

The Use and Social Context of Glass Vessels in Early Medieval China

中國魏晉南北朝
時期玻璃器皿的
使用與社會背景
大衛·蒙哥馬利

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Abstract

Both imported and locally produced glass vessels have been uncovered in funerary sites from the Jin (266~420 AD) and Northern Wei (386~535 AD) Dynasties. The ruling houses of these two societies came from quite different ethnic and cultural backgrounds and yet glass vessels were used in both societies. Taking a multi-faceted approach this thesis examines how glass, and specifically glass vessels, fit into the material culture and world view of these two contrasting cultures. Utilising archaeological data, primarily from Chinese excavation reports, the types and placement of glass vessels within funerary contexts from both dynasties is examined. This evidence is reviewed in the light of historical texts in the Jin Dynasty, which give insights into how glass vessels were used and viewed in this period. For the Northern Wei differing, but complimentary, strands of evidence are examined, including more limited historical texts, data from a Buddhist religious site and evidence for local production of glass vessels; strands of evidence not available for the Jin dynasty. The thesis has found that to some extent glass vessels follow a similar pattern of use in both societies, where they functioned predominantly as drinking vessels for elites. However, their contrasting cultural outlooks and ethnic identities meant that glass vessels were viewed and also, in some cases, used quite differently both dynasties. The literate aristocracy of the Jin Dynasty praised glass in prose and poetry for its unique material properties. This is contrasted in Northern Wei society, where imported glass vessels were treasured as exotic luxuries and symbols of status, while indigenously produced glass was used to supply both the secular and religious needs of the imperial palace.

Acknowledgements

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So in the hardships we underwent in Asia, we want you to be quite certain, brothers, that we were under extraordinary pressure, beyond our powers of endurance, so that we gave up all hope even of surviving. In fact we were carrying the sentence of death within our own selves, so that we should be forced to trust not in ourselves but in God, who raises the dead. 2 Cor 1: 8-9

Dedication

This work is dedicated to my grandparents, Rosalie and Steffan, who each in their own way inspired this thesis and its subject matter. Both passed away in January 2021 during the Covid-19 pandemic, but their memory lives on.

Requiem aeternam dona eis, Domine. Et lux perpetua luceat eis. Requiescant in pace.



主啊求祢賜給他們永遠的安息並以永
恒的光輝照耀他們願他們得享安息

Ad Majorem Dei Gloriam

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1 Introduction

晉潘尼琉璃碗賦

覽方貢之彼珍

瑋茲碗之獨奇

濟流沙之絕險

越蔥嶺之峻危

其由來也阻遠

其所託也幽深

據重巒之億仞

臨洪溪之萬尋

藝文類聚卷七十三雜器物部

Examining those rarities amid the regional tributary offerings,
One prizes the uniqueness of this glass bowl.
It would have had to cross the remote perils of the shifting sands
And traverse the precipitous dangers of the Pamirs.
The way it came was obstructed and distant,
The place to which it was consigned was dark and deep.
One relied on the multitudinous paces of repeated peaks
And overlooked the myriad spans of flooding streams.

Yiwen Leiji, Scroll 73, Miscellaneous Utensils: Bowls

1.1 Overview

Glass has historically been seen as a marginal material in Chinese society. It arrived in China as imported eye beads, in the early fifth century BC, some two millennia after glass was first produced in Western Asia (Henderson, 2013: 127; Braghin, 2002: 4). Imports of foreign glass, while present, are found only in small numbers. Furthermore, while local Chinese glass industries emerged at various points in history, they are often small in scale and characterised by limited numbers of simplistic items. Glass therefore never reached the level of development and cultural traction that materials such as porcelain achieved (Braghin, 2002: XI). Studies of Chinese glass have tended to focus on the glass industries at the two ends of their development. The early import and then local production of glass in the Warring States period (476~221 BC) and Western Han Dynasty (206 BC~9 AD), or the development of the imperial glass workshops in the final imperial dynasty, the Qing (1644~1911) (Braghin, 2002: XI-XII). The long period in between this, has received comparatively little attention. In recent decades however, excavations across China have begun to uncover an increasing number of glass artifacts. Chemical and typological studies indicate that while most of these vessels were imported, others were shaped locally (Gan *et al*, 2016).

The focus of this thesis will be on the glass vessel usage in early medieval period, a time when the usage of imported glass vessels seems to sharply increase. In both traditional Chinese historiography and modern scholarship this period which runs from 220~581 AD is referred to by several names, although each allude to slightly different things. A common term used in Chinese as well as English is the Six Dynasties period. This is in reference to the six Han Chinese dynasties, who ruled from Jiankang, modern Nanjing, South of the Yangtze River (Swartz *et al*, 2014: 1). However, this nomenclature, tends to exclude the other dynasties and kingdoms, which established themselves in the North of China. Other terms used for this period include the Northern and Southern Dynasties, the period of division or disunion and in Chinese the "Wei, Jin, Southern and Northern Dynasties". Again, these terms are all slightly problematic. The Northern and Southern Dynasties officially begin with the founding of the Northern Wei Dynasty in 386 AD, excluding the century and a half of the period prior to it. The name "period of division or disunity" is somewhat ambiguous and could equally refer to other periods in Chinese history. The Chinese term Wei, Jin, Southern and Northern Dynasties while all encompassing, sounds somewhat longwinded when translated into English (Dien and Knapp, 2019: 2-3). For the purposes of this study the term 'Early Medieval' stretching from 220 AD to 581 AD will be used to describe this period of Chinese history and is the focus of this thesis.

The early Medieval period was the longest period of disunity in Chinese dynastic history. While outwardly it may be seen as a time of cataclysmic events, warfare, and political chaos the societal changes which took place at this time laid the cultural foundation upon which later Chinese civilisation could be built. This complex political and military history often masks the much deeper social and cultural changes which were taking place in China in this period. While China in the late third century looked much as it had in the preceding Han Dynasty, by the sixth century it was transformed. The most obvious sign of this was in the ethnic make up of the population. The various invaders of Northern China, came from a wide range of ethnic groups including Turks, Mongols, Xianbei and Tibetans, who settled across large swathes of Northern China. Other peoples, merchants from Sogdiana and Buddhist monks from central Asia and even the Indian sub-continent also settled in China during this period (Swartz *et al*, 2014: 2; Zürcher, 2007: 23-24). It was the interactions between these incomers and the local Han Chinese population that shaped the cultural, political, social, and religious landscape of China in the following centuries. In an introduction to an exhibition of objects from the early medieval period Watt (2004: xviii) writes that "this period saw the coming together of cultural influences from all over Asia, with faint reflections from the Mediterranean world, into a unified whole that found its greatest expression in the arts and letters of the High Tang", a "civilization that emerged as a result of the gradual

amalgamation of many cultural strains under the general rubric of established Chinese political, social, and cultural order.” Perhaps because of this foreign influence, new forms of material culture, including glass vessels, came to be used in China.

This thesis will focus on two distinctive and contrasting dynasties, the Jin (266~420 AD) and the Northern Wei (386~534 AD) (Figure 1.1). These two dynasties provide a rich cultural resource to understand glass usage in this period of unusual disunity, allowing distinctions to be made between different cultural groups. Glass finds from the early medieval period have come almost exclusively from sites from these two dynasties and historical accounts of glass vessel usage in the period also refer almost exclusively to these the Jin and Northern Wei. More importantly, these two dynasties reflect the complex cultural landscape of China in the early medieval period. The Jin was an ethnically Han Chinese dynasty, and the inheritors of the political and cultural traditions of the Chinese past (Chaussende, 2019: 72). The Northern Wei by contrast was established by the Xianbei, a nomadic people from the Eurasian steppe. The political climate in both dynasties was also quite different. For much of their rule the Jin existed in a state of exile and crisis, under the near constant threat of annihilation (Holcombe, 2019a: 96). In contrast, the Northern Wei were the triumphant conquerors of Northern China, although their rulers gradually became enamoured with the culture of their conquered Chinese subjects (Pearce, 2019: 155). Geographically these dynasties existed in quite different spheres, the Jin for most of their rule were confined to Southern China, while for much of their reign the Wei ruled from their capital on the Northern frontier (Figure 1.1). Furthermore, while there is some overlap in chronology these two dynasties also existed at differing periods of time. Using and comparing glass in these two dynasties therefore provides a context to study not only why glass vessel usage increased in the early medieval period, but also how this usage may have differed in these two dynasties.

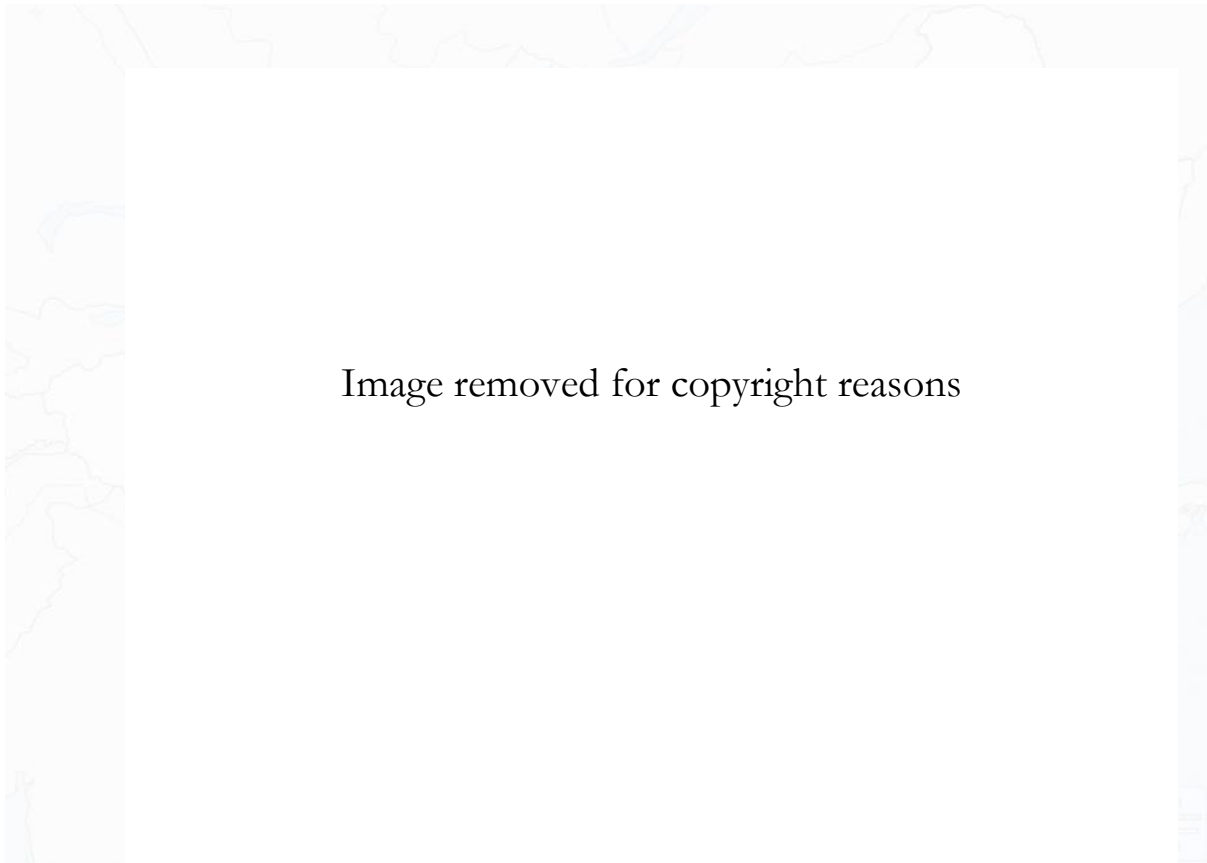


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*Figure 1.1: China in 416 AD showing the extent of the Eastern Jin and Northern Wei empires and their capital cities (https://d-maps.com/carte.php?num_car=4644&lang=en with modifications by **D.Montgomery**).*

1.2 Aims and Objectives

Glass artifacts can be used to fulfil multiple social and ritual roles and can therefore be used to contrast value and social practices in different societies. However, this thesis will focus on glass vessels rather than glass beads as vessels form a discrete and distinctive set of material culture. Because of their relative rarity and distinctive findspots, primarily in tombs, the assumption has been that glass vessels were rare and highly valued items used only by the elites (An, 2002a: 85). This study will test these assumptions by investigating who the users of glass vessels were, what they used the vessels for and if glass vessels were considered valuable objects in Chinese society in this period. It will also compare glass vessel usage in both the Jin (266~420 AD) and Northern Wei (386~534 AD) allowing for comparison between two quite different dynasties which existed in an overlapping period of Chinese history. This study will take a comprehensive approach by examining the glass vessels themselves and also the contexts in which they were found, utilising archaeological data and Chinese textual sources to build a holistic picture of the use of glass vessels

in these Medieval early societies, in order to elucidate how glass vessels were viewed, used and valued.

1.3 Research Questions

Several research questions are pertinent to answer the research aims.

1. How were glass vessels used and what were they used for? The use of glass vessels in tomb contexts will be explored as well as the references to glass vessel usage in literature from this period in order to provide a more holistic picture of glass use.
2. Who was using glass vessels? This will throw light upon issues of social status, gender, and ethnicity.
3. Were glass vessels a valuable commodity and if so, what made them valuable? It has been assumed that glass was a high-status artefact, studying context and the contemporary literature will highlight the value of glass.
4. What differences, if any, are there between glass vessel usage and value in the Jin and Northern Wei Dynasties? This will indicate how glass was viewed in each of these dynasties and if it therefore throws light on social or political similarities or differences between these two cultures.

1.4 Approach

This thesis will use different sources of evidence from archaeological sites, artefacts themselves and literary evidence from historical texts. The following section will detail the approach taken in gathering and using evidence from these different sources.

1.4.1 Material Evidence

Apart from one Northern Wei temple site, the archaeological evidence for glass usage in the early medieval period comes exclusively from tombs. As direct access to sites and artifacts in China can be logistically difficult, and during the pandemic it was not possible to visit many sites or examine material directly, much of the data about glass vessels and their contexts will come from the original Chinese excavation reports, although other sources such as information and photographs provided by Chinese researchers, as well as secondary literature will be used where appropriate. As the primary source of data will however be excavation reports it is worth considering how this data is obtained and published. The reports used for this study will come from a range of time periods from the 1950s until the present day. Most are available in a variety of national and regional journals

such as *Wenwu* 文物 *Cultural Relics*, *Kaogu* 考古 *Archaeology*, as well as book length site reports. The information contained within these reports, however, can vary significantly depending on the type of report. In China excavation reports are quite standardised, and can either be presented only as brief notes, preliminary reports, excavation reports published in journals and book-length site reports (Selbitschka, 2015: 11). Most of these reports will begin with a description of the site, follow with inventories of finds divided by materials (ceramics, bronze, stone, etc), and finish with some concluding remarks about the significance of the site or finds. Not all finds receive equal treatment and certain artefacts are given more description than others. With what are considered relatively common artefacts, such as ceramics, representative types will be chosen for more detailed description, while the rest may just receive a cursory listing of numbers and types if published at all, making an overview and quantification of material very difficult. Other artefacts, selected for qualitative reasons including rarity, degree of preservation, high material or cultural value or if they have written inscriptions, will receive much more attention (Selbitschka, 2015: 26). Some information may not be published at all. For example, reports on tombs usually give little to no information on skeletal remains other than absence or presence. Information such as the gender, age or possible ethnic identity of the tomb occupant will instead be determined from the types of grave goods placed within the tomb. In longer book length reports, which will often be about a whole site such as a cemetery, only certain tombs will be selected for detailed analysis, while others will only be given a cursory mention.

The reasons for the selection and omission of certain types of data are multifaceted and could depend on several factors relating to Chinese excavation and interpretive methodologies, which differ from those applied in the West. Furthermore, in China political ideology is all encompassing, influencing all levels of society. The prevailing political trends when a particular report was published may therefore also influence the type and quantity of data published and its interpretation. Selbitschka (2015) conducted a detailed study of Chinese excavation reports and states the following: “The Chinese case, as it is discussed in this article, demonstrates that traditional thought not only determines where to excavate, but, more importantly, what kind of evidence to publish, and how it is interpreted. Consequently, consumers of Chinese excavation reports need to decide how to deal with this problem. Being aware of these conditions is a prerequisite for a more comprehensive understanding of ancient Chinese societies.” Selbitschka (2015: 36).

There are several factors relating to Chinese practice and interpretation which are worth considering as they directly affect this study. A problem, especially in older excavations, had been

the misidentification of glass by archaeologists who were unfamiliar with the material. For example, at one of the sites in this study, Caidian tomb one, excavated in 1965, a fragment of a glass vessel was labelled rather ambiguously as a “Material Bead” (Hubei Provincial Museum, 1966: 196). It is possible that there have been many more cases of this misidentification and it has also been suggested by An (2002b: 85) that in earlier excavations glass artifacts were often discarded in the belief that they were modern. Conversely, when glass has been properly identified, especially in more recent reports, it has been treated with some interest and reports may even include extra information such as photographs, line drawings and even chemical analyses. In most current excavation reports and secondary research in China, glass vessels are interpreted as markers of foreign trade, which is valued in the current Chinese political milieu in its ‘one belt and one road’ initiative, which uses imagery from the ancient silk roads to promote modern trading partnerships across Eurasia (Nobis, 2018). Currently, glass vessels are considered important finds which can be used to demonstrate trading links in the past and thus used to justify policy in the present.

An additional factor worth considering is not only how data from sites is selected, interpreted, and published but how sites themselves are selected. Writing of Jin Dynasty burials Davis (2015: 200-201), states that “the information provided by the archaeological record is neither complete nor objective. For example, proposals for conducting scientific excavations are funded when the likelihood of discovering something historically significant is high. Accordingly, the regions around the early capitals Luoyang and Nanjing, have seen greater archaeological activity than outlying areas. In addition, many excavations of tombs in peripheral provinces are the result of chance finds and salvage archaeology.” This is certainly the case for both the Jin and Northern Wei sites in this study, are concentrated in and around the respective capitals at Nanjing and Datong. Because they were excavated in scientific research excavations, rather than haphazard salvage excavations, the sites from these cities often also have more detailed reports published about them, which give greater insights into their layout and contents. However, Davis (2015: 201) continues, “the problem of skewed representation, while serious, does not render the data collected useless as the majority of elites did, in fact, live in these capitals or were buried in cemeteries located near them.” Furthermore, because extensive excavations have taken place in these cities, tombs from a broad cross section of society have been uncovered. For example, the Northern Wei cemeteries in Datong contain the graves of individuals from a range of social classes, from what appear to be low status individuals buried with few or no grave goods, to seemingly wealthy individuals buried with gold, silver and other high-status goods (e.g. Datong Shi Kaogu Yanjiusuo, 2006). An assessment of the relative social status of glass vessel users may therefore be made by comparing their tombs, with those of others buried within the cemetery.

In the provinces and even in larger cities, budgets are limited. Teams of archaeologists from local museums and universities, who are responsible for the excavation and recording of sites often only have limited staff and resources can only work on a fraction of the sites uncovered (Luo Haiming, Personal Comm: 14/04/2019). Because of the increased likelihood of recovering intact high value artefacts, or items with written inscriptions, which can add to the historical record, tombs are usually selected. Tombs are therefore one of the most common sites excavated by Chinese archaeologists. Indeed, all the sites in this study, except for one temple and one market site, are tombs belonging to what appear to be wealthy individuals with a high social status. It is therefore worth considering whether this pattern of recovery represents actual usage or is simply a reflection of current site selection practices or collection patterns, which could exclude other locations such as domestic dwellings, markets, ports, workshops, or remote regions inhabited by ethnic minorities, where glass vessels could potentially have been used in the past. As the material evidence is analysed consideration will therefore be given to these factors to assess how they affect the interpretations.

1.4.2 Textual Evidence

This study uses a synthesis of material and also textual evidence. Since its development in the Bronze age, around the second millennium BC, China has had a written script which in a modified form is still in use today (Keightley, 1996: 68). A modern Chinese scholar or even a casual Chinese reader armed with a dictionary, would have little difficulty reading a text written more than two millennia ago. Chinese historical data comes from a variety of sources, including written books and texts, surviving personal texts such as letters, works of calligraphy and paintings as well as from sources such as inscriptions and carvings on bone, stone and ceramics. Many written texts are historical narratives, in some cases written only shortly after the events they discuss. A Chinese tradition which began in the Han Dynasty was that each new dynasty would commission an official history of its predecessor, a tradition continued today in the attempts to write an official history of the Qing Dynasty (1644~1911 AD) (Von Falkenhausen, 1993: 840). These texts, which form the basis of the Chinese historical narrative, have been both a blessing (as they document known events) and a curse (as often they are influenced by the political ideology of the time of writing) for Chinese archaeology, which is characterised by an extensive use of these histories. In China, archaeology is not considered a separate discipline, but instead an extension of the history departments within universities. The principal goal of archaeology, at least in work on the historical periods, has been to give substance to orthodox historical narrative presented in the histories (Von Falkenhausen, 1993: 844).

However, despite this, the wealth of Chinese historical sources can be a useful tool for understanding archaeological material. Dien (2007), and An (2002a), quote several passages from the early medieval period which discuss glass vessel usage. Further examination of historical material here reveals numerous other passages relating to glass. These come not only from official imperial histories but from a wide variety of texts including philosophical treatise, unofficial histories, poems, letters and notes. Some of these come from original sources written in the period, which were preserved and copied by later scholars. Others come from encyclopaedias of collected works such as the Tang Dynasty *Yiwen Leiju* or the Song Dynasty *Taiping Yulan*, in which pieces of writing considered to be of historic, literary or artist value by scholars were preserved (Richter, 2013: 8-9).

This project will collect historical sources which reference glass vessel usage in the Early Medieval period. This will be done by consulting secondary sources such as Dien (2007), as well as the original Chinese source material, particularly of digitised Chinese historical texts. These texts will then be translated into English. Selection of sources for use in this research will, wherever possible, be kept to those which specifically describe glass vessels and their uses. Some historical texts describe glass in more general terms, most notably lists which describe the various products from different regions. Although these will be excluded from the main body of the work, reference to them will be made where appropriate.

It is also worth noting some of the potential pitfalls of using historical texts to place glass within its social context. This particularly relates to who the writers of these texts were, their potential affiliations or political views, how the texts were transmitted and potential biases within them. They were almost exclusively written, and later studied and transmitted, by educated Han Chinese men, who had a specific set of concerns and interests which could potentially exclude other types of people especially women, the lower classes and people of non-Han ethnicity. Even when such groups are included there is the potential for biases to be included in the text. For example, much of the historical literature describing the Northern Wei Dynasty, was not written by the Xianbei themselves but by later Chinese writers, who wanted to paint the Xianbei in a less than favourable light (Pearce, 2019: 155). These potential issues should be to some extent accounted for when interpreting the evidence gathered from these historical accounts of glass usage. However, they should not detract from what are some remarkable accounts of glass usage which, when combined with the archaeological evidence, provide a real insight into how these vessels were used in early medieval China.

1.4.3 Translating ‘glass’

In texts from the early medieval period, there are several words for glass with distinctive origins and meaning. The earliest known word for glass in Chinese was the word *liuli* 琉璃, sometimes written 瑠璃, 瑠璃 or 瑠璃 in early texts. The earliest use of the word is in Han Dynasty (206 BC~220 AD) texts, where it is used not only to describe the material glass, but also a reflecting or glassy radiance (Needham 1962: 105). The root for the word *liuli* is almost certainly the Sanskrit word *vaidūrya*, which refers to coloured gemstones, especially lapis lazuli (Liu, 1988: 59). This connection is not as unusual as it might first appear. The earliest glasses imported to China were colourful eye beads, often with a dark blue base colour very similar to lapis. This early connection between glass and lapis lazuli was also made in other cultures. In Mycenaean Greece the term *kuwanos*, may refer to both lapis and blue glass (Bennet, 2008: 159-160). In Egyptian inscriptions for example ‘Lapis Lazuli’ is used to refer to blue glass, while ‘Royal Lapis Lazuli’ is used to refer to the natural mineral. Similarly, in cuneiform texts from the Near East lapis is described as both ‘lapis lazuli from the kiln’ and ‘lapis lazuli from the mountain’, differentiating coloured glass from the natural stone (Henderson, 2013: 202).

The other common word for glass in Chinese is *boli* 玻璃, sometimes written as *poli* 颇梨 in early texts. The earliest usage of the words *boli* is in the early medieval period, although it came into widespread use later in the Tang Dynasty (618~907 AD), and is the word still used for glass in modern Chinese. The root of this word is also likely from Sanskrit, in this case *sphatika*, which means rock crystal (Xin, 2018: 237). The connection between these two materials is obvious, as both colourless glass and rock crystal have similar properties, and even in the English language the word crystal is still used to refer to high quality glass.

Translators of early Chinese texts often translate *liuli* as coloured glass, and *boli* as colourless transparent glass. This may certainly be the case in later periods such as the Tang Dynasty. However, in the early medieval period the word *liuli* is much more common and seems to be used to describe both coloured and colourless glass. In most of the Jin Dynasty texts imported glass bowls, are described as being made from *liuli* rather than *boli*. Translators such as Mather (2017), translate this as coloured glass, but some of the descriptions of glass vessels themselves describe the glass as clear and transparent. Archaeological finds of glass vessels from the early medieval period also include both coloured and colourless glass. In the translations of Chinese texts used in chapter two and three, the word *liuli* has been translated as simply glass, rather than coloured glass.

1.4.4 Value

A primary aim of this study is to assess whether glass vessels were a valuable commodity in China in this period. It is therefore necessary to define exactly what is meant by value. Objects can have an absolute value in an economic sense, often measured in the modern world by their price (Crook, 2019: 3). However, the absolute value of an object is often fluid, often stemming from the relative rarity or availability of a commodity in a particular location or society. For example, ‘exotic’ goods, which have been imported over long distances can acquire an inherent value, which they did not possess at their point of creation (Helms, 1993: 198). Appadurai (1986: 4), believes that the exchange itself can be the source of value and writes that economic value is “a definite sum of value, which results from the commensuration of two intensities of demand. The form this commensuration takes is the exchange of sacrifice and gain. Thus, the economic object does not have an absolute value as a result of the demand for it, but the demand, as the basis of a real or imagined exchange, endows the object with value. It is exchange that sets the parameters of utility and scarcity, rather than the other way round, and exchange that is the source of value”. Some items may acquire value as gifts, a gift being something that establishes or alters a social relationship (Flad and Hruby, 2007: 9). Depending on the social relationship between giver and receiver gifts could acquire an inherent value quite separate from pure economic value. The value of a particular object could also be perceived quite differently by the owner and an onlooker who happens to view it. Indeed, the very act of display can endow objects with value, transforming them into prestige goods, whose use communicates messages about the power, knowledge, and social status of their owner. Flad and Hruby, (2007: 9) state that “The key factor that distinguishes prestige goods from utilitarian ones in a particular context, therefore, is the use of prestige goods in symbolic, powerful, and political ways by a limited, sanctioned segment of a population”. Furthermore, value is not necessarily exclusive, and a single item might be something economically valuable, which is given as a gift and then used as a prestige good. The economic and social value of glass vessels in Chinese society in this period will be explored in detail, considering all the different routes which confer value, as these will be different in different cultures and periods.

1.5 Structure of the thesis

This thesis is divided into eight chapters. This chapter gives an overview of the rationale to the study, the historical period, the context. and the aims of the thesis. Chapter two provides background information on the early history of glass in China and presents the archaeological contexts of glass vessels from different sites analysed in this thesis in order to provide a background to the research area, material and highlight potential differences or similarities between

sites and different cultures. Chapters three to seven delve more intimately into glass use in the two cultures under study, using the contemporary literature and archaeological evidence. Chapter three examines the evidence for glass vessel usage in the Jin Dynasty from historical texts. A variety of sources including literature and poems written during the Jin Dynasty, as well historical accounts and anecdotes, written about the Jin in the decades following the fall of the dynasty, will be consulted to build a holistic view of glass vessel usage in this period. Chapter four will focus on the physical evidence of glass vessel usage from the tombs of the Jin Dynasty recovered during archaeological enquiry. In chapter five the focus will shift to the Northern Wei Dynasty, where both textual and archaeological evidence will be used to elucidate potential glass production and glass usage in this culture. Chapter six will focus on the Northern Wei tombs to examine the nature of glass found in tombs with different burial customs. Chapter seven will pull together the evidence discussed and provides an interpretation of glass vessel usage and value taking into account the different cultures, burial customs and religious practices. The conclusions of the thesis and future prospects are given in chapter eight.

2 Historical Background

晉咸康起居注
詔賜遼東段遼寧琉璃碗
太平御覽器物部五碗

By an imperial edict of Jin
Emperor Cheng, a glass bowl
was bestowed on Duan Liao,
the Duke of Liaodong.

Taiping Yulan, Vessels, Section five: Bowls

2.1 Glass

Glass as a material is classed as an amorphous solid, that is it lacks the rigid molecular structure of a true solid, and yet is too rigid to qualify as a liquid. It is produced from silica, usually sand, that has been heated to a high enough temperature to transform it to a liquid state. During this process the silica loses its crystalline structure, and cools into a glossy, translucent material, which can both reflect and refract light (Henderson, 2013: 1). The temperature at which silica begins to melt is very high, around 1710°C, so ancient glass makers added materials known as fluxes to the glass batch, to lower the temperature at which this process occurs. These may be mineral sources of alkali from evaporites, such as natron, ash from alkali rich plants and trees, or oxides of heavy metals such as Lead (Henderson, 1985: 271-277). Glass makers also add other ingredients to their glass batches, network stabilisers, colourants or opacifiers, depending on the result they wished to achieve. The combinations of raw materials used by glass makers in different regions of the world result in glasses with discrete chemical compositions, characteristic of certain locations and time periods. These broad compositional groups can be identified by chemical analysis and are often

named after the type of alkali used in their production process (Jackson *et al*, 2005: 781). Soda-lime glass for example, was the predominant type of glass used in the Roman empire, while lead-barium glass discussed below, was an indigenously produced Chinese glass.

2.2 Roman and Sasanian Glass

The two sources for imported glass vessels in China during the early Medieval period were the Roman and Sasanian empires (An, 2002a: 47-56). In late antiquity the capital of the Eastern Roman empire at Constantinople and the Sasanian capital at Ctesiphon were located relatively close to one another and the frontier zone between them frequently contested (Figure 2.1). The Sasanian Empire extended east to Bactria in modern day Afghanistan. From here trade routes through Central Asia controlled by Sogdian merchants continued to China (Meredith-Goymour, 2006: 123). Trade was also conducted via the Indian Ocean, from the Red Sea or Persian Gulf and on to India, Sri Lanka, and Thailand. From here trade routes continued North from Southeast Asia to the ports on the Southern coast of China (Whitehouse & Williamson, 1973: 29; Borell, 2016: 66). Glass vessels and other goods, travelling from the Roman Empire to the Far East would therefore almost certainly have passed through Sasanian territory, either overland or on maritime trade routes in the Western Indian Ocean controlled by the Sasanians. The Sasanians themselves were also producers and exporters of glass and their glass vessels travelled on the same routes as the Roman ones. (Meredith-Goymour, 2006: 123).

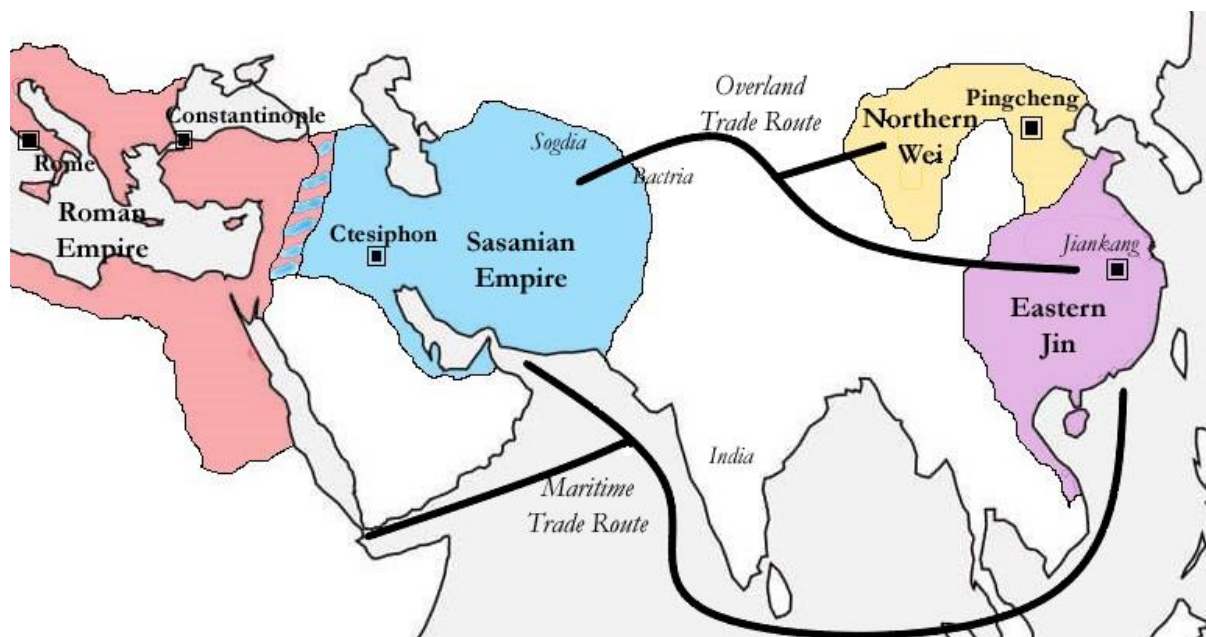


Figure 2.1: Map of the Roman, Sasanian, Northern Wei and Eastern Jin empires in the early fifth century AD, with the approximate routes of the overland and maritime trade routes (Created by **D. Montgomery**).

Although there are stylistic and decorative differences between certain types of Roman and Sasanian vessels there is a great degree of overlap. This is especially true of common vessel forms such as bowls and beakers (Figure Figure 2.2). Furthermore, certain decorative schemes such as facet cutting, while characteristic of Sasanian vessels were also employed on some Roman vessels (Meredith-Goymour, 2006: 123-124). Chemical analysis can be used to differentiate between the primary production locations for raw glass (Table 2.1). Both Roman and Sasanian glasses are considered soda-lime glasses. However, while Roman glass produced in the Levant and Egypt employed silica sand and mineral natron, Sasanian glassmakers used types of halophytic plants and quartzite pebbles, resulting in compositions with elevated levels of potash (K_2O) and magnesia (MgO) above 1.5 % (Brill, 2005: 67). Sasanian glasses typically have potash levels of between 2-5 % and Magnesia levels between 3-7% (Brill, 2005: Fig 2). Therefore, a combination of stylistic and chemical analysis can be used to differentiate between Roman and Sasanian glass vessels.

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Figure 2.2: Fourth century AD globular bowls with everted rims. Left: Roman bowl excavated in Germany (British Museum, Number 1922,0512.8). Right: Sasanian glass bowl (British Museum, Number 135854).

2.3 Early glass in China

To properly place the glass vessels of the early medieval period (220~589 AD) in their cultural and historical context, it is important to review what came before. The earliest glass objects found in China are polychrome eye beads from early fifth century BC at the very end of the Spring and Autumn (771~476 BC) and beginning of the Warring States (475~221 BC). These were periods when China was divided into multiple competing kingdoms, which shared a common Chinese language and culture. Analysis of these beads indicates that they are soda-lime glass, indicating that they were imported from West Asia (Henderson *et al*, 2018: 89-90). The tombs they are recovered from are large, elaborate and were richly furnished with grave goods, indicating that their

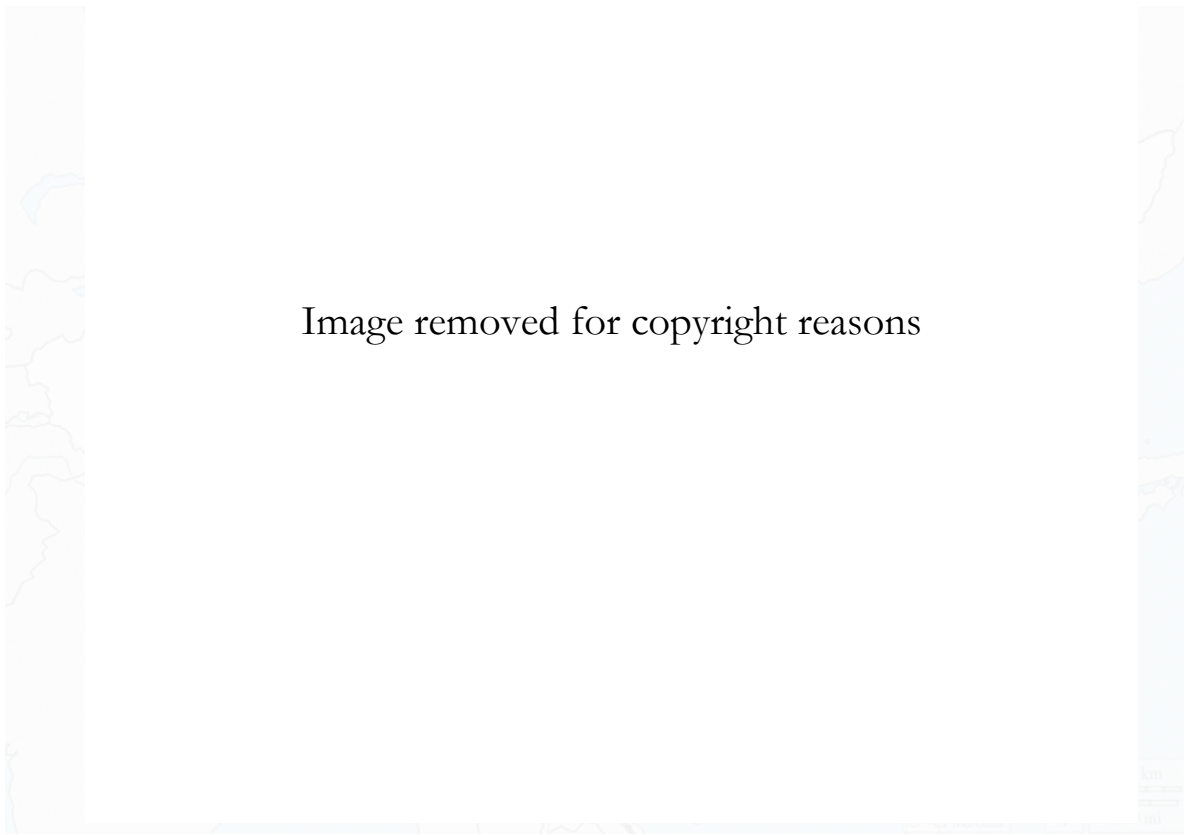
occupants were individuals of high socio-economic status. The beads were often found inside the inner coffins of the deceased. This was where the most valuable items and personal items, such as jade and gold were placed and indicated that the glass beads had a similar status (Braghin, 2002: 7-11). In a single coffin there are often beads of differing sizes, shapes and colours and even differing compositions such as the natron and plant ash glass. For example, beads found in Zenghouyi indicate that they were originally sourced from a variety of locations (Lü *et al.*, 2021: 3537). The significance of these beads, and potentially their value as high-status objects, may have come from their vivid colours, which were rare in the material culture of the period, and also their exotic origin, as imports from distant lands (Helms, 1993: 193; Valuection 1.4.4).

2.3.1.1 Lead-barium glass

Locally produced imitations of the imported eye beads appear soon after the arrival of the soda-lime originals. These are characterised by high levels of lead and barium (Table 2.1). Lead-barium (Pb-Ba) faience can be found as early as the fifth century BC in the early Warring States period (Wang *et al.*, 2019: 1-2). Lead-barium glazed pottery also makes an appearance in the early fifth century BC (Dong *et al.*, 2020). Eye beads made of true lead-barium glass appear somewhat later in the fourth century BC (Figure 2.4). The exact relationship between these different lead-barium high temperature technologies, is somewhat difficult to determine, due to a lack of archaeological samples for the early Warring States period but the association of the compositions suggests a link in terms of high temperature vitreous materials, with lead-barium glass preceded by faience and glazed ceramic. The picture that emerges is one of local craftsmen responding to local demand for highly valued imports of soda-lime glass beads, by producing imitations using locally available materials and technologies, first in faience and then in glass.

The raw materials for the production of this glass are still unknown, and there are no documentary sources to aid with this. Ramen spectroscopy indicates that feldspar minerals may have supplied the soda, potash and alumina (Henderson *et al.*, 2018: 96; Dong *et al.*, 2015: 465). It is probable that the mineral witherite (BaCO_3) was used as the source of barium, while a mineral such as cerussite (PbCO_3), was used to supply the lead (Montgomery, 2011; Qin *et al.*, 2016). Another possible barium source is Barite (BaSO_4), which has been detected in some samples by using ramen spectroscopy (Henderson *et al.*, 2018: 96; Dong *et al.*, 2015: 465). Finds of lead-barium glass are concentrated in the Yangtze River valley; a region where these barium and lead minerals are found (Qin *et al.*, 2016: 797). It is therefore theorised that the lead-barium industry was centred on and perhaps unique to this region of China (Figure 2.3), which during the Warring States period was controlled by the state of Chu (see Ma *et al.* 2022). However, currently there is no physical evidence

of primary production sites, workshops, or tools such as crucibles and therefore local production cannot be confirmed.



*Figure 2.3: The extent of the Han Dynasty in the first century BC. The broad regions where finds of the lead-barium glass and Southern Chinese potash glass are concentrated are highlighted. The locations where imported glass vessels have been found are also indicated. (https://d-maps.com/carte.php?num_car=4644&lang=en, with modifications by **D. Montgomery**)*

The use of lead-barium glass eye beads continues into the fourth century BC. However, the burials in which they are found are often smaller and of considerably lower status than the large richly furnished burials of the early fifth century (Braghin, 2002: 11). This suggests that the lead-barium beads were more affordable, and that the industry began to supply local demand for eye beads to more of the population. It remains unclear how this local production affected the use of imported soda-lime beads. They were certainly still in use in the period. Dong *et al* (2020), for example analysed a soda-lime bead unearthed in a tomb from the middle Warring States period States at Jiuliandun in Hubei Province. However, the limited evidence makes it difficult to ascertain whether there was differentiation between the use of imported and locally produced eye beads and whether this was based on status of the materials or the individuals concerned. Production of the eye-beads ceases in the third century BC, around the time of the Qin conquests of the other Warring States (between 230 and 221 BC) and perhaps as a direct cause of it (Braghin, 2002: 35). However,

singular eye beads, presumably heirlooms, continue to be found in later high-status burials, suggesting that they continued to be valued in later centuries.

Around the mid-fourth century, at the same time as the production of the new lead-barium composition glass eye beads, Chinese craftsmen also begin to produce an opaque, monochrome, usually white, lead-barium glass to produce replica jade burial goods such as bi disks, animal figurines and plugs for body orifices (Braghin, 2002: 17-18) (Figure 2.4). This is a significant change marking a transition from imitating glass, or potentially lapis lazuli, to imitating jade which was highly valued in China and thought to have magical properties associated with the soul and immortality. This is also accompanied by a significant technological development, using casting techniques taken from the bronze industry, to produce larger and more complex objects. This indicates that the industry had matured to a degree that it could be utilised to make uniquely Chinese artifacts, rather than simply copying imported beads. Again, it seems the purpose was to create a more affordable version of the natural stone, as it is found across a wide range of burial types including smaller burials (Braghin, 2002: 35; Dong *et al*, 2015: 466). The production of beads ceases around the third century BC; however, production of the glass continues into the Western Han Dynasty (202 BC~9 AD) where a wider and even more impressive array of objects was produced. These include burial suits composed of hundreds of lead-barium glass plaques, large bi-disks and plates, sets of cups and even a complete set of chimes, with a total weight of 131kg (Li *et al*, 2016: 113). The tombs which contained these artefacts belonged to the elites and often also contained items made of real jade suggesting that glass and jade were used interchangeably, with the lead-barium glass used for large and intricate objects which would have been difficult to produce from the mineral and would have used large quantities of natural jade. However, despite these advances this glass appears to go out of use by the beginning of the first century AD. The use of this glass to only produce 'jade' objects may indicate that it was understood to be a type of jade itself, and a material different from the transparent glass vessels, which was beginning to be imported to China in small quantities in this period (Section 2.3.3). This could explain why the industry never advanced beyond reproducing replica jade and why it disappeared. Changes in burial practices and declining belief in the supernatural properties of jade towards end of the Han Dynasty, meant that large quantities of jade were no longer required in burials (Shi, 2012: 230).

Images removed for copyright reasons

Figure 2.4: Lead-barium Glass bi disk, and glass eye beads (British Museum, Numbers 1935,0115.3 and 1940,1214.55).

2.3.2 Southern Chinese Potash Glass Vessels

The region of Southern China, consisting of modern Guangdong and Guangxi Provinces, as well as the Northern half of Vietnam had originally been inhabited by a people known as the Nan Yue, or Southern Viet's (Figure 2.3). The region was conquered in 111 BC by Han Chinese forces, who quickly established commanderies to control the region and sent settlers to occupy the territory. The integration of these Southern coastal regions into China gave the Han Dynasty access to trade routes formerly controlled by the Nanyue, the so-called Maritime Silk Road, which connected the South China Sea to the Indian Ocean and ultimately the Mediterranean (Li, 2011: 39-40).

Soon after these conquests, in a short period from the first century BC to the first century AD, a unique type of glass vessel appears in the region; these are small, moulded cups 4-7 cm in height and 7-9 cm in diameter with a convex base, sometimes curving inward to form a concave dimple (Figure 2.5). A distinguishing feature is the horizontal ribs on the exterior of the vessels, usually three around two-thirds up the height of the vessels. Other forms consist of cups with stemmed feet, flat dishes with flaring walls and shallow bowls with rounded bases (Borell, 2016: 57) (Figure 2.5). The colours range from blues to greens, consisting mainly of translucent deep blues, light blues and greens with some vessels semi-opaque blue or turquoise (Borell, 2011: 56). They differ significantly from the lead-barium glasses of central China and are composed of a potash glass (15-17%) with moderate to high levels of alumina (3-7%) and low levels of lime (1-3% and below) (Lankton and Dussubieux 2006; Dussubieux et al. 2010; Dussubieux, 2016: table 5.2; Borell, 2016: table 3.2). While several subgroups of East and South-East Asian potash glasses have now been identified, these vessels fit into the low lime subtype, which is distributed in Southern China and

Northern Vietnam (Table 2.1; Borell, 2016: 61-62). The exact raw materials for the production of this glass are unknown, although a later historical reference alluding to glass making in this region suggests that five sorts of mineral ashes were used (Section 3.1.5). It is possible that saltpetre KNO_3 , which occurs as a natural efflorescence in the soil of this region, could have been one of the mineral ashes alluded to in the historical text and the source of potash for this glass (Borell, 2010: 134; Henderson et al, 2018: 97). Furthermore, the quite broad variations in Alumina and lime suggest that a variety of sand sources were used in the production of this glass (Henderson et al, 2018: 97). This could indicate that production took place at more than one location.

Images removed for copyright reasons

Figure 2.5: Southern Chinese potash vessels. Left: glass bowl from Huangnigang M1 (Courtesy of Liu Song); Right: glass dish fragment from Lao Cai (Courtesy of B. Borell).

Eleven vessels made from this glass have been found in tombs in the coastal region of Hepu, in Southern Guangxi Province. Hepu was an important trading port in the Han Dynasty and many of the tombs, excavated in the region contained imported items, mostly pearls and precious stones, although one tomb contained a glazed Persian jug (See Xiong and Li 2011). The tombs which contained the glass vessels were built in Han Chinese fashion and because of the relative richness of their contents, belonged to high status individuals. Two glass vessels from this group have also been found in the neighbouring region of Northern Vietnam, which in this period was part of the Chinese empire (Li, 2011). One was a shallow greenish translucent bowl from Lao Cai in the upper Red River Valley (Borell, 2012) (Figure 2.5). The other vessel from Vietnam is a translucent greenish cup, from a brick tomb in Bac Ninh, near Hanoi (Borell, 2016: 60). Both tombs have been dated to between the first century BC and the first century AD and appear to have belonged to individuals of wealth and social status. Additionally, three similar glass bowls dated to the mid first century BC, were also excavated from a tomb at Hengzhigang in, Guangdong Province. All three bowls are of an identical blue-violet translucent colour and are hemispherical, approximately 10.6cm in diameter with an incised line below the rim. Local production of these vessels in

Southern China has not yet been confirmed with the discovery of primary production sites and workshops, but is supported by the concentration of finds within the region, historical evidence (Borell, 2016: 62) (See 3.1.5), and availability of raw materials, such as saltpetre, which forms naturally in the local climate (Henderson *et al*, 2018: 97).

Table 2.1: The compositional types of glass found in China during the Han and in the early Medieval periods.

	SiO ₂	Na ₂ O	CaO	K ₂ O	MgO	Al ₂ O ₃	Fe ₂ O ₃	MnO	CuO	SnO ₂	PbO	BaO	P ₂ O ₅
1.	75.3	13.2	4.2	1.3	0.3	1.6	1	1.7	nd	nd	nd	nd	nd
2.	66.3	15	7	3.1	5.2	1.5	1	0.1	nd	nd	nd	nd	nd
3.	6.6	3.4	1	nd	2.3	0.3	0.5	nd	0.2	nd	21.5	20.49	nd
4.	74.62	1.56	0.68	16.01	0.41	5.36	0.71	0.64	1.6	nd	nd	nd	0.8

1. **Natron (Roman) glass** (*colourless bead*), Shan-pu la cemetery, 3-4 century AD (Henderson *et al*, 2018: Table 1).
2. **Sasanian plant ash glass** (*light green bead*), Qiong-ti mu, 6-8 century AD (Henderson *et al*, 2018: Table 1).
3. **Lead-barium glass** (*green-blue bead*), Da-Wang-Ku-Mu Xinjiang, 2 century BC-9 century AD (Henderson *et al*, 2018: Table 1).
4. **Southern Chinese potash glass**, (*dark blue vessel*), Hongouling, Guangxi, 1 century BC-1 century AD (Borell, 2016: table 3.1).

2.3.3 Imported glass vessels

Glass vessels were also imported to China during the Han dynasty (202 BC~220 AD) (Figure.2.6). The earliest known vessel was found in a tomb at Wenchangta in Hepu, the city where the potash vessels are found (Xiong, 2018: 88-90). Little information on the tomb can be found and the date is simply given as Han Dynasty, but it is very likely the same date as the tombs containing the potash vessels, from the first century BC. It is a deep conical shaped bowl, made from a transparent yellowish-green glass, decorated with wheel cut grooves. It is very likely Hellenistic and is almost identical to Hellenistic sagged glass bowls from Syro-Palestine produced from the second to first century BC (Grose, 1989: 204-205).

A green glass bottle, with white marbled veins was also found in an Eastern Han tomb in in Luoyang. It is probably Roman, and the shape is typical of a Roman unguentarium produced in the first century AD (Watt *et al*, 2004: 113; Żuchowska and Szmoniewski 2017, 164). Two fragments of a purple and white mosaic ribbed bowl have been found in Jiangsu, in the tomb of Liu Jing, a son of Emperor Guangwu who died in 67AD (Borell, 2016: 45; Nanjing Bowuyuan 1981: 1-10). These types of vessels are typical of Hellenistic and early Roman glass, thought to be produced in several parts of the Mediterranean (Grose, 1989: 279-280; Żuchowska and Szmoniewski 2017, 164). Fragments of another vessel were recovered from Laohudun, a tomb in the same region of Jiangsu province, dating to the first or second century AD (Changzhou

Bowuguan 1991: 62–70). The vessel is an extremely fragmentary green, transparent glass cup, with a convex bottom. Chemical analysis indicates that it made from a mineral soda-lime glass, also indicating a Mediterranean origin (Zuchowska and Szmoniewski, 2017: 164; Borell, 2016: 47). The lack of further examples of glass vessels from the Han Dynasty indicates that they were extremely rare and probably reflects the scale of imports rather than lack of recovery (Zuchowska and Szmoniewski, 2017: 164).



Images removed for copyright reasons

Figure.2.6: Imported glass vessels from Han Dynasty Tombs.

Top left: Glass vessel from Wchangta (Courtesy of Liu Song).

Top right: Fragments of the glass vessel from Laohudun (Courtesy of Wang Zhigao).

Bottom left: Fragments of the ribbed bowl from the tomb of Liu Jing (Courtesy of Wang Zhigao).

2.3.4 Summary

During the Warring States and Han Dynasty glass was produced indigenously in China. However, these industries were regional and small in scale. The lead-barium glass, was used only in the replication of imported eye beads and later in the production of a cheaper substitute of jade, found in both mid and high-status burials. However, the technology never advanced beyond this point, and disappeared with changes in burial practice. The potash glass vessels produced in Southern China appear to have been produced indigenously, probably utilising locally available materials. However, it appears to be primarily a local regional industry, with the vessels utilised by local elites in the Southern frontier of the Chinese empire. Roman and Hellenistic glass vessels were also imported to China during the Han Dynasty, but these are found in only a few isolated burials. This

suggests that imports were limited and that imported vessels were extremely rare. This contrasts with the early medieval period which follows, where glass vessels are found in burials in larger numbers and are also discussed in the literature.

2.4 The History of the Jin and Northern Wei Dynasties

This section will provide a brief overview of the histories of the Jin and Northern Wei Dynasties, to provide the historical background necessary to understand the society and culture in which the glass vessels were used.

2.4.1 The Jin Dynasty (266~420 AD)

The ruling family of the Jin dynasty was the powerful Sima clan. From the late Han dynasty members of the family, rose through the ranks, serving the warlord Cao Cao (155~220 AD) and becoming influential in the court of the Cao Wei Kingdom (220~266 AD), one of the three kingdoms which succeeded the Eastern Han Dynasty (25~220 AD). The first emperor of the Jin Dynasty Sima Yan (236~290), after inheriting the position of regent from his father in 265, deposed the last Cao emperor, who turned over all of his powers to Sima Yan in a formal abdication ceremony in 266. This was followed by a sacrifice to the high god Shangdi, where Sima Yan accepted the Mandate of Heaven, formerly legitimising the Jin dynasty, and ascending to the throne as Emperor Wu of Jin (r.266~290) (Chaussende, 2019: 79-85).

Following this, Emperor Wu instituted a number of new policies including land reform, a new Jin code of law, and the disbanding of regional armies. He also oversaw the conquest of Wu state in 280, ending the Three Kingdoms period and reuniting China as a single country (Chaussende, 2019: 85-92). His reign was one of relative peace and prosperity, and many of the historical references to glass usage are from this period. However, upon Sima Yan's death in 290 AD, the rivalries between the various members of the Sima family erupted into a series of wars, coups, assassinations known as the disturbances of the eight princes. This devastated the Jin heartland in Northern China and gave the numerous tribal groups on the Northern frontier, who had tacitly been under Jin control the opportunity to rebel. The exhausted and weakened Jin forces were unable to effectively quell these uprisings and in 311 Liu Cong a Xiongnu chief, at the head of an army of Xiongnu, Xianbei and Jie tribesmen sacked the Jin capital at Luoyang, destroying the city, massacring the populace and capturing and later executing the Jin Emperor Huai (r.306~312) in an event known as the Yongjia Disaster (Chaussende, 2019: 92-94). Some remnants of the Jin

court escaped to Chang'an and rallied behind the newly crowned Emperor Min (r.312~316). Despite a desperate lack of supplies they were able to hold out for four years, before Emperor Min surrendered the city. With this the Chinese heartland North of the Huai River was lost, and in the words of the sixth century historian Wei Shou “weeds luxuriated in the deserted fields of China” “and half the population had perished.” (Holcombe, 2019a: 96).

2.4.1.1 The Eastern Jin (317~420 AD)

All was not lost with the fall of the Northern heartland. In 307 Sima Rui, a minor member of the imperial family and the Prince of Langye in Southeastern Shandong, was transferred to Jiankang, modern day Nanjing, on the Southern bank of the Yangtze River, assuming command of all military affairs in the Southeastern portion of the empire. When news reached Jiankang of the fall of the last Northern holdout in Chang'an, Sima Rui was hailed a Prince of Jin and began organising a final defence of the South. Upon learning of Emperor Min's death Sima Rui, assumed the role, becoming Emperor Yuan of Jin. However, to reconcile the discontinuity of the dynastic line the regime founded in Jiankang became known as the Eastern Jin, Jiankang being Southeast of the Western Jin capital of Luoyang (Holcombe, 2019a: 96-97; Lewis, 2009: 62-63).

Jiankang became a hub for people fleeing the North. Members of the Northern aristocracy, who were able to gather a large enough following to resist the marauding armed bands, that now prowled Northern China, made their way South, establishing themselves at the new capital. It is estimated that as much as one eighth of Northern China's population migrated South in this period, the vast majority settling in Jiangsu Province in the lower reaches of the Yangtze River (Lewis, 2009: 63; Holcombe, 2019a: 98-100). The land they had fled to was very different to their Northern homeland, both in climate and culture. The region had until recently been something of a frontier and was still inhabited by large numbers of aboriginal Shan Yue or Mountain Viets, as well as Han Chinese settlers who had migrated to the region in the preceding centuries and spoke dialects of Chinese almost unintelligible to the Northerners (Holcombe, 2019a: 98-103). The Eastern Jin Dynasty was very much defined by interactions between these landless Northern émigrés and landed Southern gentry. The powerful Northern families settled in and around the capital Jiankang where they derived wealth and status from positions at court, refusing to intermarry with the Southern elites and thus concentrating power in their own hands. The Southerners despite, holding power in a traditional sense through land ownership, were almost excluded from positions at court. These differences were compounded by the aloofness of the Northerners who continued to speak their Northern dialects and follow their own customs, traditions and burial practices (Holcombe,

2019a: 98-103). It is in the tombs of these powerful Northern émigré families that glass vessels have been found (chapter 4).

While a final assault from the North never came, the Eastern Jin was very much a regime in exile, making do with rather makeshift arrangements. Jiankang was defended only by a bamboo stockade and had none of the trappings of Chinese imperial power, bereft even of a proper palace (Holcombe, 2019a: 98). Even tombs from this period were considered temporary, constructed simply with the bare minimum of grave goods, the intention being to one day rebury the deceased in a permanent tomb in their Northern homeland (Kieser, 2011a: 70). These arrangements were accepted at first, when it was believed that the North would be retaken, but as this became an ever more distant possibility more permanent arrangements were put in place. An imperial palace was built in the 330s, and the imperial library began to be reassembled, although a brick city wall was not constructed until 480 (Holcombe, 2019a: 98). Southern China proved to be a fertile food producing region and furthermore, was at the beginnings of the commercial development that would transform the Yangtze River basin into the economic heart of China in later centuries. Descendants of the Northern émigrés, who were born in the South began to accept the Jiankang as their permanent home. Their tombs began to change from temporary resting places to the more permanent and comfortable structures, from the latter half of the Eastern Jin Dynasty.

2.4.1.2 Material culture in the Jin Dynasty

Although the Jin were inheritors of the customs and traditions of the Han Dynasty, changes in material culture were taking place. Predominant among these in the archaeological record is the replacement of lacquer and bronze, with pottery as the favoured material for grave goods. The most prized among these was a type of green glazed stoneware, known as celadon, which was produced in vast quantities in the kilns of Southern China. The industry was centred on Yuezhou in Zhejiang, which had avoided the devastation meted out to the Northern ceramics industries in the wars of previous centuries. Celadon was used to produce a range of vessel types from large storage jars and basins to trays, plates, bowls, and cups (Dien, 2007: 233-251; Kieser, 2019a: 423). Lacquer continued to be used for trays, plates and cups, while bronze was used for more functional items such as braziers, cooking pots, incense burners, basins and wine warmers (Dien, 2007: 251-256; Kieser 2019: 422-423). The move away from bronze and lacquer to pottery was at least in part due to economic concerns. Pottery was quicker and cheaper to produce than lacquer, while shortages of copper meant bronze became much more expensive to produce. The shift may also have represented changes in taste, with the cool muted shades of celadon, replacing the warm dark blacks and reds of lacquer and metallic bronze (Kieser, 2019a: 423). Imported goods, while present

as isolated finds do not appear to be greatly popular and mostly consist of small beads made from semi-precious stones and glass vessels (Kieser, 2019a: 441).

2.4.2 Tombs in the Jin Dynasty

In ancient Chinese belief the afterlife was thought to be an extension of the earthly life and the tomb, the dwelling place of the soul (Dien 2007: 76). The happiness of not only the dead but also their living descendants who sought to remain untroubled by the restless spirits of their ancestors, relied on the permanence of the tomb. Structures in the world of the living could decay and but the tombs of the dead must be eternal. As Davis (2015: 610) writes “a proper burial was one in which the deceased, having lived out his or her allotted life span, was peacefully laid to rest in the family cemetery, reverently remembered, and offered regular sacrifices. The inability to carry out this ideal internment was a source of concern among the deceased’s posterity, not only because filial obligations to the ancestors continued after their demise, but also because the “unquiet dead” could inflict real harm on the health and prosperity of living family members.” Giving a deceased family member a suitable burial was therefore essential not only for the dead themselves but for the living family members.

In earlier centuries tombs of the elites had become were large and extravagantly furnished. However, this tradition did not continue into the Jin Dynasty. Lavish burials were considered to be emblematic of the excesses and extravagance responsible for the downfall of the Han Dynasty. The state began to dictate some aspects of burials, which included regulating the size of tombs and what quantity of goods could be placed into them. The Warlord Cao Cao (155~220 AD), who seized control of Northern China during the fall of the Han dynasty, issued edicts imposing restrictions on the size and lavishness of burials, including his own, requesting he be buried in ordinary clothing with no valuables (Dien, 2007: 164). These policies were further reinforced by his son Cao Pi, who as the first emperor of Wei issued further policies restricting lavish burials and favouring *bozang* simple or austere burials. These policies remained in force in the Jin dynasty (266~316) and had a lasting impact throughout the Early Medieval Period (Shi, 2012: 230-231).

These imperial mandates mirrored changes that were already taking place in society. The virtue of frugality had come to be esteemed by many literati in the early Medieval period. Because of this many prominent men requested austere burials in their final death testaments, which would usually entail a simple funeral more fitting for poor commoners than men of high rank and status. (Knapp, 2014: 642). These attitudes were reinforced by wider societal changes cause by years of war and chaos during and after the collapse of the Han Dynasty. The economic status, even of families declined, and many simply could not afford to bury their relatives in rich lavish burials. Jade which

was an important component of elite Han Dynasty burials (Section 2.3.1.1), is almost completely absent from tombs in this period (Dien, 2007: 273-274). The use of elaborate and costly lacquer and bronze grave goods also sharply declines, as does the use of tomb figurines (Sections 2.4.1.2; 2.4.2.4). The deteriorating economic conditions also meant that looting became an increasingly common occurrence, the vast and untended ancient cemeteries becoming tempting targets for grave robbers. Large and extravagant burials believed to attract looters. The Jin essayist Huangfu Mi wrote that “abundant wealth and extravagant burials give rise to evil intentions. Some [grave-robbers] split open the inner and outer coffins. Some drag out and expose the body itself. Some sever the deceased’s arm to obtain its gold rings. Some grab hold of the corpse’s intestines in search of jade and pearls. The punishment of being burned to death is no more painful than this.” (Knapp, 2000: 20). The desecration of the tomb was believed to cause horrendous pain and suffering to the deceased, and this grief could further spread into the world as vengeful spirits. For this reason, Huangfu Mi and many others advocated simple austere burials, which would not attract the attentions of grave robbers (Knapp, 2000: 19). The tombs of the Jin Dynasty are therefore smaller and more simply furnished than those of previous and later dynasties.

2.4.2.1 Tomb Structure

The Jin Dynasty tombs which have so far been excavated are almost exclusively of the brick-built type. There are some regional variations, but they generally follow the traditions of earlier Han Dynasty burials. The entrance to the tomb behind a sealing door usually consisted of a ramped barrel-vaulted passageway, which might have further double-leaf stone doors. The tomb itself would consist of at least one brick-built chamber, with a paved brick floor, although an additional front chamber or side chambers might also be added (Dien, 2007: 76-80). The size and layout of the tomb can give some indication of the relative wealth and economic status of the occupant, although factors such as the number of occupants, the temporary or permanent status of the tomb, and regional variation mean that status of the tomb occupants cannot be determined by tomb size alone. Other features such as the actual tomb contents and markers of identity such as epitaph tablets give a greater indication of status. However, burial in a brick tomb, no matter the size does indicate the occupant or occupants were of a relatively high wealth and social status, as the vast majority of the population would be buried in simple pits with few or no grave goods (Dien, 2007: 84).

2.4.2.2 Temporary Tombs

A key aspect of many Jin tombs is their temporary status. This is particularly true of tombs from the Eastern Jin Dynasty (317~420). The loss of Northern China in 311, meant large numbers of

people were displaced. Many chose to flee South, to the territory controlled by the Eastern Jin Dynasty. The powerful people who surrounded the Eastern Jin court and held positions of power in their capital, Nanjing, came almost exclusively from these now landless émigré families. Early in the Eastern Jin Dynasty it was believed that their Northern homelands would one day be reconquered, and so they chose to be buried in small, simply furnished temporary burials, with the hope of reburial in their ancestral soil. This never happened and so their temporary tomb became a permanent one (Kieser, 2001: 260).



Images removed for copyright reasons

Figure 2.7: The tomb at Xiafangcun, with the layout of the tomb, the coffin and the storage compartment in the coffin (Wang, 1998: 49-50).

An important component of these temporary tombs was the coffin which would travel intact and unopened, when the body was moved to a new tomb. Grave goods placed within the coffin would therefore move along with the deceased and be kept with them. In the Eastern Jin tombs in

Nanjing a tradition developed where coffins contained special compartments at the head of the coffin, inside which were placed items for personal use (Kieser, 2011: 61). A particularly well-preserved coffin in an Eastern Jin tomb at Xiafangcun, in Nanjing serves as an example of this (Figure 2.7). The intact coffin had a compartment at its head, which contained a range of items for work and personal care, while the rest of the tomb contained only a single celadon vessel (Wang, 1998: 48). These temporary tombs can therefore be identified by their concentration of items, in the coffin, and relative sparseness of the rest of the burial.

2.4.2.3 Epitaph Tablets

The *muzhi* or epitaph tablet, although present in earlier dynasties, became more commonly used in the Jin Dynasty. These tablets of stone or brick were carved with biographical information about the deceased including their genealogical relationships, and career and were buried within the tomb (Davis, 2015). Where they are present it allows for the direct identification of the occupants of a particular tomb. Because tombs were often grouped together in family cemeteries, the identity of the occupants of other tombs, without tablets can often also be established by consulting genealogical lists in historical texts and establishing the dates of tombs in a cemetery relative to each other, if the owner of one tomb in a group can be identified by a tablet.

2.4.2.4 Tomb Contents

As much as possible, tombs were meant to replicate the above ground home of the deceased and were equipped accordingly (Kieser, 2019a: 425). There is significant variation in tomb contents depending on the social and economic status, occupation, gender and personal tastes of the deceased. A major class of grave goods are what Dien (2007: 193-194), describes as objects of quotidian usefulness, that is items intended for actual use by the deceased. These consist mainly of ceramics, such as greyware and celadon, but may also include bronze, lacquer and stone (Section 4.2). Some tombs might also be equipped with ceramic tomb figurines, of servants, animals and buildings known as *mingqi*, intended to serve the deceased in the afterlife. However, in the Jin dynasty they are not as ubiquitous as they had been in previous eras and their overall quantity, size and quality is greatly reduced (Shi, 2012: 231; Knapp, 2014: 642). The use of *mingqi* saw a resurgence in the Tang Dynasty (618~907), when high quality glazed figurines were produced. Despite the trend to simplicity, jewellery is often found in high status burials. This can include rings, bracelets, beads, bells, plaques and hairpins made from gold, silver and precious stones, usually used to adorn the body. The specific needs of an individual may also be met with other less common items. Some examples from the Eastern Jin tombs in Nanjing included inkstones,

swords, halberds, antique jade, furniture, make up sets and medicine chests (Nanjing Municipal Museum, 2004).

The relative quantity of grave goods can give an indication of the social status of the deceased, as can the presence of precious materials such as gold and silver. As grave goods were intended for actual use in the afterlife the specific type of items a person was buried with can give information about their identity in life. In the absence of skeletal analysis, the assigned gender of particular individuals is often inferred from the type of jewellery they are adorned with or the goods they are buried with. The occupations of certain individuals may also be inferred from the type of grave goods they are buried with. Weaponry for example is not ubiquitous in Jin burials so the presence of a sword may indicate a military occupation.

Some items within tombs had a specific ritual or symbolic purpose. Offering food and drink to the deceased was an important part of the funeral service and vessels for this were the essential and, in some cases, the only items placed in the tomb. There is no set combination of what was offered. It seems to vary depending on what the family of the deceased considered necessary. One account in the *Nanqishu* says that dead ancestors were served their favourite foods because it was believed that they actually did eat these in the afterlife (Knapp, 2014: 641-642). The presence of incense burners in some tombs also indicates that incense may have been offered by some families. In earlier periods these offerings were placed in elaborate bronze vessels, but by the Jin dynasty glazed ceramic vessels became the standard even for the wealthy, due to shortages of bronze (Dien, 2007: 252). These offering vessels are usually found grouped together and separate from the other grave goods, often close to the entrance of the tomb. Other objects also had symbolic meaning or specific ritual functions. Objects of this nature include crossbow craws, bronze mirrors, wax, lead figurines and pigs and cicadas made from jade or substitute materials such as soapstone (Dien, 1995: 53–54; Brashier, 1995). Again, there is significant variation in the Jin tombs, which may have depended on the specific beliefs of individuals and families, and what they considered necessary in burial.

Usually, the most valuable items were given to the deceased on the day of the funeral. The body of the individual was customarily dressed in their finest clothes and adorned with jewellery or particularly esteemed personal items. Mourners might also place condolence gifts next to or inside the coffin as described in this passage from the *Shishuo xinyu*.

“When Wang Meng’s (309~347) illness became critical he was lying beneath the lamp. Turning his sambar-tail chowry around in his hand and looking at it he sighed and said, ““People like this have never reached forty!”” When he died Liu Tan was present at the

preparation for burial and placed a chowry with a rhinoceros horn handle in the coffin. As he did so he was completely overcome with grief.”

Shi Shuo Xinyu, Shangshi: 10.
Translation: (Mather, 2017: 349)

These gifts were a way for mourners to demonstrate their close personal connection to the deceased and could be valuable or personal in nature.

Glass vessels may therefore have been placed in the tomb for a number of different reasons, either as items intended for the use of the deceased, as receptacles for offerings, for ritual or symbolic purposes or as gifts.

2.4.2.5 Glass Vessels

Glass vessels have been found in a total of fifteen Jin Dynasty tombs, dating to both the Western and Eastern Jin. Two have been found in tombs dated to the Western Jin period. Two more have been found in tombs in the Yangtze River valley, which date to either the late Western or early Eastern Jin and another two are located on the Southern Coast, one dating to the early Eastern Jin, one either the late Western or early Eastern Jin. However, the largest grouping of tombs discovered so far is in Nanjing, the capital of the Eastern Jin Dynasty. The glass vessels and their wider tomb contexts will be examined in Chapter 4.

2.4.3 The fall of Jin

Despite flourishing economically and culturally, the Eastern Jin was under constant threat of annihilation, from both external threats to the North and rebellions within. The service of several able generals was able to stave off these threats for a time, but ultimately proved to be the undoing of the dynasty, which fell in 420. One of these generals Liu Yu (363~422, r.420~422 as Emperor Wu of Song), was able to amass personal power through both military success in the North and the suppression of an internal rebellion. This allowed him to have the penultimate Jin emperor strangled, and the last Jin emperor deposed, giving him the opportunity to install himself as emperor of the new Liu Song Dynasty (420~479 AD). This set the trend of the short-lived Southern Dynasties which followed the Liu Song, as each in turn was founded by usurpation by a military strong man and despite their economic prosperity and cultural capital, they lost the legitimacy achieved by the Jin. A prevailing view therefore, was that after the fall of the Jin the Mandate of Heaven was passed, not to these Southern regimes, but instead to the Northern Wei Dynasty (386~535), which now ruled Northern China (Holcombe, 2019a: 118).

2.5 The Northern Wei Dynasty (386~534 AD)

Following the collapse of the Western Jin (266~316) rule, Northern China was fractured into what is known as the Sixteen Kingdoms, although there were as many as 22 significant states in Northern China in this period. Some were large empires in their own right, ruled by self-appointed and self-styled emperors, while others were small petty states ruled by ‘governors’, still tacitly loyal to the Jin Dynasty. The rulers of many of these states came from non-Chinese peoples, the so-called *Wu Hu* or Five ‘Barbarian’ tribes, the Xiongnu, Xianbei, Di, Qiang and Jie, as well as other ethnic groups such as Koreans. Often victorious military conquerors were unable to effectively govern their new lands and the states they founded quickly collapsed. However, they left a legacy of massive demographic change in Northern China as large numbers of people from these various ethnic groups, settled in the now depopulated lands of Northern China (Holcombe, 2019b: 119-120; Müller, 2019a: 384).

One of the five barbarian tribes was the Xianbei, a nomadic Inner Asian people, who spoke an Altaic language, which was probably an early form of Mongolian. No written texts in their own language survive and even the name Xianbei is simply a Chinese pronunciation of the two characters used by ancient scholars to transcribe the Xianbei name for themselves, which probably pronounced Sārbi (Holcombe, 2013: 3). During the collapse of the Western Jin the central authorities invited some of the border tribes to move into Chinese land to help defend the empire. The Murong clan of the Xianbei established themselves as rulers of North-eastern China in the Sixteen Kingdoms era, and remained tacitly loyal to the Jin Dynasty, their leaders styled as dukes, governing the state of Yan. The Murong Xianbei, unlike the other nomadic conquerors of Northern China were able to successfully govern Yan by developing a type of dual organisation employing different styles of government for the steppe and Chinese peoples under their rule (Tseng, 2012: 3).

In the mid fourth century another branch of the Xianbei, the Tuoba rose to power in the Mongolian grasslands. In 386 the fifteen-year-old Tuoba Gui was proclaimed Lord of the Tuoba, who after establishing their capital at Shengle, pronounced himself King of Wei. Wei was one of the major states in China’s Warring States period and this therefore indicated an interest in Chinese affairs (Pearce, 2019: 155-159). This was followed by his Northern Steppe campaign, a decade long series of engagements, during which he defeated many groups including the Turkic Gaoche and the Mongolic Rouruan, known as the Avars in Europe. Many thousands of captives from these

tribes, most notably the Gaoche were forcibly resettled within territory controlled by the Tuoba, and served to augment his army as auxiliary cavalry (Pearce, 2019: 159-160).

Once the North was pacified, Tuoba Gui turned his attention South. In 395 tensions between the Tuoba and their cousins the Murong Xianbei, broke out into open hostility. In 396 Tuoba Gui led a cavalry force said to number 400,000 men out of the mountains, and by 398 the conquest of the Central Plain, what had formerly been the heartland of Chinese Civilization had been conquered. That same year Tuoba Gui moved his capital to Pingcheng one hundred miles Southeast of his old capital at Shengle. Pingcheng, modern day Datong, is located in an uplands river basin, at the Northern tip of the fertile and vastly productive central plain. This region was within the borders of the old Chinese empires and the move here was essentially an entry into this world. A further step was taken at the end of that same year as Tuoba Gui assumed Chinese imperial titles, becoming the Daowu Emperor (Pearce, 2019: 160; Lewis, 2009: 79-80).

2.5.1 Ethnic Identity in the Northern Wei Empire

The foundation of a new capital at Pingcheng was accompanied by the large-scale movement of people into the region. Large numbers of Xianbei were settled in and around the city by the Northern Wei administration. This physical movement was accompanied by the complete restructuring of Xianbei society from, what had been a tribal confederation into a nation. The Xianbei had traditionally been divided into smaller social units, led by their own hereditary chieftains, collectively known as ‘the tribes’. However, following resettlement these tribes were subjected to de-tribalization, a series of social changes engineered by the Northern Wei court to transform them into settled citizens, and concentrate power around the imperial throne. The formerly nomadic Xianbei were settled in Pingcheng and its environs, where they were engaged primarily in stock rearing and military service, becoming the soldiers and citizenry of the Northern Wei state, known colloquially as the men of Dai, Dai being the region around Pingcheng. In Chinese they were known as the *guoren* 國人, meaning the men of the nation. The newly formed national identity of the Xianbei was centred on an intense loyalty to the Northern Wei throne and military symbols such as the regimental flag. This loyalty was further cemented through communal activities such as archery contests and hunts, often led by the emperors themselves. Unlike other subjects such as the Han Chinese, these men were liable for both taxation and service in the Northern Wei armies. Participation in military campaigns gave them a chance to gain both wealth, often in the form of war booty, and the chance for advancement through a merit-based system of administration. (Pearce, 2019: 161-162). This transition to a more sedentary lifestyle was accompanied by changes to traditional social and power structures. The hereditary tribal chieftains

of the Xianbei were gradually replaced with leaders who gained wealth and prestige, not through their bloodline, but rather through peerages awarded by the Northern Wei monarch. These new 'princes' and 'generals' became the most powerful men in the state, the inner court close to the imperial throne and the officer corps of the Northern Wei army. These men would wield great power as advisors and companions to the monarch, and their loyalty and sense of nation were an important basis for morale among the troops (Pearce, 2019: 161-162). Through these changes the Xianbei were transformed from a loose tribal confederation to settled citizens of the Northern Wei empire.

The Xianbei were not the only people to settle around Pingcheng. Large numbers of other tribal peoples, most notably the Gaoche, defeated in Tuoba Gui's Northern steppe campaign, were resettled, in the outlying grasslands surrounding Pingcheng. Here they could be more easily controlled, while providing both tribute, and when required, service as auxiliary cavalry. Unlike the Xianbei however, these groups were not subjected to de-tribalization and were allowed to retain their traditional leadership and cultural practices (Pearce, 2019: 159-160). The other major ethnic group present in Pingcheng were the Han Chinese. The Xianbei conquests of Northern China, brought large populations of Chinese under their control, who unlike the Xianbei came from a settled and agrarian society. The burgeoning population of the new capital needed a stable agricultural base to feed itself. To meet this demand, hundreds of thousands of Chinese farmers were transported to the Sanggan valley outside Pingcheng to grow food (Pearce, 160-161). At the same time the Northern Wei government, which aimed, at least in part, to model itself on a Chinese style bureaucracy, required literate staff to function. Many educated Chinese elites who now lived in the territory controlled by the Northern Wei, were therefore also brought to Pingcheng to work as civil servants in the imperial administration (Pearce, 160-161). Glass vessels have been found in tombs belonging to these different ethnic groups will be examined in chapter 6.

To govern the very different populations within their empire, the Northern Wei emperors employed the system of dual administration, first developed by their cousins the Murong Xianbei in North-eastern China. This system "allowed for a separate administration for the steppe tribal peoples and the Han Chinese. The steppe peoples were controlled by a military organization in which discipline and centralization replaced the originally loose tribal confederations; the Chinese subjects were ruled under the employment of Chinese bureaucrats and institutions. It was then the responsibility of the ruling dynasty to integrate the two spheres and to combine the strengths of Chinese-styled civil administration with the power of steppe based military forces. The civil and military commands were combined in the hands of the sovereign who theoretically had power over both sectors" (Tseng, 2012: 3). This dual presence manifested itself in the symbols, material

culture and cultural practices of the empire, which employed traditions from steppe and Chinese cultures. Using this form of governance, the Northern Wei were able to successfully rule their multi-ethnic empire for nearly a century, although through the process of acculturation they gradually began to favour Chinese practices and symbols, creating discontent in the steppe groups (Pearce, 2019: 178-182).

2.5.2 Tombs in the Northern Wei Dynasty

The Northern Wei tombs reflect the ethnic and cultural diversity of the Northern Wei Empire. They can be broadly divided into steppe style burials and Chinese style tombs based on the tomb structure and contents. However, because of acculturation and fluidity in burial practices, these divisions serve only as very general categories. A Chinese style brick tomb might contain characteristic Xianbei grave goods or vice versa. Furthermore, the style of tomb might not necessarily represent the ethnic affiliation of the person buried within. The following gives a broad overview of what characterises ‘typical’ Steppe and Chinese burials and then details how the ethnic and social identity of a tomb occupant might be determined.

2.5.2.1 Steppe Tombs

The steppe tombs, found predominantly around the Northern Wei capital of Pingcheng, consist mainly of trapezoidal shaped earthen chambers often with long ramped entrance passages, or sometimes vertical shafts (Dien, 2007: 93). These were utilised by the Xianbei, the dominant ethnic group in the Northern Wei empire as well as other steppe peoples such as the Gaoche, who lived within its boundaries. This type of tomb appears to have derived from those used by earlier steppe cultures and graveyards with similar tomb types and contents, dating to the first century AD and belonging to the Xiongnu, another Mongolic people, have been found across Southern Russia and Mongolia (See Brosseder, 2009). Elite burials belonging to Turkic peoples such as the Gaoche followed a similar pattern, with burial chambers, with long entrance corridors (Konstantinova *et al*, 2018: 111). The Xianbei style earthen tombs are often quite simply furnished with items such as food, ceramics and everyday objects, probably intended for the use of the deceased in the afterlife. Some of the more Spartan ones contain only animal bones, or sometimes even nothing at all. In contrast, some of the tombs, often those of larger size, are more richly furnished with goods including gold, silver, lacquer and glass, highlighting the status of these individuals. These tombs are rarely found in isolation and are usually grouped together in large cemeteries, some containing hundreds of graves, with both richly and sparsely furnished tombs grouped together in one graveyard (See Shanxi University *et al*, 2008).

The Northern Wei cemeteries containing tombs of this type are predominantly located in the suburbs of Datong, the Northern Wei capital, where large numbers of steppe tribesmen were settled, in the early Northern Wei period. The groupings of tombs with differing economic classes together, suggest that these cemeteries represent a much wider segment of society than is often seen in Chinese graveyards such as the Feng family cemetery (Section 6.5.4) and represent whole tribal or social groups rather than single family units (Wei, 2011: 16). While Northern Wei society was polarized between rich and poor, individuals of a higher economic status in life, did not necessarily, necessitate burial in a separate location after death. In these cemeteries socio-economic statuses appear to be more differentiated by the range and type of grave goods a person was buried with, and to some extent the size and type of tomb, rather than its location. Thus, it is not location, but differences in the tomb and its contents itself which signify status. Rich and poor appear to have been buried together.

The majority of the more than three hundred Northern Wei tombs found around in Datong have been identified as belonging culturally to Xianbei owners (Wei, 2011: 16). They are usually found in large communal cemeteries possibly representing clan or social groups. They come in several categories including vertical pits, catacomb graves, characterized by a vertical shaft entrance and an offset, usually trapezoidal chamber, tombs with ramped passageways and subterranean chambers, and brick-built tombs in the Chinese style (Dien, 2007: 93). The differences in tomb type as well as contents may represent the economic status of a tomb owner but could also represent personal choices based on cultural or ethnic affiliations. Dien (2007: 93) notes that offerings of joints of meat, which is a traditional Xianbei custom, is found mainly in smaller tombs, indicating a degree of conservatism among the poorer tribesmen. A few of the tombs even contain no grave goods at all perhaps indicating that these belonged to the poorest economic class.

The most common tomb types are those with ramped passageways and subterranean chambers (Figure 2.8). It is within this type of tomb that most luxury items, such as gold, silver, lacquer, painted sarcophagi and glass vessels have been found. However, the presence of luxury goods in these tombs is not ubiquitous and is in fact it is quite rare, with most of the tombs being rather simply furnished, with just ceramic vessels and utilitarian items such as knives. The choice to furnish these tombs of similar style with luxuries or simple furnishings, could represent the economic status of the interred and their families. These items could also be markers of status reserved for social elites. Five Xianbei tombs of this type, containing glass vessels have been discovered and are discussed in section 6.5.3.

Image removed for copyright reasons

Figure 2.8: Typical Xianbei trapezoidal tomb with ramped entrance passage. This example from Qili cemetery tomb M36 in Datong also features a wood coffin and other 'typical' contents: 1,4,6: ceramic wine jars; 2,3,7-9: ceramic ewers; 5: iron coffin rings; 10 lacquer plates; 11; lacquer ear cups; 12 stone pillow (Zhang et al, 2006: 26).

2.5.2.2 Chinese tombs

The Chinese tombs in the Northern Wei period follow the traditions seen in the earlier Jin Dynasty tombs (Section 2.4.2), consisting of brick vaulted chambers, located within family cemeteries. They contain a range of Chinese style grave goods and locally produced ceramics. Some of these types of tombs will also contain epitaph tablets which identify the deceased. During the Northern Wei there was even a resurgence in certain Chinese practices, which had declined in the Eastern Jin, such as the use of *mingqi*, tomb figurines of people or other items, which would serve the deceased in the afterlife. This resurgence of traditional 'Chinese', practices is particularly evident at the two tombs in Datong, which have been identified as belonging to Han Chinese occupants. One is the tomb of Sima Jinlong (d.484) and the other Yanbei Shiyuan M5, which belonged to Song Shaozu (d.477) and his wife (Section 6.5.4).

2.5.2.3 Ethnic Identity and Affiliation

Ethnicity identity and affiliation were clearly one of the factors determining tomb type and contents in the Northern Wei period. Ethnicity is usually defined as a social construct, which allows a self-recognised group of people to locate and identify themselves in the world, through conformity so similar ways of behaving and being (Knapp and Antoniadou, 2002: 259). This could be expressed by a collection of cultural traits shared in common, such as language, behaviour, personal adornment and material objects (Grahame, 2003: 159). However, whether ethnicity can be identified in archaeological contexts, using material culture alone is still much questioned (Trigger, 1995: 277). Furthermore, the materials used to indicate ethnic identity, could also be markers of social, religious, and political identity, perhaps connected to, but not necessarily the same as ethnic identity. For example, social class, political affiliation or religious belief could all be marked by differing styles of dress or personal adornment, among members of the same ethnic group. However, it is clear that despite the obvious complexities, that material objects do play a role in communicating information about identity (Grahame, 2003:159-160).

Wiessner (1987: 57), states that “through comparing themselves with similar others, people evaluate their characteristics and abilities against those of others surrounding them...and develop a self-image which they try to present positively to others”. This creation of self-image can be clearly seen in the Northern Wei tombs around Datong, which employ layouts, contents and decorative schemes, representing the traditions of both the steppe and Chinese worlds. The cultural plurality of the Northern Wei state and its rulers, as well as the physical movement of peoples, from China, the steppe and Central Asia, to the capital at Pingcheng, led to a type of acculturation where new forms of material culture were adopted, while other traditional material forms were reworked. For example, lacquer, a traditional Chinese material, which had been in decline in Han Chinese controlled southern China, saw a resurgence in popularity in the Northern Wei period (See Müller, 2019b), while greyware pottery from the steppe tradition is common in almost all the tombs at Datong (Müller, 2019a: 385).

While Northern Wei tombs can be broadly correlated into Steppe and Chinese types there is a great deal of fluidity in their contents. Tseng (2012: 221) writes that “funerary repertoires and furnishings enjoyed a state of fluidity in the Northern Wei Pingcheng period, as individuals of different social and cultural backgrounds were comfortable in choosing particular elements to suit their own needs in the expression of one’s attitude toward death and what the afterlife was supposed to achieve.” An outwardly Chinese style brick tomb might therefore contain contents that come from the Xianbei cultural tradition. An example of this cultural mixing is in the Northern

Wei tomb figurines. While the practice of using such tomb figurines, is typically Han Chinese tradition (See 2.4.2.4), many of the tomb figurines from Northern Wei tombs are clothed in Xianbei rather than Chinese clothing, demonstrating an adaptation to Xianbei tastes (Dien, 2007: 233). The use of Chinese goods and is predominantly confined to higher status tombs, while among the lower classes there seems to be very little change (Tseng, 2012: 221). The use of Chinese goods could therefore be indicative of class distinctions, rather than changes in ethnic affiliation. They could perhaps also represent the political identity or status of the owner. As the imperial family adopted more Chinese practices it may have been pertinent for those in positions of power to do the same.

However, although late in the dynasty there were state mandated changes, forcing the adoption of Chinese cultural practices, the fluidity in tomb contents suggests these changes had little impact on tomb styles and contents. Indeed, there never seems to be a wholesale adoption of Chinese practice even among the elites. Some estimates suggest that up to 73% of the tombs belonging to Northern Wei civilian and military officials in this period remained identifiably Xianbei, while still incorporating some Chinese elements to varying degrees (Holcombe, 2013: 22). The appearance of Chinese goods and practices is therefore not indicative of the abandoning of traditional steppe practices or the forced imposition of new practices by the imperial throne, but rather the gradual process of acculturation, where certain Chinese goods and practices were adopted to meet the particular needs, and the self-image a person wished to display. This was part of a wider process in the century of Northern Wei rule in the Pingcheng period, which is characterised by the reworking of old, and the adoption of new materials, visual systems and cultural practices. The Xianbei were not passive receivers, but were instead active participants in this process, which saw their transition from being the transitory nomadic conquerors of China, to settled active participants in, and builders of a new state, with a national culture and identity drawn from the different peoples who inhabited it (Tseng, 2012: 5-9). The fluidity of tomb designs and furnishings in the Northern Wei are therefore not only the result of state mandated cultural norms but a variety of societal, and cultural pressures and ultimately the personal choices of the tomb occupant in how they wished to present themselves to the world in their funeral ceremonies and what beliefs they held about the afterlife (Tseng, 2012: 221). The use of glass vessels in the tombs of this period may be part of this wider acculturation process, and will be examined in chapter 6.

2.5.2.4 Determining the Identity of Northern Wei Tomb Occupants

It is worth considering how conclusions about the identity of the tomb owners has been reached by excavators. In most of these cases this has been done not through examination of skeletal

remains, but through examinations of grave goods they were buried with and the type and layout of their tombs. This obviously carries with it an element of uncertainty. For example, a female might choose to be buried with what could be considered male burial goods such as a sword, or someone who came from a Han Chinese family might choose to be buried in a Xianbei style tomb, with Xianbei grave goods. This was the case in the tomb of Feng Sufu a member of the ruling family of the minor Northern Yan State, who while coming from a Han Chinese family, was buried in a Xianbei style tomb, with Xianbei grave goods, possibly the result of him being raised by the Xianbei and ruling over a majority Xianbei population (Li, 1973; Hoppál, 2019: 116-118). This example demonstrates that race and ethnic identity may not determine the goods deposited in tombs, but personal choice (of the individual or those making the burial) and social background may have been more important. However, without positive identification of biological sex through skeletal analysis, in the case of the tombs discussed below, the excavator's suggestions of gender based on the evidence provided by the grave goods are followed. Thus, ethnicity is determined, based on the evidence provided by the excavators, in some cases other scholars, as well as my own interpretations. The interpretation of ethnicity is helped greatly by the fact that all of the tombs examined are in large cemeteries, containing other tombs with similar layouts and grave goods, indicating that a certain ethnic identity was shared by the various tomb owners in the same graveyards. Finally, the relative wealth and social status of the tomb owners has been determined by examining the relative amount of what might be considered high status goods, such as gold and silver as well as the relative size of the tomb. Such comparisons are possible because these tombs are all located in large cemeteries, with tombs containing ranges of grave goods.

2.5.2.5 The absence of imperial tombs

An additional point of consideration should be the absence of imperial tombs from the dataset. Although several candidates for imperial mausolea have been identified, very few have been excavated. In the first half of the Dynasty members of the imperial family were buried in tombs located on mountain peaks close to their original capital at Shengle in the Northern tip of modern Shanxi province (Dien, 2007: 91). So far twenty-one large tombs and further ancillary tombs have been identified, but none have been excavated. Emperor Xiaowen (r.477~499) built a tomb for himself in Datong, but left it abandoned when he moved the capital South to Luoyang. His tomb and the tombs of three other emperors Xuanwu (d.515), Xiaoming (d.527) and Xiaozhuang (d.530), have been identified in Mang hills, Northwest of Luoyang. However only the tomb of Xuanwu has been excavated. It was heavily looted, and most of the objects remaining were damaged (Dien, 2007: 182-184). No glass vessels were among them. Two other tombs belonging to minor members of the imperial family Yuan Wei and Yuan Zhao (d.528), members of the same clan as Prince Yuan

Chen who is described in the historical texts as owning glass vessels (Section 5.1.1), were found to be empty. In Datong the only imperial tomb excavated belonged to Empress Dowager Feng (d.490) at Fangshan. It consisted of a large mound inside of which the tomb was constructed of a stone passageway and brick inner chambers totalling 71sq m in floorspace. The tomb however had been looted several times and few artefacts remained (Jie, 1978). No glass vessels were found but a purple glass ring 2.2cm in diameter was found in the front chamber. This is described as a material ring in the excavation report (Jie, 1978: 32). An and Liu, (2006: 36) describe the glass as good quality, retaining its original lustre, and believe that the size is indicative of it being a finger ring. This scant excavation evidence, and the historical texts, indicate that glass objects were used by members of the imperial family, but as few tombs have been excavated and those that have were looted, they do not provide a comprehensive picture. The absence of imperial tombs in this dataset is therefore a result of a lack of evidence but not necessarily indicative of a lack of usage of glass vessels among members of the imperial family.

2.5.3 Northern Wei Religious Practice

The dual presence, and the new culture which came from it, is also reflected in the religious practices of the Northern Wei rulers, which came not only their personal beliefs, but also their attempts to rule the vastly different populations within their empire. The early Northern Wei emperors made sacrifices to both the inner Asian sky god Tängri, and the Chinese high god of heaven, *tian* 天, at altars set up respectively to the West and South of their capital Pingcheng. Such practices aimed to satisfy the religious needs of the steppe peoples such as the Xianbei and Gaoche as well as the Confucian piety of the Chinese civil servants (Pearce, 2019: 169). The Emperor Taiwu (r.424~452), was a follower of both Xianbei shamanic practices and became a strong proponent of the Chinese Daoist religion, under the influence of Cui Hao, his Daoist Prime Minister. (Pearce, 2019: 170).

However, it was Buddhism that eventually came to dominate religious practice at the Northern Wei court. Buddhism had been present in China since at least the Han Dynasty, brought by monks from India and Central Asia. It attracted converts with its new philosophical and religious concepts, such as karma, nirvana and the immortality of the soul. However, while it gained some high-level converts, it was essentially practiced as a private devotion and was never adopted at a state level, by during the Han and Jin Dynasties (Zürcher, 2007: 97; Kieschnick, 2019: 531).

The Northern Wei came into contact with Buddhism during their conquests of Northern China. The mass deportations of populations which followed them, brought practitioners of Buddhism,

both clergy and lay faithful to the capital Pingcheng, where they exerted a growing influence and even married into the imperial family. Prominent among these was Madame Feng, a devout Buddhist, and one of the most powerful women at court, as the stepmother of one, and grandmother of another Northern Wei emperor (Pearce, 2019: 165; 172-173). Recognising the universal appeal of Buddhism to people of all social classes and ethnic groups Emperor Wenchang (r.452~465), began to actively promote the religion, believing it could be used to foster social cohesion in the multi-ethnic empire. The Buddhism promoted by Emperor Wenchang also aimed at strengthening Northern Wei rule by encouraging the direct identification of the Wei emperors with the Buddha (Kieschnick, 2019: 536). This took physical form in 454 AD, when five sixteen-foot-tall bronze statues depicting the Wei rulers as Buddhas, were cast in Pingcheng. Even grander depictions were made in the 460s with the carving of the colossal Buddhas at the Yungang grottos in the mountains to the West of the capital (Pearce, 2012: 101-102). The adoption of Buddhism as a type of state religion, led to the construction of new temples and monasteries and also fostered the development of new artistic styles. Earlier works such as the Yungang grottos were clearly inspired by Central Asian and ultimately Indian styles, while developments later in the Dynasty began to incorporate more Chinese artistic and architectural elements such as the pagoda, transforming Buddhism into a more Chinese religion (Tsiang, 2002: 222).

2.5.4 The fall of Wei

As the dynasty progressed, and military expansion ended, the Xianbei tribesmen who had been the backbone of the Northern Wei armies settled into more sedentary lifestyles. Some of the leaders of these men became enamoured with Chinese culture and its trappings, and this transformation can be seen in changes in tomb structures and grave goods, which incorporated Han Chinese elements. This was far from universal however, and other Xianbei elites were more conservative and less willing to adopt the Chinese practices, their tombs more reminiscent of steppe burials (Section 6.1.2). Beginning with the Emperor Xiaowen (r.471~499), the Northern Wei state began to forcibly push Chinese cultural practices onto the Xianbei, forbidding the use of Xianbei language and clothing at court and forcing the Xianbei elites to take Chinese surnames. In 494 Xiaowen made the ultimate symbolic gesture by moving the imperial capital from Pingcheng to Luoyang, in a sense physically transplanting the Northern Wei dynasty from the steppe and into the Chinese world (Pearce, 2019: 174-178).

These changes were enacted to legitimise the Northern Wei rule of China by connecting it to the glorious imperial dynasties of China's past (Tsiang, 2002: 230; 242). However, while this may have made the regime more palatable to their Han Chinese subjects, it ultimately proved to be the

downfall of the Dynasty. These changes were resisted by the Xianbei tribesmen, who now felt side-lined in favour of the Chinese, whom they had conquered. Increasing dissent among the Xianbei, who lived around Pingcheng and on the Northern frontier towns, ultimately broke out into rebellion. A military uprising in 523, followed by civil war and court intrigue weakened the Northern Wei and in 534/535 the empire was split between two rival military regimes, the Eastern and Western Wei, which survived into the 550s, before eventually falling. (Pearce, 2019: 178-182). The Xianbei people themselves did not disappear. Instead, they merged into the population of Northern China, their traditions influencing Northern Chinese culture to such an extent that many practices considered Chinese today, are actually derived from the Xianbei (Dian, 1977; Pearce, 2019: 182-183).

2.5.5 The Jin and Northern Wei Dynasties

Both the Jin and Northern Wei Dynasties are considered to have held the Mandate of Heaven and were thus the legitimate rulers of China for their respective periods. However, the history, ethnic makeup, social organisation, material culture and religious practice of both dynasties was quite different. The rulers of the Jin were ethnically Han Chinese and their culture and social practices, were inherited from the Chinese dynasties which preceded them. While there was some disruption caused by wars and social unrest, there is a high degree of cultural continuity between the Jin Dynasty and the Han Dynasty, which preceded it. The Northern Wei by contrast were outsiders, ruling historically Chinese land. The material culture and social practices of the Northern Wei reflect the multi-ethnic nature of their empire. While there is some geographical overlap, especially around the Yellow River valley and the city of Luoyang, which for short periods served as the capital for both dynasties, they occupied differing geographical regions. The Northern Wei heartland was the North, the frontier zone between the Eurasian Steppe and the central Chinese plain. The Jin, for most of their rule occupied the fertile lands of Southern China, from their capital at Nanjing, in the Yangtze River valley. Again, while there is some overlap the Jin and Northern Wei also existed in different centuries, the Jin Dynasty ruling from 266~420 AD, the Northern Wei from 386~534 AD.

The following chapters will examine glass vessel usage in both dynasties within the context of these geographical, political, social and religious differences, utilising both textual and archaeological evidence.

3 Glass Vessel Usage in the Jin Dynasty: The Literary Evidence

陸士衡文集卷第七
朝醒弦促催人
夜飲舞遲銷燭
流璃千鍾舊賓
蒲萄四時芳醇

Fragrant grape wine through the four seasons,
holding up a glass goblet to welcome old friends.
Drinking and feasting until the candles have burnt
out, awaking in the morning to the sound of the lute.

Lu Shibeng wen ji, Scroll Seven

This chapter will examine the evidence for glass vessel usage in the Jin dynasty, which comes from a variety of textual sources. Care should be taken when using texts, as they are often produced by and for elites, and could give a somewhat distorted view of the past, by emphasising what author wanted known, for their own political or economic needs (Moreland, 2006: 137; Section 1.4.2). There is therefore the possibility that the information communicated could be distorted to meet the needs of the writer. However, while this possibility should be recognised, it does not necessarily negate the information which can be gained from written sources. While texts could in some instances be used as a tool for elite oppression and control, they also empowered the individual, giving them a means to build social networks or construct identities (Moreland, 2006: 145). The written word gave people the freedom to write about their own thoughts and feelings. Because of this the information that can be gained from texts is very different from other types of material or contextual evidence. Therefore “By recognizing that both material culture and texts are resources that can be drawn on in the pursuit of human projects we can construct more fully rounded pasts” (Moreland, 2006: 145). This chapter will therefore focus on the textual evidence for Jin Dynasty glass usage, which will complement the material evidence discussed in Chapter 4. The texts have been divided into four broad categories based on what aspect of glass usage they describe: display, drinking vessels, gifts and symbolism.

3.1 Displays of Wealth

The Chinese elites in the early Medieval period, had a passion for anything foreign. Ownership of exotica was a mark of wealth, status and good taste (Lewis, 2009: 158). Exotic objects, which came from distant lands were imbued with a certain potency, because they were difficult to obtain (Helms, 1988: 114). This was passed on to the owner of such objects, who had the skills, wealth, or social connections to acquire them. In China the emperors were able to amass large collections of tribute gifts, given by embassies of foreign states as gestures of goodwill or merchants seeking permission to trade. The rarity and uniqueness of these gifts was often stressed and they were not necessarily common items of trade in themselves. This meant that ownership was a physical token of extensive power and influence, particularly for emperors who could demonstrate that they could amass tribute from across the world (Lewis, 2009: 158). The items included in the tribute lists from the early medieval period include precious metals, slaves, entertainers, wild or domestic animals such as peacocks and blood sweating horses, furs, feathers, corals, exotic woods, rare plants, exotic foods, perfumes and drugs, incense, textiles, dyes, both secular and religious objects of art, books, maps and glass (Liu, 1988: 53). Glass vessels were included among these tribute gifts. A Jin Dynasty poem about a glass bowl (Section 3.5), opens with these two lines “Examining those rarities amid the regional tributary offerings, one prizes the uniqueness of this bowl.” The following quotations illustrate how glass was used in particular contexts as a symbol of power and prestige by elites in the Jin Dynasty.

3.1.1 Wang Ji’s Banquet

It was not only the emperors who were able to amass large collections of treasure. During the Jin Dynasty the extremely wealthy and powerful would often compete for prestige by amassing vast collections of rare and exotic items and then attempt to outdo each other in ostentatious displays of wealth and extravagance. The *shishuo xinyu* contains many accounts of these displays, often aimed at winning imperial favour. One such attempt was made by Wang Ji, a brother-in-law of the Emperor Wu (r.265~289 AD), who arranged an extravagant banquet, using glass vessels to serve the food.

Emperor Wu once favoured Wang Ji’s house with a visit. Wang tendered him a banquet for which he used all glass vessels. Over a hundred female slaves, wearing silk gauze trousers and blouses, offered food and drink with their hands. The steamed suckling pig was succulent and delicious with an extraordinary flavour. The emperor marvelled at it and asked the reason. Wang replied, “They used human milk to feed the suckling pig.” The emperor was deeply offended, and though the meal was not yet over, he left abruptly. It was something that even Wang Kai and Shi Chong would never have thought of doing.

Shi Shuo Xinyu, Taichi: 3.

Translation: (Mather, 2017: 494), with minor modifications by

D. Montgomery.

The banquet was clearly an attempt by Wang Ji to impress the emperor and it seems that as competition between the elites intensified, they had to go to greater extremes to outdo each other, hence the slave girls, unusual food, and the emphasis on the use of ‘glass’ vessels. The attempt ultimately failed because the emperor was disgusted by the outrageous food served. This seems to have been a well-known incident and it is also recorded in Wang Ji’s biography although in that example it states that the suckling pig was steamed in human milk (Mather, 2017: 494). Glass vessels are specifically mentioned in the text and were an important part of this extravagant display. Glassware has been used to serve food and drink in many cultures because of its transparency and refractive qualities. The Roman philosopher Lucius Seneca writes how “apples seem more beautiful if they are seen floating in a glass” (Flemming, 1997: 42), while in eighteenth century England cut glass, which could beautifully refract candlelight, was an important part of many feasting tables (Gabay, 1991: 102). In Jin Dynasty China such a display must have been even more stunning because of the rarity of glass, and perhaps also the colours (Section 4.5.6). The ability of Wang Ji to amass and use such a large collection of glass vessels was a sign of his status.

3.1.2 Shi Chong’s Privy

The two men mentioned at the end of the previous quotation, Shi Chong (249~300 AD) and Wang Kai, loathed each other, and frequently competed in displays of wealth. Shi Chong had been a minor local official but had apparently become wealthy by extorting and even robbing merchants who passed through his territory (Xiong, 2019: 321; *Jinshu*: the biography of Shi Bao). He used this wealth to compete with and even surpass the imperial family in opulence and the luxury of his lifestyle. He constructed houses that presumptuously imitated the palaces of the imperial princes, eliciting great envy from Wang Kai and others, who felt they could never keep up with him (Mather, 2017: 497). In one instance Wang Kai showed Shi Chong a rare and beautiful coral tree given to him by the emperor. Shi Chong promptly smashed it with an iron bar, much to Wang Kai’s horror, before ordering his attendants to bring out several larger and more beautiful trees to replace it. By doing this Shi Chong was able to demonstrate his superiority over Wang Kai, through possessing and yet ultimately being indifferent to such valuable things (Liu, 1988: 55). Shi Chong’s vast estate outside of Luoyang, Golden Valley Garden was known for being large, beautifully landscaped and lavishly equipped (Knechtges, 2014: 530-532). Even his privy was luxuriously endowed as detailed in the following incident.

*When Wang Dun had just married the Princess once as he was going to the Privy, he observed a lacquered box filled with dried jujubes, originally intended to be used as nose-stoppers. Supposing that even in the Privy they were also providing fruit, Wang preceded to eat them all up. **When he came back the slave girls held out a Gold washbasin filled with water and glass bowl filled with bath beans.** Dun preceded to empty them into the water and drink them all down, supposing them to be dried cooked rice. All the slave girls cupped their hands over their mouths and laughed at him.*

Shi Shuo Xinyu, Pai Diao: 14.
Translation: (Mather, 2017: 516)

Shi Chong was engaged in numerous court intrigues and frequently invited guests to his estates where he would attempt to impress them with his wealth, and enhance his own superiority and status. Wang Dun (266~324) was a Jin general and a member of the powerful Wang family, who had just married into Princess Xiangchen, the daughter of the Emperor Wu. Shi Chong likely invited him to his house after his marriage to gain political influence over him. Several similar incidents occur in Shi Chong's privy, and Wang Dun was apparently a regular visitor. Another story tells us that most guests were too bashful to use Shi Chong's privy, because the slave girls would force them to remove their old clothes and change into a new set before leaving. Wang Dun however was self-assuredly able to enter and remove his old clothes, to the amazement of the slave girls (Mather, 2017: 494). Inviting guests to use this privy was clearly a way for Shi Chong to display wealth and enhance his own status and several stories revolve around it. For example, another visitor was Liu Shi (219~309) who upon entering saw the luxurious furnishings and slave girls assumed it was a bedroom. Embarrassed, he returned to Shi Chong, apologising that he had mistakenly entered his bedroom, to which Chong callously replied, "it's just the privy" (Mather, 2017: 494).

This privy was therefore clearly used for display, filled with people and items, which most guests would not expect to find in a utilitarian space with a base function. Gold was a precious commodity and in short supply in this period. It was used sparingly, even in high status tombs (Dien, 2007: 269). A gold wash basin was clearly a status symbol. In the passage the glass vessel is considered worthy of comment, along with the gold washbasin, suggesting it was also precious. In this period glass vessels were used by elites as high-status drinking vessels (Section 3.2). To use a glass bowl, something so highly valued by others, to simply store the beans used as soap, in a privy is an intentional means of display of wealth by Shi Chong. Like the incident with the coral trees, the use of precious objects like glass vessels in his privy served to demonstrate that he owned and yet was indifferent to things valued by others, because his wealth was so great.

3.1.3 Poetry Composition

At elite gatherings poetry was often discussed and even spontaneously composed, sometimes as part of a drinking game (Benn, 2005: 217). At one gathering in Shi Chong's house, thirty preeminent guests gathered to see off an official who was departing to a posting in Chang'an. These guests were required to compose a poem about Shi Chong's estate, and those who failed were obliged to drink three *don*, approximately six litres of wine (Knechtges, 2014: 532). A comment in the *Taiping Yulan*, describes a glass vessel being used as the subject of poetry composition at a party, hosted by a famous Western Jin poet Pan Ni (251~311 AD).

Pan Ni offered drinks to his colleagues. He owned a glass bowl and all the guests were encouraged to compose fu (poetry) about it. [Pan] Ni finished [writing] his, where he sat.

Taiping Yulan, Vessels, Section five: Bowls.

Translation: **D. Montgomery**

A *fu* is a unique Chinese literary form, which combines elements of both rhyme and prose. Sometimes translated as a rhapsody in English, *fu* were used describe a subject from multiple angles, in as much detail as possible (Knechtges and Chang, 2010: 317). Glass vessels were rare and had unusual properties, perhaps making them worthy of extensive commentary in a poem. However, even though glass vessels were rare, their use as drinking vessels, means that the glass bowl could have been an item readily available on the drinking table and for Pan Ni and his guests to write about. Furthermore, as discussed above, ownership of exotic items lent a degree of status to those who could obtain them. Encouraging his guests to write poetry about his glass bowl could have been a way for Pan Ni to display his ownership of such an item, allowing his guests to comment on its unusual properties. A poem composed by Pan Ni about a glass bowl will be examined in detail at the end of this chapter (Section 3.5).

3.1.4 The Emperor's Window

The *Shishuo Xinyu*, contains another account signifying that glass itself was a prestigious and highly valued, especially when made into large functional objects which would have come from foreign lands. This account relates to a glass window belonging to the Jin Emperor Wu (r. 265~290). There is no evidence for the production of window glass in China in this period, so this window was very probably a tributary offering given to the emperor by a foreign envoy or merchant. The only source for such a window in this period would have probably been the Roman Empire, where they were

produced from the first century onwards (Arletti *et al*, 2010: 252-253). The *Jinshu*, the official history of the Jin Dynasty alludes to the use of window glass in the Roman Empire, describing a great city, where the houses are made of coral, with glass walls and crystal pillars (*Jinshu*, Scroll 67). The coral walls perhaps refer to the coloured marbles used in some Roman buildings and the glass walls may be a reference to glass windows. Transport of one of these fragile panes on one of the trade routes from the Mediterranean to China, either overland via Central Asia or across the Indian Ocean, must have been an extremely arduous task, making them rare, valuable and therefore a suitable tribute for an emperor.

*Man Fen was afraid of drafts. Once he was present at a gathering with the Jin Emperor Wu. **The North window was made of a screen of glass.** In reality it was tightly sealed, but appeared to be open. Fen looked embarrassed and the emperor laughed at him. Fen answered, “Your servant is like the water buffalos of Wu, which pant when they see the moon.”¹*

Shi Shuo Xinyu, Yan yu. 20.
Translation: (Mather, 2017: 42)

The surprised reaction of the minister Man Fen (?~304), who had never seen anything like this before, indicates that such glass windows were rare in China. Brown (2018: 103) describes how exotic and charismatic goods such as this window, were used by those in positions of power across Eurasia, to turn their palaces and tents into places that seemed foreign and distant to those in their own society. Places that seemed a little “out of this world,” giving these leaders something of a foreign air, increasing their power. This power is used by the emperor Wu, who understood what the window was, giving him superiority over Man Fen and his subjects who did not possess this knowledge.

3.1.5 Crafting Crystal

One Jin source discusses glass production. It comes from the outer chapters of the *Baopuzi*, a philosophical treatise written by the Jin scholar Ge Hong.

The foreign made crystal bowls, are in fact prepared by compounding five sorts of (mineral) ashes. Today this method is being commonly practiced in Jiao [Vietnam] and Guang [Guangdong]. Now if one tells this to ordinary people, they will certainly not believe it, saying that crystal is a natural substance like jade.

Baopuzi Neipian, Chapter 2: Lunxian.
Translation: Needham 1962: 108, with minor modifications by **D. Montgomery.**

¹ These water buffaloes were afraid of the heat of the sun, so when they saw the moon they started panting believing it to be the sun (Mather, 2017: 42).

The foreign crystal bowls he is referring to are almost certainly imported glass vessels. In many ancient cultures glass was closely associated with rock crystal, which shares many properties with transparent, colourless glass. For example, the Roman author Pliny writes “glass-ware has now come to resemble rock-crystal in a remarkable manner, but the effect has been to flout the laws of Nature and actually to increase the value of the former without diminishing that of the latter.” (Eichholz, 1962: 185). In the Roman empire rock crystal vessels were objects used to display wealth and status and were purchased at exorbitant cost by the wealthy who sought to imitate the lifestyle of the Emperor and his circle (Flemming, 1997: 44). It is no surprise then that the transparent colourless glass, which most closely resembled rock crystal was also the most expensive (Vickers, 1996: 48-49). This association continues to this day in modern English where high quality glass is also called crystal. The passage in the *Baopuzi* indicates that in early medieval China glass and rock crystal were closely associated. If many people believed glass was a natural geological product this may have actually increased its value.

The passage also discusses the production of glass vessels in Southern China and Vietnam. Currently there is no archaeological evidence for this in the early medieval period (220~589 AD). However, there is a possibility that such an industry existed in Southern China from the first century BC to the first century AD (Section 2.3.2). These regions were on the Southern frontier of the Jin empire, so it is probable that Ge Hong never travelled to the region. Instead, he must have referred to other earlier works which recorded glass production in this area. The belief that glass was a natural geological product may have prevented attempts to produce it locally during the Jin Dynasty. Furthermore, part of the value of glass vessels was in their rarity. Producing them locally would therefore have devalued them. According to one historical source this is precisely what happened when glass was locally produced in the Northern Wei dynasty (Section 5.4.3).

3.2 Drinking Vessels

Alcohol historically played an important role in Chinese society, it was used to foster fellowship, strengthen communal bonds, placate gods, ancestors and for purely personal pleasure. It was also drunk as part of the everyday diet (Choo & Dian, 2014: 434). Only in the Tang Dynasty (618~907), was alcohol challenged by the growing popularity of tea. The contest between these two beverages is encapsulated in the *chajiu lun*, a Tang Dynasty treatise which takes the form of a verbal battle between a “Mister tea” and “Mister alcohol” (Benn, 2005: 215-216). The following excerpt from Mister Alcohol describes the importance and antiquity of alcohol in Chinese society.

From ancient times till now, tea has been disdained while alcohol has been honoured. After a goblet of wine had been sprinkled in the river, soldiers of the three forces [of Chu] could all

become drunk. When emperors and kings drink me they give their courtiers [the right to speak] without fear. When the various courtiers take me they shout, “Long live [the Emperor]!” I am used for pacifying the dead and for settling [the minds of] living beings, and even the gods are pleased with my grateful odours. When people are entertained with alcohol and food, bad intentions are always absent. [When people drink] alcohol, there are drinking games that reveal human love, justice, propriety, and wisdom!

Translation: (Chen, 1963: 278–79).

The suggestion here is that alcohol is essential for the proper functioning of government, society, and even the spiritual world (Benn, 2005: 217). Alcohol necessarily requires vessels to drink from as well as a variety of serving ware (Figure 3.1). Bronze wine warmers known as *jiaodou*, were commonly used to warm wine, while glazed ceramic ewers were used to serve it (Dien, 2007: 252). The most distinctive type of drinking vessel from the period is the ear cup (Figure 3.1). These were usually made from locally produced lacquerware and glazed ceramics such as celadon, although other materials such as bronze and shell could be used. Drinking vessels made from more exotic materials including nautilus and glass were also used in the Jin Dynasty. There are a number of texts which discuss glass drinking vessels, and these are examined below.

3.2.1 A Scholarly Drinking Party

Because of the political instability which followed the collapse of the Han Dynasty, many of the literati class found themselves increasingly ill at ease in their traditional political roles. Some sought to escape political life altogether and for many, alcohol was a means to achieve this. This was epitomised by the “Seven Sages of the Bamboo Grove,” a group of Western Jin scholars and poets, for whom the pursuit of intoxication was an almost “holy mission” (Benn, 2005: 222). Seeking to escape the hypocrisy and danger of the political world, they banded together and retreated to the countryside, where they embarked on a life of drinking wine and writing verse. *Qingtán* or “pure talk” became a popular pastime among the elites of the Jin Dynasty. These were essentially private gatherings, where alcohol was consumed in copious amounts, current political and social problems were commented on, and literature and philosophy debated (Poo, 2009: 245). One such gathering is described by the scholar Ge Hong (283~343 or 363) in the chapter aptly named “admonitions on alcohol”. He has a disparaging view of such parties and describes how cultured discussion, quickly descends into drunken debauchery.

Worldly people drink heavily and to their hearts content. When a feast begins, they are modest and dignified, chanting poems, singing songs, raising their glasses to toast to ‘longevity’ and discussing the meaning of righteousness. Before the sun had moved, bodies are

*light and ears are hot*². **Using glass and conch vessels together, they fill their cups to the brim, play drinking games and frequently stand and shout.**
The hosts will throw the lynchpins of their guest's carriages into a well, so even when they are completely drunk, they cannot leave, and must stay and continue the drinking.

Baopuzi Waipian, Chapter 24: *Jiujie*.

Translation: **D. Montgomery**

Glass and conch vessels were clearly an important component of this party. As these gatherings were about breaking convention and escaping from normal society perhaps the use of what at the time might be considered exotic vessels such as these was part of this. Glass vessels like these are also found in the archaeological record and have been excavated in several Jin tombs (chapter 4). Two Jin dynasty tombs also contained vessels made of exotic shells, which could be the conch vessels referred to in the text. In both cases they were associated with glass vessels. A Western Jin tomb in Pizhou (Section 4.4.1), contained two nautilus shell cups, two shell ear cups along with a single glass vessel (Nanjing Museum *et al*, 2018). Meanwhile the Eastern Jin cemetery of the Wang family in Nanjing, the tomb of Wang Yi contained two glass vessels, while that of his nephew Wang Xingzhi contained a nautilus shell cup (Kieser, 2011: 54-57) (Figure 3.1). The glass vessels, along with the conch, are clearly foreign, and do not conform to traditional materials and styles. Other drinking apparatus such *jiaodu* wine warmers, were also found in these tombs indicating the importance of wine consumption for the owners reinforcing perhaps the association with alcohol.

3.2.2 The Delight of Wine Drinking

One poem which references glass vessels used as drinking vessels is the “delight of wine drinking”, written by the Western Jin official Lu Ji (261~303). Lu Ji espouses the joys of drinking wine with friends throughout the year.

Fragrant grape wine through the four seasons,
Holding up a glass wine vessel to welcome old friends.
Drinking and feasting until the candles have burnt out,
Awaking in the morning to the sound of the lute.

Lu Shibeng wen ji, Scroll 7.

Translation: **D. Montgomery**

This poem is one of the earliest to specifically mention grape wine, praising the fact that it can be drunk throughout the year with inspiring and communicative effects. Furthermore, it can be seemingly drunk without causing a hangover (Kupfer, 2010: 5). Wine in Chinese literature it is generally considered to refer to locally produced alcohol. There were dozens of varieties available,

² After a short time they are drunk.

made from various types of grains including fermented rice and millet (Dien, 2007: 362; Choo & Dien, 2014: 434). The historical texts are not usually specific about the type of alcohol being consumed simply using the word *jiu* 酒 meaning alcohol, which is often translated as wine in English. However, this poem specifically describes grape wine. In the early medieval period such wine was available to purchase through foreign merchants (See Kupfer, 2010; Choo & Dien, 2014: 434). As a foreign import, grape wine could perhaps suitably be paired with an imported glass vessel. Furthermore, unlike other kinds of alcohol drunk in this period, grape wine comes in a variety of colours and hues, which could be appreciated fully when viewed through transparent glass. A later Tang Dynasty poem by Wang Han, opens with the line “Fine grape wine poured into magnificent cups shining in the night” (Kupfer, 2010: 5). Glass vessels, shining and transparent would certainly fit here. Kerner (2015: 125), suggest that one of the functions of drinking is to enjoy sensory pleasures. When drinking alcohol, taste and smell are certainly important. Glass is impervious and does not taint liquid, unlike other materials such as bronze. A glass vessel would therefore have allowed the user to fully appreciate the taste and smell of a high-quality wine. Colour is another important sensory component of wine drinking. Using a glass vessel, especially a colourless one, would give a unique sensory aspect to the user allowing them to appreciate fully the colour and quality of the wine. Furthermore, using a glass vessel will allow others to see the owner drinking imported wine, highlighting their consumption of a luxury product from something equally luxurious.

3.2.3 Cui Hong Refuses to Drink with Sima Liang

The *Jinshu*, describes a banquet hosted by Sima Liang (d.291) a member of the Imperial family, who briefly served as regent of the Emperor Hui (r.290~306), before his assassination. During the banquet Sima Liang invites his ministers to drink with him using glass vessels but one of the ministers Cui Hong refuses.

Cui Hong did not speak about wealth and did not hold treasure. [Sima] Liang, the Prince of Runan invited his ministers to a banquet, to drink wine with glass cups. When the wine came to Cui Hong he did not take it. [Sima] Liang asked the reason and Cui Hong replied “When I hold jade I can’t walk quickly”. This is contrary to common sense and was sophistry. [In fact the real reason was when] Yang Jun was killed, Cui Hong was close to the Water Minister Wang You and was therefore implicated in the crime and demoted.

Jinshu, Scroll 45, Biographies section fifteen: Liu Yi, Cheng Wei, He Qiao, Wu Ye, Ren Kai, Cui Hong, Guo Yi, Hou Shiguang and He Pan.

Translation: **D. Montgomery.**

The glass vessels are described as being *zhong* in the original Chinese, which can be translated either as a kind of cup without handles or a goblet. Because of his demotion Cui Hong snubs Sima Liang by refusing to drink with him, but to save face fabricates the excuse that he could not hold jade or treasure. This would indicate that the glass vessels are considered highly valued or treasured items, on a par with jade. By using the glass vessels to serve his guests Sima Liang is trying impress on them his wealth and status, through his ability to acquire, display and use rare and exotic items.

3.2.4 Wang Dao and Zhou Yi Drink Together

The *Shishuo Xinyu*, records another example of powerful men drinking together, using glass vessels. Wang Dao (276~339), an Eastern Jin statesman, asks a courtier Zhou Yi (269~322) why a glass vessel empty of wine is still considered precious.

Wang Dao was once drinking together with the other courtiers. Raising a glass bowl, he said to Zhou Yi, “the belly of this bowl is extraordinarily empty, yet it is called a precious vessel. why?” Zhou replied, “this bowl is lustrous and luminous, genuinely clear and translucent. That's the only reason it's precious.”

Shi Shuo Xinyu, Paidiao: 14.

Translation: (Mather, 2017: 440), with minor modifications by **D. Montgomery.**

This anecdote is interesting because Wang Dao directly asks Zhou Yi why a glass vessel is valued, and it is one of the few examples where the properties of glass are discussed in relation to value. This remark is actually a gibe. Wang Dao believes that Zhou Yi like the bowl was empty; he lacked ability and was a renowned drunkard, but despite this he was highly valued and held high office (Mather, 2017: 440). Zhou Yi however, replies honestly to the question, giving reasons why he considered glass valuable. In this translation he tells us the bowl is “lustrous and luminous, genuinely clear and translucent”. In the original Chinese, the word *yingying*, certainly means something that is bright, wonderful, and beautiful. *Qingche* means something that is clear and transparent as still water might be. That it is described as genuinely clear and transparent, perhaps sets it apart from other materials, such as jade, that offer some measure of translucency, but not the full transparency of glass. This combination of brightness and transparency not found in other materials appears to be what gave glass value as a material.

Images removed for copyright reasons

Figure 3.1: Eastern Jin (317~420) drinkware unearthed in Nanjing. Clockwise from top left, Glass vessel from the tomb of Wang Yi (d.322). Nautilus cup from the tomb of Wang Xingzhi (d.361). Lacquer ear cup, from Shangfang tomb M1. Bronze wine warmer from the tomb at Dongshanqiao. Celadon chicken head ewer, from the tomb at Beigushan. Celadon wine set from the tomb at Ganjiaxiang. (Nanjing Municipal Museum, 2004: 63, 82-83, 96-97, 114)

3.2.5 Treasures for the Tomb

The *Jinsbu* gives one account of glass drinking vessels being used in a tomb. It discussed the tomb of Zhang Jun (307~346), the Han Chinese ruler of the Former Liang (320~376), a minor state in North-western China, which was a vassal of the Jin dynasty. His tomb was looted by the Hu people, Hu being an all-encompassing term for the non-Chinese ethnic groups which inhabited Northern and Western China during Jin rule. The tomb was repaired by Lü Zuan (r. 400~401), the ruler of the Later Liang (386~403), who was a Di by ethnicity. The Di were a proto-Tibetan ethnic group, also considered barbarian by the Chinese (Holcombe, 2019b: 120). However, Lü Zuan seems to follow some Chinese cultural practices, sending envoys to repair and perform the proper sacrifices at the tomb of Zhang Jun, which was now located within his kingdom.

The Hu barbarian An Ju looted the tomb of Zhang Jun. Upon opening the tomb he saw Jun's face appear as if he were still alive, and found a pearl screen, a glass wine vessel, a white jade wine vessel, a red jade flute, a purple jade flute, a string of coral, an agate goblet and numerous treasures of land and water. Lü Zuan was furious and had more than fifty of An Ju's followers killed. He then sent envoys to sacrifice to Zhang Jun and repair his tomb.

Jinsbu, Records, Section twenty-two: *Lü Guang, Lü Zuan, and Lü Long.*
Translation: **D. Montgomery**

The contents of the tomb were clearly considered valuable enough to make them worth looting. The practice was actually fairly common in the early medieval period due to warfare and social instability (Shi, 2012: 230). The glass vessel is described as a *Ke* an ancient word for a type of wine vessel. This indicates that it was probably intended as a drinking vessels in the afterlife. It appears to have been valuable, described as being among other treasures and valued drinking vessels, including the agate goblet and the jade wine vessel. The contents of the tomb bear some similarities to those found in high status Jin Dynasty tombs (Section 4.2). In particular the great tomb at Beigu shan in Nanjing, believed to have belonged to one of the Jin Emperors (Zhu, 1983). This tomb was also looted but contained fragments of two glass vessels, as well as fragments of agate vessels, and small decorations made of precious materials such as jade, gold and amber. Such inventories of precious materials, including glass vessels may have been fairly standard for tombs of rulers in the Jin Dynasty. This however would also make them a prime target for looting and currently no intact tombs belonging to such rulers have been uncovered.

3.3 Precious Gifts

Gift giving has been, and still is, an important social practice in many cultures, used to create and maintain social relationships and alliances, display power, clarify social status and create debt and

obligations. During the social chaos that followed the collapse of the Han Dynasty, gift giving along with feasting were important social practices, which reinforced the value of fellowship, restored social bonds and rebuilt hierarchies and communities (Tian, 2015: 1). Glass vessels were in a sense a perfect gift for these times as they also had a utilitarian value and could be used as tableware and drinking vessels in social gatherings, reinforcing these bonds of fellowship and displaying alliances or obligations served.

3.3.1 The Letter of Zhuge Hui

Emperors would often give gifts, including rare items from the imperial treasury to their subordinates (Liu, 1988: 53). In one letter, preserved in the *Yiwen Leiju* an imperial official Zhuge Hui (284~345), thanks the emperor for gifts he received, including a glass bowl. Where he is going is not stated, but the tone of the letter suggests that it was a distant posting far from the capital.

Upon my melancholic departure, I was, by imperial decree sent a blanket, a sword, and a glass bowl. Eminent men record what is on their hearts. Heaven's blessings visit the upmost ends of the earth and your decrees are applied equally, whether near or far.

Yiwen Leiji, Scroll 73, Miscellaneous Utensils: Bowls.

Translation: **D. Montgomery.**

These gifts cemented the relationship between the emperor and Zhuge Hui, who tacitly confirms his loyalty to the emperor. Such gifts are actually indicative of a close relationship between the emperor and Zhuge Hui, demonstrating a degree of care and forethought. The gifts provide for the all the needs of the person, the blanket for shelter from the elements, the sword for protection from enemies and the glass bowl for sustenance of the body and soul. Furthermore, each of these gifts were items that would be used and touched frequently. The blanket would be wrapped around the body for warmth, the sword would hang by its side, while the glass bowl would be held in the hand and brought to the lips to drink from. Each time Zhuge Hui touched one of these items he would be reminded of the gift giver, that is the Emperor, even in his post away from the Imperial court. However, while the other items were functional, the choice of a glass bowl, rather than a vessel made from another material, indicates not only care but also high esteem. The emperor wanted to provide Zhuge Hui with something truly precious, suggesting that he was held in high regard at court.

3.3.2 A gift for Duan Liao

A note in the *Taiping Yulan*, records another instance of an emperor giving a glass vessel as a gift. In this case the Emperor Cheng (r. 325~342), gave a glass bowl to Duan Liao (d. 339) a chief of

the Duan tribe of the Xianbei, the cousins of the Tuoba Xianbei who founded the Northern Wei Dynasty. Originally a nomadic people the Duan Xianbei, became vassals of the Jin Dynasty and were given control of Liaodong, a region of North eastern China, remaining loyal even after the Jin loss of Northern China (Section 2.5) (Xiong, 2017: 135).

*By an imperial edict of Jin Emperor Cheng, a glass bowl was bestowed on Duan Liao,
the Duke of Liaodong.*

*Taiping Yulan, Vessels, Section five: Bowls.
Translation: D. Montgomery*

The conferring of official Chinese titles on local strongmen in border regions became quite common in the early medieval period. It elevated these men above the other local competition, giving them legitimacy and winning the Chinese imperial court a local ally with little to no cost, other than a title (Holcombe, 2019c: 298). The bestowing of gifts would have further cemented these relationships. The bowl was given in an official imperial edict indicating the importance of this interaction between the emperor and Duan Liao. The glass bowl appears to be an ideal gift in this case as it would serve the dual purpose of allowing Duan Liao to show off his status and legitimacy, by using it publicly at events such as feasts, while at the same time reminding him of the fealty, he owed the emperor.

3.4 A Symbol of Purity

3.4.1 Rhapsody on a Dirty Wine Vessel

The rhapsody on a Dirty Wine Vessel and was composed by Fu Xian (239-294), a Western Jin writer government official (Knechtges & Chang, 2010: 250-252). In the poem Fu Xian narrates the story of a glass wine vessel, which his children played with and dropped in the dirt. After this event he sees the glass vessel as defiled and unfit for use as a wine vessel.

*I once received a glass wine vessel as a gift,
Which the children found and played with,
It was ruined and can't be cleaned,
It can't be cherished anymore.
Seeing it gives a feeling of defilement,
So it lost its place as a treasure,
Like a noble gentleman,
Dying in disgrace.
O Rare Autumnal treasure,*

*With the purity of heaven,
The eternal colour of Spring Sunshine,
The extreme clarity of Winter ice,
From whence did you become a vessel,
With your remarkable exotic design?
O you fell into filth,
Your beauty is not spared,
The wine vessel gone forever,
Inferior even to a water jug.*

Yiwen Leiju, Scroll 73, Miscellaneous Utensils: Wine Vessels.

Translation: **D. Montgomery**.

Fu Xian clearly considers the glass vessel to be extremely valuable as it began life as a ‘treasure’. The properties that gave it this value appear to be the material properties of glass such as the colour, like Spring sunshine, and the clarity, like Winter ice, as well as the exotic foreign design of the vessel. The fact he received it as a gift may also have added to its value. The other quality praised is purity and the glass vessel even achieves a type of ‘heavenly’ purity. This association with purity is in fact inherent throughout the fu. The glass vessel begins its life as something ‘pure’ but becomes tainted after its contact with the filth. This transformation is reflected in the vocabulary used to describe the vessel. At the beginning of the poem it is described as a *zhi* 卮, which is an archaic word for a wine vessel, perhaps reflecting an ancient nobility or purity. At the end of the poem it is described as a *shangshao*, another more common term for drinking vessel or cup. However in the final lines of the poem the vessel is described as inferior, even to a *wayi*, a type of jug used for pouring water onto hands when washing; that is to say it is no longer fit for purpose as a wine vessel. An (2002 a: 57), suggests that the owner of the vessel was devastated after his children dropped the vessel in the dirt, because he believed it could not be cleaned. However, the sorrow perhaps comes not from being unable to clean the glass, but that the vessel lost something of its inherent purity. Along with brightness and transparency, purity could perhaps be considered another quality that gave glass its value. Something clean and without blemish, perhaps even something that we should aspire to be like. However, contact with dirt causes it to lose this intrinsic purity in the eyes of the owner, who cannot even bear to look at the vessel anymore, because seeing it gives him such a sense of defilement. While outwardly clean and intact, its innate value is gone.

3.4.1.1 An Allegory for Corruption

Fu Xian personifies the glass vessel considering it like a gentleman losing honour, dignity, status and finally dying in disgrace. This leads us to the deeper meaning of the fu, which is in fact an allegory referring to government ministers, who engaging in corruption, forever besmirch their reputation, just as the glass vessel loses its treasured status after being dropped in the filth. Because of this, the Qianlong Emperor specially selected the text for the imperial examinations of 1796 to demonstrate to the officials his desire that they be clean and incorruptible. Suffice to say no one passed the exams that year as the corrupt candidates could not write about the text, without condemning their own amoral behaviour (Bo, 2016: 3). One might even consider that the fu was about the author himself; hopes and dreams tarnished by a corrupt political system, outwardly pure but inwardly adulterated and stained by the politics of the day. Perhaps he could not bear to look at the glass vessel because it gave him an uncomfortable reminder of his own life.

3.5 Rhapsody on a Glass Bowl

A poem written by the Western Jin poet Pan Ni (251~311) (see Section 3.1.3), entitled as *liuli wan fu*, ‘Rhapsody on a glass bowl’, encapsulates many of the uses and properties of glass vessels described in the other textual sources.

*Examining those rarities amid the regional tributary offerings,
One prizes the uniqueness of this bowl.
It would have had to cross the remote perils of the shifting sands
And traverse the precipitous dangers of the Pamirs.
The way it came was obstructed and distant,
The place to which it was consigned was dark and deep.
One relied on the multitudinous paces of repeated peaks
And overlooked the myriad spans of flooding streams.
One came into contact with jade trees and lustrous gems
And was neighbour to the sand-plum tree and fine green jades.
One regarded with awe the rocky summits of the “Boundless Winds”
And gazed at the majestic ranges of the “Mysterious Garden”
Thereupon one journey to the Western Antipodes
And looked from afar at the Great Cover.
One would have passed through the Kunlun Mountains,
Where one might catch sight of the Lantern Dragon.
One would have had an audience with the Queen Mother [of the West]
And paid a call on the sylph youths.
They would have drawn on the flowing splendour of glass
And given orders to the excellent craftsmen of that far world.*

*These then assembled the mysterious insignia to select the image
and calibrated the three heavenly bodies [sun, moon, and stars] to determine the capacity.*

Its gleam and glitter [match the] the sun's dazzle.

Its roundness and repletion [mirror] the moon's fullness.

Hairline blemishes are not to be found,

And flying dust does not adhere.

Its clarity and sparkle are on a par with a candle flame,

Its outer and inner surfaces conform to [one] shape.

Congeaed frost is inadequate to match its purity,

Limpid water unable to convey its clarity.

Its hardness is beyond that of gold or stone,

Its strength challenges the most excellent jade.

Grinding does not wear it down,

Besmirching does not soil it.

To raise this bowl to toast the guests,

Is to add lustre to the Imperial banquet's close-packed ranks.

Its flowing luminosity is bright and brilliant so as to discern what is inside,

The clear wind's glitter and gleam can be seen from without.

Yiwen Leiji, Scroll 73, Miscellaneous Utensils: Bowls.

Translation: (Dien, 2007: 291-2), with minor modifications by **D.**

Montgomery.

In Pan Ni's poem, the glass vessel is displayed in the imperial treasury and then conspicuously used to toast guests, perhaps by the emperor himself at an imperial banquet to display wealth. Pan Ni also notes that glass was among the tributary offerings. This indicates that the glass vessel was given as a diplomatic gift to the emperor, by foreign envoys or merchants. Several properties gave glass vessels their value and these are described in detail in the poem. Firstly, the glass bowl is exotic and has travelled great distances to reach China. This journey is described in detail by Pan Ni as the bowl travels across deserts and the Pamir mountains. The fragility of glass vessels and the difficult journey they had to make was one of the reasons for their rarity. The craftsmanship also considered excellent and the craftsmen who made it are described by Pan Ni as receiving inspiration and instruction from immortal beings. The poem then goes on to describe the properties of the bowl which make it praiseworthy. As with the other historical texts these include transparency, brightness, luminosity, lustre and purity. To these Pan Ni adds other qualities, such as strength, hardness, roundness and lack of blemishes. Some of these qualities might seem like over exaggerations and Pan Ni appears to want to heap praise on the glass bowl from all conceivable angles. He also states that glass vessels were used predominantly as drinking vessels in the final lines of the poem, where the glass bowl is raised to toast guests at an imperial banquet. The final lines of the poem reiterates the special qualities of glass. It is bright, lustrous, luminous,

glittering, and transparent. Such qualities would have been seen and admired by the guests at the banquet and highlighted the status of the owner.

3.6 Summary

The historical texts indicate that in the Jin period glass vessels were used by the elites, primarily those in the imperial family and high level officials in the imperial administration. They served as primarily as drinking vessels, although they were also used by wealthy individuals for other functions such as the serving of food, or for displays of wealth, power and status.. Glass vessels were used publicly and conspicuously to make toasts, serve guests and as the subject of poetry compositions at drinking parties. Because of their value they were also received as tribute by the emperor and also given as precious gifts. Glass was rare and highly valued due to its unique physical properties. It is transparent but at the same time lustrous and luminous and can also come in a range of colours. These properties were not found in other materials available in China in this period and made glass vessels unique and pleasing to the senses. Transparency also meant glass was associated with more ephemeral properties such as purity, and it is used as an analogy to discredit those who are less than pure. Some people believed that glass was a natural material, like rock crystal or jade, which would have perhaps precluded attempts to produce glass locally.

The next chapter will continue to explore Jin Dynasty glass usage by examining evidence from tombs.

4 Glass Vessel Usage in the Jin Dynasty Tombs

即序胡安據盜發張駿墓見
駿貌如生得真珠簾琉璃榼
白玉樽赤玉簫紫玉笛珊瑚
鞭馬腦鐘水陸奇珍不可勝
紀纂誅安據黨五十餘家遣
使弔祭駿並繕脩其墓

晉書載記第二十二呂光呂纂呂隆

The Hu barbarian An Ju looted the tomb of Zhang Jun. Upon opening the tomb he saw Jun's face appeared as if he were still alive, and found a pearl screen, a glass wine vessel, a white jade wine vessel, a red jade flute, a purple jade flute, a string of coral, an agate goblet and numerous treasures of land and water. Lü Zuan was furious and had more than fifty of An Ju's followers killed. He then sent envoys to sacrifice to Zhang Jun and repair his tomb.

The Book of Jin, Records, Section twenty-two: Lü Guang, Lü Zuan, and Lü Long.

This chapter will examine the material evidence of glass vessel usage in the Jin dynasty, which comes from tombs. Their location, structure and contents will be reviewed, to build a picture of who the owners of these tombs were. Four intact tombs will then be examined in more detail to assess how glass vessels were used in relation to other goods placed in the tomb. The glass vessels themselves, which were imported from the Roman and Sasanian empires, will then be examined in detail. A summary of information about each individual tomb can be seen in Table 4.1, which also contains the four tombs discussed in more detail.

Table 4.1: Summary of information on the glass vessels and fragments from the Jin Dynasty tombs.

Site and Location	Date	Tomb Owners	Tomb Style and condition	Glass Vessel Style	Colour and Transparency	Dimensions (cm)	Glass Vessel Location.	Suggested Origin	Intended Purpose	Associated Grave goods	Excavation Report
Xiangshan Tomb M7 <i>Nanjing Jiangsu Province</i>	322 AD	Wang Yi (d. 322) and two wives. Tutor of the Crown prince.	Large, brick built single chamber. <i>Intact</i>	Facet cut beaker. <i>Intact</i>	Yellowish-green and transparent.	Rim d. 9.4 Base d. 2.5 H. 10.4	Inside the male coffin	Roman	Drinking Vessel	Gold diamond ring, jade cicada, steatite pigs, a crossbow crow, bronze mirror, bronze dagger, jade belt hook, jewellery including gold rings, hairpins and small bells and imported beads made from agate, turquoise, carnelian and rock crystal. Bronze, celadon and ceramic utensils, bronze wine warmer, raises ceramic couch, and armrests, multiple tomb figurines and an oxcart.	Yuan, 1972.
				Facet cut beaker. <i>Intact</i>	Yellowish and transparent	Rim d. 9.4	Inside the female coffin, under a bronze wine warmer.	Roman	Drinking Vessel.		
Nanjing University North campus <i>Nanjing</i>	342 AD	Emperor Cheng (r. 325–342); Empress Du Lingyang (d.341); a female concubine.	Large brick built chamber, with single annex. <i>Looted</i>	Hemispherical bowl decorated with oval facets. <i>Four fragments</i>	Colourless and transparent.	Estimated rim d. 10 cm	Scattered inside main tomb chamber.	Roman	Drinking Vessel	Gold, agate, and rock crystal and silver jewellery, ceramic couch and armrests, ceramic, bronze and celadon utensils, including, ewers, plates and ear cups.	Nanjing daxue lishikaoguzu, 1973.
Shangfang Li Cun <i>Nanjing</i>	Early E. Jin	High Status?	Brick built tomb. <i>Intact</i>	glass vessel <i>Small fragments</i>	Blue and transparent.		Fragments spread throughout tomb	Roman	?	?	Report unpublished. See Wang 2015: 425
Shimenkan <i>Nanjing</i>	Early E. Jin	High Status	Brick built, multi chambered. <i>Looted</i>	Bowl, with facet cut decoration and incised lines.. <i>Fragmentary</i>	Green and transparent		Scattered in back chamber.	?	?	A jade cicada, jade horse head ornament and a jade bi disk, a bronze incense burner, an iron mirror and ceramic tomb attendants and chariot.	Li & Tu, 1958.
Laiyu Village. <i>Dangtu Anhui Province</i>	Early E. Jin	High Status	Brick built tomb, with front and back chamber. <i>Looted</i>	Possibly a bowl. Punty mark on one fragment. Raised boss on another. Four or five fragments.	Light green and transparent.		Back chamber	Sasanian	?	Five celadon vessels, a spittoon, copper coins, fragments of a bronze bowl, two gold bracelets and a silver ring.	Li & Luo, 2006.
Beigushan <i>Nanjing</i>	361 AD	Emperor Mu (r.344–361) and wife?	Large single chambered brick built tomb, with entrance ramp. <i>Looted</i>	Glass vessel <i>Small fragments</i>	Dark blue and transparent		?	Roman	?	An agate Vessel, raised couch, armrests, gold, silver jade and lacquer.	Zhu, 1983.
				Facet cut beaker. <i>Twenty-five fragments</i>	Transparent with yellow tinge.		?	Roman	Drinking Vessel		
Xianhe Guan Tomb M6 <i>Nanjing</i>	366 AD	Gao Li (d.366) and his wife (d.356). Served governor of Danyang	Single chambered brick built tomb. <i>Intact</i>	hemispherical bowl, decorated with four rows of rice facets <i>Intact</i>	Colourless and transparent.	Rim d. 9.1 H. 7	Inside a lacquer box placed in the female coffin.	Roman	Drinking Vessel	Husband: An iron sword with jade fittings, a jade disk, jade pigs and two jade belt hooks, an inkstone, a lacquer tray and spittoon, a bronze crossbow mechanism and a single rock crystal bead. Wife: fifty-six pieces of gold, including ten animal shaped ornaments, seven bracelets, five rings, and an ear ornament in the shape of a cicada. She was further adorned with turquoise and amber beads and supplied lacquer plates and vessels including two ear cups, a bronze ear cup, iron knife.	Wang <i>et al</i> , 2001.
Fuguishan <i>Nanjing</i>	Late E. Jin	Male member of Imperial family?	Small single chambered brick built tomb. <i>Intact</i>	Hemispherical bowl <i>Intact</i>	Transparent and bluish.	Rim d. 8.5 H. 7.8	Placed inside a silver bowl at the base of the coffin.	Sassanian or Roman.	Drinking vessel		Qi <i>et al</i> , 1998.

Guojiaoshan Tomb M13 <i>Nanjing</i>	Late E. Jin	Wen Songzhi a member of the powerful Wen family and his wife.	Brick built tomb <i>Looted</i>	fragments	Transparent and colourless		?	?	?	Twenty gold items, a raised ceramic couch and armrest, a ceramic ear cup, stone pigs, four ceramic mingqi figurines.	Yue and Zhang, 2008.
				fragments.	Dark blue and transparent.		?	?	?		
				Fragments	Transparent and colourless green streaks.		?	?	?		
Jiayao miao, Tomb M1 <i>Pizhou, Jiangsu Province.</i>	Mid ~ Late W. Jin	Male member of the local nobility.	Large, brick built, double chambered. <i>Intact</i>	Glass bowl with an everted rim rounded lip spherical body. Decorated with ten prominent rounded prunts midway down the wall. And seven small, pointed spurs are located on the base.	Transparent, yellowish green.	Rim d. 10.6 Max d. 11.6, H. 7.6 cm	Left side of the body. Four silver rings, two gold rings and two pearls were placed inside the vessel.	Sassanian	Drinking Vessel	Richly furnished. Drin	Nanjing Museum <i>et al.</i> , 2018.
Babaoshan Revolutionary Cemetery <i>Beijing</i>	307 AD	Hua Fang the wife of a military commander of Youzhou	Brick built, single chamber. Intended as temporary. <i>Looted</i>	Glass bowl, with a spherical body, a pronounced everted rim and a rounded lip. Decorated with ten prominent rounded prunts midway down the vessel wall and seven pairs of small pointed spurs on the base.	Translucent and pale green		Left side of coffin possibly placed on a lacquer plate.	Sassanian	Drinking Vessel.	Two lacquer plates, a ceramic jar, two bronze incense burners, a bronze crossbow mechanism, a bone measuring ruler, and a silver bell decorated with rubies and sapphires.	Zheng, 1965.
Caidian Tomb One <i>Hanyang, Hubei Province</i>	Early E. Jin	Member of the local aristocracy.	Single brick built chamber. <i>Looted</i>	Fragment	Yellowish green		?	Roman	?	Celadon and bronze utensils, including two chicken headed ewers, a bronze wine warmer, a bronze kettle, a bronze crossbow mechanism and a bronze mirror, a long iron knife. Additionally a stone slab, two silver hairpins, a jade belt hook and a	Hubei Provincial Museum. 1966.
Wulidun. <i>Ezhou, Hubei Province</i>	W. ~ Early E. Jin.	Local Aristocracy.	Small brick built tomb with entrance ramp. <i>Damaged</i>	glass bowl	Transparent, slightly yellowish green.	Rim d. 10.2 Max d. 11 H. 9.4	?	Sasanian	Dinking vessel	Four celadon vessels.	Jiang, 2007: 303-304.
				Fragment of a glass bowl.	Slightly yellowish green.		?	Sasanian	?		
Xiatang, Shidaigang Tomb M5 <i>Guangzhou, Guangdong Province</i>	Late W. ~ Early E. Jin.	High Status ?	Small brick built tomb with front and back chamber. <i>Looted</i>	Fragment of glass possibly decorated with a rib. Possibly from a bowl or cup.	Blue		Back of tomb.	Roman	?	A silver ring, a silver hairpin, a soapstone pig, a bronze mirror and an imported bronze bowl. Celadon utensils including ewer.	Quan, 1996.
Pingshigang <i>Shaoing, Guangdong Province</i>	325 AD	The Marquis of Cangwu and Guangxin.	Very large, multi chambered brick built tomb. <i>Intact but plan of the tomb has been lost.</i>	Glass bowl, with a spherical body, a narrow mouth and slightly everted rim. Appears to be undecorated	Transparent, slightly green.	Rim d. 8.8 H. 7	Rear chamber	Sasanian	Drinking vessel	A variety of celadon vessels, a gold ring and bracelet and silver hairpins and an ear spoon, an iron sword, spear and knife, a bronze crossbow mechanism, a bronze steamer pot and large number of tomb figurines.	GICRA and ZM, 2009: 428-436.

4.1 Tombs containing Glass Vessels

4.1.1 Tomb Locations

Jin Dynasty tombs containing glass vessels have been found across what was then China from the Northern Frontier to the Southern Coasts (Figure 4.1). However, the largest grouping, a total of nine tombs are found in Nanjing, the capital of the Eastern Jin Dynasty (317~420). Although initially intended as a temporary base of operations, as the dynasty progressed Nanjing became the permanent capital and home to a large number of Northern refugees, who established themselves in this Southern city (Section 2.4.1.1). The tombs were excavated between 1955 and the early 2000s in both salvage and dedicated research excavations. They are located on the slopes of the hills which spread out to the North and east of the city often in graveyards, which belonged to members of the same family. For example, the Wang family were buried at Xiangshan, while the Gao family tombs were at Xianheguan, and those of the Wen family were located on the slopes of Guojiashan. This appears to be a standard pattern in Nanjing, and multiple family cemeteries have been identified (See Kieser, 2011), although not all tombs contained glass vessels. Other tombs such as the great tomb at Beigushan, or the tomb at Nanjing University North campus, are set apart, perhaps because they belonged to Eastern Jin Emperors. The outlier of the Nanjing group is the tomb at Laiyu village, 60km South of Nanjing, far enough away that it could be considered a different locality (Li and Luo, 2006) (Figure 4.1).

Two tombs are located in the middle reaches of the Yangtze River valley, which was an important economic and military centre during the Three Kingdoms era (220–280 AD). The Yangtze River was a major nexus of trade connecting North and South China. During the Eastern Jin the population was increased by large numbers of refugees fleeing Northern China, who settled in the region (Lewis, 2009: 14-15; Kieser, 2019a: 441).

Two further tombs are located on the Southern coast, in a region known as Lingnan. The area was conquered during the Qin Dynasty (221~206 BC) and colonised with large numbers of Chinese settlers in later centuries, quickly developing into an important centre of trade on the maritime Silk Road (see Xiong, 2018). The region was absorbed by the Jin in 280 AD after their conquest of the Wu Kingdom, and continued to be an important trading centre (Dien, 2007: 380; Section 2.4.1). A saying from the fifth century states that “if a Guangzhou Regional Inspector passes through the city gate only once, he will obtain 30 million [cash]” (Holcombe, 2014: 149), giving an indication of the wealth that flowed through the region.

It should be noted that because many of the tombs were discovered by chance events, such as during construction work, they do not necessarily give a representative sample or demonstrate the complete extent of glass vessel usage in Jin Dynasty China. A notable absence from the data set are tombs from Luoyang which was the capital of the Western Jin (266~316). However, the fifteen tombs which contained glass vessels do come from a variety of locations across the country. The largest concentration is in the Eastern Jin capital, Nanjing, because this was a centre of power, where elites, the users of glass vessels (See 2.4.1.1; Figure 4.2), gathered around the imperial throne. The Southern coastal region was a major entry point for foreign goods, and almost certainly glass vessels into China. However, glass vessels were also found in more regional locations. Two tombs were located in the Yangtze River valley, which was a secondary economic centre. Others were located in Pizhou an agricultural region and Beijing, which in this period was on the Northern frontier. This indicates that glass vessels were not just found in the imperial palace in the capital, but were used across China, in country estates and even garrison towns. All of the tombs are brick built, indicating that they belonged to wealthy elites. However, the size of the tombs appears to be related more to the number of occupants than differences in status. The smaller single chambered tombs, house one individual, while larger tombs housed two or three.



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*Figure 4.1: Map showing the location of the Jin tombs which will be examined. The Western Jin Empire controlled both Northern and Southern China, while the Eastern Jin was confined to the South (https://d-maps.com/carte.php?num_car=4644&lang=en with modifications by **D. Montgomery**).*

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Figure 4.2 The locations of the Eastern Jin tombs in Nanjing. 1: Xiangshan M7; 2: Nanjing University North Campus; 3 Shangfang Licun; 4: Shimenkan; 5: Guojiashan; 6: Xianheguan ; 7: Fuguisban ; 8: Beigushan; 9: Laiyu Village (Created by **D. Montgomery**).

4.1.1.1 Temporary tombs

At least three of the tombs were intended as temporary resting places. It is possible that this was the case for some of the other tombs in the sample, but because of looting and damage this cannot be determined. Two of the tombs Xianheguan M6 and Xiangshan M7 feature the coffins described by Kieser (2001, 260), in which were stored valuables, such as jewellery, but also items such as dining sets, toiletries and drinking vessels, essential for the comfort of the deceased in the afterlife. These grave goods, which would remain with the body when it was moved to a new tomb (Section 2.4.2.2; 4.4.4). The temporary nature of the tomb at Babaoshan Cemetery in Beijing is described on an epitaph tablet found inside the tomb. The following passage gives details about the circumstances of her burial.

“The old tomb of the former sire is at Beimang in Luo[yang]. My two wives from the Wen and Wei clans enjoy associate burial there. This year the famine-stricken people are starving, and we have been unable to return south. Under these circumstances I arranged for [Hua Fang’s] temporary burial twenty leagues west of Jicheng in the Principality of Yan. Close to high hills that give way to wide-open spaces, we have peacefully placed her divine coffined body. As a hun-spirit possessing sentience, how could she not go there? I selected an auspicious day and provided chariots, infantry, and officers in armor, who followed according to commission and rank. [She was] fully provided with ceremonies [appropriate for the wife of one serving in the] three offices; the officials did not neglect the old precepts and performed the rites with extra care.”

Translation: (Davis, 2015: 203).

The epitaph was composed by her husband Wang Jun (253~314), who was appointed as the regional inspector of You Province at the Northern periphery of the Jin domains in 300. Hua Fang had accompanied him to the North and died in 307, during a period of chaos and famine known as the war of the eight princes (Section 2.4.1). Because of this her husband was unable to transport her body back South to the Western Jin capital at Luoyang, where the other family burials were located. He therefore chose to give her a temporary burial, and seemingly took great care to select a suitable site and provide her with the proper funeral rites, hoping that her soul would find rest in this tomb (Davis, 2015: 202, 203, 275). He presumably planned to exhume her body when conditions were calmer and bring her south to be buried in Luoyang with the rest of his family, but as the Western Jin empire collapsed in 311, this never took place (See 2.4.1).

The choice to include the glass vessels in the inventories of these three temporary tombs indicates that they were considered important or valued in some way. In the Xiangshan and Xianheguan they were placed inside the coffin to move with the body. This suggests they were more valued than the other grave goods in the tomb. The ceramic vessels and utensils, placed in the tomb outside the coffin were dispensable and could be replaced at a new tomb, but the glass vessel could not be. This suggests value not just in a material sense, but perhaps even an emotional attachment. Perhaps they were vessels the owners particularly enjoyed using, or gifts they had received from someone close to them (See 3.3). The epitaph tablet in Hua Fang's tomb states that despite the temporary nature of the tomb, her husband was careful to select a proper location and perform full rites. Although the tomb was looted in antiquity, the few remaining contents suggest that it was well furnished, indicating that the husband intended to fully provide for the needs of his deceased wife.

4.1.1.2 Tomb Condition

Of the fifteen Jin Dynasty tombs, only five were found intact. Three in Nanjing, one in Pizhou and one in Zhaoqing on the Southern coast (Table 4.1, Figure 4.1). The others were damaged, predominantly due to looting, although modern construction work has also damaged at least one tomb. In some cases the looting itself took place in antiquity. For example, at the Nanjing University North Campus tomb, a shard of Tang Dynasty (618~907) pottery in the grave robber's tunnel, indicates the looting took place in this period (Nanjing daxue lishikaoguzu, 1973). When tombs have been looted, items considered valuable at the time of looting are usually stolen. When this occurs the tombs are left in disarray meaning the original placements of artifacts in the tomb cannot be reconstructed. In the looted tombs the glass vessels are usually damaged, indicating that in this condition they were not valuable enough to take.

4.2 Tomb Contents

The contents of the tombs vary quite widely (Figure 4.3). The relative wealth and social status of an individual, would in some part dictate what was placed in their tomb. In some cases, wills were left detailing the personal wishes of the deceased (Section 2.4.2), while ritual, tradition and the choices of the family members preparing the tomb also played a part in the contents. As the deceased were believed to inhabit the tomb in the afterlife items were chosen to meet personal needs such as sustenance, hygiene and comfort. Other types of goods such as jewellery or weaponry, were perhaps personal items used in life and intended for continued use in the next. As funerals were a chance to display wealth and status, items could also have been chosen specifically for display purposes, while other objects had specific ritual functions. It is not possible to always tell without a will or epitaph tablet who decides what is placed in the tombs, whether it was the choice of family, a mandate by the state, or whether the wishes of the deceased were communicated some other way in life.

Celadon and ceramic vessels are ubiquitous, and items made from these materials included tableware, utensils, incense burners, ewers, chamber pots and storage jars. Bronze utensils were also common and included items such as cauldrons, braziers, irons, basins and wine warmers, as well as bronze mirrors. Bronze crossbow mechanisms are also often found in Jin tombs. It is believed that they had some type of symbolic or apotropaic ritual, although the exact nature of their use is still unclear (Dien, 2007: 214).. Tableware made of lacquer was also found in some of the tombs, used primarily for eating and drinking vessels as well as trays. Several of the tombs in Nanjing were equipped with furniture, which consisted of a type of large, raised ceramic bench and armrests. Several also contained ceramic *mingqi*: tomb figurines of servants, animals, buildings and fields. However, these were not ubiquitous, indicating perhaps changes in burial practices, or the temporary nature of some of the tombs. Jade was also only present in six of the burials, and, with the exception of Xianheguan, in small quantities, perhaps representing changes in beliefs about the afterlife (See Section 2.4.2). Weapons such as swords, daggers and halberds were present in some tombs as were items such as inkstones, indicative perhaps of professions in the imperial administration or military. Jewellery of various types was also almost always present, including gold and silver items as well as beads made from precious stones. Even after looting, these burials contain rich and luxurious contents.

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Figure 4.3: Examples of grave goods from the Jin tombs. Clockwise from top left: Celadon incense burner, Xiangshan M7; Soapstone pigs, Xiangshan M7; Caledon ewer, Beigushan; Greyware earcups and tray, Xiangshan M7; Bronze wine warmer, Jianyaomiao M1; Ceramic backrest, Xiangshan M7; Gold cicada ear ornament, Xianbeguan M6; Jade sword fittings, Xianbeguan M6; Jade cicada, Xiangshan M7; Ceramic bench, Guojiashan M13, Bronze ladle, Jianyaomiao M1; Ceramic tomb attendants and ox cart, Xiangshan M7. (Nanjing Municipal Museum, 2004: 63; 80; 106; 181; 201; 205; 209; 305; 306; 308; 309; Nanjing Museum et al, 2018: plate III).

4.2.1 Imported Goods

Along with the glass vessels, other types of imported goods were found in some of the tombs (Figure 4.4). Jianyaomiao tomb M1 contained several foreign items. Next to the male coffin and placed under a glass vessel were two bronze and shell earcups. While earcups are a traditional Chinese drinking vessel form, this design is unusual as the shell used to produce them was almost certainly imported from the tropics. Two nautilus shell cups were also placed on the female side of the tomb (Section 4.4.2.2). They were covered with copper bands and decorated with red and black paint and copper circles. Because they resemble a parrot they are called parrot cups in Chinese (Borell, 2016: 52). Only one other vessel of this type has been found in the Jin Dynasty tombs, at Xiangshan tomb M1. The tomb belonged to Wang Xingzhi, a relative of Wang Yi (Section 4.4.2.3). In Wang Xingzhi's tomb the nautilus cup was decorated with gilded bronze and must have been a visually striking drinking vessel of incredible value. Like the glass vessels in tomb M7 the Nautilus cup was placed inside Wang Xingzhi's coffin, indicating it was a valued personal drinking vessel. The nautilus shells were from the tropical waters around Southeast Asia or the Indian Ocean (Borell, 2016: 52). The modifications with bronze, especially on the earcups to create Chinese style drinking vessels, suggests that the shell may have been brought to China as raw materials, and then worked into their final forms. Vessels made of shell are described in the historical literature as being used with glass vessels at a drinking party (Section 3.2.1), indicating that these exotic drinking vessels were used conspicuously and publicly by the elite.

The two tombs on the Southern coast (Figure 4.1) contained lidded bronze vessels, believed to be imported (GICRA and ZM, 2009; Quan, 1996). The bronze vessel from Shidaigang was analysed using electron probe microscopy and had elevated levels of tin, which according to the report is indicative of production outside China (Quan, 1996: 44). However, no indication of possible provenance, or use are given in either report.

Seven fragments of an agate vessel were found inside the great tomb at Beigushan. These are extremely rare, and this is one of the only examples from a Jin Dynasty tomb. The use of both agate and glass drinking vessels are discussed in two historical accounts. One describes the looted contents of the tomb of Zhang Jun, the ruler of the former Liang Kingdom (Section 3.2.5), where a glass wine vessel and an agate goblet are listed as being among the tomb's treasures. The second account lists glass and agate drinking vessels imported from the Western regions being in a collection of exotica belonging to the Northern Wei prince, Yuan Chen (Section 5.1.1). This suggests that agate goblets were also foreign products used by the wealthy as drinking vessels.

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Figure 4.4: Imported goods from the Jin tombs. Clockwise from top left. Nautilus shell 'Parrot' cup, Jianyaomiao M1; Bronze and shell ear cup, Jianyaomiao M1; Carnelian, rock crystal, turquoise, amber and agate beads, Xiangshan M7; Gold diamond ring, Xiangshan M7. (Nanjing Museum et al, 2018: plate iv; Nanjing Municipal Museum, 2004: 188; 208)

A gold diamond ring, from Xiangshan M7, placed on the chest of the tomb owner, was almost certainly an import (Kieser, 2001: 428). In the same tomb one of the females was adorned with beads made from agate, turquoise, amber, carnelian and rock crystal (Figure 4.4). These minerals are not native to China and were also Indian imports (Xiong, 2017: 90-111). However, some of these beads have been worked into Chinese shapes such as mythical beasts known as *bixie* and silkworm cocoons. This indicates that they were brought to China in their raw state and reworked in China. Small beads and pearls, which were also imported have also been found in other Jin tombs. A single rock crystal bead was uncovered in Xianheguan M6. An amber lion was found in Fuguishan M4, and two pearls were placed inside the glass vessels in Jianyaomiao M1.

This review of the imported goods that are present in the Jin tombs show that they tend to be small items of jewellery such as gemstones, or more rarely larger vessels made from shell and agate. These were probably imported in their natural state and reworked in China. The lists of imports and tribute from foreign countries from this era include these types of natural geological and

animal products, as well as other natural materials such as exotic woods and ivory. Raw natural materials may therefore have been favoured because they could be reworked into forms valued in local Chinese culture.

Finished foreign products are much rarer. Little information is given about the two bronze bowls found in the tombs on the Southern coast and it may be that they were only used in that locality. Imported gilded silver vessels like those found in the Northern Wei tombs (Section 6.2.1.2), were available during the Jin Dynasty, as evidenced by a cache of buried silver vessels found in Guangdong (Chen, 1986). However, they are not found in the Jin tombs, indicating there was little desire for such vessels (Kieser, 2019a: 441).

Glass vessels are therefore unique in that they are a finished foreign product found in multiple regions across the Jin Empire. This suggests that glass vessels were highly valued, almost certainly for their physical properties such as transparency. Glass may have been viewed as a natural product by some (Section 3.1.5). One poem by Pan Ni (Section 3.5), ascribes some unusual properties to a glass bowl stating that “its hardness is beyond that of gold or stone, its strength challenges the most excellent jade. Grinding does not wear it down”. This may suggest a belief that glass could not be carved or worked like other natural stones. He also praises the remarkable design and the “excellent craftsmen” who made the glass bowl. In this case then although Pan Ni is aware that glass is a manufactured product, the material, design and craftsmanship of the glass vessel is so excellent that it can be appreciated, without any need of modification. Glass vessels were perfect as they were.

4.3 Tomb Occupants

Having reviewed the structure and contents of the tombs, the identities of their occupants will now be examined in detail.

4.3.1 Status

The occupants of many of the tombs have been identified and are known from historical literature. Xiangshan tomb M7 is believed to belong to Wang Yi (d.322), a member of the powerful Wang clan, and tutor to the crown Prince. Xianheguan tomb M6 is believed to belong to Gao Li (d.366) who was for a time the governor of Danyang, which because of the proximity to Nanjing was an extremely prestigious office (Mather, 2017: 574; Wang *et al*, 2001: 38-39). The tomb at the Babaoshan Revolutionary cemetery in Beijing belonged to Hua Fang (d. 307), the wife of Wang Jun (253~314), a general who was appointed as the regional inspector of You Province at the

Northern periphery of the Jin domains in 300 (Section 4.1.1.1). Guojiashan M13 is thought to belong to Wen Songzhi and his wife. Little is known about them, although they were members of the powerful Wen family, some of whom held high governmental and military positions (Yue and Zhang, 2008: 497-498). In the tomb at Pingshigang on the Southern coast a partially preserved brick epitaph indicates that the owner was the Marquis of Cangwu and Guangxin an important regional position, although his name is unknown.

Two of the tombs are thought to belong to Jin emperors. It is believed that the most likely occupant of the great tomb at Beigushan was the Emperor Mu of Jin (r. 344~361). The exact identity of the occupant of the tomb from Nanjing University North Campus remains uncertain. Wang (2015: 424), indicates that the tomb probably belonged to an Eastern Jin Emperor, either Yuan (r. 317~323), Ming (r. 323~325), or Cheng (r. 325~342). A recent study by (Dong, 2020) suggests that the tomb belonged to Emperor Cheng (d. 342) and his Empress Du Lingyang (d.341), while the side chamber contained the body of his concubine, a member of the Zhou family. It is suggested that the occupant of Fuguishan tomb M4 was also a member of the imperial family due to the tomb's location, which is on a hillside overlooking the site of the imperial palace (Borell, 2016: 55).

All of these individuals were extremely important. Emperors, members of elite families who held the reins of power, top tier government officials and high-ranking military officers. This is further corroborated by the size and contents of their tombs, which are among the largest and most well equipped in the Jin Dynasty (Table 4.1). Even the tombs where the owners have not been identified clearly belonged to high status individuals, who were wealthy enough to construct brick tombs, and equip them with expensive items such as gold and silver jewellery, jade, and bronze utensils.

4.3.2 Gender

Although the historical literature does not describe women using glass vessels, three glass vessels have been found in female burials. One in the tomb of Hua Fang (Section 4.1.1.1), and the other two in the female coffins of the husband-and-wife burials at Xiangshan and Xianheguan (Sections 4.4.2; 4.4.4). Three glass vessels have also been found in identifiably male burials. In the tomb at Fuguishan, the male coffin at Xiangshan and the third, next to the male coffin at Jianyaomiao. In the other tombs the reports either do not assign a gender to the occupants, or in the case of shared burials, looting means that the original position of the glass vessels in the tomb, and therefore the intended user cannot be determined. The same type of vessel was found in the tomb of Huafang and the tomb at Jianyaomiao (Table 4.1; Section 4.4.1). The husband-and-wife pair at Xiangshan both had the same type of glass beaker in their coffins, although in slightly different colours. The

female coffin at Xiangshan also contained equipment for preparing and serving wine and the same type of equipment was found at Jianyaomiao and in the male burial at Fuguishan. This suggests that both men and women were using glass vessels and they were using them in similar ways. Therefore, while women are absent in literature describing glass vessel usage in this period, this is not borne out in the archaeological evidence. Within these tombs there appears to be little difference in glass vessel usage between men and women.

4.3.3 Ethnicity

All of the tombs follow Han Chinese practice in design, layout and contents. Many of the tombs belonged to identifiable members of the imperial family and ruling elites who were Han Chinese. There is no current evidence that any of the tombs belonged to ethnic minorities or foreigners. This is not to say that non-Han ethnic groups were not present in the Jin Dynasty China. Southern China in this period was still inhabited by a variety of non-Chinese peoples: the Yue, Man, Lao and Li. Those that lived in the areas of Han Chinese settlement were quickly assimilated and ceased to be a distinctive group. However, those who inhabited the vast mountainous regions of the South, remained fiercely independent and could not be subdued by the Jin emperors. They were sometimes even joined by Han Chinese who sought to evade taxation and military service (Holcombe, 2019a: 98-99). These groups are rarely seen in the archaeological record. This is probably because Chinese archaeological research is focussed primarily on urban centres, while the remote areas in which these ethnic groups lived have received little or no investigation (Kieser, 2019b: 32-33). Even ethnically Han Chinese people from these Southern regions were excluded from positions of power in the Jin government and ridiculed for their differing dialects and customs (Holcombe, 2019a: 99). This makes it unlikely that non-Chinese groups would be able to attain positions of power. As the glass vessels appear to have been used exclusively by the elites in the Imperial family or governmental office, use or access to them may have been limited to people in these circles, making it difficult for these non-Chinese groups to access them.

4.3.3.1 Regional Variation

While the tombs come from sites across China (Figure 4.1), there seems to be little regional variation, aside from minor architectural details (See Dien, 2007). Variations in size and layouts appear to relate more to the number of tomb occupants and if the tomb was considered permanent or temporary. The contents of all the tombs feature similar sets of celadon, ceramic and bronze vessels and utensils, suggesting relative homogeneity in burial rituals across the Jin empire. Variations in other types of contents, again appear to relate more to personal preference and beliefs, occupation, gender and again if the tomb was considered permanent or temporary. Kieser (2001;

2011), demonstrated that there is distinctive regional variation in tomb contents in this era. The relative homogeneity of these glass-bearing tombs may indicate that they belonged to a specific and select group of people. This was certainly the case in Nanjing, where the tombs belonged to members of the imperial family and powerful Northern émigré families who held power at court. While in Nanjing they retained the customs and traditions of their Northern homeland, rather than adapting to the traditions native to Southern China (Kieser, 2001). The regional tombs may also have belonged to officials sent out from the capital to these distant postings. One tomb on the Southern coast belonged to the Marquis of Cangwu, who was almost certainly an official sent from the capital rather than a native of the region. The tomb in Beijing belonged to Hua Fang, the wife of the military commander of the region, who was posted there by the central government and was not native to the region. The epitaph tablet in the tomb, even expresses the wish that Hua Fang would one day be reburied in the capital Luoyang (Section 4.1.1.1). The occupants of the other tombs may also have been from a similar group of people, officials and their families sent out from the capital to regional postings, where rather than adapt to native customs, they retained tomb styles and furnishings used by elites in the capital. The one exception to this is the tomb at Wulidun, who may have belonged to a member of the local aristocracy, but the tomb is damaged and the report does not give detailed enough information to make an assessment of differences with other tombs (Jiang, 2007: 303-304). Glass vessels were even in some cases given to officials posted to distant regions as is recorded in one historical text (Section 3.3.1). The homogeneity in the tomb contents therefore suggests that glass vessels were used by a very specific group of elite high-level officials and their families.

4.4 Intact tombs

Four tombs were found intact and undisturbed. These will be reviewed in detail to assess how glass vessels were used.

4.4.1 Jianyaomiao Tomb M1

An intact glass vessel was found in tomb M1 of the Jianyaomiao Western Jin cemetery. Located in Pizhou, Northern Jiangsu Province, the cemetery was excavated between 2015 and 2016. It contained a total of nine large brick-built tombs, which contained high quality celadon ware, suggesting the cemetery belonged to a local ruling family (Nanjing Museum *et al*, 2018). Tomb M1, a large double chambered brick tomb (Figure 4.5), which was found undisturbed by looters was the most richly furnished with a variety of bronze, ceramic, gold, silver, iron, ivory, and shell artefacts, as well as a glass vessel. A lacquer vessel, with an inscription dated to 289 AD serves as

a *Terminus Post Quem* and the excavators suggest the tomb is mid to late Western Jin. The tomb appears to have had two occupants, although only one body has survived and is believed to be a male based on the type of burial goods, which included an iron sword. It has been suggested that the other chamber originally contained a female, based on grave goods, which included gold bracelets and other jewellery. While there was no epitaph identifying the owner, the richness of the burial suggests that the occupant was someone of very high status, perhaps a noble or member of the aristocracy and his wife (Nanjing Museum *et al*, 2018: 281).

The glass vessel was placed on the left side of the body next to the sword and was perhaps originally inside the coffin with the body (Figure 4.6; Figure 4.13; Section 4.5.1.5). Five silver rings, two gold rings and two pearls were placed inside the vessel, while two bronze and shell ear cups were placed under it. The placement of the rings and pearls inside the glass vessel, rather than on the body perhaps suggests that they were condolence gifts given to the deceased on the day of burial by mourners attending the funeral. This placement of these valuable items with the glass vessel suggests that it too was valued. Furthermore, the transparency of the glass would have allowed these objects to be viewed inside, beautifying them or perhaps endowing them with symbolic meaning (Section 7.1.1). Other items found in conjunction with the body included an iron knife and an iron sword. The sword blade was intricately decorated, with the sword hilt and scabbard decorated with inlaid gold. The coffin also contained an ivory flask and two silver hairpins as well as an iron mirror, an oyster shell and gold, silver and lead coins. The placement of the glass vessel in conjunction with the body and these other items suggests that it was an important and valued item.

The tomb contained a variety of different drinkware. Two nautilus shell cups were found on the female side of the tomb, along with two lacquer ear cups placed close to her coffin, probably intended as personal drinking vessels. On the male side of the tomb two bronze and shell earcups were also found under the glass vessel and were probably also imported (Section 4.2.1). The tomb also contained other wine drinking paraphernalia including two bronze wine warmers, a bronze serving ladle, ceramic ewers and wine storage jars. The placement of the glass vessel close to the male body, in conjunction with other valuable goods and drinking paraphernalia suggests that it was a valued item and also intended for use as a drinking vessel.

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Figure 4.5: Aerial view of Jianyaomiao tomb M1 showing the entrance ramp and brick tomb structure (Nanjing Museum et al, 2018: Plate I).



Image removed for copyright reasons

*Figure 4.6: Plan of Jianyaomiao tomb M1, with the locations of the glass vessel and drinkware (Nanjing Museum et al, 2018: 23; modifications **D. Montgomery**).*

4.4.2 Xiangshan Tomb M7

Two glass vessels were found in tomb M7 at Xiangshan in the Northern suburbs of Nanjing. It was part of a cemetery complex, where so far eleven tombs belonging to members of the Wang family have been excavated (Kieser, 2011: 54-57).

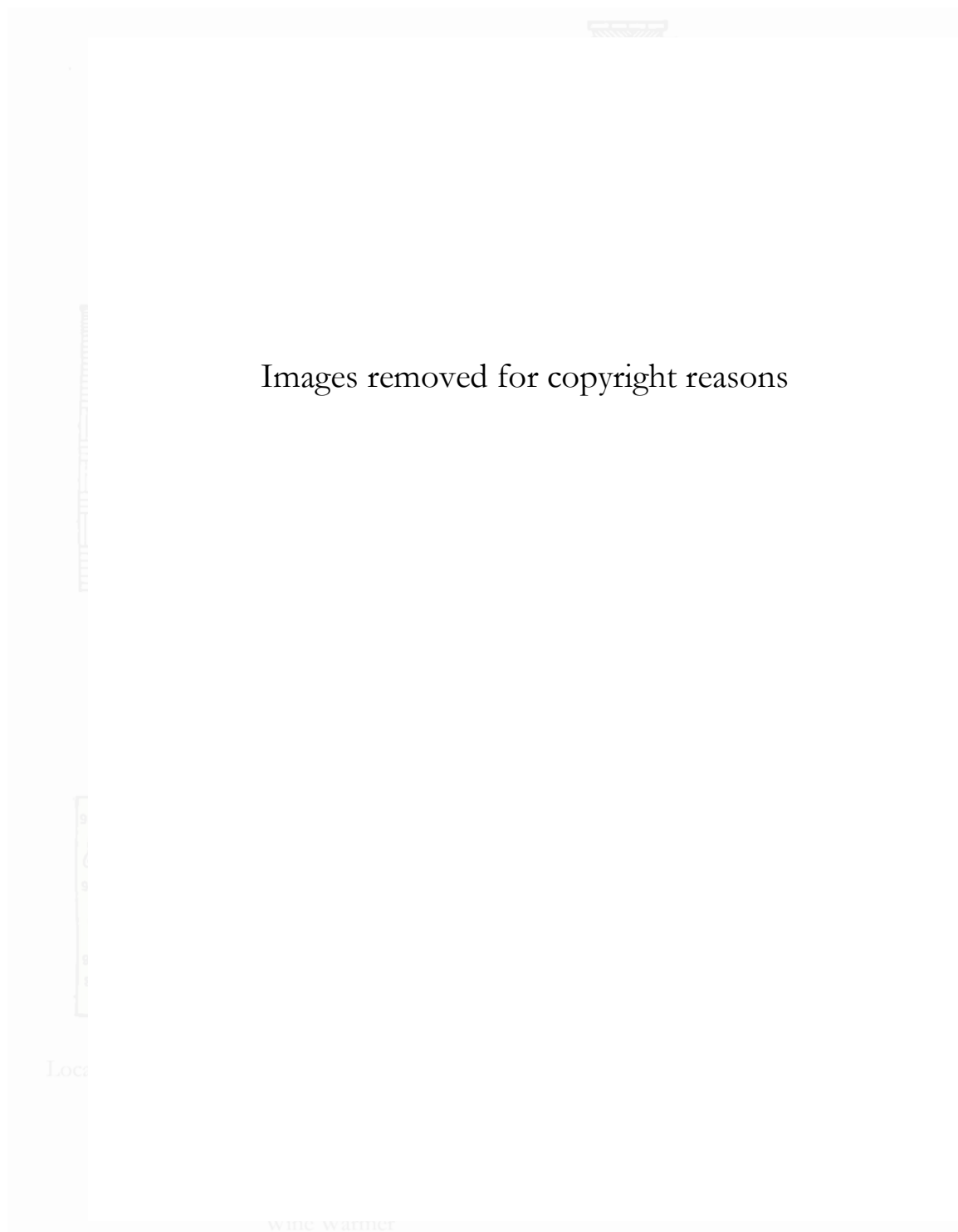


Figure 4.7: Plan of Xiangshan tomb M7, showing the location of the glass vessels and principal artefacts (Yuan, 1972:29; modifications **D. Montgomery**).

4.4.2.1 The Wang clan

The Wang clan were a powerful family in the Eastern Jin. During the chaos that preceded the collapse of the Western Jin they abandoned their ancestral lands and fled South to join Sima Rui,

the first emperor of the Eastern Jin, in Nanjing (Section 2.4.1.1). The fates of the ruling Sima clan and that of Langye Wang clan became so intertwined through marriage that a popular adage from the period went “The Wang and [Si]ma share the realm” (Kieser, 2011: 55). Prominent members of the family are described using glass vessels in the historical texts included the imperial chancellor Wang Dao (276~339) (Section 3.2.4) and the prominent general Wang Dun (266~324) (Section 3.1.2). Another prominent member of the family was Wang Xizhi (303~361) a renowned calligrapher, whose works are celebrated to this day (Kieser, 2001: 245-247).

Although there is no epitaph tablet, tomb M7, is believed to have belonged to Wang Yi (d.322), the brother-in-law of the Sima Rui, who reigned as Emperor Yuan (r.317~322). Wang Yi served for a time as the governor of Jing Province (Hunan and Hubei), and in 322, was appointed ‘General Pacifying the South’, but died of natural causes shortly after arriving at his post. During his life he was a painter and calligrapher of some renown and tutored both his nephew Wang Xizhi and the Crown Prince Sima Shao, who would later rule as the Jin Emperor Ming (r. 323~325) (Mather, 2017: 620-621). His relationship with the Crown Prince was close. An account in the *Jinshu* records that when the Prince heard of Wang Yi’s death, he was overcome with grief. When the body arrived in the capital, he honoured Wang Yi by personally attending the funeral and paying respect in front of the coffin, as a close family member would have done (Kieser, 2001: 246 and Kieser, 2011: 68 Mather, 2017: 621). A gold diamond ring, a rare and extremely valuable item, was found on Wang Yi’s chest (Figure 4.4). The book of Song reports that a diamond ring was brought to the Liu Song court from India in 428 (Kieser, 2001: 428). This could have been a final condolence gift from the Crown Prince, placed here during the funeral rites (Borell, 2016: 52)

4.4.2.2 Tomb Contents

The tomb was extremely well equipped with 120 items (Figure 4.7). Wang Yi’s coffin was supplied with the full range of symbolic items including a jade cicada placed in his mouth, two steatite pigs placed in his hands, a crossbow bow and bronze mirror placed above his head along with a glass vessel (Section 4.5.1.6; Figure 4.14). At his feet was placed a celadon chamber pot, presumably for his personal comfort. A jade belt hook and bronze dagger were worn at his waist and a gold diamond ring, was placed on his chest. Above his head was placed a limestone slab with a bronze spittoon placed on top of it, a celadon chicken headed ewer, a celadon ram, and a green glass vessel. On either side of Wang Yi were two female burials, presumably those of his wives. The female coffin to the south of him, was also richly furnished. Her head, body and clothes were adorned with a variety of jewellery including gold rings, hairpins and small bells and imported beads made from agate, turquoise, carnelian and rock crystal (Figure 4.4). Above her head was a bronze mirror,

some coins, a celadon spittoon, a celadon bowl with a clam shell inside it, a lacquer toiletry case, and a bronze wine warmer with a yellow glass vessel placed underneath it (Section 4.5.1.6; Figure 4.7; Figure 4.14). The wife buried to the North was more plainly adorned, with only a few silver hairpins, and a bronze mirror and some celadon vessels placed above her head (Yuan, 1972). Outside of the coffins the tomb was richly supplied with multiple utensils and storage vessels, lamps, incense burners and basins. The entrance of the tomb contained a large number of earthenware *mingqi* tomb figurines including a horse, an ox pulled carriage, and fourteen servants, which would have attended to the needs of Wang Yi and his wives in the afterlife. Above Wang Yi's coffin in front of the tomb entrance was placed a raised ceramic bench heated with a brazier, equipped with an arm rest, two ceramic ear cups on a tray, an incense burner, a spittoon and an inkstone, clearly intended as a place where Wang Yi could rest, write and drink wine.

4.4.2.3 Temporary tombs?

The other tombs in the Xiangshan cemetery neatly fit the mould of temporary tombs, being small and rather sparsely furnished outside the coffin (Section 2.4.2.2). For example, tomb M1, which belonged to Wang Xingzhi (310~340) and his wife, had only the epitaph tablet, an incense burner and seven celadon vessels which would have been used for a first offering (Nanjing City Cultural Care Committee, 1965a). However, Wang Xingzhi's coffin contained a rich array of goods including a bronze crossbow crow, a bronze mirror, which had probably originally been placed in a lacquer box, a knife, a gold ring and two small vessels, a flat lead figurine and a gilded bronze nautilus shell cup. Tomb M3, which belonged to Wang Danhu was even more sparsely furnished with only an epitaph tablet, a few lamps and a single jar. However, within her coffin she was richly adorned with seventeen gold hairpins, four gold rings, ten pearls, a silver buckle, numerous amber and turquoise beads as well a yellow and white glass bead (Nanjing City Cultural Care Committee, 1965b). She was also supplied with a bronze crossbow mechanism, and mirror, several knives, a bronze ear cup, a makeup stand, which consisted of bronze mounted stone slab with different coloured powders on it and two hundred cinnabar pills which may have been medicine or an elixir. The intent must have been to eventually move these members of the Wang family to permanent tombs in their homeland in Langye, when the North was retaken by the Jin. Then the coffins and the goods within would be moved to the new tombs, which would be properly furnished. However, this never happened and they remained permanently buried on Xiangshan.

The tomb of Wang Yi contrasts greatly with those of his other family members, being richly furnished with grave goods. This could be because Wang Yi had no intention of being reburied at home (Kieser, 2011: 70). However it seems that the coffin of Wang Yi and his wives are also well

supplied with items such as the glass vessels, wine warmers, tableware and other goods, which in other permanent tombs are placed outside the coffin (Figure 4.7). This suggests that the intention may still have been to move Wang Yi eventually. The rich furnishing of the tomb could therefore have been to ensure that he was provided for until his eventual move to his final resting place. A similar situation is seen in the tomb of Hua Fang, which was made comfortable even though it was temporary (Section 4.1.1.1). Wang Yi also had close personal connections to the imperial family, especially the crown prince, who personally attended the funeral. Funerals were events where families could display wealth and status. With such guests attending it may have been pertinent to bury Wang Yi in a large well equipped tomb as a display of status for the Wang family (Kieser, 2011: 70).

4.4.2.4 The use and meaning of the glass vessels in the tomb

The placement of the glass vessels in the coffins of Wang Yi and his wife indicates they were considered important personal items. However, they also served a practical function as drinking vessels, which is also described in texts from the period (Section 3.2). Both glass vessels were shaped as beakers so this was actually their original intended function. They were also found in conjunction with other drinkware. The yellow glass vessel in the coffin of Wang Yi's wife was placed directly under bronze *jiaodou*, a type of three-legged basin, used for warming wine, perhaps indicating a connection between the two items. Furthermore, her coffin also contained a small ceramic ewer, which could have been used for pouring wine. She was thus provided with a means to prepare, serve and drink wine in the afterlife. Wang Yi's coffin also contained a glass vessel along with a ewer, giving him a means to serve and drink wine. The similar drinkware in both male and female coffins suggests that members of both sexes used glass vessels for wine drinking, even if this is not described in the historical texts. It is worth noting that the glass vessel in the wife's coffin is almost identical, except for colour differences to the one belonging to Wang Yi, suggesting that they were perhaps part of a set received at one time and used by the couple.

While other tombs in the cemetery contained drinking vessels, most notably the nautilus cup in the tomb of Wang Xingzhi, Wang Yi's tomb is the only one that contained glass vessels. This suggests that glass vessels were quite rare, even among wealthy families such as the Langye Wang. Glass vessels are described as being tribute gifts given to the emperor so they may have actually been quite difficult to obtain (Section 3.5). However, several texts describe glass vessels being given as gifts, in two cases by the emperor. It is therefore possible that Wang Yi, due to his close relationship to the imperial family obtained the glass vessels by this means.

4.4.3 Fuguishan Tomb M4

Tomb M4 on Fuguishan, dating to the late Eastern Jin Dynasty, is part of small of a group of six tombs, which were located on a hill overlooking the imperial palace. Because of this location and the relative richness of the tombs, they are believed to belong to either members of the imperial family or important people who were close to the emperor. Tomb M4 was brick built, 4.87m long by 1.89m wide and belonged to a single occupant. Because it was undisturbed the tomb contents are relatively well preserved and in situ (Figure 4.8).

The glass vessel (section 4.5.1.2; Figure 4.11) was placed at the foot of the coffin inside a silver bowl suggesting it was treasured. The back of the tomb contained multiple celadon vessels, for the storage of food and drink including ten chicken headed ewers. The coffin and body itself had decomposed but the centre of the tomb contained jewellery and symbolic items which were originally placed inside the coffin: an amber lion, an amber bead, four gold bracelets, a gold hairpin, a silver bell, two iron mirrors and an iron knife. There was also a glass eye bead, which has not been analysed, but was perhaps a relic from the Warring States era (Section 2.3.1.1). Beside the coffin were laid several weapons including a halberd and two single edged iron swords. A bronze crossbow mechanism was also placed here, although it is unclear whether this was for a ritual or symbolic purpose as in other tombs (Section 2.4.2.4), or an actual weapon due to its association with the swords and halberd. Spread at the base of the coffin either side of the glass vessel was an array of other vessels and utensils for the use of the deceased, including celadon bowls, a celadon ewer, two bronze basins for washing, a bronze ladle, a bronze wine warmer, and two chamber pots one of bronze the other of celadon. The ewer and wine warmer are intended to be used for the preparation and serving of drinks, so it is probable that this was the intended purpose of the glass vessel, as no other specific drinking vessels are placed in this location. A further celadon plate and ear cup are placed separately near the entrance of the tomb, but these were probably for a ritual offering to the deceased, rather than for their personal use (Section 2.4.2.4). The richness and abundance of the furnishings indicates that this burial was intended as a permanent resting place. The tomb is dated to the late Eastern Jin Dynasty and in this period the descendants of the Northern émigrés had little or no connection to their ancestral homelands and were happy to be buried permanently in the capital (Kieser, 2011: 71).

The occupant of Fuguishan tomb M4 was clearly someone of wealth and status, and was possibly connected to the imperial family. The tomb contained a single occupant and finds in the tomb such as weaponry and chamber pots, which were intended for male usage suggest that they were biologically male. The placement of the glass vessel inside a silver bowl indicates that it was highly

valued, enhancing and also protecting it. The shape of the bowl and placement close to other drinkware, suggests that it was intended for use as a drinking vessel.

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Figure 4.8: Plan of Fuguishan tomb M4, showing the location of the glass vessel and principal artefacts (Qi et al, 1998: 39; modifications D. Montgomery).

4.4.4 Xianheguan Tomb M6

A single glass vessel was found in an intact and well-furnished burial, tomb M6 at Xianheguan in the Eastern suburbs of Nanjing. The tomb, which held two bodies is thought to belong to Gao Li (d.366) and his wife (d.356). Gao Li was for a time the governor of Danyang, which because of the proximity to capital in Nanjing the was an extremely prestigious position. However, he was dismissed from office because of improper conduct, dying in disgrace. Because of this, upon his death his son Gao Song was prevented from taking possession of the body. He fought a five-year legal battle and eventually the court took pity on him and he was able to bury his father (Mather, 2017: 574; Wang *et al*, 2004: 38-39). Gao Song is buried in the same cemetery in tomb M2.

The richness of the burial is extraordinary, particularly the amount of jade. The tomb contained a total of fifteen finely carved pieces, harkening back to the jade burials of the Han Dynasty (Section 2.4.1.2). Indeed, they may have actually been antique pieces from this era (Dien, 2007: 274). Gao Li's coffin contained an iron sword with jade fittings, a jade disk, jade pignons and two jade belt hooks. It also contains an inkstone, a lacquer tray and spittoon, a bronze crossbow mechanism and a single rock crystal bead. The glass vessel (Section 4.5.1.1) was placed in the wife's coffin, which also contained fifty-six pieces of gold, including ten animal shaped ornaments, seven bracelets, five rings, and an ear ornament in the shape of a cicada. She was further adorned with turquoise and amber beads and supplied lacquer plates and vessels including two ear cups, a bronze ear cup, iron knife. The glass vessel (Figure 4.10) was stored with these items placed on a lacquer stand.

Despite the great wealth in the coffins, the tomb seems rather under-equipped, with only four celadon vessels, indicating that it was temporary (Section 2.4.2.2). Gao Li himself seems rather

underequipped and apart from his sword and jade adornments and he was equipped with only a crossbow mechanism, a lacquer tray and a spittoon. This could perhaps be related to the unusual delay to his burial. The wife by contrast is both well adorned with gold and jewellery and also supplied with quotidian and symbolic items, so that she could be comfortable but also moved to a new tomb easily. The glass vessel was almost certainly considered a valuable item, being placed on its own lacquer stand. Although the connection to drinkware is not as clear as in Wang Yi's tomb (Section 4.4.2.4), she was supplied with several items for this purpose, including a ewer, two lacquer cups and bronze ear cup, so it is probable the glass bowl was also intended as a drinking vessel.

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Figure 4.9: Plan of Xianbeguan tomb M6, showing the location of the glass vessel and principal artefacts (Wang et al, 2001: 8; modifications D. Montgomery).

4.5 Glass Vessels

The glass vessels themselves will now be examined in further detail, to elucidate further information on usage, symbolism, and provenance.

4.5.1 Forms Identified

The nineteen glass vessels and fragments from the Jin tombs have been divided into groups based on their shape and decoration. The most common vessel type in the Jin tombs are globular bowls with everted rims. These can be further divided into several subcategories based on their decorative schemes. The other vessel form represented are beakers.

4.5.1.1 Globular Bowls decorated with rice facets

The glass vessel from Xianheguan M6 is a globular transparent bowl, with a slight yellowish green tinge (Figure 4.10). It has an everted rim and is decorated with four rows of rice facets and two horizontal wheel incisions. No analysis has been carried out but it is quite similar to a third century bowl in the Wolf collection, and three bowls from Himlingøje in Denmark, which are all thought to be made in Cologne (Stern, 2001: 159), indicating a probable Roman origin.

Several fragments from a similar bowl were found in the tomb at Nanjing University North campus in the corridor connecting the main tomb chamber to a sub chamber (Figure 4.10). They come from a vessel made from transparent glass with an everted rim and curved walls suggesting a globular vessel, perhaps a bowl. It is decorated with a row of vertically aligned horizontal facets and what appear to be two incised bands under the rim. The diameter of the rim is estimated to be 10cm. The fragments have been analysed (*Table 4.2*) and are composed of a mineral soda-lime with low levels of potash and magnesia indicating a Mediterranean origin (Borell, 2016: 52). Furthermore, the wall thickness is given as 0.1cm, which would also suggest a Roman rather than Sasanian origin (Meredith-Goymour, 2006: 125).

4.5.1.2 Globular Bowls featuring Pinching

The intact globular glass bowl from Fuguishan M4 (Figure 4.11) is free-blown with an everted rim, made from transparent glass with a bluish tinge. The lower half of the vessel is decorated with twenty small ribs, produced by pinching. No chemical analysis has been carried out, so provenance is difficult to determine. Bowls of this type were produced in both the Roman and Sasanian Empires (Borell, 2016: 55; Hoppál, 2016: 104). Vessels of a similar shape and decorative pattern have been excavated at the Sasanian city of Veh Ardashir in Iraq (Simpson, 2014: Fig. 20.11).

4.5.1.3 Globular Bowls decorated with Circular facets

Two globular bowls were recovered from Wulidun tomb M4021 (*Table 4.1*). One, which has been reconstructed, is decorated with four bands of circular facets and three sets of wheel cut grooves (Figure 4.12). The second is fragmented but of a similar colour and decoration scheme, with circular facets and grooves identifiable in the fragments (Wang, 2015: 421). The British Museum holds a fourth century Sasanian globular bowl, described as probably a drinking bowl, which has a similar shape, colour and decorative scheme, although two bands of facets consist of rice facets rather than circles (Figure 4.12). Bowls of this type have also been found in excavations in the Sasanian city of Veh Ardashir in Iraq (Negro Ponzi, 1984: fig. 4.1; Simpson, 2014: Fig. 20.21). The Sasanian origin of the vessels from Wulidun is further supported by chemical analysis which has

been carried out on one of the fragments, which has a composition consistent with a Sasanian plant ash glass (*Table 4.2*).

4.5.1.4 Undecorated Globular Bowls

An intact globular bowl was also recovered from the large tomb at Pingshigang. The report is brief and does not describe any decoration, and no decoration is shown on the line drawing, suggesting the bowl was undecorated. Chemical analysis has been carried out and shows elevated levels of potash of 4%, which would be indicative of a plant ash glass and likely a Sasanian origin (*Table 4.2*, Section 2.2). Undecorated bowls of a similar shape have been excavated at the Sasanian city of Veh Ardashir in Iraq (Negro Ponzi, 1984: fig. 2.7; Simpson, 2014: Fig. 20.9).

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Figure 4.10: Globular Bowls decorated with rice facets. Left: Glass vessel from Xianbeguan Right: Fragments from Nanjing University North Campus (Images courtesy of Wang Zbigao).

Images removed for copyright reasons

Figure 4.11: Globular Bowl featuring Pinching from Fuguishan Tomb M4 (Images courtesy of Wang Zbigao)

Images removed for copyright reasons

*Figure 4.12: Globular Bowls decorated with Circular facets. **Left:** Line drawing of the glass vessel from Wulidun (Image courtesy of Wang Zhigao). **Right:** Sasanian glass drinking bowl (British museum, Number 135854).*

4.5.1.5 Globular Bowls decorated with prunts and spurs

Two vessels of identical shape and decorative scheme were recovered from Jianyaomiao M1 (Section 4.4.1) and the tomb of Hua Fang at the Babaoshan revolutionary cemetery (Table 4.1). Both are green and transparent, with spherical bodies and everted rims. They are decorated with ten prominent rounded prunts midway down the vessel wall. The base of both vessels have a further set of seven pairs of small pointed spurs which serve as feet (Figure 4.13). Although chemical analysis has not yet been carried out to suggest potential provenance, the design appears to be typically Sasanian. A Sasanian bowl dated to the third or fourth century, with a similar style and decorative pattern is held in the collection of the Corning Museum of glass, and further examples have been found in Iraq, Iran and the United Arab Emirates (Whitehouse, 2005: 25). The British Museum collection also holds an almost identical vessel from Amlash in North-Western Iran dated to the fifth century (Simpson, 2015: 82; British Museum, Object number 134374; Figure 4.13).

Five fragments of a transparent, light green glass vessel were also recovered from an Eastern Jin tomb at Laiyu village close to Nanjing (Table 4.1). The fragments are too few in number to reconstruct the original shape of the vessel although one features a large prominent prunt (Figure 4.13). However, the base of the vessel has a prominent punty mark, not seen on the other vessels in the sample, and no pointed spurs suggesting the original design of the vessel was different from the other bowls described above. Chemical analysis has been carried out on one of the fragments and indicates that it was made from a Sasanian plant ash glass (*Table 4.2*, Section 2.2).

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*Figure 4.13: Globular Bowls decorated with prunts and spurs. Clockwise from top left: glass vessels from Jianyaomiao M1 (Nanjing Museum et al, 2018.); line drawings of glass vessel from Babaoshan Revolutionary Cemetery (Image courtesy of Wang Zbigao); glass fragments from Laiyu Village (**D. Montgomery**); Glass vessel from Amlash (British Museum, Number 134374)*

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Figure 4.14: Glass Beakers. Clockwise from the top left: Glass beaker from the male coffin in Xianhshan M7 (Nanjing Municipal Museum, 2004: 63); glass vessel from the female coffin Xiangshan M7 (courtesy of Wang Zhigao); glass vessel from Amlash (British Museum, Number 134885); fragments from Beigushan (courtesy of Wang Zhigao).

4.5.1.6 Beakers

Two intact glass beakers with cylindrical bodies and narrow rounded bases were recovered from Xiangshan M7 (Section 4.4.2). They are decorated with two incised bands and oval facets under the lip, seven large vertical facets on the body, surrounded by cut grooves and a further band of narrow oval facets near the base (Hoppál 2016: 113). Both are transparent with the beaker from the male coffin yellowish-green in colour, while the one from the female coffin has a more yellowish tinge (Figure 4.14). The beakers have been compared to a similar beaker in the British Museum, dated to the fourth century AD, labelled as Sasanian and said to come from Amlash in

Northern Iran (Hoppál 2016: 113; Figure 4.14). However, the decorative scheme is more consistent with the late Roman style of dividing the vessel surface clearly differentiated segments of facets (Meredith-Goymour, 2006: 125). Borell (2016: 51) also noted that the unusual cut grooves surrounding the large facets on the body are like vessels found at Dura Europos in Syria, which date to before 256 AD (Clairmont, 1963: 70-72). There are two chemical analyses for the glass vessels from this site (Table 4.2), although it is unclear whether they come from one or both vessels. The relatively low potash and Magnesia indicate that the vessels are of Roman, rather than a Sasanian origin.

Fragments of another vessel of this type were found in the great tomb at Beigushan (Table 4.1). They are transparent and colourless with a yellowish tinge, and are decorated with a row of small, closely set oval facets, incised lines and a further set of large oval facets (Zhu, 1983: 320; Figure 4.14). Two chemical analyses have been carried out on these fragments and indicate that they were made from Roman soda-lime glass (Table 4.2). Fragments from the tomb at Shimenkan are described as transparent and green in colour and with facet cut decoration and incised lines, indicating that it may have originally been a similar vessel type but there is little further information about these fragments.

4.5.2 Fragments

Fragments from seven vessels have also been identified, but these are too small, or too few in number to give any indication of vessel shape. They come in a range of colours. Four of the vessels were blue, one colourless, one colourless with green streaks, and one yellowish green, indicating that they came from a range of different vessel types (Table 4.1). Chemical analysis has been carried out on four of these, three blue and one yellowish green and all are made from Roman soda-lime glass (Table 4.2). One of these a blue glass from Shidaigang M5 is described as possibly being decorated with a rib (Quan, 1996).

4.5.3 Provenance

The glass vessels found in these Jin tombs come from both the Roman and Sasanian Empires. However, there appears to be no distinction in usage or geographical provenance or distribution. For example, in the two tombs on the Southern coast, an important trading region, one vessel is Sasanian, the other Roman. Both Roman and Sasanian vessels, have also been found in the tombs in Nanjing, although there is no apparent distinction in their use. From the available evidence the supply of Roman and Sasanian vessels appears to be relatively equal in terms of quantity (See **Error! Reference source not found.**). Form and function therefore appear to be more important than

original provenance, with globular drinking bowls produced in both the Roman and Sasanian Empires being the most popular vessel type.

	SiO ₂	Na ₂ O	CaO	K ₂ O	MgO	Al ₂ O ₃	Fe ₂ O ₃	TiO ₂	MnO	CuO	CoO	SnO ₂	PbO	P ₂ O
1.	67.70	19.23	6.05	0.45	0.94	3.43	0.58		1.63	0.02				
2.	69.15	15.84	5.79	0.33	0.55	2.09	1.22		0.03	0.27				
3.	63.39	19.60	6.81	0.49	0.27	1.89								
4.	67.70	19.23	6.05	0.45	0.94	3.43	0.58		1.63	0.02				
5.	68.41	18.82	5.80	0.38	1.00	2.20	0.63	0.08	1.34					0.09
6.	69.15	15.84	5.79	0.33	0.55	2.09	1.22		0.03	0.27				
7.	69.95	16.10	5.72	0.27	0.63	2.20	1.17	0.099	0.002	0.22			0.24	0.07
8.	72.04	14.76	6.29	0.32	0.61	2.30	1.34	0.09	0.03	0.25	0.12	0.003	0.21	0.05
9.	61.86	19.17	8.92	3.97	4.38	0.71	0.50		0.04					
10.	67.31	18.23	5.45	0.51	1.14	2.98	0.98	0.39	0.81	0.028				
11.	64.22	17.51	9.19	3.59	3.21	1.64	0.57		0.04	0.02				
12.	65.99	17.63	1.24	0.74	9.22	5.18								
13.	65.82	17.11	0.47	0.21	9.17	7.22								

<p>1. Nanjing Xiangshan Sample One (<i>Wang, 2015: table 2</i>)</p> <p>2. Nanjing Xiangshan Sample Two (<i>Wang, 2015: table 2</i>)</p> <p>3. Nanjing University North Campus (<i>Wang, 2015: table 2</i>)</p> <p>4. Beigushan (Yellowish glass) a (<i>Wang, 2015: table 2</i>)</p> <p>5. Beigushan (Yellowish glass) b (<i>Borell, 2016: table 3.1</i>)</p> <p>6. Beigushan blue glass vessel a (<i>Borell, 2016: table 3.1</i>)</p> <p>7. Beigushan blue glass vessel b (<i>Wang, 2015: table 2</i>)</p> <p>8. Shangfang Licun (<i>Wang, 2015: table 2</i>)</p>	<p>9. Laiyu Village, Anhui Province (<i>Wang, 2015: table 2</i>)</p> <p>10. Hubei, Caidian (<i>Wang, 2015: table 2</i>)</p> <p>11. Echeng M4021:3 (<i>Wang, 2015: table 2</i>)</p> <p>12. Guangzhou Shidaigang Scan one (<i>Quan, 1996: 44</i>)</p> <p>13. Guangzhou Shidaigang Scan two (<i>Quan, 1996: 44</i>)</p>
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Table 4.2: Chemical analyses of Jin Dynasty glass vessels.

4.5.4 Placement in tombs

The original placement of the glass vessels can be seen in four intact tombs (Section 4.4). At Xiangshan, Xianheguan and Jianyaomiao, the glass vessels were placed close to or inside the coffin of the deceased. This indicates that the glass vessels were personal items, akin to personal weaponry or jewellery, rather than simply utilitarian items, which were placed around the edges of the tombs. Xianheguan and Xiangshan were intended as temporary tombs, so the placement of the glass vessels inside the coffins of the deceased, indicates that they were important items. At Fuguishan the glass vessel was placed inside a silver bowl, while at Xianheguan, it was placed inside a lacquer box. Caring for and protecting the glass vessels in this way further indicates that they were valued objects. This assessment is supported at Jianyaomiao where five silver rings, two gold rings and two pearls were placed inside the glass vessel.

4.5.4.1 **Ritual or symbolic significance**

The historical literature indicates that glass was considered a symbol of purity (Section 3.4). However, there is little evidence of glass being used in a ritual or symbolic way in these burials. Ritual goods would often be placed in specific locations inside the coffin, or on the body. For example jade pigs would be placed in their hands, perhaps signifying the laying to rest of the deceased or a crossbow mechanism inside the coffin which had an unknown ritual significance (Dien, 1995: 50; 53). However, the glass vessels were placed in different locations, both inside and outside the coffin, suggesting they did not have a specific symbolic function in these burials. Furthermore, they are not placed close to the ceramic vessels used for ritual offerings of food and drink at the entrances of tombs, indicating they were not used in this way. Instead, they appear to be among the class of goods intended for the personal use and comfort or enjoyment of the deceased. The glass vessels may have been the personal drinking vessels used by the deceased in life or could have been selected for inclusion in the tomb inventory by those arranging the funeral as symbols of wealth and status. They could perhaps even have been given as gifts by mourners at the funeral.

4.5.5 **Drinking Vessels**

All of the vessels are small, rounded bowls and beakers. They have rim diameters between 8.5 and 10.6cm and heights ranging between 7 and 10.4 cm (Table 4.1). These types of small vessels were originally intended for use as drinking vessels. The Jin historical literature also indicates that in China glass vessels were used predominantly as wine vessels and this is supported by the tomb evidence. The glass vessel from the female coffin at Xiangshan was found under a bronze wine warmer. Next to these was also placed a ceramic ewer for pouring wine, indicating that the items were intended for use together. At Jianyaomiao two bronze and shell ear cups were placed under the glass vessel. Perhaps these were favoured personal drinking vessels. The tomb contained a total of seven drinking vessels, as well as two bronze wine warmers, ewers and wine storage jars. At Fuguishan the glass vessel was placed at the foot of the coffin again close to a ceramic ewer and bronze wine warmer. In other tombs similar types of drinkware including, wine warmers, ewers, storage jars, serving trays and ear cups were also found. Several tombs in Nanjing were also supplied with ceramic raised benches, and armrests. At Xiangshan a tray with ceramic ear cups was placed on top of the bench, next to the armrests. This was clearly a space for the occupant to sit and enjoy a cup of wine. The presence of the various types of drinkware and furniture within the tombs indicates that wine drinking was an important activity for the occupants and that the glass beakers and bowls were intended as drinking vessels in the afterlife.

4.5.6 Colour

Colour was symbolically important in ancient Chinese culture. As early as the Spring and Autumn period five colours, red, blue/green, black, white and yellow, became associated with a conceptual scheme known as *wuxing*, which was used to describe a wide array of mythical and cosmological phenomena. The system was used in a wide array of practices from divination to medicine. (Dusenbury, 2015: 12-13). The combination of red and black, was particularly important in early Chinese tomb settings, as it was symbolic of the dyadic understanding prevalent in the period. For this reason, objects made from red and black lacquer were commonly used as grave goods (Dusenbury, 2015: 12).

However, by the early medieval period the use of lacquer vessels in burials begins to decline, while vessels made from glazed ceramics such as pale green celadon become much more common in tombs (Section 2.4.1.2). Kieser (2019a: 423), suggests that the increased use of celadon ware in the Jin Dynasty, may in part be due to economic concerns. Glazed ceramics can be produced more quickly and cheaply, than traditional lacquerware, which had an expensive, time-consuming production process. However, she also theorises that it may be indicative of changes in fashion and taste, with the cool and muted shades of celadon, replacing the warm and dark blacks and reds of lacquer and metallic bronze, on the tables of the living and in the tombs of the dead. The phasing out of red and black lacquer grave goods perhaps also represents changing beliefs about death and the afterlife in the early medieval period, which is also typified by a decline in the use of jade in burials (Section 2.4.2).

The glass vessels found in the Jin tombs are all are transparent, and have a range of colours; pale green, pale yellow, blue and colourless. Some of these colours do have significance in the *wuxing* colour system. Yellow represents earth and centre, while blue/green represents, Spring, the East and Wood. One poem (Section 3.4.1), does indeed comment on the colour of a glass bowl describing it as having “The eternal colour of Spring Sunshine”. However, in this case the poet may have simply been describing the physical characteristics of the bowl, rather than a deeper symbolic meaning. In the same stanza he also describes do not fit into the *wuxing* system at all. For example, the vessel fragments the bowl as having the “clarity of Winter ice”. In fact, some of the glass colours from three tombs are dark blue, while vessels from two other tombs are completely colourless. This suggests that glass vessels were not chosen because they had symbolically significant colours, although colour could still have been important.

If as Kieser (2019a: 423) suggests, a cool and pale colour palette was fashionable in this period, then the glass vessels, could perhaps have been chosen because they were fashionable, rather than

had meaning. As drinking vessels, the glass vessels would probably have been used together with other types of tableware, and were perhaps chosen because their colours matched the , muted colours in other types of tableware used in the period. At the same time glass vessels, were bright and transparent enhancing the colours of tableware fashionable in the Jin Dynasty.

4.6 Summary

Glass vessels were used exclusively in the Jin tombs of high status individuals; emperors, courtiers, high ranking members of the civil and military administration and their family members. The presence of glass vessels in the tombs and coffins of both males and females suggests that their usage was not limited to just men. The placement of glass vessels inside the coffins of temporary tombs suggest that they were highly valued and were supposed to remain with the deceased if they moved to a new tomb. In other tombs the glass vessels were placed in lacquer or silver containers again suggesting they were highly valued. The glass vessels chosen for inclusion in tombs were beakers and globular bowls and intended for used as drinking vessels. Finds of associated drinking equipment further supports this. They do not appear to have a specific ritual function but were instead placed in the tomb for the use of the deceased in the afterlife.

In the next sections the focus will shift to the Northern Wei Dynasty (386~535), which rose to power in Northern China in the Waning years of the Eastern Jin (317~420).

5 Glass Vessel use in Northern Wei Society

太武時其國人商販京師自
云能鑄石為五色琉璃於是
採礦山中於京師鑄之既成
光澤乃美於西方來者

北史卷九十七列傳第八十五西域

During the reign of the emperor Tai Wu, merchants from Bactria came to the capital to peddle, saying they could cast certain stones to make five coloured glass. They mined stones in the mountains and cast them in the capital and when it was finished the lustre was even more beautiful than glass brought from the West.

Beishi Scroll ninety-seven, Biographies eighty-five: Western Regions

This chapter will examine the evidence for glass vessel usage in Northern Wei Society. It will begin with an overview of historical accounts of Northern Wei glass and explore its use in Buddhism before finally examining the evidence for indigenous glass production.

5.1 Historical accounts of glass usage

5.1.1 Glass as a marker of status

In 547 Yang Xuanzhi published his work the *Luoyang qielan ji*, the Record of Buddhist Monasteries in Luoyang, a nostalgic memoir of life in the Northern Wei city before it was destroyed in succession struggles at the end of the Northern Wei Dynasty (Choo and Dien, 2019: 434). One section of the work gives an account of Prince Yuan Chen 元琛 (?~526) a member of the Northern Wei imperial family, well known for his wealth and extravagance. Discussing his great wealth Prince Yuan Chen states that “if Shi Chong of the Jin dynasty, who came from only a common family could be extravagant, what prevented him [Yuan Chen], a prince of the great Wei Empire, from being so” (Liu, 1988: 83). Shi Chong (249~300), who lived during the Western Jin Dynasty was well known as an extremely wealthy and ostentatious man, who even competed with members of the imperial family in displays of wealth and opulence (Section 3.1.2).

During the late Northern Wei Dynasty, the Emperor Xiaowen began a policy of Sinicization, moving the capital to Luoyang and encouraging members of the Xianbei elite to adopt Chinese culture and customs (Section 2.5.4). However, members of the Han Chinese aristocracy still looked upon the ‘barbarian’, Xianbei nobility who ruled over them with disdain or even outright hatred, masked behind a veneer of loyalty (Jenner, 1981: 128-129). Prince Yuan Chen seems to be aware of this and attempts to gain legitimacy by imitating Shi Chong and amassing wealth and exotic goods. Ironically, however, this was also a key marker of status among the nomadic tribes of Central Asia (Stark, 2015: 474), and perhaps a cultural holdover from the Xianbei past. The *Luoyang Qielanji* describes his collection as including more than ten rare Persian horses, outfitted with gold and silver tack, before going on to describe his collection of exotic vessels which included glass.

“Often [Prince Yuan Chen would] gather his clansmen together and show off his various treasures: more than one hundred gold vessels and silver jars, about the same amount of [gold or silver] bowls, footed containers, plates, and boxes. Among the wine vessels were crystal bowls, agate and glass bowls, and red jade cups. There were scores of them, all marvellously made. They were not native products but came from the Western Regions.”

Luoyang Qielanji, Scroll four.
Translation: (Yang, 1984: 243)

The imported glass vessels are clearly considered highly valuable and their source worthy of mention, being among the collection of treasures Yuan Chen sought to display. The description

of the collection of items being “marvellously made” and coming “from the Western Regions”, implies that the value of the collection came from both the beauty of the items and the fact that they were imported over great distance. ‘The Western Regions’, is a somewhat ambiguous term for the lands West of China, especially central Asia. The Western Regions scroll of the *weishu*, the official history of the Northern Wei Dynasty, lists many of the products in Yuan Chen’s collection, including gold, silver, agate, crystal and also glass, as coming from Persia, which in this period would have been the Sasanian Empire. While an exact description of Yuan Chen’s glass bowls is not given in the text they were most likely Sasanian vessels, which have been found in several Northern Wei tombs (chapter 6) These were often intricately decorated with facet cutting, which would also fit their description of being marvellously made.

5.1.2 Glass on the Dining table

Another account describes glass vessels being used at a banquet at the Northern Wei court at Pingcheng. The description is recorded in the *Nanqishu*, the *official history of the Southern Qi Dynasty* (479~502), which ruled Southern China. A description of how banquets were served at in the Northern Wei court which reinforces this.

*The Main Hall is decorated with tasselled curtains, gold censers, dragon phoenix lacquer screens and woven hangings. Guests were seated on wool carpets. **Gold incense burners, glass bowls and gold bowls were set out on the table.** Plates a Chinese foot long were set before the guests, while Imperial delicacies were served on round platters a Chinese yard across.*

Nanqi Shu, Scroll fifty-seven, Biography Thirty-eight: *Wei Lu*.

Translation: **D. Montgomery**

The royal court in question is the one at Pingcheng, modern day Datong, which was the Northern Wei capital from 398-493 AD. It was housed in a what eventually came to be a huge and sprawling palace, almost a city in itself, where the Northern Wei emperors, often reluctantly, spent increasingly longer amounts of time, when they would rather be out on a hunt or campaign (Pearce, 2019: 172). Despite this being a large and permeant structure, the description of the banqueting hall has echoes of the nomadic tents of the Xianbei past, such as the curtains, wall hangings and wool carpets. Among these however are also Chinese elements such as the lacquer screens decorated with dragons and phoenixes in typical Chinese Imperial style. This could perhaps represent the process of acculturation where certain Chinese materials and symbols of power were adopted by the Xianbei rulers of the Northern Wei. Ultimately it could also represent greater ambitions of becoming a legitimate Chinese imperial dynasty. The table is set up with food served

on large plates and platters and appears to be of Xianbei rather than Chinese tradition. Such scenes, with similar shaped serving vessels, are depicted on murals on the walls of several tombs from the Northern Dynasties, believed to have belonged to Xianbei occupants. One such a banquet is depicted in the tomb of Xu Xianxiu (d. 571) In the scene a couple, presumably the deceased and his wife, sit under a curtained canopy on a low carpeted couch, with what appear to be lacquer screens at their backs. Between them is a large plate of meat surrounded by other small dishes. The couple and the attendants around them all wear typical Xianbei garb, while musicians play Central Asian instruments (Hung, 2011: 74-75). This is similar to the description of the banquet at the Northern Wei court, albeit on a much smaller scale. This implies that the Northern Wei court, at least in this case, still adhered to the traditions of their nomadic past rather than the Chinese customs, which they began to adopt towards the end of their dynasty. Regular banquets played a central role in nomadic society in this period, where both social and political prestige were demonstrated through personal bonds between leaders and followers. Magnificent displays of precious luxuries played a key role in such banquets where hosts wished to both impress their guests and display their power (Stark, 2015: 474; Paul, 2004: 1075–1076).

Luxury tableware as described in the passage are found in high status Northern Wei tombs, including gilt silver plates, bowls and ewers imported from Central Asia (see Harper, 2002; Marshak, 2004). Vessels made of Chinese lacquerware are also found in these tombs including large plates and serving trays plates consistent with the description in the historical account (Müller, 2019 b: 50). These types of lacquer and silver vessels are found in conjunction with glass vessels in two high status tombs (Section 6.3.1), suggesting that they were used together as tableware.

5.2 ‘Glass’ in the Marketplace

Excavations of the Northern Wei city of Luoyang between 1985 and 1991, uncovered part of the area occupied by the great market. During the excavations glazed ceramic shards from utilitarian vessels such as bowls and cups were uncovered. These shards came in a surprisingly wide variety of styles and glazes (Du, 1991; Müller, 2019a: 389). One style was particularly distinctive. It was made from a dark grey earthenware body and decorated with rows of small white disks, which were described by An (2004: 259) as “like strings of pearls”. These are interspersed with large, raised disks coloured with either white, yellow or green slip (Figure 5.1). This decoration is distinctive as it does not appear to come from any local stylistic tradition, but instead seems to be an attempt to copy imported facet cut glass vessels. Stylistically it seems to have been inspired by Sasanian vessels, which were imported to China in this period and are found in both Northern Wei and Jin Dynasty tombs (Sections 4.5.1.3 & 6.4.1). The disks in particular appear to imitate the

large, raised bosses, with concave surfaces, which often decorate Sasanian glassware. The ceramic shards were additionally covered with a thick glaze, which gives them an even more glassy feel and appearance (An, 2004: 259). A bowl reconstructed from some of these shards has a straight mouth, a deep, round body and a large concave foot.

The material the shards are produced from local grayware, which was a common type of ceramic in the Northern Wei period (Müller, 2019a: 384-387). The vessels may have been produced by local craftspeople, who purposefully decorated and glazed them to look like the imported glass vessels. In the late Northern Wei period Luoyang, which became the capital of the empire in 493 AD, was home to between forty and fifty thousand foreign residents; Mongolians, Koreans, exiles from Southern China as well as Buddhist monks and merchants from Central and South Asia (Huang, 2021: 136-137). It was a huge commercial centre, with a constant flow of merchants travelling from Central and Southern Asia (Holcombe, 2013: 25). Excavations at the great market, where the ceramic shards were found, also uncovered imported Indian glass (see Liu and Zhang, 1999). This indicates that other foreign products were also available, although currently most of the finds from the excavations appear to remain unpublished. It is possible that genuine glass bowls were also sold in the same market. The craftspeople who produced the glazed ceramics appear to have been familiar enough with Sasanian glass vessels to produce reasonable replicas, suggesting that they had some familiarity with them from perhaps seeing the original items.

Glass vessels were not the only product to be imitated as ceramic copies of Sogdian silver vessels from the same period, have also been uncovered in Northern Wei tombs (Müller, 2019: 389). Examples of the original silver vessels have been found with Sasanian glass in two Northern Wei tombs (Sections 6.4.1.1; 6.4.1.2). Both glass and silverware could be considered as luxury goods as both of the tombs where they were found belonged to high status individuals. The production of deliberate imitations of these imported items suggest that they were highly sought after, but not available to all. This does not suggest that these replicas were cheap or common pieces. As An (2004) points out, the glazed ceramic copies of glass vessels were very high quality and were probably quite expensive products in their own right. The end use was probably the same as the glass and silver originals, such as luxury drinking vessels, tableware and perhaps ultimately grave goods. The current archaeological evidence indicates that these ceramic replicas of glass were only produced for a short period. However, the copies of silverware had an enduring impact on Chinese ceramics and imagery from imported silver vessels such as floral motifs, became a standard decorative scheme in the glazed ceramics of later dynasties (see Rawson, 1991).

Images removed for copyright reasons

Figure 5.1: Reconstructed glazed bowl and glazed ceramic shards excavated in the great market of Luoyang (An, 2004: 61; 259).

5.3 Glass in the Temple

Buddhism gained importance in the latter half of the Northern Wei Dynasty (Section 2.5.3). Evidence for Northern Wei glass vessel usage in a Buddhist context comes from a single site; the Dingzhou pagoda in Hebei Province. When it was excavated in 1964, six complete glass vessels were found inside a stone chest, which had been buried directly in the rammed earth foundation of the pagoda. An inscription gives the date on which the chest was buried, the fifth year of the Taihe Era of the Northern Wei, that is 481 AD (Liu, 1966: 253). The chest contained an extraordinary number of objects, 5657 in total, and included items of gold, silver, bronze, pearls, jade, agate, rock crystal, coral, carnelian, cowrie shell as well as glass. The glass vessels consisted of a bowl, two globular jars, three gourd shaped bottles and a fragment, probably from the base of a vessel, all made from transparent blue glass. Other glass objects in the chest included two ring-shaped ornaments, twelve columned string ornaments and more than two thousand glass beads of various colours (Xin, 2018: 244).

5.3.1 Reliquary Caskets

The inscription on the lid of the stone chest gives the circumstances under which it was buried. It states that the emperor Xiaowen (r. 471~499), while on a hunting expedition, made a vow, and commanded his officials to use bureaucratic funds for the construction of a five-story pagoda, for the burial of a stone Śāriṃ relic casket (Hong, 2010: 184). Relics were an important component of Chinese Buddhism from the very beginning. Kieschnick, (2019: 550) writes that “the cult of relics entered China with Buddhism and quickly inspired the Chinese imagination. Whether believed to be the sacred remains of the Buddha himself or of a local holy monk, relics were sources of merit, miracle, and wonder, venerated in stupas that grew up in every major city and at the very centre of

every major monastery.” The relic referred to in the inscription on the stone chest is a Śarīra. This can be a generic term referring to Buddhist relics, which could be a small piece of bone or other bodily tissue from the Buddha or other holy figure. However, Śarīra could also be a type of small pearl or crystal-like bead-shaped object, which are purportedly found among the cremated ashes of Buddhist spiritual masters. These relics were believed to perform miracles during and after the process of enshrinement, and were objects of worship and veneration (Walley, 2016: 163).

In India, where Buddhism first emerged, relics were usually enshrined in several hierarchical layers of different materials, usually with a rock crystal container for the relic at the centre and then layers of gold, silver, bronze and finally an outermost layer of stone. Surviving reliquaries from the Tang (618~907) and Song (960~1279) Dynasties (see Shen, 2002) and the equivalent date range in Korea and Japan (see Walley, 2016), indicate a similar pattern where a relic, was nested in the centre of several layers of different materials. However, these did not necessarily follow the exact Indian pattern, and each reliquary employed slightly different materials and shapes for the different layers. A notable feature of many of the East Asian reliquaries is the use of glass vessels both for the central relic container and sometimes even in the outer layers of the reliquary.

One particularly well-preserved example was discovered in the Songnimsa pagoda in South Korea, constructed between the seventh and eighth century AD (Walley, 2016: 146-147). Buried at the base of the pagoda was a tortoise-shaped stone chest, which contained an ornate openwork gilded bronze canopy, inside which was a green glass cup, with applied circular decoration (Figure 5.2). Walley (2016: 169) indicates that this vessel is Sasanian, although no specific reason for this is given, and there appears to be no parallels, with this particular shape and decorative scheme in the catalogues and literature on Sasanian glass (Simpson, 2014; Whitehouse, 2005). Inside this cup was a further green glass bottle, with a rounded body and long neck, which contained the relic itself (Figure 5.2). Another example of an intact reliquary was found buried under the eighth century Hōryūji pagoda in Japan. The reliquary consisted of several nested layers, an outermost bronze bowl, inside which was placed, nested oval containers of bronze, silver and gold. At the very centre of the reliquary was a glass bottle, with a silver stopper, which housed the enshrined relic. Within the two outermost containers were also placed numerous small items such as beads, pearls, precious stones and a bronze mirror. (Walley, 2016: 139-140). Other similar arrangements have been found in varying degrees of preservation at Buddhist sites in China dating from the Tang and Song periods (See Shen, 2002). These later finds provide examples of how to interpret the reliquary and glass vessels from the Dingzhou pagoda, which is the earliest example to be found in East Asia.



Figure 5.2: Reliquary set from the Songnimsa pagoda in Korea, dating to the 7th–8th century. The reliquary was found in a stone chest under the pagoda and features outer openwork made of gilt bronze, inside which is a glass bowl, likely imported, inside of which is a glass bottle, which held the relic. (Image used with permission from the National Museum of Korea catalogue).

Glass reliquary bottles are discussed in one Northern Wei text, the *Beishi*, the history of the Northern Dynasties.

The country of Yuezhi has [a relic of] Buddha's hair, kept in a glass bottle.

Taiping Yulan, Vessels, Section three: Bottles.
Translation: **D. Montgomery**

Yuezhi refers to Bactria in Central Asia. Imported silverware from this region is found in Northern Wei tombs (Section 6.2.1.2). This was also where the glassblowers, who produced glass in the Northern Wei capital were said to originally come from (Section 5.4.3). Furthermore in this period Yuezhi was a transitional area between India and China, important not only as a nexus of trade, but also religious ideas. Buddhist monks from this region were responsible for much of the Buddhist missionary work in China (Shen, 2002: footnote 21). The specific type of vessel described in the text is a *ying*, a type of small bottle with a wide body and long neck. Bottles matching this

description have been found in the Buddhist reliquaries of the Tang Dynasty described by Shen (2002), the Korean and Japanese reliquaries described above and also in the Dingzhou pagoda itself (Section 5.3.4; Figure 5.7). This passage therefore indicates that the practice of using small bottles to house Buddhist relics came from Central Asia.

5.3.2 Glass Alms Bowl

The largest glass vessel found in the Dingzhou reliquary was a transparent blue bowl. It is 7.9cm in height with a maximum diameter of 14.7cm and a wall thickness of around 2mm (An, 2009: 381). In shape it resembles a Buddhist alms bowl, with a rounded base and wide body curving into a wide mouth, 13.4cm in diameter (Figure 5.3). These were the bowls used by Buddhist monks to collect food and other donations from believers and were considered, with the robe, to be the most important possession of a monk. While the practice has mostly died out in East Asian Buddhism, these bowls are still used today in some areas of South-east Asia. These were usually made from wood or metal, which could survive the heavy wear of everyday use (Kieschnick, 2003: 108). A glass bowl by contrast is fragile so would seem to be impractical for regular use in this way and may therefore have had a more symbolic significance. A painted silk banner from the Dunhuang grottos (Figure 5.4), dating to the Tang Dynasty shows a Buddhist Bodhisattva holding a similarly shaped glass bowl. Its transparency is clearly emphasised by the painter, perhaps as a symbolic reference to purity (Section 3.4; 5.3.5.). It is also decorated with circles, perhaps alluding to the facet cut decoration frequently employed in Sasanian glassware.

Alms bowls were one of the few gifts Buddhist monks were allowed to receive and while often made of ordinary materials in keeping with Buddhist practice, they could in some cases be made of precious materials, even if this was generally in violation of monastic rules. One such example is a solid gold alms bowl found in the stupa of the Famen temple, which was donated to the monastery by Emperor Yizong in 873. An inscription on the gold bowl stated that it had been made to “welcome the true relics of the Buddha” and it was found in close proximity to a relic of Buddha’s fingerbone (Kieschnick, 2003: 109-110). In this period relics of the Buddha had the legal status of a person who could receive and hold property, so it is very likely that the gold bowl was intended as a gift for the relic. Kieschnick, (2003: 110), notes that the bowl ignored monastic regulations about precious materials, because it came from an imperial, rather than monastic tradition and thus the finest materials and craftsmanship were employed. A similar case may be argued for the alms bowl from Dingzhou; it was donated by an emperor, found in a relic chest and made of a material considered precious in the period.

Image removed for copyright reasons

Figure 5.3 Glass alms bowl from the Dingzhou Pagoda (An, 2004: 158).

Image removed for copyright reasons

Figure 5.4: A Tang Dynasty painted silk banner, from Mogao Cave 17 in Dunhuang. It features an image of a Bodhisattva, holding a transparent glass vessel. The shape and circular decoration is reminiscent of the facet cut Sasanian glass vessels found in both Jin and Northern Wei tombs. (British Museum, Number 1919,0101,0.139)

5.3.3 Globular Glass Jars

Two of the jars from the chest are small and globular in shape, with a squat round body and rounded base (Figure 5.5). One also additionally had a ring foot. They both have a short neck, with a small mouth and rounded lip and are made from a transparent blue glass. One has a height of 4.3cm and a maximum diameter of 4.9cm. The other a height of 3.6cm and a diameter of 4.8cm (An 2004: 157). The size and shape of the jars is quite similar to one found in Datong, in Qili Village, tomb M20 (Section 6.4.2.4). They are free blown with very thin walls, approximately 1mm in thickness.

In a study of glass in Buddhist relic deposits from the Tang and Northern Song Dynasties (618-1127), Shen (2002: 74-75) suggest that vessels can be divided into two groups; gifts or offerings to the relic and reliquaries for holding the relic. They found that reliquaries are vessels that “hardly exceed 5cm in height and rarely carry any surface decoration. They are often made of green glass and shaped like long necked or double gourd bottles, and small lidded jars.” This description matches very well with the two glass vessels in terms of height and shape indicating that they could indeed be reliquaries. The lack of a lid or stopper could be because they were made of a degradable organic material such as wood or cloth. Alternatively, there were certain small pieces of rock crystal in the chest that appear to be somewhat plug shaped so it is possible that these could have also acted as a stopper. The lack of detail in the excavation report about even the position of items in the stone chest makes this hard to investigate further. The excavator does not record the contents of the glass vessels if indeed there were any. Relics could be organic matter such as hair, fingernails or bodily tissue, which would have significantly degraded over time. Even if the relics were a more durable material, they could often be visibly quite unimpressive, in many cases undistinguishable from ordinary bone (Shen, 2002: 78). As the Dingzhou Pagoda was excavated relatively early in 1964 it is possible that the contents were simply thrown away by excavators unaware of their significance.

5.3.4 Gourd Bottles

The chest also contained three other bottles, all made from a transparent pale blue glass with a rounded body, a long thin neck and a mouth folded into a small hook (Figure 5.6). They are very small 5.3cm in height and a maximum diameter of 2.1cm on the rounded section of the body (An, 2009: 381). They are described by the excavators as gourd shaped, the mouths of the bottles folded into a small hooks shaped like stems. Gourds have a deep and ancient symbolism in Chinese cultural and religious practice. In Buddhism they came to represent eternal spiritual time of the universe (Peng and Geng, 2017: 69). A relic viewed inside the glass bottle was perhaps seen as

existing eternally outside the temporal boundaries of our own world and perhaps because of these associations gourd shaped glass bottles were frequently used as reliquaries in the Tang Dynasty (Shen, 2002: 75).

In terms of size and shape the gourd shaped bottles are similar to glass reliquaries used in later periods (see Shen, 2002). Whether these three gourd bottles were reliquaries themselves is unclear. The excavator makes no report of bone inside the bottles. It is possible that any content could have been removed by the excavators if they considered it unimportant. Alternatively, they could have held another substance. Analysis of residues found inside small Roman bird shaped glass bottles from Spain for example, indicate that they contained cosmetic powders (Pérez-Arantegui *et al*, 1996). Another intact example from Italy, contained a liquid interpreted as perfume (Maccabruni 1983: 108–109). It is believed these birds were filled with perfume or cosmetics, and then the long thin tail of the bird was sealed by heating in a flame. The tip could then be broken by the end user to access the contents. These gourd bottles, which have a long thin neck, which could have been sealed in a similar way without damaging the contents. If they did not contain relics they could perhaps have held another precious substance such as incense, given as an offering to the Buddha.

Images removed for copyright reasons

Figure 5.5: Globular glass jars from the Dingzhou pagoda. (An, 2004: 157).

Images removed for copyright reasons

*Figure 5.6: The gourd shaped bottles from the Dingzhou reliquary.
(Image Courtesy of Jiuqing Dong).*

5.3.5 The use of glass vessels in reliquaries

The tradition of using glass vessels in reliquaries continued in later periods in China, especially the Tang Dynasty (618~907 AD). The practice also spread to the Korean peninsula and Japan, where Buddhist practices from China were adopted. The use of glass vessels to house a relic, may have primarily been practical. Because the relics themselves were often visibly quite unimpressive (Figure 5.7), the reliquary in which they were housed, was almost as essential as the relic itself, giving visual form to what otherwise might have been an ordinary piece of bone or small stone-like object (Shen, 2002: 78). The physical properties of glass, especially transparency which is not possessed by other materials during this period, except for rock crystal (Section 3.1.5), made it an ideal material for such an enshrinement. It would give a beautiful physical form to a relic, but still allow it to be viewed, and perhaps even enhance its appearance. An inscription from the Tang Dynasty reliquary in the Qingshan temple, describes this and states that a glass bottle was used to capture the miraculous rays which emanated from the relic, while the silk covering gave it a material presence (Shen, 2002: 78). The light emitted from relics is often commented on in stories and historical accounts from this period as being a source of both awe and wonder (Kieschnick, 2003: 35). Enshrining a relic in a glass bottle, would help these rays of light manifest and possibly be intensified. To a pious viewer, with little previous contact with glass, this light would appear to be emanating from the relic itself, giving it a glowing, transcendent, and otherworldly appearance. The glass bottles could therefore be considered the most important item within the reliquaries, as they gave the relic its form and its power, manifesting the rays of light relics were believed to emit.

Images removed for copyright reasons

Figure 5.7 Glass Sarira Bottle and crystal Sarira relics from the Namwonsi temple in South-West Korea, dating to the Silla Period (668~935) (Image used with permission from the National Museum of Korea catalogue).

5.3.5.1 Value

Glass was also significant in Chinese Buddhism because it was considered one of the “Seven Treasures”. These were the seven types of precious gems associated with the Buddhist paradise and ultimately the Buddha himself and were used to decorate Buddhist temples, statues, icons, sutras, canopies and other sacred items (Campany, 2012: 84). The use of the seven treasures in such decorations is described in the Northern Wei text, the Buddhist Temples of Luoyang. “On the road to the south of the Stone Bridge was the Flourishing Prospect Nunnery, which was also built by a group of eunuchs as a joint enterprise. There was a gold carriage with an image, which was thirty Chinese feet off the ground. A jewelled canopy was hung above the carriage, from which were suspended gold bells, beads made out of seven varieties of precious materials, and images of Buddhist musicians and entertainers who appeared high up in the clouds. The craftsmanship was so superb it was hard to describe.” (Translation Yang 1984: 77-78). The exact nature of the treasures often varied, depending on which Buddhist text is consulted. However, they will almost always include gold, silver, liuli, which as discussed above in the original Sanskrit, meant lapis lazuli (Section 1.4.3), but in China it was taken to mean glass. The remaining four treasures varied, but could include agate, carnelian, shell, amber, black mica, pearl, turquoise, coral, and boli (meaning rock crystal but often taken to mean glass (Section 1.4.3; Campany, 2012: 84; Liu, 1988: 93-94). Many of these materials are represented in the Dingzhou reliquary, which in addition to the glass vessels contained 2621 glass beads, 2334 coral beads, 160 pearls, 41 silver Sasanian coins, 8 cowrie shells, as well as five small pieces of gold, two silver rings, three silver hairpins, two silver bells as well as a variety of other small items made of silver, bronze and other precious stones. Some of these items were probably gifts given to the relic. A reference in the book Liang describes the construction of a pagoda in Southern China in 523. Buried beneath it were stone chests filled with “gold, silver, necklaces, bracelets, and other precious things given from the coffers of princes, barons, consorts, and the common people.” (Translation: Li, 2010: 653).

The explicit use of treasures such as glass would appear to be the antithesis of Buddhist teaching, which emphasises a rejection of material riches. However, as Kieschnick (2003: 5) writes if “we leave the world of recondite doctrines and statements of principle and look instead at the way Buddhism has been practiced, we find material goods everywhere.” On a purely everyday level monasteries required material donations from the faithful to function. Furthermore, greater devotion was provoked among the faithful through grand and spectacularly adorned images of the Buddha, highlighting his majesty. Kieschnick (2003: 9), writes “Linking the Buddha, or for that matter a monastery, with precious gems and elaborate ornamentation had immediate resonance with people from all walks of life, expressing majesty, distinction, and splendour, while at the same

time giving expression to the collective desires of donors and devotees for material well-being.” One text, the *Mahdprajnaparamitasastra*, translated into Chinese by the Kuchean monk Kumārajīva (344–413 AD), for example, suggests that the colour of the Buddha’s skin essentially depended on what the viewer themselves valued. For some it would appear as gold, but for others it could appear as lapis, glass, or diamonds, depending on what they themselves admired (Kieschnick 2003: 8). This indicates that glass was valued on the same level as gold or diamonds.

5.3.5.2 Symbolism

Glass was not just valuable in a material sense. Because of its physical properties, especially transparency, not found in other materials, glass was believed to symbolise purity. This symbolism is seen in the secular poetry from the Jin Dynasty (Section 3.4.1). In one religious text from the Tang Dynasty, the “Hearing Lectures of Nanshan”, glass also has a specific symbolism, representing purity of mind in a person’s search for dharma. In one excerpt it is written that “an excellent person’s mind-water is as pure and clear as glass” (Xin, 2018: 241). In another text “the sutra of the glassy radiance of the Medicine Teacher”, translated from Sanskrit by Master Xuanzang (596-664 AD), glass is used as a symbol of wholesomeness and perfection. In one passage it is written that “when I attain enlightenment in the next life, I aspire to have a body like glass: clear both inside and out, pure without flaws.” (Xin, 2018: 240). In a prayer from a Tang Dynasty manuscript “Protocols of Prayers for the Deceased”, found at the Dunhuang grottos, the wish is expressed that monks be reborn in good realms and that “the gathering of glass expel the contaminated.” (Xin, 2018: 241). This implies that glass was not just symbolically pure, but even had physical power to expel impurity. Tang Dynasty Buddhism descended directly from the Buddhist practice in the Northern Wei, and it is therefore probable that these beliefs about purity were held in the Northern Wei period. Glass as a material was considered to be pure, flawless, with the power to expel impurity and would therefore be a suitable material to house Buddhist relics.

5.4 Northern Wei glass production?

An (2009) suggests, that a some of the glass vessels found at Northern Wei site were locally produced. A total of fourteen intact vessels and two fragments of this type of glass have so far been found (Table 6.1). These come from four tomb sites (Section 0) and one pagoda (Section 5.3), all dating from the mid to late fifth century. They are all made from a transparent bright blue glass and are typologically quite different from those produced in the Roman and Sasanian empires, the two major sources of imported glass vessels in sites from this period. Chemical analysis carried out on four of these vessels has also demonstrated that they have an unusual composition, which

again differs from Roman and Sasanian glasses, having a much higher concentration of Alumina and Potash, and lower concentration of soda (Table 2.1Table 5.1). Furthermore, a historical account describes glass production taking place in the Northern Wei capital. An, 2002, 2009 and An and Liu, 2004, taking this evidence together, suggest that these vessels were produced locally in the Northern Wei empire rather than imported. The evidence for any potential local production will be reviewed in the following sections.

5.4.1 Typological Analysis

There are a number of tombs which contain these purportedly locally produced vessels. Hudong Bianzuzhan tomb M21, contained a bottle with a wide rounded base tapering to a small neck and mouth. Tomb M16 at Yingbin Dadao meanwhile, contained a glass vessel with the characteristic shape of a Northern Wei long necked jar. These jars, known as *hu*, were used for storing liquids and are usually made from high-fired greyware (Figure 6.3). These jars are ubiquitous in nearly all fifth century burials around Datong (Müller, 2019a: 385). The vessels from the Dingzhou pagoda also included a glass vessel in the shape of a Buddhist alms bowl, and also three small gourd shaped vessels. These are uniquely Buddhist shapes, the gourd in particular being strongly associated with Chinese Buddhist symbology (Section 5.3.4). These shapes are unique, not corresponding to anything produced in the Roman, Sasanian or Byzantine empires.

That glass vessels were produced in these forms, unique to the local region, implies that they were made specifically for the local market rather than destined for export. The glass *hu* jar in particular, is quite specific to the region and time period in which it was found and strongly suggests that the craftsmen who made it were familiar with locally produced ceramics, and purposely replicated them in glass. Furthermore, the glass vessels from the Dingzhou pagoda come from a uniquely Chinese development in Buddhism, in which glass became a treasured material and was used for offerings and reliquaries. It is possible that these vessels were produced elsewhere and imported, but there is no evidence for vessels of this type elsewhere. This familiarity with local craft traditions and religious practices, as well as the restricted distribution pattern indicates that these vessels could have been produced locally. One possibility is secondary production, where raw glass cullet was imported from elsewhere and used to produce the vessels locally. Another is primary production, where both the raw glass and vessels were produced in the Northern Wei Empire. The evidence for this provided by chemical analysis and from historical texts will be examined in the next sections.

5.4.2 Chemical analysis

Four analyses of these vessels have been published (Table 5.1), two on the glass vessel found in Yingbin Dadao tomb M16 and two different vessels from the Dingzhou pagoda, although due to labelling issues it is somewhat unclear exactly which vessels in Dingzhou were analysed (An, 2009: 383-384). The one from the fragment is heavily weathered so the analysis is likely not accurate and can be discounted leaving just three analyses from two different vessels. These analyses reveal a glass composition that is significantly different from both Roman and Sasanian glass vessels found in Chinese tombs in this period (Table 2.1, *Table 4.2* Table 5.1). Żuchowska and Szmoniewski (2017: 172), suggest that the composition is of a Central Asian high alumina type found in Brill (2009: Table 3.1), which is a soda-lime-silica type with $K_2O > 4.5\%$ and $Al_2O_3 > 5\%$. Henderson *et al* (2018: 97) meanwhile, note that while there are some compositional similarities with Central Asian glasses there are also differences. Levels of soda are lower in the Chinese glasses than in the Central Asian ones, while levels of lime are higher. Minor elements such as copper and lead are also present in significant quantities in the Chinese glasses but not in the Central Asian ones, while levels of Magnesia are significantly lower in the Chinese glass from Yingbin Dadao M16 (Table 5.1). This could suggest that the recipe for this glass came from the Central Asian tradition, and perhaps adapted to use locally available raw materials, altering the resulting chemical composition. It could also however be an indication of other processes such as recycling, which can result in changes to glass compositions (See Jackson 1996; Jackson, Paynter 2015). The varied concentrations of lead and copper colourants may point to indicate indiscriminate recycling, while lower sodium may suggest repeated recycling or mixing. Currently, these chemical analyses are not enough to confirm local production, and further analyses are needed. Trace element analysis and isotopic analysis has proved successful in the past in determining potential geological provenance and hence likely origin of the glass (Henderson *et al*, 2010; Brems and Degryse, 2014). Similar techniques could be used to enhance the interpretation of the chemical data presented here.

	SiO ₂	Na ₂ O	CaO	K ₂ O	MgO	Al ₂ O ₃	Fe ₂ O ₃	TiO ₂	MnO	CuO	ZnO	PbO	BaO	P ₂ O ₅
1	55.95	11.11	10.98	4.73	1.55	6.98	1.36	0.56	n.d.	3.19	n.d.	2.84	n.d.	0.69
2	56.69	11.31	10.39	4.99	1.51	6.04	1.35	0.57	n.d.	3.34	n.d.	3.07	n.d.	0.63
3	60.10	5.17	9.96	8.53	9.13	n.d.	1.75	n.d.	n.d.	4.10	0.15	1.11	n.d.	n.d.
4	36.98	0.57	34.18	2.44	6.17	4.28	1.88	n.d.	0.68	9.56	n.d.	1.82	0.22	1.22
5	55.9	13.7	4.4	4	1.9	4.4	9.3	0.17	0.1	nd	-	nd	nd	nd
6	68.04	-	4.52	2.70	2.73	2.93	1.64	-	0.01	1.08	-	0.63	0.00	-
7	75.85	-	4.75	2.88	4.73	4.30	1.45	-	0.00	1.11	-	0.65	0.00	-
8	59.22	15.74	6.53	5.48	4.53	4.78	0.92	0.11	1.22	0.074		0.023	0.50	-

1. The bottom of the glass wine jar from Yingbin Dadao Tomb M16 (*An, 2009: Table 19.4*)
2. A vessel fragment from Yingbin Dadao Tomb M16 (*An, 2009: Table 19.4*)
3. Vessel fragment Dingzhou Pagoda (*An, 2009: Table 19.3*)
4. Vessel fragment from the Dingzhou Pagoda (heavily weathered) (*An, 2009: Table 19.3*)
5. Central Asian Plant Ash Glass, black bead (*Henderson et al, 2018: table 1*)
6. Glass vessel from the Yihe-Nur cemetery: mouth (*Aihaiti et al, 2016: table 1*)
7. Glass vessel from the Yihe-Nur cemetery: lower body (*Aihaiti et al, 2016: table 1*)
8. Central Asian high potash, high alumina soda lime, Loulan 6813 (*Brill, 2009: table 3.3.1.*)

Table 5.1: Chemical analyses of the Northern Wei glass vessels and Central Asian glass compositions.

5.4.3 Textual Evidence

The possibility of local production of this glass is supported by one piece of contemporary textual evidence. A passage present in both the *Beishi* the History of the Northern Dynasties and the *Weishu*, the history of the Wei, gives an account of glass production taking place in the Northern Wei capital at Datong.

“During the reign of the emperor Tai Wu [r. 424-452 AD], merchants from this country [Da Yuezhi or Bactria in Central Asia former Kushan empire] came to the capital [Pingcheng or modern-day Datong] to peddle, saying they could cast certain stones to make five coloured glass. They mined [stones] in the mountains and cast them in the capital and when it was finished the lustre was even more beautiful than [glass] brought from the West. An imperial edict was thus issued that a hall should be built [of this material?], which could accommodate more than one hundred people. Brilliant light reflected off it and shone through it, so that all who beheld it were astonished and thought it was made by the gods. After this, glass became considerably cheaper in China, and no one regarded it as precious.”

Beishi Scroll ninety-seven, Biographies eighty-five: Western Regions.
Translation: **D. Montgomery.**

Some scholars such as Hsu (2016: 40) have argued that the account refers not to glass but to brightly coloured glazed tiles called *liuli wa* 琉璃瓦, which also came into use during the period and were used for decorating important buildings such as palaces and temples. This is because the passage appears to suggest that a hall was built using *liuli*, indicating that it was an architectural material. However, the argument for glazed tiles seems unconvincing. The passage compares the *liuli* produced by the merchants to that which is imported from the West. There is no evidence for glazed ceramics or tiles being imported to China in this period. There would be little need, as China's own glazing technologies were already well developed in this period (Dien, 2007: 233-251). Glass on the other hand was certainly imported. The wording used to describe the product produced by the foreign merchants, *guangse yingche* 光色映徹 also indicates that it is glass rather than glaze, which is being produced. Hsu (2016: 40), translates this only as brilliance, but there is a much deeper meaning to this description. The word *guangse* does indicate a brightness or brilliance in the quality of light, the word *ying* refers to a quality of reflection or shining, while *che* means penetrating or pervading. It can therefore be taken to mean that light both reflected off it and penetrated through it, which is why in my translation I chose the phrase "brilliant light reflected off it and shone through it." Such qualities would be more indicative of glass than glazed tile, and indeed the same word is used to describe a glass bowl in the *Shishuo Xinyu*, which was translated by Mather (2002) as translucent (Section 3.2.4). Further clues in the original Chinese text also point to this being glass. The word used for the production process is *zhu* 鑄, taken from the bronze industry, meaning to cast. The connotation here is that the stones or minerals were melted, which is what Liu (1988: 59), translates it as, rather than fused which is used by Needham (1962: 109) and Hsu (2016: 40). If the raw materials were melted together, this would be indicative of glass making rather than simply glazing.

Because of the reference to a hall being built, Needham (1962: 109) suggests that the product may have been some kind of glass screen. However, while an account for a glass window from the Jin Dynasty does exist (Section 3.1.4), these must have been extremely rare and imported from the Roman Empire. Currently no archaeological evidence exists for the production of such windows or screens either in either China or Central Asia, where the glass makers came from. Furthermore, production of large sheets of glass would have been complex. Roman glassmakers for example were only able to produce sheets that did not exceed half a metre in length (Caroline Jackson, Personal Comm: 24/09/2022). If the original Chinese text is examined closely, it states that an imperial edict was issued that a hall should be built, but it does *not* reference the material the hall

was built from. Based on her translation of the text Hoppál (2019: 121-122) therefore suggests that the edict stipulated that glass vessels were to be the decoration for an audience hall.

The final sentence of the passages states that glass became considerably cheaper and was no longer regarded as precious. This may have been true when the text was written. The *Weishu* was written over a century after the event occurred during the Northern Qi Dynasty, (550-577), while the *Beishi* was written in the seventh century. However, the other textual sources, the presence of glass vessels in high status tombs (Section 6.5.5), and the use of glazed ceramics to mimic imported glass vessels (Section 5.2) suggests that imported glass continued to retain its value.

5.4.4 Production Process

The chemical analyses and historical account highlight the possibility that this glass was produced locally in Datong by Central Asian craftspeople, but this cannot be confirmed without further detailed analytical research. However, if this was indeed the case, they may have used familiar recipes from their homeland, but collected raw materials locally as highlighted in the passage from the *Beishi*. The local geological conditions in Northern Shanxi, where Datong is located are quite distinctive. Datong is one of the largest coal producing regions in China. The local geology is predominantly sedimentary and consists of Permian-Carboniferous and Jurassic coal-bearing strata (Yuan et al, 2019: 184). It is probable that these conditions differed from those in the homeland of these glass makers in Central Asia, where the geology is extremely complex and varied (Moore and Fairbridge, 1997). The composition of the plants and minerals they would have used to produce glass in Datong, would therefore be quite different from those used in Central Asia and would ultimately affect the glass they produced, resulting in a unique compositional fingerprint. This would be especially evident in the trace elements, which could provide some indication of likely provenance, although this has not yet been confirmed by analysis. It is worth noting also that the compositions of the two Chinese vessels themselves, while clearly related, differ significantly from each other in their levels of soda, potash, magnesia and alumina. This could imply that changes were made to the recipes either over time, perhaps due to the availability of certain materials, different production locations, or use of slightly different raw materials.

The vessels produced using this glass were free blown (An, 2002). If they were produced locally this would mark a significant departure from previous glass industries developed in China in the Warring States and Han periods (Section 2.3), where a limited number of vessels were produced by casting, using techniques borrowed from the bronze industry (Braghin, 2002: 18). In the Levant, blowing, came into use in the first century BC. Again, it was preceded by casting technology, but blowing is a much more specialised craft, requiring greater degree skill than simply pouring molten

glass into prepared moulds (Henderson, 2013: 232). These free blown Northern Wei vessels appear suddenly, after an absence of local glass technology for nearly five centuries. If they were locally produced, this would suggest that the technology was introduced as the historical account suggests, by foreign artisans. This was not necessarily a unique situation in the ancient world and new technologies, including glass production were often transmitted to new regions through the movement of itinerant craftspeople (An, 2004: 63). Along with being blown the Northern Wei vessels also employ other Roman and Sasanian glass making techniques, such as the application of threads of glass to form the bases of vessels and the heating and rounding of vessel rims (An, 2009: 382-383). Again, this suggests that the technology was imported, rather than locally developed. The use of these imported techniques combined with the unique composition, albeit related to Central Asian glass suggests that this technology was indeed brought to China, by foreign, probably Central Asian, artisans, who set up a workshop in the Northern Wei capital and began producing glass using local materials, using their own techniques to produce glass to supply local needs. Furthermore, if production was small scale and limited to a few specialists it could explain its rapid disappearance, due to political upheavals or perhaps even the death or departure of the specialists who produced it.

5.4.5 A State Controlled Industry?

If this glass was locally produced, the relative rarity of these glass vessels suggests that the industry may also have been subject to some type of state control. During the Northern Wei several government agencies were set up to control manufacturing. These included the Chamberlain for the Palace Buildings which oversaw construction projects for the court and the artisans involved, while the Palace Bursary which was responsible for other manufacturing activities, which were both under the oversight of the board of works. The industries under government oversight, were usually capital intensive or considered essential to the functioning of the state, such as ore mining, iron founding, bronze casting, ship building, salt production and the manufacture of architectural tools and weapons. Other industries producing both ordinary and consumer goods such as paper, ceramics, cloth, gold and silver were also controlled by the palace (Xiong, 2019: 319-320). The historical account of local glass production indicates that the glass was produced for the emperor, to furnish a hall (Section 5.4.3). This suggests that glass production could have been one of the industries controlled by the imperial palace and could explain why glass is found in only four tomb sites.

There are certain parallels here with the palace industries in Mycenaean Greece. Bennet (2008: 163) argues that certain objects in the Mycenaean Greece, including blue glass beads, which are rarely

found outside of core Mycenaean areas, were manufactured in palace industries, and bore a type of palace trademark. Bennet (2008: 163) suggests that “we can think of them as one means of materializing a relationship with the palace for those sub-elite members of ‘Mycenaean’ society who buried themselves in chamber tombs and who, no doubt, enjoyed some form of interaction with palatial authority.” The local glass vessels in the Northern Wei may have been produced as part of a similar palatial economy, obtainable for a small and select group of Xianbei elites, with a close connection to the palace.

Such a palace industry could also be used to furnish new Buddhist temples such as the Dingzhou pagoda, which were built under imperial patronage (Section 5.3). Once Buddhism was adopted by the Northern Wei in the late fifth century, many new Buddhist monasteries and temples were built, many of which would have housed relics. The evidence from the Dingzhou pagoda and Buddhist sites from later periods, indicates that glass vessels were important component in these reliquaries. Of the seventy Tang Dynasty reliquaries uncovered twenty-six contained glass artifacts (Shen, 2002: 74). While the reliquary from the Dingzhou pagoda, is the only one from the Northern Wei period, it contained six complete glass vessels. While imported glass vessels were available in this period, they are incredibly rare, and were expensive. Hundreds of new Buddhist temples were built in the Northern Wei period. For example, in the year 534 it is estimated that there were at least 421 Buddhist temples in the city of Luoyang alone (Jenner, 1981: 271). If glass vessels were supplied to even a small number of these temples, it could necessitate local production. A state controlled glass industry would therefore be useful for the Northern Wei emperors, as Buddhist new religious sites under their patronage could be supplied with glass vessels direct from the imperial treasury.

5.5 Summary

Glass vessels had a myriad of uses in Northern Wei society. Imported vessels were used on the tables of the elites, to demonstrate wealth and status. Such vessels were also desired by a wider segment of the population, leading to local reproductions using glazed ceramics. Glass vessels were also used in Buddhist religious practice as both reliquaries and offerings. This was because glass had symbolic meanings in Chinese Buddhism, but it was also a practical material for displaying relics for veneration. A local glass industry could have developed during the Northern Wei period. This bright blue glass was used to make copies of local ceramics and also religious goods for use in Buddhist temples. However, currently there is not enough evidence to confirm local primary production. The next chapter will examine how glass vessels were used in Northern Wei funerary contexts.

6 Glass Vessels in the Northern Wei Tombs

自餘酒器有水晶鉢瑪瑙琉璃碗赤玉卮數十枚作工奇妙中土所無皆從西域而來

洛陽伽藍記卷四

Among the wine vessels were crystal bowls, agate and glass bowls, and red jade cups. There were scores of them, all marvellously made. They were not native products, but came from the Western Regions.

Luoyang Qielanji, Scroll four

Glass vessels have so far been found in eight Northern Wei tombs. Although this represents only a small percentage of the hundreds of Northern Wei tombs now excavated, these glass bearing tombs contained a remarkable variety of grave goods from both the Chinese and steppe traditions. In this chapter these tombs and the glass vessels which they contained will be examined in detail, to assess how glass vessels were used in burials and by whom. A summary of information about each individual tomb can be found in Table 6.1.

Table 6.1: Summary of information on the glass vessels and fragments from the Northern Wei tombs.

Site and Location	Date	Tomb Occupant, gender, ethnicity	Tomb Style and condition	Glass Vessel Style	Colour and Transparency	Dimensions (cm)	Glass Vessel Location.	Suggested Origin	Intended Purpose	Associated Grave goods	Excavation Report
Southern suburbs Cemetery Tomb M107 <i>Datong Shanxi Province</i>	No later than the mid fifth century.	Female member of the Gaoche nobility.	Trapezoidal earth chamber, 2.7 m in length and between 1.1 and 1.6 m in width. Entrance ramp 11m long. <i>Intact</i>	Glass bowl with facet cut decoration.	Colourless and transparent.		Head end of the coffin.	Sasanian	Drinking Vessel	Gold, precious stones, bronze chin straps, bronze plate, lacquer ear cup, bronze chin straps, gilt silver Bactrian bowl.	Shanxi <i>et al</i> , 2006.
Yihe-Nur Cemetery Tomb M1 <i>Inner Mongolia</i>	Second half of the fifth century	Female member of the Gaoche nobility.	Rectangular earth chamber, 3.5m long by 2.5m wide. Entrance ramp 10.5 m. <i>Looted</i>	Glass bowl, with rounded foot.	Blue and transparent.	Rim d. 9.5cm H. 4cm	?	Sasanian	Drinking Vessel	Fourteen, glazed and unglazed ceramic vessels, two lacquer bowls, two turquoise beads, ten agate beads, bronze coffin decorations, fifty-six pieces of gold jewellery, including earrings, beads, a gold chin strap, which included a headband, cheek girdles and jaw guard The tomb also contained a gilt silver bowl, and a gilded bronze earcup.	Wang <i>et al</i> , 2017.
Yingbin Dadao Tomb M16 <i>Datong, Shanxi Province</i>	Second half of the fifth century	Male Xianbei	Painted brick tomb chamber, 4.04m long by 3.99m wide. Very long earth entrance ramp 26.6m long. <i>Intact</i>	Northern Wei style <i>hu</i> wine jar	Sky blue and transparent.	H. 15.4cm Mouth d. 5.8cm Max d.14.2cm.	southwest corner of the tomb	Local production	Drinking set	Glazed ceramic jars and ewers in the local style, a silver ear spoon, a gold ring a gold cap ornament, a gold plaque and two bone tips, which would have originally been placed at either end of a composite bow	Liu <i>et al</i> , 2006.
				Four small hemispherical bowls	Sky blue and transparent.	Mouth d. 5-5.5cm	?	Local production			
Qili Village Tomb M6. <i>Datong Shanxi Province</i>	Second half of the fifth century	Xianbei Male?	Earthen tomb 2.86 by 2.8 m wide. Entrance ramp 16m long. <i>Intact</i>	Bowl decorated with a single incised line.	Sky blue and transparent.	Rim d. 12.8-12.9cm	?	Local production	Drinking Vessel	?	Zhang <i>et al</i> , 2006.
Qili Village Tomb M20. <i>Datong, Shanxi Province</i>	Second half of the fifth century	Xianbei Male?	Trapezoidal earth chamber 2.5 m long and between 1.3-2.2m wide. Entrance ramp 12m long. <i>Intact</i>	Small globular jar.	Sky blue and transparent.	H. 3.1cm D. 4.5cm	?	Local production	?	?	Zhang <i>et al.</i> , 2006.
				Fragment	?	?	?	Local production	?		
Hudong Bianzuzhan, Tomb M21	Second half of the fifth century	Male Xianbei	Trapezoidal earth chamber, 4.5m long and between 1.88-2.6m wide. Entrance ramp 18.9m long. <i>Intact</i>	Large, blown glass bottle.	Sky blue and transparent.	Length 19cm Mouth d. 0.9cm	?	Local production	Wine Drinking?	Gold, silver, jade, lacquer, iron, bronze, thirty glazed ceramic vessels.	Not Published. See An and Liu, 2007.
Feng family cemetery <i>Jingxian, Hebei Province</i>	483/4	Feng Monu	Brick tomb <i>Damaged</i>	Green glass bowl.	Green and transparent	H. 4.4	?	Roman	Drinking Vessel?	?	Zhang, 1957.
Feng family cemetery <i>Jingxian, Hebei Province</i>	Late fifth century	Madame Zu	Brick tomb <i>Damaged</i>	A light green transparent glass bowl decorated with wave Pattern.	Light green and transparent.		?	Roman?	Drinking Vessel	?	Zhang, 1957.

6.1 Tomb locations

Of the eight tombs in the sample five were located in Datong, known as Pingcheng in this period (Figure 6.1; Figure 6.2). This was the Northern Wei capital from 398 to 494 AD, and populated with people from a range of ethnic groups (Section 2.5.1). The tombs were located in the Eastern and Southern suburbs of the city and grouped into large cemeteries, possibly representing large clan or tribal groups.

The cemetery at Yingbin Dadao contained a total of seventy-five tombs. Most of these consisted of earthen burial chambers, either square or trapezoidal in shape with long earthen entrance ramps. Eight of the tombs consisted of brick-built chambers and long entrance ramps. The brick-built tombs contained greater numbers of grave goods, including Chinese style tomb figurines, indicating the occupants of these tombs may have been higher status. The range of finds and tomb styles suggests that the cemetery was used for a relatively long period of time, during the second half of the fifth century (Liu *et al*, 2006). A similar pattern is repeated at the Qili Village cemetery dated to the second half of the fifth century. It contained seventy tombs with a similar mixture of tomb styles including eight brick built tombs, earthen chamber tombs with long entrance ramps and simple pits (Zhang *et al*, 2006).

The Southern suburbs cemetery contained a total of 167 tombs (Shanxi *et al*, 2006). The regular and well-ordered nature of the tombs and changes in ceramic typologies, suggest that this was a planned cemetery used over a relatively long period of time (Wei, 2011: 72). In style, the cemetery is very similar to those belonging to the Xianbei and features tombs which appear to belong to a wide range of socio-economic classes (Section 2.5.2.1). Ninety-eight tombs were composed of earthen trapezoidal chambers with long entrance ramps (Shanxi *et al*, 2006: 131), while only one tomb featured a brick-built chamber with a long entrance ramp (Shanxi *et al*, 2006: 385). The other tombs consisted of simple graves or pit burials. The graves and pit burials appear to belong to individuals with a lower social or economic status, and usually just contain one or two ceramic jars, or in some cases nothing at all (Shanxi *et al*, 2006: 6-128). The tombs with entrance ramps usually contain more grave goods, mostly consisting of glazed ceramics and joints of meat, and stone lamps, although there is some variety in these tombs as well, some furnished with a simply a few ceramic pieces, while others were more richly furnished. Some contained iron utensils and weapons, bone tips from bows, bronze belt buckles and silver jewellery (Shanxi *et al*, 2006: 128-360). It is worth noting that unlike the Xianbei cemeteries examined above, material goods from the Chinese tradition, such as ceramic tomb figurines, seem to be almost completely absent. The relative consistency of the burials, and variation in numbers of grave goods indicates that the

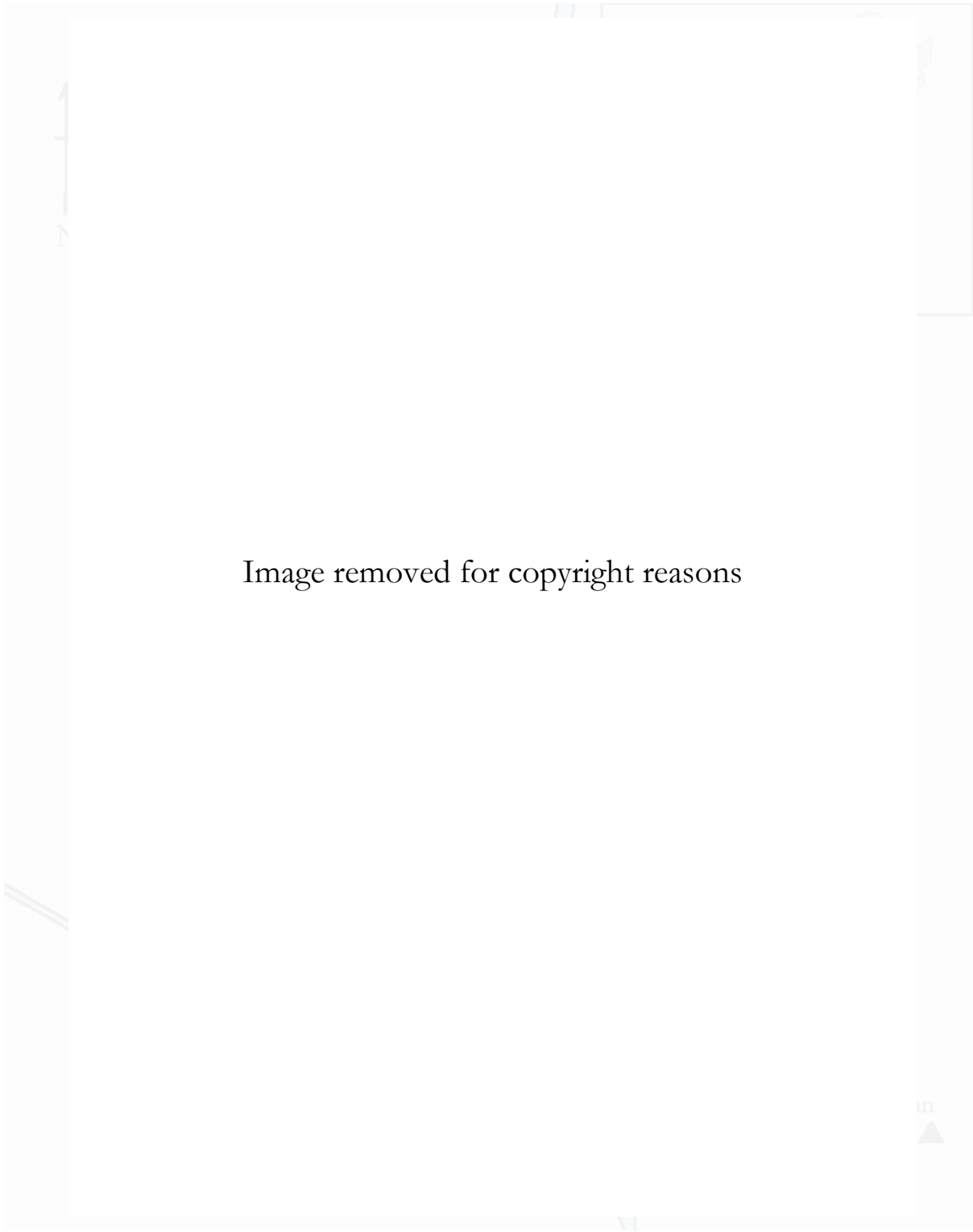
individuals buried within the cemetery belonged to the same clan or tribal group but varied in their social and economic status (Wei, 2011: 84-85).

Another tomb was found at Yihe-Nur, a remote region of Zhengxiangbai Banner, in the Inner Mongolia Autonomous Region in Northern of China. This region was also the Northern frontier of the Northern Wei Empire. The Yihe-Nur cemetery was relatively small compared to the ones in Datong and contained only six tombs, with trapezoidal earthen chambers and long entrance ramps. Based on the contents they belonged to both men and women of the same ethnic group and of a similar social status.

Two other tombs were located in the Feng family cemetery, close to Hongtun village, near Jingxian in Hebei Province. This region of the Northern Wei empire, was home to a larger Han Chinese population and served as an agricultural region. The cemetery contained a total of eighteen tombs (Zhang, 1957).

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*Figure 6.1 Map of the Northern Wei Empire in the late fifth century AD, with the locations of the principal sites discussed in the chapter, and the approximate location of the Gaoche homeland (https://d-maps.com/carte.php?num_car=4644&lang=en with modifications by **D. Montgomery**).*



*Figure 6.2: The locations of the Northern Wei tombs in Datong (Liu et al, 2006:1 with modifications by **D. Montgomery**).*

6.1.1.1 Tomb condition

The five tombs from Datong appear to have been found intact. However, a complete report with plans has only been published for the Southern suburbs tomb M107. Data for the other tombs,

Yingbin Dadao M16 and Qili Village M6 and M20 is quite limited. It is published in reports, where the focus is on entire cemeteries rather than individual tombs, and do not contain plans of the tombs or complete lists and descriptions of artefacts. A report for Hudong Bianzuzhan, tomb M21, has not been published at all and information is only available in a secondary source (An and Liu, 2007: 38).

The Yihe-Nur cemetery in Inner Mongolia suffered from repeated looting, until in 2010 police were able to track down the looters and recover a large cache of artefacts. Another round of looting in 2012 prompted a salvage excavation of the cemetery, which uncovered six tombs, including M1, which contained a glass vessel. The reports do not provide much contextual information and are unclear about whether the artefacts were recovered directly from the tombs or from the cache taken by the looters.

Almost no contextual information is available for the two tombs in the Feng family cemetery. In the early twentieth century local peasants believed the cemetery, was the dwelling place of eighteen immortals and left the area undisturbed. In 1948 the area was taken over by Communist forces, who according to the archaeological report, freed the local villagers of their 'feudal superstitions'. Being 'liberated', they took it upon themselves to dig up the cemetery (Zhang, 1957: 29). These impromptu excavations led to the destruction of most of the tombs and the loss of many artefacts. Only in 1955 were archaeologists dispatched from Beijing to report on the tombs and their contents. The documentation is therefore quite poor and the brief report by Zhang (1957) simply groups the different artefacts into categories but gives almost no information on their specific contexts. This is probably the result of the haphazard way in which they were excavated by the villagers. This lack of data is compounded by the apparent loss of some artefacts, including glass vessels. An (2016: 154), states that there were in fact originally four glass vessels found in the cemetery, but the report (Zhang, 1957: 33), describes only two, which are examined in section 6.4.1.

6.1.2 Tomb Structures

Four tombs in Datong and the tomb at Yihe-Nur were typical steppe style tombs consisting of trapezoidal or rectangular earthen chambers, accessed by long entrance ramps (Section 2.5.2.1). Within their respective cemeteries tombs of this type are usually more richly furnished suggesting they belonged to higher status individuals.

Yingbin Dadao Tomb M16, is something of a hybrid between the steppe and Chinese style tombs. It consisted of a large square brick built tomb chamber, 4.04m long by 3.99m wide, with a very

long earth entrance passage of 26.6 m (An & Liu 2007: 42). The chamber was also painted with murals, but no description or images of these are available (Liu *et al*, 2006). Tombs of this type usually belonged to higher status individuals (Section 2.5.2.1).

Almost no information is provided about the tombs in the Feng family cemetery. The probable tomb structure for a high-status family such as the Feng would be brick built chambers, similar to the Jin Dynasty tombs, but this cannot be confirmed.

6.2 Tomb contents

The tombs contained a variety of grave goods (Figure 6.3). Ubiquitous among these were ceramic vessels both glazed and unglazed, mostly consisting of storage jars. These were produced locally (Section 2.5.2.3) and are found many of the Northern Wei tombs in Datong. Lacquer was also used for serving vessels as well as lacquer vessels and gold jewellery. Gold was important for the nomadic peoples as they displayed their mythological beliefs, membership of a particular clan and rank (Bunker 1993: 48).

Yingbin Dadao tomb M16 contained a variety of glazed ceramic jars and ewers in the local Northern Wei style from this period, as well as a silver ear spoon, and two bone tips, which would have originally been placed at either end of a composite bow. The burial also contained several gold items, including a gold ring a gold cap ornament, and a gold plaque (Liu *et al*, 2006). The gold ornaments found in tomb M16 are also worth noting as they give some indication of the identity and social status of the occupant. The gold plaque, known as a *dang* in Chinese were worn as a cap ornament and used as part of formal court dress. Two other examples have been identified in the Eastern Jin tombs at Xianhe guan and Nanjing University (Section 4.4.4). While used in the Chinese imperial court such customs may have been introduced to China by the nomadic predecessors of the Xianbei in the warring states period (475-221 BC) (Laursen, 2011: 120). Gold was also a symbol of power among the nomadic groups of Eastern Eurasia, signifying rank, membership to a particular clan and for chieftains' gold headgear, jewellery and plaques ultimately demonstrated their authority and right to rule (Bunker, 1993: 48). Although it is unclear how exactly the plaque in M16 was worn, the possibilities include a belt buckle, pectoral, or on a cap in Chinese court style. The decoration consists of a dragon, a symbol of Chinese imperial power which could represent the mixing of Chinese and steppe cultures which characterised the later Northern Wei period (Section 2.5.4). The other gold ornament found in the tomb consisted of a long, large pin, almost certainly a cap ornament, worn on traditional Xianbei hats, indicating the tomb occupant was dressed in traditional Xianbei headgear.

Hudong bianzhuguan M21 contained a similar range of contents. The body was placed in a double coffin, with the inner coffin lacquered and painted. Placed next to the body was an iron sword. The tomb also contained items made from gold, silver, jade, lacquer, iron and bronze, as well as thirty glazed ceramic vessels. The decorated coffin, sword, gold and jade indicate that the tomb belonged to someone with a high social status (An and Liu, 2007: 38).

Yihe-Nur M1 was also richly furnished with fourteen, glazed and unglazed ceramic vessels, two lacquer bowls, two turquoise beads, ten agate beads, bronze coffin decorations and fifty-six pieces of gold jewellery, including earrings, beads, a gold chin strap, which included a headband, cheek girdles and jaw guard (Wang *et al*, 2017; Chen *et al*, 2016). The tomb also contained a gilt silver bowl, and a gilded bronze earcup. The earcup is a typically Chinese style drinking vessel, but the handles of the earcup are decorated with what appears to be honeysuckle patterning, often seen in Central Asian metalwork. This could indicate that the earcup was produced for the Chinese market, by craftsmen familiar with Central Asian design. There are records of foreign craftsmen setting up workshops in the Northern Wei capital (Section 5.4.3) and it is possible that the earcup represents the mixing of cultures, which was common in the Northern Wei period. Another unusual item was a gilded bronze tripod plate, whose rim is decorated with six small parrot figurines. Parrots are native only to the Subtropical regions in the far South of China, and are not commonly seen in decorations from this era. This tomb however contained a second parrot decorated item, a gold chin strap, which features a rather unusual design of dragons, flanked by parrots.

Southern Cemetery tomb M107 was also furnished with a variety of grave goods. Outside of the coffin the tomb was supplied with a variety of ceramic storage jars and a stone lamp. Within the coffin itself the body was adorned with a gold earring, agate beads, a bronze pectoral necklace and bronze chin straps. Also placed inside the coffin were a variety of items including a pair of iron scissors, an iron mirror originally wrapped in silk and an unusual small silver jug with a short straight neck, and soldered in the middle of the belly, which the excavators suggest is imported (Shanxi *et al*, 2006: 226). The deceased was also supplied with a bronze plate on which was placed a lacquer ear cup, as well as walnuts, pine nut kernels, and red dates.

The exact contents of tombs M6 and M20 in Qili Village are not recorded. The report on the entire cemetery, indicates that as a whole the tombs contained ranges of grave, similar to those of other cemeteries in the sample. This was predominantly glazed and unglazed ceramics, lacquer, gold and tomb figurines.

Images removed for copyright reasons

Figure 6.3: Grave goods from Yibe-Nur M1 and Yingbin Dadao M16. Clockwise from top left: Gold cap ornament (M16), Gold dang (M16), lacquer bowl (M1), gold earring (M1), bone tips from a composite bow (M16), greynware wine jar (M16), glazed wine jar (M1), detail of parrot from bronze tripod vessel (M1), bronze coffin hobnail (M1), gilded bronze earcup (M1) (Wang et al, 2017: 19, 20, 27, 28; Liu et al, 2006: 57, 58, 67, 68).

6.2.1.1 Chinese burials in the Feng family cemetery

Two glass vessels were found in the Feng family cemetery. One came from a tomb, identified by an epitaph tablet as belonging to Feng Monu, a Northern Wei government administrator. He died between 483~484 AD, and was buried elsewhere, but as was quite common practice at the time, he was reburied in the family cemetery in 521. Another vessel was found in the tomb Madam Zu, a female member of the family (Hoppál, 2019: 119). Because the cemetery was excavated haphazardly by local villagers, the distribution of the 270 artefacts among the eighteen tombs in the cemetery is not clear. The most ubiquitous items are ceramic tomb figurines including 167 people, and 28 animals. Eleven bronze items including two bottles, two drinking cups, one wine warmer and three seals, were also recovered. There were additionally 35 glazed ceramic vessels of various types including, five epitaph tablets and 48 agate beads. All of these items are of a Chinese type and what remains suggests a continuation of Jin Dynasty practices. This indicates that the Feng family chose to retain traditional Chinese practices rather than adopt customs from the Xianbei.

6.2.1.2 Imported Goods

Only Southern cemetery M107 and Yihe-Nur M1, contained imported goods (Figure 6.4). Hellenistic style gilt silver bowls were found in both tombs. They are very similar in style and both feature portraits enclosed in medallions and decorative motifs, such as the leaf calyx, which are inherited from late Hellenistic “Megara” bowls (Watt, 2004: 155). At Yihe-Nur the excavators suggest the portraits represent the Greek gods Zeus, Hera, Aphrodite, and Athena (Chen *et al*, 2017: 51). Both bowls feature plain borders, with two rows of beads, which is typical of bowls produced in Bactria between the third and fifth centuries AD (Watt, 2004: 155). Bactria was located within the borders of modern-day Afghanistan, at the Eastern limit of Alexander the Great’s empire. Even long after the fall of the Greco-Bactrian kingdom, elements of this Hellenistic heritage appear to have been retained in local craft production, which recalled Greek inspired techniques and designs (Setaioli, 2020; Watt, 2004: 155). A vessel with identical decoration, but with the addition of a foot, was found in another tomb M109, in the Southern suburbs cemetery. Apart from the absence of a glass vessels the tomb contained a very similar suite of funerary goods suggesting a similar social status, although M109 is believed to belong to an adult female, while M107 is believed to be a young girl (Shanxi *et al*, 2006: 226). M107 also contained an unusual small silver jug with a short straight neck, and soldered in the middle of the belly, which the excavators suggest is imported (Shanxi *et al*, 2006: 226), while Yihe-Nur M1 also contained two turquoise beads, ten agate beads, which were imports. The tombs also contained a variety of jewellery and

metalwork with foreign decorative and design influences, which could have been imports or produced locally in China (Section 4.2.1).

Images removed for copyright reasons

Figure 6.4: Imported goods. Clockwise from top left. Gilt silver bowl, Yibe-Nur M1; Gilt silver bowl detail, Yibe-Nur M1, Turquoise and agate beads, Yibe-Nur M1; line drawings of gilt silver bowl, Southern cemeteries tomb M1. (Wang et al, 2017: 24; 25; 28; Shanxi et al, 2006: 229).

6.3 Intact Tombs

Only one intact tomb in the sample has a complete plan and description of contents. It will therefore be examined in more detail to determine who the tomb owner was and how glass was used in the tomb.

6.3.1 Southern Suburbs Cemetery, Tomb M107

The tomb was located in large Northern Wei cemetery, on the Southern outskirts of Datong. The cemetery, which contained a total of 167 tombs was found close to the Datong Electrical Welding Equipment factory and was excavated in 1988. The regular and well-ordered nature of the tombs and changes in ceramic typologies, suggest that this was a planned cemetery used over a relatively long period of time from early to late fifth century (Wei, 2011: 72). The differing tomb types and grave goods indicates that the tombs belonged to a wide range of socio-economic classes. Ninety-eight tombs were composed of earthen trapezoidal chambers with long entrance ramps (Shanxi *et al*, 2006: 131), while only one tomb featured a brick built chamber with a long entrance ramp (Shanxi *et al*, 2006: 385). The other tombs consisted of simple graves or pit burials. The graves and pit burials appear to belong to individuals with a lower social or economic status, and usually just contain one or two ceramic jars, or in some cases nothing at all (Shanxi *et al*, 2006: 6-128). The tombs with entrance ramps usually contain more grave goods, mostly consisting of glazed ceramics animal bones, and stone lamps, although there is some variety in these tombs as well, some furnished with a simply a few ceramic pieces, while others were more richly furnished. Some contained iron utensils and weapons, bone tips from bows, bronze belt buckles and silver jewellery (Shanxi *et al*, 2006: 128-360). In terms of layout the cemetery is quite similar to the other Northern Xianbei cemeteries in Datong, although it is worth noting that unlike the Xianbei cemeteries, material goods from the Chinese tradition seem to be almost completely absent. The relative consistency of the burials, and variation in numbers of grave goods indicates that the individuals buried within the cemetery belonged to a relatively homogenous social or ethnic group, and were perhaps members of the same clan or tribal unit, but varied in their social and economic status (Wei, 2011: 84-85). The use of chin straps and other unique burial traditions in many of the tombs in this cemetery suggest that the occupants all belonged to the same distinctive ethnic group (Section 6.5.2).

Tomb M107, which contained the glass vessel was one of the most richly furnished in the cemetery. It consisted of a trapezoidal shaped earthen chamber, 2.7 m in length and between 1.1 and 1.6 m in width and a long entrance passage approximately 11m in length. Based on grave form and

typology of the ceramics M107 dates to the period before the reign of the emperor Xiaowen, (AD 477–499) (Wang and Wang 1999: 160). Although there appears to have been little examination of the skeletal remains of the tomb owner, the excavators suggest that it was probably a young girl, because of the presence of the mirror and scissors, and the lack of a hairpin, which was a symbol of maturity (Müller, 2003: 30-31).

The tomb was furnished with a variety of other items. Outside of the coffin the tomb was supplied with a variety of ceramic storage jars and a stone lamp. Within the coffin itself the body was adorned with a gold earring, agate beads, a bronze pectoral necklace and bronze chin straps. Also placed inside the coffin were a variety of items including a pair of iron scissors, an iron mirror originally wrapped in silk and an unusual small silver jug with a short straight neck, and soldered in the middle of the belly, which the excavators suggest is imported, although a possible provenance is not given (Shanxi *et al*, 2006: 226). The deceased was also supplied with a bronze plate on which was placed a lacquer ear cup, as well as walnuts, pine nut kernels, and red dates. The glass vessel, a well preserved facet cut bowl (Figure 6.7; Section 6.4.1.1), was found on the right hand side of the head end of the coffin (Figure 6.6). Found close to the glass vessel was one of the most distinctive finds in the tomb, a gilt silver bowl decorated with four portraits enclosed in medallions (Figure 6.4; Section 6.2.1.2). It was found outside the coffin close to the South wall of the tomb, but may have originally been placed in the coffin, falling to its current position after the coffin had decayed (Figure 6.5; Figure 6.6). The bowl is Hellenistic in style and features decorative motifs, such as the leaf calyx, which are inherited from late Hellenistic “Megara” bowls and is most probably Bactrian in origin (Watt, 2004: 155).

One other tomb in the cemetery, M109, contained a comparable gilt silver vessel. The decoration on this vessel is almost identical to the one from M107, featuring four portraits set in medallions, but with the addition of a foot on the base of the bowl. Indeed, apart from the absence of a glass vessel tomb M109 had a remarkably similar suite of funerary goods to M107, including gold and silver jewellery and vessels as well as bronze chin straps, perhaps indicating the occupants belonged to the same ethnic group and held a similar status, although M109 is believed to belong to an adult female, while M107 is believed to be a young girl (Shanxi *et al*, 2006: 226). The richness of these burials in comparison to the other tombs in the cemetery indicates that these individuals were perhaps members of the nobility.

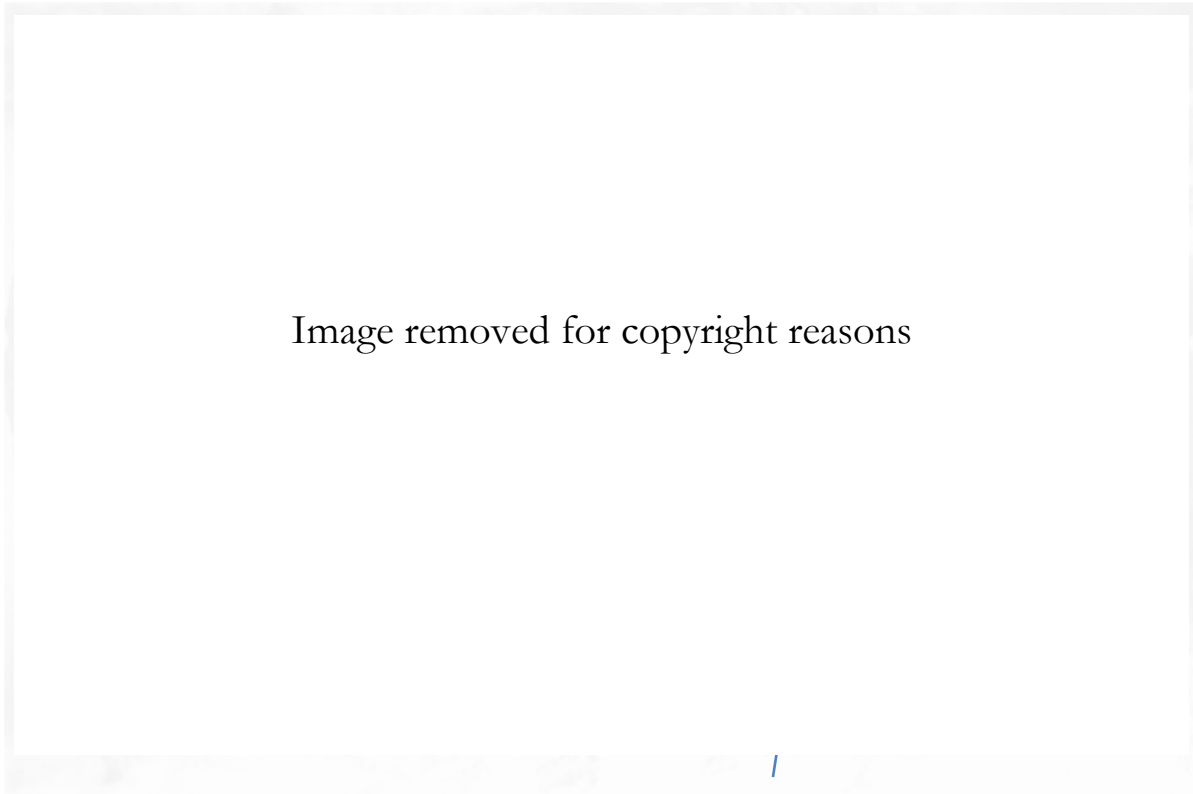


Figure 6.5 Photograph of the burial chamber. The glass vessel can be seen poking out from the coffin planks to the right of the coffin ring in the centre of the image (Shanxi et al, 2006: 226).



Figure 6.6: Plan of tomb M107. 1: silver jar; 2: bronze ring; 3–5, 18: clay jars; 6: bronze chin straps; 7: wood tray; 8: wood ladle; 9: bronze tray; 10: bronze pectoral; 11: golden earring; 12: lacquer ear cup; 13: iron scissors; 14: iron mirror; 15: agate bead; 16: silver bowl; 17: glass bowl; 19: clay basin; 20–21: ceramic ewers; 22: stone lamp; 23: silk remains; 24: coffin rings; 25: red dates; 26: pine nuts; 27: walnuts. (Shanxi et al, 2006: 226).

6.4 Glass Vessels

The glass vessels themselves will now be examined in further detail, to elucidate further information on usage, symbolism, and provenance.

6.4.1 Imported Vessels

Four glass vessels from the Northern Wei tombs were imported. The vessel types, decoration and provenance of each of these vessels will now be examined.

6.4.1.1 Facet cut bowl

The blown glass vessel from Southern Suburbs Cemetery, tomb M107 was extremely well preserved, made from transparent, colourless glass, with a very slight yellow tinge, with only a few areas of minor weathering (Figure 6.7). It has a round, spherical body with a large mouth, a short neck and rounded bottom. The body is decorated with three interlocking rows of vertical oval facets, with a fourth row of vertical oval facets below these. The bottom of the bowl has seven large circular facets, a central facet on the base, encircled by six others. Between each large circular facet is a single vertical oval facet. Overall, the bowl is extremely high quality with intricate decoration and high transparency. It has not yet been chemically analysed but the facet cut decoration indicates it is of a Sasanian origin (Watt, 2004: 156; An & Liu, 2006: 43). Vessels with a similar type of decoration have been excavated from the Sasanian city of Nineveh in Northern Iraq and are also present in unprovenanced collections of Sasanian vessels (Simpson, 2005: Figure 2; Simpson, 2014: Fig. 20.24). Bowl with applied decoration

The glass vessel from the tomb Madam Zu (Section 6.2.1.1), was light green, transparent, has thin walls of only 2mm, and is covered in a thick iridescent weathering layer (Figure 6.7). The base of the bowl features a pontil mark and a small ring foot, and it has a rounded, slightly everted rim. Although covered in a heavy weathering layer, the glass is light green and transparent. The inner wall is smooth while the outer wall has textured horizontal lines, indicating that it was mould blown. However, the most distinctive feature is the applied decoration, which consists of three interlocking wavy lines, which form a net or mesh-like pattern (Hoppál, 2019: 119).

Vessels of this type have been found in Northern and Eastern Europe. Two vessels identified as being Eggers type 199–200 were excavated in the cemetery at Brøndsager, on Zealand in Denmark, which dates from the third to fifth century AD (Hansen, 2011: 138-139). Another vessel of the same type was found in the Gepidic prince grave in Rudka, in Ukraine, dated to the end of the third century AD (Hansen, 2011: 147). A further fragment of from a vessel of this types was found

at a fifth century settlement site at Lesko in Southern Poland (Bulas, 2019: 59). The exact production location of these vessels is unknown but may have been within the Roman Empire in Lower Germania or even outside the Roman occupied territories (Hansen, 2011: 147). Another possible production location has been suggested as the Northern Black Sea region, again either inside, or perhaps even outside the Roman and later Byzantine empires (An, 2004: 157). There is a growing corpus of evidence that suggests that there were extensive trading contacts in Europe outside the Roman Empire, between Scandinavia and the Black Sea region in the third to fifth centuries (see Khrapunov & Stylegar, 2011). These glass vessels were also traded further into Eurasia as evidenced by this glass vessel in Northern China and further examples of the same type found in several tombs on the Korean Peninsula (An, 2004: 157). XRF analysis of the vessel found in Madame Zu's tomb, indicates that the vessel is composed of ordinary Roman soda-lime glass (An, 2016: 154).

6.4.1.2 Blue glass bowl

The glass vessel from Yihe-Nur M1 is a blue bowl, 9.5cm in diameter and 4cm high (Figure 6.7). The bowl is quite plain, and apart from a rounded foot there is no other distinguishable decoration. Bowls of this type were relatively common and produced in a variety of locations in the Roman and Sasanian empires. Bowls of a similar shape have been excavated at the Sasanian city of Veh Ardashir in Iraq (Negro Ponzi, 1984: fig. A; Simpson, 2014: Fig. 20.9).

Analysis using portable XRF, indicates that it is probably an imported Sasanian plant ash glass (Table 5.1; Aihaiati *et al*, 2017).

6.4.1.3 Shallow glass bowl

The glass vessel from the tomb of Feng Monu is a shallow bowl made from a greenish glass, with a rounded rim, short ring foot and a single incised line below the rim (Hoppál, 2019: 119; Figure 6.7). According to An (2016: 154), analysis using XRF reveals it is of a soda-lime composition consistent with Roman glass, with somewhat elevated levels of tin, although the full analysis has not yet been published.

6.4.1.4 Provenance

The glass vessels were imported from both the Sasanian and Roman Empires. However, as with the Jin tombs (Section 4.5.3), there appears to be little distinction between the usage of vessels from these two zones. The Sasanian vessels were both found in steppe style burials, while the Roman vessels were found in the Han Chinese tombs. However, the sample is too small to determine whether these two different cultural groups, were using glass vessels from these two

distinct locations. In fact, despite differences in colour and decoration all four vessels are quite similar in form, being small bowls. As with the vessels from the Jin dynasty tombs, form and function therefore appear to be more important than original provenance.

Images removed for copyright reasons

Figure 6.7: Imported glass vessels. Clockwise from top left. Spherical bowl with facet cut decoration, Southern cemetery M107; Blue glass bowl, Yibe-Nur M1; Bowl with applied decoration from the tomb of Madame Zu; Shallow glass bowl from the tomb of Feng Monu (Chen et al, 2016: 52; An, 2004: 60; 157).

6.4.2 ‘Locally’ produced vessels

Eight vessels from the Northern Wei tombs were made from a bright blue glass, which was possibly locally produced (Section 5.4; Table 5.1). These will now be examined in detail.

6.4.2.1 Wine Jar

Yingbin Dadao M16 contained fragments of a glass vessel which when reconstructed formed a vessel, with a wide belly, long thin neck and wide mouth (Figure 6.8). This is a typical vessel form, a type of wine jar known as a *hu* (Figure 6.3). These are ubiquitous in Northern Wei tombs, but this is the only one made of glass so far discovered. The vessel is made from a transparent light blue glass. It is 15.4cm high and 5.8cm wide at the mouth with a maximum diameter of 14.2cm. Two fragments have been analysed and are of a Central Asian high alumina glass (An, 2009: 384; Brill 2009: 122; Table 5.1). However, in terms of form it is analogous with local ceramic vessels, common to many of Northern Wei tombs which suggests local production (Zuchowska and Szmoniewski, 2017: 172). This may therefore be consistent with the historical account in the *Beisbi* which describes glass production being practiced in Datong by Central Asian glass workers (Section 5.4.3).

6.4.2.2 Small Hemispherical Glass Bowls

In addition to the wine jar, four small hemispherical bowls, with a mouth diameter of 5-5.5cm and made from the same light blue glass, were found in Yingbin Dadao M16 (Figure 6.8; An & Liu 2005: 40-41). In the report the small bowls are described as bubble decorations (Liu *et al.*, 2006: 65). An and Liu (2005: 41); note that the shape of the small bowls are quite similar to a type of hobnail, which was attached to Northern Wei coffin as decoration (Figure 6.3). Such bright blue appendages to the coffin would have indeed been rather striking at a funeral although more than four would have been required to cover an entire coffin. Furthermore, it is unclear how these would have been attached to the coffin, making their use as such a decoration unlikely. A more probable use is as small drinking vessels. They were found in conjunction with the glass wine jar, indicating they were intended for use together as part of a wine drinking set.

6.4.2.3 Bowl

In Qili Village tomb M6 a light blue transparent glass bowl was uncovered. It has a rim diameter of 12.8-12.9cm. The body of the vessel is decorated with a single incised line, while on the base there is a single round foot (Figure 6.8; An and Liu 2007: 39). In terms of form, it is quite typical of Northern Wei ceramic bowls, suggesting local production (Bai, 2013).

6.4.2.4 Globular jar

Qili village tomb M20 contained a small blue transparent, free-blown glass jar, 3.1cm in height with a diameter of 4.5cm at its widest point. It is very similar to the two glass jars found in the Dingzhou pagoda, which were probably used as containers for Buddhist relics (Section 5.3.3; Figure 5.5), although there is no indication of such a use in this tomb. It was found with a small, spherical glass fragment made of a similar blue glass, 2.2cm in diameter. It appears to originally have had a longer neck, which has been broken. Again, there is some similarity to the material in the Dingzhou pagoda, which contained three gourd shaped bottles, with spherical bases of the same size (Section 5.3.4), so there is the possibility that it could be the base of a vessel of this type.

6.4.2.5 Large Bottle

At Hudong Bianzhuguan M21 a transparent, bright blue, blown glass bottle was recovered. It is 19cm in length, with a wide rounded base tapering to a small neck. It is hollow, with an opening at the top, measuring 0.9cm in diameter, and would appear to be a type of bottle (Figure 6.8). It has not been analysed but the blue glass is visibly like the other locally produced Northern Wei glass. However, in this case it takes a form that is not seen in local ceramic vessels. It might instead be a reproduction of something produced in a perishable material, such as a type of gourd or calabash flask, which does not survive in the archaeological record, or could also be a new shape produced with this glass.

6.4.2.6 Buddhist Ritual use?

In section 5.3 the use and symbolism of locally produced glass vessels from the Dingzhou pagoda, a Buddhist religious site were examined. The vessels from the pagoda and the Xianbei tombs were made using the same bright blue locally produced glass. The small jar from Qili Village M6 is almost identical to two jars found in the Dingzhou pagoda. However, there is no indication of a Buddhist ritual use for any of the vessels in the Northern Wei tombs. The layouts and contents of the tombs follow conventions from steppe and Chinese practice, with no indications of Buddhist ritual practice such as cremation. Furthermore, none of the tombs contain other explicitly Buddhist items or iconography. This suggests that the intended purpose of the glass vessels in the tombs were as table and drinkware for the deceased and not connected in any way to Buddhist ritual practice.

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Figure 6.8: Locally produced glass vessels. Clockwise from top left: Glass wine jar, Yingbin Dadao M16; Small hemispherical bowls, Yingbin Dadao M16; Small glass bottle and fragment, Qili Village M20; Large glass bottle, Hudong Bianzhuguan M21; Glass bowl, Qili Village M6 (Zhang et al, 2006: 39; Liu et al, 2006: 67; other images courtesy of Wang Zhigao).

6.4.3 Imported vs 'Local' Vessels

There are clear typological and stylistic differences between the imported glass vessels and those which may have been locally produced glass vessels. The imported vessels are all small bowls, quite homogeneous in terms of shape and size, but differing in decorative schemes. They are relatively similar to the vessels from the Jin tombs examined in Chapter 4, which were probably used as drinking vessels (Section 4.5.5). The provision of food and drink for the deceased was also practiced in the Northern Wei, by both steppe peoples such as the Xianbei and the Han Chinese. The Northern Wei tombs include table and drinkware such as wine jars, ear cups, gilt silver bowls and large serving plates. In Southern cemeteries M107 a lacquer ear cup was placed on a large lacquer plate, with a variety of dried fruits and nuts. This type of food serving, utilising large plates and trays represents a steppe tradition, which continued to be fashionable as a dining practice for the Northern Wei elites (Müller, 2019b: 50). A historical account (Section 5.1.1) describes a banquet at the Northern Wei court where glass vessels and gold bowls were placed on the table and food was served on large plates. Murals from several Northern Wei tombs also show images of couples being served food in this manner (Section 5.1.2). This suggests that the imported vessels were used as tableware, most likely as drinking vessels as they were in the Jin Dynasty.

There is more variety in the locally produced vessels. However, they were probably also used as drinkware. The size and shape of the bowl from Qili Village M6 indicates that it was probably a drinking bowl. The wine jar and four small bowls from Yingbin Dadao M16 could have been used together as a drinking set. The vessel from Hundong Bianzhuguan M21 appears to have been a type of flask or bottle, which could have been used for storing or serving drinks. While the layouts of the tombs containing locally produced glass are not recorded in detail, they did contain paraphernalia associated with wine drinking such as wine storage jars and ewers, suggesting that wine drinking was an important practice.

Also worthy of note is that the locally produced vessels were all found in tombs belonging to a specific ethnic group, the Xianbei. The imported glass vessels meanwhile were found in tombs belonging to the Han Chinese and another ethnic group, the Gaoche. The usage and symbolism attached to glass vessels by people of these ethnicities will now be examined in detail.

6.5 Tomb occupants

Having reviewed the structure and contents of the tombs, and the glass vessels in detail, the specific identities of the tomb occupants will now be examined in detail.

6.5.1 Ethnic Identity

The Northern Wei tombs show clear differences between those belonging to the steppe and Chinese traditions. These steppe tombs were previously all ascribed as belonging to members of the Xianbei (Shanxi *et al*, 2006: 502; Wang *et al*, 2016: 33). However, differences in grave goods indicate that some of these tombs belonged to another ethnic group, the Gaoche.

6.5.2 Glass and the Gaoche tombs

The two tombs, Southern suburbs M107 and Yihe-Nur M1 are remarkably similar in construction and contents. The reports for both the tombs suggested that they belonged to members of the Xianbei elite, or Han Chinese who had adopted Xianbei practice (Shanxi *et al*, 2006: 502; Wang *et al*, 2016: 33). However, the contents of these two tombs are quite different from the other Xianbei tombs (Müller, 2003, 56-61). The presence of a wide variety of imported goods including Sasanian glassware and Bactrian silverware already differentiates them. However, the most unique custom in both of these burials is the use of metal chin straps, which consist of a headband, cheek girdles and chin guards. The exact purpose of the device is unclear, and a range of theories have been proposed, including medical equipment and even a torture device (Müller, 2003: 28). However more recent scholarship suggests that they were used to hold the jaw of the deceased in place as the body decomposed (Müller, 2003). They are quite rare finds in China and in the Northern Wei period they are almost completely absent from the typically Han Chinese and Xianbei burials. However, in the Southern Suburbs cemetery of Datong, the devices have been found in at least fourteen of the burials (Müller, 2003, 55) and at Yihe-Nur they are present in at least two of the five burials (Chen *et al*, 2016; Figure 6.9). At the Southern suburbs cemetery, chin straps are in burials belonging to both ascribed genders across a range of ages, and even social statuses (Müller, 2003, 55; Shanxi *et al*, 2006) Therefore, while both tombs discussed in detail here probably belonged to females the tradition was not limited to female burials. The presence of chin straps at both of these cemeteries and the similarity of the tombs strongly supports the suggestion that the occupants of both M107 and M1 shared a similar unique ethnic identity which was quite different from both the Xianbei and Chinese. Finds from Afghanistan and East Turkestan suggest such chin straps were in use in these areas from the eighth century BC. The use of this unique burial

apparatus in these particular Northern Wei burials might therefore indicate a Central Asian origin for these tomb occupants.

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Figure 6.9: The head of the occupant of Yibe-Nur tomb M3. The gold chin straps, gold pectoral necklace inlaid with glass and silk wrappings are all visible. Photograph (Chen et al, 2016 44).

Other burial customs also support a Central Asian influence. The placement of walnuts, pine nuts and dates within the female coffin of tomb M107 is very rare in China in this period. However, the placing of walnuts and fruit seeds within the coffins of female burials is a tradition with a long pedigree in Central Asia, the Caucasus and even Iron Age Europe (Müller, 2003: 69). The pectoral necklaces found in tomb M107 as well as other tombs in both cemeteries are again quite rare in China, but stem from Central Asian traditions. Furthermore, the honeysuckle decorative schemes of some of the metalwork in the burial, is indicative of Hellenistic inspired decorative schemes, which were still used in Central Asian metal work in this period (Harper, 2002: 102).

Thus, the most likely ethnicity of these tomb occupants is a tribal group of Turkic origin, known in Chinese as the Gaoche, meaning ‘high wheels’, stemming from the supposedly large carts the tribe used (Pearce, 2019: 159). They were one of the nomadic groups that inhabited the Eurasian steppe during the period of Northern Wei ascendancy and were defeated by Tuoba Gui (371-409), during his Northern steppe campaign in, the 380s and 390s, shortly before his enthronement as the Northern Wei Daowu Emperor (r. 398-409) (Section 2.5). The defeated tribes were forcibly resettled within the Northern Wei empire, where they could be more easily controlled. Some were settled in the grasslands around the Northern Wei capital at Pingcheng, while others were settled with other ethnic and tribal groups in the region surrounding the six garrison towns on the Northern frontier. These are in fact the locations of these two tombs, M107 near the capital and M1 on the Northern frontier. Despite this forcible resettlement by the Northern Wei the Gaoche were to an extent, allowed to retain their original lifestyle, culture, social structures, and political organisation, although were now subservient to the Northern Wei monarch (Section 2.5.1). This is consistent with and reflected in the two tombs which probably belonged to high status

individuals, who were buried according to their own customs, which differed from both Xianbei and Chinese practice.

The Gaoche maintained a much stronger link to their nomadic lifestyle and culture than the Xianbei. In many of the Eurasian nomadic cultures possession of foreign goods was important for leaders as a way of displaying and enhancing their status, both through personal usage and by giving them away as gifts (Stark, 2015: 474). Elite burials belonging to these nomadic groups across Eurasia from the Black Sea region to the Mongolian steppe have been found to contain glass vessels. For example, the late first century AD tomb 30 in the Gol Mod II Xiongnu cemetery in Mongolia, contained a Roman ribbed blue and white glass bowl, similar to the ribbed Bowl (*Zarte Rippenschale*) in the corning museum of glass and the fragments from the Han Dynasty tomb of Liu Jing (Section 2.3.3) (Iderkhangai and Orgilbayar, 2018: 208). At the other end of the Eurasian Steppe a glass beaker decorated with applied wavy lines, was found in the late third century AD grave of the Gepidic prince at Rudka in Ukraine, (Hansen, 2011: 147; Section 0). This indicates that glass vessels were one of the luxury goods desired by these groups. These groups were possibly responsible, at least in part, for the transport of glass vessels and other foreign goods across Eurasia along the Steppe Route, which passed through Central Asia and Mongolia, into Northern China and eventually the Korean Peninsula, where similar imported glass vessels have also been found (Lee, 2010: 215). This would have made groups such as the Gaoche familiar with glass vessels and other goods such as the silver vessels, coming from West Asia, but also Chinese goods such as silks and lacquer travelling in the opposite direction. Examples of all of these items have been found in the Gaoche burials indicating that these goods from across Eurasia were desired by members of their society.

Burials with exotic and luxurious goods, sometimes labelled ‘ostentatious burials’, occur for short time periods when societies undergo intense stress. Kossack (1998: 16-21), gives examples from a range of societies and time periods including Mesopotamia, Egypt and the Bosporan Kingdom. Kossack (1998: 33-36) goes on to suggest that these ostentatious burials occur when ranked societies, that is societies which rank individuals based on their genetic distance to a chief, come into contact with advanced civilizations. In such situations high ranking members of these societies feel compelled to prove that they are members of an elite by adopting foreign materials and customs. The use of the ‘foreign’, allows these elites to display to their own people, an association with these advanced societies. This is done through a type of stylised self-presentation, often involving grand ceremonies and processions, luxury clothing, and imported eating and drinking vessels as the core elements of this display, which can also be seen across a wide range of cultures

and time periods. These burials are the physical evidence showing this cultural change in action and often only occur for short periods of time.

This response to societal pressures is found in the noble burials of multiple steppe cultures from Mongolia to the shores of the Black Sea. For example, large richly furnished Xiongnu burials in Mongolia, which occur for a short time period in the first half of the first century AD, which Brosseder, (2009), interprets as ostentatious burials. In this period the Xiongnu experienced multiple crises, a plague on the steppe, droughts and attacks by Han dynasty forces (Brosseder, 2009: 271-272). These large and richly furnished burials are a response to this political and social instability. What is remarkable is the similarity of these Mongolian tombs to those of the Gaoche in terms of construction and furnishing. The Xiongnu burials in Mongolia, are constructed in the same fashion, with ramped earth entrances and square or trapezoidal burial chambers. Furthermore, they contain suites of precious goods such as imported bronze vessels, silks, prestigious horse gear and jewellery (Brosseder, 2009: 275). In two tombs at Gol-Mod imported Roman glass vessels have also been found. These include fragments from two different ribbed bowls from the first royal burial, also an intact ribbed bowl made of blue and white marbled glass from the thirtieth satellite burial of the first Royal tomb (Iderkhangai and Orgilbayar, 2018: 208).

The Gaoche tombs within the Northern Wei typify what seems to be a 'typical' nomadic response to societal pressures; the construction of large, richly furnished elite burials. The Gaoche burials quite neatly fall into the category of ostentatious burial when using Kossak's definition and when compared to the Xiongnu tombs from Mongolia. They are large and equipped with a variety of precious goods including gold, silver, silk, lacquer, and glass. Furthermore, they seem to be confined to a relatively short time period, within the fifth century. The stimulus for the construction of this type of tomb may have been their defeat and forced resettlement at the hands of the Xianbei (Section 2.5.1). This could have generated a need for this kind of conscious self-presentation by the Gaoche elite, in order to demonstrate their continued legitimacy and status to both their Northern Wei conquerors and their own people. These Gaoche populations within the Wei empire, while providing useful service as auxiliary cavalry in the Northern Wei armies, proved to be a restive and rebellious people and their consistent longing to return to the grasslands north of the Gobi desert led to frequent uprisings (Pearce, 2019: 159-160). However, when they were given legitimacy and respect, their desire to rebel was to a degree subdued. This was demonstrated when in the Spring of 464 the Emperor Wenchang visited a region in the great bend of the Yellow River, inhabited by Gaoche who had instigated a large-scale rebellion just fifteen years earlier. Taking a guard of just a few hundred men he came to view a sacrifice offered to the sky god Tengri, by tens of thousands of Gaoche. Such a visit must have taken a great deal of courage, but the

Gaoche were happy that the emperor had personally come to observe their rituals (Pearce, 2012: 99). The funeral ceremonies for the Gaoche elite must have had a similar sense of grandeur and tradition, and while we cannot reconstruct the entire ceremony, the use of gold chinstraps, decorated with what may have been clan or mythological symbols give a sense of the continued importance of tradition. The addition of imported luxury goods from across the known world to the burial; the Chinese silks and lacquer, the Bactrian silverware and the Sasanian glass vessels, demonstrated the power of these noble families who were able to acquire them. With other imported goods the glass vessels may be seen as symbols of status and legitimacy for elites of a conquered, yet still proud people.

6.5.3 Glass and the Xianbei tombs

The predominant ethnic group in the Northern Wei empire was the Xianbei, originally a nomadic people from the Eurasian steppe (Section 2.5). The excavators of the tombs from Yingbin Dadao, Qili Village and Hudong Bianzhuguan have been identified as belonging to Xianbei occupants, which is based on the styles of the tombs and their contents. Yingbin Dadao M16, although built from brick in the Chinese fashion, contained characteristically Xianbei contents. This included a gold cap ornament worn on Xianbei style clothing and a composite bow; the weapon favoured by the Xianbei military. Yingbin Dadao M16 is decorated with painted tomb murals, while the inner coffin of Hudong Bianzhuguan M21 is lacquered and painted, traditions almost exclusive to Xianbei burials during the Northern Wei Dynasty (Müller, 2019: 53). Notably absent from these tombs are ceramic tomb figurines, a custom adopted from earlier Han Chinese practice by some high status Xianbei, and present in some other tombs in these cemeteries (Liu *et al*, 2006; Zhang *et al*, 2006). This suggests that these burials containing glass vessels were occupied by individuals who chose objects and decorative schemes highlighting a consciously Xianbei, rather than Chinese identity.

While the Xianbei shared some customs with the Gaoche, such as the use of steppe style burials in large communal cemeteries, the contents of the tombs are quite different. The Gaoche retain distinctive cultural elements from their nomadic heritage, including exotic items such as imported glass and silver vessels and distinctive gold pectoral necklaces and chin straps jewellery. In tribal nomadic cultures ownership of these foreign luxury goods conferred status on those who could acquire them (Bunker, 1993: 48). However, within the Xianbei tombs there are no such exotic luxuries. Neither are there any distinctly Chinese goods as there are in some of the other Xianbei tombs, in the same cemeteries in Datong (See Liu *et al*, 2006; Zhang *et al*, 2006). This could be a conscious attempt by the tomb owners to forge a distinctive identity as ‘men of the nation’, by

rejecting both the ostentatious trappings of their nomadic past as well as the material culture of the Han Chinese.

The glass vessels in the Xianbei tombs are not imported, but instead are locally produced in shapes mimicking local ceramics. In his study of interactions between Native Americans and Europeans in colonial Eastern Canada, Godsen (2004: 4-5) emphasises how new forms of material culture were created which destabilised older values. Tseng (2012: 6; 33-34), argues for a similar pattern occurring in Northern Wei Pingcheng. After their conquest of Northern China the Xianbei negotiated their transition from nomadic conquerors to 'men of the nation' by adopting new forms of material culture. Pingcheng was, in a sense, a melting pot where Xianbei, Chinese and foreigners from further afield brought their resources, resulting in the creation of new material and visual forms, creating a new Northern Wei habitus, with a new material culture repertoire and set of social practices, revolving around military service and loyalty to the imperial throne (Section 2.5.1). The glass vessels are a perfect example of this reworking of native and foreign, by utilising a new material, glass, to produce copies of traditional ceramic vessels. The use of these 'new material' goods may have helped the Xianbei transition from tribal nomads to 'men of the nation', giving them a new sense of identity and nationhood. The locally produced glass vessels may be a visual representation of this new national identity, a traditional vessel form in a strikingly colourful and transparent new material. The placement of these vessels and other new material and visual forms, such as the painted lacquer coffin, the gold cap pin and the gold plaque, within the tombs, may therefore be a conscious attempt to display this new identity.

6.5.4 Glass in the Chinese tombs

Epitaph tablets from tombs in the Feng family cemetery have identified the tomb occupants as members of the Han Chinese Feng clan. The Feng had a long pedigree. During the Western Jin Dynasty they had were considered one of the great Northern families. However, unlike many of the other families, which fled South, after the collapse of Jin control in Northern China (Section 2.4.1), the Feng chose to remain in the North, entering the service of various lords who took control of the region (Watt, 2004: 248). Initially this was the Murong Xianbei, a tribe related to, but distinct from the Tuoba Xianbei. After this the Feng served in the various minor Yan states, founded in the Northeast (Section 2.5). Finally, they entered the service of Tuoba Xianbei the founders of the Northern Wei Dynasty. Northern Wei expansion brought the Central plains including Jingxian, the ancestral home of the Feng clan, under their direct control. This provided a homecoming of sorts for the Feng, allowing them to re-establish a family cemetery, so that members of the disparate clan could once again be buried in their ancestral soil (Watt, 2004: 248).

The range of grave goods in the Feng family cemetery clearly indicates that members of the family chose to be buried in Chinese fashion. Of 270 artefacts recovered from the cemetery the vast majority of were tomb figurines. These hark back to the grand tombs of the Han Dynasty, before they became less common in the Jin Dynasty. This could be an attempt to reconnect with a Chinese past and assert a Chinese identity in a region now dominated by non-Chinese peoples. The other artefacts uncovered in the cemetery were almost exclusively of a Chinese style, and included eleven bronze items including two bottles, two drinking cups, one wine warmer and three seals. There were additionally 35 glazed ceramic vessels of various types including, five epitaph tablets and 48 agate beads. None of these items would be out of place in one of the Jin Dynasty tombs in the earlier period (Section 4.2). During the Jin dynasty the glass vessels were used as high-status personal drinking vessels, by both men and women. The limited evidence available for the Feng family cemetery correlates with this. Other drinkware such as wine warmers and storage vessels were uncovered on site, the vessels were found in a male and female tomb, and the tombs are furnished in Jin Dynasty fashion.

There are examples of ethnically Han Chinese individuals being buried in Xianbei fashion. For example, Feng Sufu (d.415) a member of the ruling family of the minor Northern Yan State, who despite being Han Chinese by birth, was buried in a Xianbei style tomb, with Xianbei grave goods, possibly the result of him being raised by the Xianbei and ruling over a majority Xianbei population (Li, 1973; Hoppál, 2019: 116-118). However, it appears that in their re-established family cemetery the Feng chose to construct and furnish for themselves, traditional Chinese tombs, with little influence from the Xianbei practices. This is seen in other Han Chinese tombs from the Northern Wei period. Two tombs in Datong have been identified as belonging to Han Chinese occupants. One is the tomb of Sima Jinlong (d. 484) and the other Yanbei Shiyuan M5, which belonged to Song Shaozu (d.477) and his wife. Both tombs were built and furnished in traditional Chinese fashion. Notably both these tombs contained small armies of warrior figurines, which harken back to imperial tombs of the Qin and Han dynasties, most notably the ‘Teracotta Warriors’ at the tomb of Qin Shihuang. In this period such ‘armies’ had been exclusively reserved for members of the imperial family. Both Sima Jinlong and Song shaozu, came from ancient and noble Han Chinese families. Sima Jinlong was a descendant of one branch of the imperial Sima family, who had ruled the Jin Dynasty. However, both men now worked as civil servants for the Northern Wei administration. The revival of an old Chinese imperial practice in the tombs of these men, is perhaps an indicator of their private ambitions, a restoration of power and status, which had once belonged to their families. While they could not achieve this in life the placement of the military figurines in their tombs perhaps gave them a chance of achieving this in the afterlife (Tseng, 2012:

203-207). Some of the *mingqi* figurines from the Feng cemetery, were also martial, perhaps indicating that members of this family held similar ambitions.

An additional factor worth considering is the production dates of the vessels in comparison to the tombs. Both tombs date to the late fifth century or early sixth AD. However, if the vessels are Roman they were likely produced somewhat earlier than this and one almost identical vessel from Ukraine was excavated in a tomb dated to the end of the third century almost two centuries earlier. This poses the possibility that the vessels could have already been quite old at the time they were deposited in the tombs. Certainly, transport over the vast distances from Europe to China could have taken a significant length of time as they were traded through different hands. However, it is unlikely that it would have taken more than 200 years. As was demonstrated in chapter 4, many of the vessels found in the Jin tombs were Roman in origin. The Feng were recognised as one of these aristocratic families in the Western Jin Dynasty (266~316) and would very probably have had access to a similar range of goods. This therefore raises the possibility that the vessels in the Feng cemetery were antiques or heirlooms from this earlier period. This is certainly not without precedent in Chinese tombs. A lacquer screen found in the tomb of a Sima Jinlong, featured Jin dynasty imagery and was possibly an heirloom from the Eastern Jin period (Müller, 2019: 56). The tomb of Gao Song, who was buried in the Eastern Jin Dynasty contained vast quantities of carved jade pieces, which were probably antique (Section 4.4.4). As has been demonstrated in chapter 3, glass vessels were highly valued in the Jin Dynasty, making them worth keeping and passing down through the family. Glass vessels also played an important role in the drinking culture of the Jin Dynasty (Section 3.2). Perhaps in keeping these vessels, the Feng family were hearkening back to a kind of idealised Chinese past where glass vessels were used by members of the elite families.

6.5.5 Status

The Northern Wei tombs containing glass vessels also belonged to high status individuals. The Xianbei burials, from Southern cemeteries M107, Yingbin Dadao M16 and Qili Village M21, were larger and more richly furnished than most of the other tombs in their respective cemeteries. Yingbin Dadao was also brick built and painted, something reserved for high status individuals. These tombs also contained symbols of power for their respective cultures, and are generally larger and contained more numerous and higher quality grave goods. Two glass vessels were found in the tombs of the Feng clan, a high family who served in various administrative and military roles in the imperial administration. The two Gaoche tombs probably belonged to high ranking members of the Gaoche nobility.

Glass vessels were only found in four Xianbei tombs, out of more than three hundred excavated in Datong. This indicates that glass vessels were quite rare commodities and perhaps not available to everyone. At least two of the Xianbei tombs belonged to what appear to be holders of high offices at court or in the military, who had richly furnished tombs, compared to others in their cemeteries. The other two tombs at Qili Village, while not the most richly furnished tombs in their cemetery, were still large, ramped entrance tombs equipped with impressive grave goods. In Xiongnu burials, of a similar design, the size of the tomb and length of the entrance passage, are symbolic of an increased status of the tomb owner due to the labour invested in construction (Brosseder, 2009: 257). The larger size of tomb may therefore indicate that the occupants of these Xianbei tombs also belonged to a relatively high social class.

6.5.6 Gender

Two of the occupants of the Xianbei tombs, at Yingbin Dadao M16 and Hudong Bianzhuguan M21 are believed to be male, based on weaponry found in the tombs. The possible gender of the two occupants in Qili village is not given in the report. The two Gaoche tombs both belonged to females (Section 6.5.2). While the sample size is too small to reach solid conclusions about gender specific usage of glass vessels among the Gaoche, it is worth noting that both burials were found in larger cemeteries, belonging to both male and female members of the same ethnic group. Because of epitaph tablets the identities of the of the two tombs in the Feng family cemetery, one belonged to a male and the other a female, indicating that both men and women were using glass vessels. Because the sample size is limited it is not possible at this time to comment further on patters of usage between men and women in these different ethnic groups.

6.6 Summary

The evidence and analysis presented here shows that the different ethnic groups within the Northern Wei empire, in the late fifth century were buried with different kinds of glass vessels, which were used for a myriad of different purposes. The Han Chinese Feng family appear to have attached values similar to those of their Jin Dynasty ancestors to the glass vessels in their possession, viewing them as rare and exotic drinking vessels. The Roman glass vessels in their tombs may in fact have been antiques from this period, used to connect the family to their Chinese past. For the Gaoche the Sasanian glass vessels were symbols of power and legitimacy, used by their nobility to display their continued elite status, despite traumatic defeats, resettlement and rebellions. The locally produced glass vessels used by the Xianbei elites were powerful symbols of

their new nationhood and identity, utilizing a new material to created traditional and recognizable vessel forms.

7 Discussion

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To raise this glass bowl to toast the guests, is to add lustre to the Imperial banquet's close-packed ranks. Its flowing luminosity is bright and brilliant so as to discern what is inside, the clear wind's glitter and gleam can be seen from without.

Yiwen Leiji, Scroll 73, Miscellaneous Utensils: Bowls

This research has examined Chinese glass found in burials and used by two distinctive dynasties, using both textual and archaeological evidence. Utilising and combining these two strands of evidence, has given a more holistic view of glass vessels found and deposited in tombs in China in the early medieval period, allowing for an examination of not only how glass vessels were used and who was using them, but also how they were viewed and valued by these people. How a material which could be transparent or take high colour, and moulded to produce vessels, has wide ranging applications, fitting into ordinary daily usage, funerary beliefs, and Buddhist religions practice.

7.1 Value and perceived meaning

7.1.1 Material Properties

The Jin Dynasty texts suggest that glass was valued for the material properties which it possesses.

7.1.1.1 Transparency

Transparency was highly prized. In one exchange between a prominent minister and a courtier, the minister directly asks why a glass bowl is considered precious. The courtier replies “this bowl is lustrous and luminous, genuinely clear and translucent. That's the only reason it's precious.” (Section 3.2.4; *Baopuzi Waipian*, Chapter 24: *Jinjie*.) Other historical texts also praise transparency. One poet Fu Xian, praises the clarity of a glass vessel, which is like Winter ice (*Yiwen Leiju*, Scroll 73, Miscellaneous Utensils: Wine Vessels), while another Pan Ni describes that the “flowing luminosity [of a glass bowl] is bright and brilliant so as to discern what is inside”(Section 3.5; *Yiwen Leiju*, Scroll 73, Miscellaneous Utensils: Bowls). A text describing Northern Wei glass production also describes transparency “Brilliant light reflected off it and shone through it, so that all who beheld it were astonished and thought it was made by the gods.” Transparency is not found in any other natural or manmade material used in China in this period, with perhaps the exception of rock crystal, which was even rarer and sometimes even confused with glass (Section 3.1.5). This makes glass vessels unique among the material culture of this period, which is one of the reasons they were highly valued.

7.1.1.2 Luminosity, Lustre and Colour

Glass vessels were also bright and sparkling. Along with transparency the properties of luminosity and lustre, are highly praised in the historical texts. For example the final line of Pan Ni's Rhapsody on a glass vessel state that “To raise this bowl to toast the guests, is to add lustre to the Imperial banquet's close-packed ranks. Its flowing luminosity is bright and brilliant so as to discern what is inside, the clear wind's glitter and gleam can be seen from without.” (Section 3.5) This would be desirable both for personal enjoyment, but also when displaying or using the vessel as described in the poem. Light shining through and reflecting off a glass vessel, would give it the appearance of a precious stone, adding to its value. A bright and sparkling glass vessel could therefore have served as a symbol of wealth and luxury.

The colour palette of the imported glass vessels from both Jin and Northern Wei tombs is quite muted, being predominantly colourless and pale green, with some examples of pale yellow and blue. While some of these colours, specifically green/blue and yellow had significance in the Chinese *wuxing* tradition, others, especially darker blue and colourless do not. This suggests that the colours of glass vessels were not particularly important in relation to their symbolic significance in the *wuxing* system (Section 4.5.6). The historical texts do not particularly discuss colour, except for the rhapsody on a dirty wine vessel, which describes the glass vessel having the colour of spring sunshine (Section 3.4.1). The focus is more on the transparency and glitter of glass vessels. Using

colourless glass or glass in pale colours would have emphasised the transparency, which was highly valued. However, the colours themselves, or lack of them, could also add value to the glass vessels. One text refers to grape wine consumed in glass vessels (Section 3.2.2). The colour of a red wine in a colourless glass vessel would have been distinctive. Combined with the luminosity of glass and the facet cut decoration, this may have had the effect of making the vessel appear as a large cut gemstone, like a ruby. The coloured glass vessels would have had a similar effect with white grape wine or Chinese rice and grain alcohols, which range from colourless to pale yellow. Drinking these liquids from coloured glass vessels would have enhanced the experience, blue vessels sparkling like sapphires, green like emeralds or jade. The sparkling effect of light passing through liquid a coloured vessel would have created the colour of Spring sunshine, written about by Fu Xian. Colour would therefore have enhanced the experience of the glass vessel user, and further emphasised that they were consuming luxury.

Table and drink ware in light colours, especially pale green glazed celadon ware was popular during the Jin Dynasty, replacing the darker coloured lacquer and bronzes of previous eras (Section 2.4.1.2). This preference for a particular colour palette may explain why the gilded silver vessels popular in the Northern Wei were apparently not used by the Jin, despite their availability (Section 4.2.1). Glass vessels in contrast did match the pale colour palette present on the tables of the Jin elites with the added interest of transparency.

The locally produced Northern Wei vessels are all a bright sky blue in colour (Section 5.4.1). Whether this was intentional or simply a by-product of the production technique is unclear. However, these vessels were produced in shapes copied from local ceramic wares. One aspect of Northern Wei society was the reworking of older forms of material culture into something new. The bright blue colour of these glass copies of traditional ceramic vessels could have emphasised this reworking, making them stand out from traditional dark greyware.

7.1.2 Shape

Both the Jin and Northern Wei tombs contained vessels in a variety of shapes sizes and materials. However, the imported glass vessels, whether Roman or Sasanian, are limited to bowls, particularly globular bowls and beakers. All are relatively small in size with rim diameters of around 10 cm (Table 4.1). Certainly, the long distances the vessels needed to be transported over could have been a factor limiting their size. Larger glass vessels would have been more difficult and expensive to transport due to their fragile nature. However, both Roman and Sasanian glassmakers produced a variety of smaller vessels which are not present in the tombs, such as small closed bottles and flasks. Furthermore, there appears to be no apparent difference between the usage of Roman or

Sasanian glass vessels. Small globular bowls for example are utilised in a similar fashion in the tombs of both dynasties, whether Roman or Sasanian. This limited repertoire of glass vessels found in the tombs from both the Jin and Northern Wei dynasties may therefore represent choice, rather than availability. Small glass bowls and beakers could be used publicly at social gatherings such as banquets and drinking parties, to display status. They could also easily be used as drinking vessels with other conventional Chinese and Northern Wei table and drinkware such as ewers. Other vessel forms, such as bottles however perhaps did not fit as well with other Chinese tableware or had a less conspicuous public use. A small perfume bottle for example, could perhaps have been utilised in a more private setting, but would not be used publicly as a status symbol.

There is more variation in the shapes of the locally produced Northern Wei glass vessels than the imports. In some cases these meet specific religious needs. For example, the glass bowl from the Dingzhou pagoda had the characteristic shape of a Buddhist alms bowl and was probably intended as a gift for the relic (Section 5.3.2). In others they model themselves on local ceramic vessels, such as wine jars and bowls, perhaps as a distinctive display of the new Northern Wei cultural identity (Section 6.5.3). Like the imported vessels these could have been used alongside more conventional table and drinkware to highlight the social status of the users.

7.1.3 Gifts

Three textual sources describe glass vessels being given as gifts in the Jin Dynasty. One records an emperor bestowing a glass vessel as a gift, on the leader of a vassal state (Section 3.3.2). The other is a letter written by a Jin official thanking the emperor for the gift of a sword, blanket and glass vessel. In his poem “Rhapsody on a dirty wine vessel”, Fu Xian states that he received the glass wine vessel as a gift (Section 3.4.1). Glass vessels would have made excellent presents in this period. Fu Xian specifically writes about a glass wine vessel, while the other two references describe glass bowls, which were probably also intended as drinking vessels. Wine drinking was an important activity in Chinese society in this period, for everyday nourishment, social gatherings and ritual activity (Section 3.2). Wine could be seen as life sustaining, providing sustenance to both the body and in some senses the soul. Giving a glass vessel could therefore be seen as showing care for the receiver, giving them the ability to drink this life-giving liquid. This also means that glass vessels were practical gifts which would be frequently used and touched. In doing so the user would be reminded of the giver, their relationship, and any obligations owed to them. For example, the letter of the Jin official, writes about enforcing the decrees of the emperor in locations both near and far. Glass drinking vessels could also have been used at social events. Because glass vessels were exotic, had unusual material properties, and were probably quite difficult to obtain, conspicuous

public use would have imparted a certain degree of status on the user. A glass vessel was therefore also a gift of status.

There is no direct historical evidence of glass vessels being given as gifts in the Northern Wei Dynasty. This is probably due to a lack of preserved historical texts, due to later Chinese biases (Section 1.4.2). Gift giving was an important component of the original steppe culture of the Xianbei and the Han Chinese culture they adopted later in the dynasty. The locally produced glass vessels from the Xianbei tombs, may have been produced specifically for the imperial palace (Section 5.4.5). Access to them would therefore have been limited to receiving them as gifts directly from the emperor, which would explain their relative rarity, despite local production. Although they conform to the shapes of local ceramics, the glass is a bright blue, which would have been particularly eye catching during public use, especially if they were available only in limited quantities. They are found only in high status Xianbei tombs, belonging to men who would have served the emperor directly (Section 6.5.3). Advancement in Xianbei society in this period was not through hereditary bloodlines, but through peerages awarded by the emperor. These glass vessels could have served as a symbol of such social status. They could be used as drinkware, and therefore frequently and conspicuously used, publicly displaying not only their own elite standing but also their loyalty to the emperor and cementing their relationship to the throne.

7.1.4 Purity

Because glass was clear and transparent, with no imperfections it could serve as a symbol of purity. One of the historical texts, rhapsody on a dirty wine vessel, referred to above, uses purity as its primary theme (Section 3.4.1). The poem laments how a glass vessel dropped into dirt lost its inherent beauty and value. It is not a specifically religious work but does give a moral commentary. The dirty vessel is an allegorical representation of a corrupt government official (Section 3.4.1.1). The dropping of the glass vessel into the dirt is like a man who engages in corrupt activities. While outwardly they may look the same they lose their purity and thus their inherent value. This indicates that purity was considered an inherent property of glass in early medieval China, which is perhaps why it came to be used in Buddhism.

7.1.5 Exotica

Two of the Jin Dynasty poems comment on the exotic origin of glass vessels. The first half of the poem ‘Rhapsody on a glass vessel’ by Pan Ni, comments on the distant origins of a glass vessel from the imperial treasury, and its journey over various geographical perils such as the Pamir mountains (Section 3.5). The rhapsody on a dirty wine vessel also comments on the “Remarkable

foreign design” of the glass vessel (Section 3.4.1). However, overall, the foreignness or exoticness of the glass vessels does not seem to be of primary importance compared to physical properties such as transparency, lustre and colour, which are praised in several accounts.

This might be contrasted with the collection of drinking vessels, including glass, which belonged to the Northern Wei prince Yuan Chen, which seem to be valued precisely because “they were not native products but came from the Western Regions” (Section 5.1.1). Because of their control of North-western China, and the trade routes which passed through it, the Northern Wei had greater contact with the ‘Western Regions’, modern Central Asia. Elsewhere in the same text it describes how Yuan Chen personally sent out envoys to the Western Regions to obtain rare horses. These horses drank from a silver trough and upon seeing them “the other princes bowed to his [Yuan Chen’s] superior wealth.” These exotic goods gave Yuan Chen status among his peers. Furthermore, he was not just a passive receiver of these goods, but actively attempted to acquire them in foreign lands. Again, this active pursuit of goods contrasts with the Jin Dynasty. While they controlled the sea ports on the Southern coast of China, the maritime trade itself was carried out by foreign merchants. In this sense the Jin were more passive, receiving the goods merchants brought but not actively sending out envoys to acquire them.

This more active pursuit of foreign goods by the Northern Wei also created a market for local reproductions. Ceramic copies of imported glass vessels have been found in excavations of the great market of Luoyang, the capital of the Northern Wei. Coloured slip was used to replicate the facet cut decoration, and they were covered with a thick glaze to give them a glassy appearance (Section 5.2). Their presence at a market clearly indicates that they were for sale to the general public, whereas genuine glass vessels may have had their circulation restricted, or been prohibitively expensive for much of the population. Ceramic copies of imported silver vessels have also been found at Northern Wei sites indicating that foreign imported goods were highly desirable. This active attempt to acquire and copy foreign goods, probably also led to local production of glass in the Northern Wei Dynasty (Section 7.2).

These copies of foreign goods are not found in the Jin Dynasty. This could suggest that there were less of the genuine goods in circulation because of restrictions by the imperial palace (Section 3.3) meaning the population was less familiar with them. It could also indicate that there was simply less desire for foreign products. This might be contrasted with the Northern Wei tombs which contained finished products from a variety of locations, most notably jewellery such as pectoral necklaces of Central Asian origin and Bactrian silver vessels. These items were valued not only for their exotic appeal but because of the fine workmanship (Müller, 2019a: 402).

Imports that are found in the Jin tombs are almost exclusively natural products, precious stones such as turquoise and carnelian, or exotic shells such as conch and nautilus, from Southeast Asia and the Indian subcontinent (Section 4.2.1). Like the glass vessels they are rare and found predominantly in high status tombs, suggesting access to these goods was limited. However, unlike the glass which arrived as a finished product, the shells and minerals were frequently reworked once they reached China. Some of the stones were carved into Chinese shapes such as *bixie* while nautilus shells were outfitted with bronze and painted to resemble parrots (Section 4.2.1). These products were therefore almost certainly valued for their natural material qualities rather than for their exotic origin or foreign workmanship. The glass vessels are therefore quite unique among these finds as a finished foreign product. It is possible that they were actually believed to be natural products by some of their owners (Section 3.1.5). As natural products were valued by the Chinese in this period (An, 2002b: 93), this would have increased their perceived value.

The cultural outlook of the Northern Wei was quite different from that of the Jin. Within the Northern Wei empire there were large populations of nomadic peoples such as the Xianbei and Gaoche. Exotic luxury goods appear to have been particularly desirable among these groups as symbols of wealth and status. Glass and also silver vessels were found in tombs belonging to the Gaoche, a group which retained its nomadic heritage and culture. The multi-ethnic makeup of the Northern Wei empire may have contributed to a society which was more outward looking and sought to utilise material culture and practices from different cultures to forge a cohesive new national culture. This outward looking view would have stimulated a greater desire for foreign goods. In contrast to this the Jin Dynasty for much of its existence, teetered on the edge of annihilation, from internal, but also external threats, from groups such as the Xianbei (Section 2.4.1). This may have created a culture that was more conservative and inward looking, where traditional goods and practices were adhered to, as a way to provide a sense of stability. In such a culture foreign goods would have been less desirable. Glass vessels may have been an exception to this because of their unique properties such as transparency, which could not be found among local goods and materials.

7.1.5.1 Roman vs Sasanian

The imported glass vessels found in both the Jin and Northern Wei tombs were imported from the Roman and Sasanian Empires. However, there appears to be no distinction in their usage or geographical provenance and distribution (Section 4.5.3; 6.4.3). Form and function therefore appear to be more important than original provenance, with globular drinking bowls produced in both the Roman and Sasanian Empires being the most popular vessel type.

7.1.6 Supply and Control of Imported Glass Vessels

The value of glass was also increased by its relative scarcity. This was at least in part due to the difficulty of transporting fragile glass vessels over the great distances from the Roman and Sasanian Empires. Furthermore, tribute inventories from the early medieval period list a huge variety of products which were brought to China from foreign countries (Section 3.1). It is possible that glass vessels were only a minor part of these trade shipments and therefore not widely available for exchange. During the Jin Dynasty the supply of vessels may also have been controlled by the imperial palace. In Pan Ni's poem, glass vessels are described as being among the regional tributary offerings in the imperial palace. These types of offerings, which consisted of rare and unusual imported items, were often not available on the local markets (Section 3.1). Foreign trade was tightly controlled. The Southern maritime trade was carried out by foreign merchants but they often could not trade openly on the Chinese markets and were instead restricted to small foreign concessions in trading ports. This would have increased their rarity of imported goods and made them even more valuable. Being able to obtain them was therefore a symbol of power and social standing as it would have necessitated a connection to the emperor, who would give them out as gifts. Those with enough wealth may also have been able to acquire these items via their own means. Certain wealthy individuals in the Jin Dynasty competed with each other to acquire such items, including glass vessels, which they used as symbols of wealth and power (Section 3.1.2).

In contrast to Jin restriction, foreigners traded openly in large markets in the Northern Wei capitals at Pingcheng and Luoyang. The multi-ethnic makeup of the Northern Wei empire could have contributed to a society that was more outward looking and actively sought goods from other cultures. The presence of ceramic copies of facet cut glass vessels found in the great market of Luoyang indicates that the general public were familiar with and desired imported glass vessels. Such vessels may even have been traded in the same market. The presence of glass vessels in tombs belonging to both the Gaoche and Han Chinese ethnic groups also suggests such vessels were available to a wider group of people. However, their relative scarcity, presence in only high status tombs and the ceramic reproductions indicate that such vessels were still very expensive commodities and thus only available to the wealthy.

7.2 Local Production of Glass Vessels

The possibility of local glass production in the Northern Wei Dynasty is suggested by glass vessels from four tombs and one temple site. They are made from a bright blue glass, which is quite different from the colour palette of the imported Roman and Sasanian vessels found at four other

Northern Wei tomb sites (Section 0). Production locally is supported by typological analysis of the vessels, which imitate common local ceramics and Buddhist religious items. A Northern Wei historical text indicates that glass makers from Central Asia travelled to the Northern Wei court and made glass to furnish a hall built by the Xiaowen (r.471~499) (Section 5.3). During the Northern Wei industries essential to the state, including those related to the palace, were heavily regulated (Section 5.4.5). During the Tang Dynasty production of luxury goods such as silver vessels was tightly controlled to maintain their scarcity and value. These blue glass vessels are found only in the tombs of high ranking Xianbei and the Dingzhou pagoda, which was built under imperial patronage. If these glass vessels were produced locally, their supply and production could have been controlled by the imperial palace, perhaps explaining their limited distribution pattern. However, no production sites have yet been found. Furthermore, only three comprehensive chemical analyses have been carried out on these vessels. These indicate a glass composition, with some similarity to Central Asian composition. This could correlate with the historical account of Central Asian glass makers producing glass for the imperial court. However, it is also possible that raw glass was imported and reworked locally. Direct import of finished vessels also cannot be fully ruled out at this stage. Trace element analysis and isotopic analysis could be used to enhance the interpretation of these vessels and give an indication of their provenance.

There is no evidence of local production of glass in the Jin Dynasty. One Jin writer refers to production of glass vessels in Southern China, but this is almost certainly referring to an earlier Han Dynasty industry centred on this region, which had ended by this period (Section 3.1.5). The prerequisite high temperature technologies were available during the Jin, so the lack of a local glass industry may have more to do with cultural constraints. The reference to glass production indicates that many people in the period believed glass to be a natural product like jade, and the reference itself refers to glass as rock crystal. If glass was believed to be a natural geological product, this could have precluded attempts to make it. Furthermore, without the prerequisite knowledge of raw materials and production techniques glass is difficult to make. The Northern Wei glass industry was started by the arrival of foreign craftspeople who had the knowledge to select suitable local raw materials for glass production (Section 5.4.3). Without the knowledge from such specialists it would be very difficult to develop a local glass industry as glass as a finished product is so different from its constituent raw materials.

7.3 Use

7.3.1 Drinking Vessels

Both the historical texts and the evidence from tombs indicate glass vessels were predominantly used as drinking vessels in both the Jin and Northern Wei Dynasties. Glass vessels are described as being raised to toast guests, or to serve wine in much of the Jin historical literature. The poet Lu Ji writes about “holding up a glass wine vessel to welcome old friends (Section 3.2.2), while Pan Ni, writes that to raise a bowl to toast guests, “is to add lustre to the Imperial banquet’s close-packed ranks.” (Section 3.5). Cui Hong describes a party where wine is drunk from both glass vessels, while the *Jinshu* describes the prince of Runan serving his ministers wine from glass cups (Section 3.2.3). Even when wine drinking is not explicitly described the vocabulary used to describe the drinking vessel implies its function is for wine drinking. Words such as *Ke* 榼, *zhong* 鐘 and *zhi* 卮, are all archaic words for wine drinking vessels. Another historical text from the Northern Wei also describes a collection of drinking vessels belonging to the prince Yuan Chen, which included glass bowls.

Wine drinking was an important activity in this period of Chinese history, both in private and socially (Section 3.2). This is highlighted by the ranges of drinking vessels and associated drinkware described in the literature and found in the tombs of both the Jin and Northern Wei. While vessels for other purposes come in fairly standardised shape forms, drinking vessels made from a variety of materials including celadon, greyware, lacquer, bronze, nautilus, agate, jade, shell, gold and silver are found in the tombs of both dynasties. Some are shaped as ear cups, a traditional Chinese drinking vessel form, the glass vessels and cups such as nautilus shell are more exotic shapes. The literature describes, bowls, cups and goblets. The wide variety of drinking vessels suggests this was an area where individuals had a greater degree of choice. While utensils for serving food may change depending on the culture, the Northern Wei for example had a preference for large plates not shared by the Jin (Section 5.1.2), the function of drinking cups is the same across both cultures. This means that drinking vessels of different shapes and materials could be used universally, while other vessels, such as those for serving food could not.

With such a variety of drinking cups available, using a glass vessel was a distinctive and conscious choice. Glass could have been selected because it enhanced the experience of wine drinking. Visually glass vessels were pleasing to behold. Pan Ni writing of a glass bowl states that “its flowing luminosity is bright and brilliant so as to discern what is inside” (Section 3.5). The transparency of would have been particularly striking, allowing both the user and any potential onlookers to view

the colour and quality of the wine held within. Glass also had a pleasing glitter and gleam, which would appear to sparkle like a jewel in reflected light. The touch and feel of glass, its smoothness, roundness and hardness is unique and is commented on by the poet Pan Ni (Section 3.5). Glass would also have enhanced taste because unlike some other materials such as bronze it does not taint the taste of liquids. Using glass vessels could also involve the sense of smell. Wine could be swirled in a rounded glass vessel releasing the alcoholic vapours as the glass warms up from the hand, releasing the smell of the liquor. This would not be possible in an earcup, the most common Chinese drinking vessels in this period, because they are too shallow. Sound could also be a factor. Glass vessels are described as being raised to toast guests (Sections 3.2.2 and 3.5). The pleasing sound of glass vessels clinking, could have added a further level of sensory input. Using a glass vessel could therefore be a unique sensory experience, involving all five senses to enhance the pleasure of drinking wine.

7.3.2 Other Uses

The historical texts indicate that glass vessels were also sometimes used for purposes other than wine drinking. One Jin Dynasty historical reference describes an unusual banquet attended by the Emperor Wu, at which the food was served entirely on glass vessels. The lavishness of the event was supposed to impress the emperor (Section 3.1.1). Glass vessels are often described singularly in historical texts and usually only single glass vessels are found in tombs, indicating a relative rarity. Therefore, utilising so many glass vessels at one time would have been quite impressive. The strangeness of this banquet is emphasised in the text, and the emperor was disgusted by the food, indicating that this was not necessarily normal practice. Another historical text describes a banquet at the Northern Wei court, where glass and gold bowls were set before the guests (Section 5.1.2). It is unclear exactly what the intended purpose of the glass bowls was, and they could have been used to serve either drinks or food. Again, the use of glass and gold bowls is intended to convey luxury, status and power to the guests attending the banquet.

A final reference describes a glass bowl being used to store a type of bath bean, used as soap, in the privy of Shi Chong, a very wealthy man (Section 3.1.2). Once again this is intended to convey wealth and status. Shi Chong was known as an extravagant and wasteful man. The privy in his house, contained among other luxuries a gold wash basin, and was attended to by slave girls. This was intended to both impress and belittle guests in equal measure. For these extremely wealthy individuals' status was gained by owning, but ultimately being indifferent to wealth. Utilising a glass vessel, a rare and beautiful object valued and admired by others for the simple purpose of storing beans is an example of this ultimate indifference.

7.3.3 Grave Goods

With the exception of the Dingzhou pagoda from the Northern Wei Dynasty, the physical evidence for glass vessel usage in this period comes exclusively from tombs. This is probably due more to Chinese archaeological practice, which has a strong emphasis on funerary archaeology, rather than being representative of actual usage. As the historical literature reviewed in chapters 3 and 5 indicated, glass vessels were very much used by living individuals.

In the Jin dynasty tombs were intended as microcosms of the world the deceased had lived in. As well as offering and ritual items, they contained the goods and utensils used in everyday life. This could include tableware, furniture, writing sets, weapons, jewellery, medicine and toiletries, all intended for the use of the deceased in the next world. Exactly what was in specific tomb inventories varied depending on what were considered to be the specific needs of the individual, their social status, and the choices of those preparing the burial. Glass vessels were therefore chosen because they met a specific requirement. Glass vessels were used predominantly as drinking vessels in life, as discussed above. The presence of associated drinkware such as wine warmers, ewers and wine jars suggests that they would also be used as drinking cups in the afterlife.

The placement of glass vessels close to, or in some cases physically inside the coffin suggests that they were highly valued items. Some of the Eastern Jin tombs were considered temporary and the intention was to rebury the deceased one day in a permanent tomb. In this situation the coffin would be moved and reburied without opening it. The items placed within the coffin were therefore considered important items which needed to stay with the deceased when they moved. The evidence from the Northern Wei tomb sites also suggests that a similar situation, where the vessels placed in the tomb were of the same type used by the deceased in life.

The glass vessels placed in tombs were intended to serve the deceased in the next world, but they also served a function for living family members. Funeral rites were public affairs in both the Jin and Northern Wei dynasties (Kieser, 2011: 71). Mourners attending the funeral would view the deceased within the coffin and also attend rites within the tomb itself. Funerals could therefore be used to display the wealth, status and power of not only the deceased but also their families, through the scale and pomp of the funeral rituals, the type and size of the tomb and the grave goods placed within (Kieser, 2011: 71). Glass vessels were clearly not normal grave goods and therefore their placement within tombs was a conscious choice. Just as glass drinking vessels conferred status on their users at grand banquets, they also conveyed status on the deceased, and perhaps more importantly their still living family members, at funerals.

7.3.4 Changes of use with Buddhism

A defining feature of the early medieval period is the spread of Buddhism in China. The adoption of new religious practices, such as the veneration of relics, led to the new forms of material culture and new ways of interacting with older forms (Section 2.5.3). Glass was one of the materials which came to have an increased importance in Buddhist practice. However, Buddhism spread slowly and was not universally adopted. During the Jin Dynasty Buddhism was never the officially adopted religion of the imperial family. While there was clearly some cultural influence; the words used for glass in the Jin Dynasty texts are derived from Sanskrit words from Buddhist scriptures (Section 1.4.3). However, there are no large Buddhist religious sites containing glass vessels and the Jin Dynasty tombs containing glass vessels do not have any specific Buddhist iconography or material culture. This indicates that glass vessels usage in the Jin Dynasty was not in itself, connected to Buddhist religious practices.

This is contrasted by the Northern Wei Dynasty. In the latter half of the Dynasty Buddhism was adopted by the imperial family as a type of state religion (Section 2.5.3). Evidence for glass vessel usage in a Buddhist context comes from the Dinzhou Pagoda, which contained six glass vessels in a stone reliquary chest (Section 5.3). One of the vessels is an alms bowl a typically Buddhist vessel, which may have been supplied as a gift for the relic. The other vessels were two small globular jars and three gourd shaped bottles. These may also have been intended as gifts, but another possibility is that they were relic containers used to house relics themselves.

The choice of glass as a material for these Buddhist vessels is probably related to a variety of interrelated symbolic and practical considerations. Glass was considered one of the seven treasures of Buddhism (Section 5.3.5.2). Furthermore, the property of transparency meant that glass was considered a symbolically pure material (Section 3.4). A transparent glass vessel was clean, without blemish, and nothing could be hidden inside it. These values and symbolism meant that glass was a suitable material for both offerings to and containers for Buddhist relics. Glass vessels were further suited for use as reliquaries because they gave physical form to, what were often visually unimpressive relics, allowing them to be viewed, but at the same time given otherworldly appearance by the coloured glass. This would be further enhanced by specific light conditions. Light shining through the glass vessels could have given the appearance of rays emanating from the relic. This would have given the appearance of emanating beams of light, which was supposed to be one of the special qualities of true relics. Glass was therefore an ideal reliquary material. It was valued as a Buddhist treasure; it was symbolically pure; it could physically hold relics and perhaps under the right conditions provide them with a ritual power by allowing them to manifest

and emanate light. The suitability of glass vessels for Buddhist usage is further confirmed by their continued usage in later Chinese dynasties, especially the Tang, and the spread of the practice to the Korean peninsula and the Japanese archipelago at the same period. However the vessels from the Dingzhou pagoda is the earliest example of such usage.

The use of glass vessels may also have served the Northern Wei emperor, symbolising and projecting imperial power. If the glass vessels from the Dingzhou pagoda were locally produced, the industry could have been controlled by the imperial palace (Section 5.4.5). In this period the Northern Wei rulers were attempting to promote Buddhism as a type of state religion, which could unify their multi-ethnic empire. The Dingzhou Pagoda was built under imperial patronage with funds from the imperial treasury, on the orders of emperor Xiaowen (r.471~499). If they were indeed locally made, these characteristically Buddhist vessels could have been a way for the emperor to display his support for the religion. However, at the same time the monopoly on glass vessel production would also give the emperor control over where they were used and thus control over the foundation of new monasteries.

7.4 Users

One of the aims of this thesis was to examine who was using glass vessels in the early medieval period. The focus has been on social status, gender and ethnicity, which are discussed in detail below.

7.4.1 Social Status

The Jin historical texts indicate that the users of glass vessels were all high-status individuals, members of the imperial family such as the Jin emperor Wu, the extremely wealthy such as Shi Chong, and officials in the imperial administration such as Pan Ni and Fu Xian. This is also reflected by the archaeological evidence, especially where the identity of the tomb owners have been established, using epitaph tablets. This evidence should however be viewed with some caution. Texts which have been preserved, were written by high status individuals and naturally discuss their own lives and concerns. The brick-built tombs which have been preserved and excavated also belonged to such high status individuals and are found predominantly in Nanjing and its environs. This was the capital of the Eastern Jin dynasty, where the emperor and the powerful aristocratic families were concentrated. Along with glass vessels they contained items which denote status and wealth such as jade, gold jewellery, precious stones and exotic goods, such as nautilus shell (Section 4.3.1). There is therefore a certain bias towards high status individuals in

both the historical and archaeological record. However, glass vessels were rare and expensive and therefore only the wealthy and educated could obtain and write about them.

However, even within this elite group the usage of glass vessels was not universal. Access to glass vessels may have been limited as they were among the tribute gifts given to the emperor and such items were not always available on the open market (Section 3.1). Access to glass vessels may therefore have been limited to individuals with access to or connections with the imperial family. The owners of the tombs where glass vessels have been found were in at least two cases emperors themselves, or in other cases held powerful positions at court or in the imperial bureaucracy. Wang Yi was the personal tutor of the Jin Crown prince, Hua Fang was the wife of a regional military commander and others included the marquis of Cangwu and the wife of the governor of Danyang. All these individuals were in powerful positions, and would have had connections to the imperial household, and therefore access to tribute goods such as glass vessels from the imperial treasury, given as gifts (Section 3.3).

The use of glass vessels may also have down to the personal taste of certain individuals. The Jin tombs contained drinking vessels made from a variety of materials including celadon, greyware, lacquer, bronze, shell, nautilus and agate. Drinking vessels were often used at public banquets and parties and the choice of a particular vessel type may have conveyed subtle messages about the user to those who viewed them. The use of lacquer and bronze vessels for example, which were traditional Chinese materials, could therefore represent a degree of conservatism in those who used them. Glass vessels may have been chosen by individuals for different reasons, particularly because of eye catching qualities such as transparency and colour, which may also have made wine drinking a more sensory and luxurious experience (Section 7.1.1.2).

The three texts that reference Northern Wei glass usage all link it to the imperial family (Section 5.1.1; 5.1.2; 5.4.3). While the archaeological evidence also generally denotes usage by high status individuals, the circle of users appears to be wider than that of the Jin dynasty and includes both high ranking Xianbei elites, as well as subject peoples; the noble women from the Gaoche tribe and the Han Chinese Feng family. Status could have been denoted by access to the unusual and perhaps locally produced vessels, which appear to only be used by high ranking Xianbei who were close to the imperial throne, and therefore had access to these vessels (Section 6.5.3). The imported glass vessels by contrast may have been available for purchase on the open market (Section 5.2), and available to a wider group of people, if they had the wealth to afford them.

7.4.2 Gender

The Jin historical texts reference only male usage of glass vessels, except in two cases where female slaves and attendants served the men, who were central to the anecdotes. This absence of women however is a common deficiency in Chinese historical texts, which often make little reference to the life of women (Richter, 2019: 600). Because of this lack of historical data it is difficult to assess how women might have used these glass vessels and if there is any difference between male and female usage. There is little apparent difference between the glass vessels and associated drinkware in the male and female tombs. The female burials contain the same types of vessels, beakers and globular bowls, as those found in the burials of their male counterparts. Furthermore, the female burials also have the same drinkware associated with them, including ewers and wine warmers. This could indicate that the vessels were intended for usage as drinking vessels and that women, despite a lack of evidence in historical texts, also participated in the wine drinking culture practiced by men. Another possibility however is that the glass vessels were given to them by their husbands or other family members at the funeral. Funerals were public affairs where families could display status. For example, the epitaph tablet in the tomb of Hua Fang, indicates that her husband gave her a funeral with full ceremony and selected a comfortable site for a tomb even though it was meant to be temporary (Section 4.1.1.1). Certainly, this was at least in part for the benefit of Hua Fang. However, such a funeral display also benefitted her husband, Wang You, who was a high ranking general in command of a prefecture on the Northern frontier. The epitaph states that his officers and soldiers took part in the ceremony. Providing his wife with high status goods, possibly gifts from the imperial palace could have been a way for Wang You to display his own power and status to his men and secure their loyalty. The burial took place in an unstable period, with famine, civil war and invasion (Section 2.4.1). Therefore, perhaps the very survival of Wang You himself necessitated the loyalty of his men, achieved through displays of power and status. The glass vessels in the female burials could therefore be items for their personal use, but also symbols of power and status, used to advance the social and political machinations of their husbands or other family members who arranged the funeral.

Because of the broader range of ethnic groups with different cultural practices, and more limited numbers of tombs and historical texts it is more difficult to establish patterns of gender usage in the Northern Wei Dynasty. Of the historical texts one describes a collection of glass vessels belonging to a prince, which he displayed to his clansmen. Another describes a banquet at the Northern Wei court, without giving details about who was at the banquet.

The evidence from tombs does indicate that glass vessels were used by women as well as men. The two Gaoche tombs both belonged to high status women, one of them presumed to be a young girl (Section 6.5.2). In both cases these tombs were located within larger cemeteries, which contained both male and female burials. The much smaller Yi-he Nur cemetery contained exclusively high-status individuals, and possibly belonged to a single noble family. Contrasting this are the Xianbei tombs, which appear to have belonged exclusively to high status males. This could be indicative of specifically gendered usage within the Gaoche and Xianbei cultures, although the sample size is currently too small to confirm this. The two Han Chinese burials at the Feng family cemetery belonged to a male and a female, suggesting a pattern similar to the Jin tombs where glass was used by both men and women.

7.4.3 Ethnicity

The historical texts paint an essentially mono-ethnic picture of Jin glass vessel usage, with the users being members of the Han Chinese elites. However, there are two exceptions to this. The first refers to the Jin Emperor Cheng gifting a glass vessel to Duan Liao, the Murong Xianbei ruler of Liaodong in the North-East (Section 3.3.2). The other refers to An Ju, who was a Hu, a generic term for barbarian, who looted a tomb belonging to Zhang Jun a Han Chinese ruler of a Jin vassal Kingdom in North Western China (Section 3.2.5). One of the treasures looted from the tomb was a glass vessel. The tomb was then repaired by Lü Zuan a Tibetan by ethnicity, who repaired the tomb according to Han Chinese custom. In both these cases the glass vessel users were on the peripheries, or even outside the confines of the Jin empire. The other historical texts and evidence from the tombs indicates that glass vessels were used by the powerful Han Chinese elites.

There is a much greater ethnic variation in the Northern Wei tombs. Based on the tomb types, grave goods and the historical record Northern Wei tombs containing glass vessels belonged to individuals from three different ethnic groups, the Han Chinese, the Xianbei, and the Gaoche. Glass vessels held quite different meanings in the funerary repertoires of each of these groups.

Two tombs belonging to members Han Chinese Feng clan, contained imported glass vessels (Section 6.5.4). Although the layouts and contents for each individual tomb has not been recorded, the finds in the cemetery are quite similar to those found in the Jin Dynasty tombs, which suggests that Feng family continued to follow Chinese practice in furnishing their tombs. This was a perhaps a conscious decision, by members of the Feng family, who wished to maintain a Han Chinese ethnic identity, while serving under the Xianbei dominated Northern Wei Dynasty. The use of ‘traditional’ Chinese grave goods in their tombs, may therefore represent their attempt to maintain a Han Chinese identity, and perhaps even private ambitions for the return of an ethnically

Han Chinese imperial dynasty. As has been demonstrated glass vessels were used to furnish high-status tombs in the ethnically Han Chinese Jin Dynasty, which preceded the Northern Wei. The Feng clan were considered one of the great Northern families during the Jin dynasty and would have furnished their tombs in a similar fashion to the Jin Dynasty tombs investigated in this study, perhaps including glass vessels. During the Northern Wei period they continued to furnish their tombs in elite Jin Dynasty fashion. This suggests that glass vessels were considered part of the 'traditional' funerary repertoire for Han Chinese elites and may have held the same function and symbolism that they had in the Jin Dynasty.

Two tombs belonging to the Gaoche contained glass vessels. The Gaoche were a nomadic steppe people, defeated by the Northern Wei and forcibly resettled, within the boundaries of the Northern Wei empire. The structure and contents of these tombs suggests that they retained traditional steppe funerary practices. The presence of distinctive grave goods, such as chinstraps, helped distinguish them from those of the Xianbei, some of whom followed similar steppe practices (Section 6.5.2). In traditional steppe cultures status was derived from possession of exotic goods from distant places. Ownership and use of such items was intended to emphasise rank and elite status. Along with imported glass vessels the Gaoche tombs contained other distinctive imported goods, such as Bactrian silver vessels. The use of these exotic items in their tomb inventories may have been a way to for the Gaoche nobility, despite their conquest by the Northern Wei to signal their continued relevance and status as elites to both their own people and outside observers (Section 6.5.2). The glass vessels, as exotic, imported goods therefore served as status symbol for the Gaoche elites.

The use of glass vessels in the Xianbei tombs is quite different from the Gaoche and Han Chinese. The glass itself is also quite different from the Roman and Sasanian imports, being a bright blue colour, with a unique chemical composition (Section 6.4.2). Some of these vessels were also in the shape of local ceramic wares and probably intended for local consumption. This contrasts with the usage among other ethnic groups, such as the Gaoche or even the Han Chinese, where the value of glass vessels, were at least in part due to their exotic origin. This is clearly not the case with the glass vessels used in the Xianbei tombs. Instead, they may be part of a distinctive Northern Wei habitus, which developed in Datong under Northern Wei rule. The Xianbei were outsiders, conquerors of this land where they had settled. Rather than use exotic and foreign glass vessels, which would in some sense highlight their status as outsiders, they chose local ceramic forms. At the same time rather than traditional ceramics, such as those used by the Chinese, they chose a distinctive bright blue glass. The blue glass vessels perhaps represent a process of acculturation; the formation of a new Xianbei identity in Datong, which incorporated a mixture of old and new

behaviours, visual forms and materials, drawn from China, the steppe, and Central Asia. They were settled and no longer conformed to the traditional nomadic practices of the steppe. Neither, despite the tendencies of their rulers, did they completely adopt the customs and practices of the Han Chinese whom they had conquered. Instead, as suggested in section 2.5.2.3, they developed new material and visual forms, consistent with their new status as soldiers and citizens of the Northern Wei Empire. The glass vessels, traditional forms in a different and visually striking material, may therefore represent the particular needs and tastes of the Xianbei in this specific period of transformation.

7.5 Jin and Wei

In some respects there are a number of similarities between Jin and Northern Wei glass vessel usage, despite the difference in geography, chronology, ethnicity and cultural outlook. In both dynasties glass vessels were used predominantly as high-status drinkware, by elites and were placed in their tombs. However, while glass was highly valued in both societies, the reason for this value varied, depending on cultural background. In Jin society, glass vessels were valued primarily for their unique physical properties (Section 7.1.1). Furthermore, the supply of glass vessels may have been limited by the imperial tribute system. This made them symbols of status and wealth, which could be used in both life and death.

Because of the multi-ethnic makeup of the Northern Wei empire the value and usage of glass vessels was more varied. Contrasting with the Jin, glass vessels may have been available to purchase on the open market, as evidenced by the ceramic copies of glass vessels. Imported glass vessels were used by elite members of the tribal Gaoche people and high-status Han Chinese families. For the Gaoche the exotic origin of imported glass vessels may have symbolised the power and status of the owner through their ability to acquire objects from across the world. In contrast, the Han Chinese under Northern Wei rule had a cultural outlook more reminiscent of their Jin predecessors and may have valued glass vessels for their rarity and material properties. The possible local production of glass vessels by the Northern Wei also differentiates them from the Jin. Again, this may have been the result of different cultural attitudes, the Northern Wei more willing to adopt foreign materials and cultural practices than the Jin. The primary users of these bright blue glass vessels were high ranking Xianbei, who used them to display power and status through their connection to the imperial throne. The Northern Wei rulers also used these vessels as reliquaries and religious offerings in the Dingzhou pagoda, beginning a tradition which continued into later dynasties.

The aim of this thesis was to examine how glass vessels were used and viewed by these early medieval Chinese societies. It has revealed that glass can be used as a tool to differentiate between cultures, ethnicities and social groups, living in different geographical regions and time periods. Glass can be also used to study differing social practices, funerary rituals, religious beliefs and governmental structures. The way cultures used glass vessels can also reveal deeper trends in their societies. How they reacted to military victory or conquest and subordination, to cultural change or stagnation. The early medieval period was a time of intense cultural change and upheaval in China, which has been evidenced in some part, by the study of glass vessels.

7.6 Contributions of this project to wider glass studies

Studies of ancient glass are predominantly focussed on either technological aspects of the glass production process or on provenance and distribution patterns. They will often employ scientific techniques such as chemical analysis to identify distinct compositional groups or utilise experimental replication to replicate ancient glass recipes. Other studies may focus on building typologies of glass objects from a particular site region or culture. The main aim is usually on where and how a certain type of glass was made, and where it eventually moved too.

While utilising some of these techniques, this project has taken a unique and multi-disciplinary approach using material evidence, archaeological excavation reports and typological studies, alongside texts such as poems and other literary documents, to illustrate how glass was perceived or used, and what its economic or social value was. This was to some extent out of necessity. The data set of glass vessels from the period of study is small and limited in number. Because of strict regulations regarding antiquities in China, methods such as chemical analysis could not be employed. Furthermore, the PhD was conducted during the two years of the covid pandemic when travel was not possible. However, these techniques ultimately proved to be particularly informative and allowed a greater understanding of the material culture under discussion.

This study focussed on two lines different lines of enquiry. The first of these was the review and interpretation of historical literature pertaining to glass usage in this period. The second was a detailed review of the contexts in which glass vessels were found. By taking this approach the information gained from the historical literature could be reviewed in light of what was revealed in the archaeological excavations, and vice versa, giving a greater understanding of how glass vessels were used and viewed in these cultures. By taking this approach the glass vessels from archaeological sites, such as tombs can be viewed in a new light, not simply small pieces in larger

funerary repertoires or as markers of foreign trade, but as objects which can shed light on the culture and values of a society. This allowed for a direct comparison between the material cultures of two very different societies to shed light on cultural differences, and the use of material goods, influenced by political and social changes and belief systems.

This project has therefore demonstrated how historical and archaeological data can be integrated to give deeper insights into glass usage in a society. A similar methodology could be successfully employed in other geographical regions and time periods, which have extant historical texts available. As demonstrated here, it is particularly useful in regions where direct access to archaeological material is limited, or where finds are too limited for traditional typological studies. It can also be fruitfully employed, with success, in regions where glass finds are plentiful, as it gives an alternative perspective on glass ownership and use and has the potential to shed light on perceived economic or social value and status. This type of study need not be limited to glass but could also be employed on other materials which can be directly identified in both the historical and archaeological record.

8 Conclusion

世說新語排調

徹所以為寶耳

答曰此碗英英誠為清

腹殊空謂之寶器何邪

琉璃碗謂伯仁曰此碗

王公與朝士共飲酒舉

Wang Dao Was once drinking together with the other courtiers. Raising a glass bowl, he said to Zhou Yi, “the belly of this bowl is extraordinarily empty, yet it is called a precious vessel. why?” Zhou replied, “this bowl is lustrous and luminous, genuinely clear and translucent. That's the only reason it's precious.”

Shi Shuo Xinyu, Paidiao: 14

The aims of this thesis were to investigate how glass vessels were obtained, viewed, used, and valued in early medieval China by analysing archaeological data and historical texts from two culturally different but overlapping dynasties from different regions. The findings have informed the following conclusions which illustrate glass use in China in the early medieval period. Furthermore, they highlight the differences and similarities in vessel use and value in these two different societies, the Jin and Northern Wei. The glass studied here is primarily from funerary contexts as there are few excavations of settlement sites from this period (Section 1.4.1).

. Who was using glass vessels?

- Glass vessels were used exclusively by elites in both the Jin and Northern Wei Dynasties. The evidence from tombs and historical texts points to usage by members of the imperial family (Sections 3.1.4; 3.2.3; 3.5; 4.3.1; 5.1.1), courtiers (Section 3.2.4), generals (Sections 4.1.1.1; 6.5.3), the aristocracy (Sections 3.2.1; 4.4.1; 4.4.2) high ranking government officials (Sections 3.4.1; 3.3.1; 3.1.3; 4.4.4), tribal nobility (Sections 3.3.2; 6.3.1 6.5.2) and wealthy individuals (Sections 3.1.2; 3.1.1). However, glass vessels are only found in a small

percentage of tombs from both societies, indicating that even among the elites glass vessels were quite rare.

- As the historical texts were written exclusively by men and focussed on male activities accounts of glass vessel use is male dominated in both cultures (Section 1.4.2). However, this is not borne out in the archaeological data, as glass vessels are found in tombs belonging to both men and women in both dynasties, indicating that women also used glass vessels (Sections 4.3.2; 6.5.6).
- The historical texts and evidence from tombs indicate that during the Jin Dynasty glass vessels were used by a small subset of the Han Chinese elite (Section 4.3.3). In contrast to this the Northern Wei tombs belonged to individuals from three different ethnic groups, the Xianbei, Gaoche and Han Chinese (Sections 6.5.2; 6.5.3; 6.5.4). However, their usage of glass vessels appears to be differentiated along ethnic lines. The imported vessels are used by the Han Chinese and Gaoche, while the locally produced vessels are found exclusively in Xianbei tombs in the imperial capital. There is evidence that the production and distribution of locally produced glass may have been controlled by the palace (Section 5.4.5). The emperors themselves were from the Xianbei ethnic group and chose Xianbei men to serve as their advisors, companions and military officers (Section 6.5.3). This could have given them greater access to palace products, such as the locally produced glass.

How were glass vessels used and what were they used for?

- Glass vessels were used predominantly as drinking vessels in both dynasties. Evidence for this comes from historical texts (Sections 3.2; 5.1.1), associated drinkware found in tombs (Sections 4.5.5; 6.4.3) and the limited range of vessel typologies, both local and imported, which consist predominantly of small drinking bowls (Section 4.5.5; 7.1.2; 6.4.3).
- The textual data suggests that in both dynasties glass vessels may have had other uses such as the serving of food (Sections 3.1.1; 3.1.2; 5.1.2). However, there is little evidence for this in the tombs.
- The glass vessels found in tombs of both dynasties consist of small bowls and beakers which were intended to serve as wine drinking vessels, for the deceased to use in the next life (Section 4.5.5)(Section 6.4.3). The glass vessels in the tombs of both dynasties also functioned as public symbols of status for the deceased and their families at funeral ceremonies (Sections 4.4.2.2; 7.3.3).

- During the Northern Wei glass vessels were used in Buddhist religious practice as reliquaries and offerings (Section 5.3). This was because glass had symbolic meanings in Chinese Buddhism, but it was also a practical material for displaying relics for veneration (Section 5.3.5).

Were glass vessels a valuable commodity and if so, what made them valuable?

- The Jin Dynasty texts suggest that glass was primarily valued for material properties such as transparency, brightness, luminosity and colour (Sections 3.2.4; 3.5; 7.1.1.1; 7.1.1.2; 7.1.2). This combination of properties is unique in this era and made glass vessels pleasing to use. In contrast to this, during the Northern Wei imported glass vessels were prized because they were exotic and came from distant lands and could therefore confer status upon the owner by demonstrating their ability to acquire such objects (Sections 5.1.1; 6.5.2). Conversely however the locally produced glass from the Northern Wei empire may have conferred status by demonstrating a close connection to the imperial throne and therefore access to such materials (Section 6.5.3).
- And so, because glass vessels were rare, unusual, and valuable, they served as symbols of wealth and power in both the Jin and Northern Wei. (Sections 3.3; 5.1.1).
- Glass vessels were given as gifts by the emperors to their subordinates. As gifts glass vessels served a practical function as drinking vessels, but also conferred status on their users and reminded them of loyalty owed to the giver (Sections 3.3; 7.1.3).

What differences, if any, are there between glass vessel usage and value in the Jin and Northern Wei Dynasties?

- During the Jin imported glass may have been received primarily as tribute by the imperial palace, and distributed as gifts (Sections 3.1.4; 3.5; 3.3; 7.1.3). This is contrasted by evidence from the Northern Wei dynasty, where ceramic copies of glass vessels were sold at a market in Luoyang (Section 5.2). The distribution of imported glass among Northern Wei subject peoples such as the Gaoche and Han Chinese also suggests that imported glass may have been available to purchase on the open market (Sections 6.5.2; 6.5.4). However, the presence of the ceramic copies indicates that genuine imported glass was rare and expensive and therefore not available to all.
- Glass was never indigenously produced during the Jin Dynasty. However, there is a possibility that the bright blue glass vessels found at some Northern sites may have been

locally produced. If this is the case local production of glass during the Northern Wei may have been stimulated by a more outward looking cultural attitude, the need to create a new and distinctive form of material culture and to supply the monasteries of the newly adopted religion, Buddhism (Section 5.4).

- During the Northern Wei glass vessels were used in Buddhist religious practice, but there is no evidence of this from the Jin Dynasty. This is primarily because during the Northern Wei Buddhism was more widely practiced and promoted by the state, while during the Jin Dynasty the religion was much less widespread (Sections 2.5.3; 5.3).

8.1 Future Work

There are several prospects for future work.

- A study of other materials, such as imported silverware could be carried out to investigate whether they have similar patterns of usage and value to glass vessels.
- The time period of the study could be expanded to include the Sui and Tang Dynasties. Particularly important would be the creation of an up-to-date database of glass vessels from these two dynasties, from which future work can be conducted. The usage of glass in Buddhist temple contexts, which begins in the Northern Wei Dynasty greatly expands in this later period, but usage in tombs appears to decline. Detailed analysis of this pattern should be conducted to assess the continued relationship between Buddhism and glass vessel usage.
- The geographical scope could also be expanded to include Korea and Japan, where similar types of imported vessels are used in both tomb and temple contexts.
- More extensive chemical analysis of the Northern Wei glass vessels could be carried out, especially trace element analysis, to determine whether they were locally produced in China.

9 Chronology

Han Dynasty 漢

206 BC~220 AD

Western Han 西漢 206 BC~8 AD

Eastern Han 東漢 25~220 AD

Three Kingdoms 三國

220~280

Cao-Wei 曹魏 220~265

Shu-Han 蜀漢 221~263

Wu 吳 222/229~280

Jin Dynasty 晉

266~420

Western Jin 西晉 266~316

Southern Dynasties

Eastern Jin 東晉

317~420

Liu-Song 劉宋 420~479

Southern Qi 南齊 479~502

Liang 梁 502~557

Chen 陳 557~589

Northern Dynasties

Sixteen Kingdoms 五胡十六國

300~430

Northern Wei Dynasty 北魏

386~534

Western Wei 西魏

535~556

Eastern Wei 東魏

534~550

Northern Zhou 北周

557~581

Northern Qi 北齊

550~577

Sui Dynasty 隋

581~618

Tang Dynasty 唐

618~907

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10.1 Chinese Primary Texts

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