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Exotic Beads and Jar Burials:

Social Status in the Old Kiyangan Village, Ifugao, Philippines

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of the requirements for the degree Master of Arts
in Anthropology

by

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ABSTRACT OF THE THESIS

Exotic Beads and Jar Burials:
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Professor Stephen B. Acabado, Chair

Trade and interaction are linked to the development of social ranking among premodern societies, indications for which are seen in mortuary practices, particularly with the existence of exotic burial goods. Excavations in the Old Kiyyangan Village (OKV) in the northern Philippine highlands present new information on the relationship between the introduction of imported goods, the most prevalent of which are beads, and increasing social differentiation. I investigate the relationship between both the quality and quantity of the burial beads and the juvenile individuals they were buried with. The varied amounts per grave could indicate an expression of social ranking in Ifugao society as supported by morphological analysis, preliminary XRF analysis, and ethnographic studies of Ifugao heirlooms. Additionally, the presence of Chinese-style glass beads in a Philippine site suggests a network of trade between Ifugao and other Philippine or Asian polities.

The thesis of Madeleine Amee Yakal is approved.

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Chapter 1: Introduction and Theoretical Orientation

Research Questions

This investigation explores the relationship between trade and shifts in social organization in the highlands of the Philippine Cordilleras during the latter half the second millennium AD. The analysis of traded goods has previously been linked to social status where an increase in exotic, prestige goods is associated with the presence of elites within a society (e.g. Bellina 2007; Bronson 1977; Carter 2013; Junker 1990, 1994). Through the examination of stone and glass beads excavated from the Old Kiyyangan Village (OKV) site in the Ifugao region of the Cordilleras, I identify trade and interaction networks between the Philippine highlands and distant communities. I discuss how these routes are associated with an alternative view of the development of social status in highland Philippines, which is different from the political economy models proposed by Junker (1999), and Barretto-Tesoro (2008) for the lowland Philippines. I explore this interest by describing the morphological characteristics of mortuary beads obtained from the OKV, Ifugao to establish the origins and movement of these purportedly imported goods. I argue, based on contextual analysis, that these beads are proxy indicators for social differentiation at the OKV.

By exploring these questions, it is possible to develop an understanding of highland trade and to address issues of Ifugao history. Earlier trade networks were already established in lowland Philippine communities, but based on data presented in this thesis I argue that the Ifugao were part of these exchange networks that linked them to foreign traders, especially those from China. Additionally, unequal distribution of glass and stone beads across sub-adult jar and supine burial contexts indicates that these artifacts were not available to all members of a community in a mortuary context, and suggests that access to these exotic, nonlocal goods was limited. Previous

ethnographic work on heirlooms such as beads and other ritual objects also contribute to our growing knowledge of Ifugao traditions and practices.

As the first analysis of bead artifacts in Ifugao, this research is not only an important step in the development of Ifugao heritage, but it is also implemental in reorganizing the role the Ifugao had in the larger scale of Philippine trade and interaction. Archaeological research and historical narratives in the Philippines are typically focused on lowland sites in the southern Tagalog region, and often neglect to include the highlands, such as Ifugao. Acknowledging highland sites and their different responses to concepts such as colonialism and trade are valid and necessary contributions to the discourse of Philippine history.



Figure 1 The Philippine Archipelago and its location relative to the Asian region

Theoretical Orientation

The Philippines is an archipelagic country in Southeast Asia, consisting of 7641 islands. It is more commonly known by its three main geographical regions: From north to south, they are Luzon, Visayas, and Mindanao, as seen in Figure 1. Within these regions are distinct ethnolinguistic groups and various polities that predate contact with Europeans. With the Philippine Sea to the east, and the West Philippine Sea to the west, the country

has an extensive record of foreign contact and long history of colonialism, most notably by the Spanish from 1565-1898.

Trade and Exchange

Prior to the Spanish colonial period, the Philippines interacted with Chinese traders (Fox 1967; Hung et al. 2013; Hutterer 1974; Junker 1994; Ronquillo 1987), which is documented primarily through Chinese goods (mostly ceramic tradeware) found in the Philippines. Renfrew defines trade and exchange as “the reciprocal traffic, exchange, or movement of materials or goods through peaceful human agency” (Renfrew 1969: 152). The terms trade and exchange are used interchangeably to express the economic relationship between two groups of people; in this case, the Philippines and China. I explore two different scales of exchange: long-distance exchange of beads between China and the Philippines, and the regional exchange between sites within the Philippines. By looking at these two different scales, people at these sites may be connected to other regional networks in mainland and island Southeast Asia. These interactions between China and the Philippines continued well into the Spanish colonial period, which influenced the ability of highland groups to successfully resist colonialism.

Culture contact refers to groups of people coming into contact and interacting with one another for any period of time (e.g. Gosden 2004; Hall and Silliman 2005). Colonialism is a more specific form of culture contact, in which there is some sort of dominance or power (Lyons and Papadopoulos 2002; Gosden 2004; Voss 2015). Lyons and Papadopoulos define colonialism generally as “territories that came under the sway of implanted settlements as well as the homelands from which entrepreneurs and colonists first set forth” (2002: 1). However, some scholars reject the standard relationship of the dominant/resistance model (e.g. Acabado 2017) to interject agency and innovation into the formation of material culture and identity. The distinction between culture contact and colonialism is imperative to any narrative about the Philippines in order to draw a distinct line between well-known historic periods of colonialism with Spain, and

less-defined pre- and protohistoric periods of trade and exchange, or culture contact, with non-colonial entities (e.g. China, Southeast Asia, and Pacific Islands).

Prestige goods

Material culture is indicative of status or behavior (Binford 1962). To some extent, all elites across cultures use personal ornaments like beads to display status (Bellina 2003; Carter 2013; Christie 1995; Clark 1986; Higham 2011; Miksic et al. 1994). Utilitarian goods are dichotomized with wealth or prestige objects: Utilitarian goods are related to subsistence strategies, household needs, and other normalized activities; in contrast, prestige goods are associated with symbolism, ideology, and elites (Carter 2013: 6). Brumfiel and Earle define wealth and prestige objects as artifacts of status “used in display, ritual, and exchange” (1987: 4). Renfrew (2001) argues that in the case of prestige goods like copper, gold, and other similar materials, there is a “crucial nexus surrounding prestige goods – value, measure, and exchange” (2001: 102). He noted that in many early societies, prominent individuals expressed their high status with possession of “rich artifacts made of exotic materials and fashioned into shapes of evidently symbolic significance” (Renfrew 2001: 104). Elites possess these ornaments or artifacts to gain legitimation in socio-political hierarchies (Hodder 1980: 10). While prestige goods may be made from local raw materials, in some cases it is exotic, or nonlocal, materials and goods that have a distinct prestige and higher wealth due to their limited availability or necessary energy expense for acquisition (Carter 2013; Helms 1992).

The factors for identifying and measuring prestige objects varies. Some scholars have proposed systems for comparing items of prestige based on assigned value. Barretto-Tesoro (2003) measures prestige value by assigning and counting value based on the following criteria: raw

material, source of material, time and energy required to manufacture and acquire an object, and cultural meaning (2003:201). In Chapter 3, I do not use a value system (Barretto-Tesoro 2003), but instead a morphological approach (Beck 1928; Santiago 1992) and contextual analysis to identify the role of bead use in exhibiting status at OKV. The high quantity of beads in a small number of burials is suggestive of differential social status across. The morphological analysis allows for future comparison of OKV beads to other beads in the Philippines, which may be indicative of trade and shared behaviors between different Philippine groups.

Social status

Scholars in Southeast Asia are often concerned with emerging socio-complexities (states or chiefdoms) who have access to extensive trade routes to acquire exotic prestige goods (see Bellwood 2013, Carter 2013, Christie 1995, Higham 2002, Junker 1999, Stark 2008). The Philippines, however, did not reach the threshold of state level until after the islands were unified under the Spanish rule, but there is evidence for social ranking within a hierarchical society based on exotic material culture and Chinese accounts of maritime Philippine trade (e.g. Bacus 2004, Junker 1999; Peterson 2003).

Berreman (1981: 8) defines social inequality as the combination of relevant differences within a society (inequality) with the behavioral expression of these differences (dominance). A ranked society can be understood in opposition to an egalitarian one, in which there is equal access to positions of prestige and means of production (Fried 1967). In a ranked society, there is “differential access to positions of high status and prestige, with fewer positions than there are people to occupy them” (Ames 2004: 489). Rank may be ascribed or achieved. A ranked society differs from a stratified society in that a stratified society has differential access to positions of

high status and access to basic resources, and all members are ranked by socially-defined, nonkin characteristics (Berreman 1981:10). I use the term *ranked* to describe the social organization at OKV, as it is indicative of status (elites versus non-elites) in relation to access to prestige goods. Beads are a proxy indicator for social status as indicated by their distribution across OKV burials.

The emergence of social complexity varies across the Philippines. There is a dearth of archaeological evidence between 500 BCE to 500 CE; however, the limited artifacts found in the Philippines from this period, including the *lingling-o* earring/pendant, indicate people's participation in trade with polities in Mainland Southeast Asia (Thailand and Vietnam) and Island Southeast Asia (Sarawak) (Bacus 2004: 263). The *lingling-o* is an early body ornament found across Southeast Asia. Trade with China expanded initially during the Tang Dynasty (AD 618-907) with the closure of the silk road trade, and went through fluctuating periods of trading. The Philippines saw a rapid increase in tradewares by late Song (1127-1279) and Yuan (1280-1386) and again during the following Ming Dynasty. During these periods, various proxies for socio-political complexity became evident, such as differential burials, exotic material goods like the *lingling-o* and beads, and maritime trade ports (Bacus 2004).

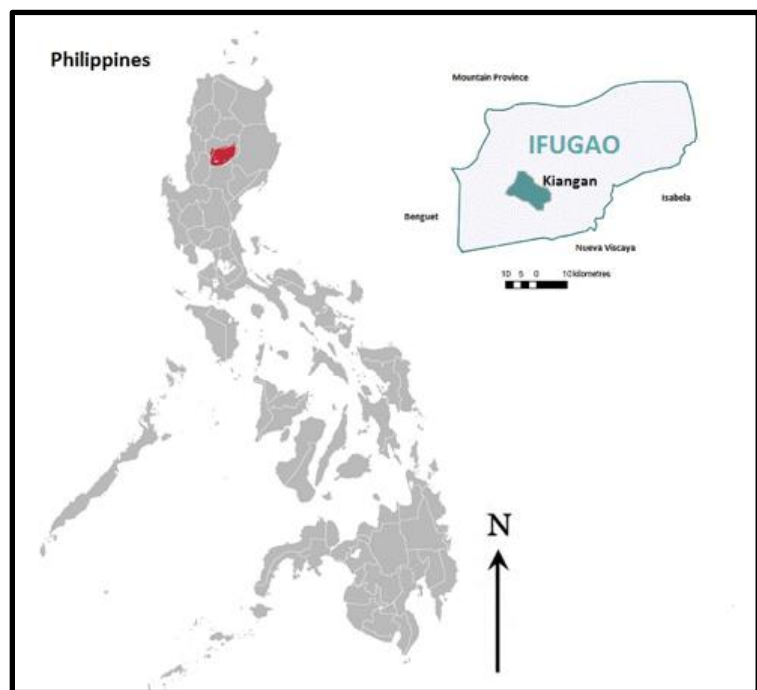
Research has exclusively focused on the lowland Tagalog and Visayas regions because of their close proximity to the coast, the breadth of supporting historical documentation, and the national narrative that highlights Manila in lowland Luzon as the cultural center of the Philippines. The dominant Philippine narrative neglects to acknowledge the agency and participation of highland indigenous groups as part of the country's national history, and subsequently infers that indigenous groups, particularly the Ifugao, were not as "progressive" as lowland Hispanized groups. I contend that by connecting Ifugao to interregional trade routes with China, and the subsequent expression of status through exotic prestige goods, a portion of Ifugao history at Old

Kiyyangan Village can be highlighted as part of the national history of the Philippines. The following section of Chapter 1 introduces the Ifugao and identifies how past research formalized the dominant Philippine narrative, and how archaeology attempts to address these issues.

The Ifugao: issues of interaction

To address themes of trade and status, I analyze the OKV site, located 4 km away from the Kiangnan municipality. The local origin myth of Kiangnan identifies OKV as the first settlement in Ifugao. Based on archaeological excavations, the earliest human occupation of the site is ca. 1000 CE, followed by a rapid expansion of the village and shift to wet-rice agriculture after 1600 (Acabado 2013, 2015, 2017). It is during this later time period that I identify high quantities of beads as exotic burial goods distributed across the site.

The term *Ifugao* refers to both ethnolinguistic people and the Philippine geographical region. Ifugao is a landlocked province in the Cordillera Mountains on the main island of Luzon (Figure 2), characterized by rainy weather and mountain ranges as high as 2000



meters above sea level. The entire **Figure 2** The Philippines; Ifugao province highlighted. province is 2,628 square kilometers, with a current population of approximately 190,000 individuals spread across 11 rural municipalities. Ifugao is widely known for its massive rice

terraces built directly into the mountains, making the region a popular tourist destination for those both in the Philippines and abroad.

Scholarly research in the region includes historical documents, ethnography, and more recently, archaeological excavations. The focus is often on the age of the terraces, an interest that has fascinated scholars since contact period (Acabado 2009; Barton 1919; Beyer 1955; Keesing 1962). The earliest ethnohistoric recordings of the rice terrace are from a Spanish account by Fray Molano, a Spanish friar who mentioned the terraces in a letter in 1801 (Scott 1974: 199). The Spanish had been in the region since 1572, but no formal description came until Spanish occupation of the municipality of Kiangang in the 1750s. Keesing (1962: 319) suggested this lack of formal records implied the terraces were recent, not archaic. His justification for such a conclusion was that the terraces are magnificent visual feats, and if the Spanish had seen them, they would have mentioned it in their records. Dozier (1966) agreed with the later date of origin, and Lambrecht (1967) supported a later date with lexical and linguistic evidence found in the Ifugao romantic tales, the *hudhud*.

Conversely, several scholars proposed a much earlier date for rice terrace conception. Barton's (1919; 1922; 1930) and Beyer's (1948) ethnographies embellished the antiquity of the Ifugao, and suggested the terraces were built 2000-3000 years BP. Their dates were based on observations rather than concrete data. Maher (1973) published radiocarbon dates obtained archaeologically from Banaue, a municipality 30 kilometers away from Kiangang, and his results indicated that the earliest date for rice terrace construction was 2950 BP. However, the depositional context and in-built age of Maher's samples weaken his argument, and represent use of the region for human occupation, not rice terrace construction or farming (Acabado 2009: 804-805). Instead, Acabado (2009; 2012; 2017) proposes a much later date for the construction of terraces explicitly

for wet-rice cultivation. Based on radiocarbon determinations, he suggests that the earliest evidence for human activity in Old Kiyangan Village is ca. 1000 CE, and the main subsistence was taro, not wet-rice (2013, 2015). Wet-rice agriculture emerged in the region by ca. 1650. Based on population demographics in the nearby Magat Valley and early Spanish accounts, Acabado (2017: 8-9) argues that the onset of Spanish colonialism in the 16th century resulted in the active resistance and migration of indigenous peoples from the lowlands to the Cordilleras to evade Spanish control. With the influx in population, the Ifugao used intensive wet-rice terrace cultivation to consolidate political and economic resources. This concept, termed pericolonialism, refers to “groups who were not directly colonized by a foreign force, but shows that parallel culture change with groups who were directly colonized” (Acabado 2017: 3). By this model, the rice terraces and wet-rice agriculture are likely only 300 years old, instead of the earlier assumptions that they were up to 3000 years old. Pericolonialism suggests that the Ifugao were not controlled by the Spanish, but colonization did have an effect on their migration, settlement patterns, and subsequent shifts sociopolitical organization.

Today, the Ifugao practice both wet-rice agriculture and swidden farming, and their ethnic identity is “largely based on the idea of being unconquered” (Acabado 2017: 3), unlike lowland Hispanized populations. With this image, however, comes attached a negative stereotype that if the Ifugao were unconquered, it was because they were isolated in the mountains of the Cordilleras and they had little to no major contact with outsiders until American Christianization in the 1900s. I argue that bead artifacts at OKV are indicative of trade with lowland Philippine groups and Chinese merchants, therefore negating the contention that the Ifugao were isolated from the rest of Luzon. This concept challenges the dominant Philippine narrative, and attributes agency to the Ifugao by acknowledging their participation in a large-scale China-to-Philippines trade network. I

also suggest that prestige beads are a proxy indicator for social ranking at OKV: Along with population increase and wet-rice intensification, the Ifugao utilized exotic beads to mark rank amongst community members and express wealth, similar to how they also did with terrace ownership to exert sociopolitical control over the population. (Acabado 2017). The increase in imported tradeware ceramics at OKV (Acabado 2017: 8) and faunal remains associated with feasting activities (Lapeña and Acabado 2017) beginning around mid-1700s, also supports this contention.

The details of the age debate for Ifugao rice terraces are an intrinsic component for understanding the contribution this thesis has to the overall archaeological record. Identifying foreign prestige objects in a small rural site broadens our understanding of past Ifugao social ties, organization, and cultural practices. By attributing agency to past Ifugao people, this research also contributes to returning agency to modern Ifugao people as well and gives them the opportunity to redefine their history as Ifugao people.

Conclusion

In this chapter, I have introduced my research questions and theoretical orientation concerning trade and exchange and its relationship with social ranking at OKV. By analyzing OKV beads as a proxy for social status, I argue that the Ifugao at OKV were part of an interregional exchange network as early as 600 years before present. This contention challenges the dominant historical narrative of isolation and proposes the Ifugao were actively engaging other polities in the Philippines.

The succeeding chapters provide details about the role of imported beads in the development of Ifugao ranking. I also offer a survey of research on trade, exchange, and social

complexity carried out in the region (Chapter 2). In Chapter 3, I provide details on the methodology that I applied to analyze beads excavated at OKV. Results of the analysis and interpretation are proved in Chapter 4. Chapter 5 discusses the implications of my findings and provides future research that will strengthen this investigation.

Chapter 2: Trade and Exchange, Status and Wealth

Archaeological research in Southeast Asia provides information that can be used to infer how trade and social complexity are linked, and also to understand the role prestige goods have in this relationship. Prestige body ornaments are first seen in a widespread network of trade in island Southeast Asia at approximately 500 BCE. Over time, the style of these ornaments and their associated use has changed to reflect different values of different peoples. The increase in diverse exotic goods within these growing networks suggests the emergence of a social ranking system in which elites use these objects as markers of status. In the Philippines, specifically the lowlands, differential mortuary practices are evidence for social complexity, e.g. jar burials, secondary burials, and commingle burials (Bacus 2004: 263). I discuss the role beads played in these networks of trade and interaction. This research is the first analysis of its kind for a collection of beads in the Philippines. It expands upon previous studies in this developing body of knowledge using ornaments as proxies for trade and social complexity in Southeast Asia. I also discuss ethnographies that have been recorded on the Ifugao, and how this may supplement archaeological research in the area.

Exchange in Southeast Asia

Prior to the use of body ornaments, the first evidence of culturally transmitted behavior in Southeast Asia was Hoabinhian type during the Upper Paleolithic period (30,000-20,000 BP). Based on their appearance across Southeast Asia and as far as Australia, Hoabinhian artifacts suggest the widespread distribution of ideas and technologies spread cross-culturally (Bowdler 2006). Maritime movements continued into 1500-1000 BCE, as Southeast Asian peoples populated the Polynesian islands (Bellwood 2004). The Neolithic (2500-1500/1000 BCE) and

Bronze Age (1500/1000-500 BCE) periods contained regional interaction networks of people trading artifacts, including shell beads in Thailand (Higham and Thosarat 1994).

During the subsequent Iron Age, local networks expanded to include intensified contact with South Asia and coastal sites along the West Philippine Sea (Manguin 2004). As previously mentioned in Chapter 1, one such item is the lingling-o. The lingling-o is a type of nephrite ear ornament that has been described as “the most widespread form of jade ornament in Southeast Asia” (Hung et al. 2007). The lingling-o is fairly standardized in size, style, and manufacturing method (Hung and Bellwood 2010) and found in the Philippines, Vietnam, and Cambodia (Loofs-Wissowa 1982). It has been suggested that their rarity implies prestige (Bellina 2007), and raw materials for production are from Taiwan (Hung et al. 2007). Despite its rarity, the widespread movement of an object with a standardized shape and style implies that the lingling-o possessed attributes of value and prestige that validated its passage from one community to another. Similarly, other body ornaments, like beads, may have possessed qualities of value and prestige due to its labor-intensive trade movement.

Studies on trade between South Asia, China, and Southeast Asia are often oriented around the influence foreign polities had on indigenous Southeast Asian social complexity (e.g. Manguin 1991, 2004; Wheatley 1983; Wolters 1999). Dzung (2011: 11) has argued that Southeast Asian networks of exchange existed independently of South Asian and Chinese networks, which were incorporated into the pre-existing Southeast Asian networks during the late Bronze and early Iron Ages. These Southeast Asian networks included stone and glass beads (Bellina 2003, 2007; Carter 2013) amongst other notably prestigious artifacts moving between regions.

Scholars have explored many theoretical orientations for emerging social complexity in Southeast Asia. Bronson (1977) proposed a model based on waterways in which inland

communities moved goods along the river system from center to center, until they arrived at the primary center at the mouth of the river basin. From this location, polities moved goods outwards to overseas consumers. This hypothesis has been tested elsewhere in Southeast Asia (see Christie 1990) and specifically the Philippines (Junker 1994, as discussed in more detail later in this chapter). Also looking at movement on water, Glover (1989) proposed that interaction between South Asia and Southeast Asia occurred as early as the late first millennium BCE. He suggested long-distance maritime trade with a strong Indian influence. Christie (1990) also advocated for maritime trade as an integral component to social complexity by looking at the Malacca Straits and Java Sea regions. The Dongson culture in Vietnam is well-known for its bronze technology, which highlights its socio-political complexity (Bellwood 2007; Kim 2010). Higham (2002) suggested exotic goods coming to Southeast Asia from India and China were integral to the emergence of urbanism in the Mekong Delta of Cambodia.

Beads are among the many prestige objects people moved across these trade routes. Scholars have sought to identify bead trade routes and ensuing socio-political organization using different methods of analysis. Bellina (2007:28-29) analyzed over 500 beads from Indian sites, 29 of which came from Arikamedu in India, and 182 Ban Don Ta Phet beads from Thailand. Her analytical criteria pertained to the type and quality of the beads, the definition of morphologies, drilling modes, finishing techniques, and the standard of craftsmanship. After separating the beads based on these differences, she acknowledged distinctions between beads from the two regions, but she maintained that over time the Southeast Asian beads become more “Indianized.” She concluded that Southeast Asian people adopted these Indian styles from Indian craftsmen and the ornaments became exotic prestige goods based on their foreign quality (Bellina 2007). While Bellina’s work has been influential in acknowledging the importance of beads as markers of trade

and status, its limitations are found in that analysis is qualitative and therefore predisposed to be subjective in nature.

To address this problem, scholars have utilized compositional analysis, including geochemical and elemental studies (e.g., Carter 2013, 2016; Li et al. 2014; Theunissen et al. 2000) to supplement morphological and contextual studies of trade and exchange. Methods include minimally invasive Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS), and non-invasive portable X-ray Fluorescence spectrometer (pXRF), among other forms of analysis that seek to identify elemental and chemical components of an artifact. Carter (2013) uses LA-ICP-MS, morphological, and contextual analysis of stone and glass beads from sites across Cambodia and Thailand to identify trade, exchange, and socio-political organization. She argues that inland communities and elites in the Mekong Delta expanded their alliances through bead trade, although she proposes the network existed prior to Indian influence. They were traded to these inland communities from coastal sites in exchange for upland raw materials. These networks were a means for strengthening alliances between polities. Carter also recognizes that beads were only retrieved from a small number of burials, and some individuals had a higher quantity of beads than others within the same community. This may suggest that these burials belonged to important elites who had access to alliance-building exchange networks (Carter 2013: 425).

Like Carter and Bellina, I also use beads excavated from a highland site (OKV) to argue that trade networks existed between the Philippines and China, and the prestige goods exchanged between them were used to express social rank; however, there are several issues when analyzing bead artifacts. As previously mentioned, attributing a scale based on high and low production quality risks imposing a subjective analysis upon a collection. Separate analyses may qualify production, style, or quality differently. Additionally, without a geochemical compositional

analysis, and a well-established comparative collection, archaeologists are limited to contextual data. This thesis is an important component for establishing more recorded bead collections in the Philippines. Although this thesis focuses on morphological and contextual data, in Chapter 5 I discuss the potential for future research on Philippine beads using elemental analysis.

A second issue when discussing prestige goods and social status in the Philippines is the availability of sites for analogy. A majority of these models and proposals are implemented in other polities in Southeast Asia, where scholars discuss social complexity and social ranking in the realms of statehood, a major contingent of which is a large centralized population. While statehood was achieved relatively early on in other areas of Southeast Asia, the Philippines maintained small-scale communities that nevertheless participated in interregional trade. The options for similar sites in the Philippines for comparison are somewhat limited.

Despite this, scholars in the Philippines have investigated the relationship between social status and exotic goods at a number of sites. During the period 500 BCE to 500 CE, differentiation related to status emerged through a variety of behaviors in the Philippines. Burial style is one such way that suggests social ranking, where artifacts such as beads and body adornment are placed (Bacus 2004). Manunggul Cave Chamber A in Palawan, an island in the West Philippine Sea nearby to Sulu, dated to the first millennium BCE. It contained 78 broken jars in a burial context, alongside agate, jade, and shell beads, and other prestigious body adornments. In Luzon, during the same time period, bones from 60 individuals were interred at Arku Cave with ornaments including the suggestive lingling-o, as well as stone and shell beads. Pintu Rockshelter, also on Luzon, contains glass beads in a burial context. Moving further south along the archipelago, anthropomorphic jar burials at Ayub Cave in Mindanao showcase a secondary burial practice in which jar covers took the shapes of human heads (Bacus 2004: 263-264).

As mentioned in Chapter 1, Barretto-Tesoro (2003) measures prestige value by assigning and counting value based on the following criteria: raw material, source of material, time and energy required to manufacture and acquire an object, and cultural meaning (2003:201). Barretto-Tesoro analyzed artifacts from several sites across the Philippine lowlands, including Palawan, Sorsogon, South Cotabato, Surigao del Norte, Bolinao, and Calatagan. She determined that traded items held more value: Chinese iron was preferred over local iron. The next most valuable artifacts during the Protohistoric period were porcelain and stoneware. After that, ornaments, such as glass beads and bracelets, were also extremely prestigious. Of the many Chinese artifacts to be exported, blue and white tradeware was one of the most popular and persistent trends. Blue and white ware has been retrieved from multiple shipwrecks in the Pacific near East Asia and island Southeast Asia (Carswell 2000; Cayron 2005; Goddio 1988) as well as from terrestrial sites in the Philippines (Acabado 2017; Dizon 1994; Barretto-Tesoro 2003; Melendres 2008; Orillaneda 2008). Excavated shipwrecks include the Pandanan Shipwreck, and “Wreck 2” from the Royal Captain Shoal in the Pacific. The first written mention of trade between the Philippines and China occurred during the Ming period (1368-1644); however, traders likely began building relations at the end of the 12th century as Song navigators travelled to Borneo and other Southeast Asian polities (Goddio 1988: 125).

Emerging social complexity became more evident during the proto-historic period prior to Spanish contact in 1565 and continued into the colonial period. Studies focused on lowland groups emphasizing trade, particularly maritime voyages analyzed through shipwrecks. Cayron (2005) analyzed Indo-Pacific beads from the Pandanan Shipwreck off the coast of Palawan: While his conclusions were more indicative of trade than of social status, it can be inferred that the beads were prestigious goods for elites based on their exotic nature on a foreign ship and associated

goods (porcelain, tradeware ceramics, etc.). Cayron's dissertation work is an important step in acknowledging the role beads can have in theorizing social status and trade. Particularly in OKV, a landlocked site surrounded by mountainous terrain, exotic goods may have had a high value due to the long and arduous journey traders took to import them to the mountains. Currently, there are no archaeologically excavated materials for comparison from other areas in Ifugao or the Cordilleras, but Spanish documents identify the difficulties of colonizing the "isolated" region.

Despite OKV being inland, coastal and riverine models provide an opportunity to investigate how exotic goods came to the Philippines at all. Junker (1990) suggests a coastal-based trade interaction system dominated Philippines chiefdoms. Trade in the West Philippine Sea was essential to lowland Philippine polities' maintenance of elite status as exemplified in the Bais Region of Negros Oriental. Junker stresses the presence of "chiefdoms" in the lowland Philippines. These chiefdoms, similar to Polynesian polities, features a tribute structure, craft specialists, and the movement of agricultural surplus into the chief's alliance network at community ritual events (Junker 1990: 175). The elements of a chief's control were based on a chief's, or datu's, vertical alliances for collecting tribute from political subordinates (non-elites in a tiered society); horizontal alliances for the exchange of inland resources; and direct control of slave labor (Junker 1990:176).

Key to Junker's argument is her adaptation of a coastal-centered, maritime- trade-oriented Philippine chiefdom structure (1990:1 81). This model contextualizes trade for the lowlands, but must be modified to better understand trade in region like Ifugao, which does not have direct access to coastal routes. Archaeological evidence at Tanjay in the Bais Region supports Junker's hypothesis that social stratification within a two-tiered hierarchy developed before intensive contact and trade with the Asian mainland (Junker 1990:195). The Tanjay River controlled trade

with lowland domestic ceramics flowing inward, and inland agricultural and woodland products flowing out. Trade with China did not create new hierarchical standards, but instead it introduced a new elite “exotic” good into the chieftdom system. Yankowski’s (2004) report of Tagbilaran City in Bohol, central Philippines, supports Junker’s model of interdependent trade. The site was an active participant in early inter-island trade between 400 BC and AD 900 as evidenced by Indo-Pacific and Chinese glass beads, iron tools, earthenware pots, and human burials (Yankowski 2004:52-53). By the 15th-16th centuries, upland groups traded forest materials (rattan, beeswax, honey, tree resin, spices, animal pelts) for lowland products (pottery, textiles, fish, salt, metal tools, and possibly rice) (Junker 1996:394-396). While these were primarily utilitarian objects, trade was prompted by both competitive feasting, and also gift exchange for other status and foreign goods (Junker 1996:394-401).

Acabado (2017) explores socio-political organization of the Ifugao in the Philippine highlands during the Spanish colonial period. He suggests that Spanish forces in the lowlands pressured Filipinos to actively migrate north to the Cordilleras in order to maintain political autonomy. This resulted in new methods of socio-political organization to cope with a larger population, including social rank determined by access to rice, rice terraces, and exotic goods. The beads at OKV were used in burials to express this social rank.

Ifugao ethnography may help frame an understanding of the OKV archaeological record, particularly on the relationship between imported goods, wealth, and status. Although caution is always taken when using ethnographic analogy, the shallow time period of the Ifugao sequence could suggest a continuity of practice. The next section of this chapter discusses how social ranking and prestige are addressed in Ifugao ethnographic accounts.

Indigenous Ifugao Social Rank

Certain aspects of Ifugao culture could provide ideas about social ranking – such as specific textile designs used by a particular status – but these do not survive the archaeological record. For instance, burial blankets or shrouds in the traditional Ifugao colors of red, black, and yellow do not preserve in the deposition process. Oral tradition indicates different types of woven cloths are used in exhumation rituals (ancestor veneration), in which the bones of the deceased are cleaned and reburied.

Ethnographies indicate that Ifugao is a ranked society; individuals have differential access to wealth and prestige goods (Acabado 2017; Conklin 1980; Dulawan 2005). An individual's or group's importance in relation to others within their society expresses itself in a multitude of ways. Economically, Ifugao social status is dependent on rice terrace ownership. Politically, social status is directly connected to and expressed through social organization, or how individuals view themselves in relation to one another. There are several examples of how social status and prestige are linked as indicated in the following ethnographic examples.

Ifugao sociopolitical organization is dependent on the ownership of rice terraces and the ability to host feasts, rites, and rituals that serve the entire community. The Ifugao elite are known as the *kadangyan*. The *kadangyan* have year-round access to rice and their status is marked by the ownership of rice terraces, year-round access to rice, and the ability to distribute rice to the community through feasts. The poor are known as the *nawotwot*. Unlike the *kadangyan*, this group of Ifugaos is associated with swidden agriculture instead of wet-rice farming. The *nawotwot* typically work at the rice fields of the *kadangyan* in exchange for rice (Dulawan 2005; Remme 2014).

The Ifugao identify two groups of rites used for maintaining family well-being or for attaining family prestige. The latter of the two, under the *hongan' di kitaguan*, are rights for which a family can attain prestige. These include *kanong*, *honga*, *kolot*, *ballihong*, *balog*, *uyaui*, and *hagabi*. *Kanong* can be sponsored by any family to gain favor from gods and the spirits of ancestors. *Honga* is the generic term for prestige and well-being rites; specifically, in this context it calls for animal sacrifices to maintain family well-being and economic prosperity. *Kolot* is a coming-of-age hair-cutting ceremony for the male child of a wealthy couple. *Ballihong* is a rite for a boy or girl child to gain favor from the gods in order to secure social prestige and desirable attributes. In order to obtain *kadangyan* rank, or the top Ifugao elite rank, a couple must sponsor *balog*, *uyaui*, and finally *hagabi*, among other prestige rites depending on their current social status (Dulawan 2005: 31-41). These three rites can be used to elevate a couple's status from a lower prestige status to the elite *kadangyan* rank.

Ritual chants are sung as part of these many prestige ceremonies for performance of major rights. The Tawali Ifugao, local to the Kiangnan municipality and nearby to OKV, identify five forms of chanting: the *baltung*, *hudhud*, *ap-apnga*, *liwliwa*, and *alim*. The *baltung* and *alim* are ritual chants and the remainder are non-ritual chants sung as entertainment during long occasions (Dulawan 2005: 249). The *baltung* literally means "stamping" and is chanted during one of the many rice rites, as well as during prestige rites at the vigil on the death and exhumation rites of affluent individuals (Dulawan 2005: 249). The *hudhud* is another form of chanting stories sung at harvest in the rice fields, during the vigil on the death of an individual who died of natural causes, and at the wake in the *bogwa*, or the exhumation rites. The major themes of the *hudhud* address Ifugao ideals of love, marriage, and wealth (Dulawan 2005: 260). The *alim* is a unique chant used during prestige rites on the death and cleansing ceremonies of the *kadangyan*, the elite. It is distinct

through its use of repetitive syllabic notations, and thus one of the more complex chants to memorize and perform. It tells the story of a husband and wife, Ummangal and Bugan (Dulawan 2005: 289-290).

These ritual rites and chants stress the value of social status to the Ifugao. Themes of wealth are common among various chants and are the driving force for certain rites that elevate a couple to *kadangyan* elite status. As Dulawan (2005) details, many of these rituals call for expensive sacrifices of chickens, pigs, and carabao. These animal sacrifices complete the rituals, display one's wealth status, and also to feed the community members who participate in these important ceremonies. Wealthy *kadangyan* Ifugaos who own rice terraces are the primary ritual performers and hosts. However, it is important to note that the stress and attention placed on achieving *kadangyan* status do not necessarily create rivalries between separate social ranks. The Ifugao have respect for individual human dignity and do not use social position to suppress others who are not of *kadangyan* status. Prestigious rituals and rites, though specifically for the elite, serve the entire community. All community participants "drink from the same cup, and eat together in a public feast" which is "indicative of the high premium placed on human respect and dignity" (Dulawan 2005: 293). The *nawotwot* do not have access to rice all year round and rely on community rites ceremonies to eat rice and other expensive meat products such as carabao.

Ifugaos highly regard material wealth and are constantly striving to improve their economic position to attain a higher social status (Dulawan 2005: 293). These rites and rituals serve as community markers of transitioning and displaying one's status. While Dulawan carefully outlines the chants, rites, and rituals necessary in order for Ifugaos to attain prestige, his oral literature record does little to define what materials were used in these rituals. Other than what animals are needed for sacrifices and what plants are used (e.g. betel nut), there is little detail on the attire used

by affluent Ifugaos. Rituals and rites call for a “rich man’s attire and ornaments” (Dulawan 2005:34) in order to participate, but the oral literature does little to identify what precisely a rich person’s attire and ornaments look like. Does this attire include beads in the form of necklaces or other jewelry? However, a common practice among the Ifugao today is the use of heirloom beads. In this next section, I discuss what constitutes an artifact as an “heirloom” and the use of heirloom beads, or ornaments, in Ifugao.

Heirlooms

Rice is the most important marker of status for the Ifugao (Acabado 2017; Dulawan 2005); however, artifacts such as heirloom beads are also considered an important artifact for Ifugao status (Francis 1992; Remme 2014). Francis defines heirlooms as “items formally recognized by the community to have personal value and intrinsic worth, and actively passed down from family member to family member” (1992: 6-7). Lillios calls heirlooms “important memory sites” that can be better defined by “what they do, rather than by what they are” (1999: 244). Her view of heirloom objects is restricted to those of symbolic meaning, rather than economic, social, or political. The value of heirloom objects is particularly compelling in ranked societies, according to Weiner (1985):

“Persons and groups need to demonstrate continually who they are in relation to others, and their identities must be attached to those ancestral connections and figure significantly in their status, ranks, or titles. To be able to keep certain objects that document these connections attests to one’s power to hold oneself or one’s group intact. For to give up

these objects to lose one's claim to the past a working part of one's identity in the present" (Weiner 1985: 2010).

Lillios (1999) proposes a model for the circulation and disposal of heirlooms in which it is the "tension between these competing sources of identity and rank [ascribed versus achieved status] that ultimately generates the conditions that lead to the use and circulation of heirlooms" (1999: 255-256). Through these viewpoints, heirlooms can be understood as hereditary objects used to indicate the status of an individual.

Through a study of Cordillera heirloom beads, Francis identifies Ifugao beads as heirloom beads in the Northern Philippines at the 15th century (1992: 6-7). The date is somewhat speculative and based on oral histories, but nevertheless conveys the continuity of family and tradition as implied in heirlooms. Heirloom beads are ethnographically recorded (Dulawan 2005; Remme 2014) as objects of prestige limited to Ifugaos with substantial wealth and status. They are reserved for ritualistic occasions such as funerals, weddings, or rice harvest festivals and they are highly endeared objects of respect.

Beyond Francis's account, no other record exists detailing the uses and history of Ifugao beads. Comparisons between heirlooms and archaeological artifacts are speculative; however, at the time of his study, Francis noted that Kiangnan heirlooms were mostly wound, leadless, Chinese carnelian (stone) and glass (1992: 6). His exact reasoning behind the Chinese identification is unclear, and possibly based on visual comparison and speculation. Figure 3 features contemporary glass and stone heirloom beads strung up for use by a Kiangnan Ifugao family. The beads have been passed across multiple generations through the same family, with their precise age since possession

unknown. They are a combination of glass and stone beads, and the stone are considered financially more expensive to acquire, thus making the beads more valuable to the family.



Figure 3 Ifugao heirloom beads, courtesy of the Martin family, Kiangan, Ifugao.

Future directions for this research are to identify bead links between highland groups, highland and lowland groups, and Philippine and foreign traders. They can link trade networks, modes of interaction, and culturally transmitted behaviors. Social elaboration is multifaceted, incorporating age, gender, identity, and other important factors of personhood into the many layers that make up individuals and society. This thesis is a small step towards understanding past Ifugao social dynamics and the growth of Old Kiyangan Village as a part of the larger Philippine history.

Conclusion

In this chapter, I have highlighted a brief history of archaeological research pertaining to trade and changing social complexity in Southeast Asia. Beginning in prehistory and intensifying during the proto-historic period, trade in Southeast Asia sparked debates as to how influential polities were over one another, and how much local trade existed before the adoption of interregional trade. Beads were part of exchange networks between India and Southeast Asia, and between various Southeast Asian polities themselves. Objects of prestige en route from one polity to another, e.g. Dongson drums from China to Vietnam, are elite activity and access to prestige goods. I also reviewed emerging social complexity in the Philippines, evidence for which is most prevalent through the analysis of prestige goods, and differential burials. I described ethnographic accounts depicting the Ifugaos' use of prestige good for shaping their social organization, namely through the use of heirloom beads by elites. Understanding the context of trade and prestige in Southeast Asia, the Philippines, and contemporary Ifugao is important for theorizing how these themes were present at OKV and what implications they have for the Philippines as a whole.

Chapter 3: Methodology and Data

Beads are a useful medium for studying human behavior because they are portable, wearable, able to be decorated, and they preserve well in the archaeological record (see Bar-Yosef 2014; Bellina 2003; Carter 2013; Kenoyer 2001; Kenoyer et al 1991; Stiner 2014). In this chapter, I describe the OKV site, and the methodology I used for collecting data. I use morphological and contextual analysis to address my argument that beads at OKV are exotic goods indicative of social status within the Ifugao community. I also include preliminary, qualitative compositional analysis with x-ray fluorescence (XRF). XRF is a non-destructive method of identifying the elemental composition of an artifact, including stone and glass. At this time, results are insufficient for conclusions outside of a non-statistical analysis of a small sample size. However, the analysis serves as a starting point for future research looking to compare the elemental composition of Philippine and Chinese beads, and provides a more objective approach to the data.

Old Kiyangan Village

The Ifugao Archaeological Project (IAP) excavated at Old Kiyangan Village (OKV) in 2012, 2013, 2015, and 2016. The site is an active rice field and relatively flat compared to other terraced fields that dominate the landscape. Local oral history indicates that this area is the origin of the Tuwali-Ifugao people, and the Ifugao community requested an investigation of the area. The town of Kiangnan is about 4 km away from the OKV site. OKV was first excavated to explore the relationship between people and the landscape, as well as to address the antiquity debate of the rice terraces. Initial excavations and radiocarbon dating (Acabado 2009, 2012) determined the age of the terraces to be closer to 300 years instead of 3000, contrary to what previous scholars had argued (Barton 1919; Beyer 1955).

From 2012-2016, the crew opened 20 excavation units: 11 shovel test pits (STP), some of which became full units; and 3 test units (Figure 4). Depths range between 1.5 and 2 m to culturally sterile soils. The crew utilized trowels, shovels, and pick axes with the goal of reaching the sterile layer of sediment. The artifact assemblage includes over 18,000 artifacts including human remains,

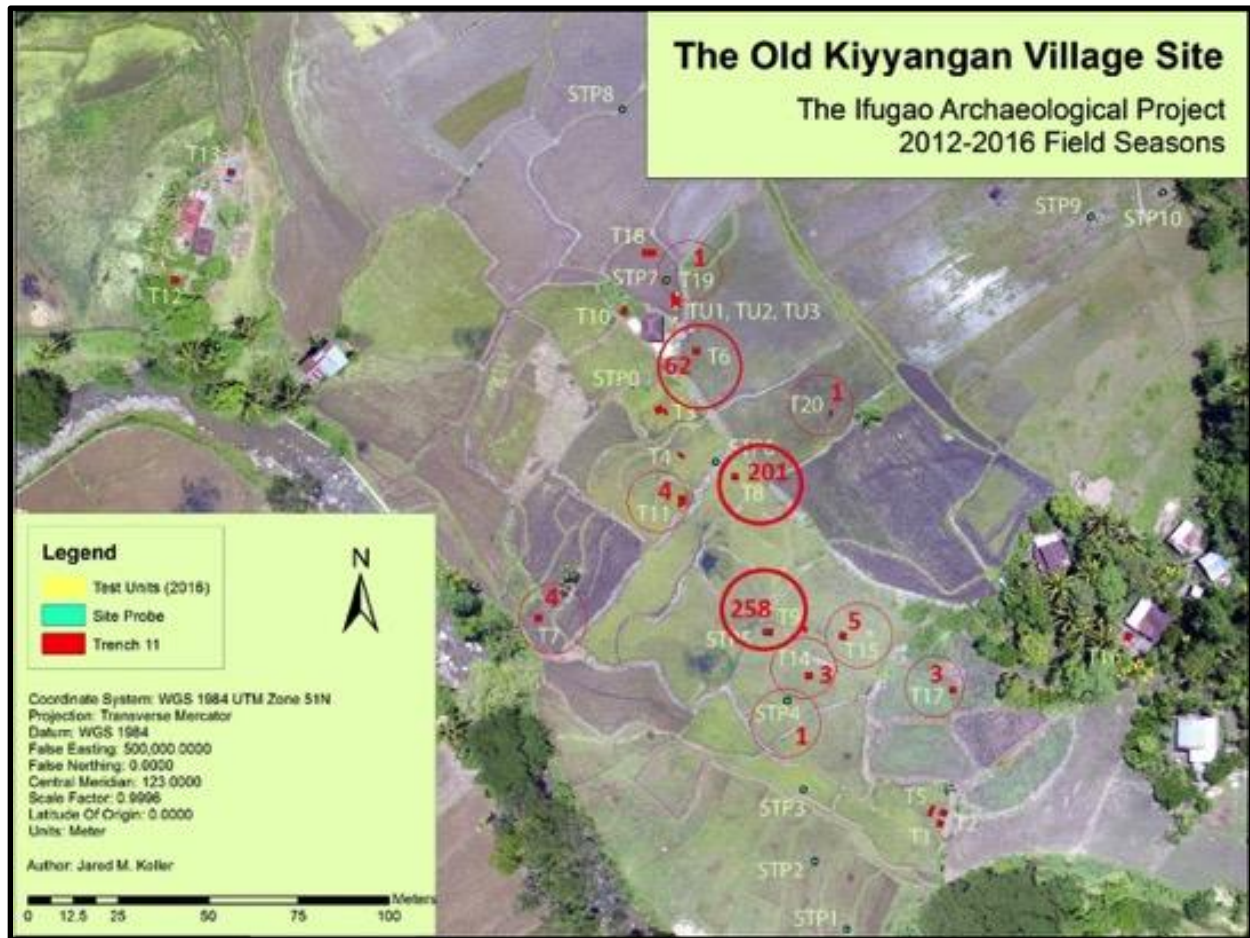


Figure 4 Map of Old Kiyangan Village with bead count per unit. Map by Jared Koller.

faunal remains, porcelain, stoneware, earthenware ceramics, and bead ornaments. Trenches 6, 7, 8, 9 and 11 utilized both dry and wet screening methods with 1/8 inch screens to retrieve beads and other artifacts. Subsequent units had insufficient water sources to facilitate water screening; additionally, thick clayey sediment sometimes proved inefficient for dry screening as well. These conditions may account for smaller numbers of beads across the site. Tradeware and beads increased incrementally in upper layers closer to the Spanish colonial period (Acabado 2017).

Beads at OKV

Of the 34 total excavations, the crew retrieved beads from 14 units. Trenches 1, 3, and 4 contained a total of 6 bead artifacts excavated in 2012, which are indicated on the map, but not included in overall counts and descriptions due to their unavailability for analysis. This thesis samples 543 beads retrieved from Trenches 6, 7, 8, 9, 11, 14, 15, 17, 19, 20, and STP 4, all of which were excavated in 2013, 2015, and 2016 (Table 1). The purpose behind this analytical methodology is to focus on units that were opened after initial excavations in 2012. These units were opened as the crew gained a better understanding of the old village boundaries.

Table 1. Number of beads per trench.

Trench	6	7	8	9	11	14	15	17	19	20	STP4	TOTAL
	62	4	201	258	4	3	5	3	1	1	1	543

Of the 543 beads analyzed, 37% (201 beads) came from Trench 8, 48% (258 beads) came from Trench 9, and 11% (62 beads) are from Trench 6. Trenches 8 and 9 are located near the center of the village, whereas Trench 6 is slightly north near a contemporary granary. The remaining 23 beads or 4% make up the rest of the OKV ornamental assemblage.

Processing the artifacts

The OKV artifacts are the first archaeological beads from Ifugao to be analyzed and recorded. Each bead was assigned an accession number under the site code CAR-2012-W1. They are individually sealed in a clear plastic bag with a provenience label. I used a Dinolite digital microscope for photographs and analysis. To describe the beads, I used the National Museum of the Philippines typological system (Santiago 1992), supplemented by Beck's (1928) additional

descriptions when necessary. The critical features that are recommended to be recorded are material, color, decorations, shapes, dimensions, and method of manufacture. The National Museum system was designed to classify Philippine beads with the purpose of using them for comparative study (Santiago 1992: 2).

Material

XRF Analysis

I identified raw material based primarily on morphological analysis. Color, wear, and shape are important factors for determining material. In addition, aided by Christian Fischer (UCLA/Getty Conservation Program) and Ellen Hsieh (UCLA Costen Institute of Archaeology), I explored the chemical composition of 7 OKV beads using XRF analysis. These beads were selected based on their morphological and physical differences to test if XRF was a viable option for analyzing chemical composition of beads less than 1cm in diameter. XRF “measures the energy level and intensity of secondary (fluorescent radiation) X-rays produced by primary X-rays striking the sample and creating vacancies in an inner shell of the atoms, which are then filled by lower-energy electrons from an outer shell” (Tykot 2016: 43). The information of the equipment and basic setting can be found in Fischer and Hsieh (2017). Data was collected by the mining mode with acquisition times set to 60 seconds.

Morphological Analysis

Morphological analysis is the primary method for identifying raw material of the OKV beads, due to the low results of the XRF analysis. Glass was identified based on shape, color, manufacturing method, and the presence of the following elements: tin, lead, and silicon. Stone was identified based on size, color, facets or no facets, and the significant presence of iron. Bone was identified based on color and shape (Figure 5). There were several beads that appear but are

not confirmed to be ceramic or possibly high-fired clay based on their color, shape, and smoothness of surface; until further analysis can be made, they are qualified as “other.”

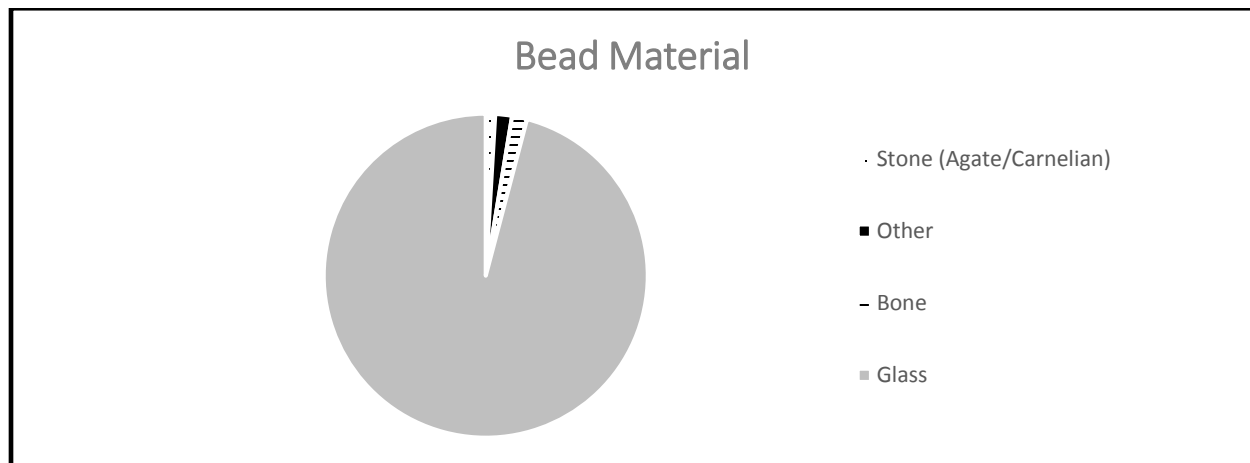


Figure 5. OKV bead material percentages (n=543).

Color

The Munsell Color Chart is ideal for opaque materials, but in the absence of such “general judgement” for color terms can be applied (Santiago 1992: 6). *Light* and *dark* are used to distinguish between subjective color determinants. The Munsell Color Chart is used to describe one to two sample units for each style classification. Opacity, or diaphaneity, is defined either opaque, translucent, or transparent. A transparent bead is clear and light can pass through. A translucent bead is cloudy and allows only partial light to pass through. An opaque bead does not allow any light to pass through. When applicable, opacity is recorded as it can be used to determine what type of glass a bead is. Nearly all glass beads with the exception of several monochromatic beads are opaque.

Shape

Bead shape is based on the classification and nomenclature identified by Horace Beck (1928). A digital caliper is used to measure the length, diameter, and diameter of each perforation,

and the weight is recorded with a generic scale. Santiago recommends using Horace Beck's (1928) shape descriptions. According to Beck, shape is initially determined by one of four sizes: disc, short, standard, or long. All shapes are round unless otherwise noted (e.g. square). A disc bead has a length of not more than one-third of its diameter. A short bead has a diameter bigger than length. A standard bead has a length that is equal to the diameter. A long bead has a length that is greater than the diameter (Beck 1928).

Decorations

The OKV bead assemblage features an assortment of decorations that make many beads distinct. This includes multiple overlaying colors, single stripes, and unique bead shapes. Decoration implies time and effort on behalf of the bead maker, which may indicate an increased prestige (Barretto-Tesoro 2003: 301). Decoration is limited to multiple colors and stripes, and does not expand to the vast array of decorations exemplified in Beck's classification and nomenclature (1928).

Manufacturing Method

I utilized Francis's (1992) recommendations that look for striations and shapes to accurately identify manufacturing methods of glass beads explicitly. I identified two distinct methods: wrapped and wound. Wrapped beads are identified based on striations that encircle the bead from edge to edge in a "wrapping" formation. Wound beads are identified based on the shape of the edge of the bead where the bead was pulled off from the main material as it was created. However, manufacturing method requires further analysis and a comparative collection for conclusive results, therefore in this thesis I only note manufacturing methods as preliminary, and I do not quantify them.


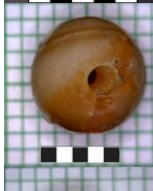



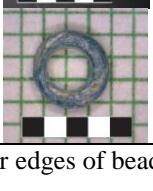
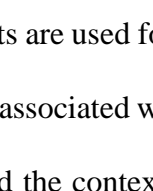
XRF Results

Using XRF for the OKV beads presented several issues. With a 4.26 mm diameter, 3.39 mm length, and 1.62 mm perforation in the middle, the average bead was smaller than the instrument's detector spot, which can be collimated to 3mm in the mining mode (Fischer and Hsieh 2017: 19). The small size and interfering "noise" of air filling the blank space of the instrument created results significant enough for only a qualitative analysis (Table 2). However, despite these setbacks, XRF was successful in identifying which elements were present, which can provide a preliminary link of OKV bead elements to that of other sites.

Previous XRF analysis on Chinese glass beads has identified elements of glass beads to from a glass making perspective (Li et al. 2013; Liu et al. 2013). Li and his colleagues (2013) utilized a combination of portable energy-dispersive XRF spectrometry, Raman spectroscopy, X-ray diffraction, and scanning electronic microscopy with energy-dispersive spectrometry to analyze 33 beads from glass beads from two cemetery sites in Xinjiang, West China. By using multiple geochemical and elemental analyses, Li identified two types of glass, as well as the types of colorants/opacifiers used. The beads were dated to 1000-500 BCE and suggested potash glasses were important trade goods on the Silk Road (Li et al. 2013: 21). By using multiple analytical methods, Li is able to compare results of the same artifact and create a more complete elemental report. Liu (2013) used portable XRF to determine a single mineral source for a majority of 37 analyzed glass potash beads from Guangxi, China during the Han Dynasty (206 BCE-220 CE). The project was conducted to study the origins of potash glass in Southern China, and was able to confidently propose Guangxi as a place of potash trade (Liu et al. 2013: 478). These studies suggest

that a larger sample size, as well as a diverse set of analytical methods, would improve future studies of glass and stone beads at OKV.

Table 2. Qualitative pXRF analysis of OKV beads (Fischer and Hsieh).

Artifact	Description	Bead	Diameter (mm)	Major Elements (%)							
				Sn	Bi	Pb	Cu	Fe	Ca	K	Si
8435	Yellow Glass, short cylinder		5.83	2.3	--	31.0	--	0.3	2.0	0.2	8.8
11899	Stone, standard oblate		7.08	--	--	0.1	0.0	--	0.1	0.1	38.0
11840.01	Striped Glass, short oblate		5.34	0.2	0.1	24.9	--	6.5	2.8	0.3	4.2
12053	Yellow Glass, long cylinder		3.44	1.5	--	27.5	0.2	0.7	2.9	0.2	1.3
12061	Opaque Glass, long cylinder		2.81	1.7	0.1	14.4	0.8	1.7	1.9	0.3	9.3
10432	Orange Glass, long cylinder		5.54	0.8	--	15.2	7.5	0.6	0.8	1.0	12.2
11927	Opaque Glass, short oblate		3.1	--	--	8.0	0.4	0.1	0.7	2.1	13.3

Diameter measures from outer edges of bead.

Different elements are used for the colorant/opacifier, and for the raw material of the bead. Identifying the elements associated with production help identify production sites, and trade routes between these places and the context in which they were excavated. Tin, lead, copper, calcium, potassium, and silicon are typical elements found in glass beads. Stone beads, specifically

carnelian, have a high concentration of iron. The amount of Chinese beads that have been analyzed in a similar method is small, and both Li and Liu's studies discuss Chinese sites that predate OKV by several hundred years. Nevertheless, they provide a starting point for which to identify the elements' presence within the beads, which contributes to the morphological and contextual analysis.

Bead Style Classification

To answer my research questions, particularly that of social status, I recorded descriptions of the bead collection and separated them into nine classification categories (Table 3). The purpose behind this is to group together beads of a similar decoration, as some beads, particularly those with decorations, were more labor-intensive to make than others, which may have had an effect of their prestige level. The style is arbitrary, but it is representative of the entire collection and provides a concise image of what the rest of the beads look like. Seven beads, or 1% of the recorded assemblage, are mixed shattered glass, making identification based on size and color unattainable. The other 99% of the assemblage are divided into nine arbitrary style categories: The first six classifications are for glass beads, while the latter three classifications are determined based on the remaining material makeup (stone, bone, and possibly ceramic).

Table 3. Bead classifications, based on style/decoration.

Bead Style Classification	
I.	Yellow Short Glass
II.	Orange Long Glass
III.	Translucent Glass Bead (blue, red)
IV.	Opaque Glass Bead (brown, white, red, blue, orange)
V.	Striped Glass Bead (black, white, brown)
VI.	Shattered Glass Bead
VII.	Other
VIII.	Stone
IX.	Bone

I emphasize quantities based on bead types between Trenches 8 and 9, as they had the highest bead counts across OKV. Trench 6 is not conclusive because it was closed due to flooding prior to reaching the sterile layer. The high number of beads in Trenches 8 and 9 suggest the individuals buried there had more access to bead goods than other nearby burials.

I. Yellow Glass Bead



Figure 6. Glass bead; pale brown, brownish yellow. CAR-2012-W1-12009

Brown yellow glass beads are identified based on a general adherence to opaque brown and yellow color tones (Figures 6 and 7). Shapes include disc cylinder; long cylinder; long square cylinder; short oblate; short barrel; short cylinder; short cylinder with one convex end; short cylinder with two convex ends; short truncated convex cone; short square cylinder; standard cylinder; and standard cylinder with one convex end. The average weight of brown yellow beads is 0.12g.

Several brown yellow glass beads have small shallow holes less than ½ mm in size and depth that reflect glass manufacturing quality. Many brown yellow glass beads have a grainy surface that are possibly due to preservation or manufacturing quality. Bead 12009 (Figure 6) is 2.5Y-8/4 pale brown with gradient spots of 10Y4-6/6 brownish yellow. Bead 10418 (Figure 7) is distinct from other yellow beads for the following reasons. 10418 is 2.5Y-7/8 yellow and coiled; its edges retain roughness from where the

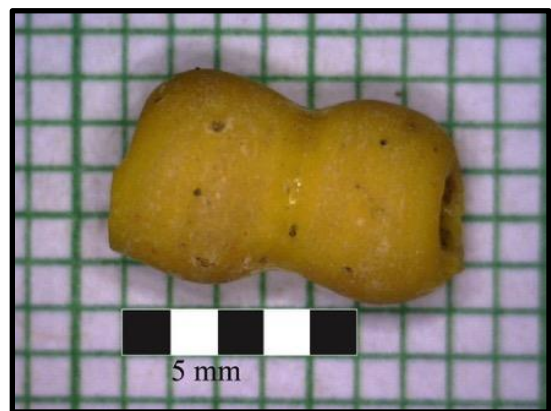


Figure 7. Glass bead, yellow. CAR-2012-W1-10418.

bead was heated and pulled off the main segment of glass during production. The sample unit can be described two different ways: 1) a long segmented bead; or 2) two beads that were not separated during production and remain attached today as a singular unit. 10418 is one of ten beads defined as yellow with little to no brown coloration mixed in. It is possible that other darker brown yellow beads may have originally resembled the brighter, glossy, vibrant quality of beads like 10418, which are only 5% (n=10) or all sample units in the brown yellow category (n=222). In this instance, higher quality is defined as more vibrant color and less grainy surface area. “High quality” was only recorded for those ten beads that are best described as solely yellow and not a mix of yellow, brown, and gray.

Although other categories discussed later in this chapter also address opaque beads, brown yellow beads are in a distinct category to reflect their high distribution across the site. Additionally, they are separate pending further analysis that can determine whether grainy brown beads initially resembled smooth yellow beads. Brown yellow beads make up 41% (n=222) of all beads in OKV (n=543) (Table 4). A higher proportion of brown yellow beads are in Trench 9 (n=154) versus Trench 8 (n=57).

Table 4. Yellow glass bead distribution.

Yellow Glass	Trench 8	Trench 9	All other units	Total (all units)
n	57	154	11	222
n/222	26%	69%	5%	100%

II. Orange Long Glass Bead

The orange wrapped long glass bead is an opaque glass bead (Figure 8). Its long cylinder shape, red yellow color, and wrapping striations are this bead’s most identifiable variables (Table 5). Bead 11896 is 5YR-6/8 reddish yellow. For description purposes I use the term “orange” to

describe this bead type and to distinguish it from red beads, as will be discussed later in this chapter.

Table 5. Orange wrapped long glass bead distribution.

Orange Long Glass	Trench 8	Trench 9	All other units	Total
n	16	26	14	56
n/56	29%	46%	25%	100%

The deep vertical striations running laterally from perforation to perforation are evidence of a wrapping technique. No other bead type exhibits deep striations, approximately 0.5mm wide, as orange long beads. Although a majority of these beads are long cylinders, other less frequent shapes include long cylinder with two convex ends; standard or short cylinder; long or short square cylinder; and short oblate. Many orange long beads are fragmented on one or both ends. Average weight is 0.11g.



Figure 8. Orange Long Glass Bead; CAR-2012-W1-11896

Orange long beads appear prominently in Trench 9 (46%, n=26), and account for 10% (n=56) or all bead style types (n=543).

Orange long beads appear prominently in Trench 9 (46%, n=26), and account for 10% (n=56) or all bead style types (n=543).

III. Translucent Beads

Translucent beads account for 8% (n=43) of the total bead assemblage. These beads are fairly translucent, depending on thickness and size. They are red, dark blue, or light blue and tend to be small in size with an average weight of 0.06g. Translucent beads are primarily distinguishable from opaque beads in that they do not have evidence of paint or slip. Shapes include disc, short,

and standard barrels; cylinders; square cylinders; and cylinders with one or two convex ends. Of 43 total translucent monochromatic beads, five are red and 38 are blue (Table 6). It is important to note that more red translucent beads appear in style classification IV Opaque Beads, but because they have been covered with brown paint or slip, they are in separate style categories. Bead 12198 is a dark blue in opposition to light blue (Figure 9), whereas bead 12181 is 7.5R-3/4 dusky red (Figure 10).

Table 6. Translucent glass distribution.

Translucent Glass	Trench 8	Trench 9	All other units	Total
n	7: blue (n=7)	3: blue (n=2); red (n=1)	33	43
n/43	16%	7%	77%	100%

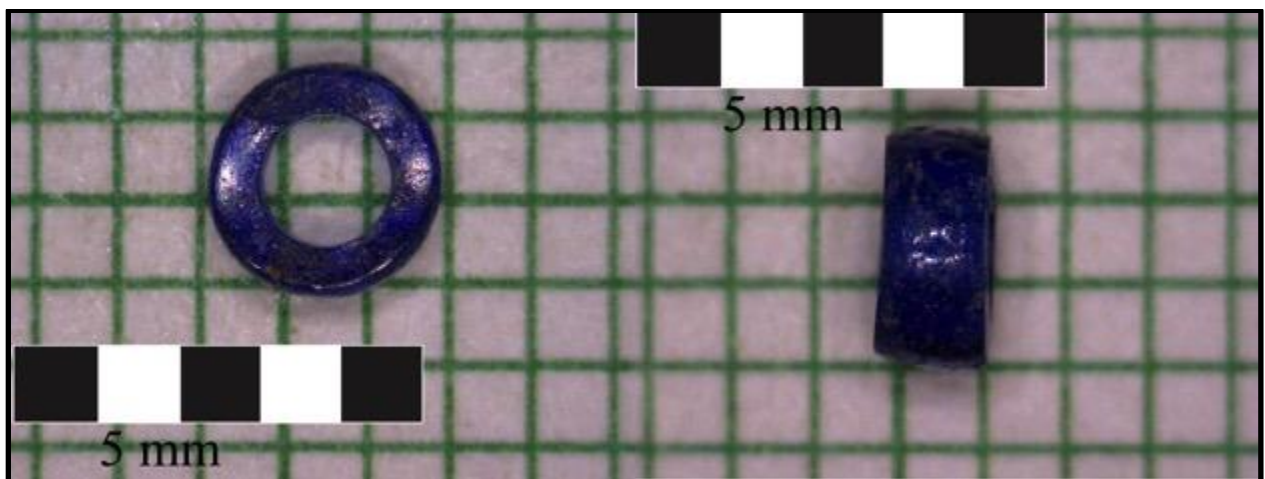


Figure 9. Translucent glass bead, blue. CAR-2012-W1-12198.

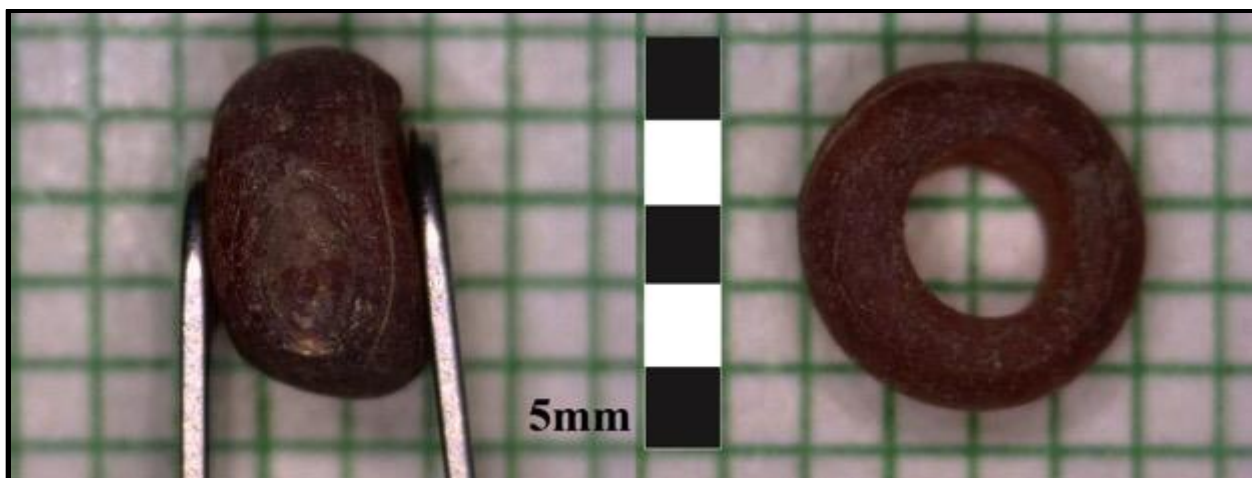


Figure 10. Translucent glass bead, red. CAR-2012-W1-12181

IV. Opaque Glass Bead

Opaque glass beads are characterized by their distinguished colors and opaque diaphaneity (Figures 11, 12, and 13). Most notable of opaque beads is the presence of a paint, slip, or oxidization byproduct (whole or partial), that covers either a monochromatic bead or a yellow opaque bead. Further research and analysis is needed to confirm the cause of this coloration.

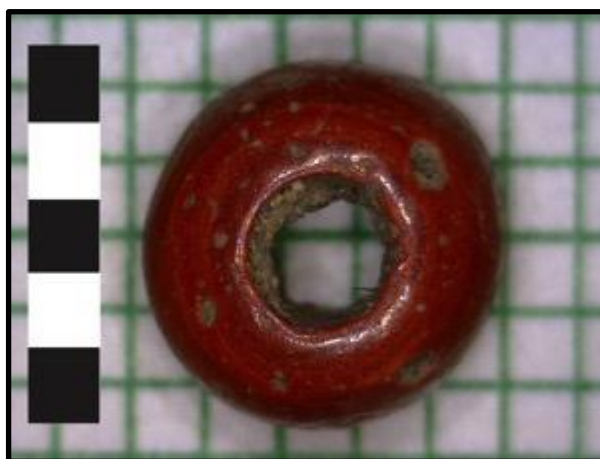


Figure 11. Opaque monochromatic bead, red. CAR-2012-W1-10474.

This is the primary variable that separate opaque beads from others, as they were likely completely covered in another material at one point in time and have since experienced little to significant wear. Note that these beads are distinguished as having a second color encasing the entire bead, as opposed to other categorized beads based on the presence of a single stripe.

Opaque beads include disc, short, and long cylinders; short oblates; short truncated convex bicone; short cylinder with one or two convex ends; short truncated convex cone or bicone; and short square cylinders. The average weight of opaque glass beads is 0.16g. These beads range in

size from a length of 0.99mm to 6.51mm. Beads like beads 10474 appear entirely painted with little to no chipping of paint. Like brown yellow beads (Classification I), sample unit 10474 has shallow holes on its exterior. Unlike brown yellow beads, sample unit 10474 has a glossy, smooth red coloring. More precisely, it is 7.5R3/6 dark red. Unlike translucent monochromatic beads, this sample unit does not allow for any amount of light to pass through and remains of a solid diaphaneity.

However, several beads of the opaque classification are a mix of opaque and translucent features. The paint has chipped away on some sample units to reveal translucent beads beneath the layers of paint. This addresses the question brought up earlier in this chapter: Were some beads (e.g. I. Yellow Glass) at OKV “painted” and have since lost their paint? Is the wear of the paint a result of preservation, use, oxidation, or some other interaction? Bead 10142 appears to have a base of translucent red glass; after the bead was created, chemical glass composition or paint decoration produced a layer of white over the red; and lastly, a later of brown paint covered the entire bead. Bead 12274 is completely covered in brown paint with very small sections where the paint has begun to wear and show the red glass underneath. Similarly, bead 12147 is a translucent blue glass bead that has been painted over with a white coloring. Sample unit 12150 depicts a blue glass bead with white paint still remaining in the manufacturing striations on the edges; otherwise, all evidences of paint have been washed or worn away. 62% (n=82) opaque painted beads were retrieved from Trench 8, and only 32% (n=42) were retrieved from Trench 9 (Table 7).

Table 7. Opaque glass bead distribution.

Opaque Glass	Trench 8	Trench 9	All other units	Total
n	82	42	9	133
n/133	62%	32%	6%	100%

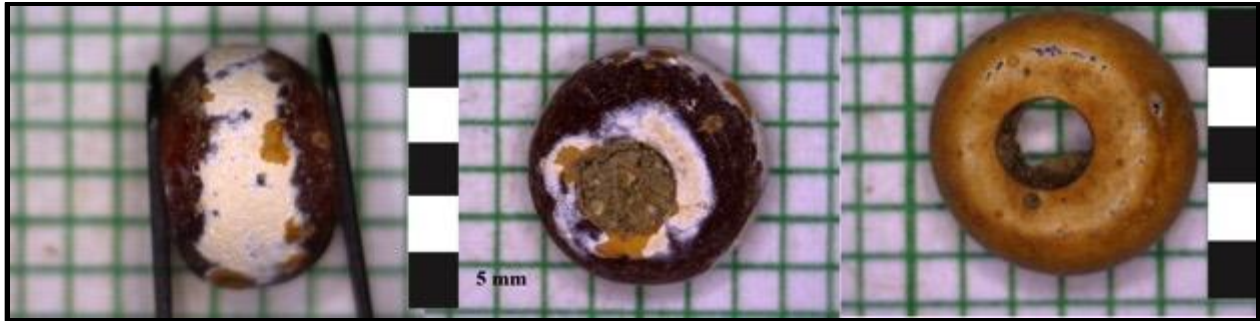


Figure 12. Left and center: Opaque bead, red. CAR-2012-W1-10142. Right: Opaque bead, brown gold. CAR-2012-W1-12273.

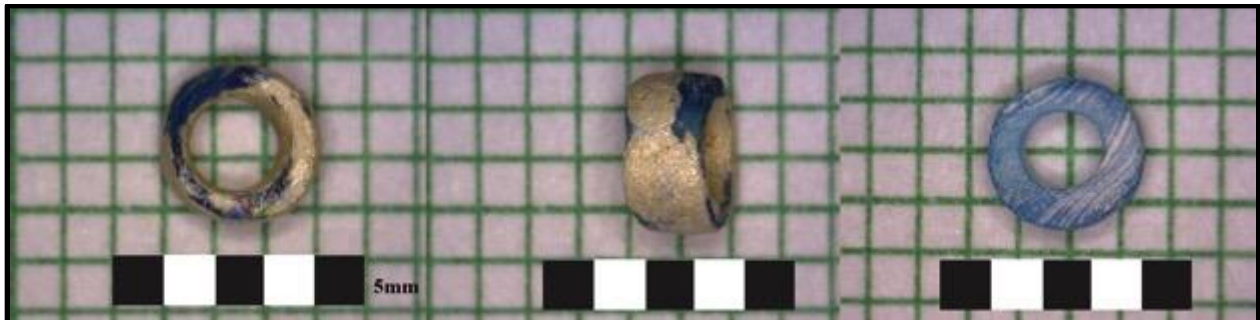


Figure 13. Left and center: Opaque bead, white and blue. CAR-2012-W1-12147. Right: Opaque bead, white and blue. CAR-2012-W1-12150

V. Striped Glass Bead

Striped glass beads are most distinctive of all styles due to their dichromatic color scheme and a single stripe wrapped around the middle of the bead. Like yellow beads, painted stripe glass beads are opaque and have small shallow holes, giving the surface a grainy texture and appearance. Shapes include long, standard, and short barrels, long, standard, and short cylinders, long barrels, short and standard oblates, and short and short cylinders with one to two convex ends.

Variety of colors is the most differential quality of striped glass beads is their variety of colors. Bead 12169 is 5Y-2.5/1 black, with a stripe of 10YR-9.5/1 white (Figure 14). Base colors include black, gray, brown yellow, and brown green; stripe colors include white, brown, and gray. Variation in stripe colors may be due to preservation and age that has turned white stripes brown

or gray. Striped glass beads account for 11% (n=60) of the total bead assemblage, with more striped beads in Trench 8 (n=29) than in Trench 9 (n=20) (Table 8).

Table 8. Striped glass bead distribution.

Striped Glass	Trench 8	Trench 9	All other units	Total
n	29	20	11	60
n/60	48.3%	33.3%	18.3%	100%

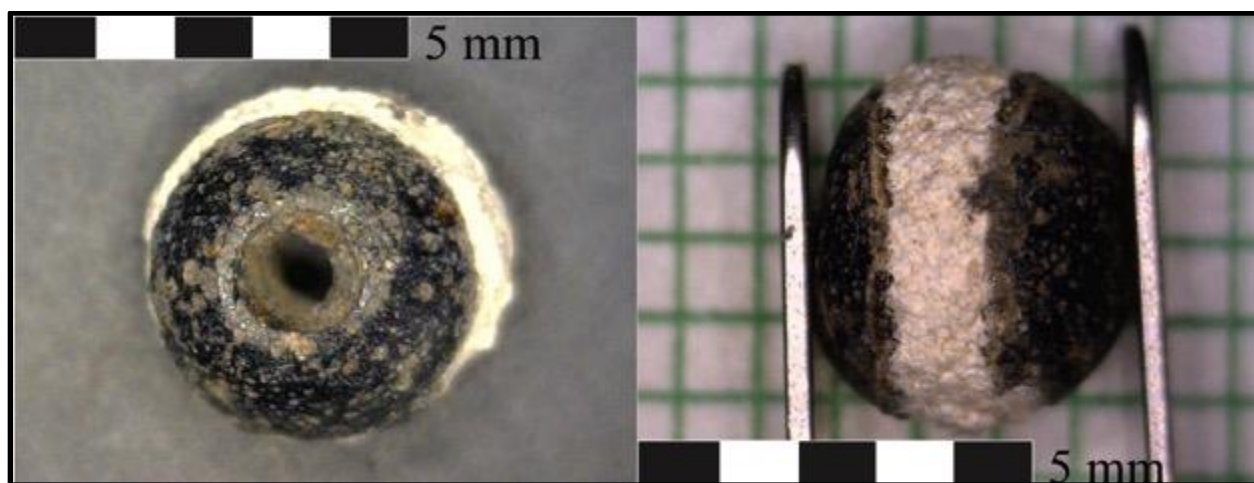


Figure 14. Striped glass, black and white. CAR-2012-W1-12169.

VI. Shattered Glass Bead

Shattered glass beads are fragments that are too small and mixed up to accurately determine size, color, and shape. Shattered glass beads account for only 1% (n=7) of the entire bead assemblage. Shattered glass beads types are distinct from other bead types whose shape, color, or size are recorded despite being fragmented before analysis. In several instances, shattering occurred before excavation; i.e. fragments were collected with sediment in the field, and separating dry sediment from various colored shards that have fragmented even more in storage is not beneficial to this thesis. Other possibilities are that fragile sample units fragmented and shattered during storage. Because some beads contain a second color over the original glass, fragmentation can lead to ambiguity over color. The seven shattered glass bead types account for two individual

sample units that have shattered, and five accession numbers that were recorded during excavation and now account for shattered and fragmented shards.

VII. Other

“Other” beads account for approximately 2% (n=9) of the artifact assemblage. Although this thesis contends that nine beads are possibly ceramic, this is based solely on morphological analysis. Further chemical analysis is necessary to confirm raw material. “Other” beads are distinguished from the rest of the artifact collection by their relatively smooth exterior, color scheme, and shape. “Other” beads have an exterior similar in appearance to stoneware ceramic sherds also found at OKV. Both “opaque” glass beads and ceramic beads are opaque; however, ceramic glass beads do not reflect light back at the viewer the way opaque glass beads tend to do. Color adheres to general grays and browns. Bead 11898 is 2.5Y-6/3 light yellowish brown, 10R-6/4 pale red, and 5YR-5/3 reddish brown (Figure 15). While this sample unit contains multiple colors, sample unit 11840.02 is a single color at 10YR-6/4 light yellowish brown. Multiple colors may reflect high- or low-fired clay. Shapes include long cylinder, long barrel, long cylinder, and standard cylinder with one convex end. Majority of ceramic beads are long with a slightly square shape. Only three possibly ceramic “other” beads appear in Trench 8, six ceramic beads are from Trench 9, and no ceramic beads are found in any other OKV units (Table 9).

Table 9. Other beads distribution.

Other Beads	Trench 8	Trench 9	All other units	Total
n	3	6	0	9
n/9	33.3%	66.7%	0%	100%

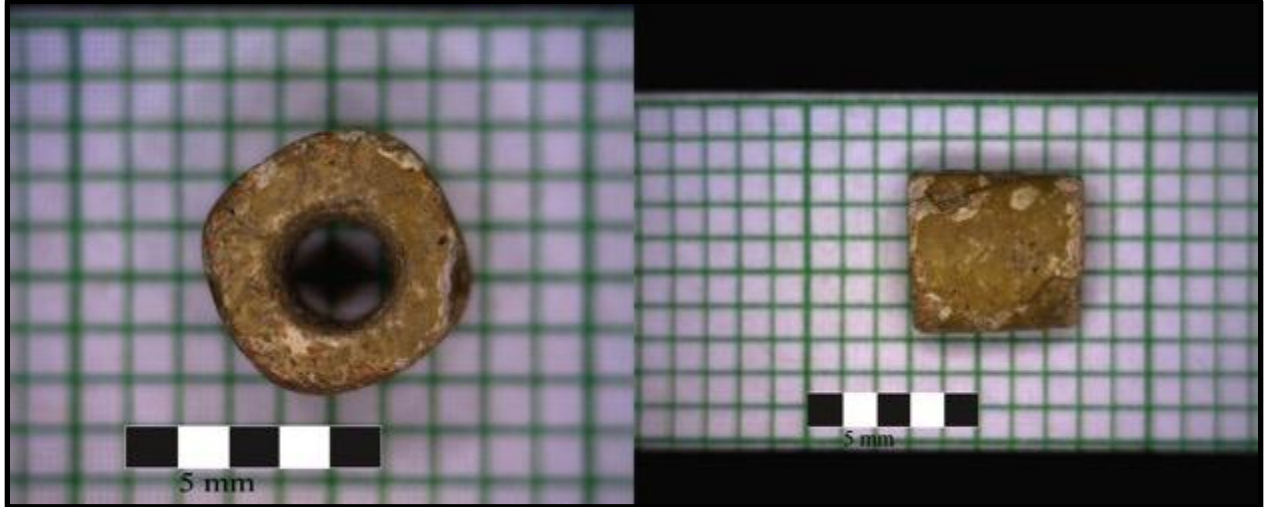


Figure 15. Other (possibly ceramic) bead. CAR-212-W1-11898.

VIII. Stone Bead

Stone beads are identified by their multifaceted shape and array of colors. I identified both agate and carnelian stone beads: Agate is of a lighter brown color, whereas carnelian has a red hue due to its high amount of iron. A decision was made to not count the facets on the exterior of the beads; however, it is important to note that all stone beads are asymmetrical. Facets appear to be random and not worked to fit a specific design or pattern. Stone beads are larger than glass, ceramic, or bone beads, with an average weight of 0.75g. Sample unit 5963 weighs 1.95g and has a diameter of 12.16mm, which is the heaviest weight of any bead in the entire OKV assemblage. Shapes include variants of pears, oblates, and cylinders.

Bead 11995, a carnelian stone bead, is 10R-4/8 red and 10R-2.5/1 reddish black (Figure 16). In contrast, sample unit 11899, an agate stone bead, is 2.5Y-7/1 light gray and 5YR-5/8 yellowish red (Figure 17). At a count of five, stone beads are slightly less than 1% of the total bead assemblage. Only one bead is carnelian and the rest are agate (Table 10).

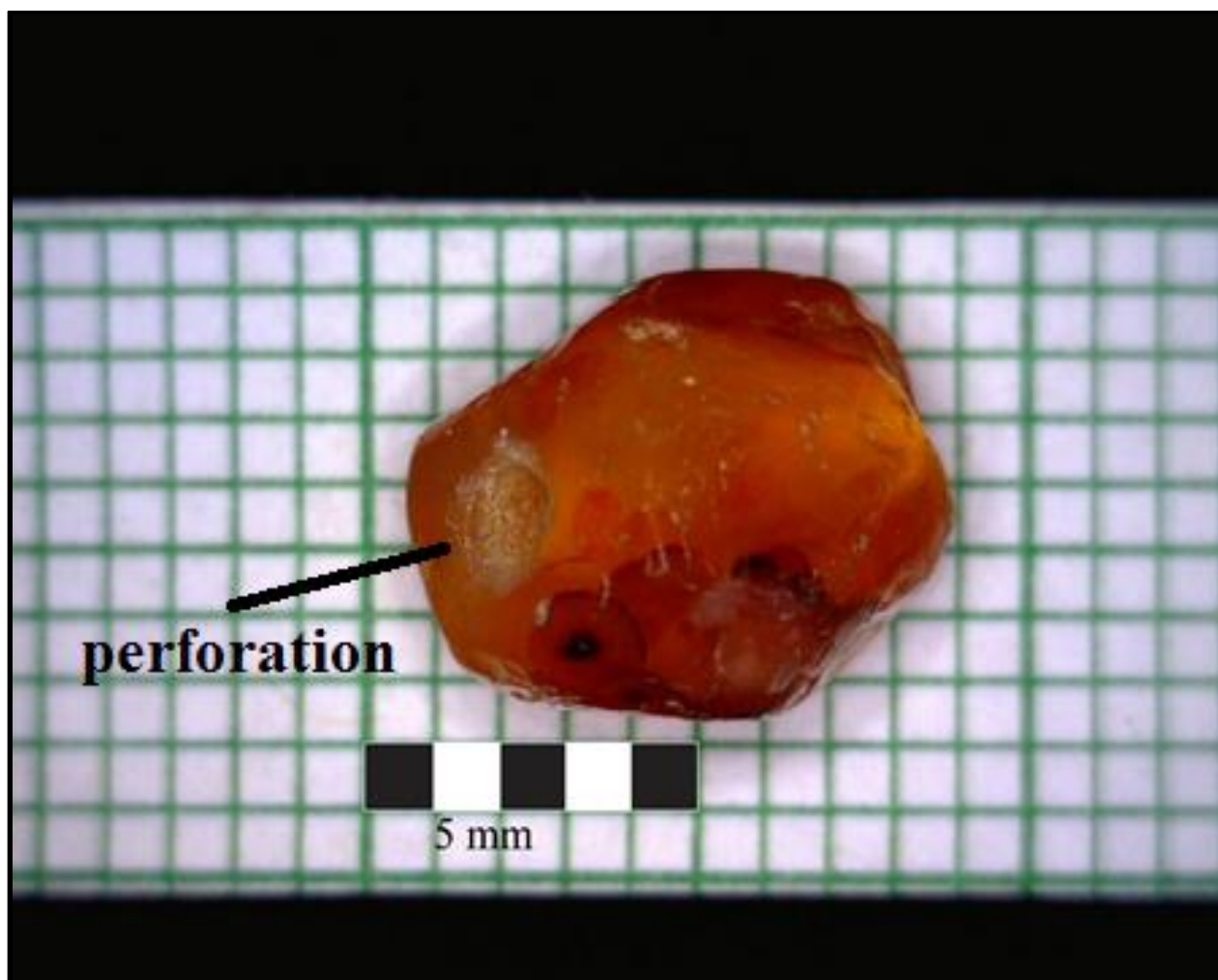


Figure 16. Stone bead. CAR-2012-W1-11995.



Figure 17. Stone bead. CAR-2012-W1-11996.

Table 10. Stone bead distribution by unit.

Stone Beads	Trench 8	Trench 9	All other units	Total (all units)
n	0	4: carnelian (n=1) agate (n=3)	1: agate	5
n/5	0%	80%	20%	100%

IX. Bone Bead

Bone beads are the final style classification and account for 1% (n=8) of the total bead assemblage (Figure 18). Bone beads, not found in Trench 8 and minimally found in Trench 9 (n=3), are likely faunal bird bones due to their hollow nature (Table 11). They are identified as

beads based on manufacturing marks (etches) near the edges of the perforations. Shapes include long cylinders and long cylinders with two convex ends. Bone beads are extremely fragile with fragmented edges.

Table 11. Bone bead distribution by unit.

Bone Beads	Trench 8	Trench 9	All other units	Total (all units)
n	0	3	5	8
n/8	0%	37.5%	62.5%	100%

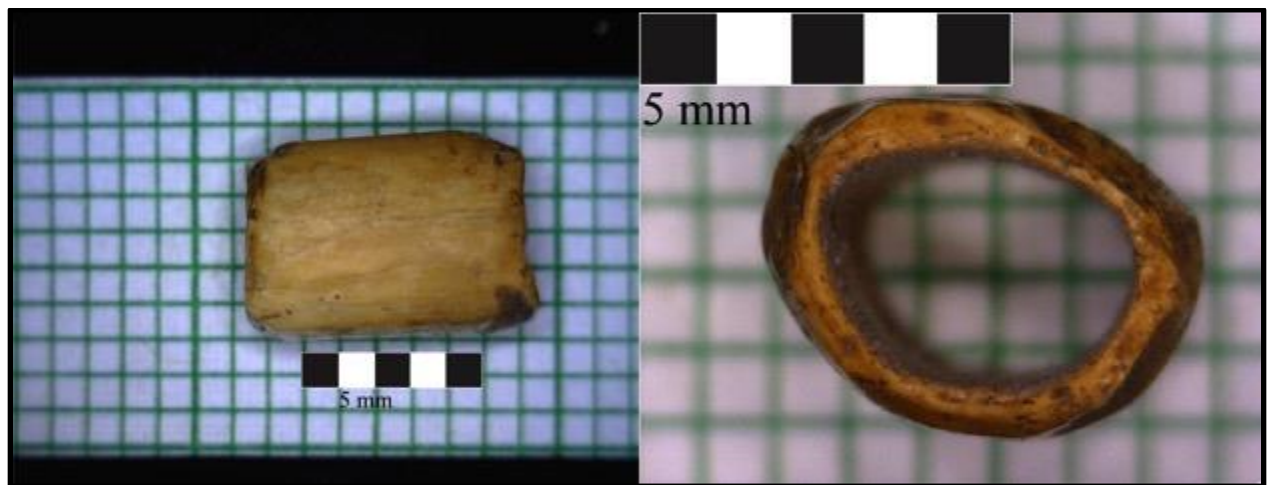


Figure 18. Bone bead. CAR-2012-W1-03.

Conclusion

In this chapter, I discussed OKV site and the artifacts excavated over the course of several field season. The methodology followed for bead descriptions follow the standard procedure set forth by the National Museum of the Philippines (Santiago 1992) and contribute to a growing database of archaeological beads in the Philippines. The descriptions presented here are representative of the complete 543 beads analyzed. In the next chapter, I present my discussion of the data, distribution patterns, and what implications this analysis has on the wider body of trade and status research.

Chapter 4: Results

This chapter discusses the distribution and context of beads across OKV (Figure 19). It is likely that OKV was a village community from ca. 1050 CE to ca. 1800 CE (Acabado 2017). I also investigate other artifacts retrieved from OKV and what implications this has for trade and social status in conjunction with objects of prestige.

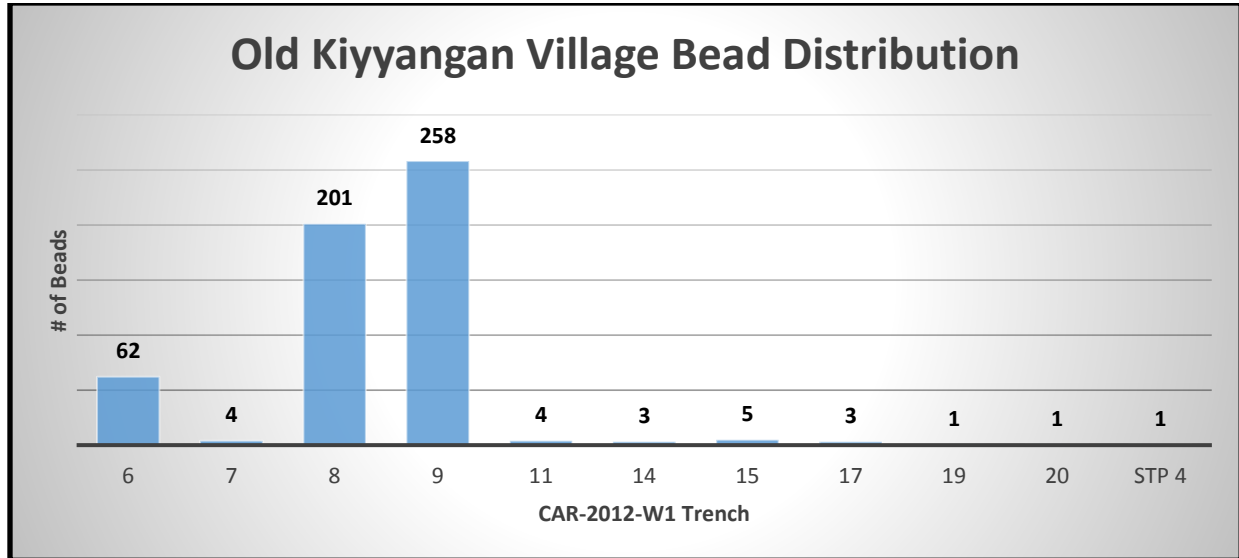


Figure 19. Graph, OKV total bead count distribution by unit.

Feature Descriptions

Burials are prominent features of the OKV site, and while not all trenches contained beads, all trenches that did contain beads also had burials. I refer to all children, infant, and in-utero burials as *sub-adult* burials to differentiate them from adult burials, which were not retrieved from OKV and possibly interred in a different location. This chapter describes the beads at OKV, with particular attention to Trenches 8 and 9, which both contained multiple burials and a large percentage of the site's beads. I propose that the unequal distribution of bead across the site is evidence of social status at OKV and differential individual access to beads. Previous research

(Bacus 2004; Barretto-Tesoro 2003; Carter 2013) has already shown that social status can be inferred based on access to prestige goods.

Both Trenches 8 and 9 contained commingled burials of mixed sub-adult remains, and 459 beads combined. Younger sub-adults, possibly infants and/or neonates, were interred in jars; older sub-adults were interred in a supine position. Lauer and Acabado (2015:34) identify three patterns of burial at OKV:

1. Isolated skeletal elements making up the edge of house foundations
2. Single interments, jar or supine, under house foundations
3. Reuse of same space over time for repeated interments

Trench 8

Trench 8 was located near the center of OKV and contained 201 beads. A majority of these were from Features 3 (jar burial) and 5 (supine); however, 12 beads were from a nonfeature context (Table 12). Other artifacts retrieved from Trench 8 include faunal remains, earthenware, stoneware, and porcelain.

Feature 3 jar burial, also known as T8B1(J) (Lauer and Acabado 2015), was a large earthenware jar containing infant remains. This jar contained 33 beads (excluding one shattered unidentified glass bead). This feature was directly above Feature 5 (T8B2, T8B3, and T8B4) (Lauer and Acabado 2015). Feature 5 supine commingled contained a minimum of three individuals, two of which were fully recovered. The three individuals were buried in supine positions, and they were aged at 18 months, 12 months, and 8 months (Lauer and Acabado 2015:34). Feature 5 supine commingled had 146 beads, many of which appeared at the necks of the individuals. The reconstruction of Features 3 and 5 suggests that Ifugaos first places a sandstone base beneath the house, followed by a supine child. Later in time, the child was moved

to make way for two more children. Finally, at some point in time the burial was disturbed and an earthenware jar burial was placed on top.

Table 12. Trench 8 bead style distribution according to feature.

Trench 8				
	Feature 3: Single Jar	Feature 5: Triple Supine	Non Feature	Total
I. Yellow	24	28	5	57
II. Orange Long	1	13	2	16
IIIA. Translucent Blue	0	6	1	7
IIIB. Translucent Red	0	0	0	0
IV. Opaque Glass	8	72	2	82
V. Striped Glass	0	27	2	29
VII. Other	0	3	0	3
VIII. Stone	0	0	0	0
IX. Bone	0	0	0	0
Shattered, unidentifiable	1	6	0	0
Total	34	155	12	201

Note: Does not account for 7 shattered glass beads whose style could not be identified.

Table 12 describes Trench 8 bead distribution based on feature, style, and decoration. Feature 3 single jar burial contained 34 beads and one interment. Feature 5, the commingled triple burial, contained 155 beads. Out of 201 total beads in Trench 8, 82 or 41% were opaque glass. Yellow glass was the next most common, followed by striped glass and then orange long glass. Looking specifically at the single jar burial, most beads were yellow glass, with a small number of opaque glass and just one orange long glass bead. The triple supine burial consisted primarily

of opaque glass beads, followed by nearly equal amounts of yellow and striped glass. Trench 8 contained no stone or bone beads, and only three beads that are “other” or possibly ceramic.

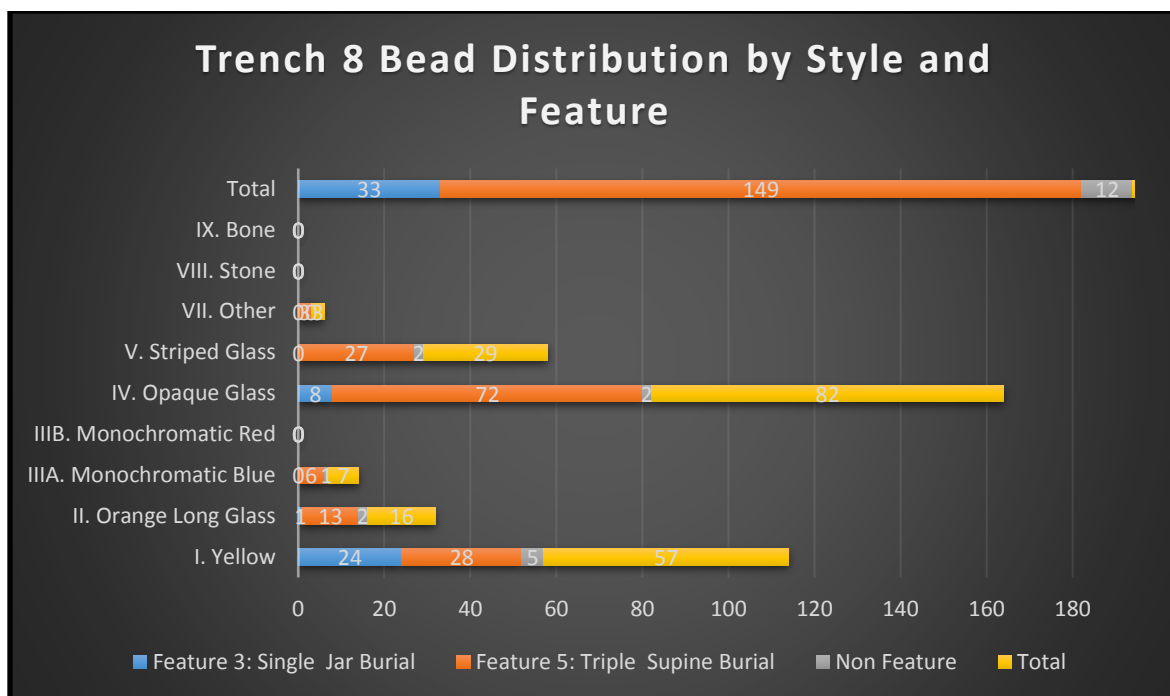


Figure 20. Trench 8 bead style distribution according to feature.
Note: Does not account for 7 shattered glass beads whose style could not be identified.

Trench 9

Trench 9 contained 258 beads total. 247 beads are from features, and 11 are from a non-feature context. Trench 9 was southeast of the granary. Its purpose was to further investigate the neonatal remains found at 50-60cm BS found in STP5. Other artifacts retrieved from Trench 9 include faunal remains, stoneware, porcelain, earthenware, and isolated adult human skeletal remains.

Feature 3 was a burial, but contained no recorded beads. Features 4 and 5 were earthenware pots with no recorded beads. Feature 6 was a possible ditch or cultural fill, and contained four beads; Feature 6 is directly related to feature 13 discussed below. Feature 7 was an earthenware

jar with six beads. Features 8 and 10 were also jars with no beads. Feature 13 (associated with feature 6) was identified as sub-adult human skeletal remains in a supine position with arms and legs extended. It contained 76 beads. Feature 14 was an earthenware jar burial directly above Feature 13 with two beads; meanwhile, Feature 15 was also adjacent to Feature 13, and it contained human skeletal remains and 159 beads. Features 13, 14, 15, and 6 by association, were part of a commingled burial of mixed jar and supine burials (Lauer and Acabado 2015:33-34; unpublished Old Kiyangan Village Site Report, 2013). Feature 15 supine burial contained the most number of beads at 159 count. Feature 13 supine burial also had a large relative amount at 76 beads, whereas Feature 14 jar burial had two beads.

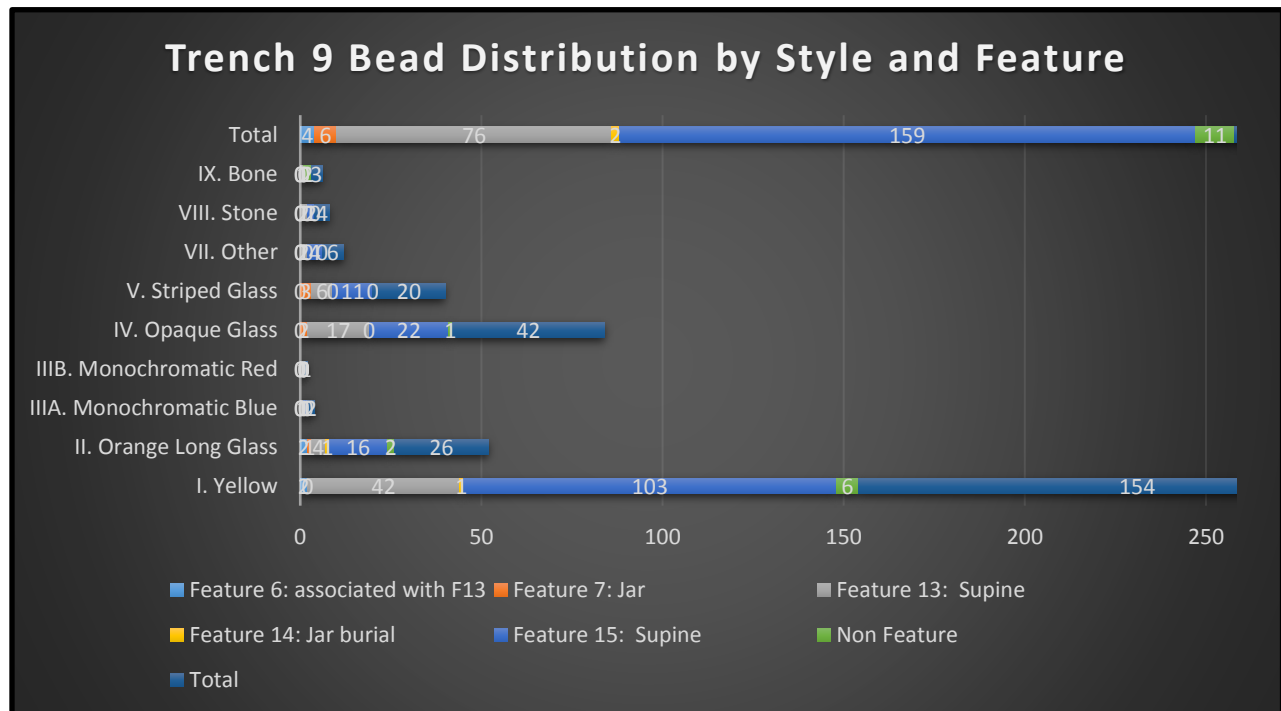


Figure 21. Trench 9 bead style distribution according to feature.

Unlike Trench 8, yellow glass beads were the most common style type across almost all Trench 9 features (Table 13). Feature 15, supine remains, contains 159 beads, 65% of which are yellow glass (n=103) and 21% of which are opaque or decorated with a stripe (n=33). Feature 14, the jar burial, contains two glass beads total. Feature 13, supine remains, contains 55% yellow

glass beads (n=42) and 30% opaque or striped beads (n=23). Both Features 13 and 15 contain two stone beads each (Figure 21).

Table 13. Trench 9 bead style distribution according to feature.

Trench 9

	Feature 6: Associated with F13	Feature 7: Jar	Feature 13: Supine	Feature 14: Infant Jar	Feature 15: Supine	Non Feature	Total
I. Yellow Glass	2	0	42	1	103	6	154
II. Orange Long Glass	2	1	4	1	16	2	26
IIIA. Translucent Blue	0	0	1	0	1	0	2
IIIB. Translucent Red	0	0	1	0	0	0	1
IV. Opaque Glass	0	2	17	0	22	1	42
V. Striped Glass	0	3	6	0	11	0	20
VII. Other	0	0	2	0	4	0	6
VIII. Stone	0	0	2	0	2	0	4
IX. Bone	0	0	1	0	0	2	3
Total	4	6	76	2	159	11	258

Other Artifacts at OKV

Beads represent a small portion of retrieved artifacts from OKV. Other prestige artifacts excavated include porcelain and stoneware (Acabado 2017) as well as faunal remains, which are associated with ritualistic feasting (Lapeña and Acabado 2017).

Blue and white porcelain vessels, mostly Ming from China, were introduced to the region during the Spanish colonial period, but access at OKV was limited. They do not appear in the archaeological record until 1280-1445, and they drastically increase in quantity between 1648 and 1800 (67 total sherds) (Acabado 2017: 19). Stoneware follows a similar pattern (311 total sherds) (Acabado 2017: 20), as well as faunal remains (Lapeña and Acabado 2017). Faunal remains, such as domestic pig, are associated with costly feasts. Feasting would have been limited to those who had the necessary wealth to host a prestige ritual. These three artifacts (porcelain, stoneware, and faunal remains) were only available to certain individuals in the OKV community who had the status required to own such prestige items, and their contextual relationship to beads is an important aspect for understanding social status across OKV. The use of these objects in a ritual familial context, like a burial, may suggest multiple components to expressing prestige at OKV that is not just limited to wearing beads, but also extended to behaviors such as feasting. Rank was present and the access to prestige goods changed over time as population increased with the Spanish presence in the lowlands affecting the migrations of people to the Ifugao highlands.

Summary

The data above outlines the methods and descriptions used to classify all 543 beads of the Old Kiyangan Village bead assemblage. A majority of the beads are glass (n=521) with a small representation of stone, bone, and unconfirmed “other” (n=22). Prominent decorations include

multiple overlaid colors, and stripes. It is speculated that many beads were once decorated but have since deteriorated through wear and preservation in the archaeological record.

The OKV mortuary beads vary in number and style across different types of features, with yellow beads (n=211) and opaque and stripe beads (n=124) being the most prominent. All beads are from trenches that contain burials, with a majority of beads directly from burial features. The high quantity of beads in two areas of the site (Trenches 8 and 9) is suggestive of high status and access to wealth of the individuals interred there. Chapter 5 discusses the implication of these results and the value it poses to contemporary Ifugao.

Chapter 5: Interpretation, Discussion, and Conclusion

Based on several lines of data presented in Chapters 3 and 4, I revisit my original research questions: Are the Old Kiyangan Village beads “exotic” goods, and thus a proxy for social status in the Old Kiyangan Village? In this section, I discuss my interpretation of the OKV beads, how they were an object of trade between the Philippines and China, and how they are representative of social status.

Chinese beads in Ifugao

With a qualitative analysis of the beads, I discussed the different raw materials and styles retrieved from Old Kiyangan Village. The elemental analysis, though preliminary, confirms that yellow, orange, translucent, opaque, and striped beads are glass, and that the stone beads are either agate or carnelian. Morphological descriptions also support these observations. Based on this information, as well as the presence of blue and white porcelain and stoneware at OKV, and documents citing Chinese trade with the lowlands, I contend that the OKV beads are of Chinese origin. This confirms that OKV, presumed to be isolated even by today’s Philippine historical narrative, was part of a long-distance maritime trade network with Chinese merchants. I speculate the Ifugao were trading indirectly with China through other lowland Philippine groups; however, more data is needed to confirm this specific hypothesis.

The majority of beads at the OKV are glass, with a small percentage of stone; bone beads are less represented and require further analysis to determine the role they have amongst glass and stone. “Other” beads that resemble ceramic require further geochemical analysis, such as LA-ICP-MS, to confirm whether they are glass, ceramic, or another material. This information could help identify if the OKV beads are imported from China, or Philippine-made replicas. Further testing

could also confirm what substance of elements were used to create multiple colors on certain beads, if it is an oxidization or slip that has been used to color the beads intentionally or not.

Findings from the OKV suggest that access to extra-local wealth support the contention that the appearance of elite goods indicates the emergence of social ranking. Other work in the wider region, such as Carter's (2013) investigations in Cambodia, propose that elites used exotic prestige goods in the form of beads to exert control over the community. Similarly, Acabado (2017) argues the Ifugao used rice terrace ownership as a method for self-organization as the population increased with the onset of Spanish colonialism in the 16th and 17th centuries. Elites who owned rice terraces likely controlled access to rice, which was not a basic resource, but instead a prestige crop. Other Ifugaos relied on swidden farming of taro and other root crops (Acabado 2012, 2013, 2017). This was done to control access to foods, and to give social structure to Ifugaos without placing a figure of authority at the center. I propose that at Old Kiyangan Village, Ifugaos who owned rice terraces were considered elites in the community, and controlled access to not only rice but also to prestigious, exotic goods. They may have used exotic beads as markers of status to differentiate themselves from non-elites at funerals and other ritualistic events. The high concentration of beads in the center of site and a lower density of beads on the periphery implies that elites lived at the center of the village, where a burial space was habitually used multiple times for sub-adults. This concentration near the center implies that distribution was unequal, and not all buried individuals had access to the same amount.

Distribution of beads per burial

This thesis acknowledges two types of burials for sub-adults: (1) single jar interments (one individual) and (2) commingled burials (multiple individuals). Commingled burials may incur both

jar burials and supine burials in a single context. Earlier osteological analysis (Lauer and Acabado 2015) found that jar burials only contained infants in-utero or possibly stillborn. This is in contrast to supine burials, in which all individuals were several months older than individuals retrieved from jars.

It has been suggested (Lauer and Acabado 2015) that the higher quantity of beads with older individuals may reflect larger neck size and thus a need for a longer bead necklace. The difference between Trench 8 Feature 3 single jar burial bead count (n=34) and Feature 5 supine burial bead count (n=51) is 17 beads. Beads average out to 3.41mm in Trench 8, which would be an approximate increase of 57.97mm (2.82in) in supine necklace size from jar burial size (107.78mm, or 4.24in). It was noted in the previous chapter that the average bead count per individual for Trench 8 feature 5 may not account for beads not collected from the third interred individual.

Trench 8 featured a commingled burial with one individual jar burial aged 42 weeks, and three supine individuals aged 8-18 months. These four individuals were buried on the same sandstone platform at different points in time. The stratigraphy indicates that the three supine individuals were buried first over a sandstone platform, and the jar was placed over them later in time. Similarly, the Trench 9 commingled burial contained mixed jar and supine individuals. The jar burials had significantly less beads per burial than the supine burials, suggesting that the supine burials had a higher social status and thus attained more beads in burial. Supine burials in Features 13 and 15 contained a majority of the bead assemblage, with over 76 and 159 respectively, whereas the Feature 14 jar burial had only 2 beads. This drastic difference again highlights the high number of prestige goods placed with supine individuals, and the lesser number attributed to younger individuals in earthenware jars. Further analysis of sub-adult burials is needed to explore whether

these patterns between individuals and burial types are deliberate, and if they have any association at all with age.

Deconstructing the myth of isolation

The beads distribution across Old Kiyangan Village is variable in both style and quantity; as discussed above, majority of beads appear at the center of the village in supine burials, and opaque beads are limited almost exclusively to supine individuals as well. The supine burials at Trench 9 contain stone beads, but Trench 8 contains none. The appearance of beads in the stratigraphic layers coincides with the introduction of wet-rice agriculture (Acabado 2012, 2016). The radiocarbon dates of the rice terraces suggest that wet-rice terracing is approximately 300 years old (Acabado 2009, 2012, 2016); this suggests that the beads are likewise, like Francis (2002) suggested, also approximately several hundred years old, not several thousand. Wet-rice agriculture was used to accommodate growing populations; simultaneously, social elaboration intensified social status developed as a method of self-organization. With this, rites and rituals intensified and became complex, and expressed themselves in the archaeological record through beads as markers of social status.

This pericolonial concept refutes the idea of a “dominant Philippine narrative” in which Ifugaos were isolated from other Philippine polities; Ifugaos maintained contact with other groups through the trade and exchange of material goods such as beads from China. As a result, pericolonial areas act as “places of refuge” for peoples avoiding Spanish colonization and control. Schneider (2015) defines places of refuge as “familiar and unfamiliar places...to which people return to evade and maintain physical separation from persecution...[they] intersected the colonial imprint and...served as centers of indigenous power.” Ifugao served as a center of indigenous

power separated from Spanish control, not devoid of any Spanish influence. The surge of individuals who migrated to the safety and seclusion of the mountains in Ifugao was a direct result of Spanish presence in the lowlands. In order to cope with the population influx, the intensification of wet-rice agriculture, the increase in ritual use, and the development of distinct social statuses based on wealth were indirect responses of indigenous peoples.

These concepts of interaction and exchange are of value to the Ifugao and the Philippines as a whole because the notion that Ifugaos are “different” from other Filipinos is still part of the dominant narrative. This older date has led to stereotypes that negatively portray the Ifugao as “separate” from the lowland Hispanized Filipinos. This research aims to engage in a discourse that includes the Ifugao in the rest of the history of the Philippines as active participants of trade, exchange, and interaction. By linking Ifugao to Chinese exchange networks, I argue that they were active participants in interregional Philippine trade.

In summary, the OKV beads express social status and differentiation among Ifugaos. Beads were used by the elite to express personhood and social status at the heart of the village, conveying information of both settlement patterns, social ranking, and access to exotic prestige goods. Evidence for these conclusions is based on morphological analysis and contextual analysis. These artifacts were a result of intensified agriculture, ritual use, and wealth that accumulated during the time of Spanish colonization.

Conclusion

The goal of my project is to present the analysis of 543 beads retrieved from the Old Kiyangan Village site in Ifugao, Philippines. The site is unique in that it is the first major archaeological project in the region that directly addresses questions of age, identity, and persistence of tradition, among other research goals. I argue that the contextual analysis of these

nonlocal beads and their differential morphological structure make them a proxy indicator for social status at Old Kiyangan. Beads are an indication of increased social activity and differentiation as a method of self-governance alongside rice terrace ownership. This social structure is unlike chief, or *datu*, led polities found elsewhere in the Philippines.

The value of this project lies in its ability to contribute to both local and global studies of social status, bead trade, and colonialism. Other indigenous sites in Southeast Asia, the Americas, and other regions present similar finds for burials featuring an uneven distribution of beads per burial or individual, indicating diverse social status. This research is one of many first steps in reconstructing trade routes between highland and lowland Philippine polities, and Philippine polities with other culture groups in Southeast Asia. The presence of Chinese beads in a highland setting is a critical component of understanding trade relationships between Filipinos and the Chinese, who have a long history of contact prior to Spanish colonization. Exotic materials are markers of prestige across the Philippines, and exploring this avenue of research can help build continuity of tradition and prestige for multiple sites across the Philippines.

Exploring these concepts from a pericolonial perspective is invaluable to the ongoing study of indigenous people in the Philippines and abroad. Academia has long been structured by colonial enterprises with nationalistic goals. This research seeks to deconstruct the colonial frameworks used to build Ifugao identity and instead offer new ways of understanding the past and preserving heritage. The initial goal of this project was to document and record the OKV beads so that they can be preserved as part of Ifugao past identity. Identity studies is a growing field, and it is important to provide local communities with archaeological findings to educate, conserve, and acknowledge culture, tradition, and history.

APPENDIX A

Bead Counts

Table A-1. Bead Count by Raw Material

	Trench 6	Trench 7	Trench 8	Trench 9	Trench 11	Trench 14	Trench 15	Trench 17	Trench 19	Trench 20	STP 4	Total
Stone (Agate/Carnelian)	0	1	0	4	0	0	0	0	0	0	0	5
Possibly Ceramic	0	0	3	6	0	0	0	0	0	0	0	9
Bone	2	0	3	0	0	0	3	0	0	0	0	8
Glass	60	3	191	245	4	3	2	3	1	1	1	514
Shattered Glass (unidentifiable shape or color)	0	0	7	0	0	0	0	0	0	0	0	7

APPENDIX B

Bead Weights

Table B-1. Total bead weight by trench.

Trench	Sum of Weight (g)
6	3.33
7	3.2
8	27.31
9	29.56
11	0.41
14	0.75
15	0.45
17	0.57
19	0.5
20	0.04
STP4	0

Table B-2. Average bead size for Trenches 8 and 9.

Avg	Trench 8	Trench 9	All Bead Units
Weight	0.17	0.12	0.14
Diameter	4.57	4.13	4.26
Length	3.41	3.37	3.39
Perforation	1.7	1.52	1.62

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