Unsealing the Graves: Understanding stamp and cylinder seals in Late Cypriot grave contexts: Property markers, merchant tools, or pendants?

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Aiyana I.W. Plasman

Cover Image: Stamp B1632 from Episkopi-*Bamboula* – detail from Benson, 1972, plate 38.

Benson, J. L. (1972). *Bamboula at Kourion: The necropolis and the finds; excavated by J. F. Daniel*. Haney Foundation Series 12. University of Pennsylvania Press.

Title: Unsealing the Graves: Understanding stamp and cylinder seals in Late Cypriot grave contexts: Property markers, merchant tools, or pendants?

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Chapter 1: Introduction

1.1 Aim and Research Questions

Cylinder and stamp seals are an early administrative technology which are found throughout the archaeological record, their appearance in the Mediterranean can be traced to the Eastern Mediterranean in particular, and cylinder seals emerge as a common tool from the 4th millennium BCE and became a pervasive tool throughout the wider region (Smith, 1994, p. 45). Stamp seals appeared earlier in the archaeological record, and can be traced back to the Halaf Period (6000-5300 BCE), stamp seals were part of the so-called "Halaf-Package" which appeared throughout the West Asian region (Nieuwenhuyse, 2017, p. 840). In many cases the find context of stamp and cylinder seals has been revealing of their function – indicating their use to seal jars and doors, or sign clay tablets (Smith, 1994, p. 45). These uses can be associated with systems of control and hierarchy. However, they could also be used on a household level as property markers, hold religious/ritual significance as amulets, or be used by merchants (Knapp, 2008, pp. 154-155). Stamp and cylinder seals in the Late Cypriot period of Cyprus (1450-1050 BCE) have been discussed for example by Porada (1948), Smith (1994, 2012), and Webb and Weingarten (2012). These sources investigate more extensively the seals in non-funerary contexts. However, seals which have been found in funerary contexts are often dismissed as being heirlooms or amulets of the deceased. Little attention is given to their possible significance beyond this – What was their use during the life of the interred? What factors made them appropriate as grave goods? And what can the study of these cylinder and stamp seals contribute to larger theoretical debates regarding the Bronze Age of Cyprus?

The use of seals, usually associated with administration, control, and commerce, touches upon major issues regarding Late Bronze Age societies in Cyprus. For example, reconstructions of the political system, and whether there was a hierarchy between sites, or whether Cyprus functioned as a heterarchy. Furthermore, it contributes to debates about economical systems, and whether there were centralized units controlling trade or if there were independent systems of trade and other mercantile activity.

A more focused study on the seals in funerary context can expand on the understanding of their function and use, and contribute to these theoretical discussions. Furthermore, this research will take a quantitative approach and compare the data between sites. This research aims to answer the central question of:

How can the presence of cylinder and stamp seals in Late Bronze Age Funerary contexts in Cyprus be understood?

This will be investigated through the following sub-questions:

- What materials have been used for stamp and cylinder seals in different contexts and what does this indicate of their function/use?
- What is the quality and the wear of cylinder and stamp seals in different contexts and does this indicate patterns of use?
- Is there a trend in the associated grave finds of cylinder and stamp seals found in funerary contexts and what does this indicate of their function/use?
- What iconography is present in the stamp and cylinder seals and what does this indicate of their functions/use?
- What is the stylistic influence of the iconography used and the origin of the stamp and cylinder seals and what does this indicate of their functions/use?

The dataset to be used for this research consists of various excavation reports, with a focus on the sites of Episkopi-*Bamboula*, Maroni, Kalavasos-*Ayios Dhimitrios*, Enkomi, and Hala Sultan Tekke. These sites are all generally coastal and spread along the southern coast of Cyprus, as seen in Figure 1.1. The data from Episkopi-*Bamboula* will be based on the report by Benson (1972), data from Maroni is from Johnson (1980) who processed the British Museum's excavations in the 1890s, Kalavasos-*Ayios Dhmitrios* on the report by South et al. (1989), Enkomi is based on Dikaios (1969a; 1971) and Gjerstad et al. (1934b), and finally Hala Sultan Tekke is based on a few intermediate reports by Fischer and Bürge (2014, 2015, 2017, 2018). Specialist studies have been carried out by Porada (1971, 1972, 1980, 1989) in the past and published in excavation reports as appendices or chapters. The cylinder and stamp seals found at these excavations have been put in a database, and will be analyzed with both qualitative, but more so quantitative, methods.

Figure 1.1: Map of Cyprus with location of sites included in this research indicated (Figure by Aiyana Plasman using Google Earth).

1.2 Reading Guide

The contents of the research paper will be as follows:

Chapter 2 outlines the relevant theoretical background. This firstly relates to bigger-picture discussions regarding the archaeology if Cyprus during the Late Cypriot period – these are related to the structure of the political system and the economy. These theories will be covered briefly. More particularly this section will cover the current theories regarding the use of stamp and cylinder seals in Cyprus, and particularly theories about how to recognize their use based on context, appearance, or other indicators.

Chapter 3 describes the geography of Cyprus and the archaeology of the Late Cypriot period. It also covers the current understandings and research about Late Cypriot seal use. This is followed by a background of each of the sites – which includes the archaeological research that has been done there, key features of the sites, and a discussion of the sources which have been used for the current research project.

Chapter 4 describes the methodology which has been applied in this research. It covers the data collection and database which has been made, as well as how the data was processed. Chapter 4 also covers the analysis. This includes a discussion of the materials used for stamp and cylinder seals (4.2.1), the grave finds they are associated with (4.2.2), the iconographic elements (4.2.3), the stylistic influences (4.2.4) and finally a note on the periodization of stamp and cylinder seals and the potential influence on the results (4.2.5).

In Chapter 5 – Results and Discussion – the results of the different areas of analysis are considered together. This considers all of the data in the analysis and how it relates to each other and potentially conflicts, and is discussed.

Chapter 6, the conclusion, summarizes the findings and discussion. It also highlights point which are still poorly understood and potential avenues for further research.

The conclusion is followed with the source list and appendices.

Chapter 2: Theory

The archaeology of Late Bronze Age Cyprus riddled with theoretical debates, these include broad topics, which the scope of this paper is unlikely to contribute much to. I will lay them out briefly to offer context, but the main focus of this chapter will be related to funerary archaeology specifically and the possible understandings of grave goods and cylinder and stamp seals. The theoretical points to be covered are the centralization of Late Cypriot society, the economic system, and the interpretations of stamp and cylinder seals.

The reason that the analysis will consider sites separately as well as in combination is related to the debate surrounding Late Cypriot centralization. To only consider the data as a whole, and not distinguish between sites, would be to assume that there is uniformity in cultural practice in Cyprus at this time. The references to the king of Alashiya – often identified as Cyprus (Goren et al., 2003, p. 233) - in ancient texts have led certain academics to believe that there was a central site in Cyprus which to some extent controlled the other sites, which is countered by the theory that sites functioned independently from one another (Knapp, 2013, pp. 432-433). The research at hand may find a variation in the data between the sites, or a particularly strong correlation between the sites. While this may have the potential to contribute to this discussion, the study of cylinder and stamp seals alone will not settle this discussion, nor is that the aim of this research. Even so, it is an important theoretical debate to remain aware of throughout the research.

Another point, which is likely to be touched upon when discussing cylinder and stamp seals, is the economy. Glyptic technology is often associated with bureaucratic and economic practices (Smith, 1994, pp. 45-46). An understanding needs to be established of the Late Cypriot economy to comprehend how stamp and cylinder seals could have functioned within these systems. However, the nature of the Late Cypriot economy is disputed. The discussion is whether there was an elite class who controlled economic activities, or independent merchants were driving the economy, or whether there was some combination of these two (Knapp & Meyer, 2023, p. 328).

The scope of this paper will be focused on the significance of stamp and cylinder seals in funerary contexts. The main three theories which are considered regarding stamp and cylinder seals is that they functioned as amulet pendants, mercantile tools, or to secure property on a household level. However, it has to be established how these functions can be recognized in funerary assemblages.

If stamp and cylinder seals in grave contexts functioned solely as amulets one would expect to see a difference between the pieces encountered in graves compared to other contexts. In this line of reasoning there are two "types" of stamp and cylinder seals – those with a functional purpose, which were not taken to the grave, and those which were amulets of importance to an individual and buried with that person. If this is a case the analysis will reflect these groupings in the factors analyzed. Additionally, stamps and cylinders which serve a solely spiritual function would not be found in graves with mercantile assemblages or associations (described below).

The idea that these cylinder and stamp seals are amulets or have some sort of cult-related function can be suggested for various contexts. In excavations at Enkomi there is evidence for stamps and cylinders in ritual contexts. Examples from Dikaios (1971, pp. 814-817) include a cylinder seal (Inv. 228) and two stamp seals (Inv. 184; Inv. 353) in ritual contexts. Inv. 228 is found in association with a terracotta bull statuette, while nearby in an adjacent room a bronze Horned God statuette was found to which oxen skulls were offered, leading to the belief that the "terracotta statuette of the bull, the cylinder seal […] and all the other objects […], were also votive offerings to the Horned God" (Dikaios, 1971, p. 814). The stamp seal examples from Enkomi are found in similar contexts, also seemingly offering in the Horned God cult (Dikaios, 1971, pp. 816-817). Another examples, from Hala Sultan Tekke, is a hematite cylinder seal which was deposited at the bottom of Well C with a bull figurine an equid skeleton (Fischer & Bürge, 2015, p. 54). The authors cater the possibility that the deposition of the cylinder seal may have been a way to "honour a favorite animal" (Fischer & Bürge, 2015, p. 55). A final example is highlighted by Porada (1972, pp. 141-142) at Episkopi-*Bamboula*, concerning a steatite cylinder seal (B1622). The wear on this piece is identified as resulting from rubbing, which Porada (1972, pp. 141-142) equates to its use as a worry bead. This would evidence the use of these seals as having an amuletic function and possibly related to a belief-system or superstition.

Mercantile assemblages for this time in Cyprus have been described by Knapp and Meyer (2023, p. 318). In identifying mercantile assemblages one can expect "contextual association of objects such as weights, scales, cylinder seals, writing styli, imported goods, and other, related paraphernalia", and these assemblages can be encountered in both "special-purpose buildings and individual burials" (Knapp & Meyer, 2023, p. 318). Cylinder seals are considered by these authors as mercantile tools, when found in association with these other finds. Should these assemblages be recognized in graves, this can indicate that the interred individual was involved with mercantile activities.

However, less formal uses may have also occurred – such as the use of stamp and cylinder seals as property markers. How to recognize this is suggested by Porada (1971, p. 799), in her discussion of amateur-made seals she suggests that poorly made pieces would have served less formal or economic functions, stating that such seals may "have served as amulets and could even be used to identify and secure property." On a household level, the quality would not have been of as much interest as it would be in long-distance trade and other formal mercantile activities. On a household level, function would likely be primary over appearance. Furthermore, well-made seals may have been difficult and costly to come by, so a self-made or poorly made seal would suffice for a less wealthy household. This quote by Porada (1971, p. 799) also reveals the belief that the use of seals was not singular and their functions could overlap.

In summary, the key functions theorized for stamp and cylinder seals in Cypriot contexts are cult-related, spiritual/amulets, mercantile, and as property markers. However, these purposes may also overlap. There is no air-tight way of establishing the function of a piece, however, through the use of various context-clues an interpretation can be made. How these interpretations have been applied in this research is discussed in the Methodology and Analysis section. The current section has also covered theoretical debates regarding the socio-political and economic structure of the Late Cypriot Period, the understanding of which impacts the interpretations of stamp and cylinder seals. Elaborating on this theoretical chapter is the following Background chapter.

Chapter 3: Background

The background section will cover the geography of Cyprus, the Bronze Age of Cyprus, the understanding of seal use on Cyprus according to previous studies as well as the classification of seal types. The mortuary practices known from this period are also summarized. Then each of the sites is discussed – covering the relevant background information and the excavations which have taken place. The reports which have been used and their possible shortcomings are described. This section also includes maps of all of the studied sites.

3.1: Geography

Cyprus is an island located in the Eastern Mediterranean, north of it is modern-day Turkey, and the Levantine coast is to its east. The Troodos mountain range is located in the central western part of the island and is rich in copper, which was widely exploited during the Bronze Age and traded throughout the Mediterranean. The copper exploitation was a basis for the trade economy which resulted in the connection of Cyprus to various polities and states in the Mediterranean region. The sites which have been considered for this research can be seen in Figure 1.1. The majority of these sites come from what is now the South of Cyprus, apart from Enkomi.

3.2: Bronze Age

The Late Cypriot Period spans from 1680/1650-1050 BCE (Knapp, 2013, p. 27, Table 2), see Table 3.1. The start of the Bronze Age saw the use and intensification of certain characteristics to Cyprus, such as the use of the plough, new pottery types and copper implements (Knapp, 2008, p. 70). Throughout the Bronze Age, connections between Cyprus and the greater Mediterranean area increased (Knapp, 2013, p. 348).

Table 3.1: Chronology of Cyprus starting from Early Cypriot I till Late Cypriot III. (On the basis of Knapp, 2013, p. 27, Table 2; and Webb, 2019, p. 205, Table 1).

Phase/Culture	Dates Cal BCE
Early Cypriot I-II	2250-2150
Early Cypriot III	2150-1950
Middle Cypriot I	1950-1850
Middle Cypriot II	1850-1750/1700
Middle Cypriot III	1700/1750-1680/1650
Late Cypriot I	1680/1650-1450
Late Cypriot II	1340/1325-1200
Late Cypriot III	1200-1050

Knapp (2013, p. 348) summarizes the following changes starting around 1750/1700 BCE, also known as the Protohistoric Bronze Age in Cyprus:

"(a) town centres with monumental architecture;
(b) burial practices showing clear distinctions in social status;
(c) writing (Cypro-Minoan) on clay tablets, cylinders, and other materials;
(d) intensified and widespread production and export of copper;
(e) extensive regional and interregional trade (especially with the Levant and Aegean)
(f) newly built fortifications, weaponry in burials, warriors depicted on pottery"
(Knapp, 2013, p. 348)

These characteristics indicate an increased complexity, but the exact form of this social, economic, and political system is debated. Despite textual references to Alashiya – a toponym frequently identified as Cyprus - from Amarna and Ugarit (Goren et al., 2003, p. 233), there is little archaeological evidence for a centralized Cypriot state during the Late Bronze Age, rather economies vary per site and are not controlled solely by elites (Andreou, 2019, pp. 180-181). However, Knapp and Meyer (2023, pp. 310-312) do not believe in sites being autonomous of one another on the basis of large-scale exports, particularly of copper, which suggests centralized control.

The site-types of the period and the hierarchy of these site-types during the Late Bronze Age is proposed by Knapp (2013, pp. 355-359), and can be seen in Figure 3.1 as found in Andreou (2016, p. 144). The material that this study focuses on comes from sites which are classified as first tier sites by Knapp (2013, pp. 355-359), namely Episkopi-*Bamboula*,

Kalavasos-*Ayios Dhmitrios*, Maroni, Enkomi, and Hala Sultan Tekke. These sites are all coastal centers. They likely had commercial functions and economies based on specialized-goods, and may have had some sort of control over the production in smaller surrounding sites (Knapp, 2013, p. 356). Fourth tier sites are classified as centers of production, while the intermediate site tiers would have influenced the movement of goods between various sites within Cyprus (Knapp, 2013, pp. 356-357).

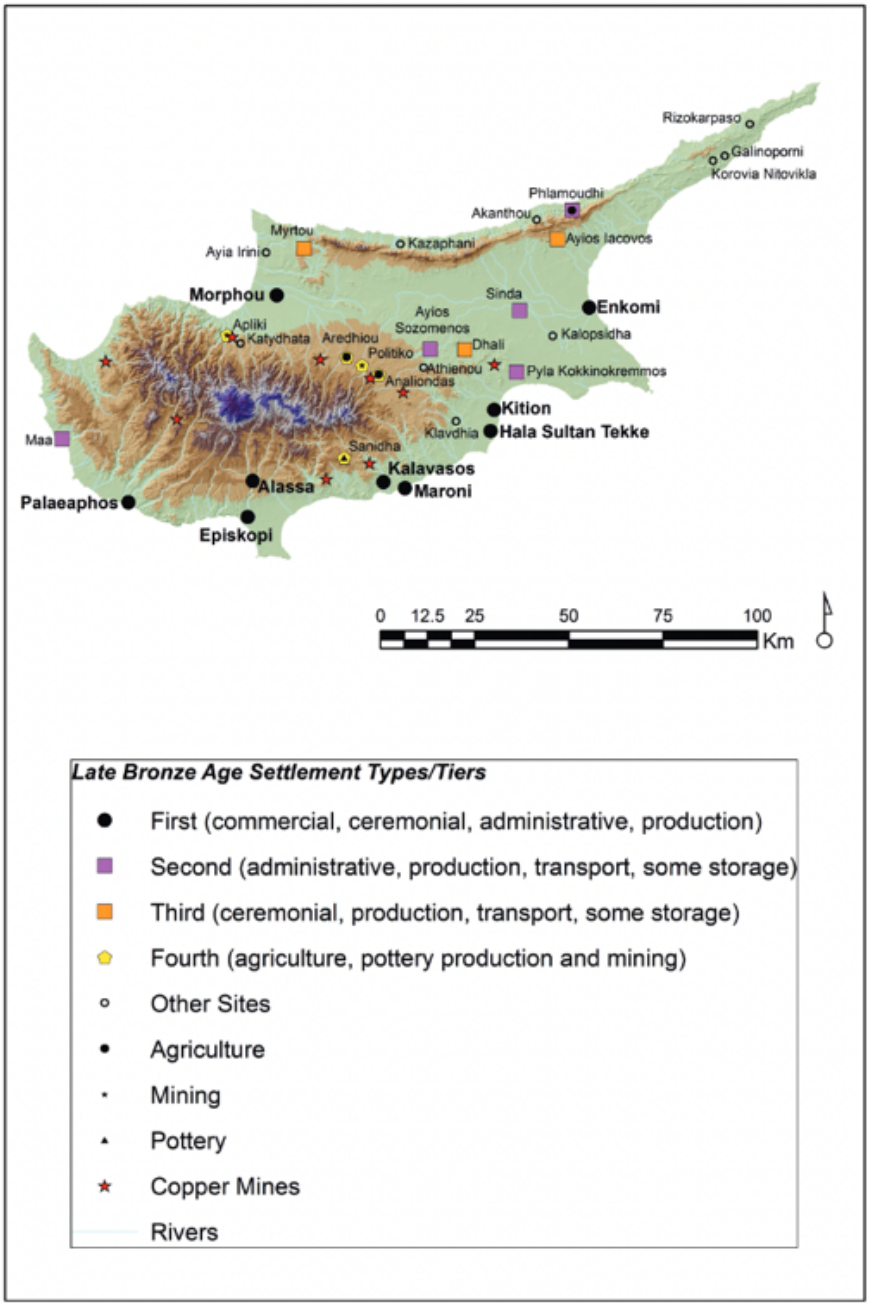

Figure 3.1: Settlement tiers during the Late Cypriot. (Andreou, 2016, p. 144, Figure 1, on the basis of Knapp, 2013, pp. 355-358)

3.3: Understanding of seal use in the Late Bronze Age

Smith (1994, pp. 45-47) outlines the use and appearance of seals throughout the Mediterranean in the Late Bronze Age. Cylinder seals are more abundant in Syria and Mesopotamia, whereas stamp seals appear more frequently in Egypt, Anatolia, and the Aegean (Smith, 1994, p. 45). Knapp (2008, p. 154) summarizes the uses of stamp and cylinder seals in this period on Cyprus: "Cylinder and stamp seals alike were commonly used as votives or amulets and as personal ornamentation; equally they could be used as markers of status or identity, and for administrative control over production and storage." Additionally, Knapp (2008, pp. 154-155) acknowledges their use by merchants, which does not limit the use and control of stamp and cylinder seals to those with a high status. Merchants may have worked independently, however, they may also have been in the employ of an elite class (Knapp & Meyer, 2023, p. 313).

Stamp and cylinder seals could also be used in textual contexts, "almost as a form of signature" (Smith, 1994, p. 46). Another use described by Smith (1994, pp. 46-47) are to permanently label containers by stamping clay vessels prior to firing them (described by Smith as an administrative act, but it could also have served a decorative purpose), this can be seen for example at Episkopi-*Bamboula* (Smith, 2012, p. 40).

Prior to the Late Cypriot, seals appeared only sporadically in the archaeological record of Cyprus (Webb & Weingarten, 2012, pp. 85-87). From the Late Cypriot onwards their presence becomes more regular, starting with imported material from the late 17th century onwards, and they are domestically produced from the 16th-15th century onwards (Webb & Weingarten, 2012, p. 87). Webb and Weingarten (2012, p. 87) attribute their presence to increasing extra-insular interaction, but do not believe that they were used for administrative purposes, rather they were seen as status objects which mirrored the elites in various Mediterranean polities. Enkomi is the most seal-rich site on Cyprus, with roughly 200 cylinder seals (Webb & Weingarten, 2012, p. 87; Knapp, 2008, p. 152), the varying intensity and contexts in which seals are found at Late Cypriot sites does not indicate a uniform seal function. The roughly 200 cylinder seals known from Enkomi have led to the interpretation that Enkomi may have been a site of seal production for the island during this period (Knapp, 2008, p. 152). However, the degree of variation in cylinder and stamp seal appearance across the Cypriot sites may also be an indicator of decentralization between the sites (Knapp, 2008, p. 154).

Edith Porada has done extensive analysis of Cypriot seals and was often a contributor in excavation reports for sites which turned up significant amounts of glyptic artifacts.

Stylistically, Porada (1948, pp. 182-195) has identified the different groups of Cypriot cylinder and stamp seals. They key styles and characteristics are summarized by Webb and Weingarten (2012, pp. 88-89): Elaborate, Derivative, and Common styles. The distinctions between these styles are described in Table 3.2, as found in Webb and Weingarten (2012, p. 90, Table 6.1). These styles have influences from beyond Cyprus. The Elaborate style is reminiscent of Near Eastern representations, which Webb and Weingarten (2012, pp. 89-90) interpret as Mitannian and Syrian influences specifically. Indicated in Table 3.2, is the fact that in all cases, despite style, the seals had high intrinsic value. However, the different styles were likely associated with different activities and uses, ranging from more formal administrative activities to household functions. The exact correlation between style and activity would need to be further investigated, while this would be interesting to consider in this research, not all the datasets consulted followed this system, and making this classification myself was not plausible.

Table 3.2: Description of the styles of Cypriot stamp and cylinder seals. (Webb and Weingarten, 2012, p. 90, Table 6).

	Elaborate Style	***Derivative Style***	***Common Style***
Raw materials	predominantly haematite (imported)	predominantly chloritite (imported)	predominantly chloritite (imported)
Technical investment	high; specialised tools; long apprenticeships	medium; less specialised tools	low; less specialised tools
Knowledge investment	high esoteric; evidence of literacy; exposure to foreign iconographies	medium esoteric; some evidence of literacy	medium esoteric
Content	divine; mythical; semi-narrative	heroic; semi-narrative; ritual	human; ritual; talismanic
Variability	high	medium; some recurrent motifs	medium/low; recurrent motifs
Distribution	found outside Cyprus	occasionally found outside Cyprus	rarely found outside Cyprus
Intrinsic value	very high; frequently fitted with gold mounts or in jewellery	high; occasionally fitted with gold mounts or in jewellery	high; occasionally fitted with gold mounts or in jewellery
Depositional context	elite burials, votive deposits, industrial and storage installations	elite/middle level burials, votive deposits, industrial and storage installations	elite/middle level burials, votive deposits, industrial and storage installations

Smith (1994, pp. 52-53) summarizes the debated use of seals on Cyprus - they evidently functioned as jewelry and talismans, but more difficult to prove is any sort of administrative or mercantile function. Smith (1994, pp. 62-63) posits that if sealings were made on wax they would not be archaeologically visible, which would explain the scarcity of sealings which are found. Considering various contexts, Smith (1994, p. 140) determines a diverse system of practices: “Seals were buried as items of personal adornment with their owners, dedicated in sanctuaries as votives, placed as dedications in building deposits, and deposited in areas of craft, mercantile, and administrative activities.” Webb and Weingarten

(2012, p. 100) conclude a more uniform use of seals in Late Bronze Age Cyprus, proposing that their use by independent merchants involved in long distance trade, similarly argued by Knapp and Meyer (2023, p. 313). The interpretations of seals in non-funerary contexts are evidently varied, but funerary contexts are limited to interpretations of adornments and amulets.

3.4: Mortuary Practices in Late Bronze Age Cyprus

The burial practices in the Late Cypriot period were not uniform. The start of the period and the end of it show distinct burial practices, and various practices existed simultaneously as well. Initially in the Late Cypriot "intramural burials became much more common, and grave goods much richer", which broke with traditions from the preceding period (Knapp, 2013, p. 381). Knapp (2013, pp. 381-382) notes that the richness of the graves indicates the urge to show hierarchies, status or identity. However, by the end of the Late Cypriot period, burial practices had changed once more and communal burials became more common (Knapp, 2013, p. 382). The tomb types found throughout this period are summarized by Knapp (2013, pp. 382-383) and include the frequently appearing rock-cut chamber tombs, the tholos tombs which appear mostly in the early half of the Late Cypriot, rectangular ashlar tombs from the Late Cypriot II, and pit and shaft graves. Keswani (2004) has done an extensive study on Bronze Age Cypriot mortuary practices. While chamber tombs could have multiple chambers, they most commonly had a single chamber (which was usually a rounded shape) with an entrance shaft located "either through the roof of the chamber […] or relatively high up in one of the chamber walls," (Keswani, 2004, p. 113). Tholos tombs are known from Mycenean Greece, however the variation found in Cyprus are smaller and have a layout which is "more similar to the local rock-cut chamber tombs," (Keswani, 2004, p. 115). The type of grave does not necessarily indicate a particular status, although ashlar-built tombs which are specifically found in contexts which suggest high status of the interred (Knapp, 2013, p. 383). Meanwhile, shaft graves are simplistic in build compared to the other grave types, although some "were lined with stones," (Keswani, 2004, p. 115). An important factor in deciding tomb type is geology, as rock-cut chamber tombs and pit graves have to be dug into bedrock (Webb, 2019, pp. 204-205). Familial tombs were a common occurrence during this period in Cyprus, and tombs would be reopened to add deceased kin (Keswani, 2012, p. 314). Additionally, primary interments could be disrupted and the body moved to "collective tombs in rituals of ancestral celebration," (Keswani, 2012, p. 314).

For the tombs investigated in this research, the tomb types were often ambiguous. This was either due to the weathering, erosion, or destruction by looters of the tombs. There are also reports for which it was not clearly recorded what the tomb type was.

3.5: Background on the sites

The analysis of this paper will be based on archaeological excavations at Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimtrios*, Maroni, Enkomi, and Hala Sultan Tekke. The specific sites and datasets are discussed in this section.

3.5.1: Epsikopi-*Bamboula*

Episkopi-*Bamboula*, also referred to as Bamboula at Kourion, is a site in the south east of Cyprus, located in the Kouris river valley. This site is on the smaller side of the sites which are considered for this research, the settled area measured 6ha, however, there may have been a larger hinterland which is less archaeologically visible (Smith, 2012, p. 45). The site, while classified as a primary site by Knapp (2013, p. 355), was possibly secondary to the nearby site of Alassa (Smith, 2012, pp. 40-41). Bamboula may have conducted commercial activities on the behalf of Alassa - there is evidence for the use of the same bureaucratic equipment between the two sites, evidenced by identical imprints on pottery made with large wooden rollers, which corroborates this idea of a shared political and/or economic system (Smith, 2012, pp. 40-41). (Knapp, 2013, p. 357). An increase in imported goods and luxury items is seen in the onset of the Late Cypriot IIC period (Kiely, 2010, p. 63). This can mean an increase in social complexity, but it might also be a more general indicator of increased economic activity and trade (Kiely, 2010, p. 63). Smith (2012, p. 46) discusses the layout of the site – the settlement is walled and site Area D, E and F show evidence for the same bureaucratic devices as Alassa. Site Area E is characterized by buildings with securely built and thick walls, these buildings are also associated with tombs (Smith, 2012, p. 46). This may evidence that this settlement area was more elite than other, more haphazardly built areas, however it may also be a result of the building materials which were available in those areas (Smith, 2012, p. 46).

The dataset from this site originates from the excavation report by Benson (1972) excavated by J.F. Daniel, and stamps and seals analyzed by Porada (1972). A total of 19 glyptics were identified – nine cylinder seals, eight stamp seals, and two scarabs. Eleven of these were found in funerary contexts. A map of the site can be seen in Figure 3.2.

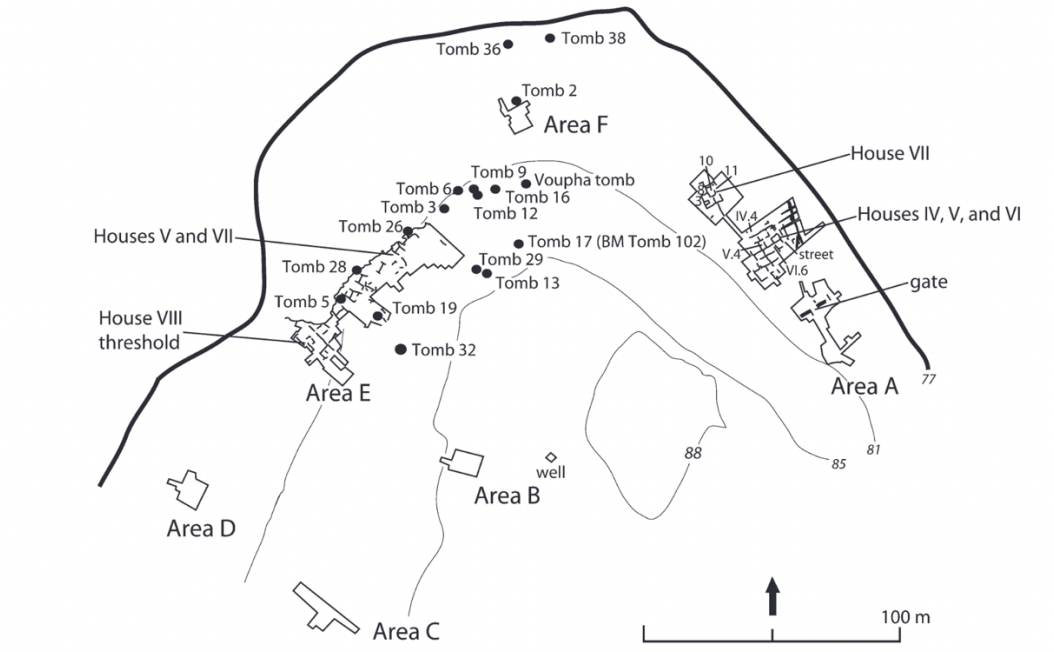

Figure 3.2: Site map of Episkopi-*Bamboula*. The site area with the various tombs and excavated buildings indicated (Smith, 2012, p. 44, Figure 2).

3.5.2: Kalavasos-*Ayios Dhimitrios*

The site of Ayios Dhimitrios is located in the Vasilikos River Valley in the southern part of Cyprus. It is between 10ha and 12ha (Fisher et al., 2019, p. 477; South, 2012, p. 35), and there is archaeological evidence for its occupation starting around the 14th century BCE, and its abandonments around 1200 BCE (South, 2012, p. 35). It has been investigated by both the Vasilikos Valley Project and the Kalavasos and Maroni Built Environments Project (KAMBE). The site's location places it at a regionally significant node for trade and communication (Fisher et al., 2019, p. 477). Ayios Dhimitrios was laid out in an orthogonal grid and this type of plan is a result of purposeful urban planning, which may be a "materialization of elite place making" (Fisher et al., 2019, p. 497). The site has clear evidence for social stratification which is archaeologically best perceived in Building X and the surrounding burials, as well as elite residences, all of which have been identified in the North Eastern area of the site (Fisher et al., 2019, pp. 478-480). The tombs which are associated with Building X have luxury and imported materials (South, 2012, p. 35). Building X likely functioned as an administrative center and large-scale storage location (Fisher et al., 2019, pp. 478-479). Large amounts of olive oil were stored here (Fisher et al., 2019, p. 479), which may have been an important aspect of the site's economy (South, 2012, p. 45). South (2012, pp. 35, 39-41) discusses the significance of metallurgy to the site's economy - the archaeological evidence does not show that metallurgy was extensive beyond local production for local use, despite the proximity to the Kalavasos copper mines. The richness

of imported and luxury items suggests that Ayios Dhimitrios had something of value to trade, but what product this was in particular has not been established (South, 2012, p. 45).

The dataset for Kalavasos-*Ayios Dhimitrios* is from the Vasilikos Valley Project, as reported by South et al. (1989). This excavation turned up seven glyptic objects – four of them cylinders and three of them stamp seals, all analyzed by Porada (1989). Only one piece was found in funerary context. This is not enough data for a quantitative analysis at this site alone, but is still significant to consider stylistically and compared to other sites. A map of this site can be seen in Figure 3.3.

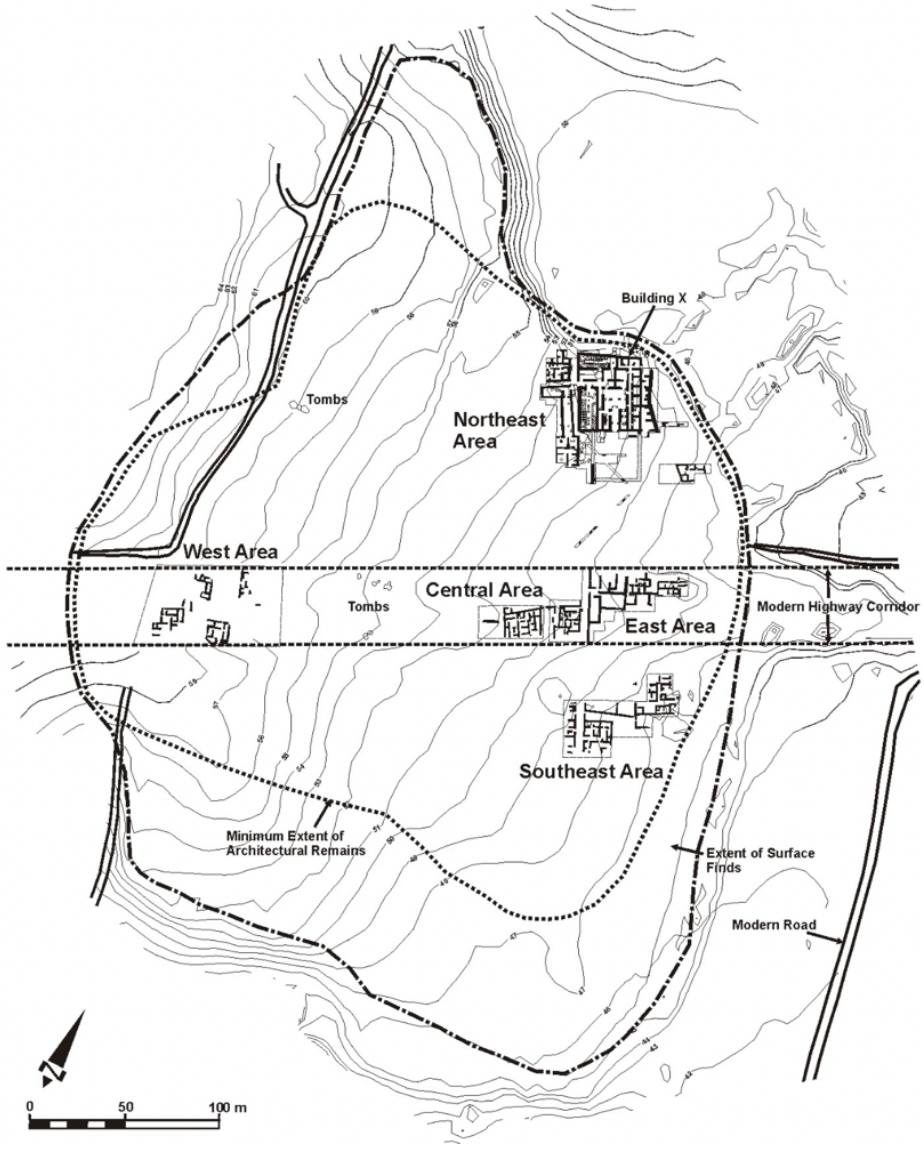

Figure 3.3: Site map of Kalavasos-*Ayios Dhimitrios*. Excavated areas/buildings are indicated as well as the modern roads. (The Kalavasos and Maroni Built Environments Project (KAMBE), n.d.-a, Figure 2, drawn by K. Fisher, https://kambe.cnrs.ubc.ca/the-sites/kalavasos-ayios-dhimitrios/).

3.5.3: Maroni de Chypre

Maroni de Chypre is located in the south of Cyprus. Maroni is more archaeologically elusive than other Late Cypriot sites. This is in part due to its research history. British Museum excavations in 1897 were entirely focused on excavating tombs, however locational and contextual information was often poorly, and sometimes not at all, recorded. The British Museum excavations covered the sites which are now known as Maroni-*Vournes* and Maroni-*Tsaroukkas* (Manning et al., 2014, p. 12). The combined site size is an estimated 25ha (Knapp, 2013, p. 355, fig. 95). These areas can be considered the urban center of the area, for lack of other significantly sized sites (Manning et al., 2014, p. 10). However, we should not consider this a continually built-up area, there is "no single coherent, dense habitation area" (Manning et al., 2014, p. 10). The burials from the site are indicative of social stratification, with certain "elite" burials containing imported and luxury material (Manning & Monks, 1998, p. 348). Identified at Maroni-*Vournes* in particular is a monumental Ashlar Building combined with what is known as the West Building (Knapp, 2013, p. 365). It had storage and production functions, particularly regarding "metalworking, olive-oil processing, weaving, [and] writing" (Knapp, 2013, p. 365). This structure at Maroni could be a manifestation of an elite or centralized control at the site (Knapp, 2013, p. 366).

The data from Maroni is based on the excavations of the British Museum by H.B. Walters in 1897. However, the recording of data and contexts from these excavations is erratic, Johnson (1980) has attempted to order this data with the information available. Unfortunately, some contexts are not retrievable. The excavations were exclusively of tombs, and yielded eight seals: six cylinder seals, one stamp seal, and a single scarab, analyzed by Porada (1980). The original excavation map by H.B. Walters can be seen in Figure 3.4, and a revised version in Figure 3.5.

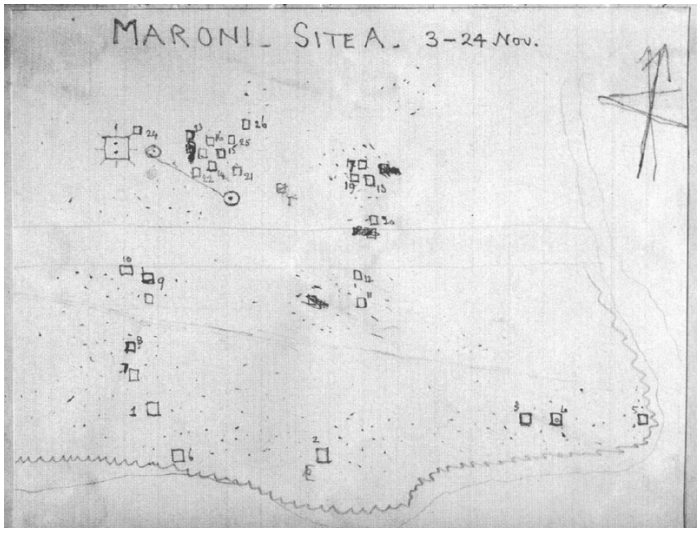

Figure 3.4: Site Map of Maroni. As drawn in the sketchbook of H.B Walters during the British Museum Excavations. (Manning & Monks, 1998, pl. 58a)

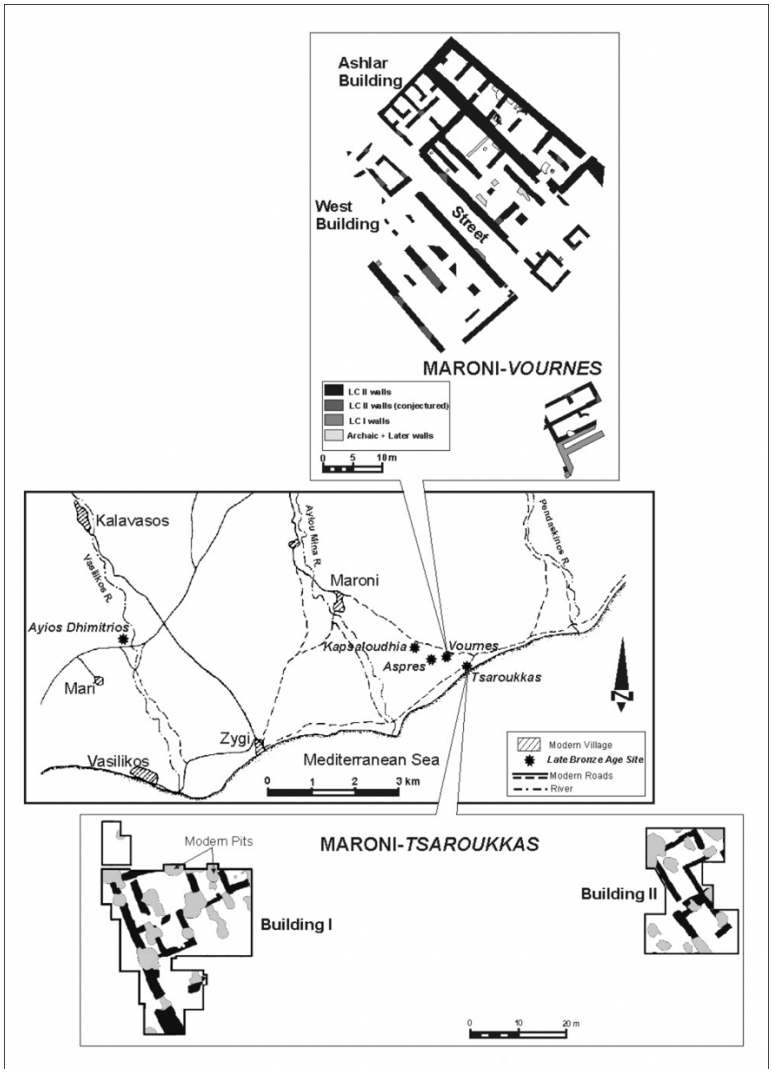

Figure 3.5: Map of Maroni-*Vournes* and Maroni-*Tsaroukkas* (KAMBE, n.d.-b, Figure 1, https://kambe.cnrs.ubc.ca/the-sites/maroni/).

3.5.4: Enkomi

The site of Enkomi is located on the eastern coast of Cyprus, and has been extensively excavated. The site covers roughly 15ha (Knapp, 2013, p. 355). Like at the other sites in this study, monumental architecture gives an insight to the activities which occurred here. Knapp (2013, pp. 361-363, pp. 368-372) gives an overview of such buildings. The so-called "fortress" at Enkomi, speculated to be a manifestation of an authority figure, is a large (550m^2) structure with multi-faceted functions (Knapp, 2013, pp. 361-363). It shows evidence of large-scale copper production as well as domestic spaces (Knapp, 2013, p. 362). Two other monumental structures, the Ashlar Building and Batiment 18, likely served a different purpose, interpreted instead as elite residences (Knapp, 2013, p. 372). These buildings have administrative, domestic, and social functions, as well as spaces classified as sanctuaries in which particular gods were venerated and feasts were held (Knapp, 2013, pp. 368-372). Fisher (2009, p. 454) emphasizes the importance of feasting in the Ashlar Building at Enkomi, considering them events "during which various facets of individual and group status and identity could be displayed, negotiated, or reinforced". This serves as a reminder that an "elite" identity is not static, and we should be cautious not to treat it as a rigid classification, particularly in the Cypriot context where social organization is not well understood. Excavations at Enkomi have recovered a large assemblage of cylinder and stamp seals compared to the other Late Cypriot sites, possibly indicating that they had a more integral function in Enkomi's society than they had at other sites.

The dataset from Enkomi is from two separate excavations. Dikaios (1969a; 1971) reports on the findings from excavation between 1948-1958. These excavations found 46 glyptics (not including scarabs), 29 are cylinder seals and 17 are stamp seals. However, these were all found in non-funerary contexts, and no seals were found in the various tombs excavated. The found stamp and cylinder seals were analyzed by Porada (1971). Gjerstad et al. (1934b) report on the 1927-1931 Swedish-Cyprus expeditions at Enkomi. Their excavations of exclusively tombs did turn up glyptics – nine cylinder seals and one stamp seal, totaling ten. A map of the site can be seen in Figure 3.6.

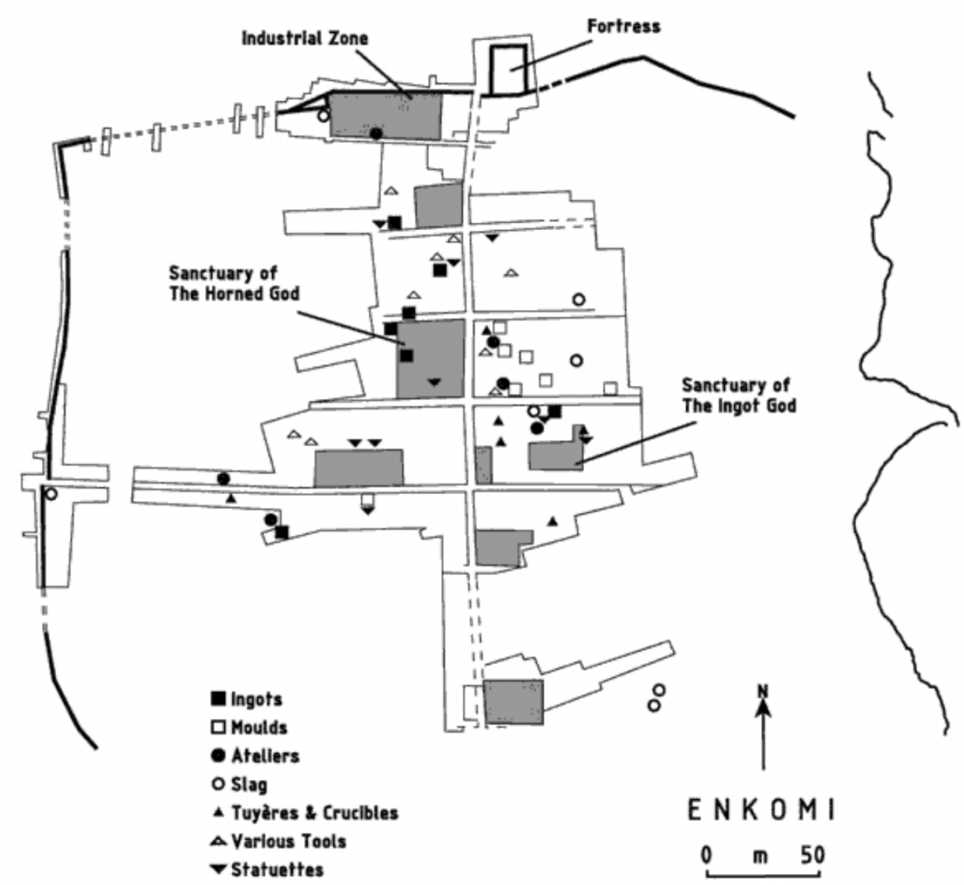

Figure 3.6: Site Map of Enkomi. Significant features and areas have been indicated. (Knapp, 2008, p. 217, Figure 42)

3.5.5: Hala Sultan Tekke

Hala Sultan Tekke is located on the southern coast of Cyprus approximately halfway between Maroni and Kalavasos to the west and Enkomi to the east. Hala Sultan Tekke nears 25ha in size (Knapp, 2013, p. 355, fig. 95). This site is also classified as a first-tier site by Knapp (2013, p. 355). The built environment is summarized by Knapp (2013, pp. 375-376) as having a planned grid layout, buildings with “domestic, industrial, and mercantile nature” (p. 376) have been identified. Furthermore, there are two potential sanctuaries (Knapp, 2013, p. 376). The economic function of the site was likely grounded in trade, as imported goods from throughout the Mediterranean region have been identified, which is further attested by the presence of anchors at the site (Fischer, 2019, p. 246). Imported materials from “Sardinia to Afghanistan/India, and from the Baltic Sea to Nubia (Sudan)” (Fischer, 2023, p. 12) have been identified. Excavations at the site provide evidence for the production of purple-dyed textiles and copper production (Fischer, 2023, p. 2), which may have functioned as exports for interregional trade. However, Knapp et al. (2022, pp. 91-92) note the complexity of such long-distance trade relations, they deem it unlikely that there were many direct links between distant locales, and rather identify overlapping zones of

trade, whereby products move through various intermediates. Much of the imported material is known from tombs. There is a stark variation between burials, some interred are left with little to no grave gifts, whereas others are particularly rich, such as Chamber Tomb X (Fischer, 2019, pp. 240-242). This disparity indicates social stratification in the city, and possibly a ruling class (Fischer, 2019, p. 241).

The excavation considered for the Hala Sultan Tekke data is from the New Swedish Cyprus Expedition/Söderberg Expedition (Fischer & Bürge 2015; 2017; 2018). Not all the data has been published yet, for this research nine seals will be considered – all of them cylinder seals, seven of them from funerary contexts. A map of the site can be seen in Figure 3.7.

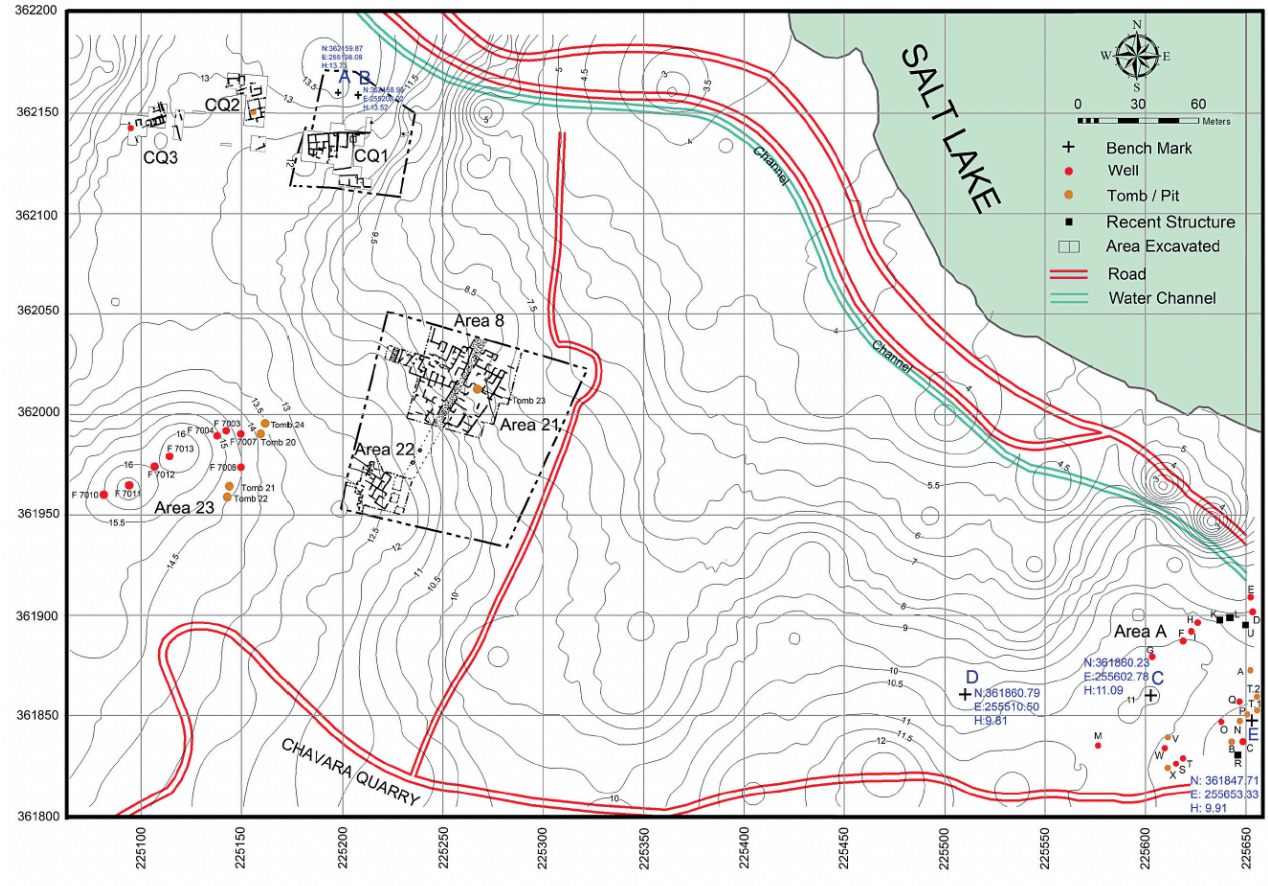

Figure 3.7: Site Map of Hala Sultan Tekke. Various excavated city quarters are indicated. (Fischer & Bürge, 2017, p. 162, Figure 1).

This chapter has established the necessary background on Late Bronze Age Cypriot society, stamp and cylinder seals, and mortuary practices, as well as an overview of the sites considered. Following this is the establishment of a methodology used for approaching the research questions.

Chapter 4: Methodology and Analysis

Chapter 4.1: Methodology and Approaches

For this research a database of stamp and cylinder seals was made based on the pieces in reports by: Benson (1972), Dikaios (1969a, 1971), Fischer and Bürge (2014, 2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), and South et al. (1989). The dataset spans five sites – Episkopi-*Bamboula*, Enkomi, Hala Sultan Tekke, Maroni, and Kalavasos-*Ayios Dhimitrios*.

The database considered the following characteristics:

- Find location (whether it was in a tomb, and the location identifier)
- The date of the context/deposition
- The tomb type and associated burials and grave gifts
- The seal type (stamp or cylinder seal)
- The material of the seal and any notes on the wear of the seal.
- The iconography/decoration on the seal (what has been depicted)
- Whether the seal contained script, and what script
- Whether the seal was reworked
- Whether it was imported or had clear stylistic influences (locational influence when indicated in the reports. The specific styles discussed previously- elaborate, derivative, common - have not been established in all of the publication, and it is beyond the scope of this research to do so).
- Any additional notes about the context or find

With this data the following was analyzed: the material stamp and cylinders are made from as well as their quality and wear, the associated grave finds identified in the tombs with stamp and cylinder seals, the iconography depicted on the seals, and the stylistic influences and origins of the objects. This was analyzed for the individual sites as well as compared between the sites. This allows insight to if there are site specific trends. Additionally, comparisons were made in these categories between stamp and cylinder seals found in grave contexts and in other contexts. This allows insight to whether there is a noticeable difference between the seals in these different contexts – indicating whether funerary seals were expressly made as a grave gift, or whether they are the same as seals identified in other contexts.

Apart from these quantitative analyses, there is also a qualitative approach. While making the database, notable contexts and cylinder and stamp seals were flagged. Also considered

were the comments made by the authors of the reports and analyses of what they considered significant or patterns they indicated. The pieces are discussed in the Results and Discussion section. The finds are discussed and their influence on the interpretation is elaborated.

The data do have some limitations. The particular limitations vary per site, and is more specifically discussed in the background section of the sites. It will be summarized here – for most of the graves and funerary contexts the osteological remains were either not analyzed, or not well enough preserved to be analyzed. There are also a number of cases in which there were multiple skeletons which made it analysis difficult as it was not clear which bones corresponded with each other, or skeletons were incomplete. In the cases were analysis could be and was done there is not more detail than an age indication of the interred. This is discussed where relevant, but does not offer enough data for further analysis. For the Maroni data there are a number of concerns. These excavations took place in the 1897 by the British Museum and are not well recorded, the interpretations by Johnson (1980) can only do so much to repair this. It does not take away from the poor excavation practices –not all material was collected and recorded, and graves were likely skipped if not considered rich enough, exemplified by the letters between H.B. Walters and the Principal Librarian, as replicated in Johnson (1980, pp. 11-12). This makes the dataset from these excavations highly selective and incomplete, which has been kept in mind when interpreting these results. These are the biggest issues concerning the dataset, less significant aspects to keep in mind per site have been previously mentioned. As for the chronology, which part of the Late Cypriot period a stamp or cylinder seal came from, this is analyzed in the last part of the chapter, and the impact on the results is assessed.

On the basis of the methodology described here, the following section is the analysis which has been conducted.

Chapter 4.2: Analysis

The analysis will approach the five elements which have been mentioned in the sub-questions in the introduction. These are the materials, quality, associated grave finds, the iconography, and the stylistic influence. Given the limitations of the dataset not all of the elements can be satisfactorily analyzed through quantitative approaches alone. As such, elaborations will be made in the Discussion and Results section which consider individual examples. At the end of the analysis section a note will be made on the periodization of the finds and the extent to which this has an effect on the dataset.

4.2.1: Stamp and Cylinder Seal Materials and Quality

Comparing the materials that stamp and cylinder seals are made of in grave and non-grave context aid in understanding the similarities and differences between these contexts. The following materials have been used for stamp and cylinder seals in this dataset: steatite, faience, paste, stone, hematite, chlorite, rock crystal, amethyst, lead, clay, copper, and serpentine. The table of this data can be found in Appendix A. The comparison between the contexts can be seen in Figure 4.1 below.

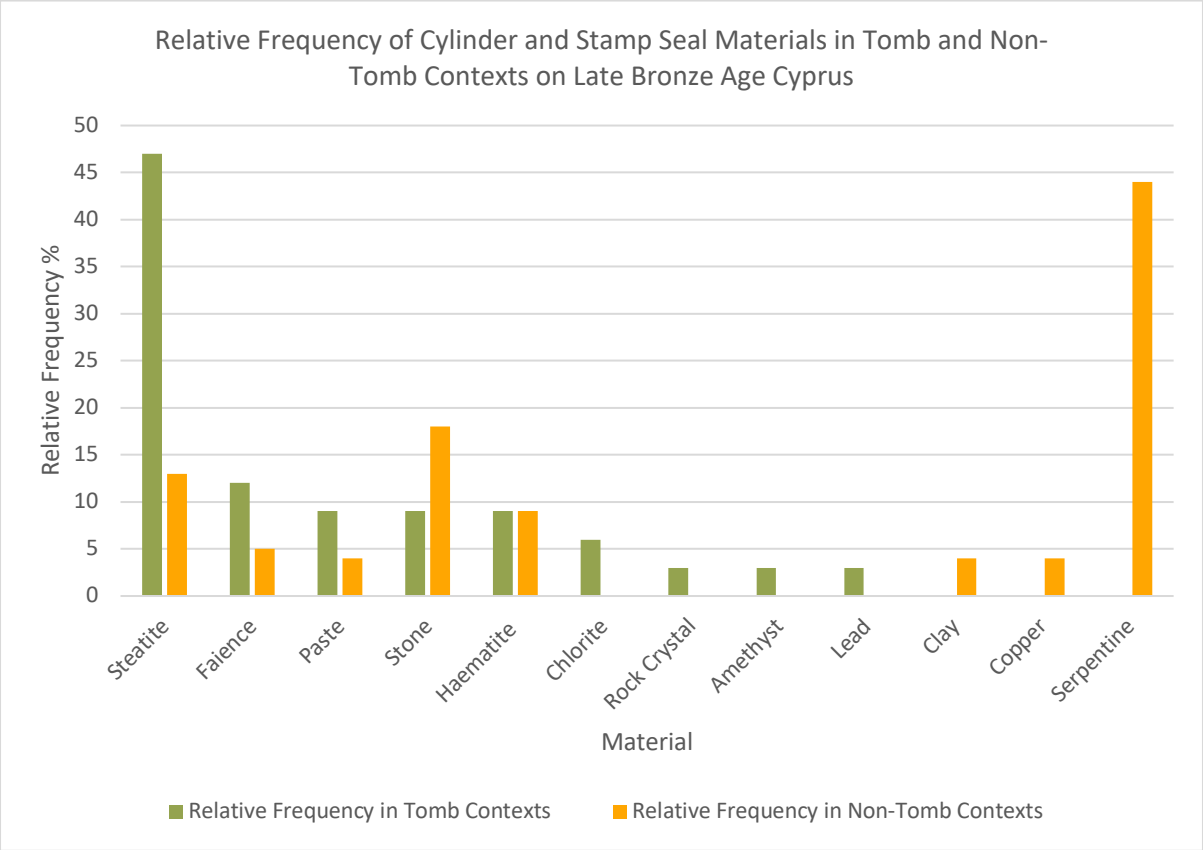

Figure 4.1: Relative frequency of cylinder and stamp seal material in tomb and non-tomb contexts across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Maroni, Enkomi, and Hala Sultan Tekke. (Figure by Aiyana Plasman)

On the basis of data from Benson (1972), Dikaios (1969a, 1971), Fischer and Bürge (2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

Comparing the materials from which stamps and cylinders are made in grave and non-grave contexts reveals a notable pattern which opposes what was seen in the iconography. Figure 4.1 shows that steatite is the dominant material used for the finds from tomb contexts. Almost half of the assemblage of cylinders and stamps from this context is made of steatite. Steatite is a very soft stone, measuring 1 on the Moh's scale of hardness (Hurlbut et al., 1977, p. 403). This softness makes the steatite easy to carve. Webb and Weingarten (2012,

pp. 99-100) and Fischer (2023, p. 10) noted that most of the raw material for Cypriot seals was imported, however, steatite is abundant in Cyprus and could have been locally sourced. While this makes sense in terms of carving, it may impact durability – this is corroborated by the fact that other steatite examples found in burial contexts are noted to be (very) worn down. At Episkopi-*Bamboula,* B1622, B1623 and B1629 are noted to be worn down (Porada, 1972, p. 144), B1622 can be seen in Figure 4.2. And at Enkomi, Swedish Cyprus Expedition T7/No.6 is noted to be worn down (Gjerstad et al., 1934b, pp. 498-500), which can be seen in Figure 4.3. This information could serve to answer two questions – what contributed to the decision to deposit a seal with its owner rather than keep it in circulation? And why do we see so few steatite examples in circulation?

Figure 4.2: Imprint of worn-down cylinder seal B1622 from Episkopi-*Bamboula*. (Detail from Benson, 1972, plate 38).

Figure 4.3: Worn-down steatite cylinder seal No.6 from T7 from Enkomi (Swedish Cyprus Expedition) and the corresponding imprint. (Detail from Gjerstad et al., 1934a, Plate LXXXI, Figure 8).

Using the evidence of the worn-down steatite stamps and cylinders, it can be hypothesized that the wear of a piece contributed to the decision of when to include it in a grave.

Furthering this argument is the fact that some stamps and cylinders are much older than the grave in which they are deposited and for these examples it is logical to conclude that they were used for a long time by different people, before being finally buried. One explanation would be that the final owner had a strong connection to the piece which lead to its use as a grave gift. However, it may be related to the wear of the piece. An example of this could be a lapis lazuli cylinder seal from Enkomi, Inv. 780, pictured in Figure 4.4, it may have come from a grave but the context is uncertain (Dikaios, 1971, p. 815). The cylinder dates to the late 19th century BCE (Porada, 1971, p. 785), meanwhile the grave dates to between 1300-1230 BCE (Dikaios, 1971, p. 486; 815), which indicates a long period of use prior to deposition. The piece is not only old but also extensively used and worn down (Dikaios, 1971, p. 815). This factor may have been key to its final deposition. The deposition of stamps and cylinders in graves may therefore be less related to personal importance and amuletic factors than previously theorized, and more to whether the seal had reached the end of its own use-life. Keeping this idea in mind, the low number of steatite cylinders and stamps outside of grave contexts may be because of how soft this material is and how quickly it becomes worn. Due to this it would have been deposited sooner and not passed between as many people.

Figure 4.4: Cylinder Inv. 780 from Enkomi. Used for a long period of time prior to deposition (detail from Dikaios, 1969b, Plate 180).

Another important trend to note in the materials shown in Figure 4.1 is the prevalence of serpentine in non-tomb contexts. Cylinders and stamps from Enkomi dominate this material category, and there are no serpentine seals from the other sites. The fact that Enkomi dominates the data of seals outside of grave contexts is not surprising, as this is where the largest body of non-grave data comes from. The use of serpentine is likely due to its hardness – rating from 3-5 on the Moh's scale (Hurlbut et al., 1977, p. 400), which is relatively soft, this would aid carving while also being more durable than the softer steatite.

To better understand the breakdown of the material between sites Figure 4.5 was made. In Figure 4.5 the breakdown of materials of all the cylinder and stamp seals from the various sites studied is seen. Evidently, the sites are dissimilar in terms of material. In other factors analyzed commonality is seen between sites (discussed below) so the divergence in this category is likely not due to cultural divergence or isolation between the sites. More likely, this is related to a matter of access to materials for each site. Webb and Weingarten (2012, p. 100) and Fischer (2023, p. 10) mention that the majority of raw material for stamp and cylinder seals is likely imported. This would suggest that the variation between the sites has to do with access to different trading spheres. More detail on this goes beyond the focus of this paper. However, the main trend to be noted here is that the data in Figure 4.5 gives an impression of the actual diversity of materials between sites which is not evident when looking at Figure 4.1.

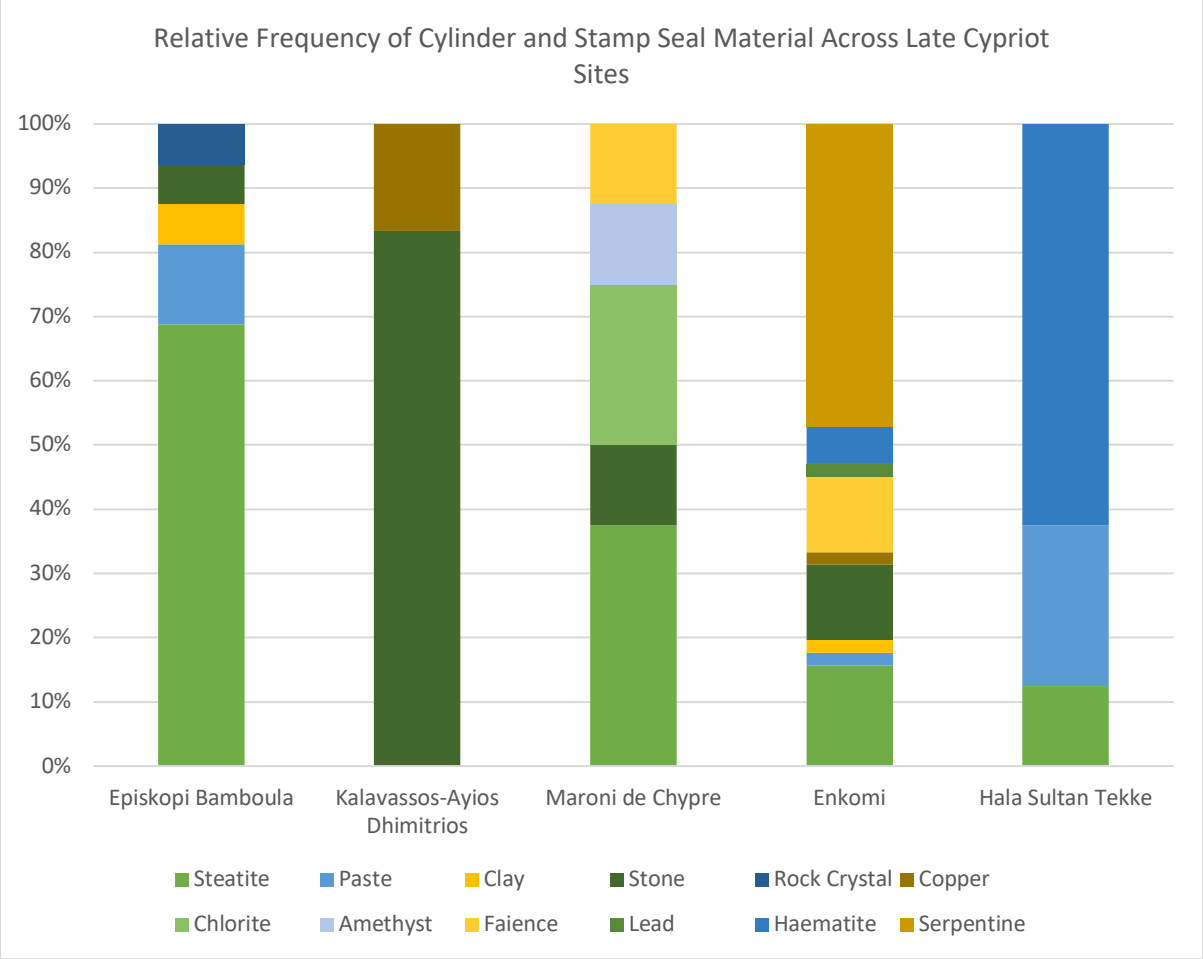

Figure 4.5: Relative frequency of cylinder and stamp seal material across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Maroni de Chypre, Enkomi, and Hala Sultan Tekke. (Figure by Aiyana Plasman).

On the basis of data from Benson (1972), Dikaios (1969a, 1971), Fischer and Bürge (2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

4.2.2: Associated Finds

Associated finds have been grouped into general categories which make them more perspicuous and will aid analysis.

These groups are:

- Worked ivory and bone
- Faience and glass
- Gold Finds
- Bronze Finds
- Silver Finds
- Weights and Whorls
- Figurines
- Glyptics (cylinder seals, stamp seals, and scarabs)
- Imported and Imitation Pottery (Mycenean, Minoan, Levanto-Helladic)
- Cypriot Pottery Wares (base ring, monochrome, plain white, white painted, decorated, white slip, red glazed, black slip, white shaved, red slip, black slip, black lustrous, red lustrous, bichrome, general “local wares”)
- Miscellaneous

The dataset in table form can be found in Appendix B, Table B1 and Table B2.

The dominance of certain categories can point towards more “elite” assemblages, or those with a relatively high amount of weights and imports could indicate mercantile activities. A breakdown of the frequency of grave goods can be seen in Figure 4.6 below, comparing graves with and without stamp and cylinder seals.

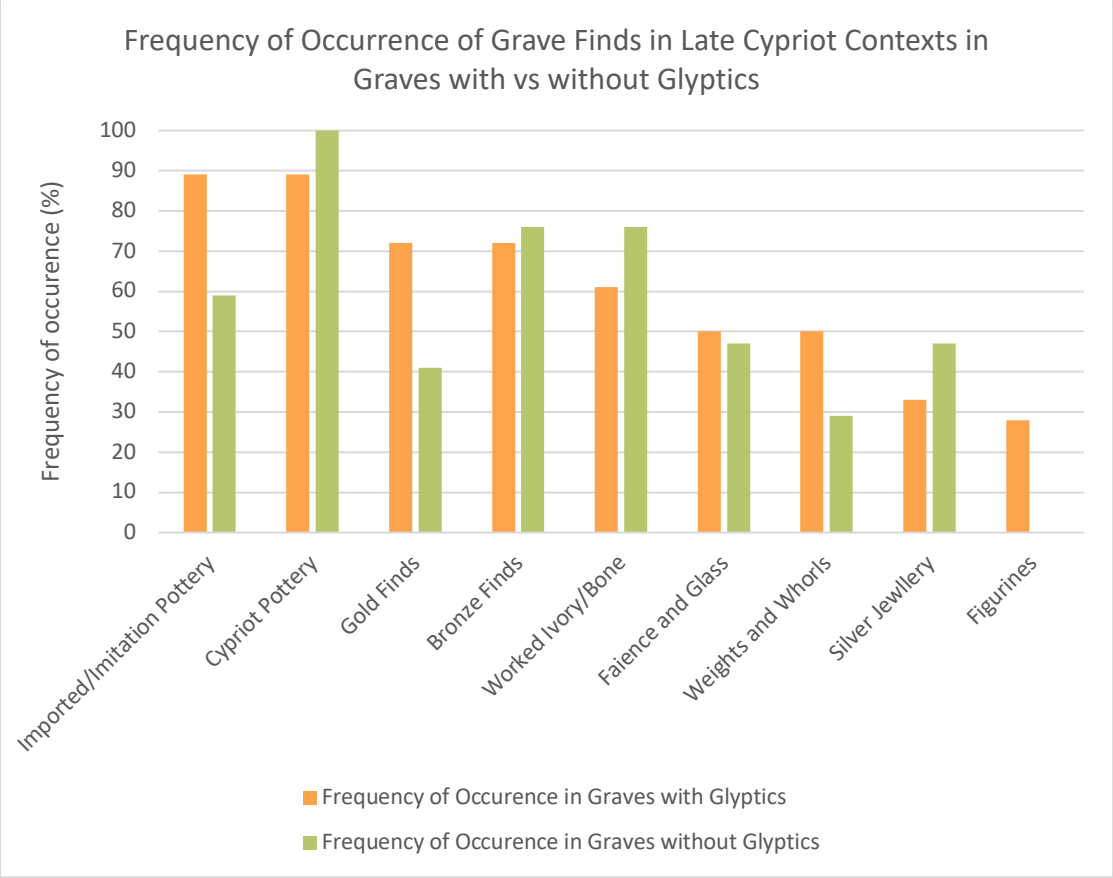

Figure 4.6: Frequency of occurrence of grave finds in Late Cypriot Contexts in graves with glyptics compared to those without at the sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Enkomi, Maroni, and Hala Sultan Tekke. (Figure by Aiyana Plasman).
On the basis of data from Benson (1972), Fischer and Bürge (2014, 2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), South et al. (1989).

The analysis of grave goods found together with stamp and cylinder seals becomes most meaningful when compared with the assemblages of graves that do not contain glyptics. A general pattern to note is that cylinder and stamp seals are often found in relatively rich tombs. Imported pottery and gold finds are considerably more abundant in graves which also contain seals, as evidenced by Figure 4.6. The gold finds consist mostly of jewelry. Gold, being a valuable commodity, can indicate the wealth of the interred individual. However, the abundance of gold in the graves with glyptics is variable – ranging from one item to seventeen. So, while the presence of gold is more commonly attested in graves containing cylinder and stamp seals, these graves are not necessarily abundant in gold (see Appendix B, Table B1). The same should be kept in mind when discussing the imported pottery. Imported pottery, or possible imitation pottery, is for the most part Mycenaean, although Levantine pottery also occurs. It appears in almost 90% of the graves which also contain cylinder and stamp seals. This could indicate wealth – being able to afford foreign

commodities which arrive in these foreign vessels. Or it could represent trade relations of the interred, perhaps as a merchant. Mercantile speculations are particularly interesting, as these could relate to the presence of the cylinder and stamp seals. A final category in which a significant difference is present is that of whorls and weights – they co-occur with cylinder and stamp seals 50% of the time, as opposed to 29% of the time in other graves. They also occur abundantly – for example in Hala Sultan Tekke L328, 22 weights and one whorl are found (Fischer & Bürge, 2014, pp. 75-77; 2018, p. 419;). Establishing the significance of these weights and whorls is beyond the scope of this paper, but it is an interesting pattern to recognize. Considering the richness of the grave assemblage as well as the imported material, the data is compelling in painting a picture of a merchant's grave, somewhat fitting the profile of this type of assemblage as described by Knapp and Meyer (2023, p. 318). The various other finds which are here considered show similarities between the two grave sorts – bronze, faience, glass, and worked bone and ivory occur at similar frequencies in both graves with and without stamp and cylinder seals. Notable silver finds occur somewhat more frequently in graves without glyptics.

The most important pattern to recognize here is that there is a difference between the graves in which cylinder and stamp seals are found compared to those where they are absent. These differences are most prevalent in the categories discussed above. This establishes the fact that the stamp and cylinder seals were not just an item of personal sentimental or superstitious importance, they signified something more. This may have been occupation or status related. I am more drawn to the prior theory – that these were tools of certain occupations. The graves in which they are found vary in richness. If these items were related to status one would expect to see more consistency in the abundance of the graves, but this is not the case. It seems more likely that the grave assemblages were related to the occupation of the deceased, who may have been variably successful independent merchants – explaining the difference in the abundance of the graves, but certainly not being scarce in terms of grave goods.

4.2.3: Iconographic Representation

Even if stamp and cylinder seals are related to mercantile activity, this does not disconnect them from systems of belief. A number of groups were made to sort the iconographic features into – see Appendix C, Table C1 for the full list and table.

Counts were made of the iconographic elements of the stamps and cylinders. It should be noted that it was considered whether an element was present or absent, if a cylinder had

three goats, for example, this would be counted as one representation of the Goat-type category. A comparison has been made between the seals found in grave contexts compared to those in non-grave contexts across the various sites and is shown in Figure 4.7. A similarity between these two contexts would indicate that the cylinders and stamps found in graves are not fundamentally different. Meanwhile, a significant difference between the two categories would encourage the idea that cylinder and stamp seals which have been deposited in graves served a different purpose than those which were in circulation. This would support the idea that these pieces are amulets or talismans which are ideologically significant – and either worn throughout someone's life and taken to the grave, or made specifically to be deposited in a grave context.

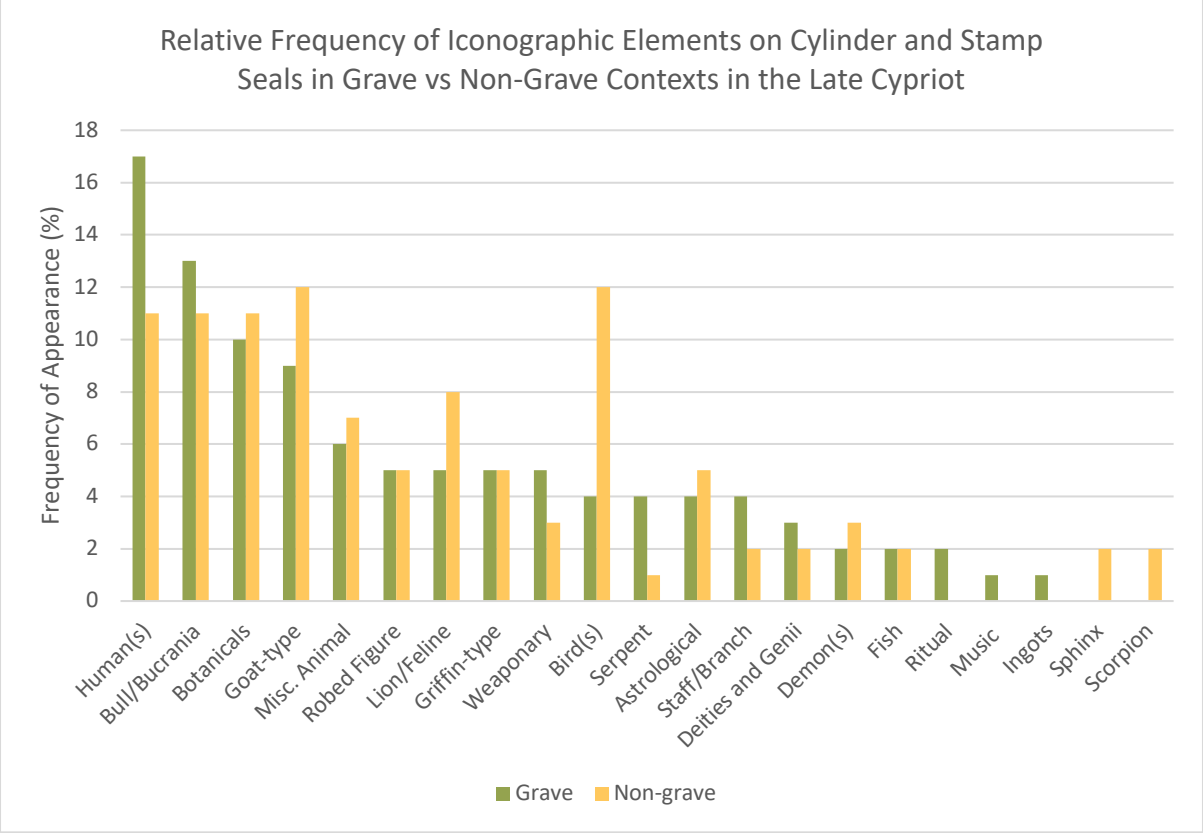

Figure 4.7: Relative frequency of iconographic elements on cylinder and stamp seals in grave vs non-grave contexts in the Late Cypriot at Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Maroni, Enkomi and Hala Sultan Tekke. (Figure by Aiyana Plasman).

On the basis of data from Benson (1972), Dikaios (1969a; 1971), Fischer and Bürge (2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

Figure 4.7 shows the variations between the cylinder and stamp seals found in graves and those from other contexts. In most categories there is not a significant variation between the two contexts. However, humans feature more frequently on the stamps and cylinders found

in graves, appearing on 17% of the seals, compared to 11% in other contexts. A 6% difference however is not very significant. Another contrast is the bird, which appears in non-grave contexts 12% of the time compared to 4% of the time in grave contexts. In general, it can be said that there is similarity between the two contexts. There are a few discrepancies, but considering the size of the data set this is not necessarily representative. In most of the categories the appearance of the iconographic elements is very similar. This indicates the first line of thought previously described – that the stamps and cylinders that people were buried with were not fundamentally different from those in use. Given that we accept the idea that stamps and cylinders were used as property markers, to seal containers, and to sign tablets, then the cylinders and stamps which became grave goods served a similar function prior to being buried. This would mean that we can interpret the glyptics encountered in burials as more than just amulets of individual importance, but as tools which were used throughout the life of the interred. It raises the question, however, what factor lead to the deposition of certain stamps and cylinders in graves, whereas others were deposited in other contexts?

This analysis should not draw attention away from the fact that iconography can also have a spiritual meaning. Cylinders and stamp seals may have functioned in economic spheres but this does not negate the fact that they could have also had significance as amulets or talismans. The following graph shows the variation of iconography between sites. This will show if there is a uniform iconography which points towards an overarching belief system. For this graph, the evidence is limited to the stamps and cylinders encountered in grave contexts, as items deposited in this context likely best represents spiritual belief.

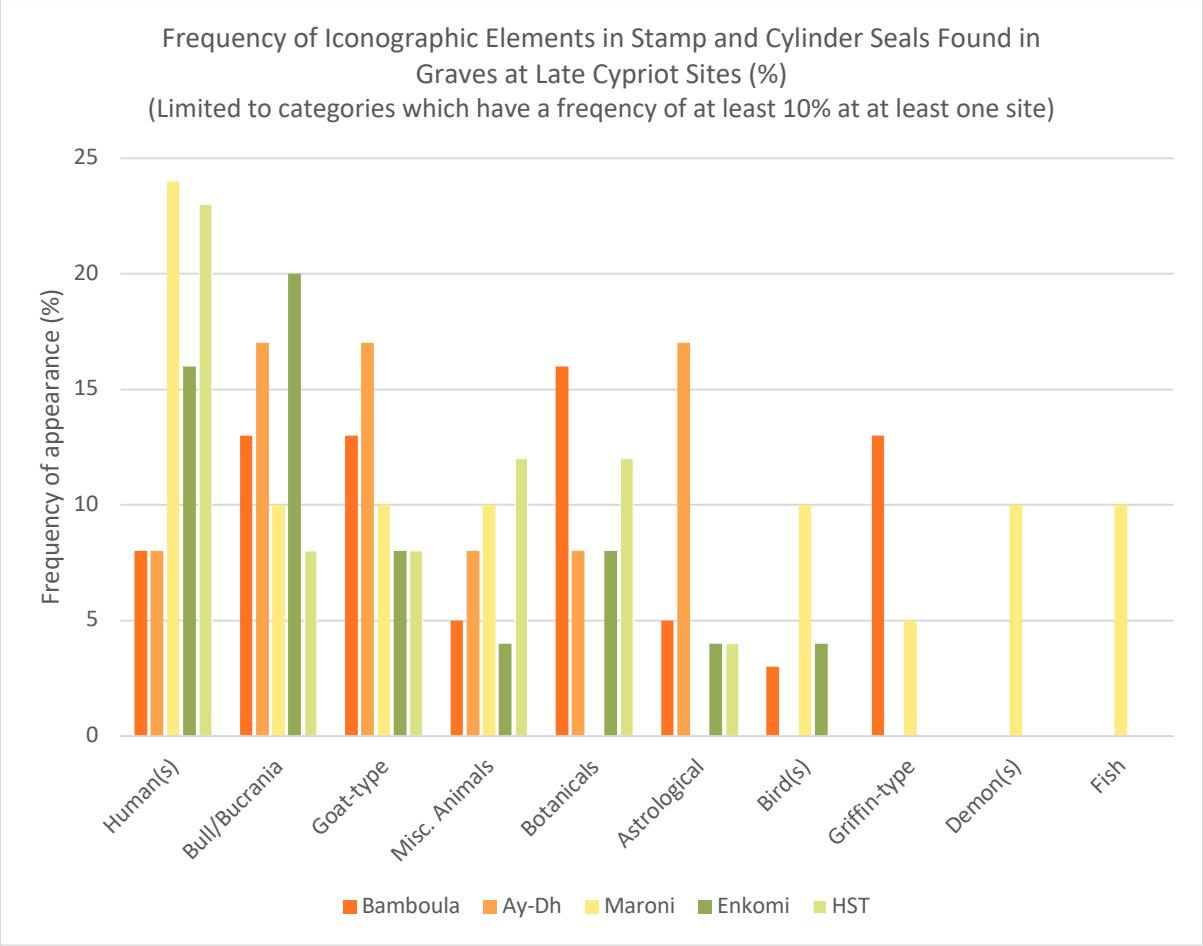

Figure 4.8: Frequency of iconographic elements in stamp and cylinder seals found in graves at Late Cypriot Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Maroni, Enkomi and Hala Sultan Tekke. (Figure by Aiyana Plasman).

On the basis of data from Benson (1972), Fischer and Bürge (2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

Figure 4.8 shows the variation of appearance in the most popular iconographic elements per site. Evidently, much like the Figure 4.7, human representations are popular across the sites, although less significantly at Episkopi-*Bamboula* and Kalavasos-*Ayios Dhimitrios*. Bull and goat iconography are relatively popular, though with some variation as well. This suggests some religious connotation, as the use of bull symbols is pervasive throughout Cyprus at the time, and this connection is further corroborated by two stamps and a cylinder found in votive contexts at Enkomi (Dikaios, 1971, pp. 814-817) which will be discussed in a following section.

There are also iconographic elements which are clearly preferred at certain sites which are otherwise not widespread. Episkopi-*Bamboula* has a comparatively strong preference for botanical elements and griffin-type representations. Kalavasos-*Ayios Dhimitrios* has a

notable high representation of astrological features. Maroni has a number of elements which diverge from the other sites with a relatively frequent representation of birds, demons, and fish. Both Enkomi and Hala Sultan Tekke follow along in the general trends. Overall, there are preferences which are clear across the various sites, as well as site-specific representations. Evidently, the choices of iconography are not random, and indicate some sort of overarching belief system, as there is a repeated preference for certain symbols across the sites. The ritual significance of these symbols will be discussed further in the discussion section – 5.1.4. Caution should be taken in deeming these patterns as evidence for spiritual or religious ideas as they could also be related to aesthetic preferences. Attention was paid to what was represented on a stamp or cylinder and this may relate to superstitions and beliefs which would give these items significance as an amulet.

All in all, analysis of iconography has indicated that there is not a great difference between the glyptics which were deposited in graves compared to those in circulation which were deposited elsewhere. Likely, they served the same functions prior to deposition. However, functionality does not negate spirituality. The iconography was intentionally chosen and is likely linked to some form of ideology across the island as well as relating to site-specific identities.

4.2.4: Stylistic Influences and Origins

Thirteen stylistic groups of cylinder and stamp seals are recognized by Porada (1948, pp. 182-195), which have been sorted into three broader categories – the Elaborate, Derivative, and Common Style. For the current dataset, not all of the cylinders and stamps have been sorted into these groupings in their respective publications. It has been beyond the scope of this particular research to sort the pieces into these groups myself. As such, there is not much which can be said about stylistic influences in regards to this specific dataset. However, the variation is styles is notable in contrast to the relatively uniform use of iconography. It indicates that despite varying aesthetic preferences and styles, there was an overarching iconography. Based on this, I posit that the trends in iconography were motivated by a belief system rather than an aesthetic preference as aesthetic preferences were variant and clearly expressed, evidenced by the variation in styles and groups.

Stylistic groups are often related to regional influences in the style. For example, Porada (1948, p. 182, 189) defines a group based on the Syrian influence and another on similarities with Mycenean pottery painting. In the current dataset it was very variant whether

or not regional influences were mentioned in the sources. As such, there is not enough data for quantitative analysis.

4.2.5: A Note on Periodization

The chronological breakdown of the seals can be seen in Table 5.1. Approximately 61% of the stamp and cylinder seals date to the Late Cypriot IIC and Late Cypriot IIIA dating to between 1300 BCE and 1125/1100 BCE. About 24% of the pieces date to the preceding Late Cypriot IIA and IIC periods, dating to 1450-1300 BCE. Thus, the date range for the majority of the data falls within a 350-year window of the Late Cypriot II period and the Late Cypriot IIIA period. Additionally, the tombs which are considered in the "Associated Finds" data mostly date to the Late Cypriot II period as well, although this is somewhat complicated by graves with multiple phases of use, as grave finds do become mixed up which results in an uncertain or wide range for the date. There are some stamp and cylinder seals which come from earlier or later dates, two pieces date between the Late Cypriot I and IIA, and nine pieces date to the Late Cypriot IIIB.

Some of the factors which have been analyzed may have been impacted by the preferences which were held in the different periods. As the majority of the data falls into a similar time period, the impact of these changes is kept to a minimum. In this case a "similar time period" encompasses a 350-year range, so how similar practices were throughout this period is debatable. However, the contexts in which seals are found often cannot be dated more specifically than a particular century. As such, narrowing the dataset down to a more specific time period would result in a very meager dataset, so the 350-year window is accepted in the interest of a more meaningful analysis. The dates of the seals were kept in mind while the data was analyzed. While doing analysis it was checked whether the trends noticed could be better explained by periodization than other factors, however this did not seem to be the case.

Another factor to note is that the date which is taken is the date of deposition, this is not the data at which the stamp or cylinder seal was fabricated. Some of the pieces had a long use life, being manufactured long before deposition, and for other pieces it is difficult to estimate what the production date was. Therefore, the deposition date has been used as a measure instead, which indicates the last time a piece was used, rather than when it entered circulation.

Table 4.1: Chronology of the stamp and cylinder seals found across the Late Cypriot sites Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Maroni, Enkomi and Hala Sultan Tekke.

Phase	Number of Seals	Date BCE
Late Cypriot I – IIA	2	1680/1650-1450
Late Cypriot IIA – IIC	23	1450-1300
Late Cypriot IIC – IIIA	59	1300-1125/1100
Late Cypriot IIIB	9	1125/1100-1050
Late Cypriot (not more specifically identified)	4	-

Table by Aiyana Plasman. The dating of the phases is based on Knapp (2013, p. 27, Table 2; p.348) and the data from Benson (1972), Dikaios (1969a; 1971), Fischer and Bürge (2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

This analysis has established the patterns in a number of variables. In the discussion section which follows these variables will be looked at as a whole, considering the connections between them. However, first the discussion will consider notable finds and contexts which can expand (and complicate) understandings and which would be otherwise overlooked through a solely quantitative approach.

Chapter 5: Results and Discussion

5.1: Notable Finds and Contexts

Certain finds have notable characteristics or contexts, which are not noticeable through a quantitative approach. However, this may give some insight to mare particular functions. The function of these seals does not have to be uniform, but these particularities are not necessarily visible in a quantitative approach.

5.1.1: Amateur and Professional Seal Carvers

An elaboration which can be made regarding the quality of stamp and cylinder seals is illustrated by examples from Enkomi. Porada (1971, pp. 798-800) outlines a series of poorly made and not completed cylinder seals from Enkomi – this consists of Inv. 1265, Inv. 1536, Inv. 912, Inv. 1484, Inv. 3288, Inv. 1849, Inv. 2132, Inv. 2080 and Inv. 1724. Inv. 1536 is pictured in Figure 5.1. It is suggested that these were made by amateur carvers (Porada, 1971, pp. 798-800). This indicates that urge for people to have their own cylinder and stamp seals – suggesting that the high-quality versions were not available to everyone, but were a desired commodity. The makeshift pieces may have functioned at a less formal household level, for example to seal personal property or may have been used solely as amulets (Porada, 1971, p. 799). Whereas the better-quality examples may be used in more formal economic spheres.

However, poorly-carved pieces may, in certain contexts, be intentionally made that way – for example B1628 from Episkopi-*Bamboula* – described by Porada (1972, p. 143) as an "unsightly steatite cylinder" is poorly engraved but shows traces of being covered in gold foil and has gold caps. The gold caps on either end make the piece more than just a tool but a valuable item, and the gold foil suggests it was probably not used at all. Porada (1972, p. 144) suggests that "clarity of impression may not have been the principal concern," rather the item would have functioned as a way to show status. It was deposited in Tomb 36 – which included glass beads, gold beads, bronze earrings, faience beads, and pottery in both Cypriot and Mycenaean styles. This paints the picture of a rich context belonging to individuals of high status. The poorly made pieces are thus not only imitations or made to function in informal circumstances, but in some cases signify the fact that the impression was not important. Evidently, the function of the cylinder and stamp seals is not uniform.

Figure 5.1: Poorly made seal from Enkomi, Inv. 1536. (Detail from from Dikaios, 1969b, Plate 181).

5.1.2: Heirlooms? The Deposition of Old Stamps

A point which was mentioned in the material and quality section was the extent of wearing down of certain objects. Some of the cylinder and stamp seals are originally fabricated long before their deposition. This is the case for Inv. 780 (see Figure 4.4) which is a lapis lazuli cylinder from Enkomi (Dikaios, 1971, p. 815). And another example is an originally Mesopotamian cylinder made of hematite from Hala Sultan Tekke (Fischer, 2023, p. 12). They were both (re)used over a long period of time, and thus not associated with a single individual, which raises the question of what factor(s) lead to their deposition? These items were passed over various owners, perhaps as an heirloom, or maybe traded or found. Perhaps it is due to their worn-down state that they were finally buried. Having reached the end of their use-life they no longer had functional significance, but they did have a spiritual significance and were deposited as a grave good. Or, the meaning of these seals changed with different owners, and for these particular owners they had some relevance, perhaps as an amulet, which lead to their eventual deposition upon death. In the previous section, the analysis of materials, discusses this matter further, and it seems plausible that the wearing down of a stamp or cylinder seal could be a key consideration in its eventual deposition. This idea is further corroborated by the example discussed here – when a piece is used over multiple generations and then deposited this decision may be informed by the end of the functionality. The inclusion in a grave then indicates that the seal was valued beyond its functionality, as appreciated in another way, possibly spiritually.

5.1.3: The Worry Bead

The wearing down of pieces can also be understood in another way, it may not only be the result if repeated use. One of the seals from Episkopi-*Bamboula*, B1622, has been noted by Porada (1972, pp. 141-142) for how worn down it is. She notes that this type of wear is reminiscent of a worry-bead – a talisman which is held between the fingers and rubbed (Porada, 1972, pp. 141-142). This would be indicative to an amulet-like function, where it would be held near to the body, perhaps around the neck as a pendant. No surface-wear analysis has been done to confirm this function, so it rests on speculation. However, it does pull the narrative away from economic systems and hierarchies and act as a reminder that these items can have very personal importance. Almost all of the cylinder seals are hollow cylinders, and stamp seals have a loop on the top of them, all of these pieces could have been work close to the body on a necklace as a bead. If an individual was using a seal for economic purposes, it would make sense to wear it close to the body for easy access. However, wearing something on such a regular basis may lead to a sentimental bond to the item, and possibly form a part of one's identity, not unlike a signet ring. This example expands economic functions to also include an emotional function, and these functions may have co-existed.

5.1.4: Votive Pieces: Horned God Cult at Enkomi

This spiritual aspect may be further expanded on by the stamp and cylinder seals which were found in votive contexts. Further diversifying the uses analyzed thus far is an example from Enkomi. Mentioned also in the theory section is Inv. 228 at Enkomi, pictured in Figure 5.2, which was found in conditions where it likely served as an offering to the Horned God cult (Dikaios, 1971, pp. 814). Inv. 184 and Inv. 353 from Enkomi are also interpreted as offerings to the Horned God cult (Dikaios, 1971, pp. 816-817). These contexts are evidently ritual and highlight the fact that stamp and cylinder seals were not only functional tools but also ritual ones. If cylinder and stamp seals are used as a ritual item in this context, then it can be speculated that their inclusions in graves involves an element of religion as well. Based on the contexts at Enkomi there was an element of superstition or religion attached to the seals and they were considered valuable offerings. Based on this is should be concluded that even outside of grave contexts stamp and cylinder seals did not have solely economic or administrative functions. So, when they are encountered in graves they should not be considered as only relating to the vocation of the deceased, there is likely also a belief system or superstition associated to the deposition.

The votive pieces also offer an insight to the importance of iconography, as Inv. 228 depicts a religious scene, and Inv. 353 depicts a bull (Dikaios, 1971, p. 814; 817) – which are both images which relate to their function as an offering to the Horned God cult. This strengthens the idea that patterns in iconography related to a belief system, rather than relating to aesthetic preferences.

Figure 5.2: Cylinder seal impression of Inv. 228 Enkomi depicting a ritual scene. (Detail from Dikaios, 1969b, plate 179)

5.1.5: Baby burial

Another notable find, and specifically context, from Episkopi-*Bamboula*, is that of B1632 in Tomb 19. This steatite stamp seal was associated with six baby skeletons (Benson, 1972, pp. 22-23). The stamp features a griffin and a plant, seen in Figure 5.3, and the associated finds include a snail-shell and glass bead necklace, a bronze pin with an ivory bead, faience beads, and decorated bowls (Benson, 1972, pp. 22-23). Benson (1972, p. 22) hypothesizes that the deaths were plague-related due to the large number of coeval baby burials. The presence of the stamp seal is curious. In some cases, babies associated with precious materials is used as an indicator of hereditary status – received as a birthright before having to even establish themselves in society (Flannery, 1972, p. 403). However, whether these stamps are a precious commodity, is debatable. Another consideration could be its use as a toy. This is based on personal speculation, but it is not unimaginable for children to use something like this to stamp in clay, not unlike children now who use ink stamps on paper. The item may have been dear to these children and buried with them. This example also indicates an emotional and possibly spiritual dimension to the function of the stamp and cylinder seals.

Figure 5.3: Stamp B1632 from Episkopi-*Bamboula*. (Detail from Benson, 1972, plate 38)

5.2: Discussion of Results

Considering all the factors in the analysis creates a complex mosaic of uses for Late Cypriot stamp and cylinder seals. The analysis and discussion have aimed to approach the various sub-questions which were developed. These were:

- What materials have been used for stamp and cylinder seals in different contexts and what does this indicate of their function/use?
- What is the quality and the wear of cylinder and stamp seals in different contexts and does this indicate patterns of use?
- Is there a trend in the associated grave finds of cylinder and stamp seals found in funerary contexts and what does this indicate of their function/use?
- What iconography is present in the stamp and cylinder seals and what does this indicate of their functions/use?
- What is the stylistic influence of the iconography used and the origin of the stamp and cylinder seals and what does this indicate of their functions/use?

This section discusses the insights which have been gained to these questions on the basis of the analysis.

The material analysis shows the prevalence of steatite seals in grave contexts. This prevalence could be related to the softness of the material – which on the one hand makes it easy to carve, but also reduces the use-life. Many of the steatite examples are described as worn out. The wearing-out of seals may be a key persuasion for deposition in a grave. This would also explain why certain examples have old production dates compared to their deposition date. Whether these older examples were passed down as family heirlooms or

circulated otherwise has not been investigated here. The choice to add pieces to graves which were no longer functional also indicates that the pieces had emotional or spiritual importance, and not centered only on functionality. As for the quality, this varied greatly, some pieces were specialist-made while others seemed more make-shift. This could indicate that stamp and cylinder seals functioned on formal economic levels as well as in more-everyday household functions.

Analysis of the associated grave finds (Figure 4.6) evokes the impression that cylinder and stamp seals were related to mercantile activities – indicated by the association with imported pottery and gold. Relation to status is less likely, as numerous graves in which the seals occurred were relatively modest - they contained gold finds and other valuables but these were not particularly abundant. Analysis of the iconography of seals found in graves compared to those in other contexts corroborates the idea that the two contexts do not feature fundamentally different seals in terms of represented images. Figure 5.2 illustrates the fact that iconography is relatively consistent between the two contexts. This entails that the cylinder and stamp seals which were found in functional contexts were the same type of cylinder and stamp seals which would be deposited in graves.

Iconographic analysis also revealed however that the purpose of stamp and cylinder seals is not solely utility-based. There are evident preferences for certain iconographies. There are a few symbols which are popular throughout Cyprus – such as bulls/bucrania, humans, and goat-type animals. This prevalent preference could allude to religious practices or superstitions. Furthermore, there are also site-specific preferences for certain symbols (Figure 5.3), which may indicate local identities. Implementing religious practices into the cylinders and stamps highlights the fact that these were not just tools, but did also serve as talismans. Given the data available, little could be said regarding the origins of stamp and cylinder seals or the stylistic influences.

The previously discussed notable finds and contexts further diversify understandings. There are a number of specific cases which indicate that the cylinder and seal stamps also functioned as amulets and ritually-related objects. A piece from Episkopi-*Bamboula* bears wear-traces which would have been caused by repeated rubbing is compared by Porada (1972, pp. 141-142) to a worry bead. The baby burial at Episkopi-*Bamboula* (Benson, 1972, pp. 22-23) further develops the spiritual elements of the cylinder and stamp seals. In this example, it is difficult to explain the presence of the cylinder in any other way than sentimental or spiritual. While cylinder and stamps in associated with adult burials may have been related to the vocation of the deceased, it could simultaneously function as a talisman.

Even in the adult burials it is clear that the pieces were not always vocationally-related. An example of this which has been analyzed is B1628 from Episkopi-*Bamboula*, this piece was poorly carved but richly decorated. This cylinder was made to be decorative and not for use (Porada, 1972, pp. 143-144). It can therefore not be concluded that all cylinder and seals are related to mercantile activity and vocation, there is also evidence for their use being ritual and decorative.

Chapter 6: Conclusions

To conclude, the central research question will be revisited:

How can the presence of cylinder and stamp seals in Late Bronze Age Funerary contexts in Cyprus be understood?

The discussion section covered the sub-questions, which formed a diverse understanding of the stamp and cylinder seals in Late Bronze Age Cyprus. Considering the stamp and cylinder seals in funerary contexts, the whole picture is complex. Stamp and cylinder seals in this context should not be oversimplified, and the previously theorized amulet function is limiting to the full picture. Based on the data, a key factor which lead to the deposition of the pieces was the fact that they reached the end of their use-life. However, if their value were solely functional then they would have been disposed of with less care. The fact that they are found in graves indicates that they were also valued in another way, likely spiritually or as an object of status or vocation. Their spiritual value is emphasized by the fact that they have been found in votive contexts as well as the significance of their iconography. The grave assemblages that stamp and cylinder seals are found in also indicate that this is at time related to mercantile activity. However, this is context dependent, and cannot be concluded for all stamp and cylinder seals deposited in graves. They also seem to be a wanted commodity, and were at times owned as a purely decorative object, not intended for use, indicating an association with status and as something to be shown off.

A key conclusion is that the understanding of stamp and cylinder seals is not singular. It is far more complex than a single explanation. Trying to impose a rigid understanding on the past is reductive as people create meanings for objects. While there may be general overarching uses for something, it is not uncommon for people to attribute personal significance to objects. These meanings can overlap and coexist, which needs to be considered when understanding and interpreting archaeological material. This research has expanded on the established ideas of stamp and cylinder seals in funerary contexts. It certainly has not dismissed their function as amulets, but it has diversified the understanding of their functions. As excavations continue, more stamp and cylinder seals are being found. This growing body of data will expand understandings further. However, having established the patterns which can be seen in the data which is currently available will offer a framework from which to approach the analysis of these new finds and prevent overlooking their significance.

The approach which was taken in this research was effective in answering the sub-questions and offering an interpretation for the central research questions. Although, the dataset and the approach did also have limitations. Firstly, the sporadic appearance of stamp and cylinder seals across most Cypriot sites makes it difficult to establish whether certain aspects are patterns or coincidences. Certain sites have a much higher number of cylinders and stamps, for example the abundance seen at Enkomi is not mirrored at the other sites analyzed in this paper. However, an analysis of this variation was beyond the scope of this research. The variations between the sites have been acknowledged, but the aim of this research has been mostly to consider island-wide patterns. Finally, the excavation reports and excavations themselves are of varying qualities and the information recorded is not uniform. This made it difficult for example to talk about the stylistic influences in iconography and the categorization of styles (Elaborate, Derivative, Common). On the basis of this, the analysis and conclusions of this paper are not absolute.

Dedicating time to categorize the body of data into the Elaborate, Derivative, and Common styles and analyzing the stylistic influences may be a fruitful avenue for future investigation. This would require some dedication to understanding the characteristics of these styles and interpreting regional stylistic influences. However, being able to create a uniform categorization of the various excavation reports would allow meaningful analysis on this topic. This may lead to results which offer more understanding on the power-structures in Late Bronze Age Cyprus and overseas relations. This could also elaborate on discussions of trade and the function of stamp and cylinder seals as mercantile tools.

Abstract

The aim of this research is to expand the understandings of stamp and cylinder seals as grave gifts in the Late Bronze Age Period of Cyprus. The significance of stamp and cylinder seals in other contexts has been more extensively investigated and interpreted, often understood as mercantile tools, markers of social status, and administrative tools (on both household and institutional levels). However, when it comes to grave contexts, the significance of stamp and cylinder seals is reduced to being decorative or used as an amulet. This research reconsiders that perspective by analyzing the stamp and cylinder seals found in grave contexts at the sites of Episkopi-*Bamboula*, Maroni, Kalavasos-*Ayios Dhimitrios,* Hala Sultan Tekke, and Enkomi. The data considered is the material and quality of the stamp and cylinder seals, the associated grave finds encountered in tombs, and the iconography and stylistic influences of the engravings. On the basis of these elements, patterns are identified and comparisons are made to the stamp and cylinder seals which were not located in grave contexts. This gives an insight to what characterizes the stamp and cylinder seals which were used as grave gifts, and whether these characteristics were different from stamp and cylinder seals in other contexts. Also considered is what factor it was which lead to their deposition in graves, as some stamp and cylinder seals were in circulation for multiple generations before being buried. This could be related to the wear of stamp and cylinder seals, and the fact that they reached the end of their use-life. Besides the quantitative analysis, specific contexts and notable finds are considered and discussed. Importantly, this research does not aim to create a singular interpretation of this object type, but rather understand the full range of uses and understandings which surrounded stamp and cylinder seals in the past. The analysis in this research establishes the variety of interpretations which can be applied to stamp and cylinder seals in tomb contexts – they can be indicators of vocation, status, and religion.

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Appendix

Appendix A – Material Data

Table A1: Frequency of different materials used for stamp and cylinder seals across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Enkomi, Maroni, and Hala Sultan Tekke

Material	Tombs BK	Other BK	Total BK	Tombs AD	Other AD	Total AD	Tombs MdC	Other MdC	Total MdC	Tombs Enk	Other Enk	Total Enk	Tombs HST	Other HST	Total HST
Steatite	7	4	11	0	0	0	3	0	3	5	3	8	1	0	1
Paste	0	2	2	0	0	0	0	0	0	1	0	1	2	0	2
Clay	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0
Stone	1	0	1	1	4	5	1	0	1	0	6	6	0	0	0
Rock Crystal	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Copper	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0
Chlorite	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
Amethyst	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Faience	0	0	0	0	0	0	1	0	1	3	3	6	0	0	0
Lead	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Haematite	0	0	0	0	0	0	0	0	0	0	3	3	3	2	5
Serpentine	0	0	0	0	0	0	0	0	0	0	24	24	0	0	0

On the basis of data from Benson (1972), Dikaios (1969a, 1971), Fischer and Bürge (2015; 2017; 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).

Appendix B – Grave Assemblage Data

Table B1: Associated finds in graves with stamp and cylinder seals across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Enkomi, Maroni, and Hala Sultan Tekke

(no.)	BKT12 - LCI-II	BKT16 - LCIII	BKT19 - LCII-III	BKT36 - LCII	KADT4 - LCI-II	SCET2 - LCI	SCET7A - LCIII	SCET10 - LCII	SCET13 - LCI-II	SCET17 - LCII	MDCT1 - LCII	MDCT3 - LCI-II	MDCT4	MDCT14 - LCII	MDCT17 - LCII	MDCT22 - LCII	HSTL328 - LCIIA-B	HSTTX - LCII-III
Ivory/Bone	4	8	7	2	0	0	0	2	0	3	2	0	0	3	1	2	0	4
Faience/Glass	0	1	8	29	1	0	0	0	2	0	3	0	0	10	2	0	0	2
Gold	1	2	1	3	0	0	0	3	4	18	3	0	1	2	1	1	0	10
Silver	0	0	1	4	0	0	0	0	0	0	43	2	1	0	1	0	0	0
Bronze	8	1	8	0	0	0	1	6	0	1	9	1	2	1	0	1	1	6
Weights and Whorls	10	0	5	0	3	0	0	2	0	0	6	11	0	0	0	1	23	3
Figurines	0	0	1	0	0	0	0	0	0	0	2	0	0	3	3	1	0	0
Glyptic	2	3	6	1	1	2	1	1	1	1	1	1	1	2	1	1	2	8
Imported/Imitation Pottery	v	v	v	v	/	v	v	v	v	v	v	/	v	v	v	v	v	v
Cypriot Pottery	v	v	v	v	v	v	v	v	v	v	v	v	v	/	/	v	v	v
Misc (specify)	0	4	18	0	1	0	0	0	1	1	36	6	0	3	3	0	0	32

Details misc.	/	Steatite bowls, iron knife fragment, pestles	17 sea snails part of necklace, handle with impressed ornament	necklace of glass beads	quern fragment	/	/	/	terracotta lamp	terracotta lamp	35 porcelain beads, alabaster bowl	Pierced steatite object, 5 (worked) pebbles. *no number for Cypriot pottery as most was discarded.	/	Carnelian bead, 2 askos	marble saucer, mortar, small cup.	/	/	30 carnelian beads, 1 amethyst bead, 1 turquoise bead

On the basis of data from Benson (1972), Fischer and Bürge (2014, 2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), South et al. (1989).

Table B2: Associated finds in graves without stamp and cylinder seals across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios* and Enkomi

(no.)	BK T3 - LCII I	BK T5 - LCII -III	BK T6 - LCII	BKT 18 - LCII-III	BKT 21 - LCII	BKT3 3 LCII-III	BKT 40 LCII-III	KAD T5 - LCI I	KAD T6 - LCI I	SCE T6 (Chamber A LCII)	SCE T8 (2nd burial period, LCI)	SCE T14 (LCIII)	SCE T15 (LCI II)	SCE T16 (LCI II)	SCE T18 (LCII - chamber group 1 and side chamber)	SCE T18 (LCII chamber group 2)	SCE T22 (LCI I)
Ivory/Bone	1	2	1	1	0	0	1	4	2	7	0	1	1	2	5	16	0
Faience/Glass	0	0	1	1	0	1	1	0	0	4	0	1	0	0	4	3	0
Gold	0	0	0	0	0	2	0	13	0	3	8	9	0	0	24	27	0
Silver	0	0	1	1	0	1	0	1	0	1	0	1	0	0	1	2	0
Bronze	2	0	2	4	1	3	3	2	1	5	0	1	0	2	7	25	0
Weights and Whorls	0	0	0	1	0	2	3	3	0	3	0	0	0	0	0	0	0
Figurines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glyptic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imported/Imitation Pottery	/	v	v	v	v	v	/	/	v	v	/	/	/	/	v	v	v
Cypriot Pottery	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Misc (specify)	0	1	1	2	0	3	2	0	0	5	0	18	0	4	1	9	0
Details misc.	/	ostrich egg	pestle	carnelian bead, pestle	/	stone mortar, stone pestle, alabaster jar	2 shells	/	/	stone pestle x2, stone bowls x3	/	2 carnelian beads, 14 paste beads, 1 stone bowl, 1 stone pestle	/	2 stone pestles, 2 stone bowls	ostrich egg	5 stone bowls, 4 stone pestles	/

On the basis of data from Benson (1972), Gjerstad et al. (1934b), South et al. (1989).

Appendix C – Iconography Data

Table C1: Counted frequency of iconographic elements on stamp and cylinder seals across the Late Cypriot sites of Episkopi-*Bamboula*, Kalavasos-*Ayios Dhimitrios*, Enkomi, Maroni, and Hala Sultan Tekke

Iconography	Bamboula (graves)	Ay-Dh (graves)	Maroni (graves)	Enkomi (graves)	HST (graves)	Bamboula (all)	Ay-Dh (all)	Maroni (all)	Enkomi (all)	HST (all)
trees/plants/flowers	6	1	0	2	3	10	2	0	9	4
robed figure(s)	3	0	0	2	1	4	0	0	6	2
god/goddess/mythological creature	1	0	1	1	0	1	0	1	4	0
demon	0	0	2	0	0	1	0	2	4	0
human(s)	3	1	5	4	6	3	3	5	16	8
lion/feline	1	1	0	1	2	3	1	0	10	2
griffin/falcon/bird-headed	5	0	1	0	0	7	0	1	6	0
bull/bucranium	5	2	2	5	2	7	3	2	15	3
ibex/goat/…	5	2	2	2	2	7	3	2	14	3
bird(s)	1	0	2	1	0	3	2	2	11	0
fish	0	0	2	0	0	0	1	2	1	0
serpent	0	1	1	1	0	0	1	1	3	0
misc animal	2	1	2	1	3	2	2	2	8	4
Star/globe/cosmic	2	2	0	1	1	2	2	0	7	2
Altar/libation jar/ritual item	1	0	0	1	0	1	0	0	1	0
staff/branch	1	0	0	2	2	1	0	0	6	2

Weapon or shield	2	1	1	0	2	3	1	1	4	2
Sphinx	0	0	0	0	0	0	0	0	2	1
Scorpion	0	0	0	0	1	0	0	0	2	1
Music	0	0	0	1	0	0	0	0	1	0
Ingots	0	0	0	0	1	0	0	0	0	1

On the basis of data from Benson (1972), Dikaios (1969a, 1971), Fischer and Bürge (2015, 2017, 2018), Gjerstad et al. (1934b), Johnson (1980), Porada (1971, 1972, 1980, 1989), South et al. (1989).