

Pilgrim flasks: Chronological and cultural transformations in Nubia from the New Kingdom to the Napatan Period

Volume I

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NId – Not Identifiable

CC – concentric circle decoration

TT – Theban Tomb

Abstract

Ceramic pilgrim flasks were prevalent across the Eastern Mediterranean during the Late Bronze and Early Iron Age, and were adopted into Egypt during the reign of Thutmose III. Their changing synchronic and diachronic usage across these contexts has however been little explored, and research demonstrates their integral position in commodity exchange. This approach sheds light on how Egyptian colonial practices in New Kingdom and Post New Kingdom Nubia affected material culture. During the course of this study, I applied typological and anthropological methodologies to pilgrim flasks to examine how vessel use changed across this cultural border, and the disparate ways this can be represented in the archaeological record. I collated 1635 pilgrim flasks from across Egypt and Nubia to approach three research questions:

1. How does pilgrim flask morphology change as it moves across the cultural landscape between Egypt and Nubia?
2. How were pilgrim flasks used? Do the deposition patterns of flasks suggest shifting usage between the New Kingdom (c. 1550–1070 BCE) and the Early Napatan (c. 700–500 BCE) in these regions?
3. What can these vessels ultimately reveal about cultural practices in Nubia, both before and after the withdrawal of the Egyptian colonial control at the end of the New Kingdom?

I developed new typologies for Egypt and Nubia to compare the different morphological and distribution patterns visible. This revealed distinct regional practices associated with the form. The application of Practice models to the data scrutinised the divergent meanings associated with the vessel across these traditions, which were associated with both wine and perfumed oils in Egypt, but libation practices in Nubia. Pilgrim flasks were affected by colonial practices in Nubia and were swiftly appropriated into new *habitus* traditions. Their use in mixed colonial towns contributed to the ethnogenesis of an *urban habitus* that inspired institutions in the Early Napatan state.

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Introduction

0.1. Why does a pot matter?

Since the first invention of pottery c. 14,000 BCE in Jomon-era Japan (Harris 1997; Rice 1999), ceramics have played a major role in human activity. Scattered across settlements, cemeteries and trading routes, ceramic sherds are one of the most common deposits across archaeological sites, and have historically been utilised for the chronological classification of contexts, residence and kinship patterns, identity markers for cultural groups, and as evidence for domestic and international trade (e.g. Meyer 1993). In recent scholarship, the great potential which pottery holds for increasing our understanding of aspects of daily life has been expounded upon (Skibo and Feinman 1999; Robb 2010; Rice 2015). Ceramic vessels – many of which are utilitarian and almost ‘forgettable’ in nature (Trostel 1994) – surrounded the people we study on a daily basis. Their constant visual presence made them a key aspect of the creation and reinforcement of group identity (Dann 2009: 178), and this practicality generates a crucial entry-point into ancient habits and etiquette for archaeologists (e.g. Hulin 2013).

Vessel forms adopted by a region external from their original cultural milieu offer an intriguing glimpse into how objects – and thus ideas, practices and habits – transformed and evolved between cultural groups. The active manipulation of material culture (Hodder 1985) – or the ‘archaeology of difference’ (Edwards and McCollough 2007: 2) – is a theoretical framework that is key to understanding the meaning of items, including pottery, above and beyond a simplistic utilitarian approach.

This thesis investigates these themes through the mechanism of a particular vessel form: the pilgrim flask. This container was adopted by multiple cultural groups across the Eastern Mediterranean in the Late Bronze Age, and was absorbed by the Egyptians and Nubians around the time of the reign of Thuthmosis III (c. 1479–1425 BCE).

Although New Kingdom Nubian archaeological sites have been extensively excavated in recent years (e.g. Binder 2011; 2017; Binder, Spencer and Millet 2010; Budka 2011; 2014;

2014b; 2016; 2017 Säve-Söderbergh 1989; 1989b; 1991; Säve-Söderbergh and Troy 1991; Spense and Rose 2009; 2014; Spencer 2010; 2017; Smith 2007; Welsby 1993; 2003; 2004; 2015; 2017) modern theoretical approaches – including, among others, the archaeology of identity, concepts of agency and colonial transformation – remain relatively underused for approaching the more nuanced aspects of daily life across the region (see Chapters 1 and 8 for further detail). Nubia's absorption into an Egyptian empire (Adams 1977: 217–218) and the subsequent colonial occupation of the region (e.g. Kendall 1982: 8; Morkot 1991: 206) have been referenced in historical literature. However the cultural developments and activities of the 'Colonial' towns of the New Kingdom (c. 1550–1070 BCE) and the origins of the subsequent Kingdom of Kush (c. 722 BCE–30 CE) are only now being explored in more detail in the literature. The pilgrim flask was a key ceramic form that remained in circulation throughout the periods in question. Marl examples continued to be exported from Egypt past the end of the New Kingdom, through the Post New Kingdom and into the Napatan period, in common with a variety of storage jars (Boulet 2016: 35). However, the existence of crude Nile silt examples suggests the potential for local engagement with and manufacture of the form. The continued interest in the pilgrim flask is a key aspect for understanding cultural changes across these complex political phases.

Changing patterns of artefact deposition are a critical means of assessing structural and cultural changes within periods, particularly when limited textual or settlement evidence exists. The pilgrim flask is an ideal case study for assessing the mechanisms by which ceramic artefacts were adapted and transformed in meaning by different cultural groups, because of its diachronic and synchronic ubiquity across the period under study. Egyptian and Nubian culture retained differentiated cultural practices throughout history, and thus the Nubian absorption of an Egyptian vessel type demonstrates this pot's particular significance to the Nubians. Extracting this potential meaning is a key aspect of my research.

My ultimate aim in this thesis is to create a comprehensive study of pilgrim flask use and distribution across Egypt and Nubia, particularly by applying anthropological models to the data. This research is intended as a case study for the ways in which similar artefacts may have transformed in meaning between these two regions, and to elucidate how this approach can

inform our understanding of more ‘ordinary’ cultural practices that often remain invisible through traditional means of study.

0.1.1. Research Questions

Pilgrim flasks are defined in this work as vessels with a lentoid, or globular, body, a demarcated, thin neck with a diameter of c. 1–15cm, and two thin vertical handles extending from the shoulder to the neck/rim. The standard form is footless – however, Mycenaean examples, as well as a minority of flasks produced in Egypt, were given a foot or a flat base. Flasks without handles were omitted from this study because they signify different use patterns; however, distorted body shapes such as gourds and ring flasks were retained because their morphological similarities indicate a common origin. I limited my study to ceramic pilgrim flasks, in order to explore the use of vessels in a more accessible medium.

For this project, I address three key research questions, and apply them to my data (see the Catalogue in Volume II):

1. How does pilgrim flask morphology change as it moves across the cultural landscape between Egypt and Nubia?
2. How were pilgrim flasks used? Do the deposition patterns of flasks suggest shifting usage between the New Kingdom (c. 1550–1070 BCE) and the Early Napatan (c. 700–500 BCE) in these regions?
3. What can these vessels ultimately reveal about cultural practices in Nubia, both before and after the withdrawal of the Egyptian colonial control at the end of the New Kingdom?

I hypothesise that an application of Practice Theory frameworks to the data will indicate different use patterns between Egypt and Nubia, revealed by subtle differences in morphology and findspot. In particular, by applying Postcolonial models of material and relational entanglement (Thomas 1991; Stahl 2002; Stark 2006; Eckert 2008; Dietler 2010; Stockhammer 2012; 2012b; 2013; Paul van Pelt 2013; Buzon, Smith and Simonetti 2016; Smith and Buzon

2014; 2017) evidence of the creative approach to the Egyptian vessel by Nubian consumers would be demonstrated.

0.1.2. Scope of the Present Study

My research specifically examines one object class – the ceramic pilgrim flask. Although I discuss the spread of the form across the Eastern Mediterranean in the Late Bronze Age, ultimately my project concentrates upon the form's patterns of deposition within the Nile Valley across Egypt and Nubia, from the New Kingdom (c. 1550–1070 BCE) to the Late Period (c. 7th–4th centuries BCE) in Egypt, and from the New Kingdom (c. 1550–1070 BCE) to the Early Napatan period (c. 700–500 BCE) in Nubia. These chronological limitations emphasise transformations in Nubian society during the political climate of its colonial rule and aftermath. The restrictions also reflect the periods in which this form was in use: the pilgrim flask first appeared in Egypt and Nubia during the 18th dynasty and remained popular through the early Napatan period. I intended to focus solely upon the relations between the state of Egypt and communities in the Middle Nile; therefore, I did not include pilgrim flasks found outside this geographical remit including in the Sinai or in the Western Oases, which, while at times considered part of Egypt, demonstrated distinct cultural practices that were not relevant to my ultimate aim. However, foreign-manufactured vessels from the Levant, Mycenaean Greece, Cyprus and the Western Oases were included when found in the specific contexts of the Nile valley in Egypt and Nubia. Pilgrim flasks were also in use in the Meroitic period (c. 300 BCE–400 CE) in Nubia. However, I do not include later Meroitic material in the statistical analysis in order to keep the data at a manageable quantity. My background discussion of Egypto-Nubian relations extends back to the Old Kingdom. I include this early period because Nubian ceramics were marked by a high degree of conservatism: it is possible to trace many New Kingdom stylistic and morphological attributes far back in Nubian history (Knoblauch and Lacovara 2012: 200). As such, it is important to include this period in discussions circulating around ceramic material.

The pilgrim flask was used extensively in the Eastern Mediterranean and ancient Near East, including in the Levant (e.g. Tufnell et al. 1940; Tufnell 1958; Amiran 1969; Oren 1973; Arie 2006; Martin 2013), Mycenaean Greece (e.g. Furumark 1941; French 1964; 1967; Mountjoy

1986; 1993; Hankey 1997), Cyprus (e.g. Åström 1972; Flourentzos 1981; 1991; Benson 1984; Bikai 1987), and Crete (e.g. Evans 1928; Catling 1996; Hatzaki 2007; Tzedakis 1971). The evidence I present suggests that the pilgrim flask was absorbed as a domestic Egyptian vessel rapidly via contact with the Levant during the 18th dynasty, and was then no longer treated as a foreign item. Nubian communities took the Egyptian view of the pilgrim flask rather than the Levantine and further transformed it via local practices, making the form relevant to Nubian traditions during the New Kingdom, Post New Kingdom, and Napatan Periods. By studying both the physical and ideological movement of a vessel between two very different cultures, I aim to understand the way general societal practices were expressed through material culture, and how they could ultimately be displaced between different societies and traditions.

Towards this goal, I have developed a new, more detailed typology that focuses exclusively on pilgrim flasks in Egypt, from the 18th dynasty (c. 1550–1250 BCE) to the Late Period (c. 7th–4th centuries BCE). I then assess to what extent this can be applied to contexts within Nubia, before developing an original typology for flasks across this region from the New Kingdom (c. 1550–1070 BCE) to the Early Napatan period (c. 700–500 BCE). This information is then used to assess sites in Nubia that contained pilgrim flasks, and the ways in which Nubian identity may have been constructed and retained through the use of particular material culture, reflecting both ideological movements and changes of practice.

The typologies I have created for Egypt (Chapter 5) and Nubia (Chapter 6) use form as a primary characteristic. Form changes more rapidly than decoration, with vessel shapes often changing generation to generation; it is therefore most useful for quantitative and qualitative analyses of synchronic and diachronic distribution (see Chapter 3 for more detail). Decoration is an important, secondary characteristic, but I did not use it as the basis for the typology as decorative styles do not change in the same way over such a short time span. I consider fabric in order to identify regions of flask manufacture, and to pinpoint changes in technology across the New Kingdom; however it is not considered particularly relevant for the typology because small fabric differences would likely not have been observed or considered important to communities using the vessels. Furthermore, the tendency for older excavation reports to omit discussion of fabric and decoration means form is the most logical approach for the

construction of a typology, in order to correlate material from both older and contemporary excavation reports.

The pilgrim flasks used in this study have, where possible, been examined in person at x20 magnification. I ascertain the fabric used to manufacture the flask, which is defined by colour, texture, and temper (see Section 0.2 for full discussion of Egyptian and Nubian fabrics). While it is relatively simple to identify whether Nile silt or marl clay was used, it is not always possible to pinpoint the exact fabric used to produce each flask, as a fresh break could not be made on examples in museum collections to examine the composition.

0.1.3. Sources

I used a combination of museum collections and excavation reports to gather data for the construction of the typologies. I examined many pilgrim flasks in the collections of British museums in person where possible, including collections from the Ashmolean Museum (Oxford), the Fitzwilliam Museum (Cambridge), the Petrie Museum (London) and the Birmingham Museum and Art Gallery (Birmingham). I used Online Catalogues to survey examples from the British Museum (London), and the Metropolitan Museum of Art (Boston). I was kindly supplied with the records from the Manchester Museum (Manchester), the Garstang Museum (Liverpool), the National Museums Scotland (Edinburgh), and the National Museum of Khartoum (Khartoum).

I also used excavation reports from the 19th century to the present day. Early flasks in Nubia were likely imported from Egypt; therefore I developed an Egyptian typology first. In Egypt, Petrie's publications contained multiple examples (e.g. Tell Nebsheh and Defanneh 1888; Illahun, Kahun and Gurob 1891; Tell el Retabeh 1906; Giza 1907; Qurna 1909; Sedment Petrie and Brunton 1924a; 1924b) although their dating has often been revised (Aston 1996). Modern publications include Memphis (Fischer 1965; Aston and Jeffreys 2007; Bourriau 2010), Amarna (Hankey 1973; 1997; Rose 2007), Sais (Wilson 2011), Tanis (Tefnin et al. 1998; Laemmel 2011), Karnak (Jaquet Gordon 2012; Sullivan 2013; Boulet 2017), Thebes (Hölscher 1954; Rose 1996; Aston 2008b; Strudwick 2016) and Heracleopolis (López-Grande and Quesada Sanz 1995) among others. Aston's (1996) typological guide to the Third Intermediate Period in Egypt was invaluable for presenting a preliminary typology of this phase.

Furthermore, the publications of ceramic repertoires at Qantir (Aston 1998; Aston and Pusch 1999; Mommsen and Mountjoy 2001; Aston, D., Mommsen, H., Mounjoy, P., Pusch, E., and Rehren, T., 2007; Laemmel 2008) and Elephantine (Aston 1999; Rodziewicz 1992; 2005; Kopp 2006) are extremely useful for presenting pottery developments at one site over a long period of time.

For Nubian contexts, Dunham's publications of Reisner's Napatan and Meroitic excavations (el-Kurru 1950; Nuri 1955; Meroë 1963), Vila's Napatan volume at Missiminia (Vila 1980), William's publication of the cemeteries at Qustul (1992) and the volumes produced by the Scandinavian Joint Expedition (1989a; 1989b) contained a range of examples from multiple periods. Modern publications included the report of Hillat el-Arab (Vincentelli 2006), and annual reports published in the journal *Sudan and Nubia* (e.g. Smith 2007; Spence 2011; 2014; Spencer 2009; 2010; 2014; 2017; Welsby-Sjöström and Thomas 2011; Welsby 2015) were particularly useful for the discussion of a multitude of smaller sites. I also used the original, unpublished excavation records for Sanam, based in the Griffith Institute at the University of Oxford. This combined a range of sources on the site including Griffith's (1931) original publication on the cemetery with Lohwasser's (2010; 2010b; 2012) subsequent reanalysis, and Vincentelli's (2011; 2018) work at the treasury and stores, meaning this site was particularly well documented.

Where possible, I contacted directors and ceramicists affiliated with ongoing excavation projects, to access unpublished material from their respective sites. This was primarily aimed at excavators in Nubia, because much of their work is still unpublished. They included Penny Wilson at Sais, Pamela Rose at Thebes, Anna Garnett at Amara West, Phillippe Ruffieux at Kerma, Julia Budka at Sai, and Isabella Welsby-Sjöström in the Fourth Cataract area. David Edwards provided unpublished archive material from excavations in the Batn el-Hajr. All individuals kindly sent drawings and records relating to the flasks they had found. Unfortunately it was not possible to make contact with all excavation directors. Furthermore, my personal work as a ceramicist at Amara West in Upper Nubia and at Site H25 in the Northern Dongola Reach meant I could study unpublished flasks in the field.

0.1.4. Problems with the sources

The use of different source types resulted in a diffuse range of detail on the pilgrim flasks described. The majority of pre-1950s excavation reports provided only limited information regarding findspots of vessels, fabrics, and quantification of sherds found during excavation seasons. In contrast, modern, annual reports, such as those published in the journal *Sudan and Nubia*, contain large amounts of statistical data such as sherd count and findspot, but only encompass information from a single season and as such lack broad analyses of the material.

Many unpublished flasks were found among museum reserve collections. A significant amount of these had only a limited or unknown provenance. Flasks in the Birmingham Museum and Art Gallery, for example, were donated from the Welcome Collection in the 1950s and attempts to track down their records via the previous owner proved fruitless. Others, such as the flasks in the National Museum Khartoum, had missing labels resulting in a prolonged search time. It was possible to access information regarding these examples through subsequent contact with Shadia Abdu, a curator affiliated with the museum.

In common with much of Nubian archaeology (see Section 1.3.2), publications demonstrated a bias towards the excavation of mortuary sites, particularly during the rescue excavations of Lower Nubia (e.g. Säve-Söderbergh 1989a; 1989b). This presents an incomplete picture, which must be borne in mind when analysing the material. Despite such setbacks, the quantity of data collected for analysis is large (980 flasks from Egyptian contexts and 648 flasks from Nubian contexts), and is of a sufficient sample size to enable interpretation.

0.2. Fabrics

One of the most widely recognized phenomena in the archaeology of ceramics is the similarity of a particular pottery paste or fabric, deposited within a restricted area over a period of time.

(Sillar 1997: 1)

The concept of the existence of two distinct fabrics – Nile silt and marl clay – to produce vessels in Egypt, is so entrenched in Egyptological literature that to try and change this would be counterproductive (Bourriau, Nicholson and Rose 2009: 121). As such, I use these terms throughout this study. In this section I provide a brief summary of this terminology, as well as providing an introduction to fabric types, for the benefit of the general reader (for more information see Bourriau 1981b; Nordström and Bourriau 1993: 168–182; Aston 1996: 1–9; Bourriau, Nicholson and Rose 2009).

Nile silt refers to clays deposited by the river Nile at any time between the Upper Pleistocene era and the present day. This clay is sourced from both the modern Nile floodplain and its ancient paleochannels. Nile silt clays are rich in silica and iron: this results in a reddish-brown vessel after firing, which often has a black or grey core. Vessels from this fabric can also be fired in a deoxidising environment or smoked, which results in a partially or completely black pot (Makundi, Waern-Sperber, and Ericsson 1989; Arnold and Bourriau 1993: 104; Bourriau, Nicholson and Rose 2009: 128).

The term marl clay encompasses a group of fabrics whose overarching feature is that they are calcareous. These can be subdivided into clays from the shales and limestones between Esna and Cairo, and secondary deposits such as those at the Wadi Qena. These latter deposits consist of those washed down into the wadis and mixed with local shales and limestone (Butzer 1974). Marls are rich in mineral salts and calcium carbonate, and fire to a cream colour, often with orange, pink or green zoning. Indeed, the salt-rich nature of the fabric can result in a surface layer of effloresced salts (Ownby and Griffiths 2009), which often forms a deliberate whiteish surface layer or ‘self-slip’. If fired above 1000°C, this can produce an olive green colour resembling green glaze; however, true glazed ceramic was not produced in Egypt until the Roman period.

Kaolinite clays were also exploited. The Egyptian source for this is at Aswan, once thought first used in the early Roman period (Ballet and Vichy 1992: 113–116; Bourriau, Nicholson and Rose 2009: 122), with additional sources exploited in the Western Oases of Kharga (Ballet and Vichy 1992) and Dakhleh (Ballet and Picon 1990). However, studies at Elephantine have shown that the first examples were manufactured in the 8th century BCE (Aston 1999: 7) with

the use of this clay increasing in the Ptolemaic period (Rodziewicz 1992; 2005: 46). Aswan clay was used to produce a range of amphorae, kegs, and gourds, which were manufactured for a Nile Valley market from the New Kingdom onwards and presumably contained specialised contents from the oases regions.

Pilgrim flasks were produced in both Nile silt and marl clays from their earliest appearance in Egypt (e.g. Abydos: Cat. Nos. 122 and TT99: Cat. Nos. 332–333; 801–803). Pilgrim flasks in Levantine, Mycenaean, Cypriote, and Oases fabrics were also found in the Nile Valley; however, these are discussed in Section 3.3 and 3.4 as they were produced outside of the region in question. Vessels could also be manufactured from mixed clay, which may occur naturally or as the result of potters mixing both Nile silt and marl clays to specific recipes. These are often very difficult to identify.

Each of these fabrics can be further subdivided, with differentiation based on colour, pore size, type and quantity of temper, as well as firing temperature. Typically, ceramicists working on excavations develop unique, site-specific fabric typologies which are then used to differentiate between clays and wares at each location. An important, non-site-specific system that has been developed to record the appearance of certain vessel types is the Vienna System (see Section 1.3.1; also for descriptions Arnold 1980; Arnold et al. 1980; 1981; Bourriau 1981b; 1984; 1986; Nicholson and Rose 1985; Nordström 1986; Nordström and Bourriau 1993: 168–182). The Vienna System was a means of categorising Egyptian ceramic fabrics from the Old Kingdom to the New Kingdom, and has been particularly useful for Middle Kingdom sites. Wares were classified by examination by x30 magnification lens and described according to their inclusions, colour, porosity and hardness, based upon sherds compared by ceramicists working in the field at a meeting in 1980. The system was intended as a starting point, for subsequent refinement as more sites were excavated and more samples added (Nordström and Bourriau 1993: 168). Even sites within the accepted date range often showed strong regionality based upon the preparation of the clay by the potter (Bourriau, Bellido, Bryan and Robinson 2006: 277).

Although this classification has been highly effective for ceramic study, the Vienna system was only intended to provide a broad classification of fabrics between the Old and New

Kingdoms (Bourriau 2007: 142), and it was recognised that the system was not applicable to all archaeological contexts in Egypt and Nubia (Bader, Knoblauch and Köhler 2016: x; Jesse 2016: 302; Ownby 2016: 461). One particular issue with the Vienna system is that it relies upon the standardisation of the ceramic industry and its centralised distribution during the unified Pharaonic system. This is often very useful for sites from the Old to New Kingdoms in Egypt, but it does not work efficiently either for periods such as the Predynastic, Intermediate, and Late, or when applied to Nubia. As such, it should be applied with caution to ceramics from a Nubian archaeological context. The problems with attempting to apply the Vienna system to Nubian contexts are evident when analysing Nile silt fabrics in New Kingdom Nubia; de Souza (2016: 81) has questioned whether the development of such a broad geographical fabric typology is even desirable for Nubia. He notes that while Egyptian pottery was mass-produced in centralised workshops, Nubian ceramic production was typically small scale, domestic, and distributed over a limited area. The manufacturers, especially when part of nomadic communities, likely exploited a variety of convenient raw materials, rather than being constrained by proximity to certain sources (de Souza 2016: 81–82). For this reason, classifying vessels by fabric may not be a productive approach for Nubia. While more centralised production was likely a feature of the kingdom of Kerma, the more artistic qualities of Kerman forms certainly suggest a different approach to clay as a medium than was the case in Egypt (Smith 2003: 34).

Also questionable is the fact that, while Egyptian pottery was primarily wheel-made, Nubian vessels were traditionally manufactured by hand, with dung temper or heavy straw added to the clay mix. They are also fired at a lower temperature than Egyptian forms, resulting in the ubiquitous presence of a black core. Such wares do not fit into any of the Vienna system's Nile silt classifications. In addition, Nubian Nile silt vessels, even those of Egyptian style, are often heavily micaceous (e.g. Adams 1977: 454 Group N.I; Chłodnicki 2006: 87; Knoblauch 2011; Wolf 2015: 123) unlike contemporary Egyptian vessels – a feature likely caused by the high quantity of mica observable in the silt along the Nile in Nubia (pers. obs.). No marl clays are exploited in Nubia prior to the Meroitic period, meaning all marl vessels found in Nubia before this phase were produced in Egypt. At this point, sources of calcareous clays were discovered and accessed at Dongola (Edwards 1999).

An important motivation behind fabric analysis is to use the mix to identify where the vessel was originally produced. In the case of marl clay, identifying the broad geographical region of production is relatively straightforward as the clay only has an Egyptian origin prior to the Meroitic period. With Nile silt, identifying a region of manufacture is more difficult. As the Nile runs the length of Egypt and Sudan, it has been argued that the composition of the clay will be homogenous wherever it was extracted (Tobia and Sayre 1974). Bourriau (1998: 193; Bourriau, Bellido, Bryan and Robinson 2006: 278) has challenged this in recent years, arguing that there are sufficient differences to enable the identification of the exact place of manufacture of many Nile silt vessels. However, while this research is important for understanding modes of production across Egypt, such fabric classifications were likely largely invisible to ancient consumers, whereas form and decoration were probably the defining markers of vessels in the ancient eye.

Vessels from the Levant (Aston 1998; Bourriau 2004; 2010; Aston et al. 2007), Mycenaean Greece (Hankey 1973; 1997; Bell 1982; 1985; Hankey and Aston 1995; Mommsen and Mountjoy 2001; Aston 2011b), Cyprus (Merrillees 1968; Aston 1996b; Eriksson 2001; 2006; 2006b), and the Western Oases (Giddy 1980; Hope 2000; Hope, Eccleston, Rose, and Bourriau 2002) were also imported into Egypt and vessels from the Levant (Vincentelli 2006), Cyprus (Spataro, Millet and Spencer 2015; Spencer 2017: 349), Mycenaean Greece (Smith 2007; Schiller 2018) and in one case Western Oases (Budka pers. comm.) into Nubia during the New Kingdom. These are distinct from Egyptian vessels in both fabric and form (see Section 3.3, 3.4 for full discussion). Mycenaean clays are particularly distinctive – these vessels fire to an orange-red, and the majority of pots are given an orange slip and heavily striped in black (see Furumark 1941; Jones 1986; Mountjoy 1986; 1993). Substantial research has been carried out on ceramic fabrics across the Levant (e.g. Berlin 2018), with studies discussing the wares and forms observed across the region (e.g. Amiran 1969; Hartal et al. 2008; Gadot, Yasur-Landau and Uziel 2012; Knapp and Demesticha 2016) as well as conducting petrographic analysis (e.g. Haiman and Goren 1992; McGovern and Harbottle 1997; Goren and Halperin 2004; Magrill and Middleton 2004: 2515–2521; Ben-Schlomo 2012; Martin and Finkelstein 2013). Projects correlating the fabric of Levantine vessels found in Egypt with these studies are on-going (Nordström and Bourriau 1993; Serpico and Bourriau 1996;

Bourriau et al 2001; Smith et al 2004; Ownby 2012). The Canaanite Amphorae Project focused on material from current excavations at Amarna and Memphis, and has conducted chemical analysis and thin-section petrography on samples to identify regions of sherd manufacture. The study has identified six distinct imported fabric groups in these cities, five hailing from the Levant and the sixth from Cyprus (Bourriau 2010: 30; see also Bourriau et al. 2001). This has led to great strides in identifying production centres used by the Egyptian market. Some examples of pilgrim flasks have been identified as being produced in two locales in the Jezreel Valley and the Carmel plain region (see Section 5.5.4).

0.3. Chapter summaries

This thesis is presented in two volumes. Volume I consists of seven chapters. Volume II contains the relevant figures and maps, along with the catalogue documenting the flasks in the study.

Chapter 1 highlights methodological considerations for this research project. I discuss terminologies used for ceramic vessels and their impact on archaeological research. Different conceptual approaches to material culture within the field of Egyptology more generally are considered, and their applicability for this study is analysed. I highlight the *habitus* theory and a framework of cultural ‘entanglement’ as particularly applicable to this project.

Chapter 2 focuses on the historic and cultural interactions between groups within Egypt and Nubia. I use archaeological and written evidence to understand Egypto-Nubian relations from the Old Kingdom (c. 2686–2181 BCE) to the Late Period (c. 7th–4th centuries BCE), in order to set the activities of the period (the 18th dynasty (c. 1550–1250 BCE) to the Early Napatan period (c. 700–500 BCE)), in context.

Chapter 3 concentrates specifically on the pilgrim flask form within the specified time scale. I discuss the flask’s presence in deposits across the eastern Mediterranean, before its subsequent adoption in the Nile Valley, and summarise the known morphological and decorative styles across these regions.

Chapter 4 assesses archaeological, textual and pictorial evidence for trade routes into Egypt and Nubia, along which the form could have travelled. I then analyse hypotheses and studies that reveal the vessel's potential contents when imported into the Nile valley, and briefly discuss known flasks in non-ceramic fabrics.

Chapter 5 introduces a new pilgrim flasks typology for Egypt. I present and analyse the morphology, fabric, decoration, and findspots for each period in question, using the 483 flasks from Egyptian contexts that are presented in the Catalogue.

Chapter 6 assesses whether this new typology can be applied to contemporary Nubia. I discuss broad ceramic changes occurring in Nubia from the Classic Kerma to the Napatan period, in order to set the pilgrim flask in a material framework. I then present the Nubian typology with the same format of morphology, fabric, decoration, and findspots for each period in question. Finally I contrast this with contemporary Egypt.

Chapter 7 applies the new Nubian typology to two cemetery case studies within Nubia, in order to demonstrate both the chronological and social information an expanded study of pilgrim flasks can provide. I analyse deposits from Sai, a New Kingdom colonial cemetery, and Sanam, a Napatan cemetery. I discuss the different excavation histories of the two sites, before analysing patterns of flask deposition and what this reveals about life at these sites.

Chapter 8 draws together my overall analysis and applies the anthropological models introduced in Chapter 1 to my material. I use Practice Theory to interpret pilgrim flasks within the broader social milieu in Egypt and Nubia. The way objects can travel and be transformed in use when adopted by different cultures is first discussed, before I analyse the potential meaning behind flask distribution patterns and how they can reveal aspects of cultural practice. Evidence suggests pilgrim flask use was not analogous in Egypt and Sudan, and I conclude with a hypothesis for vessel use in both these areas.

0.4. Conclusion

There has been a proliferation of archaeological work across Nubia in recent years, spearheaded by the Sudan Archaeological Research Society in Britain (e.g. Welsby-Sjöström 1998; Ginns 2006; Haddow 2014), as well as substantial grants by bodies such as the Qatar-Sudan Archaeological Project (e.g. Thomas 2014; Welsby 2015) and the Across Borders Project (Budka 2011; 2014; 2014b; 2016; 2017). As such, this is an ideal point at which to begin to attempt a more systematic, social assessment of Nubian pottery.

Chapter 1. Methodological considerations

1. Introduction

In this thesis I aim to present a holistic synthesis of synchronic and diachronic pilgrim flask changes. In order to do so, I will not only analyse typological changes but will also apply several theoretical and methodological models to my data, which I shall summarise in this chapter.

I use the term ‘Nubia’ in its widest historical sense, as the Middle Nile Region (see **Map 2**), rather than any shifting geographical or cultural locale; following Eide et al. in their seminal work *Fontes historiae Nubiorum* (1994). This region is demarcated for these purposes from the border region south of Elephantine to Khartoum. Although ‘Middle Nile Region’ would perhaps have been more accurate, this terminology was adopted for simplicity. However, it is important to remember that the earliest evidence for an individual considering themselves as ‘a Nubian’ dates to the 1st Millennium CE (Eide et al. 1994 vol. III: 1181; Edwards 2004: 19), and it is extremely unlikely that the multitude of ancient communities living throughout the Nile Valley over the time period in question felt a shared identity with other groups along the length of the river. The term Nubia today refers to the area occupied by individuals speaking the Nubian language, from the First Cataract to Ed-Debba between the Third and Fourth Cataracts (Welsby 2002: 7); and indeed, many Sudanese and Nubian archaeologists have expressed discomfort at archaeology’s broader use of the term (pers. obs.), something that is important to recognize and take into account when researching the area.

When I refer to the Levant in this study, this relates to the expanse of Syria-Palestine that over the Bronze and Iron Ages was split into a number of shifting city-states and kingdoms, and does not imply a unified state. Similarly Mycenae/Mycenaean Greece is similarly used to describe an area of relative cultural homogeneity, rather than a single kingdom. Both regions were composed of a number of independent polities throughout the period in question.

1.1. Terminology

The terminology used to describe ceramic vessels can create significant obstacles for the researcher (Sconzo 2014: 215; Braun 2016). Indeed, the very term ‘pilgrim flask’ used throughout this thesis is an anachronism. It was first used to describe small flasks stamped with an image of the Christian Saint Menas in the late 5th–mid 7th centuries CE, but later became synonymous with Bronze Age predecessors of a similar form (Aston 1996: 13). Therefore, it is important to describe the pilgrim flask’s defining features as they are applied in the present project. This is an essential and necessary step, because the vessels identified as pilgrim flasks, along with the terminology used to describe and define them, are not consistent between publications. Often, this is related to the discipline in question – scholars trained in Medieval and Classical disciplines have a different understanding of the form’s parameters than those specializing in the Iron Age Levant. Roman versions of pilgrim flasks are, for example, often called *ampullae* or *aryballoi* (e.g. Lenoble 1998). In her Doctoral dissertation, Bushnell (2013: 64) includes pilgrim flasks under the umbrella term ‘juglets’ and includes types that only have one handle. Peacock and Williams (1986: 5) have suggested that all vessels used for the transportation of liquid should be considered amphorae – which would include imported pilgrim flasks. How then can we define a pilgrim flask?

Establishing an appropriate terminology to discuss vessel shapes is a key aspect of ceramic research (Traunecker 1981; Bourriau 2010: 11). One important method in recent years has been to apply mathematical measurements of body contours and vessel index to form types, an approach developed by Anna Shepard (1956: 224–248). This was first applied to Egyptian contexts in Saqqara (Bourriau and Aston 1985: 41) and to the Scandinavian Joint Expedition missions in Nubia (Holthoer 1977: 43–50) and has subsequently been adopted across excavations in Egypt (e.g. Lisht: Arnold 1988; Qantir: Aston 1998; Saqqara: Aston and Aston 2010; Amarna: Rose 2007; Memphis: Bourriau 2010). The difference between the aperture diameter and the maximum body diameter allows the archaeologist to determine whether a vessel is an open or closed form (Aston 1996: 11), and to further subdivide types into categories. Although this is a highly useful approach, and certainly demonstrates that the pilgrim flask is a closed form, the decision was taken not to employ it in detail, as my study only concerns one type of vessel.

Within Egyptology, Holthoer (1977: 2) has noted that the development of consistent definitions for pottery has been historically lacking across much of the literature, and pilgrim flask records do differ in approach. Petrie (e.g. 1891) assumed that all flasks hailed from the Levant, and typically referred to them as ‘foreign’, ‘Phoenecian’, or ‘Cypriote’. He did not consider the potential for local manufacture, which has now been demonstrated from the 18th dynasty (see Chapter 5). Aston (1996: 13) does not assume flasks have a foreign origin, and rather focuses on manufacturing technique:

‘A type of pot which was generally lentoid, consisting of two equal-sized open forms (usually dishes or bowls) placed rim to rim and stuck together, with a separate narrow neck inserted at the top. From the neck to the body horizontal loop handles were subsequently attached’.

Rose (2007: 137) speaks of ‘vessels with a lentoid body, narrow neck, and two handles running neck to shoulder’; while Bourriau (1981: 75) comments that while the term was originally used for the Menas flasks intended for pilgrims in the Christian era, it has now become fixed in the literature as ‘all two-handled lenticular flasks, whatever their date, material or function’.

In the field of Classical archaeology, two other vessel forms appear which bear distinct similarities to the above descriptions. An *ampulla* is a globular flask from Greek and Roman contexts, with two handles and a narrow neck, used to contain oil for both bathing and eating (Kipfer 2000: 19). An *unguentarium* is a vessel often found at Roman and Hellenistic sites, especially in the 6th–7th centuries CE, and was used to store perfume (Hayes 1971: 243). The latter term appears to have been classified based on the presumed contents. There is a distinct overlap between the use of these latter two terms in the literature: and both can refer to flasks with or without handles. However comparing the vessels is difficult, as they are categorized by different parameters – one by form, and the other by contents – even though morphologically they appear very similar. By the Roman period in Egypt, the term *ampulla* appears to take over in archaeological descriptions of what I would term pilgrim flasks, even though morphologically little has changed. The different terminology appears to depend primarily upon the discipline describing the vessel at a given time, rather than reflecting different vessel types.

Returning to Egyptology, a similar issue arises with the term *gourd*. A gourd is a specific type of pilgrim flask with one bowl side that is distinctly shallower than the other (Aston 1996: 13; Hope 2000: 189). Examples in Oasis fabric (see Section 3.3.6, 3.4), dating to the Roman period, are often defined as gourds (Wuttman et al. 1996: 425, figs 55, 56), while Hope (2000: 189; fig. 5) notes that the keg – a large, barrel-shaped vessel without handles which is similar to both the gourd and the pilgrim flask – first appeared in the Dakhleh Oasis in the Late Period. However, in other publications, flasks with one side shallower than the other are referred to as pilgrim flasks rather than gourds (Vincentelli 2006: fig. 2.89, no. 575; fig. 2.90, no. 577). This confusion over what constitutes a flask continues in excavations of other periods: a vessel with a tapering base, short neck and flaring rim found in the Sai necropolis (I7 34: Minault-Gout and Thill 2012: pl. 159) looks distinct as a vessel form, but is still categorised as a pilgrim flask. Another vessel in the Ashmolean Museum (AN. 1912.392), from Grave 1021 in Cemetery 1 at Faras, has clear parallels to the kegs from the Dakhleh Oasis – yet it is also recorded as a pilgrim flask in the museum card index, even though its similarities to vessels in an oasis fabric referred to as ‘les siga’ are notable (Wuttman et al. 1996: 425, fig. 53). These problems are significant when attempting to source data from an online museum catalogue: at the Petrie Museum, for example, when the term ‘pilgrim flask’ was inserted into the search criteria, 20 results were returned. However, when the term ‘bottle’ was inserted instead, a further 34 examples were found upon searching through the results. The tendency towards inconsistent terminology can thus be extremely inconvenient for research purposes.

The Causal Theory of Reference, as developed by Kripke (1980), describes how a name refers to an object by virtue of a causal connection with the item, as mediated by referents. However, the different backgrounds and disciplines of such referents problematizes their ability to communicate effectively – names and terms become almost culturally specific within disciplines (Preucel 2006: 249), and this context of experience profoundly shapes how we ultimately analyse material culture (Bauer 2002: 39). The pot, with all of its associated connotations, is intimately tied up with the semiotic process (Renfrew and Bahn 2005: 256). Words and things articulate with one another in strategic discourse (Preucel 2006: 248), but the standardization of terms and names breaks down in these cases, leaving us with different

names for the same vessel, and, ultimately, differences in the understandings of the vessel itself. I address this problem by focusing exclusively on form as defined by the strict parameters laid out in Section 0.1.1.

It should be noted that the term ‘pilgrim flask’ is a modern construct and bears no relation to any known Egyptian, or Nubian, term for the vessel. Indigenous vocabulary for the pot is currently unknown. It is also important to consider the way modern onomastics affect the semiosis of terms such as pilgrim flask because they reflect the way we, as scholars, mentally structure the world that we study (Preucel 2006; Hough 2016), as part of a system of symbols intended to meld our environment into a manageable framework (Geertz 1973: 250). The terms *ampullae*, *unguentarium*, and pilgrim flask are all attempts at dividing vessels into category groups within such a world, and should not be assumed to correspond to ways the ancient Egyptians and Nubians might have interacted with their material worlds. Our categorisations reflect an *etic*, rather than an *emic*, approach.

As the name is so subjective, it could be argued that the term ‘pilgrim flask’ is meaningless as it is based on personal and disciplinary constructs, completely unrelated to the vessel as understood by ancient communities. However I believe that the observable consistencies within pilgrim flask morphology over such a broad time and space suggest an interest in the retention of its main characteristics for a particular purpose. In conclusion, although we must approach ancient data through an *etic* format, this can be mitigated through the use of anthropological models that demand careful consideration of inherent environmental biases. My holistic synthesis of both a typological and anthropological approach should allow us to at least begin to understand the way the form was used and perceived in ancient Egypt and Nubia.

1.2. Literature review

1.2.1. Development of pottery studies within Egyptology

Although pottery is today recognized as intrinsic to our reconstruction of ancient activity, historically it has not always been studied in detail. During the 19th century, the discipline of Egyptology neglected the study of ceramics. Little quantitative analysis was conducted at this time, and vessels were often described summarily.

The first to attempt a systematic study of vessel form and decoration was Flinders Petrie (1901), during his excavations at Diospolis Parva in 1898–1899. Petrie (1896) first developed a seriation sequence of 700 vessel types using material from the Predynastic cemetery at Naqada, while carefully recording their findspots. This enabled him to develop a relative chronology for Predynastic ceramics during the phases now termed the Naqada I–III periods (c. 4400–3085 BCE).

The use of ceramics for relative chronological sequencing was revolutionary, and it still impacts how we approach pottery today. However, as important a development as this was for our understanding of ceramic change, it is vital to remember that Petrie's work ultimately focused on complete/semi-complete vessels (e.g. Petrie 1896: ix; Petrie and Brunton 1924b: pl. liv; as mentioned by Stockhammer 2012b: 97) or unusual sherds (e.g. see the focus on collecting Mycenaean sherds at Amarna: Petrie 1894), rather than quantifying the total number of sherds recovered from a site as is now standard practice. These methodological discrepancies make it difficult to compare 19th century excavation reports with contemporary publications. Petrie's tendencies to refer back to his original typological publication report during discussions of pottery, and to only publish new form additions rather than the typology in full in every excavation (e.g. Petrie 1927: pl. xv), also made his ceramic discussions increasingly difficult to understand. Furthermore, its use was limited when applied to later wheel-made pottery (Holthoer 1977: 3). Nonetheless, Petrie's interest in ceramics resulted in the presence of large amounts of ceramic material across museum collections worldwide – indeed, a significant quantity of the Egyptian data assessed in this project originated from Petrie's excavations.

Petrie's seminal approach led to an increased effort among archaeologists to interpret sites using ceramic material – from the late 1920s, Egyptologists such as Brunton (1928), Myers (Myers 1937), Nagel (1938) and Rieke (1937) attempted to form site-specific pottery typologies, using vessel forms to provide relative dates for archaeological contexts. However this did not become ubiquitous across Egyptian excavations. Holthoer (1977: 4) discusses the seminal systematic methods of classification applied to pottery within the discipline of archaeology, based on work developed by Anna Shepard (1956). Unfortunately these applications were little used within Egyptology, with Holthoer (1977) and Nordström's (1972) works the only attempts at applying such classification in this period.

By the late 1980s, descriptions of ceramic morphology had become part of standard archaeological practice in Egypt (e.g. Arnold 1988; Traunecker 1988; P. Spencer 1997; Aston 1998; 1999). Substantial qualitative and quantitative studies have been undertaken for Predynastic pottery in particular (Friedman 1994), and many excavations on New Kingdom sites have published volumes which concentrate solely on their pottery remains (e.g. Aston 1998; Rose 2007; Bourriau 2010).

The description and analysis of the clay paste that made up these vessels, on the other hand, is still not part of standard practice. Late 19th and 20th century excavation reports restricted fabric description to a vessel's general colour (e.g. Griffith 1931: 98; Fischer 1956) or its perceived origin (e.g. Petrie 1891: 23). To some extent this practice continues in modern publications, with reports such as that of Sai (Minault-Gout and Thill 2012) describing pots as *terre cuite*, rather than as Nile silt or marl clay (see Section 0.2 for full discussion of these terms). This makes it difficult to compare fabric distributions between sites. Creating site-specific fabric typologies during excavations is, however, now standard practice, and modern archaeological teams typically formulate both a site-specific fabric and form typology at the commencement of excavations.

The introduction of the Vienna system, first discussed by ceramicists working in the field at a meeting in Vienna in 1980 (see Section 0.2; also for descriptions and early usage Arnold 1980; 1982; Arnold et al. 1980; 1981; Bourriau 1981b; 1984; 1986; Nicholson and Rose 1985;

Nordström 1986; Nordström and Bourriau 1993: 168–182) was the first attempt to make fabric description systematic and cross-referential between sites. This visual classification of ceramic fabric was based on discussions at the Vienna Conference in 1980 by several ceramicists working across Egypt. Sherds were brought from their respective sites for comparison with those from other regions, and an attempt was made to draft a site-wide classification system. This subdivision was intended to put site-specific fabric typologies into context, and to aid in understanding broader regional changes (see also Section 0.2).

Few studies which focused exclusively on pottery have been undertaken for Nubia. Gratién's (1978) seminal work on Kerma pottery, along with Privati's (1998) classifications at Kerma itself, Bietak's (1966; 1968; 1979) work on Pan-grave and C-group pottery and Adams' (1964; 1986) studies of Meroitic and Medieval pottery are key works for the region but largely unhelpful for this study, because they are outside the timeframe of my research. Reisner's reports on excavations at El-Kurru (Dunham 1950) and Nuri (1955) and Williams' (1990) work at Qustul provided detailed ceramic information and were particularly helpful for my study of the Napatan period. The later typological discussions by the Scandinavian Joint Expedition included a major study of New Kingdom Nubian ceramics (Holthoer 1977) which analysed form types and distribution across Lower Nubian sites from rescue excavations, and contained several pilgrim flasks. In recent years excavators have begun to publish site-specific ceramic analyses, broadening the available scope for study (e.g. Welsby-Sjöström and Thomas 2011; Miellé 2014; 2016; Rose 2017). Raue (2012; 2017) has also conducted chronological analysis of Nubian ceramics at Elephantine in Egypt, which can potentially be applied to Nubian contexts. However, many ceramicists continue to apply Egyptian typological systems to Nubian contexts (de Souza 2016: 81), and scholars have suggested that there was a 'cultural lag' evident in Egyptian-type pottery in Nubia, with new trends taking time to trickle down to the colonies (e.g. Adams et al. 1979: 738; Weglarz 2017: 139), similar to that seen with Mycenaean pottery in Egypt (Aston 2011b: 9). These ideas are not supported by archaeological evidence during the New Kingdom, which is increasingly demonstrating independent ceramic evolution within Nubia throughout the New Kingdom (e.g. Heidorn 1992: fig. 25; Vincentelli 2006: fig. 2.56 322; fig. 2.64, 386; fig. 2.65, 394; Ruffieux 2010: 25; Thomas 2014: 66; Spataro and Villing 2015: 418; see Section 5.2 for full discussion).

Modern work on pottery studies has expanded from this typological focus (e.g. Bader and Ownby 2013) and events such as the second Vienna conference – held in 2016 (Bader et al. 2016) – have continued to increase the purview of ceramicists working on Egyptian and Nubian material. As such, this is the ideal stage from which to begin a systematic, social analysis of pilgrim flasks.

1.2.2. Nubiology

The discipline of Egyptology has historically focused upon written source material. Local sources in Nubia are, in contrast, generally non-textual and, with some exceptions, limited to the archaeological record until the hieroglyphic funerary inscriptions known from the 25th dynasty. As such, when reconstructing Nubian society, the discipline has focused more upon hieroglyphic and hieratic sources from the Egyptian world, rather than dealing with the archaeological indigenous material. This reliance upon Egyptian written sources has resulted in interpretations that are biased towards an Egyptian, rather than indigenous, world-view and should therefore be treated with caution (see Section 2.2 for full discussion).

While exploration of the Middle Nile region has been undertaken by Egyptologists and archaeologists since the mid-1800s, systematic archaeological excavation only began in the early 1900s with archaeologists such as Griffith (1931), Garstang (1911), and Reisner (1910; 1923) active across the area. Reisner in particular conducted large-scale excavations at the city of Kerma (1923) and at the later Kushite royal burial sites of El-Kurru (Dunham 1950), Nuri (Dunham 1955) and Meroe (Dunham 1963), vastly increasing archaeological understanding of Nubia. However the study of Nubia during this early period was considered unimportant in some scholarly circles. Early researchers such as de Garis Davies (1943: 25–26) commented on the lack of interest Nubian civilization was able to stir in scholars, based on a perceived ‘inferior culture’. Other scholars suggested an Egyptian (e.g. Reisner 1923) or egyptianised (e.g. Adams 1984) origin for these cultures. Such beliefs have heavily influenced archaeological study in the region, resulting in a focus on the periodic Egyptianisation of the local inhabitants (see Section 1.4.4 for full discussion).

Much archaeological work in Sudan has been characterized by a sense of urgency, because the majority of excavation was conducted beneath the shadow of impending dam construction. This included the Aswan Dam in 1898 and the Aswan High Dam in 1970 in Egypt, and the Meroe High Dam in 2009 in Sudan (e.g. Welsby 2003). The expansion of agricultural land and infrastructure has also led to multiple rescue excavations (Bashir 2013). This has resulted in a wealth of data, much of which still awaits analysis (Dann 2009: 80–81). Excavation prior to the construction of the Aswan High Dam in particular led to a concentrated interest in Lower Nubia, the vast area under threat from flooding. Much of this early work focused upon Egyptian sites or interests in Nubia. Adam's 1977 publication *Nubia: corridor to Africa* was the first publication to explore Nubian archaeology beyond its Egyptian aspects, and summarized available knowledge at the time obtained from the Aswan Dam rescue excavations. This has in recent years been updated by publications by Edwards (2004) and Török (2009), who have developed broad syntheses of Nubian history from the Palaeolithic to the Islamic period.

The Scandinavian Joint Expedition to Nubia (Säve-Söderbergh 1960; 1969; 1989; 1989b) was a seminal attempt to synthesise large quantities of material culture systems and ceramic chronologies, and involved the excavation of a large quantity of sites across Lower Nubia during the 1960s. However excavation in Sudan has increased exponentially over the past 20 years, with journals such as first *Kush*, and now *Sudan and Nubia* publishing and publicizing annual excavation reports. Scholars have begun to return to 20th century excavation reports, such as that of Sanam, to analyse the data anew (e.g. Griffith 1931 and subsequently Lohwasser 2010; 2010b; 2012; Vincentelli 2011; 2018; Howley forthcoming). New sites in Upper Nubia and across central Sudan have also been discovered and explored (e.g. Vincentelli 2006; Kolosowksa and El-Tayeb 2012; Thomas 2014), broadening our knowledge of the region beyond Lower Nubia (Edwards 2004: ix) (see **Map 2** for sites used in this thesis). Substantial, long-term excavation projects at Amara West (Binder 2011; 2017; Binder, Spencer and Millet 2010; P. Spencer 1997; N. Spencer 2009; 2010; 2014; 2017), Dokki Gel (Bonnet 1986; 1990; 1992; 2000; 2004; 2014; Bonnet and Valbelle 2000; Ruffieux 2009; 2019); Sai (Budka 2011; 2014; 2014b; 2016; 2017); Kawa (Welsby 1993; 2004; 2015; 2017; Welsby-Sjöström and Thomas 2011), and Qasr Ibrim (Aldsworth 2010; Rose 2011; Adams 2013) have added to the body of evidence concerning daily life in Nubian societies across time.

Unfortunately, a significant bias towards the excavation of cemeteries has historically been evident across Nubian archaeology (Dann 2009: 71), with the majority of these royal in nature. The necropolis at Sanam remains the only large Napatan non-royal burial site excavated to date (Griffith 1931; Lohwasser 2010; 2010b; 2012). This bias calls into question how the excavated material relates to broader activities among the populace. Settlement sites such as H25 (Thomas 2014), Sai (Budka 2011; 2014; 2014b; 2016; 2017; Minault-Gout and Thill 2012), and Kawa (Welsby 1993; 2004; 2015; 2017; Welsby-Sjöström and Thomas 2011) have only recently begun to be thoroughly investigated and this has had a significant impact on our understanding of daily life in ancient Nubia. While the data gathered for this thesis is still biased towards vessels from mortuary contexts, the addition of examples from settlement sites has been especially useful for comparing how pilgrim flasks were used in both life and death (see Chapter 6).

1.3. Approaches to material culture

In this thesis I discuss and analyse pilgrim flasks employing a variety of theoretical viewpoints. The relevant methodologies are briefly summarized in this section. The use of material culture for the reconstruction of ancient pathways is key, and a synopsis of the relevant methods of interpretation and definition applied to Nubian studies is crucial before projecting an analysis of pilgrim flasks onto this background.

1.3.1. Mortuary Studies

Although the 1635 pilgrim flasks within the Catalogue were found at various types of sites – including subterranean and pyramidal cemeteries, colonial towns, fortresses, and indigenous Nubian settlements – many – particularly complete examples – were grave goods from mortuary contexts (see Catalogue Volume II). Many comprehensive studies have sought to assess the meaning behind funerary ritual, grave goods, and their relationship with the artefactual repertoire of daily life (see Parker Pearson 2009 for a broad discussion). Although early scholars viewed patterns of mortuary disposal as generally unrelated to cultural practice (e.g. Kroeber 1927), later processual archaeologists moved towards an appreciation of how

mortuary practice was related to social systems and relationships. Higher social complexity and an increase in the amount of social roles an individual played – directly related to their status within a given community – were thought to correlate with more elaborate mortuary rituals, a larger grave structure (Tainter 1975; 1978) and the inclusion of either more, or better quality, grave goods (Saxe 1970; Binford 1971; Kamp 1998; Hohmann 2001). Land usage for structured cemeteries was considered akin to social organization, and was thought to reflect the control of resources by the living group (Goldstein 1980). Such funerary ritual was often understood as conservative in nature (Stutz 2015: 1).

These concepts have been challenged by a group of scholars in recent years (e.g. Hodder 1980; Pader 1980; Renfrew 1984; Parker-Pearson 2009), who have demonstrated that the agency behind funerary rituals stems from the living, because they act as a nexus for the manipulation of material culture and social ideals (Rakita and Buikstra 2005: 1). Funerals were political gatherings, and were opportunities for the active manipulation of social structures (Rakita and Buikstra 2005: 8), involving displays of conspicuous consumption (Smith 2003: 145) and the renegotiation of social hierarchies (Hodder 1982). This made them key arenas for social and cultural reproduction (Stutz 2015: 2).

Use of these models in Egyptology has been relatively limited (but see Assmann 1992; Baines and Lacovara 1996; Meskell 2001), with a focus on the earlier paradigms of Saxe (1970) and Binford (1971) dominating the literature. However, an appreciation of the way artefacts can be manipulated, appropriated, and display alternative histories such as horizontal hierarchies (Stevenson 2009; 2009b: 186) is crucial in attempting to access the Egyptian and Nubian perceptions of pilgrim flasks. Although it is likely that correlations between mortuary expenditure and social status existed prior to the advent of Christianity in Nubia, evidence such as the presence of Nubian vessels deposited outside Egyptian burials (Smith 2003: 154) indicates that the area around funerary spaces was open to manipulation beyond the official ideological realm.

As such, the items deposited within graves should be considered representative of the living, but not necessarily of daily life. Rather, such items both structure, and are structured by, the negotiation of ethnic identity (Jones 2002: 129) as well as by the myriad multiple identities

encompassing social role, status, belief, and gender (Stevenson 2009). Friedman (1994: 863) noted that ceramic remains from the limited settlement sites excavated in predynastic Egypt were strongly differentiated from mortuary deposits, and this situation was likely similar in Nubia, with settlement pottery still understudied. Bietak (1979: 123) notes that C-group household pottery was produced with a higher percentage of chaff temper in the fabric, and consisted of a larger quantity of open and undecorated forms. Funerary repertoires will have included specially selected pieces, and should not be understood as archetypal of daily life (Paul Van Pelt 2013: 542 note 16). De Souza (2013: 39) has further noted a tendency for Nubians to consciously express their ethnic identity in death, but communities may have behaved differently in daily living.

1.3.2. State vs. Chiefdom

I am using pilgrim flasks to understand different cultural practices in Egypt and Nubia. As such, it is important to consider the potential political differences between the regions, which may have affected these traditions. A major issue to address is whether Nubia should be considered as encompassing a 'State' or 'States', rather than a 'Chiefdom'. The terminology around what constitutes a 'Chiefdom' as opposed to a 'State' has been notoriously loose within Egyptology (Morkot 1999: 181). A Chiefdom is traditionally understood as a small-scale polity which distributes power along kinship lines, and has some degree of social stratification and economic hierarchy (Johnson and Earle 1991: 1), typically as a stage along the evolutionary trajectory towards full statehood (Service 1975: 15–16; O'Connor 1991: 145; see Johnson and Earle 1991 for full bibliography) while demonstrating an increase in productivity and complexity within society (Lull and Micó 2011: 152). However this definition is ambiguous. There is similarly no conclusive definition for the state among scholars (Claessen and Skalník 1978); however it is customarily understood as a complex polity on a larger scale, characterized by a lack of tribal kinship, high levels of social stratification and a centralized rule. States display a monopoly on military force, which allows for expansion (Lull and Micó 2011: 152). The borders between these types are relatively fluid and can be assigned to a spectrum of development (O'Connor 1991: 145).

Ancient Egypt is primarily described as a territorial state within the discipline (e.g. Wenke 2009: 188ff; Lloyd 2014); however, pristine political terminology within the literature is ambiguous when considering Nubia (O'Connor 1991: 145), which is often deemed to encompass chiefdoms dependent on the relative power of the Egyptian government (e.g. Adams 1977: 165; Kemp 1983: 126). Kerma for example is described as both a state and chiefdom in some publications (e.g. Trigger 1976). The Napatan kingdom (c. 700–300 BCE) is traditionally recognized as a full state, but O'Connor (1991) has argued that this development was part of a long-standing process of state formation within the Middle Nile region. He suggests that many of the Nubian polities known from Egyptian textual sources were, for at least part of their history, chiefdoms – but that these chiefdoms were larger and more independently powerful than usually suggested. In Upper Nubia, on the other hand, Kerma is thought to have displayed significant levels of social stratification during the Kerma Ancien period (Bonnet 1986: 5; O'Connor 1991: 156) and should likely be understood as a powerful state polity. Other scholars (e.g. Williams 1996; 1987) have argued that state systems existed in Lower Nubia as early as the A-group. Although these polities were likely powerful, I do not address the contentious debate of state origin in this study. The Middle Nile region is vast, and likely encompassed a broad range of societal types and systems across its history. Based on archaeological evidence, I will refer to Kerma and the Kushite kingdom as 'states' here, while others are termed 'groups', 'polities' or 'cultures'. However, political shifts between entities considered a 'state' or 'chiefdom' should not be considered as part of a unilateral system of development, and the majority will have changed in political organization and stratification many times.

1.3.3. The Core-Periphery model

The relationship between Egypt and Nubia has typically been understood via a Core-Periphery model (e.g. Adams 1984; Flamini 2008; Trigger 1976;). Such models prioritise unilateral flows of influence and interaction, from the polity deemed 'more advanced' to that less developed (Stein 2002: 903). In this system, the Core controls the Periphery zone, either by colonial administration or by the instalment of puppet rulers, and the Periphery's role is primarily characterised by the supply of resources to the Core area (Stein 2002: 904). This concept is a part of the World Systems Theory developed by Wallerstein (1979), which has

been applied by several scholars to the Bronze Age (starting with Kohl 1978; see Tsakos 2009: 52–53 for full bibliography). Although in archaeology the Core-Periphery model has been abandoned in favour of Network Theory (e.g. Knappett 2011), this has had little impact in Egyptology, which continues to apply this model to archaeological deposits. The role of Nubia within this has generally been restricted to an Egyptocentric approach, with Nubia acting as a periphery area (Flamini 2008; Tsakos 2009: 65). Discussions of ‘Egyptianisation’ also rely heavily upon such biases and are intricately linked to this perception (see Section 1.4.4). Through this model, Nubia – as a region controlled by various levels of Egyptian colonial administration throughout history, and heavily exploited for its gold, stone, ivory, and other resources – is understood as the ‘less developed’ periphery which relies on the core for various reasons including resources and socio-political status (e.g. Flamini 2008).

This theoretical concept mirrors the Egyptian world-view, as portrayed through official ideological source material. The south – Nubia – was emblematic of *isft*, or chaos, and was something to be controlled, with rigid borders and the enforcement of officially sanctioned trade. Egyptian hegemony, paralleled with Nubia and other external regions as the foreign ‘other’, was an essential *topos* within Egyptian ideology (Roth 2015), as in many colonial situations (Mata 2017), but evidence suggests the reality of this relationship was much more complex. Archaeological evidence at the A-group site of Qustul (Williams 1986) and Kerma (Bonnet 1990; 1992; 2004) indicates that Nubian polities had considerable control of resources and power that was not dependent on Egypt. Furthermore, the understanding of Egypt as a homogenous state system is also flawed. Differentiation between areas in Egypt itself was not only observable at sites with different geographic conditions from the main Nile Valley (such as the Nile Delta), but has also been found by recent excavations to be present between cities even in unified periods (Jeffreys 2010; see Section 2.4). Material evidence also suggests that relations between the regions were fluid, with a continual active movement of goods, people and information between Egypt and Nubia. As such, people of different appearance were a consistent part of Egyptian daily life (Pemler 2014: 443), even if Egyptian iconography does not always reflect this reality. Accompanying this are various phases of two-way cultural admixture and interaction, observable in Nubian- and Canaanite-inspired material culture found across Egypt. Such data indicates that approaching Egypto-Nubian relations

through a Core-Periphery model is too simplistic. Understanding the limitations of Egyptian sources such as tomb autobiographies and temple reliefs is important for comprehending such inter-cultural relations accurately (e.g. Riggs and Baines 2012; Leprohon 2015).

1.3.4. Egyptianisation

‘Egyptianisation’ has historically been an influential model applied to Nubian regions and individuals (e.g. at Debeira East: Säve-Söderbergh 1989: 200; Williams 2017). The concept was developed by Reisner (1910) for the purpose of describing the southward movement of Egyptian immigrants as they fled the Hyksos invasion. The model has since undergone several revisions and is now understood to encompass any widespread adoption of Egyptian-style material culture and behavioural practices among non-Egyptian communities (Weglarz 2017: 36). The term has been used to explain the supposed ‘disappearance’ of groups such as the Pan-Grave culture from the archaeological record within Egypt (Bietak 1966; Bourriau 1991: 132; Edwards 2004: 100); groups were said to have been ‘Egyptianised’ and thus become indistinguishable from Egyptians (e.g. Säve-Söderbergh and Troy 1991: 8). The model has especially been directed towards New Kingdom cemetery contexts in Nubia, where there was a mass shift towards Egyptian burial practices and material culture in the 18th dynasty (Säve-Söderbergh 1991; Williams 1992; Edwards 2004: 107; Török 2009: 264). This has been suggested by Williams (2017: 319) to indicate a ‘profound cultural conversion based on religious impulse’. Pilgrim flasks were a key aspect of this shift and appear across these New Kingdom contexts (see Chapter 6).

The idea of Egyptianisation is intricately linked to the concept of ‘elite emulation’ (Török 2009: 274). This theory was developed by Higginbotham (2000), who applied the model of Colonial towns in New Kingdom Nubia to Ramesside Palestine (the Levant), when large parts of the region were under Egyptian administration. Higginbotham argued that the adoption of Egyptian architectural styles and material culture, including ceramics, was indicative of attempts by local elites to emulate Egyptian practices for political and social gain. This model was designed to challenge the ‘direct rule’ model, which implied a full Egyptian military and administrative presence across the Levant (e.g. Martin 2011; 2011b; Weinstein 1981: 18). However, Higginbotham’s analysis of Egyptian-type ceramics across the region was

problematic (Aston 2002). Large quantities of Egyptian domestic pottery within these sites – ‘items associated with low social prestige’ (Martin 2011b: 259) – are not adequately explained by the ‘elite emulation’ paradigm, and likely indicate targeted Egyptian imperialism in the region (Killebrew 2004: 310). Morris (2005: 8–20) has further contested the simplicity of assigning deposits to either category, and has argued that the political situation was more complex than can be understood by two diametrically opposed models. She suggests that the patterns evident in material culture indicate that such items were brought to the Levant through a variety of mechanisms. The political and social situation was similarly complex in contemporary Nubia, and the idea of elite emulation has been applied to Nubian contexts via similar paradigms (e.g. Morris 2005).

The concept is intricately related to the Core-Periphery model discussed above, and assumes an inherent Egyptian superiority (de Souza 2013: 110) common to much early scholarship within Egyptology. Reisner’s (1918: 236) comments regarding the ‘superiority of the Egyptian race’ were not unusual for their time, and their essence has continued to some extent into the 21st century. Scholars such as Kemp (1978: 34–35) have remarked that ‘Egyptian culture must have had a considerable glamour in the eyes of Nubians’ and that ‘some recognition, at least, should be given to the positive side of this early attempt to extend...a civilized way of life’ (Kemp 1978: 56).

In common with these models, the Egyptianisation hypothesis belies a complex reality. Its simplistic framework has much in common with the similar model of ‘Romanisation’ attributed to contact between Romans and indigenous groups during the European Late Iron Age (Jones 2002: 33–39), which has been critiqued in recent years (e.g. Jones 2002; Mata 2017; Wilson 2017). While it is undoubtedly true that members of Nubian groups used Egyptian material culture and practices, particularly in the New Kingdom (e.g. Säve-Söderbergh 1989: 203; de Souza 2013), and possible that certain groups did undergo some form of ‘cultural conversion’, archaeological evidence suggests that this relationship was more complicated.

References to Nubian princes and kingdoms during the New Kingdom such as Tekhet indicates that these rulers were allowed to continue their rule during colonial expansion (Säve-Söderbergh 1991; Säve-Söderbergh and Troy 1991: 190–204; Török 2009: 265ff). Paul Van

Pelt (2013: 537) has noted that these elite members of society would have likely acted as intermediaries between the Egyptian administration and the local populace, necessitating a careful balancing act to avoid appearing too submissive to Egyptian interests. Although Williams (2017: 310) suggests that preservation of indigenous traditions was ‘difficult to detect, few and sparsely distributed’, these features are certainly significantly evident at least to the south of the Second Cataract (e.g. Smith 2007; Thomas 2014; Rose 2017; Spencer 2017). The ‘reappearance’ of cultural traits, particularly in pottery, towards the end of the New Kingdom furthermore suggests that such traits never disappeared (Welsby and Welsby-Sjöström 2007).

In particular, the ability of Nubian groups to manipulate the Egyptian powers has been underestimated (Tsakos 2009: 65). While Egyptian pottery does occur in Pan-Grave burials across Egypt, for example, it does not exist in an inverse relationship with Pan-Grave ceramics and artefacts, which are maintained across the supposed ‘Egyptianising’ chronological timespan (de Souza 2013: 116). Even at sites where Egyptian pottery such as pilgrim flasks predominated (e.g. at Fadrus: Säve-Söderbergh 1991), the supposed ‘disappearance’ of certain groups does not mean they ceased to differentiate themselves within society (Riggs and Baines 2012: 3).

A major problem with the term ‘Egyptianisation’ lies in the fact it suggests Egyptian culture to have been static and monolithic, a concept that grew out of 20th century culture-essentialism (see for example the focus on splitting remains into distinct cultures e.g. Säve-Söderbergh 1963; Assmann 1992). In fact, evidence suggests that Egyptian culture was both multi-lateral and dynamic. Although material heterogeneity and practices are observable across Egyptian culture, within this milieu regional identities persisted in expression from the Naqada period onwards, with city and nome identities key aspects of local religion and practice (Jeffreys 2010). Foreign influence was, in addition, always a present factor (Schneider 2003: 158), with cultural preferences linked to environmental conditions – Qantir had close links with the Levant, for example, due to its strategic trading position in the North East of the Nile Delta on a key Nile tributary (Van Dijk 2003: 292). Elephantine, on the other hand, had strong links with Nubia, and Nubian communities are known to have existed in the region even during times of official war with the south (Friedman 2001). Ceramic repertoires reflect these distinct

regional trajectories, accelerating during the Intermediate Periods when centralised ceramic production ceased, resulting in a proliferation of regional ceramic styles (seen for example in the Third Intermediate Period: Aston 1996; Boulet 2016).

Nubia had a similarly regional nature. The area was not unified, but was rather a conglomeration of settled and nomadic groups and kingdoms assimilated into one area by both the ancient Egyptians and by many modern scholars. The movements and interactions of several contemporary cultural groups are, however, clear in the archaeological record (e.g. Edwards 2004: 11; Riggs and Baines 2012: 5). Egyptian textual sources do subtly refer to this cultural diversity of Lower and Upper Nubia, by occasionally adding toponyms to C-group descriptions, suggesting the existence of multiple cohesive groups (Bietak 1966: 75; Paul Van Pelt 2013: 528). In general however, the stereotyping common to Egyptian ideological tropes overshadowed this (Dann 2009: 101).

The interactions between such groups led to many instances of multi-directional inspiration between these cultures, something that the term ‘Egyptianisation’ ignores. The idea that Egypt was influenced by outside cultures has been little broached within Egyptology, yet aspects of religion (Bonnet 1990: 77), attire (Vogelsang-Eastwood, Hense, and Wilson 1999: 99; Bianchi 2004: 128; Schneider 2010: 154 Walsh in press) and pottery (Rzeuska 2010) can be identified from Egyptian sources, to the extent that statues of Amenhotep II in the dress of a Nubian soldier were depicted in the tomb of Kenamun at Thebes (Davies 1930: 26; pl. 17). Such crossovers indicate that the Egyptians did respect and admire certain customs and abilities among the Nubian peoples regardless of official rhetoric (de Souza 2013: 110).

Paul Van Pelt (2013) has argued that the concept of Egyptianisation is fundamentally flawed by its rigid, monolithic approach to both Egyptian and Nubian cultures – which fails to take such crossovers into account – as well as its elite focused, ‘top-down’ methodology. He points out that, economically and socially, the poorer elements of society would have had little to gain from imitating Egyptian culture and, perhaps, little experience of aspects such as religious practice in general (Paul Van Pelt 2013: 529). A large proportion of evidence cited in favour of Egyptianisation and elite emulation comes from tomb reliefs belonging to elite Nubian males. Two tombs belonging to ‘Princes of Tekhet’ (Säve-Söderbergh 1991; Säve-Söderbergh and

Troy 1991: 190- 204; Török 2009: 265ff), likely rulers of a small kingdom within Lower Nubia, and the tomb of a Nubian prince raised at the Egyptian court, Maiheperi, a *Xrdw n kAp* (Child of the Nursery) (Riggs and Baines 2012: fig. 1), are common examples (see Chapter 2 for further discussion). These princes were buried in Egyptian-style tombs, and were depicted within their own tomb reliefs as Egyptian.

However, the majority of the populace likely only adopted Egyptian forms of expression for matters of economy and convenience. An increased Egyptian presence in Nubia would have flooded the economic market with large quantities of mass-produced Egyptian goods, which resulted in their high availability to the local populace (Trigger 1976: 134; Paul Van Pelt 2013: 540). This does not necessarily reflect community preference, but rather accessibility. Weglarz (2017: 20) has noted that many instances of mortuary variation persist in such Egyptianised cemeteries which indicate a rather more selective adoption of Egyptian practice than is often suggested. The continued presence of contracted burials and the lack of culturally significant Egyptian items such as shabtis or canopic equipment (Smith 2003: 154) points to a lack of investment in Egyptian practices. The perseverance during the New Kingdom of cemeteries that only display indigenous material culture (Williams 1983: 121; Säve-Söderbergh 1989: 23; 1991: 8) further suggests that this adoption was not universal and that elements of society in Lower Nubia, perhaps even distinct groups, rejected Egyptian practices. This has the potential to change our perception of pilgrim flask use across both Lower and Upper Nubia, because it suggests that indigenous practices continued. Their adoption was not part of a mass export of Egyptian cultural practice, but the form was deliberately selected by communities for use in local activities.

I suggest that the term Egyptianisation should be understood as a more complex, ongoing process of interaction between several dynamic cultural groups (see Chapter 8), rather than as a part of a traditional Core-Periphery model. The political benefits of emulating Egyptian culture will have been clear to elites, particularly in Lower Nubia (Török 2009: 274; Edwards 2004: 108), and was likely used as a local legitimization strategy (Weglarz 2017: 19). However, shifts to Egyptian modes of expression among the ordinary members of ‘foreign’ groups – both within Egypt (de Souza 2013) and across Nubia (Säve-Söderbergh 1989: 203) – is better understood as the utilisation of items which were in mass circulation, and thus more easily available. That Egyptian modes of expression were in use by different communities at

different times is evident. However, whether these communities were using such items in the Egyptian manner is by no means conclusive (Hulin 2013: 365; Paul van Pelt 2013: 539) and this has direct implications for the interpretation of pilgrim flasks within Nubia.

1.3.5. Do pots equal people?

I use the term ‘culture’ throughout this study to refer to a society or group of people with similar material culture, which suggests that they shared a perceived sense of group identity and means of expression. However, historically the term has often been conflated with ideas of ethnicity and identity. I briefly discuss the parameters surrounding this term here in order to express the problems behind this concept, and how best to attempt to use pottery to reconstruct social and cultural identity.

The use of material culture, particularly ceramics, to identify archaeological ‘cultures’ has historically been a key practice within archaeology (Jones 2002: 15), and involved equating different artefacts, languages and perceived races with rigidly demarcated ethnicities (Trigger 2006: 235; Riggs and Baines 2012: 1; Card 2013: 3). The term ‘culture’ was originally defined as ‘that complex whole which includes knowledge, belief, art, morals, law, custom, and other capabilities and habits acquired by man as a member of society’ (Tylor 1871: 1). Pottery types were thus seen in this vein as directly mappable onto specific cultures, with cultures such as the A-group in Nubia identified in this way (Reisner 1910; Steindorff 1935). However, it is important to establish broader criteria before concluding the presence of a cultural group based on ceramic evidence alone.

Until the 1960s, ethnic identities within archaeology were typically understood as fixed and immutable. Culture-historical scholars such as Crawford (1921) and Casson (1921) associated the distribution of certain objects – in the case of Casson, pottery and bronzes – to the spread of certain cultures, such as the Dorians. The work of Childe (1929; 1939) was crucial in formalizing this methodology within chronological frameworks (Jones 2002: 17–18), and his work has become synonymous with the establishment of culture-historical archaeology in Britain (Jones 2002: 16). Childe stated (1929: v) that cultures were identifiable by ‘certain types of remains – pots, implements, ornaments, burial rites, house forms – constantly recurring

together'. He identified pottery as the item most likely to be resistant to change and thus the best artefact to aid in cultural differentiation. Childe and his contemporaries were heavily influenced by the work of Kossinna (1911), whose ethno-historical methodologies in Germany were ultimately used for nationalistic purposes in Europe. However, the ideas developed at this time remained prevalent into the 1970s (Pierce 2013: 51) and they are the origin of the so-called 'pots equal people' phenomenon.

Barth (1969) was the first to argue that constructs of ethnicity were more fluid and negotiable. Since his seminal publication, *Ethnic Groups and Boundaries*, ethnic identities have become focal points within the literature, with studies assessing the myriad ways in which individuals and communities can be categorized both internally and externally (Cohen 1978). It also marked an important shift to the study of multicultural and multiethnic groups (Cohen 1978: 386). Ethnic boundaries have since been understood to be dynamic and open to manipulation, shifting according to both social context and the interests of the agent (Barth 1969; Paul Van Pelt 2013: 537). Rather than being a biological definite, such categories were assigned by individual and community agency, and were intricately linked with group relationships (Riggs and Baines 2012: 9). Ideas of circumstantial ethnicity, for example, emphasise the potential for changing one's ethnic allegiance as a result of political or social strategy (e.g. Barth 1969: 23). Such a practice is indicated by the example of the elite burials of the Princes of Tekhet in Lower Nubia (Török 2009: 265ff).

More recent scholarship within archaeology has moved further from equating material culture with these discussions of ethnicity, arguing that goods from a particular source were not necessarily carried or owned by people of the same origin (Graham 1990: 50; Meyer 1993: 739–740). Indeed, Stockhammer (2013: 13) has noted that what are termed archaeological cultures 'are nothing but – more or less – arbitrarily created entities that are more the result of our discipline's history of research than an adequate representation of past realities'. While it is likely that there were material markers for ethnic groups, the problems with identifying and understanding them are vast (Van Driel 2005: 5). Ethnic identities are more likely constructed by the shared dispositions and practices of individuals – their *habitus* – more than use of similar material cultures (Jones 2002: 128; see Section 1.5.1).

This is not true in Egyptology, however, which has persisted with the essentialist ‘pots equal people’ approach. The presence of Nubian pottery in Egypt has often been equated with the settlement of Nubians, and that of Egyptian pottery at sites such as the New Kingdom ‘colonial towns’ (see Sections 1.5.3 and 2.5.1) with the migration of Egyptians into Nubia. The discipline has only recently begun to approach the difficulties associated with this concept (e.g. Smith 2003; Schneider 2010; Wilson 2010: 245; Smith and Buzon 2014; 2017; Raue 2017).

The constant renegotiation of ethnic identity through social interaction is evident in Egypt, where various foreign groups across history migrated to the Nile Valley and to some extent adopted Egyptian practices and customs, while retaining others in particular contexts (see Chapter 2 for full discussion). Some appear to have acculturated to the extent they became ‘invisible’ to later scholars, although they may have retained practices not preserved in the archaeological record. The Egyptian acceptance of foreigners once they were absorbed into the Egyptian world is perhaps exemplified by the fact the Egyptian term *xAs.tiw*, ‘foreigners’, is only used for those outside the borders of Egypt – never for foreign groups within an Egyptian socio-economic context (Schneider 2010: 144).

Riggs and Baines (2012: 2) have discussed the difficulties with identifying such ethnic groups in ancient Egypt, and suggested that regional or local identities within Egypt may be comparable to ethnic identities with significantly different dialects and religious practices. Sites such as Tell el-Da’ba exemplify how establishing the socio-cultural context of artefacts is fundamental for equating material culture with the potential presence of a cultural group. The discovery of a small quantity of Kerma pottery – 20 cooking pot sherds and 10 fineware sherds (Hein 2001; Fuscaldo 2002) as well as flint arrow-heads of Kerma type (Tillmann 1994: no. 348-9; Aston and Bietak 2017: fig. 12) in several royal administrative areas in the city has been interpreted as indicating the presence of Nubian archers enlisted as mercenaries (Bietak and Forstner-Müller 2011: 29). The existence of Nubian cooking pots (Aston and Bietak 2017: 501) and open vessels, in particular an Egyptian imitation Nubian cooking pot (Fuscaldo 2002: fig. 4), further points to a Kerman presence as such forms represent food preferences and are unsuitable for travel. This is not the case when we look at fineware beakers, however, which were potentially brought north as diplomatic gifts or via trade. The concept of Nubian pottery being desired by an Egyptian market is rarely considered when approaching Nubian pottery,

but Kerma fineware in particular was likely of high value in Nubian communities (Nordström 2004). Other, more fragile cups were likely locally manufactured by a resident Nubian population (Raue 2017: 528). Such an example serves to illustrate the intricacies inherent in attempting to associate sherd scatter with population movement.

Modern ethnic distinctions, based on current understandings of the patterns observable through material culture, may well bear no relation to ancient reality (Stockhammer 2013: 13). In Nubia, the broad ceramic similarities within riverine communities of both Lower and Upper Nubia, over a broad chronological timespan, points to a tangled web of interconnections across the region. There is no evidence that groups such as the C-Group or Pan-Grave self-identified as a single ethnicity, and indeed their multiculturalism is hinted at in Egyptian sources (Bietak 1966: 75; Paul Van Pelt 2013: 528). Furthermore, the close similarities between early C-Group and Kerma material culture (Gratien 1978; Edwards 2004: 88) suggest that these communities both originated in the Kerma region. The groups likely only diverged after a string of Egyptian fortresses – designed to control trade within the Nile Valley as well as to act as defensive fortifications against Kerma during the Middle Kingdom – were constructed across Lower Nubia during the 12th dynasty (Gardiner 1916; Baines and Målek 2000: 41; Monnier 2010: 40ff). Their presence prevented continued interaction between Kerma and the displaced C-Group from the Second Millennium BCE, and led to accelerated differences between their material cultures. Further problems are observable when one attempts to correlate both the ‘pots equal people’ paradigm and the Egyptianisation model with archaeological deposits across Nubia during the New Kingdom. The presence of six women buried in an Egyptian multiple-interment grave, yet according to traditional Nubian mortuary practices at Tombos (Smith 2007: 7; Smith and Buzon 2017) – an important Egyptian administrative seat – suggests that ethnicity was more complex and hybrid than official sources portrayed.

The archaeological evidence demonstrates that, while the simplistic ‘pots equal people’ concept is invalid, ceramic deposits and technology do reveal considerable information about the self-identity of individuals, the role ancestry may or may not have played in material culture choices, and the deliberate negotiations of these made by the people in such settlements.

1.4. Anthropological approaches to material culture

The study of meanings behind material culture – and the social structures that were responsible for its creation – has resulted in the development of specific criteria for this purpose in the discipline of anthropology. The application of several of these models to archaeology has been beneficial for increasing scholarly understandings of daily life in the ancient world, and are useful for attempting to understand the meaning behind pilgrim flask adoption in ancient Egypt and Nubia. I next summarise select theories that I consider relevant to the study of pilgrim flasks.

1.4.1. Habitus and agency

The concept of the *habitus* was first theorised by Pierre Bourdieu (1977) in his publication ‘Outline of a Theory of Practice’. Here, he suggested that an individual’s unconscious decisions and choices are affected by their surrounding social and behavioural structures, which early in life become internal, unperceived embodiments within the self. The naturalisation of these beliefs and behaviours is responsible for the creation of one’s *doxa* – fundamental, unconscious beliefs and values within a person that are necessarily, but unknowingly, learned. These beliefs and values are so entrenched that communities understand them as universal truths, rather than culturally affected world-views. An understanding of different *habitus* behaviour is key to comprehending the distinct use patterns surrounding pilgrim flasks in a Nubian as opposed to Egyptian cultural context.

Bourdieu’s *habitus* theory is intimately connected to that of another practice theory: Giddens’ (1986) theory of structuration. Giddens developed the understanding of individual agency within the *habitus*, and presented this in a dual model, emphasizing that the relationship between agency and social structures drives the continuation of a society (Giddens 1986: 25). He suggested that such practices, learned via the *habitus*, would then persist among communities as ‘memory traces’ (Giddens 1986: 17; 45), and significantly affect an individual’s life choices and daily decisions, by causing commonalities of practice that encourage the feeling of group identity (Hu 2013: 374). These hereditary resources and practices are used by

individuals and communities to make structures within society, and cannot exist without their constant reaffirmation by individuals (Giddens 1976).

While *habitus* expresses the subconsciously absorbed rules of a society – what is considered appropriate, and in which context – it does not dictate how this is translated in practice. The agency of an individual allows them to make practical and creative decisions within these social parameters (Giddens 1976; Robb 2010). Gell explores agency in his 1998 publication *Art and Agency: an anthropological theory*. Individual agency, like the *habitus*, is not independently constructed, but relies upon the social relations and systems surrounding the individual. The ability to learn and understand one's specific 'landscape of action' (Robb 2010: 498), and to interpret and modify behavior accordingly, depends upon an understanding of the social structures within one's society and the desire, consciously or unconsciously, to reproduce and manipulate them (Giddens 1976: 6). The agency behind acquiring, using, and perhaps displaying pilgrim flasks would have involved tasks and social interactions that ultimately affected the self identity of an individual or group (e.g. Robb 2010: 513). The changing use patterns of the form are particularly enlightening for understanding changes in *habitus* practices within the changing political and social milieu of New Kingdom Nubia, which are well expressed through transformations in ceramics.

The *habitus* in a given social group is directly related to the material culture that individuals within manufacture and use, because this makes up its culturally constituted world (McCracken 1986: 72). This relationship between an individual and their object world, their overarching *habitus*, is the fundamental basis of societal symbols used to reinforce identity and sense of self, as well as the basis of subsequent taste and etiquette. While an individual may think they are acting independently, their embeddedness in a web of social relations means that their choices and actions are often the result of these complex and multidirectional forces (Feldman 2014: 50). Skibo (1999: 2) has suggested that artefacts have both a physical and a metaphysical presence and are crucial for our understanding of ancient lifestyles. This presence within items has been theorized to exert its own agency, with their perceived meaning embedded within them (Pollard 2001: 317). Gell (1998: 17–19) defined humans as Primary Agents of intention, enforcing their agency on the surrounding world. When humans ascribe an agency or intentionality to an artefact, this item can be argued to be a Secondary

Agent, with its own agency. Kjølbj (2009: 34) has termed this ‘experienced material agency’, and in such cases, the person interacting with the object has a genuine belief that the object is creating a set of circumstances. A ritual vessel containing sacred oils, for example, could have been considered an intentional actor by the participants. If using a different vessel were deemed unlucky, then any negative consequences after using the incorrect form would have been interpreted as being ‘caused’ by the incorrect vessel. In this way, artefacts create, embody, and reproduce cultural habits and meaning (Hodder 1982; Tilley 1989: 188; 2006: 60–73; Steffenson 2007: 150).

Such objects, as agglomerations of social relationships (Dann 2009: 247) were part of the relationships with the users surrounding them as social actors. Humans are present not just in their bodies but also in all the items that allow for a specific existence (Gell 1998: 103; Kjølbj 2009). Indeed, perhaps Egyptian pilgrim flasks in Nubia were deliberately manipulated by the user for ‘the abduction of agency’ (Gell 1998: 13; e.g. Minor 2012) – forcing viewers to make specific inferences about the owner/user, and acting as integral parts of an owner’s attempt at ‘elite emulation’. Gell’s hypotheses can be further expanded to assess the potential effects of the deposition of such items in burial contexts, and how they reflect the negotiated relationships between people and objects (Pollard 2001: 317). These items had distinct influences on culture. Only the presence of a pilgrim flask itself was required to inspire a materially entangled imitation among the consumer body, not the craftspeople responsible for producing the original vessel. In this case, the agency could be said to be firmly held by the pilgrim flask rather than by the agents of its manufacture (Paul Van Pelt 2013: 541).

Preucel (2006: 248) has noted that both Bourdieu’s *habitus* and Giddens’s structuration theories fail to take into account the materiality of social life, and how people use objects to mediate their social existence. However, Smith (2003; Buzon and Smith 2017) has successfully adapted the *habitus* concept to Egypto-Nubian interaction and its display through material culture. I believe the *habitus* concept to be particularly useful as a method for approaching changing perspectives of pilgrim flasks between Egypt and Nubia, and as such I employ it throughout this study.

1.4.2. Anthropological study of ceramics in Egyptology

Ceramic study has increased over the past decade (see Section 1.3.1); however, within the discipline of Egyptology, chronological typologies have persisted as the main avenue of study. While invaluable, these studies neglect an important aspect of pottery: its social and cultural implications. This concept was first mentioned in early surveys of Nubia (Holthoer 1977: 3) and still holds true 40 years later (Weglarz 2017: 78).

An important aspect of my research therefore involves not only creating a new typology for pilgrim flasks, but also analysing the social aspects of the ceramic assemblages, and how changes within pilgrim flask repertoires could reflect shifts in society. Such an anthropological approach is increasingly popular in contemporary archaeological publications (e.g. Hill 1995; Simon and Burton 1998; Spataro and Viling 2015); however, the number of Egyptological publications that adopt this approach is limited (but see; Meskell 2004; Stevenson 2009b; Aston 2013; Bader 2013; Walsh 2013). Stevenson's (2009) analysis of the Predynastic cemetery at El-Gerzeh and Hulin's (2013) quantification analysis of changes in Egyptian ceramic distribution at Beth Shan are particularly important for my research since they look at spatial positioning to access the social significance of vessels, an approach I apply in Chapter 7. Work by Martin (2004; 2011; 2011b) on Egyptian colonial settlements in the Levant, and the subsequent effect on pottery repertoires, is also extremely useful for projects such as mine, as it discusses methods for approaching the role of ceramics in a colonial context. Modern analyses on excavations in Nubia have also begun to utilize this socio-cultural approach (e.g. Smith 2003; 2007; Dann 2009; Minor 2012; Smith and Buzon 2014; Spencer 2014; Binder 2017; Weglarz 2017). Discussions of the implications of certain forms of material culture for cultural identity, etiquette, diet, and view of the surrounding environment, are vital for understanding the socio-cultural meaning that a vessel may have carried. I contribute to this debate by approaching pilgrim flasks from both a typological and social analysis.

1.4.3. Post-Colonial Theory

Post-colonialism has become an increasingly used critical approach within both archaeology and anthropology, as a study of cultures and societies under colonial rule. Its theoretical

parameters were originally developed to discuss the effects of and reactions to European colonialism (e.g. Comaroff and Comaroff 1991), but these concepts can be similarly applied to archaeological sites under colonial authorities such as ancient Rome and Egypt. This model is vital for understanding the early use of pilgrim flasks in Egyptian contexts in Nubia, but also for how the vessel was appropriated and transformed by local communities.

In the catalogue, 24% of the Nubian pilgrim flasks can be attributed to ‘colonial’ sites in Nubia; either the Egyptian ‘colonial towns’ of the New Kingdom, or the Middle Kingdom fortresses originally established during the 12th dynasty (Gardiner 1916; Baines and Målek 2000: 41) and subsequently reused in the New Kingdom (e.g. Semna: Dunham and Janssen 1960). The colonial towns were new settlements constructed in the 18th dynasty, often above or close to previously significant indigenous sites (e.g. Sai: Minault-Gout and Thill 2012; Budka 2011; 2014b; 2017), and they were likely founded soon after Thutmosis I subjugated the region (Davies 2017: 93–94). These settlements were designed according to an Egyptian architectural plan, centring on a temple (Kemp 1978: 23–25) and originally consisted primarily of storage magazines, barracks and small residential areas. The significant position of the large magazines suggests an Egyptian economic system was being imported here (O’Connor 1983). Temples were responsible for the collection and distribution of resources, something evidenced in Egypt (Kemp 1978: 31; see Section 4.5 for more detail). In addition, at least one cemetery is located on the outskirts of the settlement area. Over time, these towns evolved from primarily administrative into residential spaces. Magazines were converted into small houses, which were expanded/divided as required by each family (Spencer 2010; 2014; 2017). Temple architectural elements were reused as door lintels, and larger houses were constructed outside city walls, suggesting there was no urgent need for military protection by the 20th dynasty (e.g. Spencer 2009).

These towns were historically suggested to house Egyptian immigrants and their ‘Egyptianised’ protégées (Adams 1977: 229–230; Kemp 1978: 34–35; Grimal 1992: 134; Shaw 2003b: 320). However, recent evidence suggests that the reality was more multi-cultural. Although some Egyptian administrators were certainly present in some areas (e.g. Smith 2003: 137ff), osteoarchaeological analysis at Tombos supports the idea that these towns were occupied by a mix of Egyptian migrants, indigenous people, and second and third generation

settlers from multi-cultural marriages (Smith and Buzon 2014: 432; Spencer 2014: 480); pointing to a biologically mixed population (Buzon 2006).

The application of post-colonial models to these Egyptian settlements allows for a more nuanced study of their impact on the local populace, and subsequent material culture. Within these parameters, I believe the role of Egyptian ceramics, including pilgrim flasks, can be demonstrated to be particularly revealing regarding changes in Nubian society.

1.4.4. Entanglement

A more useful model than ‘Egyptianisation’, the ability to hold multiple, and even ‘entangled’ or hybrid identities within areas of Egyptian and Nubian interaction has become an increasingly popular hypothesis within post-colonial studies in recent years (Paul van Pelt 2013; Matić 2017: 100). It is vital for understanding changing material culture across the period in question, and is an integral aspect of my pilgrim flask analysis.

In this research, I understand this entanglement as a series of stages in Nubia, which I will discuss in this section:

Stage 1. Egyptian pottery is appropriated by indigenous groups in Nubia and incorporated into local practices, with the pottery undergoing ‘relational entanglement’.

Stage 2. Behaviour in colonial towns in Nubia becomes hybridised between Egyptian and Nubian practices in these politically charged spaces, resulting in ceramic examples of ‘material entanglement’.

Stage 3. By the end of the New Kingdom, *habitus* behaviours in the colonial towns have developed into unique practices that demonstrate the ethnogenesis of a new, creolised identity which I term the *urban habitus*.

Stage 4. This *urban habitus*, rather than contemporary Egyptian culture, influenced the subsequent development of Kushite identity.

In such mixed spaces, indigenous and immigrant cultures change to accommodate the aggregated diverse social conventions in a group, and develop ways of dealing with new

resources and materials to create a new material world (Eckert 2008: 39). Dietler (2010: 21) defines such entanglement as the means by which two or more societies link together via colonial relationships, through a variety of cultural, political, and economic pathways. The arrival of a colonial power and its subsequent entanglement within indigenous social and political structures has been noted within other colonial and post-colonial contexts (e.g. Thomas 1991; Paynter 2000; Bader 2013; Wilson 2017: 99) and this multiplicity is strongly evident at Egyptian sites across Nubia (Smith and Buzon 2014).

The cultural contact between groups broadly understood as ‘Egyptian’ and ‘Nubian’ in these spaces led to striking syncretisms between the two cultural traditions in aspects of material culture, including architecture (Spencer 2010), burial type (Binder 2017), and ceramics (Vincentelli 2006; Pappa 2013: 3; Budka 2017: 440; Raue 2017: 529, fig. 5; Rose 2017: fig. 1: 6, fig. 2). These reactions to Egyptian colonisation reflect the interweaving of Egyptian and Nubian cultural identities produced by an accumulation of individual choices over time (Smith and Buzon 2017: 615) and the negotiation of such identities within a tense frontier environment (Comaroff and Comaroff 1991: 217). Many of these choices were expressed through indigenous reactions to the ‘alien’ material culture of the colonisers. Traditional ‘Egyptianisation’ studies can only offer limited information on such enigmatic issues as self-identity and individual resistance in these contexts, especially when considering the potential for individuals to possess multiple fluid identities (Dann 2009: 100). One may simultaneously be a mother, daughter, and priestess, for example; or project an Egyptian identity in life, but a Nubian one in death.

The idiographic concept of entanglement is extremely useful as it takes into account the agency both of the coloniser and the colonised, rather than focusing solely on elite groups (Paul Van Pelt 2013: 541). It also explores how the tension between two opposed *habitus* systems leads to creative approaches to identity and material culture (Smith and Buzon 2014: 431). One consequence of this hybridity is the ethnogenesis of new cultural practices and new identities in these border zones (Hu 2013: 391; Weik 2014): frontiers between the old (indigenous) world and the new, dominating (colonizing) force. These frontier zones have been emphasized as ‘uncharted spaces of confrontation... in which people fashion new worlds’ (Comaroff and Comaroff 1991: 217), and the material culture and ethnic boundaries

in such spaces have been noted by many scholars to be particularly permeable (Killebrew 1999: 259). In particular, they reflect the forging of distinct senses of identity, expressed through new reactions to materiality (Buzon, Smith, and Simonetti 2016: 295). Developing reactions to pilgrim flasks are clearly visible across the colonial period in Nubia.

Stockhammer (2012: 49–51) has usefully divided the multitude of community responses to ‘alien’ material culture within such contexts into two categories. ‘Material entanglement’ results in the creative development of entirely new items, often inspired by the amalgamation of traditional and incoming objects. ‘Relational entanglement’ rather involves the development of new social practices and meaning ascribed to an appropriated item, which is more difficult to discern in the archaeological record. These theoretical concepts are particularly beneficial when considering the changing materiality of pilgrim flasks across Nubia. Examples of both material and relational entanglement are clear in the archaeological remains of pilgrim flasks. Relational entanglement can be understood from the use of Egyptian pilgrim flasks in Nubian funerary contexts at Debeira East (Säve-Söderbergh 1989b; Steffenson 2007), and material entanglement appeared during the Ramesside period, with the appearance of Nubian-specific flask types such as Type Aiv and a higher proportion of Type B vessels (see Chapter 6; pls 5, 6). In Chapter 8 I suggest that much of the evidence for ‘Egyptianisation’, such as the use of Egyptian pottery such as pilgrim flasks within Nubia, can in fact be attributed to such relational entanglement.

Colonial towns were the common frontier space for this culture contact, and often resulted in the ethnogenesis of new cultures in a complex web of social interactions. Understanding the way political situations affected contexts within Nubia is crucial for understanding the impact it had on classes of material culture such as pilgrim flasks (Card 2013: 3). Artefacts in these frontier spaces encompass vital aspects of symbolic ethnic signalling – where one’s identity is expressed via material culture. Boundary zones, such as these colonial towns (Manzanilla 2015: 9174), allow individuals to ‘resist’ the dominant colonial entity in subtle ways. Persistent Nubian cultural practices, visible through ceramic deposits, reflect this resistance. The traditional Nubian burial of women in Unit 6 at Tombos (Smith 2007: 7) as well as tumulus structures within the Egyptianised cemetery spaces at Amara West (Binder 2017: 599) indicate that individuals were persisting with indigenous modes of practice in what are usually

considered thoroughly Egyptian spaces (Smith 2007: 5). Funerals were public events in Egyptian and Nubian communities, and the expression of an overt Nubian identity in an Egyptian town would have made a visible statement to the community (Smith and Buzon 2014: 432; 2017: 625).

However, the material culture within colonial towns also demonstrates the rapid ethnogenesis of a new, hybrid identity. The preservation of ethnic difference between two groups relies upon a dichotomization of the other group as ‘The Stranger’ (Barth 1969: 15) and on a restriction of social, cultural, and economic interaction between groups (Royce 1982: 39–40; Hu 2013: 375). When this restriction ceased in these small towns, space was created for the ethnogenesis of a new identity – what I term the *urban habitus*. This is used to describe the new entangled identity that emerged from the mixed populations in New Kingdom Colonial towns, which appropriated select aspects of Egyptian social and ideological practice and combined these with indigenous traditions. Early traces of this entangled identity appear in the early 18th dynasty, but its hybridity solidifies in the Ramesside period when a new *habitus* is clear. This *urban habitus* ultimately had a significant impact on the rise of the Napatan state. It was this *urban habitus* that influenced later Napatan practices, rather than a contemporary Egyptian emulation, which had long since appropriated and transformed practices from Egyptian into local. The development of a new identity within regions on the periphery of the Egyptian state has similarities to the model of creolisation, which Webster (2001) has commented should be applied to provinces absorbed into the Roman Empire. A creolisation framework involves the blending of two different types of material culture in a tense, politically charged space typically in a colonial environment. These material culture worlds were originally used by communities in different contexts, but over time social interactions between the groups isolated from their original background can result in the development of hybrid practices and a new identity.

The concept that ethnogenesis may also be used as part of resistance against an oppressive group (Hu 2013: 385–386) may be especially relevant to Nubian contexts, where established hierarchies of power resulted in Nubian elites emulating Egyptian practices for political gain (Török 2009: 274). Indeed it is the combination of cooperation and tension between ethnic groups that allows for such endomesic transformation within these societies (Manzanilla 2015:

9174), because it both inspires and necessitates new activities. These behavioral changes are most clearly expressed through utilitarian material culture such as pottery. The decisions among members of colonial towns to preserve aspects of indigenous culture – particularly cuisine and ceramic technology (Smith 2003: 118, table 5.4) – whilst simultaneously engaging with Egyptian modes of display, resulted in a second generation of inhabitants identifying as both Nubian and Egyptian. The consequential mixed traditions led to this *urban habitus*. The developing new identity may be expressed in myriad ways – a new amalgamated language (e.g. Mufwene 2015), new cuisine, new ritual practices (Török 2009: 331), or new forms of self-presentation. Many of these changes will be invisible in the archaeological record, and as such have to be reconstructed through transformations in material deposition, such as pottery. Pilgrim flasks are a vital aspect of such transformations, as their non-domestic use reflects broader, unwritten cultural practices.

1.5. Conclusion

I applied a range of methodological frameworks to ceramics from archaeological contexts in this section. Many of these are extremely useful when applied to pilgrim flasks. Although a large part of my research involves typological and quantification analysis, I include anthropological approaches to material culture to elucidate our understanding of ancient Nubia – and how items such as the pilgrim flask were used in daily life. In particular, the concept of the *habitus* and the entanglement model are beneficial for assessing the transformation in meaning behind depositional changes of this ceramic form, and are used throughout my analysis.

In the following chapter, I move from this theoretical approach to discuss Egypto-Nubian relations between Old Kingdom and the Late Period in Egypt, and the Kerma Kingdom and the Kingdom of Kush in Nubia, in order to demonstrate how Egyptians and Nubians were constantly exchanging and appropriating neighbouring goods and ideas across history. This significantly impacted the *habitus* practices of the communities moving and interacting across the Nile valley, and has broad implications for our understanding of the adoption of Egyptian pottery such as the pilgrim flask during the New Kingdom. This section of the thesis acts both

to provide a broad contexts of the Nile Valley, and to demonstrate the complexity of community relations in the region, which ultimately changes the way we view the deposition of Egyptian pilgrim flasks in Nubia from evidence for Egyptianisation, to evidence for complex appropriation.

Chapter Two. Contextualising Artefacts: Egypto-Nubian interconnections from the Predynastic to the Late Period

2.1. Introduction

In this chapter, I use the methodological models established in Chapter 1 to outline a chronological summary of Egypto-Nubian relations. In order to contextualise the appearance, development, and transformation of pilgrim flasks within Egyptian and Nubian societies, I first discuss the complex history of Egypto-Nubian relations, and the consistent exchange of artefacts and ideas between these two regions, from the Old Kingdom (c. 2686–2181 BCE) to the Late Period in Egypt (c. 7th–4th centuries BCE) and the early Napatan period in Nubia (c. 700–500 BCE). This background approach is necessary to convey the full variability and complexity of Egypto-Nubian interaction over time, and the social processes by which material culture was exchanged. The implications of such contact will be considered throughout this thesis.

Pilgrim flasks exemplify the mechanisms by which material culture was shared and transferred across the ancient Near East in the Late Bronze Age (c. 1550 BCE–1200 BCE) and Early Iron Age (c. 1200–1000 BCE). By the New Kingdom, Egypt had established links with cultures to the north, east, south, and west of its borders. However, these contacts were a continuation of those stretching back thousands of years; and it was via such means that goods, services, and people were moving into and out of Egypt from the Predynastic period. Items from the Aegean (e.g. Hankey 1973; 1997; Hankey and Aston 1995; Kelder 2002; Hassler 2015), Crete (e.g. Davies 1943: pl. xviii–xx; Kemp and Merrillees 1980; Barrett 2009), Cyprus (Merrillees 1968; Eriksson 2001), the Levant (Davies 1943: pl. xxxi – xxiii; Davies and Faulkner 1947; Smith et al. 2004; Serpico 2000; 2003; Sowada 2009), Mesopotamia (Mark 1998), Afghanistan (Aston, Harrell and Shaw 2009: 39–40), the Sinai Peninsula (Mansour 2014), Arabia (Artzy 1994), Lower and Upper Nubia (Davies 1943: pl. xviii–xx; Smith 1995: 6–7; Roy 2011; Muhs 2016: 86), Punt (Naville 1895: pls lxix–lxxi; Kitchen 1993; Fattovich 2012), and Sub-Saharan Africa (Trigger 1976; Dasen 2013: 27) were transported across land and maritime exchange routes into Egypt and subsequently entered economic circulation.

These cultural, economic, and diplomatic links represented by these artefacts intensified during the New Kingdom due to the Egyptian imperial presence in the Levant and Nubia (Morris 2005). This resulted in an increase in the quantity of imports into Egypt from these regions (Davies 1930: pls xvi, xxiv; 1943: pls xvii–xxiii; Davies and Faulkner 1947; Hankey 1973; 1997; Freed 1982: 16; Hankey and Aston 1995; Mommsen and Mountjoy 2001; Kelder 2002; Serpico 2000; 2003) and vice versa. Egyptian material culture appears to displace indigenous material in Nubia at this period, with a substantial increase in Egyptian artefacts in Nubian contexts paralleled by a decrease in culturally Nubian items in the 18th dynasty (Säve-Söderbergh 1991; Williams 1992; Edwards 2004: 107; Török 2009: 264). Pilgrim flasks were part of this cosmopolitan milieu, but in order to understand their use and assimilation, the wider context of Egypto-Nubian exchange must first be considered.

2.2. Accessing Nubian history

Accessing history from a Nubian perspective requires a different methodological approach from that which is typically applied to Egypt. Primary Nubian sources are generally non-textual and limited to the archaeological record until the 25th dynasty, with some exceptions. Egyptology, which historically relies heavily upon textual evidence, has found this challenging when reconstructing Nubian society (Holthoer 1977: 3) and the discipline has focused upon hieroglyphic and hieratic sources from the Egyptian world rather than evaluating the local archaeological record. Here, Nubian cultures were presented from an Egyptian world-view. Any textual information provided fit the ideal Egyptian world order – tomb biographies for example were designed to portray an individual's success within that milieu (Leprohon 2015: 309). During expeditions to Nubia, Egyptians were proceeding outside of their familiar ideological realm and thus did not present communities with which they interacted in local terms (Edwards 2004: 79) but instead from an Egyptian perception, and many references to foreign toponyms within Egyptian sources lack geographical understanding (Cooper 2012: 1). Tomb autobiographies or temple reliefs were intended as propaganda, and should therefore be considered heavily biased. While useful, they should be treated with caution when used as a means of accessing a Nubian emic world-view. Foreign groups described therein were

depicted as static, rather than dynamic agents, masking their chronological adaptations and developments. It is further probable that the presence of Egyptians in Nubia – as a group associated with economic and political power – was a major factor in shaping subsequent power dynamics among indigenous communities (Mata 2017; Williams 2017) with some behavioural changes such as ‘Egyptianisation’ attributable to colonial presence (Török 2009: 263 ff; see Section 1.4.4). Even a limited amount of Egyptian settlers would presumably have had an impact on the civic activities in a given region.

2.3. Groups across Egypt and Nubia

A broad range of peoples and communities moved across the landscape of Egypt, the Middle Nile Region, and the surrounding desert areas throughout history. I will summarise evidence for these groups briefly here, in order to characterise the archaeological deposits in which pilgrim flasks are found.

2.3.1. The Nile Valley (see Table 2)

Archaeological evidence indicates that a succession of polities and states inhabited the Nile valley. Numerous groups competed for resources, both along the river and within surrounding areas, which inevitably brought them into conflict with one another. Archaeological and textual documentation points to shifting histories of interaction between these communities (Edwards 2004: 11).

The unification of Egypt in the Early Dynastic period (c. 3100–2686 BCE) saw an intense aggression directed towards Lower Nubia (Bard 2003: 73; Tallet 2015), culminating in the enforced emptying or impoverishment of the region (Baines 2003: 37), which was actively maintained by the state (O’Connor 2014: 332). This persisted until the northwards movement of the C-group at the end of the Old Kingdom (Bard 2003: 73; see Section 2.3.2). However, early urban environments developed in Upper Nubia throughout the 3rd Millennium BCE, with Kerma Ancien deposits broadly contemporary with the Egyptian Old Kingdom known throughout the region c. 2500–2050 BCE. The city of Kerma was founded c. 2500 BCE and became a key urban node in the Dongola Reach during the Classic Kerma period, (c. 1685–

1550 BCE) (Bonnet 1990; 2000), measuring over 20 hectares in size. A large necropolis was located 4km east of the main city and was characterised by its tumuli superstructures, constructed of pebbles and stones. These tumuli were constructed to a great size – the largest measuring 90m in diameter – and were accompanied by rich grave goods and sacrificial retainers. Burials were surrounded by large quantities of cattle bucrania (Reisner 1923; Chaix, Dubosson and Honegger 2012: fig. 5), suggesting cattle iconography played an important ritual role. Large mud-brick chapels/temples were present in both the cemetery (the Eastern Defuffa) and the settlement (the Western Defuffa). Paintings of boats in funerary temples dating to c. 1700 BCE (Bonnet and Valbelle 2000: figs 65, 71) suggest this kingdom interacted with other cultures via sea or riverine trade, and the presence of Egyptian items in both settlement and cemetery contexts points to a range of interaction with Egypt, including trade (Bourriau 2004b) and looting expeditions (Howley 2017: 220). Kerma pottery bore morphological and technological similarities to ceramic traditions of other Nubian cultures across the Nile Valley (see Section 2.4.2). However, different manufacturing technologies are evident in the frequent presence of basket-impressed bowls, which were rare in C-Group and Pan-Grave burials (de Souza 2016: 115), as well as the appearance of very finely manufactured black-topped red ware beakers, formed with an iron-rich, silver undulation in the centre of their bodies. These were likely the production of specialist craftsmen (Nordström 2004: 251). Hole-mouthed bowls and cooking pots were common ceramic forms, although squat jars, spouted pots and animal-shaped vessels were also manufactured (e.g. Gratien 1978: figs 62–63). Kerman material culture is found from the 1st to the 5th Cataracts, although the presence of these common cultural features does not necessarily mean the regions were united under a single polity (Bonnet 2014: 82).

The rise of Kerma as a competitive political power in Upper Nubia was likely a key motivation behind the construction of a string of 12 Egyptian fortresses in Lower Nubia during the 12th dynasty (Gardiner 1916; Baines and Målek 2000: 41; Monnier 2010: 40ff). These garrisons, constructed along the riverbank and surrounding rock outcrops, were intended to control the Batn-el Hagar and its inhabitants and were occupied by Egyptian military battalions until their abandonment at the end of the Middle Kingdom. The Semna Boundary stele, commissioned by Senwosret III (c. 1870–1831 BCE) and positioned in highly visible locales within the fortresses of Semna and Uronarti, states the purpose for which these fortresses were erected:

r tm rd=sn-sw nḥs nb m ḥd m ḥrt m k3y mnmnt nbt nt nḥsyw

In order to not allow any Nubian to cross it by sailing north or travelling by land, with a boat, or any Nubian herds

wpw ḥr nḥsyw iw.t=f r irt swnt nt m 'lkn m wpwt r3-pw ir.tw nbt nfr ḥn^c=sn

Except for Nubians that are going to conduct trade in Mirgissa, and except those bringing a message. Good things will be done with them,

nn.swt rdt sw3 k3y n nḥsw m ḥd ḥr ḥḥ r nḥḥ

But no Nubian boat will be allowed to pass to sail north to Abusir for eternity.

De Buck 1948: 78

Kerman rulers later formed a strategic alliance with the Hyksos rulers of the Delta during the Second Intermediate Period (c. 1685–1550 BCE), and it has been suggested that the city was a meeting place where rulers from Central Sudan and the Nile Valley formed coalitions against Egypt (Bonnet 2017: 114). Kerma's political hegemony resulted in an Egyptian military offensive after reunification under King Ahmose at the start of the New Kingdom. The subsequent campaign saw Nubia conquered as far south as the Hagr el-Merwa at Kurgus – likely the southern boundary between the Kerma kingdom and the southern polity of Miu (Török 2009: 166; Davies 2017: 66).

Egyptian imperialistic expansion during the New Kingdom established a permanent Egyptian presence in Nubia. This resulted in the absorption of Nubia into the Egyptian economic system, with two new administrative roles created to oversee Lower Nubia, *w3w3t*, and Upper Nubia, *kš* – the 'King's Son of Kush' or Viceroy. This role was both a military and bureaucratic position (Spalinger 2013: 408), and was intended to guarantee the provision of Nubian revenue to the Egyptian state. This was solidified with the creation of 'colonial towns' within the region, which saw settlements constructed to an Egyptian specification across Nubia centred upon a temple-based, distributive economy (see Section 1.5.3). Egyptian material culture and activity was dominant in these colonial spaces. However, indigenous Kerman practices did not disappear. Instead, Nubian practices evolved in tandem with novel Egyptian

habits, creating ‘entangled’ identities (Smith and Buzon 2014; see Section 1.5.4). Alongside Egyptian cultural traits, elements of Nubian mortuary ritual were retained, with examples of traditional Nubian tumuli (Binder 2017: 599) and bed burials (Lehmann 2017) at the administrative capital of Upper Nubia, Amara West, along with evidence for Nubian-style architecture (Spencer 2010) and the continued appearance of Nubian pottery in settlement areas (e.g. Thomas 2014). It is likely that while Lower Nubia was under direct Egyptian control, Upper Nubia remained in the hands of such local chiefs (Morkot 1987: 40). The continuation of ancestral chiefdoms under Egyptian administration is also alluded to via textual references in both Egyptian and Nubian tomb contexts (Török 2009: 265). These sources mention Princes of Khenthenefter and Iuniu-setiu (Davies 1943: 18), Kuban, Tekhet (Säve-Söderbergh 1991; Säve-Söderbergh and Troy 1991: 190–204) and Mi’am (Davies and Gardiner 1926: pl. xxvii) and suggest local ruling groups were now acting as vassals for the Egyptian administration.

The Egyptian state withdrew its official presence in Nubia during the Late Ramesside period – possibly as early as the reign of Ramesses IX in Upper Nubia, and under Ramesses XI in Lower Nubia (Török 2009: 201) – with subsequent contemporary sources for political and social activities in the region limited. An unofficial Egyptian presence is confirmed at Aniba (Mi’am) during the reign of Ramesses XI (c. 1107–1077 BCE), when the King’s Son of Kush, Panehesy, feuded with the High Priest of Amun and Thebes and retreated here (Török 2009: 288). His ultimate burial outside the city suggests the Egyptian state never regained full control of Nubia. In the following Post New Kingdom period, scholars have suggested that Nubia was significantly depopulated (Firth 1912; Adams 1964b; Edwards 2004: 109). While a decline in burials across Lower Nubia can be observed, this does not seem feasible in Upper Nubia where ancestral cemeteries remain in use (Williams 1992: 141; e.g. Missiminia: Vila 1980; Hillat el-Arab: Vincentelli 2006). I believe this is more likely to be a false impression caused by material impoverishment, as suggested by Säve-Söderbergh (1969), with a tendency to both reduce grave goods and utilise multiple interment graves across Nubia from the late New Kingdom (e.g. Vincentelli 2006).

Political activity in the Middle Nile region during the Post New Kingdom period is poorly documented (Török 1997: 82). The persistence of Nubian cultural traits from the Kerma

culture (Welsby and Welsby-Sjöström 2007) suggests the same communities were moving across the valley. One rare textual source is an inscription found in the abandoned Egyptian fortress of Semna, which refers to a meeting of 30 military chiefs and the role of a queen, Katimala, in the establishment of regional Nubian hegemony (Darnell 2006). The text has been dated palaeographically to the 21st/22nd dynasties, and indicates the swift development of independent kingdoms during the Post New Kingdom period (see Section 2.7).

By the 8th Century BCE, a new unified kingdom had developed in Upper Nubia: Kush, the Napatan kingdom. The origins of this state have been heavily debated and the discovery of the El-Kurru cemetery by Reisner in 1918 (Dunham 1950) has dominated such discussions. El-Kurru is likely the ancestral necropolis of the Kushite kings who ultimately expanded north and ruled both Egypt and Nubia during the 25th dynasty (c. 747–656 BCE) (Török 1997: 112; Morkot 1999b). The first attested Kushite ruler, Alara, is known only from inscriptions left by his descendants, but textual evidence indicates the culture was already by that early stage dedicated to an Amun cult, a feature that was to characterise the later Napatan Kingdom (Edwards 2004: 116). The nephew of Alara, Piye, was the first to declare Kushite rule over Egypt and used his piety to enter Thebes under the guise of attending the Opet festival to pay homage to a cult of Amun (Ayad 2009: 12) before besieging Memphis. The 25th dynasty held power in Egypt until the reign of Tanwetamani, who was expelled from Egypt by Assyrian forces under Assurbanipal and subsequently retreated to Nubia (Morkot 2000: 297–302) where the Kushite state endured for the next 700 years. The Napatan kingdom marks a significant shift in ceramic practice across Nubia, with the manufacture of wheel-made pottery observed for the first time across this period (see Section 6.2). This is indicative of broader technological changes. The Napatan kingdom displayed many Egyptian cultural practices, including the use of hieroglyphics and Egyptian-style iconography, and members of the royal family and high-ranking officials were buried in pyramids until the late Meroitic period (e.g. Dunham 1950; 1955; 1963; 1970). However it is questionable to what extent these traits were still considered ‘Egyptian’, and thus ‘foreign’, after being in use for over 500 years in Nubia.

2.3.2. The Desert fringes

Outside the fertile Nile Valley, a succession of semi-nomadic, pastoral groups co-existed with the valley's inhabitants. Pastoral groups frequently moved into more fertile areas of their environment, sometimes temporarily (e.g. for grazing rights) and other times permanently, perhaps in times of drought, (Hafsaas 2006: 12–23), and such migrations are visible in the archaeological record across Egypt and Nubia. These interactions were sometimes peaceful, but in many cases resulted in conflict.

The C-group is first observable in the archaeological record from the 6th dynasty (Bietak 1968) and scatters of material culture ascribed to C-group communities show the group moving up into Lower Nubia c. 2300 BCE (Edwards 2004: 77). They are traditionally understood as the first peoples to resettle the area after Egyptian hostilities drove out the A-group at the beginning of the Old Kingdom. C-group pottery was round-based, and was comprised of bowls of various size for food consumption, as well as shallow-necked jars for liquid storage (Bietak 1979: 113–114; Hafsaas 2006: 85). Both incised and impressed decoration was common (de Souza 2016: 114), with frequent triangular motifs (Gratien 2000), but the group is characterised by its incised pottery, perhaps imitating basketwork (Bietak 1979: 126). Cattle iconography was an important ritual element with grave stele at cemetery sites engraved with images of horned cattle (Williams 1983: pls 95–99) and incised cattle on ceramic vessels (Hafsaas 2006: fig. 21b; colour pl. 3). The evident value placed upon cattle is presumably linked to the group's semi-nomadic lifestyle (Bietak 1966: 31–34; 1979: 107), which centred on cattle pastoralism (Hafsaas 2006). The majority of archaeological deposits attributed to the C-group are mortuary, and habitation sites appear to have been only temporarily occupied. However some evidence for settled groups has been found, with traces of stone rings – that are interpreted as potentially building foundations – at Sayala (Bietak 1966) and Wadi es-Sebua (Hafsaas 2006: 52), along with post holes at Aniba which may represent tented sites (see Edwards 2004: fig. 4.6. for full plan of sites). Significant similarities between C-group and Kerma material culture suggest that the C-group almost certainly originated in the Northern Dongola Reach (Edwards 2004: 110). These groups only diverged and developed regionalized styles after the establishment of the Middle Kingdom fortresses (see Section 2.3.1), cutting off contact between the regions.

The Pan-Grave culture is another pastoral group known primarily from mortuary contexts from the Middle Kingdom (c. 2000–1685 BCE) to the Second Intermediate Period (c. 1685–1550 BCE). This group is traditionally thought to have originated in the Eastern desert of Lower Nubia (de Souza 2013: 109), but their archaeological evidence is concentrated across Upper Egypt and Lower Nubia (e.g. Gatto, Gallorini and Roma 2012; see Liszka 2015: fig. 1 for distribution of sites). The group is characterised by shallow, circular graves that were thought by early scholars to resemble frying pans (Petrie 1901: 45; de Souza 2013: 110), sometimes topped with a loose stone superstructure. Limited settlement sites have been identified, with a small number of ephemeral campsites also known (Gatto, Gallorini and Roma 2012). Pan-Grave material culture was distinct from other Nubian practices – bodies were laid on leather mats and accompanied by leather garments and large quantities of beads (e.g. Bietak 1966: 43–49). Although communities used Egyptian storage jars (e.g. Gatto, Gallorini and Roma 2012), indigenous ceramic traditions were retained throughout the 200 years the culture is visible in the archaeological record (de Souza 2013: 116). Pan-grave ceramics (Bietak 1966; Säve-Söderbergh 1989) were deposited across a broader geographical range than C-group pottery, with examples found from the Fourth Cataract (de Souza 2016: 34) to Tell el-Da’ba (Aston and Bietak 2012: 164; 2017), as well as throughout both the Eastern and Western deserts.

Pan-grave ceramic repertoires are dominated by open forms consisting of shallow, deep, and horned bowls and cups, with smaller quantities of closed forms (de Souza 2016: 65–80). Their decoration consists of simple slips or burnishing, with examples fired partially or entirely in a deoxidised environment. More intricate examples were incised, often with hatched or horizontal lines (Gratien 2000: 119, fig. 18), occasionally with impressed patterns (de Souza 2016: 112). A vast amount of geometric motifs are known (Giuliani 2006: 652).

The Pan-grave culture has historically been connected to ‘the Medjay’ people (e.g. Säve-Söderbergh 1941: 135–40; Bietak 1966: 61–78), a group that featured heavily in Egyptian written sources. Textual references to Medjay communities are known in Egypt from the Old Kingdom with the term first applied by the Egyptians to refer to a set or subset of pastoral groups encountered in and around the Nile valley. In the New Kingdom the term became associated with officials acting as soldiers and police (Riggs and Baines 2012: 3). However,

evidence linking the two groups is tenuous and likely encompasses several desert dwelling ethnicities (Liszka 2015), masking a lack of Egyptian understanding about different ethnicities with which they periodically engaged. Liszka (2011: 149) has further suggested that relevant communities only began to self-identify as ‘Medjay’ in the 12th dynasty. Archaeological evidence for the Pan-grave culture disappears in Egypt c. 1500 BCE.

2.3.3. Further south

Archaeological excavations across Egypt and Nubia have historically focused upon Egyptian and Kerma cultures. However these groups did not exist in isolation and were intricately connected to a multitude of other communities outside of the Nile Valley. Although Egyptians had limited contact with groups south of the Dongola reach (Trigger 1976; Dasen 2013: 27), many of these communities had links with Nubian groups further north, with artefacts likely circulating indirectly throughout northeastern Africa. People were also migrating across this landscape. Sadr (1990) has suggested the similarities between Pan-grave artefacts and contexts and those of the Mokram culture – a pastoral group that subsisted in the southern Atbai region – points to material links between these two regions. He theorised that the disappearance of the Pan-Grave from archaeological deposits in the early New Kingdom indicates that this nomadic group moved south, and that their ethnic distinctions reflect two aspects of a larger pastoral way of life in the Eastern desert.

During the New Kingdom, Thuthmosis I’s penetration past the 4th Cataract and subsequent hieroglyphic inscriptions on the Hagar el-Merwa suggest this stone marked an important boundary for the Kerma kingdom. It has been hypothesised that it functioned as a marker between Kerma and the land of Miu (Störk 1977; Davies 2017), a kingdom rarely mentioned in Egyptian texts, but evidently a key strategic target for the Egyptians from the beginning of the Thuthmoside campaign (Davies 2017: 94). Groups in the vicinity had inscribed the prominent outcrop with cattle imagery, along with other animals and at least one anthropomorph (Davies 2017: 69). The inscription left overlaying these Thuthmoside reliefs suggests the region was inhabited by pastoral communities (Davies 2017: 70). There is no information describing the impact this southern polity may have had on Egyptian imperialistic policies in the New Kingdom.

More evidence for polities south of the 4th Cataract is available in the Napatan and Meroitic periods, when Nubian urban centres moved south, likely in response to increasing aridity across North Africa (Edwards 2004: 10). In this period the presence of faience, glass, and imitation Napatan/Meroitic artefacts at sites such as Gebel Moya, 30km west of the Blue Nile, suggests that long distance trading links were operating across the Middle Nile Region and that Kerma and/or Egypt were involved (Gerharz 1994), albeit perhaps indirectly.

One significant region referenced in Egyptian sources is the kingdom of Punt, with evidence pointing to Egyptian contacts with the region from at least the Old Kingdom. Knowledge of Punt is restricted to hieroglyphic textual sources, with no archaeological sites identified, making it difficult to establish either the geographical location or the political structure of this kingdom. Pictorial reliefs at Hatshepsut's mortuary temple at Deir el-Bahari in Upper Egypt indicate that an Egyptian crew travelled to Punt by ship (Naville 1895). Further, damaged reliefs depict the inhabitants of Punt as living in raised, cone-shaped woven huts, accessed by short ladders, in a forest environment (Naville 1895: pls lxix–lxxi). The presence of mammals such as giraffes and cheetahs (Naville 1895: pl. lxxx) suggests that the crew travelled inland after landing (O'Connor 1982: 116). It is likely that the reliefs recording this expedition have merged together encounters with several different cultural groups under the term 'Punt'. While Punt as a locale developed into a strong mental construct that was vivid in the Egyptian imagination, it is clear that the polity was a political and economic reality with whom the Egyptians traded and had diplomatic relations with from at least the 5th dynasty (Espinell 2011: 587). This kingdom was located in contemporary eastern Sudan or Eritrea (Kitchen 1993: 604; Planet Today News 2018), and was a key source of exotica, particularly the much sought-after Antiw perfume. A painting in funerary temple KXI at Kerma, dating to c. 1700 BCE, depicts similar stilted houses (Bonnet and Valbelle 2000: fig. 68), and suggests that Kerma may also have been in contact with the Puntite region (Boivin and Fuller 2009: 140).

2.4. Links between Nubian cultures

Across the Middle Nile Region, both settled and pastoral groups bore diachronic and synchronic cultural affinities reflecting continued interaction and a shared world-view. Bietak (1979: 107) has suggested this indicates their divergence from a common ‘mother culture’. However it is more likely to echo long-term interactions between groups migrating within the Nile Valley, which is a fundamental point to recognise when analysing shared material culture. These similarities are most obviously expressed through shared ceramic technologies and a cultic focus on cattle, which I will discuss in this section. Comprehending these affinities reveals important information about the complex interactions between peoples across both the Nile Valley and the surrounding desert, ultimately reflecting the cosmopolitan nature of Nubian groups within which Egyptian pottery such as pilgrim flasks was moving. Awareness of shared characteristics also serves to contradict any lingering culture-historical approaches to the archaeological data, and demonstrates the bias when differentiating communities into cultural categories.

2.4.1. Ceramic traditions

Issues relating to the use of pottery to identify ancient cultures were discussed in section 1.4.5, and the limitations of this theoretical approach can be illustrated by examining shared ceramic traditions inherent among Middle Nile ceramic industries. Pottery form, style and technology retained consistent traits from the early A-group until the Kushite period (Edwards 2004: 8; Nordström 2004: 248) and segregation of ceramic traditions according to ethnic groups should be implemented with caution (Raue 2012: 56). Presence of analogous features between these cultures emphasises the complexity of associating material culture with specific ethnic groups. The distinct similarities in the ceramics of Middle Nile Region groups underscores overarching cultural links across large areas. A Khartoum Neolithic pot found at Omdurman bears strong resemblance to contemporary A-group ceramics at Faras, for example (Arkekk 1949: 37–38), and the discovery of Kerma-like material among Gash group contexts in eastern Sudan is indicative of further links outside of the Nile valley (Manzo 2012: 77).

Nubian pottery was exclusively hand-made amongst all cultural bodies until the Kushite period, a manufacturing feature that persisted despite each group's frequent interaction with Egyptian wheel-made ceramic technologies. Large, coarsely made cooking pots and deep bowls/beakers predominate in the Nubian ceramic industry. Storage jars were uncommon; these were often the main vessel type imported from Egypt and have been found with remains of a strongly scented fatty substance inside (Bourriau 1981: 30). This represents a desire for certain Egyptian products contained in such vessels, but also suggests that Nubian societies had no requirement to manufacture jars of this type, which may not have been necessary for daily life.

Shared cultural traits are particularly visible in ceramic decorative styles. Black-topped vessels were ubiquitous across Nubian history from the Neolithic period (Nordström 2004: 251) and were subsequently produced by A-Group, C-Group (Bietak 1979: 114), Pan-Grave (Säve-Söderbergh 1989b: pl. 22; Gatto, Gallorini and Roma 2012: fig. 6b) and Kerman communities (Gratien 1978). This style persisted in New Kingdom Egyptian colonial towns across Nubia (e.g. Smith 2007: 7) and Napatan contexts (Smith 2007: pl. xi). The technique was in use across Badarian and Naqadan sites during the Egyptian Predynastic period (Bietak 1979: 115), but was not produced after this period.

The repeated occurrence of several geometric motifs and incised linear decoration has also been observed across C-group, Kerma, and Pan-Grave ceramics (Gratien 2000; 2006). Bietak (1968) has noted that the incised polished decoration common on C-group vessels has a long history in Nubia, with examples known from the Neolithic site of El-Kadada (Geus 1976: pl. ix; Reinold 2007: figs 207–210). This patterning also appeared in early Kerman contexts (Gratien 1978: fig. 44; 2006: 121–122). Roller-impressed patterns, incised lines and geometric designs also appeared throughout Nubian history, a feature that complicates the accurate dating of Nubian contexts. Such parallels suggest ancestral links across large geographical regions, and constant contemporary interaction within and across groups. The persistence of such designs across two millennia is significant, and indicates a distinct sense of identity attached to particular ceramic technologies.

2.4.2. Cattle iconography

Funerary deposits of bucrania occur among all the groups, along with cattle graffiti (Engelmayer 1965: Tafel xlix), figurines (Ferrero 1984: pl. 1; Budka 2014), mural paintings in funerary temples (Bonnet 2000: 171–173, figs 46, 57), stele (Williams 1983: pls 95–99), and scratched decoration on vessels (Friedman 2001: fig. 4, pl. 3). This iconography persists from the Palaeolithic through to the New Kingdom; and anthropological studies suggest a continued value placed upon cattle in modern ethnographic parallels (Chaix, Dubosson and Honegger 2012), with cattle cults observed among modern communities across Sudan, Uganda, Kenya, and Ethiopia (e.g. Evans-Pritchard 1953; Dubosson 2014). Such cultural continuity likely reflects a common pastoral identity, and is another key signifier of continual social interaction between communities across the Middle Nile region.

The deposition of bucrania is particularly significant. Although some cattle burials from Predynastic and Early Dynastic Egypt can be observed (Emery 1958: 8; Wengrow 2006: 56–57, 202), afterwards the tradition was culturally specific to Nubian communities and was abundant from the Neolithic. An animal, usually a cow or bull, was ritually slaughtered and processed, retaining the horns and the top of the skull for a burial. The bucrania were placed inside the grave during the Neolithic period but later restricted to the perimeter of a tumulus or grave in C-group, Pan-grave and Kerman contexts. The earliest known example occurred c. 5700 BCE, where a bucranium was placed above a child's interment at El-Barga (Chaix, Dubosson and Honegger 2012: 192).

The mortuary installation of bucrania is best evidenced at the city of Kerma, where examples were well represented in the Eastern Cemetery (e.g. Bonnet 2000: fig. 128). The placement of bucrania around burials sporadically occurs in the Kerma Ancien period (c. 2500–2050 BCE) before becoming common in the Kerma Moyen (c. 2050–1750 BCE). This was clearly a vital part of the funerary ritual: the horns were invariably placed in a semi-circle to the south of the tumulus, and were both cut and arranged in a specific manner – with cows and juveniles placed at the front, followed by bulls, and finally oxen (Chaix, Dubosson and Honegger 2012: 195). The quantity of bucrania surrounding a tumulus in the Kerma cemetery is directly related to the size of the grave and it is likely that cattle ownership was related to social prestige. Only

the horn and skull were placed in a grave, with the remaining large quantities of meat likely consumed as part of a funerary feast among the gathered group of mourners.

Cattle (and occasionally goat) skulls were similarly deposited outside C-group burials (Säve-Söderbergh 1989: sites 97, 184, 262), although their occurrence has been little studied. The practice is thought to have developed in the 12th/13th dynasties (Bietak 1983: 121), although this late date may be the result of a lack of excavation and problems dating earlier C-group burials. Cattle were clearly of iconographical significance to the C-group; grave stele from Adindan were decorated with engraved images of cattle (Williams 1983: pls 95–99) and the Semna boundary stela suggests that cattle may have been the C-group's main export to Egypt (Williams 1983: 119).

Bucrania were also a characteristic of Pan-grave cemeteries (Säve-Söderbergh 1989: 141–145), found both in burials and in offering pits (de Souza 2012: 59). The Pan-grave bucranium tradition encompassed a broader range of animal deposits, including skulls of cattle, sheep, goat, and gazelle. Pan-grave mortuary bucrania were prepared by flattening the front of the skull, and in some cases removing the horns – leading Petrie (1901: 46) to suggest they were intended as wall decorations. The fact that large parts of the skull were retained, as well as the broader range of animals selected, differentiates them from the burial traditions of other contemporary Nubian groups. Pan-Grave bucrania also display differentiation in deposition – examples in Egyptian contexts were placed inside the grave pit, whereas examples in Nubia were positioned in a semi-circle around the grave (de Souza 2012: 60) in common with C-group and Kerman contexts. Pan-grave bucrania are the only examples to display embellishment. A specimen found at Mostagedda was decorated with the hieroglyphics for the name qskAnt, Qeskaant, along with the image of an armed warrior (Brunton 1937: 120–121), and likely depicts a Pan-Grave chieftan. Others were painted with black and red geometric dots (e.g. Gatto, Gallorini and Roma 2012: 86; de Souza 2013: fig. 3). While the Pan-grave bucrania were prepared using slightly different methods, the similarity of deposition and their use in ritual contexts suggests that they represent the same cultural trend.

2.5. Interactions between Egypt and Nubia

Official Egyptian rhetoric related the role of Nubians and their position in society in a very limited manner. Depictions of Nubians became especially negative and stereotypical from the Middle Kingdom (Pemler 2014: 448), although such *topoi* were only directed at foreign groups living outside of Egypt's political and social remit (Schneider 2010: 144). Archaeological evidence is particularly abundant for two types of interaction between Egypt and Nubia: warfare and trade. Both of these interactions will be discussed in the following section.

2.5.1. Warfare

The presence of a variety of cultures inhabiting the Middle Nile Region led to constant competition for control of resources and key segments of the Nile (O'Connor 1993: 25). As a result, hostile interactions between Egypt and other groups in the southern Nile Valley were common. Campaigns into Nubia were an integral part of an Egyptian King's cosmically sanctioned role and were deemed vital for upholding *mAat* – the correct order of the world. Egypt itself was understood as the centre of *mAat*, whereas foreign lands were considered centres of chaos and barbarism in contrast. Defending borders from non-Egyptians who might seek to disturb this world order was key to ruling the state. As such, images of foreigners, including Nubians, became synonymous with chaos, and iconographic motifs of the king smiting a prisoner or leading military expeditions were ubiquitous royal images (Hornung 1982: 172–185; Dann 2009: 101; Roth 2015: 156). Therefore, reliefs depicting such tropes must be assessed with caution when reconstructing historical encroachment.

Reference to a campaign into Nubia under Sneferu on the Palermo stone (Wilkinson 2000: 141; Kemp 2006: 30; O'Connor 2014: 332), reliefs in the royal mortuary complexes of Sahure and Niuserre depicting Nubians (Säve-Söderbergh 1946: note 3; O'Connor 2014: 334) and statues depicting Nubian prisoners (Arnold 1999: fig. 116) indicate military campaigns into Nubia occurred during the Old Kingdom, although no land annexation is known at this time – the settlement at Buhen remained the sole contemporary Egyptian outpost in Nubia (Bard 2003: 73; Monnier 2010: 19). These expeditions were presumably against Upper Nubia, due to Lower Nubia's hypothesised contemporary depopulation (O'Connor 1986: 47). Nubians were

also hired as mercenaries to serve the Egyptian state from the Old Kingdom. The Gebelein papyri indicate that Nubian soldiers served in the Egyptian army from as early as the 4th dynasty (Posener-Krieger 2004). By the 6th dynasty, these forces were instrumental battalions within the military – the Autobiography of Weni the Elder in the Abydos cemetery refers to troops from Irtjet, Medjay, Wawat, Yam, Kau and Tjemeh that formed an essential part of the forces responsible for campaigns against the Levant in the 6th dynasty (Sethe 1933: 98–110).

Wooden models representing ‘Medjay’ archers in the Middle Kingdom indicate that soldiers were also recruited from the desert (e.g. the tomb of Mesehti at Asyut: Cairo CG257; Hierakonpolis: Kees 1933: fig. 55; Säve-Söderbergh 1941: 51) and were particularly admired for their archery skills (e.g. Jèquier 1940). These accomplishments were likely a key motivation behind the construction of the chain of 12 fortresses (Gardiner 1916; Baines and Målek 2000: 41; Monnier 2010: 40ff; see Section 1.4.3) that created a fortified zone in Lower Nubia during the Middle Kingdom, which were designed to limit movement of pastoral groups for defensive purposes.

Throughout the Second Intermediate Period, Nubian legions formed part of the military contingent in both the Hyksos and the Theban armies. Troops of Pan-grave soldiers may have fought for the Thebans against the Hyksos (de Souza 2013: 109), with evidence that contemporary Pan-grave cemeteries were strategically positioned close to Theban centres of power (Ryholt 1997: 178–179). However, there is also evidence for violent interactions between the Egyptian state and these nomadic groups moving throughout the Nile valley, which are alluded to in the 17th dynasty autobiography of the Governor Sobeknakht at Elkab, which describes an attack on the city by a coalition of forces under the Kingdom of Kush:

Having stirred up the tribes of Wawat (Lower Nubia), the island-[dwellers?] of Khenthennefer (Upper Nubia), Pwnt and the Medjam...

Davies 2003: 52.

These forays north explain the discovery of Egyptian statuary and other items in tumuli at Kerma (Reisner 1923: 85), which were probably looted from Egyptian tombs (Latief 2017).

Following the expulsion of the Hyksos, nomadic troops became permanent battalions – Papyrus Boulaq 18 describes an auxiliary corps of Medjay provisioned by officials at Thebes in the New Kingdom (Scharff 1922: 60–61; Quirke 1990: 10–24), suggesting this was a regular occurrence. These soldiers may have been involved in the campaigns into Nubia during the early 18th dynasty, where Kerma was ultimately destroyed during the reign of Thutmose III (Edwards 2004: 101–102). The Kerma town and necropolis suffered heavy damage and the ancestral necropolis was subsequently abandoned (Török 2009: 159). The Egyptian campaign through Nubia has recently been tracked by Davies (2017) who demonstrates that this expedition lasted a year, with periodic pauses to stabilise control of each area of Nubia via which they passed. However, even after the region was conquered in the 18th dynasty, Egypt was beset with continuous rebellions. This often occurred following the death of a king (Török 2009: 167), with royal texts hinting that alliances were forged between Nubian groups against the Egyptians (Bianchi 2004: 108).

This periodic unrest does not seem to have posed a threat towards ‘colonial’ towns established by the Egyptians throughout Nubia (see Sections 1.5.3 and 2.5.3). Although these sites were originally constructed with strong fortification walls in the 18th dynasty, by the Ramesside period large villas were built external to the protective barriers at sites such as Amara West (Dalton 2014) suggesting an impending attack was considered improbable. Indeed, Nubia was relatively stable during the Ramesside period, with no new fortresses constructed across the locality during the 20th dynasty (Morris 2005: 797). A weakening of state authority saw Egyptian withdrawal from Upper Nubia during the reign of Ramesses IX, finally culminating in a rebellion instigated by the King’s Son of Kush, Panhesy, under Ramesses XI. His attempted coup against the High Priest of Amun in Thebes failed, but he was able to establish a power base at Mi’am (Aniba), where he was subsequently buried. This suggests that Egypt was not strong enough to regain control of Nubia (Morris 2005: 788) and that military tensions persisted between Egypt and Lower Nubia at this time.

Political activity in Nubia is unclear following Egyptian withdrawal at the start of the Third Intermediate Period, and the region likely collapsed into feudal states (Morkot 2000: 108). The Katimala inscription (Darnell 2006; see Section 2.7) alludes to military activity in the region, but few other sources are known from this period. Kitchen (1986: 293) has theorised that a

military expedition to Kush was undertaken in the reign of Sheshonq I, although there is little evidence to support this. The rise of the rulers buried at the El-Kurru necropolis saw Nubia reunified into a single state, likely through a combination of diplomacy and military force, which soon expanded north. This culminated in the absorption of Egypt by the 25th dynasty: a succession of five Nubian kings who appear to have subjugated Egypt in a relatively peaceful manner (Török 2009: 322–323).

2.5.2. Trade and the presence of foreign goods

The Nile was the conventional route for transport of tradeable items (see Section 4.2 for full discussion of trading routes), although the presence of cataracts south of Elephantine made travel through Nubia more difficult. Desert routes from Egypt were also used from at least the Old Kingdom (Baines and Målek 2000: 31), with tracks running west from Egypt to the Wadi el-Natrun, Khargheh and Dakhla oases (Rossi and Ikram 2013; Förster 2015), and thence to Nubia (Storemyr, Bloxam, Heldal and Kelany 2013; Lohwasser 2013; Mumford 2017: 39), as well as east to key points along the Red Sea coastline and up into the Sinai peninsula (Mumford 2017: 41), particularly ‘The Ways of Horus’ (Hoffmeier and Moshier 2013), El-Markha and the Wadi Maghara. These pathways were formed by clearing debris and leveling the ground, with some paved in mud bricks or stone slabs, and expeditions travelled along these routes by foot or donkey (Köpp 2013).

Egypt was poor in many desired natural resources (Kendall 1997: 7), whereas Nubia was both the source of, and the route to, many exotic items, including gold, skins, wood and incense. Exchange of goods therefore characterised the relationship between Egypt and Nubia from early prehistory. A growing craft specialization in Egypt after c. 3500 BCE, coupled with demand for exotic raw materials, led to an increase in exchange interactions between the regions (Roy 2011: 2). Such artefacts were possibly given as gifts to high officials, making the ability to source them a key priority for a king (Hassan 1993: 554; see Section 4.5). Gold was particularly abundant in Nubia (Baines and Målek 2000: 21), but further resources including stone, animal skins, wood and ivory were in high demand and were used to make luxury items.

Wood for shipbuilding was sourced from Nubia during the Old Kingdom. The autobiography of the official Weni in the cemetery at Abydos mentions that Irtjet, Wawat, Yam and Medjay chiefs brought him acacia timber to build 7 boats (Sethe 1933: 108–109; Lichtheim 2006: 18–23). More atypical commodities also appeared in the pictorial and textual records – the official Harkhuf, on his fourth journey to the kingdom of Yam, brought back a pygmy for the young Pepy II (Sethe 1933: 128; Eichler 1991), alluding to indirect exchange routes into sub-Saharan Africa during the Old Kingdom. The presence of Egyptian ‘gifts’ in Nubian mortuary contexts dating to the late Old Kingdom (O’Connor 1986) further indicates an amicable relationship with Upper Nubia at this period.

Evidence of Egyptian storage jars manufactured in both Upper and Lower Egypt in burials from the Kerma Moyen period in Nubia suggest a variety of Egyptian production centres were involved in the export of specialized goods southwards (Bourriau 1991: 129). Settlement deposits from the city of Kerma during the Classic period contained Egyptian pottery consisting exclusively of narrow-necked jars for the storage of commodities (Bourriau 1991: 136). Similarly, Egyptian pottery found in Pan-grave and C-group contexts was predominantly closed vessels for storage (e.g. Gatto, Gallorini and Roma 2012). These jars likely contained various foodstuffs or other organic substances that do not survive in the archaeological record. Sporadic examples of Nubian vessels found in Egypt are usually considered to indicate the presence of Nubians in the region (see Section 2.2.3). However, Bourriau (2012: 157) has suggested the possibility that Nubians exported organic material such as cheese to Egypt, which may have been stored in the Nubian vessels found across Egyptian sites.

At Mahal Teglinos, a Gash cultural centre in the Southern Atbai region (active c. 2300 – 1700 BCE), marine shells (Fattovich et al. 1994: 17), Egyptian sherds and faience beads with an Egyptian/ Upper Nubian origin demonstrate long-ranging trade links (Manzo 2012: figs 8, 9). Such exchange was likely to be indirect, but it is clear that cultures were aware of the desirable objects sourced from hundreds of miles away. Lithics in Gash archaeological contexts have been recognised as imitations of Egyptian bronze prototypes, with similar examples found at Kerma (Manzo 2012: 78), suggesting that traders/craftspeople travelled substantial distances across the landscape.

While a decline in official state-controlled trade is visible during the Intermediate periods of Egypt – with the cessation of costly expeditions – evidence points to the continuation of independent trade, which accelerated with the collapse of state unification and control (Morkot 1999: 139), albeit on a smaller scale. While limited Egyptian artefacts appear in C-group contexts after the collapse of the Old Kingdom, Egyptian goods persisted in Kerman contexts (Bourriau 1991: 130). Although Egypt fragmented into small feudal states in the First Intermediate Period, the tomb biography of Ankhtifi at Mo’alla references the movement of barley upstream into Lower Nubia during this period (Vandier 1950: inscription 10; Lichtheim 2006: 85), suggesting that localised official trade did continue. Furthermore, Raue (2002: 22) suggests that parallel developments in ceramics and decoration between Elephantine and C-group settlements signify that strong trade routes were perpetually active between these regions.

The Egyptians restricted Nubian trading abilities during the 12th dynasty through the construction of a chain of fortresses in Lower Nubia, establishing an intensely fortified zone for control of the local populace (see Section 2.3.1). The Semna Boundary stela (see Section 2.3.1) alludes to laws forbidding Nubian pastoral groups from driving herds north of this newly established border. Only state-sanctioned trade in Mirgissa was permitted (de Buck 1948: 78) with exchange likely regulated by Egyptian officials. The creation of licensed trading areas in Lower Nubia is supported by the presence of Nubian pottery and jewellery in the Egyptian Middle Kingdom fortresses, alluding to a culturally permeable environment (Smith 2003: 97).

During the Second Intermediate Period, Kerman alliance with the Hyksos rulers of the Delta did not negate these exchange networks. Egyptian rulers in Upper Egypt continued to engage in trade with Kerma; the first king of the 17th dynasty, Senakhtenre Ahmose, imported white limestone from the Hyksos areas for construction at Karnak (El-Aref 2012). There was also a corresponding presence of Upper Egyptian ceramic imports at Kerma (Bourriau 1991: 130). Kerma also exchanged goods with the Hyksos. Fine Kerma beakers at Avaris (Hein 2001; Fuscaldo 2002) may be evidence of gift exchange between the Kerma and Hyksos courts (Aston 2013: 389). Other sources suggest Nubian vessels were coveted by Egyptian communities for their beauty – a Scribe of Frankincense, Hori, at Elephantine, is said to have

purchased vessels from the Medja people (Griffith 1897: 52, pls 20–22.2) and Raue (2002: 23) has discussed the general desire for Medjay vessels evidenced in the local imitations of these forms towards the end of the Second Intermediate Period (Raue 2017: 529, fig. 5).

Trade with Nubia was prolific during the New Kingdom. A relief in the tomb of Rekhmire in Thebes depicts the tomb owner – a vizier during the reigns of Thutmose III and Amenhotep II – recording goods from a Nubian shipment. Paintings depict the unloading of ostrich eggs and feathers, storage jars, elephant tusks, leopard skins, baskets of precious stones and gold (Davies 1936: pl. xvi). Nubian princes, *wrw*, are often presented giving gifts to the Egyptian state in such tomb scenes (Török 2009: 265). Rulers sometimes delivered this ‘tribute’ in person: the rulers of Punt, Irem and nmy returned with Hatshepsut’s expedition from Punt with gifts (O’Connor 1982: 116). However, much of the exchange portrayed as tribute in Egyptian official sources was likely part of an official, reciprocal exchange with such images acting as hyperbolic propaganda.

Nubia was still a vital avenue for access to exotica from further south. Hatshepsut’s expedition to Punt is an example of the more exotic expeditions launched for trading purposes. This was the first recorded attempt to export live myrrh trees, which were planted at Hatshepsut’s mortuary temple at Deir el-Bahari (Naville 1895: pl. lxxiv). Exotic animals were also brought back on this voyage, with baboons (Naville 1895: pl. lxxv), giraffes and cheetahs (Naville 1895: pl. lxxx) depicted as part of the Puntite revenue from the expedition. Temple donation lists further reference items flowing up from the south (Sauneron 1960: 151). Incense, *antw*, was a major Puntite import, and was highly desired for Egyptian ritual contexts (Naville 1895: pl. lxxix). Later, during the 22nd dynasty in Egypt, Osorkon I donated nbw Hnty-Hn-nfr, Nubian gold, to the Amun cult (Caminos 1958: 125) and Egypt is recorded as giving exotic animals as tribute to Shalmaneser III including elephants and a rhinoceros (Kitchen 1986: 327) undoubtedly sourced from the south via Nubia.

Copious imports also flowed into Nubia, which was inundated with Egyptian material culture during the New Kingdom (Williams 1992; Säve-Söderbergh 1991; Edwards 2004: 107–108; Török 2009: 278–279). The large magazines constructed at colonial towns (e.g. Amara West: Spencer 2009: 48) indicate that trade was a major contingent of their administrative role. Large

storage jars indicate Egyptian foodstuffs were still being exported to these sites in Nubia. These include Canaanite wine jars, one example at Amara West bearing a hieratic inscription recording its Delta origin (Binder, Spencer and Millet 2010: pl. 10).

This trade declined to some extent after Egyptian withdrawal from Nubia under Rameses XI. Although few sources are available during the Post New Kingdom period, the discovery of Egyptian storage vessels including amphorae and pilgrim flasks at Hillat el-Arab (Vincentelli 2006), Sanam (Griffith 1931; Lohwasser 2010; 2010b; 2012; Vincentelli 2011; 2018), Nuri and El-Kurru (Heidorn 2015) does however signify continued exchange of valuable commodities until the 7th century. The discovery of large quantities of wine amphorae of Egyptian provenance at the settlement site of Kawa (Welsby-Sjöström and Thomas 2011) indicates the export of these luxury items continued into the early Napatan Period.

2.6. Movement of people across North Africa

The movement of material culture reflects ancient patterns of human activity. Goods were transported through a variety of processes including direct and indirect trade, resettlement, imprisonment, and looting. The distribution of particular artefacts across the Nile Valley has been used to identify the movements of ethnic groups between Egypt and Nubia. Although the equation of items and cultures needs to be conducted with caution (see Section 1.4.5) it is desirable to attempt to track migrations across Egyptian and Nubian history. In this section I will summarise available evidence for Egyptians living in Nubia and vice versa, in order to broaden the understanding of how artefacts such as pilgrim flasks moved. Analysing evidence for a Nubian presence within Egypt suggests that any understanding of a modern-day border between the regions, or clear-cut distinctions in ethnicity, is anachronistic; what Raue (2017: 532) terms ‘transparent ethnicity’. This has a significant impact on the way we understand the assimilation by Nubians of items originally of Egyptian material culture.

2.6.1. Egyptians in Nubia

Prior to the Late Predynastic, it is largely unhelpful to think of individuals identifying as ‘Egyptian’ choosing to settle in Nubia. Partitioning the Nile Valley into regions of ‘Egypt’ and ‘Nubia’ at this time is anachronistic. Instead, we need to regard the valley as an area in which many cultures were moving and coexisting (Roy 2011: 1). By the 1st dynasty however, a strong Egyptian identity had developed which became juxtaposed with portrayals of the foreign ‘other’ in ideological topoi (Roth 2015).

Textual sources suggest an official Egyptian presence in Nubia from the Old Kingdom when the first fortified settlement at Buhen was constructed (Bard 2003: 73; Monnier 2010: 19), likely during the reign of Khafre (O’Connor 2014). This early construction was designed to exploit mineral resources in the surrounding area (O’Connor 2014: 337), and consequently was occupied by bureaucratic officials, who were only temporarily present during economic expeditions. It is unlikely that civilians accompanied these trips, but a military presence to safeguard mining interests is likely. O’Connor (2014: 337) has further suggested that Buhen acted as a key link between Egypt and Upper Nubia, both for trading purposes and as a strategic starting point for expeditions further south.

The Middle Kingdom saw an efflorescence in Egyptian military fortification across Nubia and the Levant (Monnier 2010: 40), with the construction of fortresses (see Section 2.3.1) during the 12th dynasty. These fortresses were manned by rotating garrisons of soldiers in the early phases, but changing patterns of architectural plan suggest this altered to incorporate long-term colonists and their families towards the end of the Middle Kingdom (Vercoutter 1970: 16; Emery, Smith and Millard 1979: 98–99; Smith 2003: table 5.6; Bestock 2017: 164) with a corresponding shift in burial patterns. This was likely an economic measure (Knoblauch 2017: 577). These military corps were deployed from Egypt to protect the area – with fortresses in line of sight of each other for signalling purposes – but were also indentured for non-martial activities. Evidence suggests that soldiers were employed in excavating canals, regulating trade along the Nile, goldmining and guarding/aiding in the dragging of boats over the Cataracts (Knoblauch 2017). Egyptian architecture and material culture dominate the assemblages in these fortified spaces (Smith 2003: 101). However quantities of Nubian vessels utilised in the

preparation of non-Egyptian cuisine, along with ritual items of personal adornment such as amulets, suggest that resident Egyptians interacted with and perhaps married local women (Smith 2003: 135).

Many of these Egyptians defected and switched allegiance to serve Kerma after the fortresses were abandoned by the Egyptian state at the end of the Middle Kingdom. Two stele found in the Lower Nubian fortresses indicate the continuation of permanent Egyptian habitation in Nubia. One, belonging to an individual named Ka, described how 'I was a valiant servant of the Ruler of Kush; I washed my feet in the waters of Kush in the suite of the ruler NDH, and I returned safe and sound to my family' (Säve-Söderbergh 1949: 52). The second described how the Commandant of Buhen, Sepedhor, 'built the temple of Horus, Lord of Buhen, to the satisfaction of the ruler of Kush' (Säve-Söderbergh 1949: 55), invoking not only Horus but also 'the gods of Wawat', suggesting that these Egyptian residents had also undergone a religious conversion.

The 'Colonial towns' of the New Kingdom mark a further evolution in interactions between the two regions (see Section 1.5.3). These sites first appeared in the 18th dynasty and were likely instigated soon after Thuthmosis I subjugated the region (Davies 2017: 93–94). Historically, scholars suggested these towns to be populated by Egyptian settlers (Adams 1977: 229–230; Kemp 1978: 34–35; Grimal 1992: 134; Shaw 2003b: 320). However, it is now considered likely that a large proportion of inhabitants were indigenous Nubians or the progeny of mixed marriages (Buzon 2006; Smith and Buzon 2014: 432; Spencer 2014: 480), particularly in Upper Nubia, which remained under indigenous rule (Morkot 1987: 40). The adoption of Egyptian material culture at sites such as Fadrus (Säve-Söderbergh 1991; Török 2009: 277ff) makes it difficult to ascertain the quantity of Egyptian settlers as opposed to 'Egyptianised' locals in the region – however, archaeological evidence alludes to the presence of Egyptian officials at strategic sites such as Tombos, where the decoration of the administrator Siamun's tomb with funerary cones points to his Theban origin (Smith 2003: 140).

With the withdrawal of the Egyptian administration during the reign of Ramesses XI, it is likely that some Egyptians remained in Nubia; notably the King's Son of Kush Panchesy, who

was buried in a pyramidal vaulted tomb at Aniba (Steindorff 1935: 240–241) and commanded the region until his death (Török 2009: 288). However, the majority of state administrators and military commanders likely returned to Egypt (Welsby 2017: 484–485). Some colonial towns and fortresses may have been abandoned (Adams 1977: 241) although the extent of this desertion may have been overemphasized. Many sites contain evidence for ephemeral or wind-eroded levels above New Kingdom deposits that are difficult to date, but may be assigned to the Post New Kingdom period (e.g. Thomas 2014). Other sites such as Kawa were consistently occupied (Welsby 2017) with a percentage of the populace probably of mixed Egyptian and Nubian descent.

It was historically suggested that the 25th dynasty of Nubia originated from an Egyptian group continuing to live in the region after the New Kingdom – demonstrating either Nubia’s ongoing position as a province of Egypt (Reisner 1920: 33–35) or the continued presence of an Egyptian priesthood of Amun based at Gebel Barkal (Arkell 1961: 114). However, there is limited evidence to support this. Whilst Egyptian ideological traits were used in Napatan motifs the unmistakable links to earlier indigenous cultural features corroborate that this kingdom was not of Egyptian origin (Adams 1977: 257). Furthermore, how Egyptian these attributes were considered after their use in the region for over 500 years is questionable (Edwards 2004: 116). A strong interest in refining known Egyptian cultural practices did result in the temporary importation of Egyptian craftsman to Nubia (Edwards 2004: 136) as referenced by Taharqa in an inscription at the site of Kawa (Eide et al. 1994: 142). Evidence of vessels from Upper Egypt in Nubian burials (e.g. Vincentelli 2006; Heidorn 2015; see Section 2.1.4) may indicate sporadic trade envoys.

2.6.2. Nubians in Egypt

Official Egyptian ideological sources imply an aggressive stance towards Nubia, which is not evidenced in reality (Shaw 2003: 326). While temple and mortuary reliefs suggest negative attitudes towards Nubians from abroad, this was not applicable to individuals and communities living within Egypt’s borders, who were never described as *xAstiu*, ‘foreigners’. There is abundant evidence for Nubians living peacefully in Egypt throughout Egyptian history (e.g. Elephantine: Raue 2002: 21; Kopp 2006: 60), with Nubian settlement evidently so

prolific in some areas that the term for Nubia, tA-sty, ‘The Land of the Bow’, was also used to describe the southernmost Egyptian Nome from the Old Kingdom (Gauthier 1929: 31).

Deposits of Nubian ceramics are often used to suggest the presence of Nubian settlers in Egypt, although this association must be made with caution. Cemeteries attest to the continuous movements of successive Nubian peoples into Egypt. Burials with distinctly non-Egyptian mortuary practices – such as a contracted burial position, hand-made vessels and leather items deposited with the deceased – are known across the Nile valley, with a significant concentration in the Hierakonpolis/Elkab region. Three distinct Nubian cemeteries are known at Hierakonpolis, containing Pan-Grave (localities HK47 and HK21A) and C-group (locality HK27) material, which although plundered contained particularly fine ceramic items (Friedman 2001). Nubians were perhaps also resettled in the Egyptian state through force: an inscription on the Palermo stone details a military excursion into Upper Nubia during the reign of Sneferu, which resulted in the capture of 7000 slaves (O’Connor 2014: 332).

Nubian migration into Egypt appears to increase during the Intermediate periods, with C-group settlements and cemeteries first materialising in Egypt in the late Old Kingdom (Bard 2003: 73). Målek (2003: 107) has suggested that C-group migration may have been affected by a series of contemporary low floods that caused nomadic groups to move into the Valley, eliciting competition for resources. However, their presence could also relate to the recruitment of mercenaries in the Old Kingdom, who were often recruited from pastoral groups. Grave stele at Gebelein imply assimilated C-group mercenaries were living in the region, who conducted themselves as Egyptians, adopting Egyptian names and equipping themselves with funerary stele, whilst continuing to identify as Nubian (Fischer 1961; Kendall 1999: fig. 3). These stele depict the deceased in Nubian dress, with a dark skin tone, and refer to the deceased as nHsy, or Nubian (Fischer 1961: 56). Pémmler (2014: 443) notes that this community was likely indigenous rather than encompassing new migrant mercenaries, as the Gebelein Papyri mentions Nubians already settled in the area from the 4th dynasty (Seidlmeyer 2002: 100–101). Mercenaries were particularly revered as bowmen, with wooden statues of Nubian archers known from Middle Kingdom tombs (e.g. the tomb of Mesehti at Asyut: Cairo CG257; Hierakonpolis: Kees 1933: fig. 55; Säve-Söderbergh 1941: 51). Pan-grave burials similarly begin to appear towards the end of the Middle Kingdom, and it has been

suggested that a drought in the desert drove them towards the Nile (Smither 1945; de Souza 2016: 257). At Edfu during the Middle Kingdom – 2nd Intermediate Period, Nubian vessels appear in settlement deposits, primarily composed of restricted cooking pots, with a smaller quantity of fine black-topped red ware bowls (Ayers and Moeller 2012: 106–107), suggesting the presence of settled communities. At Tell el-Da’ba, cooking pots have similarly been identified in Hyksos contexts (Aston and Bietak 2017: 501) as well as Kerma fineware beakers (Hein 2001; Fuscaldo 2002).

No Kerma cemeteries are known in Egypt and Kerma pottery is rare in Egyptian archaeological contexts. However, distinct Kerma graves in a Classic Kerma style (c. 1750–1580 BCE) appear at Egyptian cemeteries such as Abydos (Peet 1914: 61–62). Bourriau (1981: 31–37) suggests this implies that the south remained permeable, contrary to official standpoints, with considerable traffic up and down the Nile at this time. Indeed, the stela of Ankheteni at Dashur, ‘The Nubian Woman’, dating to the 12th dynasty (de Morgan 1895: 38–39; Egyptian Museum CG 1481: Borchardt 1937, I: 168–169, pl. 38; fig. 80; Schneider 2003; 2010: 152) attests to a continued ability to depict oneself as Nubian even during a period when the border region was firmly militarized.

The percentage of Kerma ceramics in assemblages increased at certain sites over time. All Nubian pottery found at Edfu during the late Second Intermediate Period was attributable to the Kerma culture (Ayers and Moeller 2012: 111). The majority of this was composed of restricted cooking pots, with a smaller quantity of black-topped red ware, fine and combed bowls. At Tell el-Da’ba, there is a similar increase in Kerma pottery during the Thutmoside period (Aston and Bietak 2017: 508). At Ballas, the presence of both finewares and cooking vessels (Bourriau 1991: 131) indicates that Kerman Nubians were settled at the site and involved in food preparation during the late 17th/early 18th dynasties.

Reference to Nubian soldiers in military inscriptions suggests that mercenaries continued to be recruited – the Kamose Stela mentions the use of Medjay battalions in his battles against the Hyksos at the dawn of the 18th dynasty (Ryholt 1997: 181):

sbì.n.ì pḏwt nḥtt nt mḏzy

I sent forth strong Medjay troops

Carnarvon stela 1, 12

The New Kingdom also saw alterations in administration resulting in the placement of the three southernmost Upper Egyptian Nomes – Gebelein, Hierakonpolis and Mo’alla – along with Nubia, under the jurisdiction of the King’s Son of Kush. This likely relates to large Nubian populations living within this region through the early–mid 2nd Millennium BCE (Friedman 2001: 38).

Nubians also immigrated into Egypt through diplomatic means. Thuthmosis II instigated the policy of raising the children of Nubian rulers in the Egyptian royal court in order to guarantee their loyalty in adulthood (Török 2009: 265):

n dī=sn ʾnh m tʿwy=sn mī wʿd.tw n nbt ḥm=f

They did not give life to their men, as commanded by his Majesty

wpw ḥr wʿ m nn msw nw wr n kš ḥst

Except for one of those children of the Chief of Vile Kush

in.n ʿnh m skr-ʿnh ḥnʿ ḥt=sn r bḥr ḥm=f

Was brought alive as a captive, together with its underlings,

r bw ḥr ḥm=f dī.w ʿ ḥr rd.wy n ntr nfr

To the place where his Majesty was, and was placed under the feet of the Beautiful God.

Sethe 1907 Urkunden 140

One of these children, Maiheperi, a ‘Child of the Nursery’, was buried in Tomb KV36 in the Valley of the Kings and depicted himself as Nubian in a specially commissioned Book of the Dead papyrus (Egyptian Museum Cairo CG 24095; Riggs and Baines 2012: fig. 1) indicating that Nubian individuals reached the highest echelons of society. The deliberate ‘Egyptianisation’ strategies of elite Nubian families (see Section 1.4.4 for discussion of this

term) may have resulted in the archaeological invisibility of many Nubians within Egyptian courtly contexts. To what extent the Nubians visible in the archaeological record were ‘new’ immigrants or part of communities that had been settled in Egypt for generations – and perhaps, thus, were also ‘Egyptian’ – is difficult to access (Riggs and Baines 2012; see Section 2.3.1). Nubian rulers such as Djehuty-hotep in the New Kingdom (Säve-Söderbergh 1960) occupied a dichotomous space in Egyptian culture (Török 2009: 267). They were depicted as subservient individuals in traditional Nubian dress – including feathered headdresses (Drenkhahn 1967: 68) or skin loincloths (Drenkhahn 1967: 22) – offering tribute in Egyptian tombs (Davies 1943: pl. 18), and yet were depicted as Egyptians in their own tombs, wearing clothing befitting the Egyptian elite and according to the Egyptian iconographic canon (Török 2009: 269; Säve-Söderbergh 1960: fig. 12). This dual identity was continued in their material culture: Djehuty-hotep was buried in an Egyptian-style tomb overlooking the Debeira plain, with Egyptian courtly titles and iconography (Török 2009: 267). The grave goods in such tombs included canopic jars and shabtis, suggesting adherence to Egyptian mortuary practices (e.g. Säve-Söderbergh and Troy 1991: 188). However the retained links to Nubian deities (Török 2009: 270) and Nubian names suggests this may have been a local legitimisation strategy (Paul Van Pelt 2013: 536–537).

Patterns of deposition of material culture suggest that Nubian communities were in Egypt for a variety of reasons. Aston and Bietak (2017: 506) note that the concentration of Nubian style pottery in royal administrative areas at Tell el-Da’ba suggests that the majority were associated with administrative or military business in the area. However, this is in contrast to Nubian pottery at Memphis (Bourriau 2012), which was typically found in settlement areas, suggesting the integration of Nubian civilians.

It is difficult to ascertain the number of Nubian communities that continued to inhabit Egypt during the Third Intermediate Period. Many were likely rendered invisible in the archaeological record – either through the adoption of Egyptian practices, or the select retention of traditions that do not survive in the archaeological record, such as basketry or ritual activities. Some scholars have suggested that the King’s Son of Kush, Panehesy, was himself a Nubian (Lobban 2004: 299): in Egyptian, *Pꜣnhꜣsy*, translates to ‘The Nubian’ (Raue 2002: 20). It is equally difficult to assess the evidence for Nubians in Egypt during the 25th

dynasty, particularly outside the royal sphere, due to the penchant for individuals to adopt Egyptian names and burial practices (Budka 2010: 503). Along with periodic attendance of the Nubian kings, the ruling dynasty ensured their position through the appointment of Kushite royal family members in key ritual positions in Egyptian temples (Morkot 2000). This included strategically ensuring the adoption of female relatives as the heir apparent to the God's Wife of Amun, beginning with the sister of Piye, Amenirdis I (Taylor 2003: 347; Ayad 2004). This powerful political role was instrumental in securing Nubian rule in Thebes. These Nubian priestesses resided in Egypt and constructed funerary chapels for themselves in Thebes (Ayad 2004; 2009: 15–22; Aston 2009: 263–264), although their bodies have not been identified.

Budka (2010: 503) notes that over the 70 years of Kushite rule in Egypt, there must have been a substantial influx of Nubians into Egypt, with elite and military officials accompanying the king, as well as traders and their families. Some of these migrants probably married Egyptian women (Morkot 2000: 289). During the 25th dynasty Thebes was characterised by a strong Kushite presence, culminating in the appointment of Kushite officials to several administrative positions, most notably the Mayor of Thebes. Mortuary evidence is suggestive of the burial of some Kushites within Egypt, with 5 examples known in the necropolis at Abydos (Leahy 1994; Morkot 2000: 289) and 20 at Thebes (Budka 2010), supporting the assertion that some elite individuals were migrating north. However, few sources are available that are representative of Kushites from lower positions, with only a single example of a tomb in the Aasif known (Tomb VII; Budka 2007: 510–514).

2.7. Kingdoms of the south?

Any attempt by scholars to designate Egypt within its wider geographical context has been hindered by a failure to fully consider the powerful kingdoms that developed across Nubia throughout history. These kingdoms directly affected Egyptian hegemony and its activities in the wider North African region. Many however had only a limited impact on the archaeological record within Egypt itself. Currently only sporadic Egyptian references and sparse material culture are available in attempts to reconstruct political situations in the south. Some kingdoms, such as Punt, are still geographically unknown.

O'Connor (1991: 145) has argued that the development of the Kingdom of Kush in the 8th century BCE was part of a much older process of state development visible in cultures within the Middle Nile Region. There is distinct documentation denoting the presence of powerful polities across the Middle Nile Region contemporary with Egypt, suggesting that power dynamics were often equal, rather than characterized by a core-periphery model (see Section 1.4.3). This has significant implications for understanding the relationship between these two regions, and how material culture was shared across physical and ideological borders.

Archaeological evidence supports the assertion that polities across Nubia were economically and politically powerful. However it is challenging to access these ancient contexts through their limited references in Egyptian sources. Often names of kingdoms are only briefly mentioned on execration texts (e.g. Posener 1940: 59–60) or temple reliefs (e.g. Sethe 1907: 796.1–797.23). During the Old Kingdom, the Autobiography of Weni indicates various levels of interaction with the kingdoms of Wawat, Irtjet, Setjiu, Medja land and Yam (Sethe 1933: 98–110), which were perhaps C-group polities. Another autobiography, of the Official Harkhuf at Qubbet el-Hawa (Sethe 1933: 120–131), describes the deceased's four journeys to the distant kingdom of Yam. In the New Kingdom, the region of Irem is first mentioned, and continues to appear in textual references in Nubia through the Meroitic period (O'Connor 1987). However the geographical location of these polities is uncertain. It has been suggested, for example, that Yam was located south of the 5th Cataract (O'Connor 1982), in the Northern Dongola Reach (Trigger 1976: 112) or even in the Wadi el-Qa'ab (Kitchen 1977: 217).

In contrast to Irem and Yam, the socio-political structure of Kerma (see **Map 2**) is well attested in both textual and archaeological sources. The state was already developing in the Third Millennium BCE and the spread of Kerma material culture as far south as the 5th Cataract and as far north as Aswan suggests it may have been linked to large areas of Upper Nubia by the Second Intermediate Period – although Bonnet (2014: 82) cautions against assuming this entailed direct political control. Discovery of Egyptian statuary in Kerma Classique tumuli (Kendall 1999: 24; fig. 10) and reference to Kerman attacks at Elkab (Davies 2003: 52) suggests that the kings of this region were powerful and intermittently hostile

towards Egypt. By the Second Intermediate Period, this kingdom was powerful enough to ally with the Hyksos rulers against Thebes, with mud sealings at Kerma attesting a significant trading relationship via the desert routes between Kush and Avaris in the Second Intermediate Period. Such evidence firmly discounts the theoretical model of a core-periphery relationship between Egypt and Nubia (see Section 1.4.3), which typically assumed Nubia to have been the weaker partner.

The title *wr n mdꜣwy*, Prince of the Medjay, appears sporadically in Egyptian textual sources and may suggest the existence of another kingdom. The ethnic identity of the Medjay has been debated (Liszka 2015; see Section 1.3.2); however during the 13th dynasty the title ‘Prince of the Medjay’ refers to a native ruler (Säve-Söderbergh and Troy 1991: 209). The title is still connected to this role in the New Kingdom, and often accompanies iconography relating to the Eastern Desert – Neferkhat, a Prince of the Medjay educated at the Egyptian court under Thutmose III was shown on a stela (Sethe 1907: 989) offering desert animals to Amun, which Török (2009: 270–271) has suggested relates to his authority over this region. However, by the Ramesside period it is likely that this title had morphed to become largely symbolic and was sometimes conferred on Egyptians (Säve-Söderbergh and Troy 1991: 209) perhaps indicating the demise of this polity.

While Nubia was subsumed into the Egyptian administrative system during the New Kingdom, Egyptian sources reveal that political divisions across Upper and Lower Nubia were retained by the Egyptian state, with control of the region ceded to indigenous puppet chiefs. These chiefs are depicted in the tomb of the Viceroy of Kush, Amenhotep Huy at Debeira East (Säve-Söderbergh 1991: 182–211), with 3 *wrw* of Wawat (Lower Nubia) and 6 *wrw* of Kush (Upper Nubia) represented. There is some evidence for the locations of these kingdoms within the region. In Lower Nubia, they centred on zones with greater agricultural potential – Kuban, Miam near Aniba, and Teh-khet from the northern end of the 2nd Cataract down to Faras (Török 2009: 265). Teh-khet (Säve-Söderbergh 1991: fig. 1) is particularly well known through its conglomeration of cemeteries in the vicinity of Debeira, with several monuments known relating to the ruling family in power during the New Kingdom (Säve-Söderbergh 1991: 190–207). The locations of the Upper Nubian kingdoms are less defined, although it is plausible they centred around ancestral power bases – likely Kerma, Sai, and perhaps Napata.

O'Connor (1993: 38) has suggested that the site of Bugdumbush in the southern Dongola reach may also have been a polity in its own right.

Scant information in the available sources exists regarding Nubian rulers. A rare reference can be found among the Execration Texts dating to the reign of Senwosret III. One clay pot bears the inscription 'The King of Kush, Awa'wa, born of Kouna, his mother, and [...], his father' along with other named rulers. A clay figurine also mentions 'The King of Kush, Utatreses, born of Teti, his mother, and Awa'a, his father', along with other rulers (Posener 1940). The similarity of names here suggests the existence of a hereditary monarchy (Kendall 2007: 406). These represent the first named rulers in Nubia. A further notable ruling figure appears in a female ruler of Yam, Satjyt (Posener 1987: 29, pls 1, 6; Morkot 2000: 60).

It is highly likely that kingdoms developed to fill the power vacuum left after Egyptian withdrawal from Nubia under the reign of Ramesses XI, although few sources exist to document this period. One of the only textual sources is the Inscription of Katimala atop the Thuthmosis III relief at Semna. This has been palaeographically dated to the 21st/22nd dynasties, and a new translation indicates that the queen set the region on a path towards unification, through diplomacy, war, and militant Amunism (Darnell 2006: ix). She speaks to a council of 30 chiefs, describing the military absorption of other lands under her hegemony:

is.tw nfr ir n imn kzyw t3(.w)

iw bn t3y=f st iwn3'

Is it not good to make other lands for Amun

Where there is not his place at all?

Darnell 2006: 39

Darnell (2006: 61–62) has suggested that Katimala was ruler of a kingdom centred at the 2nd Cataract, which later unified with the rulers buried at El-Kurru. The text hints at power struggles within the region, with the 'El-Kurru chiefdom' (Török 2009: 292) the ultimate successor in the reunification of Nubia under a single ruler (Dafa'lla 1999: 131). Reisner identified ruins under the modern settlement beside the cemetery (Kendall 1999: 48) that are thought to be the settlement attached to the necropolis, although these records remain

unpublished. Morkot (1999: 145) has suggested that other chiefdoms can be identified at Kawa and Gebel Barkal. Later inscriptions at these sites reference kings such as GAtisn. Their inclusion beside ‘neo-Ramesside’ titularies resulted in the hypothesis that these were rulers from the Post New Kingdom phase (Goedicke 1972: 89; Morkot 1991: 216–217). This theory is controversial, with others arguing that the palaeography and language are rather indicative of an Early Ptolemaic date (Eide et al. 1994; Zibelius-Chen 2006). Török (2009: 308–309) has noted that mortuary architecture and material culture from the region of Debeira bears remarkable similarities to those at the later El-Kurru necropolis. This is particularly evident in the pyramid-mastabas of the kingdom of Teh-khet, which have striking parallels to similar structures at El-Kurru. Similar vessels tentatively proposed to be decorated incense burners are also known from both El-Kurru and Site 176 (Török 2009: 308; Säve-Söderbergh 1989: pl. 38 1–4), among other aspects of material culture. These similarities may reflect ancient patterns of unification.

The first ruler referenced in sources of the Napatan period is Alara (Eide et al. 1994: 41). Although negligible evidence exists from his reign, later texts bestow upon him a cartouche in recognition of his position as founder of the dynasty (Eide et al. 1994: 42) even though his references within these sources suggest he was originally a tribal chieftain.

sn=sn wr s3-rꜥ I-r-r-I m3ꜥ-hrw

Their brother, the chief, Son of Re Alara, Justified

Eide et al. 1994: 141

This supports the hypothesis that small chiefdoms developed across the region after Egyptian withdrawal at the end of the Ramesside period, ultimately uniting to form the Kingdom of Kush in the early 8th century BCE.

2.8. Conclusion

The sources and methodology for reconstructing ancient Egypto-Nubian relations is complex. It requires utilizing a variety of sources: archaeological remains from settlements and

cemeteries, official tomb and temple reliefs, Nubian stele, and material culture. The analysis presented in this chapter demonstrates that the entanglement of the Egypto-Nubian relationship originated as early as the beginning of the Predynastic era. While Egyptian sources may present Nubia as an embodiment of chaos or isft, in reality the polities to the south were a vital resource for trade and the exploitation of goods and people. While Egypt and Nubia are traditionally presented in much of the scholarly literature as rigidly demarcated ethnic regions, evidence from the Predynastic period onwards signifies that groups of people were constantly moving and interacting within the valley and its surrounding environs and that regardless of official aggressive polities, Nubians were invariably present within the state of Egypt and vice versa.

This constant interaction is highly significant for understanding the processes through which material culture – here specifically the pilgrim flask – was transported between Egypt and Nubia. In the following chapter, I focus on the pilgrim flask within this milieu, exploring the potential mechanisms by which the vessel moved into first Egypt then Nubia. In addition I will analyse evidence for the potential contents of the pilgrim flask: the feature that ultimately drove its popularity across this area.

Chapter 3. Pilgrim flasks and their Mediterranean Context: chronology, cultures, and commerce

3.1. Introduction

In the previous chapter, I outlined the historical political and social interactions between Egypt and Nubia from the Old Kingdom (c. 2686–2181 BCE) to the Late Period (7th–4th centuries BCE). I now focus on the period in which pilgrim flasks were in circulation across the Eastern Mediterranean – the Late Bronze (c. 1550–1200 BCE) and Early Iron Age (c. 1200–1000 BCE) – in order to set the changes in pilgrim flask morphology and distribution within a broad geographical context. I outline the production and manufacture of pilgrim flasks. I then discuss the distribution of the form across the Eastern Mediterranean, in order to elucidate the material culture framework from which the Egyptians selected certain types of flask from a broad available range.

The pilgrim flask was prevalent across cultures in the Eastern Mediterranean during the Late Bronze and Early Iron Age, including the Levant (Tufnell, Inge and Harding 1940; Tufnell 1958; Amiran 1969; Oren 1973; Finkelstein and Zimhoni 2000; Arie 2006; 2013), Mycenaean Greece (Furumark 1941; French 1964; 1967; Foster 1974; Mountjoy 1986; 1993), Crete (Evans 1928; Tzedakis 1971), and Cyprus (Åström 1972; Benson 1984; Karageorghis 2002). Each region displayed slight differences in morphology, decoration and use, but the features each flask type holds in common with the overall group reflects local innovation rather than distinct vessel classes. Assessing this body of vessels as one category across both time and space allows for an understanding of exchange activities across a broad region, the behavioral practices it reflects, and the resulting different depositional patterns. I believe that these types are all related to each other, and were adopted across this expanse because of a shared focus on perfumed oils in daily practice and ritual activity. Oil was considered a necessity across the Mediterranean world, to protect the skin from the dry heat of the sun (Foster 1974: 33), and many sources allude to its production and use.

Three broad pilgrim flask types are observed. The Lentoid form is characterized by its lentoid body, and is predominant across the Levant, Cyprus, Egypt, and Nubia. Double and Triple vessels involve the joining of Lentoid flasks together. The Globular form is distinguished by its rounded, globular body, and is often although not exclusively paired with a foot. This form is prevalent across Mycenaean Greece and Crete. Finally, the Ring flask is formed in an annular shape, with a hole running through the centre of the body. These are rare across all cultures.

When assessing patterns of flask dissemination, it was necessary to exclude pots with similarities to the pilgrim flask form, which did not fit the established parameters of this study (see Section 0.1.1). This project defines pilgrim flasks as vessels with a lentoid, or globular, body, a demarcated, thin neck with a rim diameter of c. 1–15cm, and two thin vertical handles stretching from the shoulder to the neck/rim. The standard form is footless – however, Mycenaean examples as well as a minority of flasks produced in Egypt were given a foot or a flat base. As such, Cypriote vessels termed pilgrim flasks by scholars such as Åström (1972: 203–204, figs liv, lv) were omitted from the discussion as they typically have three handles or lug-holes termed ‘string-hole projections’ (e.g. Flourentzos 1991: 49–50, pl. xxxvi, no. 31); as were one-handled flasks.

3.2. Production and Manufacture

Although images depicting small vessels in the context of perfume and oil use occur across the Eastern Mediterranean, no direct evidence for the production of pilgrim flasks is known from the ancient world – one relief from the tomb of Amenemhet (Newberry 1893: pl. ii) may depict an example in a potter’s workshop, although the vessel depicted has a slightly elongated body. The majority of the literature states that the most common manufacturing method for a pilgrim flask was the ‘double-saucer’ method (e.g. Guy and Enberg 1938: 155; Amiran 1969: 166; Bourriau 1981b: 75; Mountjoy 1993: 72; Knudsen 2003: 89; Minault-Gout and Thill 2012: 354) whereby two equal-sized bowls were formed on the wheel, joined together and smoothed at the seam. The neck was formed separately on the wheel and then pushed through the body. Two symmetrical handles were then added to the body (Aston 1996: 13). Scholars have cited

the presence of rilling marks on the body and characteristic bunching of the clay in the interior of the centre on broken examples (**Figure 3.1**) as evidence for this technique (Knudsen 2003: 88).

However Eriksson (1988), Glanzman and Fleming (1993) and Gallorini (2013: fig. 4) have challenged the predominance of this manufacturing technique. They have argued that there is no evidence that flasks examined at Lachish and Beth-Shean had been formed by the double-saucer method. Magrill and Middleton (2004: 2532–2533) investigated this premise while studying pottery from Cave 4034 at Lachish, and concluded that the examples here were produced in one piece on the wheel. The neck and the handles were however still formed separately and added to the body (Magrill and Middleton 2004: fig. 36.25). This ability to manufacture a flask in one piece on the wheel was subsequently tested via experimental archaeology, and was found to produce the same features cited to indicate the double-saucer method – namely, deep ridged rilling lines on the interior of the vessel, and a ‘nipple’ on one side (Magrill and Middleton 2004: fig. 36.26).

Aston (1996: 13) and Knudsen (2003: 92) have further noted that some flasks were manufactured in a mold. Rose (2007: 138) has potentially identified this technique at Amarna: distinguished by the lack of a joint on the interior, an asymmetrical profile, and different shaped ‘closing points’ on each side of the body. However, these features could equally have been caused by throwing the vessel in one piece on the wheel, as demonstrated by Magrill and Middleton’s study. The use of a mold is uncommon, and only became a standard manufacturing procedure in the Coptic period (Anderson 2007: 225).

Glanzman and Fleming (1993: 100–101; also Glanzman and Rufo 1989) have documented two additional methods of manufacture in the Late Bronze Age Egyptian garrison at Beth Shan. Two flasks were examined by macroscopic and xeroradiographic analysis. These flasks were produced either via rotation on the wheel with the vessel pinched closed and the belly pressed down, or by the manufacture of a cone that was then pressed down.

In Sudan, by the Early Napatan period flask manufacture underwent a substantial change. This is demonstrated by the appearance of a distinctive ‘swirl’ pattern on the exterior (**Figure**

3.2). This suggests that vessels were now ubiquitously thrown on the wheel in one piece, but via a different method. This shift in production technique is a significant marker indicating that the organization of ceramic manufacture had altered by this period. In addition the modification was likely accompanied by a shift in communities of practice behind these vessels, and the visual status clues that they marked (e.g. Eckert 2008: 58; see Chapter 8).

Globular flasks were always formed in one piece on the wheel, in a vertical squat position, similar to stirrup jars. It is likely that they owed much inspiration to this other vessel form. The foot, neck and handles were manufactured separately and then added to the body, as with the Lentoid flasks. This distinct technique makes it likely that the production of the two forms was always differentiated and probably occurred in separate workshops across regions producing both styles.

No pottery workshops have been found in Egypt or Sudan containing the definitive evidence of their use for pilgrim flask production – a flask or waster within a kiln itself. A small number of kilns are known dating to the New Kingdom, primarily from Amarna (Nicholson 1993: 112ff). It has been suggested (Bourriau, Nicholson and Rose 2009: 122) that there was segregation between workshops utilizing Nile Silt, and those exploiting marl clay, each with attached specialists. However, modern anthropological studies carried out by the University of Berkley indicate this was not the case (Redmount 2003: 179).

There is a dearth of ceramic kiln evidence in Nubia. Examples were found dating to the Kerma Classique period in Kerma (Bonnet 2000). Two New Kingdom sites contained kilns: the fortress at Mirgissa (Vercoutter 1970), and Amara West (Spencer 2017: 347), supporting the hypothesis that ‘Egyptian’ vessels were being produced in Nubia. A single known Napatan workshop was excavated at Kerma (Ahmed 1992: 75–86). No kilns have been found which contained pilgrim flasks.

The presence of standardized ceramic forms across the state of Egypt by the New Kingdom suggests the presence of specialised production (de Souza 2016: 81). Some fabrics and wares were specific to particular regions. The fabric marl F, for example, is found in abundance in the eastern Delta but is rare elsewhere and almost entirely limited to wine amphorae (Aston

1998: 66). At Memphis, Fabric G2 – a subset of Nile B1 in the Vienna system – was used almost exclusively in the 18th dynasty for the production of small blue painted dishes and lids (Bourriau 2010: 23). This points to the existence of either centralized workshops or specialist itinerant potters producing these forms.

Reliefs showing men working on the potter's wheel in funerary reliefs (e.g. Davies 1930: pl. 59; Épron and Daumas 1939: pl. 71) indicate that pottery production was an activity restricted to the male sphere, although limited reliefs depicting women and children suggest that some aspects of production may have been open to other groups (Bourriau, Nicholson and Rose 2009: 136). Ceramic production was likely more domestic in Nubia, where archaeologists have cited modern ethnographic parallels to suggest these handmade vessels were in contrast produced by women (Nordström 2004: 251). Wheel-made pilgrim flasks across both regions are highly likely to have been the result of specialized craftsmen. The presence of marl pilgrim flasks in Nubia attests to the continued production of this form for an export market (see Chapter 6), and indicates that many flasks were made in Egypt rather than Nubia. The crudely formed, rough Type E examples in the Napatan period (see Chapter 6) however were probably manufactured in Nubia, which points to the existence of potters' workshops in the region in this restricted time-frame.

The different flask morphologies observable likely relate to use practices. Rims of specific shapes would hold and pour liquid in particular ways. Handle movement would have affected how a vessel was held and used. It is likely that the development of specific forms in Egypt (Chapter 5) and Nubia (Chapter 6) reflect the appropriation of the pilgrim flask into particular behaviours.

3.3. Fashions of the Ancient Near East

I now address the diachronic and synchronic changes in pilgrim flask distribution that can be observed across the Eastern Mediterranean (see Table 1). This is an integral step for my project, as it enables the placement of Egyptian and Nubian pilgrim flasks within a broader geographical context. Pilgrim flasks were imported into Egypt from Levantine, less commonly

Mycenaean, and occasionally Cypriote contexts (see Chapter 5) and locally manufactured Egyptian examples have a close affinity to contemporary Levantine vessels. There is no evidence that Cretan pilgrim flasks were imported into Egypt, or that either Mycenaean or Cretan flasks inspired Egyptian imitations. This reflects a deliberate preference by the Egyptians for Levantine forms within this milieu. Within this broad trading network, the Egyptians were exposed to a large range of pottery, and they chose select pieces from this. In order to understand this selection it is vital to first discuss this broader framework in which pilgrim flasks were moving, to understand how Egyptian preferences were expressed via their choice of material culture. Distribution patterns will be studied from c. 1850 BCE to the 4th Century BCE, a period across which flasks were manufactured in the Eastern Mediterranean and throughout which examples were still imported into Egypt from the Levant.

3.3.1. The Question of Origin

'We do not know for the present whether [the pilgrim flask's] birthplace was Canaan or whether its appearance was due to foreign influence, but very soon it became one of the most popular and most characteristic forms in the ceramic repertoire of the Late Bronze Age and the following periods'

Amiran 1969: 166

The origin and early distribution of the flask has been discussed by scholars since the 19th century, with many publications designating a probable point of origin based on its morphological characteristics. Suggestions include 'foreign' (e.g. Petrie 1906: 33; Petrie and Brunton 1924: 25b), Cypro-Phoenecian (Holthoer 1977: 99), Minoan (Tzedakis 1971: 563), the Levant (Bard 1999: 629); Mycenaean Greece (Bourriau 1981: 75–76), and the general Near East (Mountjoy 1993: 72) or Eastern Mediterranean (Aston 1996: 13).

The significant quantity of Lentoid flasks found in across the Levant in the Iron Age in particular (Amiran 1969: 276) has led many scholars to prefer the Levantine region as a point of origin, a theory supported by Egypt's strong connection with the area during New Kingdom military imperialism. Indeed Aston (1996: 62) among others has noted that the reason pilgrim flasks first appear in the 18th dynasty in Egypt is 'as a result of increasing contacts with the Levant'. In this hypothesis, Levantine campaigns by Thuthmosis III, and the

subsequent Egyptian control of the area, were responsible for the opening of major trade routes between Egypt and the Levant, which led directly to an increase in the presence of ‘exotic’ foreign goods such as pilgrim flasks (Bard 1999: 13). However, while there is substantial evidence pointing to the Levant as both the origin of those flasks imported into Egypt as well as the inspiration behind local flasks, this does not mean the form itself originated in the Levant. Other scholars have presented evidence suggesting that both the Lentoid and the Globular pilgrim flask form first appeared significantly earlier, with small numbers attested from Middle Minoan II/IIIA contexts in Crete (Evans 1928: 179; Tzedakis 1971; Mountjoy 1993: 72; Killebrew, 1999: 125 note 327; Martin 2013: 391). This would mean the flask was developed prior to its Late Bronze Age (c. 1550–1200 BCE) appearance in the Levant.

It is doubtful whether this analysis contributes to our understanding of how pilgrim flasks were used and interacted with within and between cultures. More pertinent questions focus on how and why the vessel moved between regions and thus between different cultural practices (see Chapter 8). However, as this debate is still commonly referenced in the literature it will be briefly considered here. Furthermore, the spread of the form within multiple cultural contexts is integral when analyzing the material culture framework from which the Egyptians selected pieces to use.

3.3.2. Crete

Evans noted during his Knossos excavations that the pilgrim flask shape had a very early Aegean history, and was a recurring form in the Middle Minoan II period (Evans 1928: 179). Mountjoy (1993: 72) used this to place the first evolutionary stage of the form in Middle Minoan II. Both Globular and Lentoid pilgrim flasks have been found at Knossos and Gournia in contexts dating to the Middle Minoan IIA/Late Minoan IA (Evans 1928: 215; Betancourt 1985: fig. 100: 1), 1500–1450 BCE (Bosanquet 1923: 45; pl. xviii) (see **Figures 3.3, 3.4**). One flask found in the Palakaistro was in Marine Style and was described by Betancourt (1985) as part of the ‘Special Palatial Tradition’. These examples bear typical Cretan decorations of floral geometric patterns in White on Dark, Dark on Light, and Marine Style wares.

Only limited quantities of pilgrim flasks are known from Cretan deposits, making exact dating of the form difficult. Furthermore the difficulty of distinguishing between late Middle Minoan and early Late Minoan contexts has been expressed in recent years, particularly in mixed deposits such as at Knossos (e.g. Mee 1986: 439; Hatzaki 2007: 154). The prevalence of Marine style in Knossos contexts of the Late Minoan IB phase however (Mee 1986: 440; Hatzaki 2007: 154; Betancourt 1985: fig. 18) makes it more likely that these flasks date to the early Late Minoan IB phase. This still posits the appearance of the form as earlier in Crete than the Levant, where the flask appears in Late Bronze II deposits (c. 1400–1200 BCE). The presence of destruction layers above these flasks across Crete relating to the Thera eruption – particularly at Gournia – during the Late Minoan IA/IB period (Hallager 2010: 153) supports the hypothesis that flasks found at this site in particular date to this period or prior.

The fact that both Lentoid and Globular forms were present in Crete in these early contexts is further suggestive of the form's development in this area (Tzedakis 1971: 363), with the two shapes likely intended to advertise two separate contents. Pilgrim flasks were ultimately rare in Crete and Tzedakis (1971: 363) has suggested they were restricted as honorary gifts for important members of society. A particularly unusual ring-shaped flask (Tzedakis and Martles 1999: no. 31) dating to the Late Minoan IIIA2 period may reflect this. After their adoption in the Levant and Mycenaean contexts, their value appears to have decreased.

The Lentoid form only appeared in Crete in these early contexts. However, Globular flasks continued to appear in later deposits at Knossos, with examples known in Late Minoan necropolises bearing painted band decoration (e.g. Coldstream and Catling 1996: fig. 83: 13, 14, 17; fig. 117: 121.1, 121.5). Some are very large (e.g. Walters 1912: C563). Other, similar flask shapes were produced in this period (e.g. Coldstream and Catling 1996: fig. 104:8) suggesting a broader interest in luxury oil contents across Minoan culture.

Only a very small amount of Late Minoan pottery of limited provenance is known in the early–mid New Kingdom (e.g. Bourriau and Eriksson 1997; Hankey 1997: 213), and no Minoan pilgrim flasks are known from Egypt. This may reflect deliberate Egyptian selection relating to a disinterest in Cretan flask contents. It may also stem from the relative

inaccessibility of Minoan flasks caused by disruptions in Cretan maritime at the end of the Late Minoan IB or Neopalatial period, when severe destruction layers are seen across the island (Hallager 2010: 153). By the Late Helladic II (Late Minoan IB/II) Mycenaean pottery had become the dominant fine ware across the Greek mainland and the islands (Shelton 2010: 143).

3.3.3. Mycenaean Greece

Furumark (1941: 32) has suggested that within pilgrim flask evolution, it was “the Minoan potters [who] ... exchanged the originally lenticular shape for the globular and provided the vessel with a base; this transformed type agrees with the ordinary Mycenaean form”. Mycenaean ceramics were undoubtedly influenced by Minoan shapes and decorative styles from the late Middle Helladic (Mee 1986: 439) and it is likely there was an efficient Cretan control of trading routes in this period (Shelton 2010: 142). Furthermore, distribution patterns of Minoan pottery, frescoes and tablets suggest potential Minoan settlement in Akrotiri and Trianda (Mee 1986: 439). This close relationship – likely accompanied by the development of shared cultural practices and etiquettes – make the hypothesis that pilgrim flasks were introduced to Greece via Crete viable.

Pilgrim flasks were produced in Mycenaean contexts from the Late Helladic IIA:1 period (Furumark 1941: 32) and were exported across the Eastern Mediterranean and into Nubia (e.g. Tombos, **Figure 3.5**). Globular examples at this early stage in Mycenaean Greece were relatively rare and Mountjoy (1993: 72) notes the overlarge size of these early examples, suggesting they were being used for the storage and transportation of substantial volumes of oils. While Globular flasks were undoubtedly the standard shape used across Mycenaean contexts, Lentoid flasks also appeared. By the Submycenaean phase, pilgrim flasks were no longer produced in Mycenaean Greece.

3.3.4. Cyprus

Both Lentoid and Globular flasks were in use in Cyprus. Lentoid examples were rare in the Bronze Age, and share both morphology and decorative styles with contemporary one-handled flasks (e.g. Karageorghis 1970: pl. ccxxi; Åstrom 1972: fig. liii, 13). Locally produced

Globular flasks (e.g. Enkomi Tomb 3, 13; Maroni Tomb 18L: Walters 1912: C563) and imported Mycenaean examples were deposited in mortuary contexts (e.g. Kition necropolis: Benson 1984: fig. 8, 9; Wijngaarden 2002). In common with Mycenaean Greece, flasks were primarily restricted to burial contexts and were rare in domestic deposits. This is in contrast to the Levant (see Section 3.3.5).

During the Cypro-Geometric and Cypro-Archaic periods (see **Table 1**) Lentoid flasks increased in quantity and were common in Phoenician contexts across Cyprus (Bikai 1987). Their use in mortuary contexts persisted (see Bikai 1987: 10–13; Åström 1972). Two flasks from settlement contexts at Kition (Bikai 1987: no. 94–95) however may suggest further use in daily activity. Triple pilgrim flasks were also produced in Cyprus, with two examples known in Bichrome III ware from the Cypro-Geometric period (Gjerstad 1948: fig. xxiii 2; Åström 1972: fig. xxiii). This does not occur across the rest of the Mediterranean and represents a specific Cypriote response to the form. Globular Types also appeared, including an example with a cup mouth akin to Type Aiv (Bikai 1987: pl. III: 127). However, one-handled flasks, with similar morphology and decoration, continue in prevalence (Bikai 1987: pl. iv–vi), suggesting multiple differentiated precious liquids were in circulation.

3.3.5. The Levant

Many scholars suggest the Levant as the point of origin of the pilgrim flask (e.g. Furumark 1941: 32; Holthoer 1977: 99; Bard 1999: 629). Although evidence suggests that the pilgrim flask form first appeared in the Levant in the Late Bronze II period (c. 1400–1200 BCE), Amiran (1969: 166) has suggested that one example (**Figure 3.6**) can be dated to the Late Bronze I period (c. 1550–1400 BCE). This flask was found in the Jebusite Burial cave, on the Western Slope of the Mount of Olives by Saller in 1953 (1964: 149) and has a thick neck and faint traces of brown painted concentric circles on the body.

Although Amiran notes that the flask dates to the second period of interment in the cave, on closer inspection the evidence for its assignment to the Late Bronze I period is circumstantial. The tomb was in continuous use from the Middle Bronze Age, resulting in the presence of vessels from multiple ceramic phases. Saller suggested a *terminus post quem* of the Late Bronze

II period (c. 1400–1200 BCE) due to the presence of a white steatite scarab engraved with the name of Thutmosis III. In addition, two tall, slender piriform jars in the tomb date to the Late Helladic IIIA1 period (c. 1400–1375 BCE). There is no conclusive evidence to date the flask to the Late Bronze I period and it must be presumed that for the moment, the Late Bronze II period sees the introduction of the shape in the Levant.

The first securely dated pilgrim flask in local fabric dates to the Late Bronze IIA period (Martin 2013: 391). Examples of Middle Bronze IIB period vessels (c. 1750–1650 BCE) that bear similarities to the true ‘pilgrim flask’ may be part of the same developmental trajectory (Amiran 1969: 166). Narrow-necked juglets and flasks with single handles were popular in the Middle Bronze Age (c. 2000–1550 BCE) and their form, with wide bellies and thin necks for pouring precious liquids, speaks to a similar function. Amiran (1969: 166, after Guiges 1938: pl. iv) notes in particular a one-handled flask in Tomb 66 in the cemetery of Kafer Garra near Sidon, in a Middle Bronze Age IIB context; this flask is decorated with concentric circles and evokes much of the later pilgrim flask style.

During the Late Bronze II period, Lentoid pilgrim flasks appeared in religious (Tufnell 1958), settlement (Loud 1948: pl. 67; Finkelstein and Zimhoni 2000), and military (Oren 1973) contexts, with a limited quantity in tomb contexts (e.g. Guy and Enberg 1938: tomb 877). Mycenaean Globular flasks were imported to the Levant in the Late Bronze Age, and were often deposited in burial contexts, such as Tomb 8 at Megiddo (Guy and Enberg 1938: pl. 56). Flask deposits consistently increased in quantity from the Late Bronze to the Early Iron Age in cemeteries (e.g. Megiddo: Guy and Enberg 1938) and settlements (e.g. Tell el-Far’ah: McClellan 1975: 343); which may suggest the contents were becoming more accessible to a broader consumer base. The variety of Types also increased – in Sarepta, a Phoenician settlement dating from the Late Bronze and into the Iron Age, excavators identified five pilgrim flask sub-types varying in size and decoration in Area II Y, a 100 m sq. grid on top of the settlement mound (Anderson 1988: 213). These types were all fragmentary (Anderson 1988: pl. 50), but were distinguished by their rims, which coincide with Types Ai, (PF-1B, PF-3) Aiii (PF-6) and possibly Aiv (PF-5A) in my Egyptian typology presented in Chapter 5.

In the Early Iron age, Namdar et al. (2013: 2) noted that in the Southern Levant pilgrim flasks were typically found in ‘elite’ contexts, such as treasuries and temple storerooms, which may suggest an high-value connotation associated with its contents. The vessels they studied were Phoenician and came from Yoqne’am, Kinneret, and Nahal Patish, or Philistine, such as at Tell Qasile and Dor, dating from the 11th–late 10th centuries BCE. A single and a double Lentoid pilgrim flask were discovered in Temple 131 at Tell Qasile (Mazar 1980: 39–40), in Stratum X dated to the Early Iron age IIB. However Mazar (1980: 40) notes that these were not disposed of as cult vessels, and thus were likely related to administrative procedures. This is the phase in which spoon-mouth flasks begin to appear (see **Figure 3.7**), suggesting developing use patterns and activities associated with the form. Such flasks are characteristic of Iron I sites along the coastal plains and in the northern valleys (Arie 2006: 209; fig. 11.7), and also appear in Phoenician contexts (Bikai 1987).

3.3.6. The Western Oases

Communities in the Western oases expressed non-Egyptian traditions and a distinct identity throughout Pharaonic history (Hubschmann 2009: 177–178). These people, often treated as part of ‘The Other’ topoi in Egyptian iconography, were depicted bearing tribute alongside other subjugated groups in tomb reliefs (Giddy 1980: 121–122). Their ceramic technology displayed idiosyncratic aspects of manufacturing technique, decoration, and morphology (Hubschmann 2009: 175). The existence of this indigenous oasis ceramic tradition of non-Egyptian origin is further demonstrated by the fact potters in these regions were producing both ‘Egyptian’ and ‘Oasis’ repertoires (Hubschmann 2009: 176). As such, they are included in the discussion of foreign pilgrim flasks here.

Lentoid flasks were produced in sites such as Ayn Asil during the New Kingdom (Marchand and Tallet 1999: fig. 21; Darnell 2000: 227–228), which were manufactured from the local Oasis fabric F1 G and although fragmentary, bear black painted hatched decoration. These continue to occur in the Late Period and while coarser, are often red or cream-coated (Hope 2000: fig. 1).

During the Late Period, a distended form of the pilgrim flask known as the keg developed, characterised by an elongated body allowing it to sit on the floor unaided, typically with loop handles on the body or running from the rim to the shoulder. Later examples of these kegs were not given handles, and so would not be included as pilgrim flasks under the current parameters of my study (see Section 0.1.1). Kegs have been identified in burials in the Dakhleh Oasis (Hope 1981; 1983: 149) dating to the fifth and fourth centuries BCE. Examples are also known from settlements, particularly at Ein el-Azizi (Hope 1981: 234). Kegs dating to the 27th–29th dynasty at Ayn Manawir (Marchand 2000: fig. 3) were often slipped white. A production site found in the Dakhleh oasis has been identified which was used solely for the production of flasks and kegs (Sullivan 2013: 81), suggesting specialist production.

These vessels were highly fired and thus were well suited for the transport of liquids (Darnell 2000: 229). Hope (2000: 190) notes that the large flasks likely contained water or wine, while smaller vessels contained as yet unidentified fluids.

3.4. Non-Egyptian fabrics

Flasks were manufactured in local clays across the Near East and Eastern Mediterranean, but their inclusion in land and maritime exchange resulted in a plethora of examples in alien fabrics deposited across being settlement and mortuary contexts (e.g. Wijngaarden 2002). Vessels across this expanse are typically described in archaeological publications by ware, rather than fabric groups, because of their overwhelming decoration. This is in contrast to Egypt, where plain, undecorated pottery predominates, and as a result ceramicists focus on fabric description rather than wares.

Local resources were exploited for ceramic manufacture. Pilgrim flasks in Egypt were produced in Nile silt, sourced from the Nile floodplain, and marl clay, from the surrounding cliffs and desert wadis (see Section 0.2). Oasis clays differed distinctly from clay from the Nile Valley. These fabrics are particularly hard, owing to their high levels of aluminium (Hummel and Schubert 1994b: 73) and were fired at temperatures above 850°C (Eccleston 2000: 217).

Bourriau (Hope 2002) has identified the presence of kaolin as potentially characteristic of Oasis clays. The majority of oasis flasks found in Egypt were likely produced in the Dakhleh Oasis (Eccleston 2000: 217).

In Mycenaean Greece, both Lentoid and Globular Mycenaean flasks were produced in a standardized Peloponnesian or Argolid clay (Hankey 1997: 195). A large diversity of clay across the region means fabrics were variable, with red, *terra rossa* clays and pale, calcareous clays both exploited (Jones 1986b: 103). Cypriote pottery was manufactured from reddish-brown silt from river terraces (Jones 1986b: 315), and Moni calcareous clays (Pantazis 1967). Vessels in Crete were produced from uniform Peloponnese-type clays, firing to a light brown colour (e.g. Tzedakis and Martlew 1999: 58–59) with evidence suggesting the presence of three different clay ‘zones’ on the island (Mee 1986: 460).

Multiple studies have focused upon Levantine fabric groups via the exchange of ceramic commodities across the Near East (e.g. Serpico and Bourriau 1996; Cohen-Weinberger and Goren 2004; Ownby and Bourriau 2009; Knapp and Demesticha 2016). Petrographic analysis indicates that Levantine pottery was produced in a range of manufacturing centres with clays of Coastal sand, *Terra Rossa*, and *Hassa* consistencies. Amiran (1969: 169) briefly describes pilgrim flasks as being in fabrics of pink-grey, pink, brown, black and burnt umber, with some examples bearing a white or red slip. In the Iron Age, flasks appear in bichrome ware (Amiran 1969: 276), buff and red clays (Amiran 1969: 282), or pinkish clays, sometimes with a red slip (Arie 2013: fig. 13.43 8E).

3.5. Decorative styles

Multiple decorative styles were in use across these regions in the Late Bronze and Early Iron Ages, and reflect local reactions to the form and the way it was utilized in community activities. The morphology of the flask remained constant across these decorative styles, which may act as a type of branding to reflect the different types of contents (Bushnell 2013: 143) The most common shared feature was a pattern of concentric circles – or as a slight variant, a continuous spiral – on the belly of the flask, in a red-brown or black paint,

sometimes above a cream or red slip. This design appeared on the earliest Levantine examples in the Late Bronze II period (see Amiran 1969: pl. 51; British Museum EA132324) and remains the most common style through both the Late Bronze Age and Early Iron Age. A similar concentric circle style can be observed on the base of bowls in the Late Bronze I period (Yadin 1960: pl. cxxii no. 2; see Amiran 1969: photo 125) and juglets (Yadin 1960: pl. xlviii), and this design style may have been part of a broader Late Bronze Age trend across the region. Flasks with concentric circle patterns on the body were often also given a red-brown or black line running vertically down the handles, or stars painted red-brown or black positioned where the handle meets the body of the flask. A metope or cross pattern also appeared on Late Bronze flasks in the Levant (e.g. Yadin 1960: pl. cxxx, 14). During the Early Iron Age, examples with applied relief decoration and in Bichrome style are known (Amiran 1969: 276), in addition to Spoon-mouth flasks that were given applied anthropomorphic features (**Figure 7**). Within the later Phoenician ceramic repertoire, only pilgrim flasks and small bichrome containers were routinely decorated, with all other vessels left plain (Namdar et al. 2013: 2).

Both Lentoid and Globular flasks across Mycenaean Greece were also often decorated with a concentric circle design (e.g. Mountjoy 1993: fig. 170). On Mycenaean examples however, the circles were greater in number and proximity, painted black, or dark orange, on a brown slipped surface. This design was characteristic of the majority of Mycenaean pottery during the Late Helladic, and reflects the mass-production of pottery (Foster 1974: 194), perhaps in a restricted quantity of production centres (Wijngaarden 2002: 2). Other decorative features were painted in the side panels, including chevrons (Amarna: Cat. No.198) and geometric patterns. In the early Late Helladic III, wavy line patterns were common on the belly of flasks (e.g. French 1964: pl. 71, d3) along with a single vertical plant motif. By the end of the Late Helladic, these designs had evolved into more complex, vertically arranged zonal patterns (Furumark 1941: 515). Figural designs were also occasionally added to Mycenaean Globular flasks, including painted birds, female figures and horses (Benson 1984: 12).

The Lentoid form in Cyprus was produced in a vast array of wares – including Bichrome I, II and III (Gjerstad 1948: fig. viii, 5), White Painted II (Gjerstad 1948: fig. xiv, 1), and Black-on-Red II (e.g. Amiran 1969: pl. 97:21). Painted concentric circles or a metope were the dominant

decoration on Cypriote flasks, in common with Levantine flasks. This was typically in a black paint. An unusual annular flask found in Cyprus in a Late Cypriote III context was decorated with complex designs featuring black faunal figures, and a side panel embellished with semi-circular geometric patterns (Benson 1984: 10).

Minoan flasks were extensively decorated and featured complex floral and geometric patterns, although examples with concentric circles do appear, such as one found during the excavations at Kastelli Chanion in 1969 (Tzedakis 1971: 367, pl. 64 f–g). An example in Marine Style was decorated with a black-painted octopus (Evans 1928: 510; fig. 312d), a characteristic feature of Late Minoan IB (Mee 1986). Late Minoan flasks display Mycenaean decorative traits (Tzedakis and Martlew 1999: 58: 29–31).

3.6. Examples in Egypt and Nubia

The Egyptian forms mirror the Levantine and Cypriote Lentoid form, suggesting that Egyptian flasks were influenced by flasks hailing from this region rather than by Mycenaean Globular flasks. Levantine pilgrim flasks appear consistently in Egypt and Nubia throughout the New Kingdom and Third Intermediate Period (see Chapters 5 and 6). Globular flasks have been found in Egyptian deposits throughout the 18th and 19th dynasties (c. 1550–1189 BCE) dynasties along with other Mycenaean closed forms. These were primarily from the Berbati workshop of Mycenae, with examples in ‘simple style’ now thought to have been produced in Cyprus (Mommsen, Schwedt and Oren 2005) or sometimes Egypt (Aston et al. 2007). These supplies ceased after the destruction of the Mycenaean palaces c. 1200 BCE (Bell 1982: 143; Mommsen, Schwedt and Oren 2005: 151; Shelton 2010: 146). Only a handful of Globular flasks are known from Nubia (Schiller 2018). Oasis flasks were common imports to Egypt during the Late Period, with significant quantities at sites such as Karnak Nord (Hope 2000; Jacquet-Gordon 2012). Oasis fabrics are currently unattested in Nubia, although the possibility of very small quantities has been suggested at Amara West (Spataro, Millet and Spencer 2015).

3.6.1. Decoration in Egypt

Flasks manufactured in Egypt in the New Kingdom (c. 1550–1070 BCE) bore strong similarities to contemporary Levantine and Cypriote flasks. Decoration of concentric circles or a spiraloid in red-brown or black paint, sometimes with stars under the handles or slashes along the handle itself, can sometimes be observed. A black painted rosette was particularly common in the 18th dynasty (see Chapter 5), another feature with Levantine parallels (e.g. Finkelstein and Zimhoni 2000: fig. 10.9, no.4). The closely spaced concentric circle decoration common on Globular forms may have been imitated in Egypt on some examples in Lqan and Mqan fabrics at Qantir (Aston et al. 2007), although this is significantly rarer than the examples mimicking a Levantine style.

Other forms of decoration are rare. Very occasional examples decorated in blue pigment appear during a short timespan over the 18th–19th dynasties (Hope 1989: 56), and one example was painted with a floral collar (Hope 1989: fig.13.g). A flask fragment with a hieratic inscription was found at Abydos (see Cat. No. 735) which is unfortunately too faded to be legible; three further examples in the tomb of Senneferi bore hieratic inscriptions describing their contents (Rose 2016: figs 161, 162; Bohleke 2016: 243–245; see Section 4.6.2). In later periods, engraved concentric circles often appeared on large drum flasks in the Roman period (e.g. Aston 1998: fig. 107: 104; Wodzińska 2010b: 105), and metope patterns re-emerged as a design feature in the Ptolemaic period – such as one example dated to the 2nd Century BCE in Memphis Black Ware (British Museum EA30445). However, undecorated or orange/cream-slipped flasks were in the majority in Egypt (see Chapter 5).

Limited analysis has been conducted on the pigment used for the decoration of ceramic vessels. The small quantity of blue painted pilgrim flasks in the catalogue (Amarna – Cat. Nos 2, 165) are decorated with a cobalt-based paint (Shortland, Hope, and Tite 2006). The red pigment is likely iron-oxide based ochre and the black paint manganese or carbon (Fulcher pers. Comm.). Decoration was added with a paintbrush, or sometimes via a compass for a neater finish (Aston 1998: 548).

Later specialized Coptic flasks bore the stamp of St Menas (**Figure 3.8**), with a variety of images and inscriptions relating to the saint on both sides of the body. Such vessels inspired the anachronistic naming of the Late Bronze Age form (Aston 1996: 13). Further discussion of the Christian flasks is beyond the scope of this study.

3.6.2. Decoration in Nubia

Pilgrim flasks found in New Kingdom deposits in Nubia followed similar decorative patterns to contemporary Egyptian sites. Plain flasks were in the majority, and the surface was often left untouched, such as the semi-complete vessels at H25 (Cat. Nos 103–104); others were slipped in orange or cream (e.g. Minault-Gout and Thill 2012: 354–360). Concentric circle decoration appeared on early flasks imported into Nubia from both Egypt and the Levant, and persisted in popularity into the Post New Kingdom Period on vessels likely of local manufacture (e.g. Vincentelli 2006). Globular flasks from Mycenae were very occasionally imported (e.g. Smith 2007: pl. 3; Schiller 2018) but never imitated locally, unlike stirrup jars and rhyta (Schiller 2018: 93).

By the Early Napatan period the decoration of pilgrim flasks had fallen out of fashion, and vessels were consistently plain. Engraved concentric circles on Type G drum flasks, or emphasised rilling marks on marl Type F flasks (see Chapter 6 for full discussion) were the only semi-aesthetic styles to appear in this period.

3.7. Conclusion

In this chapter, I summarized the observable morphological and deposition practices around the pilgrim flask across the Near East, and discussed its spread across the Eastern Mediterranean. **Figure 3.9** shows the suggested morphological evolution of the form within the regions discussed above. This is based upon the dates assigned to archaeological contexts containing pilgrim flasks by the excavators, as well as the observed distribution patterns. The evidence points to Minoan Crete as the form's point of origin. It was then quickly adopted by

communities in the Levant and Mycenaean Greece respectively, and was in use across these regions by the Late Bronze Age.

This was the material culture framework into which the Egyptians entered in the 18th dynasty. Minoan, Mycenaean, Cypriote and Levantine pilgrim flasks were all in circulation across the Near East and Eastern Mediterranean. However, only Lentoid Levantine pilgrim flasks and, to a much lesser extent, Mycenaean and Cypriote Globular flasks, were selected for inclusion in Egyptian activities. This pattern is even more extreme in Nubia, where only 5 Mycenaean flasks have been noted in archaeological contexts (Schiller 2018: table 1). Although this may relate to availability, it also demonstrates a deliberate preference for a specific repertoire from the wide range of flask types available, which likely relates to an Egyptian interest in the specific contents contained in Levantine Lentoid flasks. In the following chapter, I discuss the evidence for trade between these regions and Egypt and Nubia, in order to assess the potential routes by which pilgrim flasks may have entered the Nile Valley, and the motivation behind this exchange.

Chapter 4. Trade and Exchange across the Ancient Near East

4.1. Introduction

During the Late Bronze Age, goods were moved across the Near East using a variety of exchange and trading routes. These are visible both by the presence of non-local items in sites, and through contemporary textual evidence. Exchange routes into Egypt can be observed to have followed very specific designs, and reflect the particular choices and desires of the region that relate to a specific Egyptian etiquette. In this chapter, I discuss the archaeological, textual, and pictorial evidence for trading practices into Egypt and Nubia, to understand the mechanisms by which pilgrim flasks entered the region, before summarising theories regarding the Egyptian economy that likely affected the exchange of pilgrim flasks. I then move to discuss the motivation behind the form's exchange – its potential contents. Finally, I outline the known manufacture of pilgrim flasks in Egypt in non-ceramic materials, to exemplify the mechanisms by which this form was absorbed into Egyptian cultural practices.

The Late Bronze Age (c. 1550–1200 BCE) was characterized by interrelated exchange relationships resulting in large quantities of artefacts being removed from their point of origin and deposited in other regions; via official commerce, gift exchange and unregulated private transactions. The Levant in particular was ‘flooded with imported pottery’ during this period – Amiran (1969: 172) notes that up to 50% of vessels in Late Bronze Age tomb-groups could be foreign wares. The large quantities of foreign pottery found at coastal cities such as Ugarit indicate a thriving maritime trade (Wijngaarden 2002: 109). Egypt was intimately involved with this system, due to its military involvement across Syro-Palestine from the 18th dynasty (Spalinger 2005), and the consequential development of strong trade connections between the regions (Bard 1999: 57). However, ceramic distribution patterns reveal preferences for different forms across the Mediterranean, with deliberate selection for closed and storage vessels clear in Egyptian contexts (Bushnell 2016: 144). Aegean pottery was prolific in Cyprus (Broodbank 2013: 411), and a variety of open and closed Cypriote forms were distributed across the Levant, whereas Cypriote closed forms were favoured in Egypt (Merrillees 1968), mainly Base-ring (Eriksson 2006b: 100, 104; Hulin 2009: 40; Bourriau 2010: 31) but also

Proto-White Slip, White Slip, White Painted, Bichrome, Black Lustrous (Maguire 2009: 26) and Red Lustrous Wheel-made (Eriksson 2007; French 2013: 351–352). Open forms did occur but in smaller quantities (e.g. Merrillees 1968: 186; Aston 2011: 14). This pattern is mirrored with Mycenaean pottery. In the Levant a variety of open and closed Mycenaean vessel forms appeared (Leonard 1994; Wijngaarden 2002), whereas in Egypt, closed forms such as jars and flasks predominated (e.g. Bell 1982; Hankey 1997; Hulin 2009), suggesting again an interest in certain contents. Levantine closed vessels were particularly prized in Egypt, with Canaanite jars produced in at least 5 different manufacturing areas across the Levant found at Memphis (Smith et al. 2004). Spindle bottles, produced in North Syria and Cyprus (Eriksson 1991: 81) also appear frequently in Egypt (Amiran 1969: 170; Eriksson 1993 59–98), with these bottles deposited in mortuary and settlement contexts during the 18th dynasty (Eriksson 1993: 97–98). Such preference points to a desire to access specific luxury contents, which Bushnell (2013: 371) and Hulin (2006; 2009: 44) have argued relates to the frequent use of perfume in public social arenas. Both Levantine and Globular pilgrim flasks were a part of this broad maritime exchange framework, and their presence on the Uluburun shipwreck and in reliefs in the tomb of Kenamun suggests the importance of the flask and its contents (Killebrew 1999: 126).

4.2. Archaeological evidence

Archaeological remains across Egypt and Nubia attest to considerable commercial links that moved goods – including pilgrim flasks – into and throughout the country. The discovery of the late 14th/early 13th century BCE shipwreck of Uluburun (Yalçın, Pulak and Slotta 2005) attests to the wealth of commodities circulating around the Mediterranean via maritime exchange routes in the Late Bronze Age. The ship was carrying a variety of products including specialised, high value merchandise such as faience ram's-head rhyta, cylinder seals, and a golden scarab bearing the name of Nefertiti (Bass & Pulak 1989: 1). The ship was also transporting a multitude of ceramics. During the 1986 excavation, ceramic pithoi, Canaanite amphorae and 51 Canaanite pilgrim flasks of three different sizes were identified, as well as a tin pilgrim flask (Bass & Pulak 1989: fig. 22). It is likely that the range of sizes represents different purposes of the flasks: large vessels for the transport of oil and sites of heavy use,

and small vessels perhaps intended for the marketplace. The quantity of vessels on the Uluburun shipwreck suggests significant official trade between the cultures of the Ancient Near East and Eastern Mediterranean, and an interest in the ‘exotic’ commodities within the pilgrim flasks, which were originally alien to local communities. This find provides direct evidence that pilgrim flasks had a maritime value, and their substantial quantity indicates that they were a significant part of this trading network. It is probable that the majority entered Egypt via a maritime route from the Levant and Mycenaean Greece. Other, smaller shipwrecks are also known, such as the Point Iria Wreck (Phelps, Lolos, and Vichos 1999), which contained Cretan, Cypriote, and Mycenaean goods, and demonstrate that the Uluburun shipwreck was not an isolated example of state trade.

An Egyptian harbour at Mersa Gawasis (Bard and Fattovich, 2007; 2012), located at the northern end of the Wadi Gawasis, points to the use of a sea route further south. Ceramic evidence at the site suggests that the port was in use from the Old Kingdom, with a majority of the deposits datable to the 12th and 13th dynasties. Although later abandoned, the find of steering blades from a rudder at the entrance to Cave 2, dating to the time of Hatshepsut, indicates that the port was reopened in the 18th dynasty (Bard and Fattovich 2007: 150) and thus was in use at the time pilgrim flasks were in circulation. Excavators at the site have suggested this was the port for expeditions to Punt (Bard and Fattovich 2012: 27), a kingdom likely located in Eastern Sudan or Eritrea (Kitchen 1993: 604; Planet Today News 2018). This harbor could in theory have been used to trade with other southern kingdoms in Nubia.

Mryt, maritime ports, were situated along the coastal plain of the Levant and the Egyptian Delta, and ships likely sailed inland along the Nile before unloading their cargo (Fabre 2004: 47). However there was also a network of overland routes in use for a broad scope of interactions including military, mining of resources, and trade (Mumford 2017: 35). These land connections involved the use of pack animals such as oxen and donkeys, and later, horses (Köpp 2013). The Ways of Horus was a key route that ran through the Sinai between Egypt and the Levant and was in use from the Predynastic period (Hoffmeier and Moshier 2013). Waystations, fortresses, and wells (Hendrickx, Förster and Eyckerman 2013) were constructed by the Egyptian state to enable safe travel along this land bridge, which suggests the road was strategically important (Al-Ayedi 2000: 4–6). Tradable goods such as pilgrim flasks could also

have entered Egypt via this land connection. Oasis vessels including flasks were imported into the Nile Valley via routes such as the Luxor-Fashut road, where they were most prevalent during the 25th–26th dynasties (Darnell 2000: 227–228). Land routes into Nubia were also significant, with some leading to specific desert resources, and others designed to avoid hostile Nubian populations (Mumford 2017: 36–37). Many roads were positioned to avoid inconvenient bends in the Nile, such as the Meheila path. The higher quantities of Palestinian juglets in Nubia than in Middle and Upper Egypt (Bushnell 2016: 211) may suggest the use of a direct trading route from the Levant or the Delta to Nubia.

Once items arrived in Egypt, travel along the Nile was the most convenient transport route. Several cities were founded in the New Kingdom that were ideally located on the Nile for easy access to these sea trading routes (c. 1550–1070 BCE), Qantir or Pi-Ramesse being a notable example. This city was founded during the late Second Intermediate period, before being reoccupied by Horemheb (Aston 1998: 3) and expanded during the reign of Ramesses II. The significant quantity of imported Levantine vessels at the site – including 28 pilgrim flasks from area Q1 alone (see Cat. Nos. 584–611) – indicates that a strong exchange network existed between Qantir and the Levant, likely because of their proximity. Levantine pottery occurs at numerous sites within the Nile Valley in relatively high quantities at sites including Gurob (Gasparini pers. Comm.), Memphis (Bourriau 2010), Amarna (Rose 2007), Tell Nebsheh (Aston 1996: 25), Medinet Habu (Aston 1996: 53) Saqqara (French 2013: 347–351) and Qantir (Aston 1998; Aston et al. 2007: 530–537) among others. Mycenaean pottery was less common than Levantine, and has been found at sites including Gurob (Petrie 1891; Bourriau 1981b: 138; Bell 1985; Bell 1991), Malkata (Hope 1978), Amarna (Hankey 1973; 1997; Rose 2007); Deir el-Medina (Bell 1982) Qantir (Mommensen and Mountjoy 2001; Aston et al. 2007: 540–542), Sedment (Petrie and Brunton 1924a; 1924b), Saqqara (Hankey and Aston 1995; B. Aston 2012: 209; French 2013: 353–355) and Memphis (Bourriau and Hope 2005: 69; Bourriau 2010) among others. Cypriote pottery has also been identified at sites including Memphis (Eriksson 2006), Qantir (Aston et al. 2007), Saqqara (French 2013: 351–352), Kahun (Eriksson 2001: 60), Tell Hebwa (Aston 2011: 14), and Tell el-Da’ba (Maguire 2009: 26) among others. Oasis pottery was particularly prolific at Karnak Nord (Jacquet-Gordon 2012) and occurred along desert routes into the Nile Valley (Darnell 2000: 211). Large sites such as Qantir likely processed imported goods before arranging down-the-line redistribution via the

Nile, with deposits of imported vessels concentrated in important urban sites. This suggests that a majority of vessels were entering the consumer market via officially sanctioned expeditions.

Levantine and Mycenaean ceramics, including pilgrim flasks, were also exported to Nubia. While this alludes to the region's inclusion in broad exchange networks across North Africa and the Mediterranean, their presence was most likely indirect, down-the-line trade via Egypt. Levantine flasks have been confirmed at Hillat el-Arab (Vincentelli 2006: ARA10, 19) Amara West (Spataro, Millet and Spencer 2015), and Sai (Budka pers. Comm.) while Mycenaean flasks have only been identified at Amara West (Spataro, Millet and Spencer 2015), Askut, Tombos (Smith 2007: 5; pl.3) and Buhen (Cat. No. 123; Schiller 2018: tab. 1). Cypriote pottery has been identified at Aniba (Eriksson 1993: 67–68) and a lone Cypriote example has also been tentatively suggested at Amara West (Spataro et al. 2015). No Oasis pottery has been confirmed in Nubia. The more restricted scale of these imported vessels suggests that they were highly valued in Nubian contexts.

However Egyptian pottery was a significant export to Nubia. Site H25 in the Northern Dongola Reach contained a striking quantity of pilgrim flasks for a small rural site and has been hypothesized as a distribution centre for the area (Thomas 2014: 67). The presence of marl clay sherds and storage jars – including a marl clay pilgrim flask found propped against the wall in a magazine at the site (Pooley pers. comm.) – points to centralized organization at this rural site in the New Kingdom and may suggest a far-reaching Egyptian trading presence. Pilgrim flasks at Egyptian temple-towns likely relate to regulated, state trade from Egypt into these ‘colonial’ spaces, and point to the elite networks from which high officials would have been able to draw – particularly in the case of rarer Mycenaean flasks.

A fall-off pattern in pilgrim flask deposition in Nubia is discernible corresponding to the distance from Egypt and Egyptian sites. Large quantities of flasks can be identified north of the Third Cataract, with significant deposits at Egyptian colonial sites such as Sai (Minault-Gout and Thill 2012) before proportions decrease away from these centres. This distribution suggests that Levantine and Mycenaean ceramics were entering Nubia via Egyptian channels. Analysis of distribution patterns (see **Map 2**) suggests that the Meheila road running from

Kawa to Gebel Barkal may have been particularly significant in the New Kingdom, where trade routes diverged from the Nile and travelled overland to the Gebel Barkal area; the fall-off pattern in pilgrim flask deposition south of the Northern Dongola Reach, accompanied by a large cluster of flasks around Gebel Barkal, suggests the use of a desert path to this region (see Chapter 6). This area may have been a focal point for trade – during the Post-New Kingdom period Hillat el-Arab (Vinentelli 2006) and Sanam (Griffith 1931; Lohwasser 2010; 2010b; 2012), both located close to Gebel Barkal, contained significant amounts of pilgrim flask remains in burials, including Levantine imports (e.g. Cat. No. 91).

While such official exchange channels are highly visible in the archaeological record, individual exchange or the retaining of personal possessions was also a viable route for pilgrim flasks into Sudan. Rose (pers. Comm.) has noted that flasks found at military sites such as Sesebi should perhaps be considered individual soldier's possessions, rather than as evidence of trade. Bergoffen (1990: 309) has suggested that the substantial distribution of Base Ring I juglets across Egypt and Nubia indicates these may have been acquired in the Near East through individual commercial transactions, 'by Egyptian soldiers, petty officers, scribes and the like while on active campaign', something also postulated for the pre-palatial Kamares Ware sherd found at Mersa Gawasis (Bard and Fattovich 2012: 24). Individuals in Nubia perhaps exchanged pilgrim flasks via private transaction. This sort of invisible economic transition is difficult to quantify, but can perhaps be identified via the unusual context of the vessel and its status as an outlier in typical distribution patterns. The idea that soldiers stationed far from home or officials assigned to a colonial post might be predisposed to bring along familiar items cannot be understated.

4.2.1. Petrographic analysis

Petrographic analysis on foreign ceramics in Egypt and Nubia suggests a range of manufacturing regions were exporting vessels to the Nile Valley, particularly amphorae. These vessels were specifically designed for maritime exchange, and the development of the pointed base as a standard aspect of amphorae is likely related to this (Knapp and Demesticha 2016: 166). This exchange network stems from the Middle Bronze Age, when the number of fabric composition groups among the storage jars at Memphis (Ownby and Bourriau 2009: 177–181)

and Tell el-Dab'a (Cohen-Weinberger and Goren 2004) demonstrates that Egypt was exploiting a range of centres, likely for specialised contents. Several fabrics were only found in one Egyptian region, alluding to close commercial links between specific cities – Canaanite jars from the Syrian coastline were for example only found in the northeast Nile Delta. By the Late Bronze Age, the Canaanite jar shape had standardized and was found across the Nile Valley and along the Red Sea Coast (Knapp and Demesticha 2016: 187). The compositional fabrics of these jars in the Late Bronze Age is complex and suggests use of a range of production centres, with some areas continuing to export jars from the Middle Bronze Age and others new (Knapp and Demesticha 2016: 201–202).

The Canaanite Amphora Project (Serpico and Bourriau 1996; Bourriau, Smith and Serpico 2001; Smith et al. 2004) studied foreign vessels found in New Kingdom deposits at Memphis and Amarna, and identified five production regions across the Levant and a sixth in Cyprus. Although this work focused on Canaanite jars, two imported pilgrim flasks were also found: a complete example dated to the 19th dynasty in fabric P30 – compositional Group 1 in a coastal sand clay – and a neck sherd dated to the early 18th dynasty of P31 – compositional Group 2 in *hamra* clay. Bourriau's (2004: 82) suggestion of a link in the manufacturing process between pilgrim flasks and amphorae in the Levant may indicate that the forms were produced in the same workshops by the same potters, exploiting a specific resource and ultimately exported by a single administrative system.

Changes in local fabric preference may indicate corresponding shifts in centres of production. One of these shifts can be observed with a change in use of marl clay (see Section 0.2 for full fabric discussion). During the early–mid New Kingdom in Egypt, the majority of marl pilgrim flasks were manufactured in a marl D fabric (Aston 1996: 65). This fabric was extremely hard and fired to a red, beige or olive colour, with a large quantity of irregular limestone particles causing the surface to feel gritty. The outer surface was ubiquitously covered with a thick cream slip, and was dominant in the Delta and Memphis/Fayyum regions from the mid–18th dynasty to the start of Aston's Phase I of the Third Intermediate Period (c. 12th–10th centuries BCE). The early appearance of a marl D vessel in a Second Intermediate Period deposit at Memphis indicates it is likely a northern fabric produced in the Memphite region (Aston and Aston 2001: 51) before reaching Thebes during the reign of Hatshepsut (Lilyquist

2003: 65). The fabric was used to produce a range of forms in the Memphite-Fayyum region, including amphorae, large and small jars, mugs and flasks (Aston and Aston 2001: 58; Aston-Greene 2005: 113–115; French 2013: 322–330). However marl D wine amphorae have been found deposited throughout the Nile valley and it is likely the Memphite region was producing these for specific contents in specialist workshops during the 18th and 19th dynasties and transporting them across the country. By Aston's Phase I of the Third Intermediate Period (c. 12th–10th centuries BCE) however, this fabric has disappeared and all flask examples he examined were in marl A4 Variant 1 (Aston 1996: 65). This fabric was a common New Kingdom clay originating in the south of Egypt (Bourriau 1981), which is high in naturally occurring limestone and fires to a light cream external surface with a pink or occasionally green homogenous fracture. This change in clay source may relate to shifts in the production centres and subsequent availability of marl D, or perhaps a shift in the use of the flasks. Marl D may have been restricted to elite circles, but as the flask form became more popular a more readily available fabric may have been required to intensify production. An increased use of Nile silt for pilgrim flask production has been postulated post 19th dynasty (Aston 1996: 62); however the evidence seems rather to demonstrate (see Chapter 5) that numbers of the form were increasing in general in both Nile silt and marl clay.

Marl clay flasks appear Nubia from the 18th dynasty (e.g. Cat No. 103). Marl clay vessels in Nubia were almost certainly imported from Egypt (Rose 2017: 466); marl clay was not used in Nubian ceramic technology prior to the Meroitic period (Bourriau 1981: 98; Edwards 1999) and was obtained from the cliffs and wadis in Egypt (Bourriau, Nicholson and Rose 2009: 121–122), which makes such imports easy to identify. However, distinguishing whether Nile silt flasks were manufactured in Egypt or locally produced in Nubia is difficult. Large quantities of mica in the clay may indicate a Nubian origin for select flasks produced in the Second Cataract region (Knoblauch 2011; 2017). I consider it highly likely that Type E flasks (see Chapter 6) found in early Napatan contexts were locally manufactured, based on their crude finishing and rarity in Egypt.

4.3. Textual evidence

It is difficult to identify pilgrim flasks in the written record, as archaeologists are often unable to correlate vessel names referred to in sources with physical vessel forms. However, it is possible to assess textual evidence for trade with the Levant and Eastern Mediterranean, which allows an understanding of the methods through which flasks may have entered Egypt.

Written sources referring to trade are restricted to elite contexts in Egypt, and detail economic transactions between wealthy individuals, the king and individuals, and the king and foreign princes. Such texts encompass administrative documents or monumental inscriptions (Bleiberg 1995: 1373). Although exchanges involving poorer sectors of society are excluded from this repertoire, these sources are significant markers for analysing the official exchange market, via which pilgrim flasks were imported into Egypt and Nubia.

References to officially sanctioned expeditions to Nubia and the Levant in several New Kingdom texts reveal information on exchange routes between regions, and explain how goods were trafficked south after arrival from Levantine or Egyptian production centres. Travel by boat on the Nile was often the only practical means of communication in Egypt and Nubia (Eyre 2010: 292), although south of Aswan the presence of Cataracts made movement more difficult. Evidence for movement of both peoples and goods via boat is prolific in the New Kingdom – Ahmose son of Ibana refers to three river voyages south to Kush under the reigns of Ahmose, Amenhotep I and Thutmosis I:

ḥr-m-ḥt smꜣ.n ḥm=f mntiu stt wn.in=f ḥr ḥntyt r ḥnt-ḥn-nfr r sksk iwntiw-sty

After his Majesty killed the Bedonin tribes of Asia, he sailed south to Khent-ben-nefer, to destroy the Nubian nomads

Sethe 1907: IV 16–17

wn.in=i ḥr ḥntyt nsw-bity (ḏsr-kꜣ-rꜥ) mꜣꜥ-ḥrw iw=f m ḥntyt r kš r swsh tꜥšw Kmt

Then I conveyed the Dual King (Djoserkare), Justified, as he sailed south to Kush, to widen the borders of Egypt

Sethe 1907: IV 23–24

*wn.in=i hr hnyt nsw-bity (ʕ3-hpr-k3-rʕ) m3ʕ-hrw iw=f m hnyt r hnt-hn-nfr r sswn h3ʕy
ht h3swt r dr bs n ʕh3swt*

*Then I conveyed the Dual King (Aakheperkare), Justified, as he sailed south to Khent-ben-nefer, to
crush rebellion throughout the lands and to drive off entrance from the desert regions*

Sethe 1907: IV 29–30

Sea routes to the Levant are referenced in later literature, such as in the Late Period Tale of Wenamun:

*wḏ.wy r mk hr mnšw Mng3b3t iw=i h3y r p3y mw ʕ3 h3rw r 3bd S rʕ H iw=i spr r dyr
dmi n t3h3r*

*I departed with the ship's captain Mengebet. I went down into the great Khonian sea on the 4th month
of the 3rd season on the 1st day. I arrived at Dor, a city of Thekel.*

Gardiner 1932: 8–11

As discussed later (see Section 4.6 for discussion of contents), I believe the evidence points to pilgrim flasks containing several luxurious liquid contents across the form's use span, but particularly being associated with perfumed oils. The exchange network for aromatic oils around the Eastern Mediterranean is discussed in a number of contemporary texts (e.g. Moran 1992; Watson 2012; Bushnell 2013: table 5.1). The import of oils into Egypt had existed since the Old Kingdom, with the Papyrus of Ipuwer referencing the disruption of oil trade from Byblos and Crete (Tzedakis and Martlew 1999: 47). By the New Kingdom, this trade was commonplace and oils were essential to public social arenas in domestic, religious, and beautification activities (Hulin 2006; 2009; Bushnell 2013: 371). Several of the Amarna Letters reference the gift exchange of such oils. EA22, a letter from the Mittanian king Tušratta, lists an inventory of gifts sent to Amenhotep III that included:

*1 scent container, with myrrh-scented oil. 1 scent container with sikil-oil. 1 scent container with iaruttu-
oil. 1 scent container with kanatku-oil. 1 scent container with elder-oil. 1 scent container with styrax-
oil. 1 scent container with peršanti-oil. 1 scent container... 1 scent container with a mixture (of various
oils). 10 kirru-pots, full of sweet oil.*

We know that small, restricted flasks contained these oils (Bushnell 2013: Table 5-2); analysis of Red Lustrous Wheel Made flasks showed their contents to be varying plant oils (Eriksson 1993: 143; Knappet et al. 2005; Bushnell 2013: 324), while Merrillees (1989) has suggested that Cypriote juglets contained an opiate-based oil. Based on their similar morphology, pilgrim flasks are also ideally shaped for oils (Bergoffen 1990: 283; full discussion Section 4.6). Indeed Helck (1962: 415) identified 11 vessel types used to transport the multitude of oils imported into Egypt from the Near East and Eastern Mediterranean – including a pilgrim flask (Helck 1962: 419, 2) with contents from as far as Syria, Naharin (a region of Mitanni in Anatolia) and Alashiya (a kingdom of Cyprus). Papyrus Anastasi IV 15 lists a selection of these oils, which include Moringa-oil of Naharin and the finest *ḳdwr*-oil of khatti (Caminos 1954: 200).

Containers may also have entered Egypt through less official channels; with the role of the military within these economic processes an important consideration. Tuthmosis III initiated the practice of soldiers collecting tribute across the Levant (Bergoffen 1999: 75). A reference in Papyrus Anastasi IV to seven varieties of cosmetic oil provided for Pharaoh's soldiers (Erman 2005: 209) suggests that rewards of local commodities accompanied these military jobs, and perhaps encompassed *mrHt*, the 'Seven Sacred Oils' which appeared on tomb reliefs from the 4th dynasty and continue to be mentioned in offering scenes until the Saite period (Pischikova 1994: 65–66).

4.4. Pictorial evidence

Images of trade activities are also restricted to the elite sphere. While pictorial reliefs in temple or tomb contexts were biased towards the promotion of an ideologically appropriate world-view (Lephrohon 2015: 309), their elements were drawn from reality and are important conduits for understanding trade and exchange processes.

Tomb reliefs in Egypt allow further consideration of the plurality of trade. Reliefs in royal spaces, such as those detailing the Punt expedition at Deir el-Bahari (Naville 1895; see Section

2.3.3) suggest much was state-controlled, with revenue intended for the royal court; indeed royal support would have been essential for the organisation, support, and protection of long-ranging expeditions (Bleiberg 1995: 1382). Travel by officials would have been via this state-sponsored medium. However this link between elite mortuary spaces and the royal court meant that idealizing all trade as connected to the King would have been beneficial, and some royal elements of these images may be propagandistic.

Two New Kingdom reliefs depict maritime exchange with the Levant. One is from the poorly preserved Grave of Senye, published in brief by Müller (1904: Tafel III). The second, Theban Tomb 162, is well preserved and includes the lone pictorial evidence for the transport of a pilgrim flask. This belonged to Kenamun - Mayor of Thebes and Superintendent of the Granaries of Amun – and depicts Syrian ships offloading cargo in Egypt (Davies and Faulkner 1947). One of the Syrian crewmen is shown holding a pilgrim flask (**Figure 4.1**) (Davies and Faulkner 1947: pl. 8), providing incontrovertible evidence that flasks were imported from the Levant. Prestigious or economically valuable foreign trade was ‘closely connected to the palace, and in the New Kingdom to the great temples, since it was tied closely to diplomatic and military policy’ (Eyre 2010: 296) which explains Kenamun’s association with these commodities.

Few images are known from Nubia. Tomb ARA 1 at Hillat el-Arab depicts a man travelling in a paddle-boat on either side of the doorway into Chambers D and F (Vincentelli 2006: colour plate 1, 3), although this likely reflects personal travel rather than trade. Images of large ships are known from funerary temple KXI at Kerma (Bonnet and Valbelle 2000: fig. 52; 63) which may be related to trading activities.

4.5. The economic system in Egypt

The circulation of goods in a society relies upon the established structures and mechanisms of both production and consumption. Sources for understanding the Egyptian economy are primarily ceremonial – including scenes on temples and tomb walls as well as textual sources describing feasts, offerings and endowments – and administrative – including seals and

administrative documents describing litigations and exchange. However, understanding whether the cases described in such sources were typical synchronically and diachronically is complex (Bleiberg 2007: 175–176). The ceremonial sources in particular refer purely to ideological, rather than economic, motivations for expeditions.

Polyani (1957; 1977) affirmed that economic processes are ingrained in the social and political context in which the economy exists. His system outlined pre-monetary economies as involving three modes of circulation of goods: reciprocity, redistribution, and exchange. In ancient societies, these systems were hypothesised to function in place of a modern market economy – whereby the price of items fluctuates according to supply and demand. Bleiberg (1995: 1382) has commented that Polyani's redistribution model is the most suitable arrangement for understanding the non-monetary Egyptian fiscal system. Redistribution works as 'a way to reallocate to the producers the products of the labour of a society which are collectively produced, centrally collected and stored (Renger 1994: 177). In this way, the state collects a surplus from the populace as a tax, which is then distributed across society – grain, for example, was a major surplus in Egypt and was collected and redistributed among members of society that did not produce their own food, such as craftsmen. Beneficiaries then used this for the acquisition of other goods (Warburton 1997: 326).

Warburton (1997: 94) has challenged the primacy of an Egyptian redistributive economy, stating that while there was much evidence for the collection of income, there was little demonstration of its redistribution. However I disagree with his rigid definition of redistribution, which assumes items were distributed among the populace for free rather than collected as a tax and provided as wages, gifts, or as part of a market exchange. Many examples of this sort of redistributive system exist in Egypt.

Redistribution is intricately linked to reciprocity, which characterized the Egyptian state system from the Predynastic period. Economic coordination and unification in Egypt relied in part upon the ability of a ruler to reward subjects with desirable status goods (Hassan 1993: 554). This reciprocal relationship – whereby a ruler's power and his ability to preserve access to status items were exchanged for loyalty (Sahlins 1963; Steponitis 1978: 421) was likely a key

factor driving Egyptian expansion and state expeditions throughout history. This system became a major concern of Egyptian economic life (Bleiberg 1995: 1373).

State redistribution was a key aspect of Egyptian bureaucracy. Royal granaries and treasuries were responsible for collecting tax across Egyptian history, and also distributed revenue, with officials affiliated with palaces and dockyards authorizing subsequent dissemination (Muhs 2016: 115). By the New Kingdom however, the central role of temples in this fiscal system is clear (Janssen 1978: 509). Kings bestowed endowments upon particular temples that became major economic actors in Egyptian administration (Warburton 1997: 302), collecting taxes, owning land, conducting mining expeditions and hiring dependents. Temples within both Egypt and Nubia were endowed with land to increase their economic standing, and were later increasingly responsible for mounting resource expeditions to mines (Muhs 2016: 135): the Nauri decree records dependent members of the mortuary temple of Seti I at Abydos who were working in Nubia in a variety of agricultural and craftsmanship roles (Muhs 2016: 125).

Reliefs in royal spaces, such as those detailing the Punt expedition at Deir el-Bahari (Naville 1895; see Section 2.3.3), suggest that much of this trade was state-controlled. However, Warburton (1997: 87) has pointed out that while there may have been no price-making market, this does not negate the possibility of private market-level exchange activity. These practices were not state-led, hence why they do not feature heavily in official sources. There is evidence that a market economic system existed in parallel with this redistribution. While individuals such as the workmen at Deir el-Medina were paid their wages via grain and other food rations (Mandeville 2014: xiii), dependents would then be required to go to exchange centres to conduct economic transactions for items that they did not receive from the state (Warburton 2016: 168).

Although these private systems are much more difficult to access in the archaeological record, market stalls represented in tombs (Fabre 2004: 188) likely represent private businesses (Bleiberg 2007: 178) and offer our best evidence for individual trade. Davies and Faulkner (1947: 45) note that “there seems to have been no regulation against small-scale private trading”, with depictions showing individuals engaging in personal trade with passing sailors. Evidence for lower-level market activity is prolific in Old Kingdom tombs (Eyre 1998) and is

often represented by a ship carved in a lower register (Bleiberg 1995: 1383), with accompanying images showing individuals selling both perishable and non-perishable goods at the riverside. Women are typically shown manning these stalls, and Eyre (1998: 173) has suggested that this commerce was part of a gendered household economy. Such scenes continue in the New Kingdom: a market scene in the tomb of Ipuw at Deir el-Medina, TT217, shows men on grainbarges trading with women at the riverbank (Davies 1927: pl. xxx and xxxiv). Such individual enterprises were likely significant forms of economic activity in local society (Eyre 2010: 295) and the prevalence of female traders may suggest a gendered activity. Captions on these reliefs allude to a bartering system (Bleiberg 1995: 1383). In a pre-monetary economy, although prices were not reliant upon supply and demand, they relate to ‘whatever a person is willing to sacrifice in order to acquire the good in question, or whatever he is willing to receive to part with it’ (Warburton 1997: 88). Witness records of exchanges at Deir el-Medina (Cooney 2007: 44–68) indicate that this exchange was more common than the archaeological record suggests (Muhs 2016: 127).

The New Kingdom saw Nubia absorbed into the Egyptian economic system, which is likely the motivation behind the development of the colonial or ‘Temple Towns’ across Nubia after its absorption during the reign of Tuthmosis I (Török 2009: 185). Lower and Upper Nubia were administered separately, and a King’s Son of Kush (see Section 2.3.1) assigned to each, centring on Aniba and Soleb/Amara West respectively. However, evidence suggests that Upper Nubia was primarily left in the hands of local rulers and there is no evidence that in practice viceregal rule extended south of the Third Cataract (Edwards 2004: 106). Both regions were highly taxed for goods such as cattle, ivory, and gold, with differentiation based upon their available resources. Lower Nubia (w’w’t) was taxed 16 times the annual gold production than Upper Nubia – c.260kg annually – whereas Upper Nubia (kS) was taxed 4 times heavier in slaves and cattle (Morris: 2005: 183–184). Official sources frame these taxes as ‘tribute’, although they were more likely transactions involving exchange of goods (Liverani 1990: 240). Levels of Nubian revenue appear to decrease in the 20th dynasty (Morris 2005: 782ff), possibly as the region became increasingly impoverished over the course of the New Kingdom (Trigger 1976: 131; Edwards 2004: 108–109). The Redistribution model is problematic when applied outside of Egyptian New Kingdom elite spaces, however, particularly Nubia, and we currently have little material for ascertaining economic models for

the Kerma, the Post-New Kingdom and Napatan periods in Sudan. This fiscal system must be firmly embedded in a culture's ideology and social structure in order to be feasible, and there is currently no evidence for such a mechanism in earlier Kerma contexts. Within this framework, once pilgrim flasks were brought to either Egypt or Nubia, they could have moved between communities via both official and private methods.

4.6. Potential contents

The increased accessibility of luxury contents – such as wine and olive oil – was a characteristic feature of the Late Bronze Age. In Egypt, the preference for closed forms – such as stirrup jars from Mycenaean Greece, Canaanite amphorae from the Levant, and spindle bottles and base-ring juglets from Cyprus – as opposed to open vessels indicates that a variety of precious liquid contents, often only available in small quantities, were specifically desired by the Egyptians, rather than serving and display vessels. Bushnell (2013) and Hulin (2006; 2009: 44) have argued that this reflects the Egyptian preference for the display of perfume consumption, particularly foreign imports, in a public social arena. The pilgrim flask fits well into this milieu. However, direct archaeological evidence for the contents of flasks is limited. Textual evidence (Bohleke 2016) and residue analysis (Namdar et al. 2013) have provided two disparate indications of contents of some pilgrim flasks. They were certainly used to carry a liquid (Eriksson 1988: 177). Their small storage capacity and restricted morphology point to a precious liquid which many have argued, based on Egyptian consumption practice and their parallels with other vessel types, was likely often although not exclusively intended for perfumed oils across much of its use (Bourriau 1981: 75; Anderson 1990: 45ff; Bergoffen 1990: 283–288; French 2013: 327; Gallorini 2013; Steel 2013: 133; Schiller 2018: 98). The presence of 51 flasks on the Uluburun shipwreck, however, suggests that this was not a restricted content. Finally, it is important to remember that it is unlikely any vessel was restricted to a single content across both its synchronic and diachronic life biography. In this section, I will discuss evidence for the contents of the flasks to reconstruct how they might have fit into ancient pathways.

4.6.1. Vessel use

'Today's gift is tomorrow's commodity. Yesterday's commodity is tomorrow's found art object. Today's art object is tomorrow's junk. And yesterday's junk is tomorrow's heirloom'

Appadurai 2006: 15

The potential for artefact 'leakage' (Dann 2009) is an important consideration when analyzing evidence for the contents of vessels. The 'biography' of a vessel, or its *chaînes opératoires* (Nordström 2004: 248) can encompass several distinct life-stages and a pot may have accrued many different meanings across this (Steel 2013: 190). Manufacture and exchange of an item are only two phases in this biography (Appadurai 1986: 17), and across its use-life (see Peña 2007: fig. 1.2) it was often involved in a series of practices by the consumer, including reuse, recycling, and reclamation. Peña (2007: 10) identified three types of reuse practices:

Type A: Reuse involving an application similar to the vessel's prime-use application without any physical modification.

Type B: Reuse involving an application different from the vessel's prime-use application without any physical modification.

Type C: Reuse involving an application different from the vessel's prime-use application involving physical modification.

Type C can be observed in archaeological deposits across Egypt and Nubia; in Memphis, for example, a Mycenaean globular flask was cut down after breakage to reuse for a gaming piece (Bourriau and Eriksson 1997: 96). However Types A and B are more challenging to identify. Imported amphorae were buried up to the shoulder in floors at H25 (Thomas 2014: 63) and likely represent the reuse of vessels for domestic storage. While we can hypothesise that such vessels continued to be used after their original contents were exhausted, it is difficult to demonstrate this. Pilgrim flasks were probably similarly refilled with alternative substances once their original content was exhausted.

Appadurai (1986: 26) notes that the diversion of artefacts from their traditional paths – that intended by the manufacturer – is a sign of creativity or crisis. The transformation in use of pilgrim flasks between the Egyptian and Nubian cultural spheres is a classic diversion. Groups in Nubia displayed signs of the crisis of colonization, which resulted in the creative response to the alien material culture flooding the market. Different distribution patterns reflect this transformation in use between Egypt and Nubia (see Chapter 8).

Different responses to goods over time mean value was also dynamic. Value is socially constructed and reflects both an object's association with activities and people and its relative inaccessibility (Steel 2013: 124). Simmel (1978: 67) has defined valuable commodities as those which are difficult to acquire, or that 'resist our desire to possess them'. As such, the first imported pilgrim flasks were likely highly valuable. Over time, as they began to be manufactured locally and became more easily accessible, this value will have decreased. In Nubia, conversely, their continued imported state in many cases suggests that the form had a higher value index than in Egypt and may have been related to ritual practices (see Chapter 6, 8). The production of objects for ritual use belongs to a particular form of exchange in which items have a specific ritual biography (Appadurai 1986: 23). Such items have diverted from their traditional path, and in many cases, are not permitted to become commodities.

4.6.2. Morphology

A primary avenue for analyzing potential vessel contents is morphology, as this can be indicative of practical use considerations. It is likely that most vessels were used for a variety of functions, but morphology may hint at general contents.

What does analysis of pilgrim flask morphology suggest regarding its potential contents? The small size of the body of the flask would only have been able to contain a limited volume, suggesting a semi-luxurious content. Rare larger examples were perhaps used for primary transport, intended to be decanted into smaller vessels upon arrival. This ultimately suggests a liquid designed to be used in small quantities. This liquid was thin, as unguents required a spoon or similar tool for extraction, which would be impractical to insert into the narrow flask neck. The consistency of these attributes suggests a specific, original design, similar to the

specific and consistent design of the stirrup jar (Leonard 1981: 91). The single narrow aperture of the pilgrim flask means that any liquid contents would need to be poured out slowly – air pressure in a full vessel would be lower than the atmospheric pressure when opened, meaning air would be sucked inside, making the liquid ‘gulp’ out as poured – this would be problematic for many liquids but would not affect oil, which would pour steadily. The long, thin neck and pronounced rim would be particularly conducive to the extraction of small quantities, and would in turn have prevented evaporation of its contents. The small orifice in turn suggests infrequent access, and rim specialization such as that observed on pilgrim flasks facilitates use of a stopper (Knapp and Demesticha 2016: 135), or a covering tied with rope (Rose 2016: 192).

This morphology has often been used to suggest pilgrim flasks held oil contents (Anderson 1990: 45ff; French 2013: 327; Steel 2013: 133; Schiller 2018: 98), and Mycenaean flasks have more specifically been suggested as part of the perfume industry (Leonard 1981: 96; Mountjoy 1993: 72; Stockhammer 2012b: 943; Steel 2013: 134). Bushnell (2016: 41) has suggested that most evidence points to the use of all juglets, including pilgrim flasks, for aromatic infused oils. Leonard (1981: 91) hypothesised that stirrup jars and pilgrim flasks had identical functions, due to the similarity of their spouts in size, shape, and diameter, with both used to transport olive oil for food consumption. Although residue analysis on stirrup jars (Tzedakis and Martlew 1999: 32) supports the idea that stirrup jars were primarily used for olive oil in some contexts (and sometimes wine – Tzedakis and Martlew 1999: 153), dockets on 5 handled storage vessels in two forms in Marl F at Saqqara indicate these types were also used for olive oil (*nhh*) in Egypt (Aston 2008: figs 2, 3), with jars in both Egyptian and Canaanite fabrics known, suggesting olive oil was both imported and locally produced (Aston 2008: 19–20) and not restricted to the stirrup jar. Furthermore, others have suggested stirrup jars were also used for wine and perfumed oils (Mountjoy 1993: 74). However, the ‘unique and canonical’ design of stirrup jars that he observes to have been deliberately designed to transport and dispense oil, and to be continually manufactured for several centuries, suggests that flasks – with their distinct morphology – were used in a different capacity, and the significantly smaller size of the pilgrim flasks would make their use for olive oil impractical. It is more likely aromatic oil was stored in pilgrim flasks.

4.6.3. Wine

The discovery of pilgrim flasks (Cat. Nos 332–333, 801–803; see Section 5.4) bearing hieratic inscriptions in TT99, the Tomb of Senneferi at Thebes, provided vital clues for understanding pilgrim flask contents. Three Type Ai.2 flasks were decorated with concentric circles featuring geometric motifs in the centre, and bore inscriptions reading ‘Wine for the [New] year’ or ‘Good wine for Regnal Year 38’ (Bohleke 2016: 243–245; Rose 2016: 201–203) suggesting that the flasks contained special wine intended to be opened in the future for a specific event, or as a souvenir of a time when the deceased was particularly honoured (Bohleke 2016: 243). This reference to the New Year is reminiscent of the inscriptions on the Late Period New Year flasks, of which 85% bore a New Year propitiatory formula, usually dedicated to a Memphite deity (Blanquet 1991: 49). It has been suggested that these New Year Flasks contained water from the Nile Inundation (Blanquet 1991: 52; Friedman 1998: 229–230). However these earlier flask examples referencing the New Year may mean the New Year Flasks instead contained wine, although the long chronological gap may dispute this.

Many vessel types are known to have contained wine, primarily amphorae but also handleless jars and one-handled juglets (Aston 2008: 21–22; figs 4–5). Wine was a luxury but clearly not reserved for royalty, as it was widely available (Lesko 1995: 230). Although the majority of wine containers are large vessels, these docketts make it clear that some wine was bottled in small vessels such as juglets and pilgrim flasks. These smaller amounts were perhaps particularly valued vintages, a dessert-style wine, or reserved for ritual purposes. Later evidence suggests that amphorae from the Western oases contained wine (Hope et al. 2002: 95), and the large quantities of Oasis pilgrim flasks imported into the Nile Valley in the Late Period (see Section 5.7) may too have contained wine (Hope 2002: 190), perhaps of a different sort, although docketts referring to wine in Oasis vessels are restricted to amphorae (Hope et al. 2000).

However, the designation of several very different vessels for similar contents (Aston 2008: 23) should caution us against assuming that the evidence of 3 docketts means all pilgrim flasks thus contained wine. The small size of many examples would be impractical for storing wine, which was often required in significant quantities and thus stored in large amphorae. The

small orifice of the pilgrim flask would cause wine to ‘gulp’ and spill when poured. Furthermore, these are the only known pilgrim flasks to state they contain wine, in contrast to the thousands of amphorae dockets detailing wine as their contents (Lesko 1995: 220–228). Recent residue analysis further complicates the picture.

4.6.4 . Residue analysis

Substance residues are sometimes visible on the surface of vessels, but more often are absorbed within the porous structure of the fabric walls. Scientific analysis via methodology such as Neutron Activation Analysis is often the only way to directly determine organic contents of a vessel (Pollard, Batt and Stern 2007: 148). The accuracy of such methods has been demonstrated by experimental archaeology (Evershed 1990; 2008).

Limited substance analysis has been conducted on pilgrim flasks, with inconclusive results. In Egypt, Quibell notes that Lucas analysed the contents of one of two pots at Gurob, one of which was a Type Hii flask (Quibell 1901: 142–143; Cat. No. 773), and the analysed pot was found to contain gum resin. It is however not specified whether this was carried out on the pilgrim flask or the second vessel. Thomas (1974: 45) notes that Arkell tipped a pilgrim flask from Gurob (Cat. No. 1631 – referenced as UC18121 but incorrect) upside down causing some of the contents to run out, which were dark, sticky, a rich dark brown, resinous in appearance and consisted of small lumps and strands, with a faint musky smell. A marl example dating to the 18th dynasty at Gurob (Cat. No. 25) was analysed by Margaret Serpico in more detail. A sample from the neck of the vessel was analysed by FT–IR. The result was a mixed liquid, made up of a lipid and an unknown substance. Recent studies on Mycenaean Globular forms have identified the potential presence of animal fats in two Cypriote Globular flasks (Tzedakis and Martlew 1999: no. 29–30). Animal fats were used as a vehicle for perfume (e.g. Foster 1974: 38; Manniche 1999: 85; Byl 2012: 89), and it is likely that the small quantities of extract remaining in these pilgrim flasks represent the remains of an aromatic perfume.

The University of Haifa used GC–MS analysis to investigate the contents of twenty-seven pilgrim flasks at five Early Iron Age sites across the Levant (Namdar et al. 2013). Results

revealed that *cinnamaldehyde* was found in ten of the twenty-seven studied pilgrim flasks, 37% (Namdar et al. 2013), while the contents of the remaining 17 were inconclusive. *Cinnamaldehyde* is the main organic compound in cinnamon oil, extracted from the bark of the cinnamon tree. At this period the tree was only found in south/southeast Asia, particularly Sri Lanka and southern India. This compound is found as trace elements in a few select plants, but only in high percentages in the *Cinnamomum* species. The small openings of the flasks means the compound could only have been introduced as a powder or in a liquid form, and likely indicate a cinnamon-based aromatic oil.

It is unknown whether any pilgrim flasks imported into Egypt also contained cinnamon, and there is little textual or archaeological evidence attesting whether cinnamon was used in Egypt during the Late Bronze and Early Iron Age. There is clear evidence for an established trade network with India during the Roman Period, with the earliest incontrovertible textual attestation of cinnamon datable to the writings of Herodotus in the 6th–5th centuries BCE. Cinnamon as an unguent in the Roman world was in high demand, and according to Pliny the Elder was exceedingly expensive (Goddio 2016: 56; Pliny, Trans. Bostock 1855: 2). Roman alabaster – vessels morphologically similar to pilgrim flasks – contained perfumes, oils, or unguents for decorative or medical use, and often had the name of their contents carved on – including fenugreek, sweet marjoram, and cinnamon. BM1895.1020.5, a gypsum alabastron dating to 323–31BCE, bears an inscription identifying its contents as cinnamon perfume (Goddio 2016: 56), and another found in Egypt bears a comparable inscription (Verbanck-Piérard et al. 2008: 434–5, no. V.E.2). A recipe for Egyptian cinnamon oil was given by several Classical writers (Byl 2012: 102). Indeed Diodorus mentions that after the body was cleaned and anointed during mummification, it was rubbed with myrrh, cinnamon, and other oils for preservation (Diodorus, Trans. Oldfather 1887: 91.6; Herodotus, Trans. Grene 1987: 86–88; Manniche 1999: 17; 2006: 96).

However these Roman trade routes were not yet established when the flasks found in the Levant in the Early Iron Age were deposited. These instead indicate earlier, likely indirect, trading contacts, perhaps via Arabia (Artzy 1994: 13). It is possible that some of these spices reached Egypt. Manniche (1999: 17) translates the Egyptian words *tšps* and *ḥt nḏm*

as cinnamon. This material was described in the New Kingdom as being available in bundles, and Egyptian sources dating to this period indicate it was imported from or via the Land of Punt (Chassinat 1929: 387–389). She notes that it was an ingredient for medicinal unguents in medical papyri (2006: 94–97: E534, 540, 553, 687) and has suggested that it was burnt in temples, or used by priests in medicinal preparation (Manniche 2006: 96). There is archaeological evidence for other spices reaching Egypt in the New Kingdom that may support this idea. Naville (1913: 18) mentions the presence of nutmeg shells, native to parts of southern India and Indonesia; along with doms, dates and figs in the 18th dynasty levels at Deir el-Bahari. He suggests the nutmeg was brought back from Hatshepsut's expedition to Punt and was part of a votive offering. However his description of this discovery is brief, which casts some doubt on the reliability of this source. Plu (1985) has demonstrated the presence of black pepper on the body of Ramesses II, which was grown only on the south east coast of India. A small quantity of this compound was found in the abdominal cavity of the mummy, along with cypress, fir, oak, flax and *Citrullus colocynthis* (Plu 1985: 174).

It is possible that some of the early prestigious pilgrim flasks contained oil extracted from spices such as cinnamon from these indirect trade routes. However, once the flask became more widely available to a broader spectrum of society in the Ramesside period, it is likely that the form contained cheaper and more accessible contents.

4.6.5. The link with Canaanite Amphorae

Bourriau (2004: 82) noted that Canaanite pilgrim flasks were often found in association with Canaanite jars and produced from the same fabrics, in both Levantine and Egyptian archaeological contexts (e.g. Aston 1998: 638), and that in Egypt, both pilgrim flasks and Egyptian amphorae were manufactured from marl D in the 18th and 19th dynasties (e.g. Memphis: Bourriau 2010: 83; Qantir: Cat. Nos. 554–560).

Canaanite jars were a form designed for transport (Leonard jr. 1995: 237), and many were imported into Egypt as wine containers in the Second Intermediate Period (McGovern 2000: 75–77). Both imported and locally produced wine amphorae can be observed across

Egypt; a stela from Amarna (AM14122; Dayagi-Mendels 1999: 116) shows a Syrian man drinking from a wine amphora with a straw, while hieratic writing on many Egyptian wine jars (Lesko 1995: 220–228; e.g. Amara West: Binder, Spencer and Millet 2010: pl.10) or stamp sealings (Hope 1993: 96) often directly reference the vineyard from which it sourced wine. Bourriau (2004: 82) has thus suggested that pilgrim flasks may have held a sweetener or flavouring to add to wine. The practice of adding flavourings to wine has been noted at the Middle Bronze site of Tel Khabri in the Levant (Koh, Yasur-Landau and Cline 2014). However, these flavourings were pre-mixed with wine stored in a cellar, rather than being contained in separate vessels.

Egyptian wine amphorae were produced in several regions in the country, and this is reflected in their different clay fabrics. Wine produced in the Western Delta tended to be stored in marl D amphorae (e.g. Tallet 2017: 69), while that of the Eastern Delta and Qantir was most commonly in marl F amphorae (Aston 1999: 5). These clays also changed temporally, with marl D particular common in the 18th dynasty (Aston 1996: 8). These were exported throughout the Nile Valley and were provided to individuals working for the state (e.g. Kitchen 1982: 26).

Evidence suggests that the import of Canaanite jars containing wine to Egypt declines at the start of the 18th dynasty (Knapp and Demesticha 2016: 205–206), with a corresponding increase in local Egyptian wine production and large quantities of wine amphorae subsequently found in Egyptian fabrics (e.g. Aston 2014: 40). The majority of Canaanite amphorae dating after this period were found to contain *pistacia* resin (Serpico 1997; 2000; Serpico and Bourriau 1996; Serpico and White 2000), likely sourced from *pistacia atlantica* Desf., found across the Levant and Syria (Serpico 2000: 885). Its presence on sherds from the Uluburun shipwreck (Mills and White 1989) suggests a significant trade in this resin across the Mediterranean, likely destined for the incense trade (Serpico 1997: 470). This evidence makes the suggested link between the Levantine fabrics used to produce both Canaanite and pilgrim flasks – meaning they came as a set of wine and wine sweetener – unlikely. The link with Canaanite jars (Bourriau 2004: 82) may instead suggest that both forms were part of the perfume/resin trade by the mid-18th dynasty.

4.6.6. Contents conclusions

The evidence thus far indicates that 3 pilgrim flasks in Egypt contained wine for the New or Regnal year (Bohleke 2016; Rose 2016), 1 pilgrim flask in Egypt contained a lipid substance (Serpico unpublished analysis), 7 pilgrim flasks in the Levant contained *cinnamaldehyde* (Namdar et al. 2013), and 2 globular pilgrim flasks in Cyprus contained animal fats (Tzedakis and Martlew 1999: no. 29–30). What then can be inferred from this information?

Current knowledge suggests that our attempts to identify a clear content for each vessel form do not reflect ancient reality, with many contents decanted into the same vessel type, which was perhaps a common household container (Aston 2008: 23; figs 2.2–2.6). The overall term masks the fact that pilgrim flasks likely contained a multitude of contents. Bushnell (2016: 41) notes the important proviso is that they were ‘precious enough to value, use in small amounts and transport in decorative vessels over considerable distances’. It is possible that the morphological distinctions observed within the pilgrim flask form (see Chapters 5 and 6) represented different contents that we are unable to ‘read’. Indeed Bushnell (2016: 41) notes that it is not unreasonable to suppose that flasks and juglets could have contained multiple contents – different specialities for a range of social and religious occasions, each considered appropriate for specific usages by the myriad groups using them and perhaps advertising this to the consumer (Wengrow 2010; Bushnell 2016: 163; see Section 8.5.1). This also occurs in wine amphorae, which took different forms/appearance depending on their production site which likely relates to the vintage inside (Aston 2004; Dark 2001: 40). A flask in the shape of a wine-skin from Iron Age contexts at Gezer (Dayagi-Mendels 1999: 44), for example, may well have held wine or a spice/syrup to add to wine, and indicated this use through its form. Bushnell (2013: 150) has suggested that some juglets including pilgrim flasks may have contained an intoxicant or psychoactive agent, a possibility Merrillees (1989) has explored in relation to Base-Ring juglets. Examples of imported pilgrim flasks furthermore likely contained specialist products from their region of origin.

I consider it likely that pilgrim flasks contained a semi-luxurious liquid content, which was used for specific occasions rather than every day use, and that this was often an aromatic oil. The morphology of the form supports an oil content, with its small orifice, elongated neck and limited storage capacity, similar to other juglet forms (Bushnell 2016: 41). The strong similarities to later Roman alabastra (Goddio 2016: 56; Verbanck-Piérard et al. 2008: 434–5, no. V.E.2), which bear inscriptions detailing their contents as aromatic perfume, supports this idea. The link with Canaanite amphorae, with both shipped together from the Levant and produced in similar fabrics, strongly suggests that both were connected with the resin trade, with perfume an oft hidden aspect of this practice (Serpico 1997: 444). Residue analysis of examples containing lipids (Serpico, Cat. No. 25; Tzedakis and Martlew 1999: no. 29–30) and cinnamon (Namdar et al. 2013), reinforces this conclusion.

There is particular evidence to support the link between Globular flasks and the perfume industry (Leonard 1981: 96; Mountjoy 1993: 72; Stockhammer 2012b: 93; Steel 2013: 134), although the written records pertaining to perfumed oils in the Mycenaean world are brief and difficult to interpret (Foster 1974: 33). Bell (1982: 146) notes that closed Mycenaean forms were typically found in tomb contexts among other toilette items, and that while the content must have been desirable, the fact it appears in both royal and more modest tomb contexts suggests that it was eminently affordable (Bell 1982: 146). Many examples were found in burial contexts, suggesting a link with embalming (Loud 1948, pl. 63–67; Stockhammer 2012b: 923). Textual sources from Linear B documents indicate that oil was a common base for perfume, with flowers such as rose and spices such as coriander added for desired scents (Foster 1974: 71). Tablets refer to ‘perfume-makers’, who produced this commodity and were of relatively high status (Foster 1974: 97), and a centralized administrative body connected to the palace was involved in the distribution of these goods (Foster 1974: 94), which was an important export industry (Foster 1974: 187).

Iron Age Levantine pilgrim flasks may have contained cinnamon extract, based upon residue analysis (Namdar et al. 2013). However, the fact cinnamon was sourced from Sri Lanka in this period (Namdar et al. 2013) means it is improbable that all pilgrim flasks

contained what was very likely an expensive oil. Others likely contained cheaper, regional alternatives.

Some locally manufactured Egyptian pilgrim flasks in the mid–18th dynasty were used for wine for special occasions (Bohleke 2016; Rose 2016). The fact the three flasks labeled as containing wine were of Type Ai.2 may suggest that this specific morphological type was reserved for wine during the 18th dynasty. The decline in the popularity of this type (see Chapter 5) may indicate this use of pilgrim flasks for wine did not continue. The small size of many pilgrim flasks in the New Kingdom suggests that flasks did not contain significant quantities of commodities like wine amphorae, and I consider it unlikely that there was a large market in pilgrim flask wine given the extremely limited volume they would hold. The hieratic dockets on these examples suggest this was a specialist beverage, perhaps with ritual connotations rather than simply for drinking. This may represent an early response to a foreign form – a relational entanglement of a Levantine-style vessel into Egyptian cultural practices. (see Stockhammer 2012; Paul Van Pelt 2013; Section 1.5.4). During the Late Period, the large size of Oasis pilgrim flasks imported in vast quantities has been suggested to also contain wine (Hope 2002: 190).

The flask's swift absorption into Egyptian society and etiquette indicates its contents were considered suitable for Egyptian lifeways, and may reflect its practical use for a multitude of purposes, as well as changes in behaviour which meant two-handed vessels were now preferred for certain activities over one-handed juglets.

4.7. Known flasks in other materials

As discussed in Section 0.1.1, I limited the parameters in this study to ceramic vessels. This allowed me to focus on the relationship between vessel morphology and changing aspects of cultural practice related to trade, usage and cultural appropriation. However, the pilgrim flask's role in society cannot be fully comprehended if discussion of its appearance in other materials is completely omitted, so this section will give a brief summary of known flask appearances in other mediums.

4.7.1. Non-Ceramic flasks

Only limited examples of non-ceramic flasks exist outside of Egypt (e.g. Bass and Pulak 1989: fig. 22). This may suggest their development was a creative innovation inspired by the encounters between Egyptian artists/potters and foreign vessels (Paul Van Pelt 2013: 532). In Egypt, the pilgrim flask was reinterpreted into a broad range of materials of different value, including leather (which was particularly cheap) and glass (likely the most expensive). This variety of materials suggests that the form was used across all spectrums of society. However, each material has different levels of preservation, generating a biased understanding of the deposits. This factor is important to remember when making inferences from the high quantities of faience as opposed to leather flasks in the archaeological record.

The original pilgrim flask form may have been a skeumorph. Foster (1989) has noted the Minoan tendency to imitate natural specimens and vessels in other materials such as metal and basketry in ceramic form, and it has been suggested that early pilgrim flasks in Crete were intended to imitate metal or leather prototypes (Evans 1928: 179). Skeumorphism has a long history in Egypt. From the Predynastic period, vessels were often manufactured with elements evoking the features and patterns of other materials, likely relating to the Egyptian perception of clay as a low value material. In Nubia however, ceramic vessels had a higher value (Nordström 2004), which would result in a different perception of the pilgrim flask in Nubian contexts (see Chapter 8). Although skeumorphic imitation has been suggested for Kerma beakers (Edwards 2004: 96), this was likely related to the index of status in conspicuous consumption activities, similar to the use of skeumorphic vessels in Middle Bronze Crete (Knappett 2002: 110), since ceramic technology was highly appreciated in Nubia.

A leather pilgrim flask measuring c.14cm in height was found at the Ramesseum by Petrie (Hicks and Stevenson 2013: 102; Pitt Rivers Museum 1897.49.1). This example has degraded handles, but the body shape, neck incline, and distinct incised metope pattern on

the body is clearly of pilgrim flask type. Quibell (1898: 13) mentions the flask towards the end of his discussion of grave goods in Third Intermediate Period tombs at the Ramesseum; given its position after a reference to the 22nd dynasty, it is possible that he found the artefact in a tomb dating to this period. Leather and other organic materials rarely survive in the archaeological record, so it is difficult to accurately assess potential quantities of leather flasks that may have been manufactured. However decorative and morphological elements on ceramic flasks may allude to a leather prototype, including metope designs and double handles. The properties of the material mean these would not have been useful for long-distance trade; rather, tanned leather pouches may have been utilised as water carriers. These leather examples would have carried a low value and have been used in domestic contexts.

Metal examples also appear rarely in the archaeological record, likely because metals were often melted down for reuse. The tin pilgrim flask found in the shipwreck of Uluburun (Bass and Pulak 1989: fig. 22) was found in a crevice along with a pithos, 4 Canaanite amphorae and a terracotta pilgrim flask. Another tin example with a hinged lid was found in an 18th dynasty tomb at Abydos (Ayrton et al. 1903: 50; fig. xvii). The handles of pilgrim flasks sometimes exhibit a knob in the area where the handle attaches to the body, and it is possible that this is another skeumorphic feature that reflects the rivets of a metal prototype (Amiran 1969: 176).

One ivory example of a pilgrim flask is known (Randall-McIver and Mace 1902: 101; pl.44) which was found in the D cemetery at Abydos in Tomb 108 with a plaque dating to the reign of Tuthmosis III. This example was a ring flask, with a wide neck and rounded handles, and resembles stone pilgrim flasks of the 18th dynasty. No other ivory vessels are known, but ivory was imported from Nubia during the New Kingdom and featured as part of the annual tribute from Nubian communities, thus was relatively common in the archaeological record (Kryszkowska and Morkot 2000: 324).

In contrast many stone pilgrim flasks are preserved. Stone flasks were manufactured from travertine, with some examples possibly in Levantine calcite - however, it is extremely difficult to distinguish between these two materials, which means identifying whether a

flask was locally produced or imported is challenging. No other stone was used to produce pilgrim flasks. The travertine/calcite versions feature two styles. During the 18th dynasty all stone flasks had a globular body, a thick neck and handles stretching from the rim to the shoulder. In the 19th dynasty a second variation appeared which had an elongated body, and smaller loop handles (Aston 1994: type 195). Stone flasks have predominantly been found in wealthy cemetery contexts, and were perhaps associated with elite culture – an example in Grave E249 at Abydos was accompanied by other valuable artefacts including travertine vessels, copper alloy tools and a plaster facemask (Garstang 1901: pl. 18).

Faience was the most common material used to produce pilgrim flasks after pottery. Its strong composition resulted in the survival of a large quantity in the archaeological record. Three faience flasks were found in the Gurob burnt deposits (Petrie 1891: pls xvii, xviii, xix), originally dated across the New Kingdom but now understood to be 19th dynasty (Bell 1991: 167). Faience examples were typically lavishly decorated – the example in the so-called ‘Amenhotep III deposit’, for example, was painted with a winged Bes image and floral garlands (Petrie 1891: pl. xvii: 9). In the Late Period, particularly the 26th dynasty, the quantity of faience flasks significantly increased. Late Period flasks are highly homogenous in form and decoration and are termed ‘New Years Flasks’, because 85% include an inscription with New Year propitiatory formulae, usually dedicated to a Memphite deity (Blanquet 1991: 49). These vessels were typically formed in green faience and were produced in a mold. The neck was sculpted to resemble a papyrus roll or temple column, and flower garlands were commonly painted or incised onto the body, with a Bes or cow figure sometimes added. Handles were superseded by squatting baboon figures or ibex-heads facing at right angles to the vessel. The consistent references to Memphite deities on these flasks may suggest that they were manufactured in a Lower Egyptian centre of production (Homès-Federicq 1982: 87); however, a small amount bear Theban prayer forms, appear across the Levant in limited numbers, and are even on occasion found in Sudan (Minault-Gout and Thill 2012: pl. 171). New Year flasks appear in settlement and cemetery contexts (e.g. Petrie 1906: pl. xxi) and it has been suggested that they were given as gifts to celebrate the Opening of the Year/Inundation (wp-rnpt), along with faience scarabs and amulets containing propitiatory wishes (Blanquet 1992: 52). Their

peculiar homogeneity and rise in popularity suggests that New Year Flasks were intended for a specific societal use. They may have contained Nile river water collected in celebrations associated with the start of the annual inundation (Blanquet 1991: 52; Friedman 1998: 229–230), oils associated with New Year rituals, or even wine as suggested by the examples in TT99 (Bohleke 2016: 243–245; Rose 2016: 201–203).

Glass first appeared in Egypt in the 18th dynasty, and the technology was most likely imported from the Levant (Nicholson & Henderson 2009: 195). The material appears in royal contexts and was of high status; Nicholson notes it may have been sufficiently valuable to be among the items robbed from the tomb of Tutankhamun (Nicholson and Henderson 2009: 195). The labour involved in producing glass vessels was great and has a short timeframe of manufacture in Egypt; the use of the material begins c. 1500 BCE although there are possible attestations for glass in the late Middle Kingdom. It then declines considerably from c. 1050 BCE onwards, although poor quality glass does appear (Nicholson and Henderson 2009: 196). Due to their fragility and expense, they are very rare. Two purple glass pilgrim flasks were found in the so-called ‘Tutankhamun’ (Petrie 1891: pl. xvii: no.35) and ‘Ramesses II’ (Petrie 1891: pl. xvii, no.13) burnt deposits at Gurob, now dated to the 19th dynasty (Bell 1991: 167). A further 20 potential flask fragments were found in the Main City at Amarna, in Grid 12 and in the House of Ranefer. Kemp and Stevens (2010: 194) note that although these are fragmentary, “all appear to have been from small vessels, often flasks or tubes that would have been suitable as containers for cosmetics”. Evidence for glass manufacture has been found at Amarna, Malkata, and Qantir (Nicholson and Henderson 2009: 204–205) and glass pilgrim flasks were likely manufactured in these royal contexts.

Ceramic pilgrim flasks are thus one aspect of a broader pilgrim flask repertoire composed of flasks of different materials with varying value. However, all pilgrim flasks could have contained the same contents that were then framed in more or less expensive packaging (and perhaps diluted) depending on their intended destination. The price value of ceramic pilgrim flasks was likely relatively high in the 18th dynasty when examples were first imported from the Levant; and Mycenaean globular flasks likely commanded the highest price, judging by their rare appearance in the archaeological record as well as their

probable international reputation (Foster 1974: 189). However as they began to be produced in Egypt (and likely filled with an Egyptian oil alternative), this price dropped, resulting in a larger quantity of flasks in the archaeological record. While flasks that continued to be imported likely demanded a higher price tag, the development of flasks in alternative materials reflects the desire to produce accessible goods. In Nubia, pilgrim flasks in alternative materials are rare. Ceramic examples were imported from Egypt, which may have added to their value. As such, their place in the Nubian value index was likely higher.

4.8. Conclusion

In this chapter, I discussed the wide geographical distribution of pilgrim flasks within the Eastern Mediterranean, and focused on their trade between cultures during the Late Bronze and Early Iron ages. From their first appearance in the Late Bronze Age, pilgrim flasks were involved in diverse exchange processes within the Eastern Mediterranean. Although the exact commodity contained in these flasks cannot be identified, the consistent neck and rim measurements suggest all were used to carry small quantities of a semi-precious liquid, often an oil likely valued for its scent and probably used in different practices across the regions in question.

After the Egyptians encountered pilgrim flasks during the New Kingdom, the Lentoid form was apparently swiftly adopted in the Nile Valley, because their contents were desired and the form applicable to local practice. Their appearance in multiple materials, and their spread across different levels of society, suggests that they were thoroughly adopted into Egyptian etiquette and practices. The integral position of perfumed oils and scents within Egyptian contexts, both in ritual contexts and in daily life, made this transition easy; something evident from the high quantities of perfume juglets at Egyptian garrisons in the Levant, such as Beth Shan (Hulin 2013: 363). It is from this Egyptian context, rather than the Levantine one, that they entered Sudan and developed along a new cultural trajectory.

Having discussed the mechanisms by which these vessels could have entered Egyptian contexts, in the next chapter I will present a revised typology for the pilgrim flask form from the 18th dynasty (c. 1550–1250 BCE) to the Late Period (7th–4th centuries BCE), using flask examples collated from excavation reports and museum collections (See Catalogue, Volume II). My developed Type-Series will be laid out, and changes in morphology, decoration, fabric and deposition patterns will be presented and discussed.

Chapter 5. A new typology of Pilgrim Flasks for Egypt

5.1. Introduction

In the previous chapter, I discussed the geographical spread of pilgrim flasks throughout the Eastern Mediterranean during the Late Bronze (e.g. Guy and Enberg 1938: tomb 877; Loud 1948: pl. 67; Tufnell 1958; McClellan 1975: 343; Martin 2013: 391) and Early Iron Ages (e.g. Anderson 1988: pl. 50; Arie 2006: 209; fig. 11.7; Namdar et al. 2013: 2) before analysing evidence for trading practices within and between these cultures. In this chapter, I move away from broad assessments of ceramic exchange and focus on evidence for pilgrim flasks in Egypt between the 18th dynasty (c. 1550–1292 BCE) and the Late Period (c. 7th–4th centuries BCE) to identify a typology across these phases. In particular, I present a new Type-series for Egyptian contexts – a group of representatives of a subtype selected to demonstrate the extent of variation within the pilgrim flask type. This approach to ceramics in Egypt originated with Petrie (1896; 1901), whose seriation sequence developed for the prehistoric graves at Naqada laid the groundwork for modern approaches to ceramic data in the discipline of Egyptology (Amiran 1969: 13). My Type-series presents the main morphological types of pilgrim flasks that appear in Egypt, and identifies their characteristics, before I outline the geographical and chronological distribution of each sub-type in the second section of this chapter.

My Type-series is based upon morphology, although changes in fabric and decoration are also considered. It uses the material in my Catalogue (see Volume II) that consists of ceramic flasks from museum collections, current excavations, and excavation reports. I focus upon form for the typology because of the conservatism inherent in technological methods of production (Eckert 2008: 31). Such production methods resulted in the persistence of the general pilgrim flask form, meaning that I could distinguish small creative approaches to the vessel morphology. A concentration on form was also a practical consideration, as many museum records and excavation reports make no mention of fabric type, with only a brief reference to vessel colour. However, I discuss fabric where possible, because it allows for potential analysis of manufacturing locales. Although I also consider decoration in some detail, this is not employed while subdividing forms. Form changes more rapidly than

decoration in pottery. There is a tendency for certain aesthetic patterns to persist over broad chronological timespans, with the continuation of the concentric circle pattern on pilgrim flasks for example in some contexts suggesting it was used as a visual aspect of a brand (Wengrow 2010: 11–13; see Section 8.5.1). However, many Egyptian examples were left plain. As such, form was considered the most useful aspect for chronological and distributional analysis. Although a typology of pilgrim flasks has been developed for the Third Intermediate Period (Aston 1996) this focused that date range and did not include 18th dynasty, Ramesside and Late Period contexts. As such it seems necessary to develop a new, more detailed morphological typology for Egypt, before assessing whether this can be applied to Nubia (see Chapter 6).

As described in the Introduction, the pilgrim flask was a recurring form in Eastern Mediterranean Late Bronze Age ceramic repertoires, from where it subsequently entered Egypt and Nubia in the 18th dynasty. I define the pilgrim flask for the purpose of this study (see Section 0.1.1) as a vessel with a lentoid, globular, or flat body. A variously elongated, squat, tubular or flaring neck was pushed through the body after formation, and two vertical handles were added on opposite sites of the vessel (see Section 3.2. for discussion of manufacture). Flasks in the Levant, Cyprus, Egypt and Nubia typically had a rounded base; Mycenaean and Cretan globular flasks were given a foot, with a limited number of Egyptian examples also occurring with a flat base. I identify 18 types in Egypt, ranging from forms A–K. Not all examples occurred in a sufficient level of preservation that they could be assigned an accurate Type-Series form; these have been catalogued as Not Identified (abbreviated to NId) throughout this chapter, indicating that they were in too damaged a state to be accurately defined.

The fabric used in production varied according to period (see Section 0.2 for discussion of Egyptian and Nubian fabrics). The flasks included in this data set were produced in the New Kingdom in relatively fine, wellsorted Nile silt and compact cream, pink or occasionally green marl clay. In the Third Intermediate and Late periods, this expanded to include coarse, heavily tempered Nile silt and site-specific marls such as Aswan clay. Finer flasks were often smoothed and given a thick red or cream slip. Imported flasks were manufactured in clays local to their production centre, in the Levant, Cyprus, Mycenae or Oases regions (see Section

3.4 for full discussion of foreign fabrics). Red or cream slips were frequently added. A concentric circle (abbreviated to cc in the figures) or spiraloid pattern, painted in black or red pre-firing, was a common decorative feature; other attributes included painted rosettes, metope shapes, and other geometric patterns. The occasional blue painted fragment also appeared. Often these decorations were heavily eroded.

The data set comprises 1632 ceramic flasks from the 18th dynasty to the Late/Napatan period, with 980 of these with a confirmed Egyptian provenance, and 648 a Nubian provenance (the latter are discussed in the following chapter). Pilgrim flasks from the Nile Valley only were included in the data set, with morphologies according to the parameters of this study as defined in section 0.1.1. Examples found in the Western Oases and the Sinai were not included. This was to keep the data at a manageable level, as well as to ensure a focus upon the trading links between Egypt and Nubia. A limited number of examples from museum collections had no provenance and so were not included in the analysis. I include imported flasks found in Egyptian contexts in the typology, because they provide evidence of local demand for foreign products and were subsequently imitated by indigenous potters. All are fully described in the Catalogue (see Volume II) and I refer to flasks by Catalogue Number for ease of identification. It is possible that occasional flasks were unintentionally duplicated in this Catalogue, based on their mention both in an excavation report and in a museum collection. Every attempt has been made to remove these where possible, but in cases where it was impossible to certify exact duplicates, colour coding across the Catalogue signifies this. Foreign parallels to Egyptian forms have been indicated in the Type-series.

The nomenclature I use in discussing parts of the flask body is shown in **Figures 5.1** and **5.2**. Rim types are after Wodzńska (2010) and are described as demonstrated in **Figure 5.3**. These can be straight or flaring in position. Please note that all morphological features discussed, including those of imported flasks, only encompass features observed in Egypt.

5.2. Type Series (Plates 1–4)

Type A. Lentoid.

Pilgrim flasks with a lentoid shaped body. Flasks of this general form predominate in the data set. Additional morphological features may be observed which allow further subdivision:

Ai.1. Classic lentoid flask

Morphology: Lentoid body with a rounded base and a soft seam joining the two halves. Necks are relatively straight or slightly flaring. Rims are everted and rounded, squared, or pointed. Handles are rounded or upside-down L-shaped, spanning from just below the rim or the middle of the neck to the shoulder.

Decorative features: Plain; slipped and burnished in red/cream; black/red painted concentric circles; black painted rosette.

Fabric: Nile silt; marl clay; Levantine clay.

Date range in Egypt: 18th dynasty – Late Period

Foreign parallels: The Governor's Tomb, Ajjul: Late Bronze IIA (Petrie 1933: pl. XI no. 51).

Megiddo Stratum VIIA: Late Bronze II (Loud 1948: pl. 70:9).

Abu Hawam Stratum IV: Early Iron I (Hamilton 1935: 30, no. 166).

Tomb 420, Lapithos: Cypro-Geometric I (Gjesrstad et al. 1934: 234–240, pl. LII).

Zakros Palace, Knossos: Middle Minoan IIIA (Evans 1928: 215, fig. 121).

Theban Desert Route: 21st dynasty (Darnell 2000: 227–228)

Ayn Asil: New Kingdom (Marchand and Tallet 2000: fig. 21e–g)

Quantity in data set: 128

Example:

Cat. No. 137, Ashmolean Museum collection.

Amarna.

Nile silt with cream slip

Lentoid body with handles running below rim to shoulder

Handles elongated and rounded

Squared rim

Rim diameter 8.4cm

Ai.2. Classic lentoid flask with squat neck

Morphology: A similar body to Ai.1 but differentiated by a tubular, squat neck, significantly shorter than other forms. The neck often remains lower than the handle height and has a pointed or rounded rim.

Decorative features: Black painted concentric circles; black painted rosette.

Fabric: Nile silt; marl clay (marl A4).

Date range in Egypt: 18th dynasty – Ramesside period

Foreign parallels: Megiddo Building 06/K/4, Level K-8: Late Bronze IIB (Martin 2013: 415, fig. 10.12, nos. 8–9).

Abu Hawam: Late Bronze IIA (Hamilton 1935: 42, no. 255).

Quantity in data set: 46

Example: Cat. No. 152, Ashmolean Museum collection.

Kahun, Tomb of Maket.

Nile silt (B2?), brown polished wash, brown painted concentric circles

Lentoid body with handles running below rim to shoulder
Handles upside-down L-shaped
Pointed rim
Rim diameter 3.6cm

Ai.3. Lug handles

Morphology: A similar body to Ai.1 but differentiated by 'lug' handles – the handles are small and run in a circular shape from the base of the neck to the shoulder. Rim is rounded with a sharp edge at the base, or rounded.

Decorative features: Plain; black painted concentric circles.

Fabric: Nile silt.

Date range in Egypt: 18th dynasty – Third Intermediate Period

Parallels: Lachish Houses II: Iron Age I (Tufnell 1953: pl. 92: no. 432).

Quantity in data set: 20

Example:

Cat. No. 243, Fitzwilliam Museum collection.

Abydos.

Nile silt (B2?) with dark red wash

Rounded body with flat handles running base of neck to shoulder

Handles elongated and rounded

Rounded rim

Rim diameter 4.3cm

Aii. Parallel handles

Morphology: A similar body to Ai.1 but differentiated by the handle shape, which widen to run in parallel with the edge of the body.

Decorative features: Plain; cream slip.

Fabric: Nile silt, fine and coarse.

Foreign parallels: Tomb 67/166 Kouklia: Phoenecian c. 900 BCE (Bikai 1987: pl. II: no. 4).

Megiddo, Tomb 17: Early Iron I (Guy and Enberg 1938: pl. 68, no.2).

Megiddo Tomb 39: Early Iron I (Guy and Enberg 1938: pl. 72, no.9).

Megiddo Tomb 221b: Early Iron I (Guy and Enberg 1938: pl. 72, nos 3–7).

Quantity in data set: 13

Example:

Cat. No. 819.

Karnak Nord.

Marl D clay, black concentric circles, black lines down and below handles

Handles running below rim to shoulder

Handles elongated in an upside-down L-shape.

Pointed rim.

Rim diameter 4cm

Aiii. Thickened neck

Morphology: A similar body to Ai.1 but differentiated by a neck which expands in diameter towards the top, similar to an ‘egg-cup’. Rounded handles span from the lower end of the neck to the shoulder in a lug style. Rim is rounded with a sharp edge at the base.

Decoration: Red painted concentric circles with a solid centre and horizontal slashes below the handles; cream slip.

Fabric: Nile silt; marl clay.

Date range in Egypt: Third Intermediate Period – Late Period

Foreign parallels: Tomb 25, Amantus: Cypro-Geometric I–Cypro-Archaic II (Gjerstad 1948: 133–135; pl. xxix).

Megiddo Stratum VII–VI: Late Bronze II–Early Iron I (Loud 1948: pl. 72, no.9).

Quantity in data set: 19

Example:

Cat. No. 170, Ashmolean Museum collection.

Sedment Tomb 46

Nile silt (B2?), polished, red painted concentric circles, criss-crossed lines below handles, lines on rim.

Lentoid, handles running middle of neck to shoulder

Handles rounded

Pointed rim.

Rim diameter 4.8cm

Aiv. Cup mouth

Morphology: A similar body to Ai.1 but differentiated by a neck which expands in diameter towards the top, similar to an ‘egg-cup’. Rounded handles span from the lower end of the neck to the shoulder in a lug style. Rim is rounded with a sharp edge at the base.

Decoration: Red painted concentric circles with a solid centre and horizontal slashes below the handles; cream slip.

Fabric: Nile silt; marl clay.

Date range in Egypt: 25th dynasty

Foreign parallels:

Quantity in data set: 1

Example:

Cat. No. 544.

Medinet Habu, Tomb 19.

Nile silt, black painted concentric circles, stars below handles

Lentoid, handles running below rim to shoulder

Handles rounded

Rounded rim.

Rim diameter unknown

Type B. Globular

The body is spherical rather than lentoid, but still with a rounded base and soft seams. Handles are usually rounded.

Bi. Rounded body

Morphology: Characterised by fuller, almost spherical rather than lentoid body. Short flaring necks culminate in a rounded rim, and rounded handles span from the middle of the neck to the shoulder.

Decoration: Cream slip/wash.

Fabric: marl; marl A2.

Date range in Egypt: 18th dynasty – Late Period

Foreign parallels: Megiddo Stratum VII–VI: Late Bronze II–Iron Age I (Loud 1948: pl. 74, no. 144).

Tell el-Farah S Cemetery, Layer 902, Locus 110 (McClellan 1975: Type 54-132-002).

Tell Qasile, Temple 131, Room 188: Iron Age I (Philistine) (Mazar 1985: fig. 37: no.7).

Quantity in data set: 33

Example:

Cat. No. 579.

Qantir.

Nile silt B2, plain.

Globular, handles running middle of neck to shoulder.

Handles upside-down L-shape

Rounded rim.

Rim diameter 3cm

Bii. Distended

Morphology: A spherical body in common with Bi, but when viewed in profile the belly protrudes forward into a pointed shape on both sides. A flaring neck culminates in a rounded rim, with rounded handles running from the middle of the neck to the shoulder.

Decoration: Cream slip; black painted concentric circles.

Fabric: Nile silt (Nile B2); Levantine clay.

Date range in Egypt: Ramesside – Late Period

Foreign parallels: Lachish: Iron Age IIC (Amiran 1969: pl. 96, 14).

Tell el-Farah S Cemetery Layer 809 Locus 800 (McClellan 1975: Type 5 133–001).

Quantity in data set: 6

Example:

Cat. No. 580.

Qantir.

Nile silt B2, plain.

Globular, handles running rim to shoulder.

Handles almost straight.

Square rim.

Rim diameter 3.5cm.

Type C. Flat/‘butterfly’

Morphology: Distinguished by a flat body with a sharp seam. This type has an elongated neck, and ‘butterfly’ handles spanning from the rim to the shoulder. ‘Butterfly’ handles can also be seen on other forms in addition.

Decoration: Polished.

Fabric: Nile silt.

Date range in Egypt: Third Intermediate Period – Late Period

Foreign parallels: None known.

Quantity in data set: 30

Example:

Cat. No. 35.

Gurob.

Nile silt, burnished.

Flat, handles running from rim to shoulder

Handles 'butterfly'.

Pointed rim.

Rim diameter 2.5cm

Type D. Gourd

Morphology: An asymmetrical body, with one side of the belly protruding significantly, and the other half typically a standard lentoid shape.

Decoration: plain.

Fabric: Oasis clay; Nile silt, marl A4.

Date range in Egypt: Ramesside – Third Intermediate Period

Foreign parallels:

Quantity in data set: 5

Example:

Cat. No. 15.

Gurob.

Unknown fabric.

Asymmetrical, handles running below rim to shoulder

Handles rounded
Rounded rim.
Rim diameter unknown

Type E. Pinched

Morphology: An irregular lentoid body with a squat, short, tubular neck. Rim is usually un-modelled and undefined. Handles are pushed into the corner of the neck and shoulder, and are usually squashed against the body of the flask.

Decoration: Plain.

Fabric: Coarse Nile silt, marl A4, Oasis clay.

Date range in Egypt: Third Intermediate Period – Late Period

Foreign parallels: None known

Quantity in data set: 34

Example:

Cat. No. 498.

Giza Tomb 2.

Unknown fabric.

Lentoid, handles running from base of neck to shoulder

Handles pinched

Rounded rim.

Rim diameter unknown

Type F. Tapered

Body is manufactured in a globular shape, but with a tapering base.

Fi. Ribbed

Morphology: a globular body with a tapering base. A slightly flaring neck is added with a modelled rim, usually pointed. Handles are rounded and span from the middle of the neck to the shoulder. Their join to the body of the flask is usually untidy. Emphasised rilling marks are visible around the body of the flask.

Decoration: Emphasised rilling marks

Fabric: Marl A5, marl A

Date range in Egypt: Late Period

Foreign parallels: None known

Quantity in data set: 2

Example:

Cat. No. 1610.

Thebes, Tomb of Amenhotep, Khonmose, and Amenmose.

Marl A.

Body shape unknown, handles running middle of neck to shoulder

Handles triangular.

Simple rim.

Rim diameter unknown

Type G. Drum

Vessels with a large body and a flat stave.

Gi. Flattened handles

Morphology: A large, cylindrical body with two bellies joined by a perpendicular stave. Neck is squat and short, with a modelled rounded or square rim. Handles run from the base of the neck to the shoulder, but are flattened against the neck body.

Decoration: Red burnished slip; often a semi-aesthetic, emphasised rilling line pattern in the centre of the belly.

Fabric: Nile silt, Oasis clay.

Date range in Egypt: end of Ramesside – Late Period

Foreign parallels: Dakhleh Oasis (Hope 2000: fig. 2 d–e)

Dakhleh Oasis (Gill 2016: pl. E.24)

Quantity in data set: 18

Example:

Cat. No. 546.

Medinet Habu.

Nile silt.

Drum body shape, handles running from base of neck to shoulder

Handles flat.

Rounded rim.

Rim diameter unknown

Gii.1. Rounded handles

Morphology: A similar body to Gi.1 but differentiated by raised handles in a rounded or very occasionally incised style.

Decoration: Red burnished slip; often a semi-aesthetic, emphasised rilling line pattern in the centre of the belly.

Fabric: Nile silt, Oasis clay.

Date range in Egypt: Third Intermediate Period – Late Period

Foreign parallels: Beth Pelet: Late Bronze Age (Duncan 1930: 87, P).

Tell Farah Tomb 707 (Duncan 1930: 87, P).

Susa: 1st century BCE (British Museum EA136784).

Lachish, Locus 4005: Iron Age (Tufnell 1935: pl. 92, no. 436).

Dakhleh Oasis (Hope 2000: fig. 2 a–b)

Quantity in data set: 225

Example:

Cat. No. 522.

Hermopolis.

Oasis clay.

Drum body shape, handles running from base of neck to shoulder

Rounded handles.

Rounded rim.

Rim diameter unknown

Gii.2. Side handles

Morphology: A similar body to Gi.1 but differentiated by two handles set low on the shoulder, almost at a right angle to the neck.

Decoration: Red-burnished slip; often a semi-aesthetic, emphasised rilling line pattern in the centre of the belly.

Fabric: Nile silt.

Date range in Egypt:

Foreign parallels: Lachish Level H14: 23 (Tufnell 1953: pl. 103, no. 678).
Lachish Level 4007: Iron Age (Tufnell 1953: pl. 92, no. 428).

Quantity in data set: 2

Example:

Cat. No. 647.

Elephantine.

Nile silt B2 variant 2, red slip.

Rounded body shape, handles running from upper shoulder to lower shoulder.

Rounded handles.

Squared rim.

Rim diameter unknown

Type H. Double

Two vessels joined as a single piece, with at least one of the two in the pilgrim flask form.

Hi.1. Two adjoining pilgrim flasks

Morphology: Two lentoid pilgrim flasks, with L-shaped handles and a slightly flaring neck. The two flasks are joined at the body through the belly.

Decoration: One instance of black painted concentric circles with additional line over join between flasks; plain.

Fabric: Nile silt.

Date range in Egypt: 18th dynasty

Foreign parallels: Yoqne'am, Stratum xviii: Iron Age I (Ben-Tor et al., 2005: fig. I.28, 12).

Tell Qasile, Temple 131, Stratum X: Iron Age I (Philistine) (Mazar 1985: fig. 42, no. 10).

Quantity in data set: 5

Example:

Cat. No. 17, Petrie Museum collection.

Unknown provenance.

Nile silt, black painted concentric circles, black band around join and rims.

Lentoid body, handles running from rim to shoulder

Upside-down L-shaped handles.

Pointed rim.

Rim diameter c.4cm

Hi.2. Two pilgrim flasks with an arched join

Morphology: Differentiated from Hi.1 by the join of the vessels, which in this case is made by a bar of clay, arching from the rims of the two vessels.

Decoration: Plain.

Fabric: marl.

Date range in Egypt: 18th dynasty

Foreign parallels: None known.

Quantity in data set: 1

Example:

Cat. No. 18, Petrie Museum collection.

Unknown provenance.

Marl C clay, plain.

Lentoid body, handles running from rim to shoulder

Upside-down L-shaped handles.

Rounded rim.

Rim diameter 3.1cm

Hii. One pilgrim flask adjoining another vessel

Morphology: A lentoid flask with rounded handles joined to another type of vessel, typically a mug. The vessels are connected at two points. The middle of the belly connects to the widest point of the mug body, and an arched bar connects both rims.

Decoration: Cream slip and burnished.

Fabric: Nile silt; marl.

Date range in Egypt: 18th dynasty

Foreign parallels: None known.

Quantity in data set: 5

Example:

Cat. No. 145, Ashmolean Museum collection.

Rifeh, Tomb 20

Marl clay, cream burnished slip.

Lentoid body, handles running from middle of neck to shoulder

Rounded upside-down L-shaped handles.

Squared rim.

Rim diameter 2.4cm

Type I. Triple

Morphology: Three typical Ai.1 pilgrim flasks with elongated, slightly flaring neck, rounded handles from the middle of the neck to the shoulder, and a ‘nubbin’ on one side of the belly. The three flasks are joined together through the bellies.

Decoration: Black painted concentric circles on bellies of outer flasks, black painted triangular geometric pattern on sides, red painted ‘nubbin’ and red painted rims.

Fabric: Cypriote.

Date range in Egypt: Third Intermediate Period

Foreign parallels: Bichrome III Ware: Cypriote Museum, B.875, Nicosia (Gjerstad 1948: fig. xxiii, 14).

Tell Qasile, Temple 131, Stratum X: Iron Age I (Philistine) (Mazar 1985: fig. 42, no. 11).

Quantity in data set: 1

Example:

Cat. No. 27, Petrie Museum collection.

Abd el-Gurnah.

Cypriote fabric, red painted rims, black painted handles, black painted concentric circles, triangular motif on profile.

Lentoid body, handles running from base of neck to shoulder

Rounded handles.

Straight rim.

Rim diameter 2.5cm

Type J. Ring

Morphology: Body is heavily rounded across the width, and thin in depth. Handles can be rounded, L-shaped or lug. Characterised by a moulded gap in the centre of the flask.

Decoration: Cream slip and burnished; red slip with black painted concentric circles.

Fabric: Nile silt; marl; Levantine clay.

Date range in Egypt: New Kingdom

Foreign parallels:

Vessel 19, Tomb 9, Kouklia, Cyprus: Iron Age (Benson 1984: fig. 7).

Tomb N: Cypro-Geometric III (Gjerstad 1948: vol. 4, fig. 23).

Quantity in data set: 6**Example:**

Cat. No. 400, British Museum collection.

Abydos Grave 1200.

Marl clay, plain.

Ring body, handles running from base of neck to shoulder

Rounded handles.

Rounded rim.

Rim diameter 2cm

Type K. Miniature

Morphology: Lentoid pilgrim flasks miniaturized beyond practical use – some are large enough to still be considered usable, others must be symbolic.

Decoration: Plain; black painted concentric circles.

Fabric: Nile silt; marl clay.

Date range in Egypt: New Kingdom

Foreign parallels: None known.

Quantity in data set: 6**Example:**

Cat. No. 222, Ashmolean Museum collection.

Thebes.

Nile silt, black painted concentric circles, stars under handles

Rounded body, handles running from middle of neck to shoulder

Rounded handles.

Straight rim.

Rim diameter 1.1cm

Type L. Flat-bottomed

Morphology: The body is lentoid, with a narrow width, but culminates in a flat base. In most instances these would invariably be classified as a different vessel; however, in two cases in the data set the observable morphological features (aside from the unusual base) suggest these should be considered pilgrim flasks.

Decoration: Black painted concentric circles; isolated example bearing the cartouche of Ramesses II.

Fabric: Nile silt

Date range in Egypt: Ramesses II.

Foreign parallels: None known

Quantity in data set: 1

Example:

Cat. No. 403.

Unknown provenance.

Nile silt, two stamped cartouches of Ramesses II.

Lentoid body with a flat base, handles running from middle of neck to shoulder

Triangular handles.

Pointed rim.

Rim diameter 2.3cm

5.3. Discussion

In this section, I discuss the Type-series presented above in more detail, and analyse known appearances of pilgrim flasks from each time period across Egypt. Prevalence of type, preferred fabric, common decoration and propensity of find-spot are all considered. These factors are used to assess the changes in consumption practices around the pilgrim flask in Chapters 7 and 8. 980 flasks in the data set have a recorded Egyptian provenance, which were identified from excavation reports, museum records, and contemporary excavations.

5.4. The 18th dynasty

133 pilgrim flasks in the Catalogue are dated to the 18th dynasty. This includes 43 flasks from Amarna in Mycenaean clay that almost certainly date to this period. This is 14% of the Egyptian data set (n=980). It was difficult to accurately date some museum examples, because many were unprovenanced and recorded as dating only to the New Kingdom, and so some examples were unfortunately left out of the statistical analysis.

The first pilgrim flasks in Egypt were deposited in mid-18th dynasty contexts and date to the reign of Thuthmosis III (Bard 1999: 629). The earliest candidates likely came from the Tomb of Senneferi at Thebes, TT99 (Bohleke 2016; Rose 2016; Strudwick 2016: Cat. Nos 332–333, 801–803). An inscription on one example suggested that the vessels were either deposited in Year 38 of Thuthmosis III or intended for opening in that year (Bohleke 2016: 243). Another example from tomb E10 at Abydos is dated by Bourriau (1981b: 74) to the reign of Thuthmosis III (Cat. No. 122).

During this period precious liquids from across the Eastern Mediterranean were highly desired in Egypt (see Chapter 3) and so there was substantial import of ceramic vessels from the Levant (Bavay 2015: 129; Bourriau and Serpico 1996; Cohen-Weinberger and Goren 2004; Leonard jr. 1995; Ownby 2012; Serpico 1989; 1997; 2000; 2003; Serpico and White 2000), Mycenae (Bell 1982; Eriksson 2006; Hankey 1973; 1997; Hankey and Aston 1995; Hassler 2015), Cyprus (Merrillees 1968; Aston 1996b; 2011; Eriksson 1991; 1993; 2001; 2006; 2006b; 2007), and Crete (Kemp and Merrillees 1980; Bourriau and Eriksson 1997). This suggests that important trading networks had not only opened but were functioning on a regular basis. Pilgrim flasks from the Levant, Mycenae, and Cyprus were among these imports, with the Levant a significant producer, and globular flasks from Mycenae known in large quantities at Amarna in particular (Hankey 1973: 130). However, the discovery of flasks in both Egyptian marls (Bohleke 2016; Rose 2016; Strudwick 2016: Cat. Nos 332–333, 801–803) and Nile silts (Sciaparelli 2008: figs 52, 121: Cat. Nos 465–466) indicates that flasks were also locally manufactured from as early as the reign of Thuthmosis III.

5.4.1. Morphology (Graph 1)

68 flasks dating to the 18th dynasty phase were too poorly preserved to identify due to their fragmentary state, and so have been labeled as NId.

The lentoid flask with flared neck and rounded or L-shaped handles running from the upper neck to the shoulder, Type Ai.1, was the most common form in this phase (See **Plate 1**), accounting for 39% of the flasks that can be identified in this period (N=133). This was the most prevalent type over all periods, with a total of 128 Ai.1 flasks in the Catalogue, 21% of the identifiable Egyptian set (n=980, see **Graph 3**). One of the earliest flasks in the catalogue from Grave E10 at Abydos (Bourriau 1981b: 75) is in form Ai.1 (Cat. No. 122). Handles were L-shaped or rounded in this phase. Rims were usually rounded, and sometimes recurved (e.g. Cat. No. 817: Jacquet Gordon 2012: fig. 51), but everted, pointed, and squared examples can also be observed. An unusual example in Shaft I in the Tomb of Senneferi (Rose 2016: 267) has a lentoid body with rounded handles and a pointed rim, but is handmade, and may represent an Egyptian imitation of a Cypriote form.

Type Ai.1 is the most recognizable pilgrim flask form, and its morphology is broadly similar to contemporary Levantine examples. This resulted in many being placed in the ‘foreign pottery’ sections of 20th century excavation reports – one example from Tomb 1328 at Deir el Medina (Cat. No. 468) is referred to as an Aegean import (Bruyère 1937: 65–66). However its lentoid, footless body and handle position are features more indicative of a Levantine origin, if, indeed, it is an import at all – its tubular neck and lack of decoration suggest Egyptian manufacture. Unfortunately, no mention is made of fabric type in this case, which would aid a more definitive identification.

Type Ai.2 is the second most common form in this phase at 25% of the total (N=133). This form is distinguished from Type Ai.1 by its tubular, squat neck – which can either be wide or thin in width, sometimes with a strongly perpendicular pointed rim (Deir el-Medina – Cat. No. 467) – and high rounded handles. Six further examples of Ai.2 had no recorded date or provenance in their museum records (e.g. Cat. No. 6), but based on this typology these should be dated to the 18th dynasty. The first securely attested flasks in Egypt were Type Ai.2 (See Cat. Nos 332–333, 801–803) in Theban Tomb 99 (Bohleke 2016; Rose 2016; Strudwick 2016), with an inscription on one example (Cat. No. 332) further narrowing the date of deposition to either Year 38 of Thutmose III or before that year, being intended to be opened then (Bohleke 2016: 243). Rims were pointed or rolled, and handles were ubiquitously rounded and stemmed from the rim or just below it. Types Ai.3, Aiii and Bi also occur, but are rare in the archaeological record at this time. The two Type C flasks dated to the 18th dynasty are from an unclosed context at Tell el-Retabeh and are likely dated too early (see Section 5.5.3).

Specialist forms are also known in this phase. 11 examples of Type H flasks are known from Egyptian contexts, with 5 having confirmed 18th dynasty findspots (Cat. Nos 24, 145, 369, 504, 773): two from the Burnt Deposits at Gurob (Cat. Nos 42, 127) and one from Tell el-Retabeh (Cat. No. 494). The latter is a foreign import, likely Levantine based on its slender body. Four further examples are from museum contexts and have no provenance (Cat. Nos. 17, 18, 149, 654). I consider it likely that this form had a restricted manufacturing period during the 18th dynasty, although the Gurob and the Tell el-Retabeh examples were deposited during the 19th dynasty and are heirloom pieces (see Sections 5.5.1, 5.5.7). This is based upon the provenanced examples as well as the dating of examples in Nubia to a similar period (see

Chapter 6). As such, although the unprovenanced examples have been left out of the analysis here, they likely also date to the 18th dynasty.

Two ring flasks have also been dated to the 18th dynasty (Cat. Nos. 31, 34). This type is also not common at any stage and may have been inspired by the development of one-handed ring flasks in the Mediterranean (see Section 4.9).

5.4.2. Fabric (Graph 2)

It is difficult to assess fabrics for flasks described in 19th and 20th century excavation records, such as those excavated by Petrie (e.g. 1891) or Bruyère (e.g. 1927; 1937). The lack of information provided means the only method of identifying fabric is via colour descriptions, which are of limited use.

The earliest locally manufactured flasks in Egypt were produced in Marl A4 (See Cat. Nos 332–333, 801–803; Rose 2016; Bohleke 2016). This fabric originated in southern Egypt, in the Theban area (Aston 1999: 4). This fabric was suggested to overtake the use of marl D in the 12th century BCE (Aston 1996: 65); however it now appears that the manufacture of pilgrim flasks in Marl A4 was occurring from the beginning of their production in Egypt, and suggests that already in the 18th dynasty they were being produced in both Lower and Upper Egypt. It has been further suggested that 18th dynasty pilgrim flasks were more commonly manufactured in marl clay in general, before the production of Nile silt flasks increased during the Ramesside period (Aston 1996: 62). However, **Graph 2** demonstrates that both fabrics were used in roughly equal proportions to produce pilgrim flasks in the 18th dynasty, when a difference in preferred form between the fabrics is already discernible. Marl clay was typically used to produce the Ai.1 or Ai.2 form, and typically features handles stemming from the rim to the shoulder (e.g. Cat. Nos 730–732; 332– 333). However, Nile silt examples of Type Ai.1 have handles stemming from the middle of the neck. Two marl A4 pilgrim flasks from the Tomb of Maya, the treasurer during the reign of Tutankhamun, also have handles stemming from the middle of the neck (Aston pers. Comm) and may represent the earliest examples of this style in a marl fabric. This is a feature that Aston (1996: 62) suggests develops in the 12th–10th centuries BCE, but I suggest it can be pushed back earlier to the 18th dynasty

(Tomb of Kha: Cat. Nos 468–469; Sciaparelli 2008), likely the reign of Thuthmosis III. Both fabrics are used in the earliest known local production of the form: five Ai.2 flasks in marl A4 variant 1, from TT99, the tomb of Senneferi in the Theban necropolis (Cat. Nos. 332–333; 801–803: Rose 2016; Bohleke 2016; Strudwick 2016) and an Ai.1 flask in Nile silt A (Cat. No. 122) from Grave E10 at Abydos (Peet 1914) are the earliest securely dated examples in Egypt. The latter already has handles stemming from the middle of the neck, supporting the idea that these two morphological styles developed simultaneously – whilst grave contents from the 13th dynasty are mixed with the New Kingdom material in Grave E10 at Abydos, no items within post-date the reign of Thuthmosis III, making it highly likely the flask is Thutmoside (Bourriau 1981b: 74). No difference is found in rim shape between marl and Nile silt vessels.

While the examples from TT99 are in marls A4 and A2, Aston (1996: 65) notes that marl D was much more common in this early period – all flasks at Amarna are in marl D, for example (Rose 2007). However the presence of marl A4, marl D, and Nile Silt A already in the 18th dynasty across a variety of forms suggests the existence of several production centres and groups of trained potters. These workshops may have advertised different contents to a consumer market via a multitude of forms (see Chapter 8).

Foreign imports also appear in contemporary deposits. There are 43 Mycenaean sherds from Amarna in the Catalogue (Cat. Nos. 180–199, 212–216, 227–228, 242), a site where high quantities of Mycenaean pottery was found (Petrie 1894: pl. xxvi–xxx; Hankey 1997), and Hankey (1973: 130) has noted that pilgrim flasks made up a large proportion of this material. Only one example of a Levantine import is confirmed from this period, from Memphis Level IV in a P31 fabric (Cat. No. 629; Bourriau 2010: 135; fig. 33). Two examples of Levantine flasks were also deposited in later contexts but likely were manufactured and brought to Egypt during the 18th dynasty: one at Medinet Habu (Cat. No. 555) dates to the Late Bronze IIB period, in a Third Intermediate Period settlement; this has been identified as an antique (Aston 1996: 53) and likely dates to this phase. Cat. No. 494 at Tell el Retabeh is from a mixed deposit with prolific Third Intermediate period pottery (Aston 1996: 27; fig. 43, 3), but based on the fact its Type H form was prolific in the 18th dynasty, likely also dates to this phase. This suggests that imported pilgrim flasks could have a long circulation even after their contents were used up. No Cypriote flasks were found in this phase. However, at least three

oasis flasks were found in 18th dynasty contexts at Amarna (Hope et al. 2002: 110; Rose 2007: 146). These forms were fragmentary but if the identification is correct are some of the earliest examples of the form in this fabric in the Nile valley.

5.4.3. Decoration (Graph 3)

The decorative styles of both indigenous and foreign imported vessels that occur in the 18th dynasty are described in **Graph 3**. A strong correlation between fabric and decorative forms is evident (see **Graph 4**), with marl flasks more commonly slipped in cream, for example. This may relate to the fabric specific workshops in vessel manufacture. Mycenaean decoration does not appear in local Egyptian fabrics in this period. Each foreign region's decorations will be detailed below for ease of comparison.

Levant

Painted concentric circle designs are common on Late Bronze Age pilgrim flasks in the Levant (Amiran 1969: pl. 51). Flasks thus decorated were typically assumed to be imports in 19th century excavation reports (e.g. Petrie 1906: pl. xxxvi.4) because of the dominance of this style across the Levant. Metope patterns are also visible on Levantine flasks (Finkelstein and Zimhoni 2000: fig. 10.9, no. 4) and in Egypt often features in the centre of concentric circles (e.g. Cat. No. 19). The appearance of both concentric circles and rosettes on both Levantine and Egyptian flasks suggests that Egyptian examples were highly influenced by the material culture from the Levant in this period. Although some LHIIIA Mycenaean globular flasks were imitated in local fabrics in the Ramesside period (see Section 5.5.3; Mommsen and Mountjoy 2001; Aston et al. 2007), these were much rarer than the Levantine lentoid imitations, which appear across Egypt. The morphological and decorative standardizations on Ai.1 and Ai.2 flasks may further point to separate origins of manufacture in the Levantine region.

Mycenaean

Imported Mycenaean globular flasks were slipped pale brown and painted with close-set orange concentric circles (Amarna: Cat. No. 197). Egyptian imitations of these forms were limited in this phase, with examples known in the Nile Valley of stirrup jars and rhyta in clay,

Egyptian alabaster (Ayers 2015) or in faience (Bell 1982: 150; Friedman 1998: 228; Säve-Söderbergh 1989: pl. 63), which may reflect their perceived higher value index in Egyptian society. Mycenaean globular flasks were relatively rare across Egypt – the total number of 43 from this phase in the catalogue is misleading because although these fragments are described as pilgrim flasks, their poor preservation makes it difficult to confirm this identification. In addition, decorated Mycenaean sherds were more avidly collected by 19th/20th century excavators because of their rarity and aesthetic design. A large quantity of Mycenaean pilgrim flasks dating to this period were recovered from Amarna, but other examples are known from the Tomb of Horemheb at Saqqara (Cat. No. 888: Mountjoy 1986: 80–81; Bourriau and Hope 2005), and Memphis (Cat. No. 392: Bourriau 2010: fig. 33). Mycenaean pilgrim flasks become more common in the next phase. The three oasis flasks from this phase were left uncoated (Cat. Nos 1628–1630).

Near East

Across the Near East in general, specific decorative styles appear confined to cultural areas, and Egyptian potters adopted only select attributes. I discuss the possible reasons for this in Chapter 8. Certain aesthetic forms such as Marine Style decoration from Crete (Evans 1928: 510, fig. 312d) and three-dimensional anthropomorphic features from the Iron Age Levant (Amiran 1969: 276) in particular can be observed which do not appear in Egypt.

Indigenous

The majority of Egyptian-produced examples were left undecorated (Hope 1989: 56). Plain flasks make up 45% of the flasks known from the 18th dynasty with only 23 flasks from this period embellished with concentric circles (N=133); this feature only became more frequent on Egyptian manufactured flasks from the 19th dynasty (see Section 5.6.2). A popular motif for Type Ai.2 in particular was a painted rosette in the centre of the belly (Cat. Nos 21, 332–333). Although concentric circle decoration did occur (e.g. Cat. Nos. 1612–1613), within the 18th dynasty flasks were more often characterized by a creative response to this new form, with several different patterning styles observed. One Nile Silt flask from the Tomb of Kha (Cat. No. 478) was engraved with a triangular pattern around the outside of the belly. Hope (1989: 56) mentions a small quantity of flasks decorated with blue pigment were found at Malkata and Amarna, with two found at Amarna (Cat. Nos 3, 165). This is not unexpected,

given the restricted nature of this decorative form, which was closely associated with elite groups and the ‘Palace culture’ in the 18th dynasty. A lone example from Abydos bears a hieratic text (Cat. No. 399) that is unfortunately too degraded to read. This addition was likely related to the flask’s contents rather than being intended as an aesthetic decoration. Finally, Bourriau (1987) published a vase with molded anthropomorphic decoration, featuring two figures possibly representing a Syrian and a Nubian above the handles (Bourriau 1987: figs 1–3). This vessel is from the Egyptian museum in Berlin and unfortunately has no provenance (Cat. No. 800).

5.4.4. Findspots (Map 3)

18th dynasty pilgrim flasks were sourced from the Levant, Mycenaean Greece and the Western Oases as well as being produced locally (see **Map 3**). Examples were deposited in both mortuary and settlement contexts. Examples in settlement contexts are usually Not Identifiable (NId) in form that makes them difficult to assess; however their presence alludes to patterns of daily use across communities, with fragments found in the royal settlements at Memphis and Amarna as well as workmen’s villages including Kahun and Deir el-Medina. Unfortunately a substantial number from museum contexts were unprovenanced.

The majority of flasks were found in settlements in this period, with 89 examples from an urban context. This included the 43 Mycenaean fragments from Amarna. However, others were identified at Memphis (Bourriau 2010) and Karnak Nord (Jacquet Gordon 2012: fig. 51) most notably.

The majority of complete examples were found in cemetery contexts, with 26 from a necropolis. This is in part due to the increased likelihood of preservation inherent in a buried space. However, their inclusion may also be a sign that the flasks and/or their contents were considered relevant to the funerary sphere. Flasks appeared both in simple sand-cut graves such as [15128] in the Southern Cemetery at Amarna (**Figure 5.4** – Stevens et al. 2013: 9; fig. 6; Cat. No. 771) – often as the only grave good – as well as in wealthier burials such as the Tomb of Kha (Sciaparelli 2008; Cat. Nos. 465–466) or the tomb of Maya at Saqqara (Cat. Nos. 1612–1613: Aston pers. Comm.).

I expected that pilgrim flasks would be associated with Levantine burials in Egypt, due to their link with the Levant (Bard 1999: 629). However, this was demonstrated to be incorrect. The Tomb of the Three Foreign Wives of Thutmose III found looted near Luxor and reconstructed by Christine Lilyquist (2003), contained no pilgrim flasks. This tomb has been suggested to contain the bodies of three members of the harem with West Semitic names, Menhet, Menwi, and Merti, possibly daughters of Syrian rulers (Lilyquist 2003: 333). The tomb contained New Kingdom vessels, of which 21 were in a marl A4 (11) or marl D (10), 2 were imported from the Levant, 1 was imported from the Dakhleh Oasis, and 1 unidentified (Lilyquist 2003: 73). A majority of the vessels within the tomb were storage jars or Canaanite-type amphorae, although open forms, vases, and beer jars also appear. The tomb does contain a wide variety of stone ointment jars, with piriform, globular, shoulder, wide-necked and ‘fancy-form’ jars, manufactured in travertine and serpentine, which were likely preferred due to their more expensive materials. Although the tomb was robbed, ceramic vessels were usually left behind by looters. The lack of pilgrim flasks in this high-end burial suggests that the form and its associated contents were not considered of sufficient relevance to be placed such a high-status grave. No pilgrim flasks in stone or ceramic are known from royal burials at this time, although this may be due to the lack of intact royal burials known except for the tomb of Tutankhamun, which itself did not contain pilgrim flasks (Holthoer 1993).

5.5. The Ramesside Period (19th–21st dynasties)

172 flasks can be securely dated to this phase, a total of 20% of the Egyptian data set (n=980). Flasks from 20th–21st dynasty contexts were included in this section due to evidence for continuing links with Ramesside ceramic technological practice.

5.5.1. Morphology (Graph 5)

Graph 5 demonstrates the variety of forms found in Ramesside contexts. 102 flasks were NId so their type could not be calculated. As in the 18th dynasty, the lentoid Type Ai.1 continues as the most common pilgrim flask type with 36 examples dated to this phase. It has been

suggested that Type Ai.1 developed morphologically over the course this phase (Aston 2009: 323) with later flasks said to feature a particularly flat lentoid body, often with small points on the belly, paired with a tubular neck that has a strong, almost perpendicular, flare to the rim. Handles are rounded in a wide arc, with their edges extending further out than the body edges. Such flasks almost always feature painted concentric circle decoration. Aston (2009: 323) suggests these develop in the 20th/21st dynasty or by the 11th century, with such forms common throughout the subsequent phase (e.g. Heliopolis: Petrie 1915: pl.xi, 50; Cat. No. 506). However there was insufficient evidence to suggest this type as a distinct form in the dataset so they are here retained with Type Ai.1.

A clear morphological change in this period can be observed in the movement of flask handles, which stem from further down the neck towards the shoulder throughout the course of the New Kingdom. During this phase, they stem the middle of the neck to the shoulder in the majority of cases (e.g. Cat. No. 1576: Aston 2008b: pl. 111, 2240). At its most extreme, these become lug handles and turn into Type Ai.3, a form common in the following period. Examples of Ai.2 remain on a different developmental trajectory, with the squatness of the neck meaning handles remain positioned at the rim (e.g. Cat. No. 500: Sowada 2017: figs D–E); however, these are now less common with only 13 examples appearing in the Ramesside period.

Type D – an asymmetrical flask with a belly flat on one side and deep on the reverse – is rare in this phase, but one vessel in this form appears in the ‘Ramesside’ Gurob burnt deposit (Cat. No. 471: Petrie 1891: pl. xviii, no.58), one in Qantir in Marl D (Cat. No. 560: Aston 1998: 494) and a very fragmentary example in Oasis clay also from Qantir (Cat. No. 573: Aston 1998: 537). Unfortunately, no description of the fabric type of the Gurob example appears in the publication, but it is unlikely to be in Oasis clay during this phase and its morphology is more similar to contemporary Nile silt or marl pilgrim flasks.

Two Type H flasks were also deposited in this phase: a Type Hi.1 in the ‘Amenhotep III’ deposit at Gurob (Cat. No. 127) and a Levantine Type Hii at Tell el-Retabeh (Cat. No. 494). However, Bell (1991: 167) notes that some of the objects within the burnt deposits likely dated to the 18th dynasty, and it is likely that these Type H flasks are antiques. A lone example

of Type J also appears (Cat. No. 400) – this rare form is always an outlier in every phase. Unfortunately this flask has no recorded context.

Although Levantine Type A forms continued to be imported, many contemporary flasks in the Levant now have a globular body (Aston 2009: 318, fig. 18; McClellan 1975: type 64–132–001), along with L-shaped handles and a perpendicular, modelled rim. These are classified as Type B in the Type-series. Both Type A and B Levantine flask forms were invariably decorated with painted concentric circles and often stars under the handles, and were found at a variety of contemporary sites in the Late Bronze Age in the Levant, including Lachish (Locus AIII – Tufnell et al. 1940: pl. LIVB, nos 349, 351) and Megiddo (See Tomb 912B dating to the Late Bronze II: Guy and Enberg 1938: pl. 34, nos 13–16). Levantine morphology was discussed in greater detail earlier (see Section 3.4.1). Levantine inspiration behind locally manufactured Egyptian flasks is evident in their strong morphological and decorative similarities with their Levantine counterparts, and there is in this period an increase in the quantity of these rounded forms in correlation with the morphological shift in the Levant during this period, with 10 examples in the catalogue (e.g. Cat. No. 495: Aston 1996 fig. 38 no. 6; Cat. No. 482: Aston 2008b: pl. 61, 1224).

5.5.2. Type L

Type L is distinguished from Type A by its flat base, which is distinct among Egyptian forms, because all other Egyptian pilgrim flasks have rounded bases. This resulted in strongly differentiated use patterns. The sole example of Type L from an Egyptian context in the Catalogue is from the Birmingham Museum and Art Gallery, and has no recorded date or context in the museum records (Cat. No. 403). However, the flask is stamped with the cartouches of Ramesses II (1279-1213 BC), providing a *terminus post quem* for the vessel. This vessel has two sharp, L-shaped handles resembling the butterfly handles of Type C, a tubular neck with a straight rim, and a flattened uneven base (see **Plate 4**). The presence of the cartouche may signify a relationship to the royal court – perhaps it was manufactured in a royal workshop or contained a particularly valued content. It is currently the only example thus decorated to my knowledge.

5.5.4. Fabric (Graph 6)

Graph 6 shows the range of fabrics used to produce flasks during the Ramesside period. A broader variety of fabrics are observable than in the 18th dynasty examples (see **Graph 2**). From the 19th dynasty, the popularity of the pilgrim flask intensified within Egyptian society, and Aston (1999: 62) has suggested that this was reflected by a noticeable increase in Nile silt examples. However, my data shows instead relatively equal quantities of each fabric, with only slightly more Nile silt than marl flasks: 33% were produced in marl throughout the Ramesside period, compared with 22% in Nile silt (n=172). This is broadly similar to the situation in the 18th dynasty (see **Graph 2**) – the Nile silt flasks nearly match the marl flasks in quantity. What is evident is a continual increase in the popularity of the form across fabrics. However the increase in Nile silt examples, while not overtaking the marl production, is still notable. Such flasks are typically in a Nile B2 fabric (Aston 1999: 62). Laemmel (2008: 179) notes that the beginnings of an increase in Nile silt pilgrim flasks, a feature considered typical of the following period, can be observed in the later Ramesside contexts in QIV at Qantir. It likely that the higher quantity of Nile silt flasks reflects a growth in the popularity of the form.

Both L-shaped and rounded handles still appear; however, on marl flasks these now stem from the middle of the neck to the shoulder in many cases (e.g. Cat. No. 1574: Aston 2008b: no. 2110) although not ubiquitously, as evinced by examples at Qantir that still stem from the rim (Cat. Nos 574–575: Aston 1998: nos. 2225, 2235). This is a move away from the previous phase, where marl handles always stemmed from the rim. At its most extreme, this becomes Type Ai.3 in the subsequent phase. This morphological shift mirrors the Nile silt handle morphology of Ai.1 types in the 18th dynasty, which continued as a constant feature.

Aston (1996: 65) observes that marl A4 Variant 1, rather than marl D as in the 18th dynasty, is the most common fabric choice in all the flasks in his study. However, this is a regional trend that occurs towards the end of this phase. In earlier, 19th dynasty contexts at Qantir, marl F pilgrim flasks are the most prevalent, with 48% of the marl fabrics, followed by marl D at 30% and marl A4 at 22% (n=172). Marl D also continues in popularity at Memphis, and it is likely that this shift to marl A4 must be pushed back to the end of the New Kingdom. The use of these different marl clays points to the exploitation of several sources, and the circulation

of flasks from different production centres – marl F is a local Delta fabric, for example (Aston 1998: 66).

A close look at the Egyptian fabrics found in Area QI within the settlement at Qantir (Aston 1998; Aston et al. 2007 see **Graph 7**) points to the existence of several production centres across Egypt that were manufacturing and transporting flasks across the state, capitalising on the form's popularity. This suggests there was substantial demand for flasks in a variety of fabrics, which may allude to specific contents from different areas. Use of the local Delta fabric marl F suggests at least one of these production centres had a source near the settlement. Some fabrics were perhaps inaccessible to the local populace, and thus the market reacted by developing cheaper alternatives in other fabrics, possibly containing lower quality versions of the desired contents. Laemmel (2008: 178) notes that in Area QIV, an unusually large number of pilgrim flasks were manufactured in Nile silt I.C (Aston et al. 2007: 518).

Foreign imports continue to be prevalent across both settlement and cemetery deposits, with 25% of flasks from this period (n=172) hailing from the Levant, Mycenae, Cyprus and the Dakhleh oasis, particularly during the 19th dynasty. The continuing large percentage of flasks across Egypt that were imported from the Levant suggests an ongoing demand for Levantine flasks even when local flasks were available, which likely relates to high-end Levantine contents. In the settlement at Qantir, evidence suggests that Levantine imports continued unabated throughout the Ramesside period, with this market consisting mainly of Canaanite jars and pilgrim flasks (Laemmel 2008: 184). Indeed 41% of flasks from QI at Qantir were imports, with a total of 2.6% of the overall ceramic assemblage studied at Qantir Levantine, compared with 2% at Memphis (Aston 1998: note 330). These high levels of imported goods began in the Late Bronze IIB phase, when large quantities of Syro-Palestine pots were imported into Qantir – predominantly the Late Bronze IIB Canaanite jar (at 2% of the total ceramic repertoire), but also pilgrim flasks on a smaller scale. The flasks were manufactured in five Canaanite fabrics (IV.07.05, IV.07.07-12, see Cat. Nos 584–611). Such variety suggests that trade in these vessels/contents was not restricted to a single locale in the Syro-Palestinian region (Serpico and Bourriau 1996; Aston 1998: 635). These trading links were not restricted to Qantir; a Levantine flask was also found in the temple of Merenptah at Thebes (Cat. No. 1568; Aston 2008b: pl.61) in fabric P11, which was manufactured in the seaward portion of

the Jezreel Valley to the north-east of the Carmel Ridge (Aston 2008b: 40; Bourriau, Smith and Serpico 2001). Others were found at Sais (Cat. Nos 739–749; Wilson 2011), Tell el-Retabeh (Cat. No. 494; Petrie 1906: pl. XXXVI; Aston 1996: 27, fig. 43), and Memphis (Cat. Nos 629, 635, 638: Bourriau 2010). The import of contemporary Levantine forms continued to inspire local potters, which often imitate Levantine trends.

Aston (1998: 652) has noted a tendency at Qantir to use specific fabrics for the sole manufacture of pilgrim flasks and storage jars. This is in contrast to Memphis, where these fabrics were not form-specific and were instead used for a range of vessel forms. This suggests a level of workshop specialism at Qantir, and that both the manufacture of these vessels, and their clay source, were of restricted use in that city. This may be related to the royal nature of the settlement, and changes in the next period where there appears to be more freedom of production.

Mycenaean sherds continued to appear sporadically in contexts of this phase, although they were rarer than Levantine imports. Seven sherds in a Mycenaean fineware with a homogenous texture and little temper (Bourriau P4: Nordström and Bourriau 1993: 184) were found in levels dating to Phase IIA at Memphis and likely belong to pilgrim flasks or possibly stirrup jars, of Late Helladic IIIA:2 and Late Helladic IIIB period (Bourriau 2010: 292). Mycenaean sherds also continued to appear in other sites, such as the tombs of Iniua (B. Aston 2012: 209; fig. VII.55; VII.54) and Horemheb (Bourriau and Hope 2005: 70; fig. 38), Sais (Wilson 2011: 169–171), and Qantir (Mommensen and Mountjoy 2001: 148; Aston et al. 2007).

A lone fragment of Cypriote Red Lustrous Wheel Made Ware was found at Memphis (Cat. No. 639). This ware originated in northern Cyprus (Eriksson 1991; 1993; Knappett et al. 2005: 48). Wilson (2011: 195) notes that some of her pilgrim flask fragments from the domestic structure at Sais may have been Cypriote, but does not elaborate and so all were registered as Levantine in the Catalogue. Fragments of a pilgrim flask in oasis ware also appear, from Qantir Area QI (Aston 1998: 536). This fabric is distinctive (Aston et al. 2007: 538) and only becomes a common find in Egypt in the early Third Intermediate period.

5.5.6. Decoration (Graph 8)

Concentric circle decoration remained in the minority in Ramesside contexts, and Egyptian flasks were most commonly left plain or given a simple slip (See **Graph 8**). When concentric circles were added, these were painted in red pre-firing (e.g. Qantir – Cat. No. 589) or black (e.g. Elephantine: Cat. No. 615). Seven examples were embellished with stars under the handles or lines along the handles and neck (e.g. Cat. Nos. 29, 495, 544, 708, 711, 712, 713), from Rifeh, Tell el Retabeh, Thebes and Mit Rahineh; this feature is common on later Levantine and Cypriote Iron Age flasks. Nile silt pilgrim flasks are almost invariably decorated in this period (e.g. **Figure 5.6**; see **Graph 9**), however marl examples are also known with red concentric circles particularly favoured, such as at the Temple of Merenptah (Cat. Nos. 1569, 1573–1574, 1577–1578; Aston 2008b) and the late Ramesside royal stables at Qantir (Cat. No. 1591; Aston and Pusch 1999). A lone marl clay flask is known with a floral pattern (Unprovenanced: Cat. No. 772). Other geometric patterns occur on Levantine flasks, with metope or circular shapes observed (Qantir: Cat. Nos 598, 600). However the majority of imported Levantine flasks in Egyptian contexts were left plain or given a simple cream slip. This is in contrast to contemporary Levantine examples and may point to the existence of an export market manufacturing flasks specifically for the Egyptian audience.

Graph 9 demonstrates that these decorative styles were often fabric specific. Marl flasks were either left plain, or often given a red slip or red concentric circle decoration, whereas Nile silt flasks have a broader range of decorative styles, often in black.

5.5.7. Findspots

Map 4 shows the extent of sites containing Ramesside flask material. Many examples in settlement spaces were NId due to conditions in settlements, meaning vessels were less well preserved – all 10 fragments from Ramesside levels at Sais were NId (Cat. Nos 761–770), for example. However, the well-recorded contexts at Qantir (Aston 1998; Aston and Pusch 1999; Mommsen and Mountjoy 2001; Aston et al. 2007; Laemmel 2008) and Memphis (Bourriau 2010) provide valuable settlement information for this period. The royal association with both sites, and particularly the long historical use of the Memphite area, mean the developments of

this phase are particularly well understood. The strong trade and exchange networks between the Levant and Egypt, of which pilgrim flasks were evidently an important part in the 19th dynasty, are clear in the high levels of imports (see **Graph 7**). This was also evident at Sais, where of the 10 Ramesside flask fragments found, 9 were in a Levantine fabric. The discovery of these flask fragments among domestic architecture indicates such imported vessels were not restricted and were widely available to the community at Sais.

Flasks continued to be deposited in mortuary contexts, with examples in Sedment Tomb 46 (Cat. No. 170), Abydos P β (Cat. Nos. 537–538), and the tomb of Maket at Kahun (Cat. Nos. 151; 474–475). However there was a notably higher quantity of flasks found in settlement contexts, suggesting an increased interest in their use.

They were also present in more unusual spaces such as the Gurob burnt deposits, the nature of which has been much debated (Serpico 2008: 23). Petrie (1891) discovered several pits containing luxurious items buried in the floor of the harem palace at Malkata, which exhibited evidence of burning. Based on items bearing royal cartouches, he identified five deposits dating to the reigns of Amenhotep III, Tutankhamun, Ramesses II and Seti II respectively, and suggested that these represented the remains of Aegean funerary rituals, conducted in honour of the Aegean population living at the harem (Petrie 1891: 16).

However, Bell (1991) in her thorough reassessment of the burnt deposits has concluded that all in fact date to the 19th dynasty (Bell 1991: 167), a dating confirmed by Aston (1996: 16) although some antique material from the reigns of Amenhotep III and Tutankhamun were included. She has suggested that rather than being related to the harem members, they are simply the remains of intrusive burials, which are not useful for dating purposes (Bell 1985: 61). Thomas (1974: 13) rather suggested they were in fact rubbish pits, although the fine preservation and quality materials in the deposits make this unlikely. More recently, Politi (2001) has suggested these deposits were part of a Hittite funerary ritual that involved the burning of the deceased's belongings and their burial separately from the body, and represent later use of the harem building during the reign of Ramesses II.

Seven ceramic pilgrim flasks were found in the Gurob burnt deposits. In the ‘Amenhotep III’ deposit, one example each of Ai.2 and Hi were found (Cat. Nos 127, 129; Petrie 1891: pl. xvii). The ‘Tutankhamun’ deposit contained an Aii flask (Cat. No. 470; Petrie 1891: pl. xvii). The ‘Ramesside’ deposit contained two pilgrim flasks of Type D and Type Aii (**Figure 5.7**, Cat. Nos. 156, 471; Petrie 1891: pl. xviii), and the Seti II deposit contained a Type Ai.1 and a Type Ai.2 (Cat. Nos 472, 734; Petrie 1891: pl. xix). Examples in Egyptian limestone, faience, and glass, also appear in these contexts, the high quality of which may suggest that these deposits belonged to elite individuals living at Gurob.

4.6. The Third Intermediate Period (12th century BC–7th Century BC)

The period from the late 19th dynasty to the end of the New Kingdom has been described as ill-defined and understudied (Bourriau 1981b: 72) and even identifying early Third Intermediate Period contexts is often difficult, with pottery dating to this phase often overlooked in pre-1950s excavations (Aston 2009: 317). However, sites of this period have been studied in more detail over the past 30 years and ceramic evidence from this phase has become much clearer, with excavations at Heracleopolis (Lopez-grande and Quesada Sanz 1995), Elephantine (Aston 1999), Memphis (Aston and Jeffreys 2007), Sais (Wilson 2011), Tanis (Laemmel 2011), and Karnak Nord (Jacquet Gordon 2012) containing multiple pilgrim flask examples. Furthermore, Aston’s (1996; 2009) studies of Third Intermediate Period ceramic typologies are invaluable for understanding this phase, because he refines the dating of many ceramic deposits excavated in the 19th and 20th centuries.

This period is understood as dating from the end of the 12th century BCE–7th Century BCE. 164 flask examples are relatively securely dated to this phase, making up 16% of the Egyptian data set (n=980). Pilgrim flasks dating to the 20th–21st dynasty contexts were counted as part of the Ramesside period, due to their many links to the earlier ceramic industry.

5.6.1. Morphology (Graph 10)

50 flasks were identified as NId in this period. This phase sees the beginning of substantial changes in prevalent flask forms (see **Graph 10**), which likely accelerated across the Third Intermediate Period representing changing use patterns of the pilgrim flask. Lentoid pilgrim flasks continue to appear but in reduced quantities. Type Ai.1 is still the most prominent form, making up 8% of the Third Intermediate Period total (N=164). Type Ai.2 makes only 3 appearances in mixed contexts within the database, and I suggest that these have in general faded out of use. In keeping with the handle evolution discussed above, Types Ai.1 almost invariably have handles stemming from the middle of the neck by this stage (e.g. Medinet Habu – Cat. No. 542; Elephantine: Cat. Nos 619, 627), and Type Ai.3 with handles from the base of the neck is likely the characteristic form in this later period (e.g. Memphis: Cat. Nos 1602, Aston and Jeffreys 2007: fig. 51).

Other lentoid types are rare. A Type Aii flask was deposited at Tell el-Yahudiyeh (Cat. No. 15). Although dated to the 18th dynasty in museum records, parallels with Cypro-Geometric Phoenecian flasks (see Bikai 1987: pl. II, no.4) and Iron Age Levantine flasks (see Guy and Enberg 1938: pls 68, 72) suggest this flask should be redated to this phase. Type Aiii is slightly more common with examples at South Karnak (Cat. No. 805: Sullivan 2013:181; 218), Amarna (Cat. No. 532; Aston 1996: fig. 110), and Matmar (Cat. Nos 535–536; Aston 1996: fig. 128), as well as unprovenanced museum examples (Cat. Nos 387), including an imported Cypro-Geometric III pilgrim flask in the Garstang Museum (Cat. No. 410). A lone Type Aiv was found at Medinet Habu (Cat. No. 544: Hölscher 1954). This is the only example of its Type in Egypt and may have been associated with Nubians living in this area during the 21st dynasty (see Chapter 6).

Globular flasks are a much more significant presence in this phase, with 20 examples from Heliopolis (Cat. No. 519: Heliopolis – Petrie 1915: pl.XL, no.49), Gurna (Cat. No. 540: Aston 1996: fig. 156: 8), Elephantine (Cat. No. 617: Aston 1999: pl. 21 no. 612), Defanneh (Cat. Nos 490–491; Petrie 1888: pl. XXXV), Memphis (Cat. No. 1597: Aston and Jeffreys 2007: fig. 47), and Karnak Nord (Cat. Nos 845–859: Jacquet Gordon 2012: fig. 97). A further six unprovenanced examples likely also date to this phase (Cat. Nos 36, 133, 221, 545, 654, 655).

Three examples of Type D appear in this period, from Tell Nebsheh (Cat. No. 485: Petrie 1888 vol II: 21; Aston 1996: fig. 35), Elephantine (Cat. No. 624: Aston 1999), and Tanis (Cat. No. 1563: Laemmel 2011: pl. 27). Gourds were asymmetrical pilgrim flasks, where one belly side protruded significantly, along with rounded handles stemming from the base of the neck to the shoulder. During the Late Period, these vessels grew in popularity and were a speciality of the Western Oases, slipped in a red or a grey (Hope 1999; 2000). These flasks were typically produced in a distinct fabric sourced from oases deposits (Aston 1996: 9; Hope 2000: 194–195; see Section 3.3.6, 3.4). However, asymmetrical pilgrim flasks were manufactured occasionally in a Nile silt in these earlier periods; these examples are not labeled as gourds in the literature even though, morphologically, they are of identical form. Aston (1999: 71; fig. 214d) includes a gourd example from Matmar with numerous handles in his typology; this is excluded from the Type-series as it does not fit the parameters of my study (see Section 0.1.1). Although Type D gourds are often assumed to be in Oasis clay, only one of these examples was manufactured from this fabric, the gourd from Elephantine. The example from Tanis was produced in marl A4, while the flask from Nebsheh was not described but by appearance is similar to earlier Nile silt examples. Gourds and lentoid flasks may have been manufactured in the Oases as early as the Third Intermediate Period (Sullivan 2013: 123) although the form is most characteristic of the Late Period and following phases when it appears in the Nile Valley in great numbers. As discussed in Section 0.1.1, this research is restricted to pilgrim flasks found in the Nile Valley between the 18th dynasty and the Late Period, to keep the data at a manageable level. As such, examples found in oases contexts were not included.

Although the sole example of Type I in the entire data set (Cat. No. 27) was recorded as dating to the 18th dynasty in the Petrie Museum collection records, I have reassigned it to this period, based on its similar morphology to Late Cypriote IIIB flasks – one unprovenanced example in the Metropolitan Museum of Art (Acc. No. 74.51.1073) dates to 1200BCE–1050 BCE; another in Bichrome ware (Gjerstad 1948 vol. 4, fig. 23) dates to the Cypro-Geometric III period (c.850–700 BCE). This composite flask has three lentoid flasks joined at the belly with a ‘nubbin’ protrusion, paired with flaring necks, rounded handles and painted black and red geometric decoration. The parallels suggest a late Ramesside/early Third Intermediate period date for this flask is more appropriate.

Types E, F and G first appear in the 8th century, towards the end of this phase. E is the most extreme evolution of the observed handle morphology, where the handles have moved down the length of the neck over the course of the New Kingdom. Type E typically has handles running from the base of the neck, squashed into the body, in a ‘pinched’ style. Only 4 examples of Type E appear in this phase, with 3 in Giza Tomb 2 (Cat. Nos 498–500: Petrie 1907: pl.xxiii; Aston 1996: fig. 42b) and one in Hermopolis (Cat. No. 520: Aston 1996: fig. 92,7) but this form is significantly more common in Nubian contexts (see Chapter 6). Similarly, only two Type F flasks in a marl clay were identified, one in shaft C in the tomb of Khnummose (Rose 1996: pl. 67) and one from Karnak Nord (Cat. No. 843: Jacquet Gordon 2012: fig. 90); but again, this Type is significantly more common in Nubia (see Chapter 5). Type G was more common, with 22 examples from Hermopolis (Cat. Nos 520, 521–531; 1619–1625: A. Spencer 1993: pls 71–72; Aston 1996: figs 106–107), the Temple of Ptah at Karnak (Cat. No. 813: Boulet 2017: fig. 4b), Karnak Nord (Aston 1996: fig. 177; Jacquet Gordon 2012: fig. 97) and Medinet Habu (Cat. No. 547: Hölscher 1954). One example of Type Gii at Karnak (Cat. No. 860) was however from mixed contexts dating from the 21st–25th dynasties (Jacquet Gordon 2012: fig. 97) and thus it is possible that the form was first manufactured earlier than the 8th century. Types E and G bear significant similarities to contemporary Oasis gourds (Hope 2000: figs 1–3) and were likely inspired by Oasis examples.

5.5.3. Butterfly Handles

The first appearance of Type C (see **Figure 5.5**) has been the subject of some debate. The addition of semi-triangular handles in a pointed or ‘butterfly’ shape to a flat flask body is rare, and at present only appears in Egyptian contexts. Thomas (1974: 46, pl. 11 no. 198) has suggested that a Type C flask in the Gurob burnt deposits can be dated to the Late New Kingdom; however, Aston (1996: 68; 1999: 158; 2009: 323) has proposed that this type appears no earlier than the 9th century BCE, after noting their appearance at Memphis (Cat. No. 104: Fischer 1965: pl. 60), Gurob (Cat. 35: Thomas 1974: 46), Matmar (Cat. No. 534: Brunton 1948: pl. lvii, 93B) and Elephantine (Cat. No. 623: Aston 1999: 158, no. 1498).

29 flasks are categorised as Type C in the database (Cat. Nos 30, 35, 124, 406, 492, 493, 507, 534, 548, 623, 626, 628, 697, 699, 831–842, 1537, 1544, 1572, 1582). The form is relatively standardised: all examples are in Nile silt and have a thick, heavily polished Nile silt slip. One exception may be the pilgrim flask from the Temple of Merenptah (Cat. No. 1572) which was found in contexts dating to the 20th/21st dynasties (Aston 2008b pl.69); this example is in Marl A4. However it is very broken and is not certain to be a Type C. This unusual fabric and early time period may suggest it is a different form, or a very early prototype.

Although lentoid flasks occasionally have butterfly-like handles, Type C is characterised by the pairing of these handles with a very flat body and a thick brown slip, which does not appear on the lentoid flasks. The form's handles develop outside the typical handle morphology – the observable movement of handle placement during the New Kingdom/Third Intermediate Period from the rim, to the middle of the neck, to the base of the neck.

Many Type C flasks in the catalogue have a limited provenance, and others have been dated incorrectly; the example from Ash Sharqiyah is recorded on the Petrie Museum Online Catalogue as dating to the 13th dynasty, and the example in Birmingham was bought by the Wellcome Trust and registered as a Coptic flask. Neither date is valid nor sheds light on the form's chronological spread. However, modern work at Karnak Nord (Jacquet Gordon 2012), Elephantine (Aston 1999), Saqqara (Aston-Greene 2005), Kom de Plinthine (Barahona-Mendieta, Pesenti and Redon 2016) and Heracleopolis Magna (López-Grande and Quesada Sanz 1995) have provided better contexts with which to estimate the form's chronological appearance.

Of those Type C flasks with recorded findspots, many date to the late Third Intermediate Period or early Late Period, with the examples at Elephantine (Cat. No. 548, 623, 626, 628) of 8th century date; the flask from Saqqara (Cat. No. 1537) late Third Intermediate/Saite; the example from Kom de Plinthine (Cat. No. 1582) dating to the 9th/8th century BCE; the flask from Heracleopolis Magna (Cat. No. 1544) between 700 and 650 BCE, and the 11 flasks from the dumping area of Karnak Nord (Cat. Nos 831–842) between the 21st and 25th dynasties.

Of the examples dated to the late New Kingdom, upon closer inspection this designation is not firm. The examples at Tell el Retabeh (Aston 1996: fig. 42a) are not from a closed context and contain a mix of material from the Second Intermediate Period up to the present day (Cat. Nos 492–493: Petrie 1906; Aston 1996: 27), while those at Mit Rahineh were dated too late by the excavators (Aston 1996: 32). The pilgrim flask from the Temple of Merenptah (Cat. No. 1572) was dated to the 20th/21st dynasties (Aston 2008b pl. 69); although it is very broken and is not certain to be a Type C. However, the 11 flasks from Karnak Nord (Cat. Nos 831–842: Jacquet Gordon 2012: fig. 90) were from contexts between the 21st and 25th dynasties. Type C flasks from both these sites were manufactured in marl clay, which differentiates them from later examples. It is possible that these marl Type Cs represent the earliest examples of the form, likely in the early Third Intermediate Period, but its greatest spread was undoubtedly from the late Third Intermediate Period. I have placed 27 of the Type C flasks in this phase

5.6.2. Fabric (Graph 11)

Although particular regions produced local flasks throughout all periods under study, this aspect of manufacturing specialisation becomes particularly obvious in this phase thanks to the unique compositions of Oasis and Aswan fabrics, both localized kaolinite clays.

By the Third Intermediate Period, Nile silt flasks were significantly more prevalent than marl examples, with 31% of the flask total for this period in Nile silt, most commonly Nile B2 (N=164). Marl flasks are now predominantly in marl A4 or A2, with levels at 22% (N=164). Unfortunately, flasks excavated in the 19th and 20th centuries were often not given a detailed fabric description, so many of these have been designated as ‘uncertain fabric’ in the catalogue.

By the 10th century BCE, both marl and Nile silt flasks have handles running from the middle of the neck to the shoulder (Aston 1996: 68). This is clearly visible in examples from Elephantine, in both lentoid and globular flasks (Aston 1999: Cat. Nos 617, 619). The sherds from the late New Kingdom/early Third Intermediate Period from Sais are difficult to assess, but more complete examples do seem to follow this trend (Wilson 2011: fig. 71). Aston (1999: 82) has suggested that the differences in marl handle position in this phase may allow us to

chronologically differentiate between flasks of the IIA (the Late New Kingdom) and IIB (the Libyan period) eras but at this present time there is not enough carefully dated material to test this, so it must remain a hypothesis.

This period sees the first production of flasks in Aswan clay, a specialised marl clay sourced from the cliffs around the Aswan region (see Cat. Nos 623, 625, 627, 628). Vessels manufactured in Aswan clay were thought to first appear at the very end of this phase (Ballet and Vichy 1992: 113–116; Bourriau et al. 2009: 122). However, studies at Elephantine have shown that the first examples were manufactured in the 8th century BCE (Aston 1999: 7: see Cat. No. 625) with the use of this clay increasing in the Ptolemaic period (Rodziewicz 1992; 2005: 46). This indicates that a new region of production in the Aswan area opened up once the new source was identified. These early flasks were found only at Elephantine, suggesting the market for export was at this time restricted to southern Egypt. This fabric becomes more common in the Late Period (c. 7th–4th centuries BCE). Similar vessels with rough, vaguely globular bodies and thin necks also appear in this fabric in Elephantine from the Third Intermediate Period (Kaiser et al. 1999: *tafel* 49); however these rarely have handles, and thus were not counted as part of this study (see Section 0.1.1). These may represent a later evolutionary form of the pilgrim flask.

Flasks produced in oasis clay were imported from the Western Oases and increase in popularity in this phase, with 18 pilgrim flasks confirmed to be in Oasis clay and 7 more likely to be in Oasis clay. The majority of these were Type G flasks (e.g. Cat. Nos 1619–1625: A. Spencer 1993: pl.72); however some Type D flasks were also produced in this fabric (e.g. Cat. No. 624: Aston 1999). Type D continued to be produced in marl clay (e.g. Cat. No. 1563: Laemmel 2011: pl. 27). The increase in pilgrim flasks in oasis fabrics points to specialised production in the Western oases, probably related to a particular content produced in the region and desired within the Nile Valley.

The trend for imported flasks continues throughout this phase (see **Graph 11**), indicating that the breakdown in unification in Egypt did not halt its trading relationships across the Mediterranean and North Africa. While there is evidence that state-run expeditions declined in this phase – which were closely connected to the royal palace (Eyre 2010: 296) – this collapse

of royal power likely had little impact on individual-led commercial trade such as that observed in Base-Ring I juglets (Bergoffen 1999: 309).

Six Levantine Type B pilgrim flasks appear in Egypt in this phase in the cemetery at Nebesheh, a site in the eastern Nile Delta (**Figure 5.8**; Cat. Nos 487–493; Petrie 1888: 21, pl. 3), with Tomb 33 in particular containing 4 imported examples. At Sais, 64% of the flask remains were Levantine imports during this period (n=32), although their fragmentary nature means their exact morphology cannot be identified. All are contemporary with continuing Levantine Type B flask deposits of this form known from the last quarter of the 13th century BCE–10th century BCE, at Megiddo, Beth Shan, Tell Jemmeh and Tell el Farah (Aston 2009: 318).

Cypriote flasks were also in circulation in this phase – two unprovenanced examples in the collection of National Museums Scotland were dated to the 7th century BCE. These were donated by Charles T. Currelly, who excavated at Abydos and Heracleopolis Magna, and thus it is probable the flasks came from one of these sites. However, these are likely heirlooms based on their Type Ai.2 morphology. Wilson (2011: 169) notes that both Levantine and Cypriote flask imports were found at Sais, but unfortunately she does not specify which she considered Cypriote and does not include photographs, and so these have all been classified as Levantine in the database. A single uncontextualised example of Type Aiii dates to the Cypro-Geometric II/III period but unfortunately has no provenance (Cat. No. 410). However, this does indicate that the Type A forms continue in production outside Egypt at this stage.

5.6.3. Decoration (Graph 12)

Flasks were most commonly left plain in this phase (see **Graph 12**) in both fabrics (see **Graph 13**) and were either completely undecorated at 60% (N=164) or given a simple red or cream slip at 12% (N=164). The most common decorative design is the addition of red or black concentric circles/spiraloid patterning (e.g. Cat. Nos 1596–1597; Aston and Jeffreys 2007: fig. 47), occurring on 17% of flasks, painted with a compass rather than on the wheel (Aston 1998: 548). Only one example has a star painted below the handle (Cat. No. 233). These primarily date to contexts from early in the Third Intermediate period, with examples from

Tanis (Cat. No. 1565: Laemmel 2011: pl. 27) from contexts with mixed material from the 21st–24th dynasties. This concentric circle patterning is also a common feature for imported flasks from the Levant at the end of the New Kingdom/beginning of the Third Intermediate Period. The plain flasks, particularly the Oasis examples, come from slightly later contexts in this phase, up to the 8th Century BCE. Although many of the oasis examples are fragmentary, complete pilgrim flasks (e.g. Aston 1996: fig. 107) indicate Type G flasks were not decorated with painted concentric circle decoration and it is likely that this decorative style faded in popularity throughout this phase. Type G flasks did however often bear a red slip and incised concentric circles, akin to emphasised rilling marks (e.g. Cat. Nos 861–896: Jacquet Gordon 2012: fig. 97). One example at Karnak Nord was also described as bearing a pot mark (Cat. No. 860 – Jacquet Gordon 2012: 248).

5.6.4. Findspots

The pilgrim flasks from this phase were found primarily in settlement sites (see **Map 5**). Both Qantir and Elephantine contained levels dating from the Ramesside into the Ptolemaic period and thus were extremely useful for analysing morphological developments.

Levels I–II at Sais (**Figure 5.9**) contained a structure dating to the early Third Intermediate Period, in which 22 NId pilgrim flask sherds were found. 14 of these were imports (Wilson 2011: 169–171), indicating that the exchange relationship with the Levant was significant and access was not restricted to Qantir. Recent work at Tell el-Retabeh revealed the remains of domestic structures in use from the Late New Kingdom into the Third Intermediate Period, which included two flask fragments dating to the end of this phase – one imported from the Dakhleh Oasis (Rzepka et al. 2011: 160) and one in a local Nile B2. The mix of storage jars, coarse basin/bowls and bread trays in this deposit suggests a domestic purpose for this space, which was perhaps shared by a community. This is a further feature at the town of Hermopolis (A. Spencer 1993: pl. 72; Aston 1996: figs 106–107), which contained primarily flasks in Oasis clay, indicating this region desired a particular content from the Dakhlah Oasis.

A large number of pilgrim flasks were found at Karnak from contexts dating across the Third Intermediate period. The deposit at Karnak Nord was dated between the 21st–25th dynasties

but the pilgrim flasks should likely be assigned to the earlier part of the period. Examples at South Karnak were dated between the 10th and the mid-8th centuries (Sullivan 2013:181; 218: Cat. Nos 807, 810, 812), while three flasks at the Temple of Ptah (Boulet 2017: figs 2j; 4b: Cat. Nos 811–813) date to the later part of this phase, in 25th dynasty levels. The large number of Type C flasks found at Karnak Nord (Cat. Nos 831–842: Jacquet Gordon 2012: fig. 90) is much higher than that found elsewhere and may suggest the form was manufactured here.

Pilgrim flasks were also found across other town sites including Memphis (Aston and Jeffreys 2007: figs 47, 51), Tanis (Laemmel 2011: pls 26, 27, 44), Heracleopolis (López-grande and Quesada Sanz 1995: pl. xxvi, xxvii), Elephantine (Aston 1999) and Medinet Habu (Hölscher 1954). Hermopolis (A. Spencer 1993: pl. 72; Aston 1996: figs 106–107) contained a particularly significant number of Type G vessels, which would become common in the following period. The diversity of settlement contexts in which the often substantial flask quantities were found (particularly at Sais) suggests use of pilgrim flask contents was common and unrestricted during this period, a factor reflected in the variety of fabrics in which the form was now produced. However the existence of relatively equal quantities of Levantine, Egyptian and Oasis forms suggests the circulation of different specialised contents from each region.

Definitive cemetery contexts are rare in this period, due to the fashion of multiple interment tombs that developed towards the end of the Ramesside period, which resulted in the mixing of artefacts from different phases. Tomb 2 at Giza likely dates to the end of this phase (Petrie 1907: pl. xxii), and contains 3 flasks that Aston (1996: 31) refers to as gourds, but are labeled here as Type E flasks (Cat. Nos. 512–514). The cemetery at Matmar is currently the largest poor necropolis known for this phase (Aston 2009: 114), likely dating between the 10th–8th centuries BCE, and contained 517 graves (Brunton 1948). However only 28 graves, or 5% of the total, contained pottery, and in only 4 of these were the pots within the grave itself rather than on the perimeter as an offering. The fact three of these graves contained pilgrim flasks (Cat. Nos 548–550) and no other ceramics is striking. Although this decrease may be related to the fact this was a poorer cemetery, the continued appearance of pilgrim flasks even within this context may suggest they were perceived as particularly relevant for the burial sphere. Further fragments were found in a necropolis at Lahun, again dating to the end of this phase

(Petrie, Brunton, and Murray 1923). A cream-slipped and burnished fine Nile silt Type C flask was found in the Tomb of Pay and Raia at Saqqara (Aston-Greene 2005: pl. 137), dating to the end of this period or the beginning of the Late Period.

5.7. The Late Period (c. 7th–4th centuries BCE)

The Late Period, dating from the 7th to the 4th centuries BCE and starting with the 26th dynasty, sees a move away from the earlier flask forms. The catalogue contains 385 flasks belonging to the Late Period, 39% of the data set (n=980). The majority of these are oasis imports, with lentoid flasks increasingly rare. A clear distinction within Egyptian ceramics has been noted for the 8th century BCE (Boulet 2016: 35) and this change is noticeable in the pilgrim flasks now appearing in Late Period contexts.

5.7.1. Morphology (Graph 14)

Type A forms have almost completely vanished, with only 22 examples in this period (see **Graph 14**), and those that do occur have a more rounded body than in earlier phases. Types B, C and D are even less common, with only 6 Type B flasks known, 2 Type C, and 1 Type D. While 27 Type E flasks can be observed, the majority of flasks of this phase are Type G, with 218 examples in total, making up 56% of the pilgrim flasks where form could be identified (n=385). This corresponds with the increased appearance of kegs in deposits – globular vessels that are morphologically similar to pilgrim flasks, but that have no handles and were able to sit on the ground unaided (e.g. Hope 2000: fig. 5). As discussed in section 0.1.1, these later handle-less flasks were not included in the study.

Type E rims were usually left unmodelled, whereas the rims of Types D and B are often pointed, demonstrating greater care in production in these latter forms. At Ayn Manawir (Wuttman et al. 1996: 425), Type E forms were referred to as gourds by the excavators due to their manufacture in Oasis clay; however, this term should be restricted to asymmetrical vessels. An additional flask, classified as part of the same typological group by Wuttman, looks morphologically similar to a pilgrim flask, except for its lack of handles. This is likely the final

point in the evolution of handle placement discussed above (**Figure 5.10**), where handles move down the neck over the New Kingdom before degrading. This handle loss is accompanied by retention of other pilgrim flask elements, such as the lentoid body shape and tubular neck, and is a hallmark of this phase (e.g. Petrie Museum UC19239, dating to the 26th dynasty). Where handles were retained, they were typically small or even vestigial: for example Cat. No. 670, a marl example from the embalmer's cache at Saqqara, has small, pinched lug handles. Several examples from Karnak Nord (Cat. Nos 898–917: Jacquet Gordon 2012: fig. 118) appear to be Type E flasks. In Egypt, these were primarily obtained from the Western Oases.

Type G flasks held a substantially larger volume than the earlier forms of Types A and B and are reminiscent of a keg (Hope 2000: fig. 5), often with a large stave joining the two bowl halves (a keg is also referred to as a pilgrim flask in certain publications, see Rzepka et al. 2011: 160). Some Type G flasks from museum contexts were dated to the 18th (Cat. No. 645) and 19th (Cat. No. 29) dynasties – both seem unlikely given the wealth of contextualised examples in Third Intermediate Period contexts at Hermopolis (A. Spencer 1993: pl. 72; Aston 1996: figs 106–107) and Late period contexts at Karnak Nord (Jacquet Gordon 2012: fig. 97), as well as Roman and Napatan examples. It is likely that Type G flasks first came into use in the Nile Valley in the late Third Intermediate Period and increased in use throughout the Late Period, and on into the Roman period (Hope 2000: 189). Type G flasks have a substantial presence in well dated, early Napatan contexts in Nubia (see Chapter 6); however, these Nubian examples were always produced in Nile silt and display morphological differences which suggest they were inspired by Egyptian, not Oasis, examples.

Pilgrim flasks in Oasis fabrics (see Section 3.3.6, 3.4) were produced in the Western Oases during the New Kingdom (Marchand and Tallet 1999: fig. 21), but rarely reached the Nile Valley in this period. The keg, or *les siga*, was a form likely inspired by these earlier examples but which may also have taken inspiration from animal skins used for water (Hope 2000: 189). Both lentoid and keg forms appear in sites such as Mut el-Kharab (Gill 2016: figs 3.42a and b) and Ayn Manawir (Wuttman et al. 1996: 425; Marchand 2000) in the Dakhleh Oasis. By the end of the Late Period, the majority of these flasks have no handles (Hope 2000: figs 4–6; Marchand 2007).

Oasis flasks were imported into the Nile Valley via routes such as the Luxor-Fashut road, where they were most prevalent during the 25th–26th dynasties (Darnell 2000: 227–228). These forms appear at Thebes in 26th dynasty levels (Sullivan 2013: 218 2-4), Heracleopolis Magna in the 8th–7th centuries (Aston 2010), and Saqqara in debris dating to 500–450 BCE (Aston and Aston 2010: pl. 47), with a particularly significant number at Karnak Nord in 26th–30th dynasty contexts (Jacquet Gordon 2012: fig. 118).

A lone example of Type Hi (Cat. No. 653) was assigned to this phase (Regner 1998: 250; Wodzinska 2010: 258); however, the fact that all other known examples of this form occur in the New Kingdom suggests that this dating is incorrect and the form has been related to the 18th dynasty; the example has no provenance to corroborate the proposed date.

The Late Period is characterised by the appearance of the New Year's Flask (see Section 4.7). These specialised flasks have a lentoid body bearing iconic lotus and baboon/ibex decoration. They were typically produced in green faience and were made in a mould. The neck was sculpted to resemble a papyrus roll or temple column, and flower garlands were commonly painted or incised onto the body. A Bes or cow figure was sometimes added. 85% include an inscription with New Year propitiatory formulae, usually dedicated to a Memphite deity (Blanquet 1991: 49), which may indicate that they were often made in Lower Egypt; however, they do appear in other areas referencing local deities (Masson nd: 7). So-called New Year's Flasks were particularly popular during the reigns of Apries and Amasis during the 26th dynasty (Blanquet 1991: 52; F. Friedman 1998: 229), but early examples from the 18th dynasty are known (e.g. Minault-Gout and Thill 2012: pl. 171) and the form occurs until the Persian period (Masson n.d.: 5). Flask inscriptions were typically across the belly or seams and invoke a perfect year for the owner - wp rnpt nfr n nb.s. The flasks appear to have been given as gifts for the New Year Festival, which coincided with the annual Inundation (Blanquet 1991: 52; F. Friedman 1998: 229; Masson n.d.: 7) with the iconography on the vessels symbolic of this celebration.

The contents of New Year Flasks has been debated. Stampolidis (2003: 493) suggested they contained cosmetic unguents; and indeed a specific unguent intended for the New Year did

exist (Chassinat 1929: 120). However, many scholars prefer the theory they held water from the inundation, given their inscription (e.g. Goyon 1972: 52; Blanquet 1991; Schneider 1999: 72). The recent discovery of ceramic pilgrim flasks in TT99 dating to the reign of Thutmose III, two of which reference ‘Good wine for this [New] Year’ (Bohleke 2016: 243–245; Rose 2016: 201–203) and one which references ‘Good wine [to be] for regnal year 38’, however, may suggest that New Year Flasks also contained wine, based on the similar formulae on the inscriptions and the reference to the New Year. However, the difference of 800 years as well as the significant disparity between the morphology of the flasks in TT99 and the New Year Flasks means this should be applied with caution. Residue analysis of a New Year Flask – which revealed that the example contained honey (Caubet and Pierrat-Bonnefois 2005: 151) – further complicates the picture. It can however be said that all pilgrim flask forms likely contained a semi-precious liquid substance, the exact contents of which varied dependent upon place of origin and chronological point.

5.7.2. Fabric (Graph 15)

The majority of pilgrim flasks from this phase were in Oasis fabrics, at 89% (n=385), with all Type G flasks and many Type E flasks in these clays. Several Oasis clays have been identified (Eccleston 2000) which are distinct from Nile valley clays (see Section 3.4). These fabrics are typically hard and often ferruginous or high in aluminium (Sullivan 2013: 81). The 9 Type G flasks found at Heracleopolis Magna were all in Oasis IIIa2, a site-specific designation that was homogenous, fine and porous, typically of a grey colour (López-Grande and Quesada Sanz 1995: 36). The examples from this site included lentoid forms (e.g. Cat. Nos 1546, 1548), demonstrating that these oasis imports were not exclusively of Type G.

The fact all Type G flasks of this period were in Oasis wares indicates these forms were a speciality of the region, and likely contained a specialist product from the Western deserts that was clearly desired in large quantities by inhabitants of the Nile Valley, particularly around Karnak (see Jacquet Gordon 2012: figs 97, 118). Where Type E flasks were not in Oasis clay, they appear to have been imitated in the Nile Valley in marl calcareous fabrics (e.g. Tell Dafana: Cat. No. 1557, Lèclere and Spencer 2014: pl. 38; Kom Plinthine: Cat. No. 1584, Barahona-Mendieta, Pesenti, and Redon 2016: 18), perhaps to emulate these Oasis fabrics.

Other fabrics were rare in this period, with 14 flasks were produced in Nile silt clays, with Nile B2 (e.g. Cat. No. 647: Aston 1999: 249; pl.78) observed; along with examples from older excavations which provided more vague descriptions such as ‘coarse red clay’ (e.g. Cat. No. 546: Hölscher 1954: pl. 47, U7). Marl clay was even less common with only 6 flasks manufactured in this fabric (Cat. Nos 646, 656, 737). A flask from Saqqara (Cat. No. 656) was in a site-specific marl K2, which is thought to equate to marl A2 and is particularly hard and dense (Aston and Aston 2010: 5). A marl A4 and a ‘hard pinkware’ (Allen 1982: fig. 12.1) which likely denotes a marl clay are also known. No Levantine, Mycenaean, or Cypriote imported pilgrim flasks occur in this phase.

5.7.3. Decoration (Graph 16)

Decoration on Late Period flasks was very limited and in general restricted to slips (see **Graphs 16** and **17**). Red, orange and black slips were frequently added to Type G flasks at Karnak Nord (Jacquet Gordon 2012: fig. 118) and grey slips at Heracleopolis Magna (López-grande and Quesada Sanz 1995: 36). Incised concentric circles/emphasised rilling marks were often added to pilgrim flasks with red slips (Jacquet Gordon 2012: fig. 97), although also occurred on unslipped examples (e.g. Mendes Cat. No. 737; Tell el-Maskuta Cat. No. 738). A single Oasis lentoid flask from Karnak (Cat. No. 1198: Jacquet Gordon 2012: fig. 118) had traces of black painted concentric circles and was perhaps an heirloom, while two Type G Oasis flasks at Heracleopolis Magna were given red painted concentric circles (Cat. Nos 1545, 1547: López-grande and Quesada Sanz 1995: pl. LI); another at Tanis in a Nile B2 which dates to the beginning of this phase (Cat. No. 649: Tefnin et al. 1998: fig. 33 16a-b) had red concentric circles on a red slip. A marl fragment from Thebes (Cat. No. 806: Sullivan 2013: 181; 218) bore traces of a red painted rim. Two museum examples (Cat. Nos 32, 222) also had concentric circle decoration more typical of the Ramesside period and may have been heirlooms or incorrectly dated, but only had a limited provenance in the museum records. In general, decoration now seems consigned to New Year’s Flasks.

5.7.4. Findspots

Many Late Period sites containing pilgrim flasks were located in the Egyptian Delta (see **Map 6**), although this may reflect a bias in excavated sites. However, the most significant quantity of pilgrim flasks from this phase were found at Karnak Nord in Upper Egypt (Jacquet Gordon 2012), with 88% of the total amount from this period found here (n=385). This site represents the pottery found during the excavation of the treasure of Thuthmosis I at Karnak Nord and its surroundings, particularly along the surrounding east wall (Jacquet Gordon 2012: 1). All of these were in Oasis fabric and the majority were Type Gii although small numbers of Type E and Type A flasks also appeared. This suggests a significant link between the Western Oases and Karnak, and a high interest in the contents of these flasks.

Settlement remains dating to this phase have been found at sites including Elephantine (Aston 1999), Qantir (Aston 1998), Tell el Retabeh (Rzepka et al. 2011), Tanis (Tefnin et al. 1998) and Heracleopolis Magna (López-grande and Quesada Sanz 1995) demonstrating a continuation of the form's use in society, although this is now being subsumed by gourds, kegs, and handleless vessels. Flasks were identified dating from 700 BCE (e.g. Mendes: Cat. No. 737; Hawara: Cat. Nos. 223–226) to 400 BCE (e.g. Saqqara: Aston and Aston 2010: pl. 47).

Flasks in funerary contexts do continue during the Late Period, although these more limited. At Lahun, Aston has re-dated Petrie's 22nd dynasty tombs (Petrie, Brunton, and Murray 1923) to the Late Period, with three pilgrim flasks from Graves 607 and 650 now post-dating 750 BCE (Cat. Nos 513, 514). The Intef Cemetery at Thebes has also been redated to the 7th century (Aston 1996: 47–48). It contains a flask from Grave 32 (Cat. No. 539) but the cemetery was not fully published so only limited information was provided. Cat. No. 656 at Saqqara was found in the Embalmers' cache (Aston and Aston 2010: pl. 17 124) – a deposit of equipment related to this aspect of the burial. As such this example may have been used in funerary preparation, but as it is the only flask from this type of context in the dataset, further data will be needed before this is confirmed.

5.8. Specialist forms (Graph 18)

These are flasks that morphologically appear formed for a specific purpose, and are found only rarely throughout the time periods in question. All are outside the typical remit for pilgrim flask use and likely had very particular, perhaps ritual functions.

Type H featured pilgrim flasks attached to another vessel. This was often a second pilgrim flask – however, Type Hii flasks were joined to a ‘mug’ vessel, popular in the 18th and early 19th dynasties, which pinpoints their chronological appearance (see Section 5.4.1). Many forms in this Type were left plain (e.g. Cat. Nos 18, 149) but Cat. No. 145 has been adorned with a glossy green-cream marl slip. A majority of these vessels were from museum collections and unfortunately lack a context or recorded date. The few with this information recorded were all are from the New Kingdom, apart from a lone example with an unknown provenance dated by Wodzinska to the 26th–30th dynasties (Cat. No. 653) which is likely incorrectly assigned. I suggest this type is most popular in the 18th dynasty, with perhaps some overlap into the early 19th dynasty.

Only one example of Type I was observed in an Egyptian context (Cat. No. 27), which features three lentoid pilgrim flasks joined at the bellies. This flask is remarkable due to its heavy geometric decoration, combining both black and red painted motifs. The Petrie Museum records state a provenance at Abd el-Qurna, and that it dates to the 18th dynasty; however similar flasks occur in the Late Cypriote IIIB period, contemporary with the end of the New Kingdom in Egypt, and I have redated this flask to the Third Intermediate Period. The bi-colour decoration also suggests this is probably a Cypriote import.

Ring flasks were rare occurrences but covered a long chronological time-span in the archaeological record (Cat. Nos. 31, 34, 400, 514, 517, 644), with examples known from the New Kingdom to the Meroitic period, across both Egypt and Nubia. They are inconsistent in morphology. Cat. No. 400, from unpublished Grave 1200 at Abydos, is a delicate, thin marl ring with a wide aperture, coupled with an elongated, tubular neck and lug handles (Bourriau 1981b: no. 149). Cat. No. 34, on the other hand, is a thick, Nile silt ring with a small aperture, embellished with a brick red slip and black painted concentric circles, coupled with a squat

neck and rounded handles. Cat. No. 517, from Tomb 132 at Sedment, is notable in having painted concentric circle decoration with slashes across the body (Petrie and Brunton 1924: pl. lix). This type is not common at any stage, but similar flasks were common in the Mediterranean (Winbladh 1974: figs 2–4); including one-handled ring flasks in Mycenae (Furumark 1941: 617–618, fig. 20), which are typically horizontal, and in the Levant (Loud 1948: pl. 86 no. 8; Finkelstein 2000: 269, fig. 11.18, no. 12). Ring flasks also occurred in Cyprus in Middle Bronze (Gjerstad 1948: fig. xiv.2) and Late Bronze (Benson 1984: 8, fig. 7; Karageorghis 2002) contexts, so it is likely the inspiration for Type J was via foreign exchange. Bourriau (1981b: 78) comments that this type was a short-lived fashion of pilgrim flasks, appearing in the reign of Thutmosis III and going out of fashion before the Amarna period; however, the evidence from the database suggests a longer lifespan. These forms do not evolve in the Egyptian cultural sphere and most likely are sporadically influenced by occasional imports.

Type K – miniature flasks – (**Figure 5.11**) are part of a long tradition of contracting vessels in Egypt (Allen 2006), a practice known across a variety of materials. In the Old Kingdom, such vessels were deposited in tombs as symbolic gifts for the deceased (Rzeuska 2006: 425) or as offering vessels placed outside cultic spaces (Marchand and Baud 1996: 269). This practice continued into the New Kingdom, with a corpus of 3130 miniature bowls found at Karnak Nord (Allen 2012). Only a small quantity of miniature pilgrim flasks was identified. Cat. No. 222 from Thebes is the smallest in the Catalogue, measuring at just 2.1cm in height and yet bearing black painted concentric circles, with bars on the handles and tiny painted stars. Although it is possible that these tiny flasks were intended for highly valuable, precious oils, it seems more likely, given Egyptian precedent, that they were used to symbolise particular contents, and were votive gifts (Holthoer 1977: 88) destined for the burial sphere or ritual spaces such as foundation deposits.

Type L (Cat. No. 403) is unusual in that morphologically it is identical to a pilgrim flask, save for its flat base. This likely means it was made with a different manufacturing method, with the body formed vertically in one piece. The addition of a cartouche of Ramesses II is unique in the database, and may suggest a link with a royal workshop. Inscriptions on flasks are very

rare, with only six examples known: four describing contents (Bohleke 2016; Cat. Nos 332–333, 801–803) and one likely a later use of a broken flask for an ostraca (Cat. No. 399).

5.9. Summary

Pilgrim flasks were a significant though uncommon feature within Egyptian New Kingdom ceramic repertoires. Analysis of deposition patterns shows the changing circulation of a multitude of morphological Types across the New Kingdom, which is eventually subsumed by an overwhelming preference for Oasis flasks. The interest in different forms as well as pilgrim flasks from a multitude of regions including Mycenaean Greece, the Levant, and Cyprus, suggests that diverse semi-precious liquids were in circulation, with likely specialist products from each area. The fact that some vessels likely had a particularly long circulation period and were retained as heirlooms (Aston 1999: 158) indicates that the form itself was considered symbolic of such contents long after their physical presence was used up. For example, Aston notes that flask U5 at Medinet Habu (Cat. No. 541) was found in securely dated late 20th and early 21st dynasty domestic architecture (Hölscher 1954: 3–8); however, it is a Palestinian Late Bronze IIB flask (Aston 1996: 53). While this is a potential problem from a chronological perspective, it is an intriguing prospect for our concept of vessels manufactured from what is often considered merely a cheap and disposable material.

Certain patterns can be observed from my research, which shed light on interrelations between flask types (see **Figure 5.12**).

- Types A and B have visible morphological evolution – however Ai.2, C, H, I, J, K and L move along different trajectories (see **Fig. 5.12**).
- Certain types were highly standardised; Type Ai.2 has generic morphology and decoration, almost always having a painted rosette: while Type C was ubiquitously flat with butterfly handles and embellished with a thick brown slip.
- Lentoid flasks were gradually overtaken by globular forms.
- Handle movement is particularly chronologically significant for A.i Types: the earliest forms bear large handles stemming from the rim in the 18th dynasty,

before these were gradually moved down the neck culminating in small rounded or vestigial handles in the Third Intermediate Period. These ultimately conclude in the handleless forms in the Late Period.

- Although decoration does appear, flasks were predominantly left plain across all periods in Egypt. Concentric circle designs grow in popularity in the 19th dynasty, while red slips or engraved decoration is most common in the Late Period.
- Fabric shifts can be traced to identify changing production across the New Kingdom. Marl clay was favoured in the 18th dynasty but was slowly overtaken by Nile silt in subsequent periods, while Aswan clay first appears in the 8th century BCE. Levantine, Mycenaean and Cypriote flasks are continuously imported in a long-term exchange pattern. Oasis clay was imported from the Third Intermediate Period, and becomes the predominant fabric for pilgrim flasks found in Egypt in the Late Period.

5.10. Conclusion

Evidence demonstrates that pilgrim flasks first entered the Egyptian world in the mid-18th dynasty, probably during the reign of Thuthmosis III, and slowly grew in popularity across the New Kingdom and Third Intermediate Period. Their presence waned in the Late Period, as the contents of Type G kegs and gourds from the Western Oases became more important – the large quantities at Karnak Nord alone (Jacquet Gordon 2012) suggest a large exchange market with the region, perhaps for wine similar to amphorae (Hope 2002) but certainly for a liquid substance needed in larger quantities: the later flask examples could hold significantly larger volumes. Lentoid pilgrim flasks were by this stage primarily restricted to a specialised function in New Year's Flasks. Their appearance across the New Kingdom in both settlement and cemetery contexts indicates both practical uses in daily life as well as a projection of this onto the burial sphere, where they appear in both poor and wealthy tomb contexts. This suggests their contents were significant to a wide remit of society, and relevant to certain ritualistic and symbolic contexts.

This chapter aimed to reevaluate earlier typological assumptions and to bring them together for comparison with collected data, to ultimately revise our ability to date Egyptian contexts.

A pressing question remains: can this new typology be applied to contemporary Nubian contexts? Egyptian-developed typologies are often used in Nubian archaeology before considering whether the same morphological assumptions would be applicable. Chapter 6 will assess whether the newly developed typology can be applied to Nubia, and discuss any observable differences.

Chapter 6. A Nubian Typology

6.1. Introduction

In the previous chapter, I presented a new typology for pilgrim flasks in Egyptian contexts between the 18th dynasty (c. 1550–1292 BCE) and the Late Period (c. 7th–4th centuries BCE). My analysis demonstrated clear chronological remits for specific morphological forms, with handles over time moving further down towards the shoulder and bodies becoming more globular. In particular, the data showed that Egyptian pilgrim flasks, unlike contemporary Levantine examples, were predominantly plain. In this chapter, I now move away from Egypt to assess whether this new typology can be applied to Nubian contexts, in order to examine how different cultural practices can affect the use of the same material culture repertoires.

In the first section of this chapter, I review the broader ceramic developments that occurred within Nubia from the Classic Kerma (c. 1650–1550 BCE) to the Early Napatan period (c. 700–500 BCE), in order to elucidate technological and social changes occurring in Nubia before, during, and after its occupation by the Egyptian state in the New Kingdom. This places pilgrim flask adoption and use within a wider ceramic context.

Next, I present a new Type-series for pilgrim flasks in Nubia and demonstrate the morphological differences in pilgrim flasks used in Nubian contexts, which suggest distinct use-patterns associated with the vessel across the region. In particular, the association of pilgrim flasks with royal tombs for a restricted time period during the Early Napatan period indicates a temporary link between the vessel and high-status burial contexts. In common with Chapter 5, I use a variety of sources to inform this typology – including 20th and 21st century excavation reports, contemporary publications, and museum pieces. I rely heavily on unpublished data kindly provided by individuals working on contemporary excavations, as well as my own personal work at Amara West and H25 as a ceramicist with the British Museum. All flasks are recorded in the Catalogue in Volume II.

6.2. Ceramic change in Nubia in the New Kingdom

Nubian pottery traditions were significantly different from those in Egypt. Nubian vessels were almost ubiquitously handmade until the New Kingdom, and Nordström (2004: 248) has noted the significant continuation of ceramic traditions across the region, with techniques of form, decoration, and technology continuing along the same developmental trajectories until, in some cases, the present day. The retention of these traditions is highly visible even across the political changes between the Classic Kerma (c. 1650–1550 BCE) and the early Napatan periods (c. 700–500 BCE).

During the Classic Kerma period – broadly contemporary with the Egyptian Second Intermediate Period (c. 1650–1550 BCE) – much of Kerman material culture, ideology and practice displayed clear levels of continuity with earlier Kerma phases (Gratien 1978: 244) and even as far back as the Neolithic (Edwards 2004: 85). Kerman pottery continued to be handmade from Nile silt clay, with heavy chaff or dung temper. Black-topped red ware bowls were a continual element (Gratien 1978: 230, 244), although red burnished and black burnished vessels also appear in this phase (Gratien 1978: 231). The frequent presence of overlarge, coarse bowl forms (pers. obs.) are perhaps suggestive of communal eating contexts within communities. These bowls were typically embellished with basket-impressions, reflecting their method of manufacture (Forstner-Müller and Rose 2012; Rose 2017). Decoration included a variety of impressed, rolled, and incised patterns (e.g. Gratien 1978: Tableau VII; Privati 1998: fig. 19:4) although some embossed (Bonnet 2004: 88, no. 68) and painted (Reisner 1923: fig. 34, pl. 9, 2; Bonnet 2004: 83 no. 57) designs are known. The prevalence of fine burnished vessels may indicate pottery was used as a means of display.

The appearance of Kerma beakers in the Classic Kerma period demonstrates a peak in Nubian ceramic technology (Nordström 2004: 251). Calciform or ‘tulip’ beakers had thin walls and were highly burnished. Produced in black-topped red ware, many displayed a graphite silver-grey band in the centre of the body (Privati 1998: 49), caused by the driving of iron particles during firing from the upper and lower portions of the vessel (Nordström 1972: 65), which led to a silver, iron-rich band undulating across what many have assumed to be the most high-quality pots (e.g. Säve-Söderbergh 1989b: pl. 34: 1–4). Vessels imitating animals

(Gratien 1978: fig. 62: 16) and architecture/basketry (Gratien 1978: fig. 63, 32) were also known.

However, within this milieu, a multitude of different practices involving pottery were observable across what is traditionally understood as the ‘Kerma region’. At the city of Kerma, for example, pots were rarely placed outside of the grave cut, whereas at Sai, vessels typically accompanied buccrania around the edge of the superstructure (Gratien 1978: 204–207). These differentiated practices indicate regionality within Kerman material culture.

Egyptian imports were present in the archaeological record in low but consistent levels, and increased progressively from the Kerma Moyen period (Bourriau 2004b: 12). These imports predominantly consisted of marl storage jars, usually placed in mortuary contexts (Bourriau 2004b). Egyptian vessels continued to appear in Nubian contexts throughout the Second Intermediate period.

After the Egyptian sack of Kerma under Thuthmosis III (Edwards 2004: 101–102) and the subsequent ‘colonial’ expansion into the region (see Section 2.3.1), ceramic deposits can be seen to change significantly (Williams 1992: 2). Many sites in the Egyptian-controlled regions of Wawat (*wꜣwꜣt*) and Kush (*kꜥ*) in Lower and the upper half of Upper Nubia show a shift to Egyptian wares, along with other aspects of Egyptian material culture and burial practices (Edwards 2004: 107). ‘Colonial’ towns were established in both Lower and Upper Nubia (see Sections 1.5.3, 2.3.1), and these sites displayed particularly high levels of Egyptian-style pottery: in House E.13.3-S at Amara West, for example, only 5–10% of the pottery was Nubian in form and fabric (Spencer 2014: 479–480), even though much of the Nile silt repertoire was locally produced (Spataro et al. 2015: 418). Indeed Bourriau (2004b: 3) has commented that when Kerman potters set out to copy Egyptian pottery, it was impossible to distinguish between the two – although it should be noted that it is difficult to identify whether Egyptian-style pottery was manufactured by culturally Egyptian or Nubian potters.

However, evidence now suggests that the traditional picture of a mass adoption of Egyptian ceramics is likely to be an oversimplification (Welsby and Welsby-Sjöström 2007) and sites dating to the early 18th dynasty such as Debeira East were noted to have retained traditional

material culture (Säve-Söderbergh 1989: 23) to the extent that they were termed ‘transitional’. Although Egyptian pottery replaced many Nubian wares in Lower Nubia by the end of the 18th dynasty, Nubian-style cooking pots endured; and indeed over the past 10 years increased excavation in the Kerma heartlands of the Dongola Reach has demonstrated the persistence of further indigenous ceramic technology (e.g. Welsby and Welsby-Sjöström 2007; Smith 2007: 7; Thomas 2014: 65). Kerma-style finewares continued to adapt, with examples of a new style – red-topped black-ware – appearing in the early 18th dynasty (Ruffieux 2010: 25; Thomas 2014: 66). Activities surrounding Egyptian vessels at sites such as Debeira East (Säve-Söderbergh 1989: 200) were potentially indigenous Nubian practices (Steffenson 2007) in an example of relational entanglement (see Section 8.6.1; Stockhammer 2012: 50; Paul Van Pelt 2013).

There is also evidence for innovative ceramic developments in Egyptian-style forms at both colonial and indigenous sites, which become differentiated from Egyptian evolutionary developments early in the New Kingdom. While typically Egyptian forms such as beer jars and red-rimmed bowls appear in both cemetery (e.g. Binder, Spencer and Millet 2010: pl. 9) and settlement contexts (e.g. Thomas 2014: 66) across the 18th and 19th dynasties, by the later Ramesside period many exhibited innovations not observed in Egyptian contexts, with crude beer jars and handmade imitations of Egyptian bowls (see Section 8.2.4). Bowls consistently became deeper with direct walls and ultimately developed into beakers (Binder 2011: figure 9).

Imported stirrup jars and pilgrim flasks from the Levant, Mycenae and Cyprus were rare in Nubia (Schiller 2018), but are known from high-status colonial settlements such as Amara West (Spataro et al. 2015) and Tombos (Smith 2007: pl.3), indicating the region’s involvement within the Mediterranean trading world during the New Kingdom (c. 1550–1070 BCE), although this was likely indirect. This connection with the Levant extended as far south as Hillat el-Arab – Tomb 19 at this site was dated by the excavator to the late 19th/20th dynasty and contained two Levantine pilgrim flasks (Vincentelli 2006: 138).

The ceramic situation in the Post New Kingdom Period was unclear, as dateable contexts from this era are limited. The propensity for tombs to become multiple-interments in the late Ramesside period makes distinguishing between late New Kingdom and Post New Kingdom

artefacts difficult, as does the trend for a reduction in the quantity of grave goods. A single jar or bowl may be placed in a grave (e.g. Vila 1980), perhaps suggesting that funerary rituals were now conducted outside the grave cut. A significant reduction in Egyptian-style ceramics is apparent.

In the Early Napatan period (c. 700–500 BCE), Nubian pottery underwent significant changes, which likely began during the Post New Kingdom period, and ceramic styles distinct from the contemporary ceramic repertoire in Egypt can again be observed in the archaeological record (Edwards 2004: 137). The most notable is the development of Nubian wheel-made pottery, a feature that increases throughout the Napatan period (Welsby-Sjöström and Thomas 2011: 64). This is a distinct trajectory from the cultural traditions of the previous two millennia. This wheel-made pottery was likely highly market sensitive, as it disappeared in times of impoverishment (Nordström 2004: 252). The Napatan ceramic repertoire includes tall wheel-made beakers, red slipped and burnished (Vila 1980: fig. 131; Edwards 2004: 137; Vincentelli 2006: 144, no. 118) for possible communal feasting situations, which are a characteristic feature of Napatan cemetery contexts, along with large, ribbed storage jars imported from Egypt and possibly later locally manufactured (Welsby-Sjöström and Thomas 2011: 64). Applied animal decoration is common at Kawa (Welsby 2004: 155, no. 139; Welsby-Sjöström and Thomas 2011: 65; plate 1). While the predominance of wheel-made and Egyptian imported form types has been noted (Edwards 2004: 137), the continued presence of handmade bowls with basket-impressions (e.g. Vincentelli 2006: fig. 2.68, 418), linear incised patterns (e.g. Dunham 1950: fig. 24b) and black-topped red ware vessels (Edwards 2004: 137) points to the continuation of ceramic traditions known from Kerma phases. The very limited knowledge of settlement contexts dating to this phase means our understanding is generally restricted to what was considered appropriate for the mortuary sphere. Kawa remains the only settlement excavated in any detail – and no pilgrim flasks appear at this site (Welsby-Sjöström, pers. Comm.).

Pottery likely held a higher social and economic value in Nubia than in Egypt, and consequently has been suggested to hold more meaning for Nubian communities (Bietak 1966: 108). The different role the material played in a Nubian context is crucial to consider when analysing the absorption of ‘alien’ vessels such as pilgrim flasks into social practices.

6.3. Pilgrim flask morphology in Nubia – expectations

651 flasks in the Catalogue (see **Volume II**) were found in Nubian contexts dating from the 18th dynasty (c. 1550–1292 BCE) to the Early Napatan period (c. 700–500 BCE). 100 of these were Not Identifiable (NId). Pilgrim flasks continued in use during the Meroitic and Christian periods, but these examples are excluded from my study, which focuses on a restricted time scale to ensure a manageable quantity of data (see Section 0.1.2). Flasks were identified through a variety of source material, including 19th and 20th century excavation reports, unpublished archives, museum collections, and contemporary excavation projects. Historically much fieldwork in the region has been salvage archaeology undertaken in response to damming and other engineering projects, which resulted in the production of a wealth of data that was subsequently rarely analysed (Dann 2009: 81). Many contexts containing pilgrim flasks primarily originated as a result of this approach. More recent publications (e.g. Vincentelli 2006; Dann 2009) are however beginning to rectify this situation.

My research questions (see Section 0.1.1) aimed to examine a sole body of ceramic data – the pilgrim flask – to analyse potential differences observable between flasks in Nubia, and flasks in Egypt, and how these changes might shed light upon the changing cultural traditions within the Middle Nile region from the New Kingdom (c. 1550 BCE–1292 BCE) to the Early Napatan (c. 700–500 BCE):

1. How does pilgrim flask morphology change as it moves across the cultural landscape between Egypt and Nubia?
2. How were pilgrim flasks used? Do the deposition patterns of flasks suggest shifting usage between the New Kingdom (c. 1550–1070 BCE) and the Early Napatan (c. 700–500 BCE) in these regions?
3. What can these vessels ultimately reveal about cultural practices in Nubia, both before and after the withdrawal of Egyptian colonial control at the end of the New Kingdom?

Based upon the theoretical models outlined in Chapter 1, I hypothesised that an application of Practice Theory frameworks to the data would indicate different use patterns between Egypt

and Nubia, revealed by subtle differences in morphology and findspot. In particular, by applying Postcolonial models of material and relational entanglement (Thomas 1991; Stahl 2002; Stark 2006; Eckert 2008; Dietler 2010; Stockhammer 2012; 2012b; 2013; Paul van Pelt 2013; Buzon, Smith and Simonetti 2016; Smith and Buzon 2014; 2017) evidence of the creative approach to the Egyptian vessel by Nubian consumers would be demonstrated.

Previous studies of Egyptian pottery in Nubia used the same methodological approaches for pottery in Nubia as in Egypt (de Souza 2016: 81), and this suggests that ceramic morphology would consequently mirror that seen in Egypt in the 18th–20th dynasties, with perhaps a slight cultural lag (Weglarz 2017: 139). However, contemporary excavations in Nubia (e.g. Smith 2007; Binder, Spencer and Millet 2010; Welsby-Sjöström and Thomas 2011; Binder 2011; 2017b;) suggested that Egyptian ceramic material was adapted by Nubian communities throughout the New Kingdom. This is supported by my own work as a ceramicist at Amara West and H25 in Nubia. Evidence from my analysis suggests that pilgrim flasks were used in a multitude of ways by different communities across Nubia. The form was relatively restricted in use but retained its popularity across the periods in question. Significant changes in deposition and morphology in the Early Napatan period attest to a distinct shift in use patterns during the Post New Kingdom period (see Section 8.6). Many excavation reports did not use the Vienna System when referring to fabrics, describing clays as ‘Hard Pale Pink Ware’, ‘terre cuite’, or ‘chamois clay’. I have endeavoured to change this terminology where possible; however, in the case of examples not examined in person they have been retained in the catalogue.

The following section will present a new Type-Series developed for Nubia. This will follow the same lines as the Egyptian Type-Series outlined in the previous chapter, in order to allow for ease of comparison. The sites used in this chapter can be found in **Map 4**.

6.4. Type Series (Plates 5–7).

Type A. Lentoid.

The classic pilgrim flask form, with a lentoid body. Flasks of this general form predominate in the data set. Additional morphological features may be observed which allow further subdivision:

Ai.1. Classic lentoid flask

Morphology: Lentoid body with a rounded base and a soft seam joining the two halves. Necks are relatively straight or flare slightly. Rims are everted and rounded, squared, or pointed. Handles are rounded or L-shaped, spanning from just below the rim or the middle of the neck to the shoulder.

Decorative features: Plain; cream slip; red painted concentric circles; black painted concentric circles; red incised concentric circles.

Fabric: Nile silt; marl clay, marl A2, Levantine clay.

Date Range in Nubia: 18th dynasty – early Napatan

Quantity in data set: 81

Example

Cat. No. 48.

Hillat el-Arab.

Marl A2, cream slip

Rounded body shape, handles running from under rim to shoulder.

Rounded upside-down L-shaped handles.

Rounded rim.

Rim diameter 5cm

Ai.2. Classic lentoid flask with squat neck

Morphology: Similar to A.i except with a tubular, squat neck, significantly shorter than other forms. The neck often remains lower than the handle height and has a pointed or rounded rim.

Decorative features: Plain; cream slip; red slip; black painted concentric circles.

Fabric: Nile silt; marl clay, marl D

Date Range in Nubia: 18th dynasty - Ramesside

Quantity in data set: 7

Example

Cat. No. 330.

Sesebi.

Marl D, cream burnished slip

Rounded body shape, handles running from middle of neck to shoulder.

Pointed rim.

Rim diameter 11cm

o **Ai.3. Lug handles**

Morphology: Similar to form A.i. Characterised by ‘lug’ handles – the handles are small and run in a circular shape from the base of the neck to the shoulder. Rim is rounded with a sharp edge at the base, or rounded.

Decorative features: Plain; red burnish

Fabric: Marl clay; marl A2; Nile silt

Date Range in Nubia: 18th dynasty – Third Intermediate period

Quantity in data set: 8

Example

Cat. No. 263.

Amara West, G226.

Marl A2, burnished, red rim

Rounded body shape, handles running from base of neck to shoulder.

Rounded handles.

Squared rim.

Rim diameter c.3.5cm

Aii. Parallel handles

Morphology: A similar body to form A.i, with the exception of the handle shape. In A.ii these widen to run in parallel with the edge of the body.

Decorative features: Plain; red burnish.

Date Range in Nubia: 18th dynasty - Ramesside

Fabric: Levantine; marl clay; coarse Nile silt

Date Range in Nubia: 18th dynasty – Late Third Intermediate/early Napatan

Quantity in data set: 6

Example:

Cat. No. 287.

Sai, T3.

Marl clay, cream slip, brown painted concentric circles

Rounded body shape, handles running from base of neck to shoulder.

Rounded handles.

Squared rim.

Rim diameter 5cm

Aiii. Thickened neck

Morphology: A similar lentoid body to form A.i is paired with a neck that expands in diameter towards the top, similar to an 'egg-cup'. Rounded handles span from the lower end of the neck to the shoulder, similar to a lug style. Rim is rounded with a sharp edge at the base.

Decoration: Plain; cream slip.

Fabric: Marl clay; marl A2; marl A3; Nile silt.

Date Range in Nubia: 18th dynasty – Late Third Intermediate/early Napatán

Quantity in data set: 3

Example:

Cat. No. 88.

Hillat el-Arab, ARA19.

Marl A2

Rounded body shape, handles running under rim to shoulder.

Upside-down L-shaped handles.

Squared rim.

Rim diameter 6.5cm

Aiv. Cup mouth

Morphology: A slightly broader lentoid body than the others in this form type, paired with rounded handles branching from the rim to the neck. Distinguished by a heavily emphasised mouth, whereby necks curve out and upwards creating a cup-like form. Rims are straight.

Decoration: Plain; Black burnished; Spiraloid decoration, painted pre-firing; cream wash, brown painted concentric circles; orange slip, red painted concentric circles; cream slip;

Fabric: Marl clay; marl B; marl A4; Nile silt.

Date Range in Nubia: 18th dynasty – Late New Kingdom/early Third Intermediate Period

Quantity in data set: 18

Example:

Cat. No. 259.

Amara West, G200.

Marl clay, brown painted spiraloid

Rounded body shape, handles running under rim to shoulder.

Rounded handles.

Straight rim.

Rim diameter c.16cm

Type B. Globular

The body is spherical rather than lentoid, but still has a rounded base and soft seams. Handles are usually rounded.

Bi. Rounded body

Morphology: Characterised by an almost spherical rather than lentoid body. Short flaring necks culminate in a rounded rim, and rounded handles span from the middle of the neck to the shoulder.

Decoration: Plain; Cream slip/wash; cream slip with black painted concentric circles; grey slip; painted spiraloid.

Fabric: Marl clay; marl A2; marl A3; Nile silt.

Date range in Nubia: 18th dynasty – Late Third Intermediate/early Napatan

Quantity in data set: 20

Example:

Cat. No. 54.

Hillat el-Arab, ARA10.

Marl A2, cream slip

Rounded body shape, handles running under rim to shoulder.

Rounded upside-down L-shaped handles.

Squared rim.

Rim diameter 5.8cm

Bii. Distended

Morphology: Still a spherical body, but when viewed in profile the belly tapers forward into a pointed shape on both sides. Similar to B.i in that flaring necks culminate in a rounded rim, with rounded handles running from the middle of the neck to the shoulder.

Decoration: Cream slip; red slip; Cream slip and black painted concentric circles and/or stars

Fabric: Levantine clay; marl clay; marl A3, marl A2; Nile silt.

Date range in Nubia: 18th dynasty – Late Third Intermediate/early Napatán

Quantity in data set: 9

Example:

Cat. No. 80.

Hillat el-Arab, ARA19

Marl A2, cream slip

Globular body shape, handles running upper neck to shoulder.

Rounded upside-down L-shaped handles.

Rounded rim.

Rim diameter 8cm

Type D. Gourd

Morphology: Characterised by an asymmetrical body, with one belly half protruding out significantly, and the other half typically a standard lentoid.

Decoration: Cream slip and black painted concentric circles

Fabric: Marl A2.

Date range in Nubia: Late New Kingdom/early Third Intermediate

Quantity in data set: 1

Example:

Cat. No. 81.

Hillat el-Arab, ARA19

Marl A2, stained black

Flat, asymmetrical body , handles running upper neck to shoulder.

Rounded handles.

Squared rim.

Rim diameter 3.5cm

Type E. Pinched

Morphology: An irregular lentoid body with a squat, short, tubular neck. Rim is usually un-modelled and undefined. Handles are pushed into the corner of the neck and shoulder, and are usually squashed against the body of the flask.

Decoration: Plain; traces of red slip

Fabric: Coarse Nile silt; marl clay.

Date range in Nubia: Late Third Intermediate/early Napatan

Quantity in data set: 44

Example:

Cat. No. 112.

Sanam, Grave 1062

Coarse Nile silt

Globular body shape, handles pressed against lower neck.

Pinched handles.

Unmodelled rim.

Rim diameter 2.1cm

Type F. Tapered

Body is manufactured in a globular shape, but with a tapering base.

Fi. Ribbed

Morphology: a globular body with a tapering base. A slightly flaring neck is added with a modelled rim, usually pointed. Handles are rounded and span from the middle of the neck to the shoulder. Their join to the body of the flask is usually untidy. Emphasised rilling marks are visible around the body of the flask.

Decoration: The rilling marks are over-emphasised, in common with much Napatan pottery, suggesting they are semi-aesthetic.

Fabric: Marl A4 Variant 2

Date range in Nubia: Late Third Intermediate/early Napatan

Quantity in data set: 308

Example:

Cat. No. 120.

Sanam, Grave 286

Marl A4 Variant 2

Tapering body shape, handles running middle of neck to shoulder.

Rounded handles.

Pointed rim.

Rim diameter 4.3cm

Fii Ribless

Morphology: These bear a similar morphology to F.i, but differ in that these have not been accentuated with deep rilling lines. Their tapering body and rounded handles are the same.

Decoration: Plain.

Fabric: Nile silt.

Date range in Nubia: Late Third Intermediate/early Napatan

Quantity in data set: 14

Example:

Cat. No. 117.

Sanam, Grave 524

Nile silt

Taperind body shape, handles running upper neck to shoulder.

Rounded handles.

Pointed rim.

Rim diameter 2.9cm

Type G. Drum

A classically large body with a flat stave.

Gi. Flattened handles

Morphology: A large, cylindrical body with two bellies joined by a perpendicular stave. Neck is squat and short, with a modelled rounded or square rim. Handles run from the base of the neck to the shoulder, but are flattened against the neck body.

Decoration: Plain; Red burnished slip; emphasised rilling line pattern in the centre of the belly.

Fabric: Nile silt.

Date range in Nubia: Late Third Intermediate/early Napatan

Example:

Cat. No. 722.

El-Kurru, Tomb 72

Nile silt, red slip burnished

Drum body shape, handles running base of neck to shoulder.

Flat handles.

Pointed rim.

Rim diameter c.5cm

Quantity in data set: 7

Gii.1. Rounded handles

Morphology: Similar to G.i with a large, cylindrical body made of two bellies joined by a perpendicular stave. Neck is similarly squat and short, with a modelled rounded or square rim. These handles are emphasised however, in a rounded or very occasionally, incised style.

Decoration: Plain

Fabric: Nile silt.

Date range in Nubia: Late New Kingdom/early Third Intermediate – Late Third Intermediate/early Napatan

Quantity in data set: 6

Example:

Cat. No. 729.

Nuri, Tomb 55

Nile silt, emphasized incised concentric circles

Drum body shape, handles running base of neck to shoulder.

Rounded handles.

Rounded rim.

Rim diameter c.4cm

Type H. Double

Two vessels are joined as one piece, with at least one in the pilgrim flask form.

Hi.1. Two adjoining pilgrim flasks

Morphology: Two lentoid pilgrim flasks, with L-shaped handles and a slightly flaring neck. The two flasks are joined at the body through the bellies.

Decoration: Plain

Fabric: Nile silt

Date range in Nubia: 18th dynasty – Late New Kingdom/ early Third Intermediate

Quantity in data set: 3

Example:

Cat. No. 323.

Sai, T20

Nile silt, orange-red slip

Lentoid body shape, handles running middle of neck to shoulder.

Rounded handles.

Rounded rim.

Rim diameter 9.3cm

Hii. One pilgrim flask adjoining another vessel

Morphology: A lentoid flask with rounded handles, joined to another type of vessel, typically a mug. The vessels are connected via two parts. The middle of the belly connects to the widest point of the mug body, and an arched bar connects both rims.

Decoration: Cream slip.

Fabric: Nile silt; marl clay.

Date range in Nubia: 18th

Quantity in data set: 5

Example:

Cat. No. 284.

Sai, T2

Nile silt, red slip burnished

Lentoid body shape, handles running under rim to shoulder.

Rounded handles.

Straight rim.

Rim diameter 4.8cm

Type K. Miniature

Morphology: Lentoid pilgrim flasks miniaturized beyond practical use – some are large enough to still be considered usable, others must be symbolic.

Decoration: Plain.

Fabric: Nile silt.

Date range in Nubia: 18th dynasty – late Third Intermediate/early Napatan

Quantity in data set: 4

Example:

Cat. No. 344, Museum of Fine Arts, Boston collection.

El-Kurru, Tomb 72

Nile silt

Lentoid, red slip

Pinched handles.

Pointed rim.

Rim diameter 1.8cm

Type L. Flat-bottomed

Morphology: An unusual form with a thin lentoid body, but characterised by a flat base. In most instances these would invariably be known as a different vessel; however, in two cases in the data set the observable morphological features aside from the unusual base made it clear these were still pilgrim flasks.

Decoration: Cream slip with black painted concentric circles

Fabric: Marl clay.

Date range in Nubia: late New Kingdom/ early Third Intermediate/early Napatan

Quantity in data set: 3

Example:

Cat. No. 62.

Hillat el-Arab, ARA10

Marl clay, cream slip, black painted concentric circles

Flat body shape.

Pinched handles.

Rim diameter unknown

6.5. Discussion

I group the Nubian pilgrim flasks into four phases, corresponding with four ceramic phases currently observable in the Nubian material. A focus upon Egyptian history when assessing political and cultural activity further south is problematic (see Section 1.3.2), but is retained for consistency at the present time.

Phase 1: The 18th dynasty

Phase 2: The Ramesside period

Phase 3: The late New Kingdom/ early Post New Kingdom period

Phase 4: The Late Post New Kingdom /early Napatan period

Pilgrim flasks appear at a majority of New Kingdom settlements in Nubia, and 40% of the dataset originate from Nubian contexts. A majority of flasks found across Nubia were in marl clay, and thus were imported from Egypt (see **Graph 19**). Although many are of unknown fabric, this percentage is skewed by the substantial collection of flasks from Sai, which were all labeled as *terre cuite* (Minault-Gout and Thill 2012). Upon enquiry the excavators advised that marl clay flasks were likely present among the collection, but they were unable to elaborate further (Minault-Gout, pers. comm).

6.6. The 18th dynasty Phase

148 flasks in the database can be relatively securely dated to this phase, or 23% of the total Nubian data (n=651), with 41 NId. Pilgrim flasks appear in Nubian contexts early in the 18th dynasty, likely spreading south at the same time as Egyptian campaigns were waged in the region. The majority were from museum contexts and excavation reports, and have been placed in this period based on my assessment of the accompanying finds and archaeological features, as well as the opinion of the original excavators. Flasks from H25 (Cat. Nos. 103–110, 1633), Kerma (Cat. No. 111), and select flasks from Sai (Cat. Nos. 264–280) were from contemporary excavations, and I was able to confer with the excavator or, in the case of H25, was involved in the flask's excavation myself.

6.6.1. Morphology (see Graph 20)

41 flasks were NId. At 28%, (n=149) this high level is similar to the situation in contemporary Egypt. As such, 108 flasks could be identified by form although some, such as the 31 examples from Buhen (Emery, Smith and Millard 1979) were described cursorily.

Type Ai.1 was the most common form during this phase, at 54% of the identifiable flasks in this period and 28% including the NID examples (n=149), comparable to contemporary Egypt. However this type is proportionally more infrequent across all periods in Nubia, with only 78 Type Ai.1 flasks among the total data set from Nubia, or 12% (n=651). Handles typically run from under the rim or the upper neck to the shoulder, in a rounded L shape. Necks are flaring (e.g. Soleb: Cat. No. 667: Giorgini 1971: figs 276; 167) and rims are typically squared, sometimes with a bottle-top rim (e.g. Semna East: Cat. No. 334: Dunham and Janssen 1960; see **Figure 6.1**), with rounded and everted types also observed. Type A flasks in Nubia are morphologically closer to Type B flasks and are consistently more globular in form.

Type Aiv was the next common form, at 9% of the identifiable material (n=149). Type Aiv is notable as it only occurs once in an Egyptian context (Cat. No. 544: Hölscher 1954; see Section 5.6.1), but is prolific in Nubia. This is despite the fact that marl examples indicate an Egyptian manufacture (see section 5.6.2). The form has a typical lentoid body, but is

characterised by upcurved rim walls that form a ‘cup’ shape (e.g. Cat. No. 1533: Maystre 1996). The early presence of both Ai.1 and Aiv may represent different preferences and use patterns among Nubian communities, even during this early phase.

Type Ai.2 does occur in this phase in Nubia, but with only 7 examples it is less common than in contemporary Egypt. Type Ai.2 flasks found in Nubia are slightly morphologically distinctive, with a differentiated handle positioning (e.g. Shalfak: Cat. No. 657 Reisner 1967: 62; 191). The standard tubular, squat neck was still present as in Egyptian contexts, but it was often thinner and capped with a highly distinctive perpendicular rim. In addition, the handles were often positioned further from the rim (see **Figure 6.2**). Handle variability likely relates to different patterns of use, as it affects how a vessel is manoeuvred. Types Aii, and Aiii are rare in the archaeological record, with only 4 and 2 examples respectively.

7 examples of Type B flasks are also known (e.g. H25: Cat. Nos 103–104). These are distinguished by a globular, rather than lentoid body, and this form appears earlier in Nubia than it does in Egypt, with levels at H25 dated to the 18th dynasty (pers. obs.). The higher quantity of rounded forms may reflect levels of Egyptian imported flasks, which were related to the movement of larger volumes of oils to the fringes of the Egyptian empire. The handles on Type Bi flasks invariably span from the middle of the neck to the shoulder (e.g. Soleb: Cat. No. 668: Giorgini 1971: figs 346; 196).

The majority of Type H flasks found in Nubia were in 18th dynasty contexts. One Hi.1 and 5 Hii flasks are known (Cat. Nos 284, 323, 696, 789–791, 796). This form is a peculiarly Egyptian development, and appears only in a restricted timeframe, during the 18th and early 19th dynasties (see Sections 5.4.1, 5.8).

Flasks exhibit a more distorted morphology in general across Nubia than in Egypt. Cat. No. 334 from the fortress at Semna East, for example, has uneven walls, undulating handles and a very heavy recurved, ‘bottletop’ rim (Dunham and Janssen 1960: fig. 15; **Figure 6.1**), while as referenced above many flasks have swollen bodies even at this early phase. This may reflect their position as commodities into Nubia.

6.6.2. Fabric (see Graph 21)

Marl clay is the predominant fabric used for pilgrim flasks in Nubian contexts. 51 flasks, or 46% (n=149) of the total for this period, were in marl A2, marl D, marl A4, or in one case, marl A3. Fabric preferences may be site specific – the sole flask fragment at Dokki Gel, Kerma, was in marl A4, for example, whereas 16 of the 18 flasks dating to this period from Hillat el-Arab were in marl A2. This may reflect specific trading relationships between regions, although more data is needed to confirm this hypothesis.

Unfortunately the 46 pilgrim flasks excavated by Vercoutter in the 1970–1980 excavations in the Sai Necropolis SAC5 (Minault-Gout and Thill 2012) do not include a fabric description, with all flasks referred to as being in a '*terre cuite*'. It is likely that some were in marl clay, but the quantities cannot be reconstructed (Minault-Gout, pers. comm.) so I include these examples in the 'unknown fabric' section here. All 15 flasks from Budka's recent excavations in both the town and the necropolis, however, have been in marl A2, A4, or D, aside from two imports discussed below (Budka pers. comm.); and as such it seems likely that marl flasks were preferred in this phase, reflecting a significant exchange system with Egypt.

Nile clay examples are however present from the 18th dynasty, with an example at H25 (Cat. No. 104) in Nile silt, a site that contains early 18th dynasty Egyptian pottery above probable Kerma remains (Thomas 2014), although this example was unfortunately in a secondary context on a rubbish heap (pers. obs.) However the other nine examples at the site are all in marl clay, supporting the overwhelming trend.

Well-contextualised marl examples demonstrate that such flasks have handles stemming from below the rim at this period. The two examples with the most solid chronological provenance are Cat. No. 330 from Sesebi, and Cat. No. 111, from Dokki Gel. At Sesebi, the example was found on spoil dumps from the 1930s excavations, that based on location came from excavation in the housing area inside the fort, and dates to the late 18th dynasty or later (Rose, pers. comm.). The example from Dokki Gel was found in the North-East corner of Nubian 'Palace A' thought by the excavator to be 18th dynasty (Ruffieux pers. comm.). Both have handles stemming from the rim to the shoulder, a feature that continues into the Ramesside

period (see Tomb 26 at Sai, Cat. Nos. 264–266). Type H flasks were ubiquitously manufactured in marl, or given a thick cream slip likely mimicking a marl fabric. Such marl clay flasks are evidence of the import of flasks from Egypt. While some flasks may have been transported by individuals migrating south, others are suggestive of an exchange relationship between the regions.

Nile silt flasks in contrast have a greater range of handle positioning, with flasks bearing handles straight from the rim in vessels of Type A.i.2 (e.g. Sai, Tomb 3: Cat. No. 295: Minault-Gout and Thill 2012) and Type A.ii (e.g. Debeira East: Cat. No. 674: Säve-Söderburgh 1989: 200; 1989b: pls 36, 38), but from the middle of the neck in vessels of Type A.i and B (e.g. Soleb: Cat. No. 669: Giorgini 1971: fig.372; 204). This can be most clearly seen in the sheer variation of flasks at the well-recorded site of Sai (Minault-Gout and Thill 2012: pl. 157–159; 161).

Foreign imports from further afield are rare across all time periods in Nubia. Six examples are known from this phase. Two flasks of respectively Oasis and Canaanite origin were found in the settlement at Sai, to the North (Cat. No. 270) and the East (Cat. No. 279) of the site. This is the only currently known pilgrim flask in Oasis fabrics in Nubia. The Necropolis at Tombos contained 4 Mycenaean flasks (Cat. Nos. 663–666; Smith 2007: 4–5; pl.II), and one was also found at Buhen (Emery, Smith and Millard 1979: 185; pl.77 c; Schiller 2018: tab. 1). Mycenaean pottery was much rarer in Nubia than in contemporary Egypt (Schiller 2018), and the presence of these Mycenaean flasks likely indicates the prestigious nature of these sites and their connections to Mediterranean trading networks.

6.6.3. Decoration (see Graph 22)

As in contemporary Egypt, a lack of decoration is common on 18th dynasty flasks. 56% (n=149) of flasks were either left plain, or given a simple cream or red slip. At Sai, flasks dating to the reign of Hatshepsut/Tuthmosis III at Sai have plain, smoothed surfaces (Minault-Gout and Thill 2012: 354) and the two well-preserved examples at H25 were similarly left smoothed (pers. obs.). One especially large example here was given a thick red slip (Cat. No. 1632 – pers. Ob.).

Black or brown-red painted concentric circles do occur sporadically (e.g. H25: Cat. No. 110; Sai: Cat. No. 301; Minault-Gout and Thill 2012: pl. 157), with different colour schemes present on 20% of flasks; and one example of a metope pattern also appears (Cat. No. 792) at Aniba (Steindorff 1935: fig. 136), on an Ai.2 flask. This decorative element probably originates in the Levant, and throughout the New Kingdom is always painted pre-firing in a black or brown-red pigment.

No blue painted examples are known. However, a sole example of raised relief decoration appears in Tomb 1 at Sai (Cat. No. 281; Minault-Gout and Thill 2012: pl. 158), which featured floral impressions accentuated by black paint. An example at Semna (Cat. No. 338) is described as having painted decoration that may represent a different motif, although the pattern was too eroded to identify. A Canaanite flask fragment from the town area Sav1 east at Sai (Cat. No. 279; Budka pers. comm.) was embellished with red ink, which may represent a hieratic label added to the vessel in Egypt before it was traded south to Nubia, and records the vessel's contents. The addition of labels to pilgrim flasks is very rare, and only 7 examples of this are known across both Egypt and Nubia (Bohleke 2016; Cat. Nos 279; 332–333, 399; 801–803).

Graph 23 shows the correlation between fabric and decorative style. Marl flasks are significantly more likely to be left plain, whereas those in Nile silt were always given some sort of decoration.

6.6.4. Findspots

Flasks were present in both settlement and cemetery contexts in Nubia during the 18th dynasty. However the overwhelming preference towards excavating necropolises and the ease of identification of the form in a tomb context creates an inherent bias in the data (see Section 1.3.2), with cemeteries the most consistent space containing pilgrim flasks. Such flasks were significantly better preserved than the settlement examples, with flasks from Sai (Minault-Gout and Thill 2012; Budka pers. comm.) particularly well published. Pilgrim flasks were found in both 'Egyptian' contexts such as Soleb (Giorgini 1971) and indigenous sites such as

Site 176 at Debeira East (Säve-Söderbergh 1989) suggesting their use was not restricted to Egyptian communities even at this early stage.

A particularly important site for this phase is the cemetery Site 176 at Debeira East. This is a necropolis containing 105 tumulus graves (see **Figure 6.3**) located north of the Wadi Halfa, excavated by the Scandinavian Joint Expedition to Nubia in 1962 (Säve-Söderbergh 1989: 200). It was noted that this site was distinctly different from any other cemeteries in the region, with unusual superstructures, some bearing offering niches on the east side of the tomb containing pottery, including 25 pilgrim flasks. The excavators dated the site to the New Kingdom (Säve-Söderbergh 1989: 200). However, some scholars have suggested this should be revised to the Napatan period (Heidorn 1992: 108–109; Török 2009: 308–309; Williams 2017: note 34). This is based on the presence of two incised vessels thought to be incense burners or strainers found in Tomb 14, which bear remarkable similarities to examples from Tumulus 4 and 5 at El Kurru (Heidorn 1994: fig. 1: a–c). However, these flasks are distinctly more ‘rounded’ than the El-Kurru examples, and in my opinion represent early ancestral forms of the same vessel type. In addition, the similarity of several black-topped vessels with examples from El-Kurru was noted (Heidorn 1994: note 30); however, the latter are a common feature of the majority of Nubian history and notoriously problematic to date. The pilgrim flask evidence is a valuable addition to this debate. The observed pilgrim flasks (e.g. **Figure 6.4**) are of the same type as examples found in Egypt during the 18th dynasty (Weglarz 2017: 210) and no later types – such as Types E, F, and G which were characteristic of the Early Napatan period (see Section 6.9) – were found. As such I consider this site to date to the 18th dynasty, and suggest that Säve-Söderbergh’s (1989: 200) assessment of it as ‘transitional’ is entirely appropriate. The use of pilgrim flasks in indigenous mortuary cults at this site suggests the form had at this stage been relationally entangled into local practices (see Chapter 8). Pilgrim flasks were also found in the necropolis at Tombos, although unfortunately only a limited amount of these examples are included in the database due to problems contacting the team. Consistent, smaller quantities appeared in poorer burials at sites such as Qustul (Williams 1992: figs 10g, 10k; cat. Nos 787–788) and the Batn el-Hagar (Edwards pers. comm.; Cat. No. 798–799), perhaps related to the close proximity of Lower Nubia to Egypt and the strong exchange patterns between the two regions.

44 pilgrim flask fragments (Type NId) were found within settlement contexts. While these are useful for fabric analysis and understanding flask distribution patterns, they contain little morphological detail for the typological study. This is a common issue with pilgrim flask preservation - handles are particularly prone to breakage/loss – both semi-complete vessels at H25 consisted only of the main body of the flask, whilst another neck fragment had still lost both handles (pers. obs.). It is likely that many pilgrim flask fragments have been overlooked in settlement excavations in the past.

An increasing number of domestic contexts have been excavated in recent years in Nubia. New Kingdom settlements in Nubia were diverse, with a variety of site types observed. Colonial towns such as Sesebi (Blackman 1937; Fairman 1938; Spence and Rose 2009; 2014; Spence 2011; Rose 2012; 2017) and Soleb (Giorgini 1971) contain Egyptian pottery almost exclusively. Some of these, such as Sai, became key administrative centres for Egyptian activity. Middle Kingdom Egyptian fortresses in Lower Nubia were reoccupied during the New Kingdom and these sites contained several pilgrim flasks of this phase, including Semna East (Dunham and Janssen 1960: Cat. Nos 334–338), Shalfak (Dunham and Janssen 1960: Cat. Nos 461–463), Uronarti (Dunham and Janssen 1960: Cat. No. 460), and especially Buhen, which contained 31 examples (Emery, Smith and Millard 1979: Cat. Nos 1501–1531). This reoccupation of fortified spaces likely saw Egyptians coexisting with communities that had continually occupied these spaces during the Second Intermediate Period (Smith 2003) with regionally specific practices.

58 pilgrim flasks, 39% (n=149) of the total from this phase, were found in newly established Colonial towns, and a further 46 were deposited in Egyptian-occupied fortresses. There is evidence that these sites housed Egyptian officials and migrants, and pilgrim flasks in these settlements likely represent the transportation of Egyptian *habitus* practices and etiquettes by migrants. A large proportion of flasks were concentrated in the strategically important bureaucratic centre of Sai, with 14 fragments found in the settlement (Budka pers. comm, Cat. Nos 264–280) and 29 in the elite cemetery (Minault-Gout and Thill 2012: Cat. Nos 281–371). This may suggest that pilgrim flasks were more infrequent deposits than the data suggests and that their movement was relatively limited.

Indigenous sites were also retained. Dokki Gel was once thought to be a colonial settlement built by the Egyptians after Kerma was razed under Thuthmosis I; however, there is now evidence the two sites were contemporary, with Dokki Gel likely to have been a ceremonial site founded in the *Kerma Ancien* period (Bonnet 2017: 108, fig. 1). Although this site contained high levels of Egyptian pottery, only one pilgrim flask sherd was found here, in a disturbed context in the north-eastern corner of ‘Palace A’ (Ruffieux, pers. comm.), which may be related to the strong preservation of indigenous *habitus* patterns at this ancestrally important site. The significant amount of 10 pilgrim flasks (Cat. Nos 103–110; 1632–1633) at Site H25 in the Northern Dongola Reach (Thomas 2014; pers. obs.) is particularly interesting, as the settlement was small-scale and located away from the main Nile channel. This rural centre demonstrates a persistent primary use of indigenous pottery with some Egyptian pottery, primarily storage jars and bowls, and so this large quantity of pilgrim flasks was unexpected. The site has been suggested as an indigenous distribution centre for a string of settlements along the now defunct palaeochannel. If correct, this could explain the movement of pilgrim flasks into non-Egyptian sites further south, such as Hillat el-Arab, and would also account for their often unusually large size. Their presence at this site demonstrates that flasks were not simply part of an Egyptian enforced cultural package but were part of commodity exchange networks with indigenous groups, an idea supported by the significantly more rounded bodies of Type A flasks than in contemporary Egyptian examples, which held larger volumes of contents.

6.7. The Ramesside phase

Little morphological distinction can be identified between the 18th dynasty and the Ramesside Period. Only 43 flasks in the database can be securely dated to this period, or 6% of the total Nubian data (n=651). The rarity of pilgrim flasks in this period may suggest they were particularly valuable, but may equally be related to the limited number of sites currently excavated which date to this phase.

6.7.1. Morphology (see Graph 24)

A large proportion of flasks dating to the Ramesside period were fragmentary, with 20 examples labeled NId in the Catalogue. This high quantity problematises any morphological assessment in this phase, but my analysis still exemplifies the continued use of pilgrim flasks through this period, and I here offer some preliminary analyses.

A range of form types can be observed in circulation, with Type Ai.1 predominating with 10 examples (e.g. Hillat el-Arab: Vincentelli 2006; Cat. No. 45). Types Aii (e.g. Sai: Minault-Gout and Thill 2012: pl. 164; Cat. No. 316), Aiv (Cat. Nos 264–266), and Bi (Hillat el-Arab: Cat. No. 49; Vincentelli 2006) follow as the most common forms. One example of Type Bii was found in Grave 76 at Qustul, which was dated by the excavator to the Post Amarna period (Cat. No. 787; Williams 1992: fig. 10g), while an example of Type Hi.1 (Sai: Minault-Gout and Thill 2012: pl. 161; Cat. No. 323) likely dates to the beginning of this period. This range is a significant variety given the small quantity of flasks known in this phase and may suggest that a range of products associated with each type were in circulation. Aiii does not appear in Ramesside contexts and no longer appears in Nubia after the 18th dynasty. All flask Types have rounded or L-shaped handles, with regional preferences possibly evident at different sites although more data will be needed to confirm this: Flasks at Amara West, for example, displayed handles that stemmed from the rim, while at Sai, flasks occurred both with handles stemming from the rim/just under the rim, and from the middle of the neck during this phase. Rims were rounded or pointed, with occasional squared and overhanging examples.

6.7.2. Fabric (see Graph 25)

As discussed in Section 5.6.2, the flasks from Vercoutter's excavations at Sai (Minault-Gout and Thill 2012) were only described by colour, with a brief reference stating they were *terrecuite* or terracotta. Although this sounds like Nile silt, fabric descriptions for many suggest they may be marl. As such, the flask fabrics from these earlier excavations at Sai cannot be confirmed.

Among the flasks with confirmed fabrics, marl clay continues to be a clear preference, with 20 examples, or 47% (n=43), produced from marl A2 or A4. The restriction to these clays may indicate exchange relationships with specific Egyptian manufacturing centres. A clear preference for marl clay is evident at Hillat el-Arab (Vincentelli 2006), Amara West (Spencer pers. comm.), and Sesebi (Rose pers. comm.), and only 5 flasks across Nubia were in confirmed Nile silt fabrics, in the settlement at Amara West (Cat. Nos 243, 245–248, 255).

As in the previous period, imports from outside Egypt were rare. Only 2 examples are known, both from Amara West: Cat. No. 261, produced from fossiliferous clay from the Levant (Spataro et al. 2015) and Cat. No. 254, identified as Cypriote by Neutron Activation Analysis (Spataro et al. 2015; Garnett, pers. comm.). No Mycenaean flasks appear in this phase. It is likely that imports were of limited accessibility in colonial towns across Nubia, with Mycenaean pottery being extremely valuable and restricted. The presence of these imports at Amara West exemplifies the prestigious position this site likely held as administrative capital of Upper Nubia in the Ramesside period.

During the Ramesside period in contemporary Egypt, Aston (1996: 62–65) notes that Nile silt flasks bear handles stretching from the middle of the neck to the shoulder, whereas marl versions continue to stretch from the rim to the shoulder. Currently, there is not enough available data to identify whether this is also the case in Nubia, because the majority of flasks are broken and composed of body sherds; the sole example of a marl clay rim, Cat. No. 57 from Hillat El-Arab, does however have handles starting from just below the rim. If the Sai data can be clarified in the future, this could provide more useful information.

6.7.3. Decoration (see Graph 26)

Plain pilgrim flasks predominate in this phase, with 47% (n=43) of examples left uncoated or simply slipped in a red or cream. Painted concentric circle decoration is slightly more common in this phase, occurring on 44% (n=43) of flasks in a red or black, painted pre-firing above an uncoated or slipped exterior (e.g. Sai: Minault-Gout and Thill 2012: pl. 159: Cat. No 316). Some decorative designs may be fabric specific; early results suggest that marl clay flasks were always slipped in a cream, whereas Nile silt examples were typically slipped in red and were

more likely to be further embellished with concentric circle decoration (see **Graph 27**). However more data is needed to confirm the significance of this observation. No other decorative styles are known from this phase; one example from the Levant bore red lines on the handles but the flask is broken so it is unclear how this related to the remainder of the body (Amara West: Cat. No. 261).

6.7.4. Findspots

Only limited sites have been excavated with clear Ramesside contexts: those containing pilgrim flasks are Amara West (Binder, Spencer and Millet 2010; Spencer 2009; 2010; 2014; 2017; Binder 2011; 2017; 2017b), Sai (Budka 2011; 2014b; 2016; 2017; Minault-Gout and Thill 2012) and Hillat el-Arab (Vincentelli 2006). An example found in the temple at Sesebi (Rose pers. comm.) and in Grave 76 at Qustul (Williams 1992: fig. 10g) were also dated to this phase by the excavators. One flask from H25 may also date to this phase based on its morphology, with handles stemming from the middle of the neck - however, it was not from a stratified context (Cat. No. 1632). The majority of flasks dating to this phase originate in necropolises – only 14 flasks were from settlement contexts at Amara West (Cat. Nos 244–256) and Sesebi (Cat. No. 328) respectively. By this period in Nubia burials are frequently multiple interment following contemporary Egyptian fashion (Török 2009: 287) and the ongoing use of tomb contexts throughout the Ramesside period and into the Post New Kingdom means it is currently difficult to pinpoint Ramesside pilgrim flasks in burial contexts. However, the spread of pilgrim flasks across this phase is significant, and their presence in urban landscapes suggests their use was not restricted.

22 pilgrim flasks were identified at Amara West, a walled Ramesside town located opposite the modern town of Abri and currently under excavation by the British Museum (Binder, Spencer and Millet 2010; Binder 2011; 2017; 2017b; Spencer 2009; 2010; 2014; 2017). 13 of these flasks were deposited in domestic remains; unfortunately, all broken and could not be assigned to a form Type. The sheer variety of fabrics, however, indicates that flasks were being sourced from a multitude of regions, with multiple contents likely in circulation. The lone example of a Cypriote flask in Nubia was found in Building E13 in the walled town and indicates that this community had access to high-value luxurious items.

The evidence from cemeteries is more widespread with the ceramics better preserved; many of the flasks discussed in this section come from such cemetery contexts which gives the data set an unfortunate, but inevitable, bias. The remaining flasks at Amara West were deposited in grave contexts across both Cemeteries C and D, in Graves 314, 305, 200, 211, 201, 239, 244 and 246. Only one flask was deposited in each grave, even though some were multiple-interment. These patterns contrast with the deposition of flasks at Sai and Hillat el-Arab which featured multiple flasks in a single tomb, and perhaps reflect different perceptions of appropriate goods for the burial sphere.

The well-published necropolis at Hillat el-Arab (Vincentelli 2006) also has contexts dating to this phase and contained a total of 54 pilgrim flasks across all phases. This cemetery is located 3km south of Jebel Barkal, and was excavated by a Sudanese-Italian Mission in 1993. It contains 20 tombs, and was in continuous use from the 19th to the 25th dynasties, with sporadic Meroitic, post-Meroitic, and Medieval reuse. Hillat el-Arab contained the largest quantity of pilgrim flasks south of Sai and the repeated depositions of the form may suggest it was particularly well connected to exchange networks with Egypt. As all of the tombs at this site are multiple-interment, it is difficult to identify which flasks might date to the Ramesside period; however, Vincentelli has identified tombs 1 and 4 as dating to the 19th dynasty, and Tombs 9 and 7 to the 20th dynasty. Tombs ARA 1 and 4 are the only ones that contain exclusively 19th dynasty grave goods, and the flasks in both are fragmentary (see Cat. Nos 43, 44). It is possible that pilgrim flasks were rare at the site in this early phase. However by the 20th dynasty flask numbers increased, and both Type A and B specimens can be observed in the burials.

In addition, 3 tombs containing flasks at Sai are thought to be Ramesside depositions. The settlement currently under excavation has been dated to the 18th dynasty (Budka 2011; 2014b) but based on the pottery evidence, I suggest that Tomb 26 is possibly early 19th dynasty and Tombs 20 and 21 contain deposits from the 19th–20th dynasties. Again, the issue of multiple interment tombs means that it is problematic to identify which grave goods were affiliated with which individual.

6.8. The Late New Kingdom/early Post New Kingdom period

Very few sites have been excavated for this period. Settlements were historically considered abandoned by the end of the New Kingdom (Firth 1912; Adams 1964b; Edwards 2004: 109), but this is now thought to be an illusion (Säve-Söderbergh 1969) caused by general impoverishment of the region and a subsequent decline in burial goods. The lack of Nubian ceramic typologies has also made identifying contexts without contemporary Egyptian material difficult. It is likely that much Post New Kingdom material was mixed in with Late New Kingdom material in contexts excavated during the 20th century, which is a potential avenue for future research. However, I identified some contexts containing pilgrim flasks of this phase. Sites such as Missiminia, which were identified as Napatan (Vila 1980), contain Post New Kingdom material, while burial contexts including Hillat el-Arab (Vincentelli 2006) and Sai (Minault-Gout and Thill 2012) also contained some later material in multiple interment graves. The issues with dating these contexts led me to treat the Late New Kingdom and the early Post New Kingdom period as one chronological phase for the purposes of research. In addition, the change in political control and the ceramic shifts already observable by the late New Kingdom rendered the continued understanding of the period as part of the New Kingdom untenable for Nubia. Hopefully, future excavations will increase the data set available. Examination of contemporary archaeological projects in particular along with examination of older works has provided some starting morphological points, which will be described here.

6.8.1. Morphology (see Graph 28)

65 flasks in the database can be dated to this period, at 10% of the Nubian collection (n=651). Of this, 19 flasks, 30% (n=65), were fragmentary (NId).

Type Ai.1 flasks are still present in these deposits, with 13 flasks known, but for the first time, Type B vessels overtake Type A vessels in quantity, at 31% (n=65) (e.g. Cat. No. 260: see **Graph 28**). The prevalence of Type A flasks drops by the next phase and it is likely that this was already occurring towards the end of this period. Future excavation of sites dating to this period will hopefully provide more data to fine tune dates across this period.

In Egypt, Aston (1999: 82) identified a particularly globular flask at Elephantine in marl A4 Variant 1 uncoated ware, from phase II of the Third Intermediate Period. This shape is unusual in Egypt but may perhaps be linked to the Type B shapes now appearing in Nubia. The Type B flasks often have distended bellies in this phase and are categorised as Type B.ii. Two of the Levantine imports from Tomb 10 at Hillat el-Arab (Vincentelli 2006) have this distortion (Cat. Nos 50–51) and it is likely the appearance of this style in local fabrics was due to a Canaanite inspiration. The increased use of Type B flasks over time may point to a change in function between Egypt and Nubia, with a large volume more important in Nubian flasks, perhaps due to their primary import as commodities. By the Meroitic period, many can stand unaided (e.g. Ashmolean Collection AN1912.392: see **Figure 6.5**), echoing the shape of Late Period kegs in Egypt.

Type A.iv is the second most common form in this phase, with examples occurring in Tombs 16 and 19 at Hillat el-Arab (Vincentelli 2006: Cat. Nos 71, 73, 75) and 1 in Grave 200 at Amara West (Garnett pers. comm.: Cat. No. 259). Three examples of Type A.iii were found in tombs 10 and 19 at Hillat el-Arab (Vincentelli 2006: Cat. Nos 55, 88) and at Dorginarti (Heidorn 1992: fig. 32: Cat. No. 778). The Type A vessels of this phase invariably have handles stemming from the middle or the upper middle of the neck (Cat. No. 71) in both marl clay and Nile silt.

Two Type Gii.1 flasks were noted in Tomb 15 at Sai (Minault-Gout and Thill 2012: Cat. No. 310) and Dorginarti (Heidorn 1992: fig. 31: Cat. No. 777). Both these examples come from mixed contexts that date throughout the Post New Kingdom period. I suggest that these come from the end of this period, based on the later prevalence of this form.

Sporadic occurrences of other Types are known. One example of Type A.i.3 was deposited in Grave 226 at Amara West (Cat. No. 263). Two Type L flasks also appear, in Tomb 10 at Hillat el-Arab (Cat. No. 62; Vincentelli 2006), and at Site HP 736 (Cat. No. 775: Kolosowksa and El-Tayeb 2012: fig. 3:11). This Type appears only sporadically in both Egypt and Nubia and likely dates between the Ramesside and Early Napatan periods. One example of Type D appears at Hillat el-Arab (Vincentelli 2006: Cat. No. 81), which displays the characteristic asymmetrical

body of this form. In addition, a single Hi.1 flask was found at Dorginarti (see **Figure 6.6**). Based on evidence from the other periods and the fact that contexts at Dorginarti date from the Post New Kingdom/Early Napatan period, it is possible that this is an heirloom piece. However, the fact it has a flat bottom (Heidorn 1992: fig. 31c) is unprecedented and may represent a later creative response to the pilgrim flask form.

6.8.2. Fabrics (see Graph 29)

The dominance of marl clay in pilgrim flask production persists throughout this period regardless of the Egyptian withdrawal from Nubia (see Section 2.3.1). 67% of the flasks from this period were manufactured in marl clay (n=65), and as such were still being imported from Egypt. In particular, the rarer forms of Type D, and L were produced in marl clay, indicating they originated from the north. Marl A2 was the most common fabric, with 2 other examples in marl A3. The small amount of Nile silt flasks were in Types Aii or Bi forms, where identifiable.

3 Levantine flasks were also deposited in Tomb 10 at Hillat el-Arab (Vincentelli 2006: Cat. Nos 50–51, 53). Two were of Type Bii, supporting the suggestion that the distended shape may have been a Levantine inspiration. Their presence may suggest the continued accessibility of certain trade routes to the Mediterranean, via Egypt. It is possible that the flask in Tomb 248 at Missiminia (Vila 1980: fig. 110: Cat. No. 100) is an additional Levantine import, because its form and decoration bears strong parallels to the Levantine imports from Hillat el-Arab, as well as contemporary flasks across the Levant (Aston 1998: 318; fig. 18; McClellan 1975: type 64–132–001). However, it has been counted as a Nile silt example here as only the fabric colour was described in the publication. The possibility that imported flasks were retained as heirlooms should also be considered.

Fabric may show site-specific patterns in the Post New Kingdom period. Marl is predominant at Hillat el-Arab, for example, 97% of flasks from this phase at this site were manufactured from either marl A2 or A3. However 3 of the 4 flasks at Missiminia were in Nile silt. More data is required to confirm this.

6.8.3. Decoration (see Graph 30)

The trend for plain flasks persists in this period, with 56% (n=65) left uncoated or given a simple cream, red, and in one case grey, slip (Vila 1980: Cat. No. 93). The second most common embellishment was concentric circles, with 30% given predominantly black circles or spiraloids painted pre-firing (e.g. Tomb 19, Hillat el-Arab: Vincentelli 2006: Cat. No. 84). One example in Grave 200 at Amara West (Cat. No. 259) had a red painted spiraloid but may be an antique. Occasionally these circles were painted red and in one case were incised before painting. In two cases, stars were added under the handles (Cat. Nos 52, 99); however, this is likely a Levantine design (see Section 5.8.2). **Graph 31** shows the restricted range of decoration applied to Nile silt vessels.

Cat. No. 339 (see **Figure 6.7**) is unusual as it bears a black painted pot mark in the centre of the belly (Smith and Buzon 2014: pl. 7). This form is in marl clay and the mark may be related to the commodity contained within the flask.

These decorative patterns likely changed over the time period in question. Although cream slips were a dominant decorative addition, the three flasks dating to the latter end of this phase (Hillat el-Arab: Cat. Nos 58, 78, Sai: Cat. No. 310) are all in a red slip.

6.8.4. Findspots

Seven sites were identified as containing archaeological contexts dating to the Late New Kingdom/Early Post New Kingdom period. The majority of these sites were mortuary, with only the fortress of Dorginarti (Heidorn 1992) and Site HP736 (Kolosowska and El-Tayeb 2012) containing settlement deposits. The preference for multiple interments in graves continues from the end of the Ramesside period (Török 2009: 287), which makes it difficult to associate grave goods with specific individuals. I identified several flasks as dating to this period based on accompanying grave goods, which in my opinion are characteristic of this phase.

Dorginarti (Heidorn 1992), a fortress located close to the Second Cataract and likely constructed during the Post New Kingdom Period, contained 11 flasks dating to this phase. Unfortunately these are mostly fragmentary; however, the appearance of an Aiii, Gii.1, and Hi.1 suggests that all forms were still in circulation and visible to certain strata of society contemporaneously.

The other settlement site, HP736 (Kolosowksa and El-Tayeb 2012: fig. 3:11) is a late Post New Kingdom/Napatan settlement in the Fourth Cataract area. Although this flask is fragmentary, the fact that a pilgrim flask was found this far south at this period is significant, and its marl fabric indicates that trade in Egyptian items was still widespread.

Hillat el-Arab (Vincentelli 2006) contains a remarkable quantity of pilgrim flasks throughout the Ramesside, Post New Kingdom, and Napatan phases. 67% of the flasks dateable to the Post New Kingdom period come from this necropolis (n=65). However, ARA 10, 16 and 19 - the graves containing Type B flasks - are both first used in the Ramesside period, and thence until the Napatan/Meroitic. It is probable that these Type B flasks date from the early stages of this phase, but it is difficult to chronologically pinpoint them more precisely. ARA 13 and 14 are the only graves that can be fixed to the first phase of the Post New Kingdom period, and the globular nature of Cat. No. 68 confirms that Type B and Type Ai.1 were still in circulation at this time.

Three flasks from Amara West Cemetery C (Garnett pers. comm.) are in contexts dating to the Late New Kingdom/Post New Kingdom phase (see Cat. Nos 259, 260, and 263). It has been suggested that this necropolis was primarily in use between the 10th and 8th century BCE (Binder 2011; 2017). The flasks were of Type Ai.3, Aiv, and Bi, suggesting a variety of morphologies in circulation at this period.

Sporadic examples dating to this phase were also found in the necropoles at Missiminia (Vila 1980), Sai (Minault-Gout and Thill 2012), the Batn el-Hajar (Edwards pers. comm.), and Tombos (Smith 2014; pl.14). At Sai, the excavators suggest that 12 flasks can be dated to the Post-New Kingdom period from Cemetery SAC5 (Minault-Gout and Thill 2012). However, I place some of these in earlier phases, based on my developed flask hypotheses, and only place

two in this phase (Cat. Nos 310–311). The confusion over their chronological pinpointing is down to the multiple interment nature of tombs in this period.

Re-examination of the Missiminia excavation report (Vila 1980) suggests that some graves identified as Napatan in fact date to this phase. 11 tombs in the necropolis contained pilgrim flasks (Tombs 2-V-6/199, 204, 206, 211, 224, 248, 261, 311, 314, 320, and 327). All were single interment except for Tomb 2-V-6/314. 10 flasks were found across these graves, 5 appearing from their description to be manufactured in marl clay, and 5 in Nile silt, although the excavator unfortunately only described the colour and the hardness of each vessel. The remaining vessel in tomb 2-V-6/311 was a New Year's flask. These pilgrim flasks displayed strong morphological variation, which is to be expected if they ranged from the New Kingdom to the Napatan period as hypothesised. Tombs 199, 248, 261, and 327 (Cat. Nos. 103, 109, 110 and 112) were identified as dating to the end of the New Kingdom/early Post New Kingdom phase. This was based on the accompanying ceramic repertoire: Tombs 327 contained bowls with a painted 'sloppy' red rim, and Tomb 261 contained conical bowls, both characteristic features of this phase. Furthermore, the morphology of the flasks – Type Ai.1 and Type B – is supportive of an earlier dating, as these forms are very rare in the following phase.

6.9. The Late Post New Kingdom/ Early Napatan period

Quantities of pilgrim flasks increase significantly in this phase, although the morphology of the form has changed from the earlier lentoid prototypes. In order to group flasks together effectively, examples that may date to the Late Post New Kingdom phase are also placed here due to similar morphology. The phase runs until c. 590 BCE, when the capital of Kush is moved to Meroe.

6.9.1. Morphology (see Graph 32)

392 flasks can be dated to this phase, or 60% of the total Nubian collection (n=651). In observing available material from this period, the first point to note is that the pilgrim flask

form is diverging into three subtypes – Types E, F, and G. These forms differ morphologically, but are clearly related to the earlier pilgrim flask prototype (Type A) which itself only appears rarely in this phase. It is likely that they have, by this point, developed specific functions in daily practice (see further discussion in Chapter 8).

Type F makes up a significant proportion of the pilgrim flasks from this period, at a total of 81% (n=392). Type F has a globular body paired with a tapering base. These flasks are well-modelled and finished, with a smoothed surface. Rounded handles span from a pointed rim to the base of the neck. There are two subtypes of this form in the Typology: in Type Fi, the belly area is ribbed, in common with several marl jar types of the Napatan period, and may be a semi-aesthetic feature or to aid grip. 308 Type Fi flasks are found in the dataset, or 79% (n=392). Type Fii lacks this ribbing, but is otherwise identical morphologically, with 14 examples in the dataset. These are also characterised by a change in the manufacturing procedure: they appear to have been formed in one piece on the wheel, vertically, in a similar method to a jar.

44 flasks in this phase were Type E, or 11% (n=392). Type E has a typically lentoid or slightly globular body, crudely formed and often with an unsmoothed surface. This form has a smaller average size than Type A flasks, with an average diameter of 13 cm (e.g. Cat. No. 113 measures 11 cm in height, and 9 cm in diameter). Handles of this form are squashed into the body and neck of the flask in a ‘pinched’ style. Rims can be pointed, but are predominantly unmodelled. Type E displays a change in manufacturing style from the previous forms: production marks on the body suggest the form was made on the wheel but quickly and in one piece with no noticeable joining marks. A notable characteristic of this Type is the restricted volume capacity. Some vessels are barely hollow, suggesting they no longer served a practical function at this stage. Although Types E and F are broadly contemporary, they never appear in the same context, suggesting some as yet little understood ancient perceived distinction between the forms.

Type G is the largest form of this period – Cat. No. 240 (unprovenanced) is 32cm in height and has a diameter of 26cm. The body is in the shape of a drum, with the two belly halves joined by a perpendicular stave (see **Figure 5.2**). 11 examples are known in the data set.

Handles can be flattened, as in 7 cases (Type Gi), or rounded, as in 4 cases (Type Gii.1). This form is always well-modelled, with a smoothed body and emphasized rilling lines in the centre of each body. The neck is squat and tubular, and often ribbed, suggesting it was manufactured using a coiling method. The rim is typically rounded. These are similar to later Arabic ‘*ḡamḡamiyya*’ as well as Roman flasks; and also bear significant parallels with Oasis fabric kegs of the Late Period (e.g. Hope 2000: fig. 2). The absence of this type at Sanam, Missiminia, and Hillat el-Arab suggests it is a slightly later development, and was perhaps designed for large volumes of restricted commodities. The shifts in manufacturing method for all three types suggest a change in industrial production, perhaps related to shifts in the economy after the withdrawal of Egyptian control.

Although Types E, F and G predominate in the data set for this period, other Types do appear. Seven lentoid Type A vessels are known, with the majority of Type Aiii. One example of Type Ai.3 was found in a tomb deposit at Tombos (Cat. No. 339), dated by the excavator to Phase III of Aston’s Third Intermediate Period typology (Smith 2014: pl.7). Two Type Bi flasks also occur. One Type L flask is known at Missiminia (Grave 211: Vila 1980: Cat. No. 96). However, it appears that both Types A and B have declined in popularity in this phase, and the flasks of this Type likely date to the beginning of this phase.

6.9.2. Fabric (see Graph 33)

Marl clay is overwhelmingly more prevalent in Nile silt during this period, with 83% of flasks produced from these clays (n=392); including three fragmentary examples from the small Napatan settlement 4-L-100 in the Fourth Cataract area (Cat. Nos 378–380: Welsby-Sjöström pers. comm.). However, it should be noted that this is affected by the vast quantities of flasks found in recent re-excavations of the Sanam Treasury (Vincentelli 2018), which contained the majority of pilgrim flasks in this phase. A large quantity of flasks dating to this phase were found by Griffith (1931) during his earlier excavations in the cemetery at Sanam in the 1920s, and due to the early date of the excavation many do not have detailed fabric descriptions. I assign them to a fabric type based on the description of the clay provided in the excavation report, as well through first-hand examination of examples in the Ashmolean collection.

Each new type during this phase appears to have specific fabric preferences (see **Graph 33**). Types E, Fii and G were in the majority of cases manufactured in a Nile silt, whereas Type Fi is always in marl clay. This is overwhelmingly marl A4 Variant 2, which attests to an intensive trading relationship with southern Egypt, particularly the Theban area (Vincentelli 2018: 181). This fabric is characteristic of the 25th and 26th dynasties (Aston 1999: 4; Vincentelli 2018: 179). Type F flasks only rarely occur in Egyptian contexts (Cat. No. 1610: Rose 1996: pl. 67, 115; Cat. No. 843: Jacquet-Gordon 2012: fig. 90, t;) and the examples observed bear morphological differences such as a carinated rim (Cat. No. 1610), so this indicates the presence of a significant export market in Egypt. The Nile silt Type Fii forms may have been the local version of this imported vessel.

Type G flasks bear significant similarities to handled flasks in Oasis fabrics dating to the Late Period (e.g. A. Spencer 1993: pls 71–72; Hope 2000: fig. 2; Jacquet-Gordon 2012: fig. 118, a, b, n–r, t ; Boulet 2017: fig. 4b). However, all Type G flasks I have observed, both in person and via photograph, were all manufactured from a Nile silt fabric, often though not exclusively decorated with a thick red slip. Only 1 oasis flask has been identified in Nubia to date, suggesting that Type G forms were reaching Nubia through Egyptian, rather than oasis, routes.

Fabrics may have been related to preferences among the communities at each site, as well as their ability to access Egyptian trade routes. Hillat el-Arab (Vincentelli 2006), for example, continued to predominantly contain marl pilgrim flasks, with the two examples dated to this phase in marl A2 (Cat. Nos 48–49); while the 299 flasks from the treasury at Sanam were in Marl A4 Variant 2 (Vincentelli 2018: Cat. Nos 1201–1500). No imports from outside the Nile Valley are known from this phase, which may suggest that Nubia could no longer access these markets by the Early Napatan period.

6.9.3. Decoration (see Graph 34)

Graph 34 demonstrates the distinct changes in decorative styles by this period. 18% (n=392) of flasks in this phase were left completely plain (e.g. Tomb 3 Sai: Cat. No. 290: Minault-Gout and Thill 2012: pl.159); while 78% (n=392) were given emphasised rilling marks (e.g. Sanam

treasury: Vincentelli 2018: Cat. No. 1201) or engraved concentric circles (e.g. Tomb 3 Nuri: Cat. No. 725: Dunham: 1955: 41), features which are probably only partially aesthetic and were designed to aid in the holding of vessels. This preference for plainer vessels occurs across all fabric types (see **Graph 35**). Type E flasks in particular were invariably left plain and unsmoothed, with only one example given a simple red slip (Sanam cemetery: Cat. No. 448). Four flasks in total have a red slip, while one example is black burnished (Tomb 8 Hillat el-Arab: Vincentelli 2006: Cat. No. 456). Only 2 vessels bore painted concentric circles (Grave 206 Missiminia: Cat. No. 95: Vila 1980; Tombos: Cat. No. 661: Smith 2007: 7), a style which appears to have declined in popularity. One Type Fi flask, Cat. No. 321 from Sai, has an *anx* mark engraved onto the upper shoulder area (Minault-Gout 2012: pl. 148). This is the only pot mark known on a flask from this period.

6.9.4. Findspots

The mortuary bias of Nubian archaeology is very evident in this phase. Several royal cemetery deposits are known from this period, with 14 flasks from El Kurru, a burial ground used from the 8th century BCE (Dunham 1950; see **Figure 6.8**) and 6 flasks from Nuri, a cemetery started by Taharqa (Dunham 1955). The presence of coarse Type E flasks in these high-prestige spaces is particularly significant and may reflect developing ritual associations with the form (see Chapter 8). Only one non-royal necropolis has been excavated, Sanam, in use from c. 800–600 BCE (Griffith 1931; Lohwasser 2010; 2010b; 2012). 53 flasks from this period were found at the cemetery of Sanam, and these were restricted to Types E and F. Graves from this period have also been found at Missiminia (Vila 1980) and there is evidence of Napatan reuse in tombs at Hillat el-Arab (Vincentelli 2006), Tombos (Smith 2007; 2014) and Sai (Minault-Gout and Thill 2012).

The literature on early Napatan settlement sites is limited: a major Napatan settlement site currently under excavation is Kawa, but no pilgrim flasks have been found here (Welsby-Sjöström pers. comm.). Further research is needed to identify relevant morphological and functional changes within utilitarian contexts of this period. A significant quantity of pilgrim flasks were found in excavations in the Treasury at Sanam (Vincentelli 2018), with a total of 76% (n=392) of pilgrim flasks of this period found here across rooms 301, 302, 305, 307, and

the courtyard area. Including the cemetery space, this means that 90% (n=392) of the pilgrim flasks found in early Napatan contexts were from Sanam, which suggests that the site was a key trading nexus with southern Egypt at this time.

However, Sanam was clearly a site with strong access to resources and as such is difficult to use when attempting to examine potential purposes of such vessels in the daily lives of ordinary people. Three flasks were found at Site 4-L-100 in the Fourth Cataract area (Welsby 2003; Welsby-Sjöström pers. comm.), but unfortunately these were fragmentary. However, they do point to the continued use of pilgrim flasks this far south even in this late period.

6.10. Comparisons with the Egyptian typology.

The data above shows that flask deposition and morphology across Nubia underwent significant changes between the 18th dynasty and the Early Napatan period. How do these shifts then compare with Egypt?

Pilgrim flasks were less common in Nubia, with only 651 flasks from Nubian contexts compared to 980 from Egypt. Their presence in both mortuary and settlement contexts suggests applicability to both daily life and funerary practices. Already in the 18th dynasty a broad range of forms were in circulation in Nubia (see **Figure 6.9**), including some almost entirely Nubian specific examples such as Type Aiv and Type F – even though its often marl fabric indicates Egyptian manufacture. This points to the existence of a specific export market in Egypt that produced vessels for direct transport to the south.

Other forms appeared in both Egypt and Nubia, but with slight morphological differences, which reflect different use patterns. Examples of Type Ai.2 in Nubia tended to have a thin neck, rather than the fat necks observable in Egypt. The handles swept lower on the neck, and they typically had a rounded rather than pointed rim (see **Figure 6.2**). This would have affected how liquid was extracted. An additional difference is the strong preference for more globular vessels. More Type B flasks were in general use during the New Kingdom and Post New Kingdom period, and the Lentoid flasks were also generally more rounded with a larger

volume capacity. This likely reflects their use as commodity transport jars. The increasing divergence between contemporary flasks likely reflects ethnogenesis within Nubian communities (see Chapter 8).

Flask numbers increase substantially in both Egypt and Nubia during the Late Period, with 39% of the total flasks from Egypt ($n=980$) and 60% of the total flasks from Nubia ($n=651$) dating to this phase. However, the types and origins of the flasks in each region is very different. In Egypt, 89% of pilgrim flasks were in Oasis fabrics ($n=385$), likely originating from the Dakhleh Oasis (Eccleston 2000: 217), while in Nubia 85% were in marl clay ($n=392$), primarily from southern Egypt and the Theban area (Vincentelli 2018). In both regions there is an observable concentration of pilgrim flasks in one site during this phase, with 86% of Late Period pilgrim flasks in Egypt found at Karnak Nord (Jacquet Gordon 2012), and 90% of Late Post New Kingdom/Early Napatan period pilgrim flasks in Nubia found at Sanam (Griffith 1931; Lohwasser 2012; Vincentelli 2018). This preference for Egyptian Type Fi flasks is intriguing as the form only occurs twice in an Egyptian context and it would appear the shape was manufactured primarily for export to Nubia. Oasis flasks are in contrast extremely rare in Nubia and no examples are currently known from the Late Period. This suggests that different contents were in demand in Egypt and Nubia.

Prevalence of forms in the Late Period also differs. While Type E flasks do appear in Egypt, they are significantly more rare, with only four examples known from Egyptian Late period contexts in comparison to the 44 in contemporary Nubia. These flasks are typically manufactured in coarse Nile silt and display vestigial handles which could not have been used for pouring, suggesting they were no longer intended for practical use. I consider it likely that these coarse vessels were locally produced in Nubian Nile silt. The deposition of Type E and G flasks in royal necropoles is also distinct from Egypt, where to current knowledge flasks do not appear in royal contexts.

Different fabric preferences are evident between the regions. There is a continued preference for marl clay in Nubia until the Napatan period, whereas in Egypt, Nile clay grew in popularity after the 18th dynasty. From the Ramesside period, decorative styles in both areas exhibit a preference for plain flasks; however, 18th dynasty examples in Egypt displayed significant

creative approaches to the form, with unusual embellishments such as blue-painted floral garlands and molded sculptural elements. This does not occur in Nubia.

The differences visible in flask morphology and distribution between the regions of Egypt and Nubia regions point to different use patterns for the vessels from as early as the 18th dynasty, which increase over time. These likely reflect distinct *habitus* practices across Nubia around these vessels.

6.11. Conclusion

In this chapter, I reviewed my developed typology for Egyptian pilgrim flasks to test whether it could be applied to a Nubian cultural context. I first developed a new, independent typology for the form in Nubia in coordination with the Egyptian system presented in Chapter 4. My research particularly took into account evidence from contemporary archaeological excavations being unveiled across Sudan, in part due to the funding provided by the Qatar–Sudan Archaeological Project.

The Nubian typology was divided into four ceramic phases: the 18th dynasty; the Ramesside period; the late New Kingdom/early Post New Kingdom period; and the late Post New Kingdom/early Napatan period. The pilgrim flask appears to undergo significant morphological shifts across this time span, and was particularly popular in the Late Post New Kingdom/Early Napatan period. The Nubian morphological development culminated in the appearance of three distinct pilgrim flask types, which were, based on their different morphologies, intended for specific practices. It is clear that over this time, flask typology in Nubia diverged more and more from the morphological development seen in contemporary Egypt – even though a large quantity were continually imported from Egypt itself. This suggests the existence of pilgrim flask production solely intended for export, a feature observable in other periods and locales in the Nile Valley (Hope 1999: 229).

Although a basic typology has been developed here, it should be stressed that it is based on the limited well-contextualised excavations published or currently underway in Sudan. As

such, finding evidence for some periods, types of flask or accurate chronological assessment was often difficult. In the future, a higher quantity of pilgrim flasks from well-recorded excavations will hopefully further refine this typology.

In the next Chapter, I move away from a typological analysis to assess the benefits of applying this data to sites across Nubia. I will use my Nubian Type-series to assess pilgrim flask deposition practices at two sites from key political stages in Nubian history: the Colonial town at Sai Island (Budka 2011; 2014; 2014b; 2016; 2017; Minault-Gout and Thill 2012) and the Early Napatan cemetery at Sanam (Griffith 1931; Lohwasser 2010; 2010b; 2012). This chapter will ultimately demonstrate the ways in which a study of pilgrim flasks can inform our understanding of such sites.

Chapter 7. Using the Typology within Case Studies

7.1. Introduction

I have assessed the collated pilgrim flask data from Egypt (Chapter 5) and Nubia (Chapter 6) and presented a new pilgrim flask typology for each region. A comparison of the morphologies and distribution patterns within each area demonstrated different preferences from as early as the 18th dynasty, which accumulated across time to culminate in distinct forms during the Late Period/Early Napatan period. This was particularly striking as the majority of pilgrim flasks in Nubian contexts were in marl clay, with the different morphologies suggesting the presence of a specific export market for Nubia, particularly in the Late Post New Kingdom/early Napatan.

In this chapter, I will apply the Type-series and subsequent analyses to two Nubian case studies, in order to explore how this updated typological assessment can broaden our understanding of Nubian cultural contexts. Observing changes in pilgrim flask morphology can inform both chronological and sociological investigations of sites across the Nile Valley, particularly those dating towards the end of the New Kingdom and during the Post New Kingdom period, when it is often difficult to accurately date contexts.

I have chosen to apply my typology to two mortuary sites in Nubia: the New Kingdom cemetery on Sai Island (Budka 2011; 2014; 2014b; 2016; 2017; Minault-Gout and Thill 2012) and the Early Napatan cemetery at Sanam (Griffith 1931; Lohwasser 2010; 2010b; 2012). I selected these sites in order to compare distribution patterns pre- and post- Egyptian colonisation. *Habitus* practices, self-identity, and modes of expression likely changed significantly over the period of 400 years between the occupation of these sites. This can be observed in the morphological and depositional changes in the pilgrim flasks, and ultimately their development can be used as a means of accessing broader cultural and behavioural changes.

I focus on mortuary contexts, despite the problems inherent in using burial data as a means of reconstructing daily life (see Section 1.4.1) for two reasons. Firstly, the strong bias towards the excavation of mortuary contexts in Nubiology (Dann 2009: 60–61) means these sites predominate in the literature. Secondly, the increased preservation levels of mortuary goods mean it is possible to study deposition patterns to a greater level of detail. It should be noted that the spread of pilgrim flasks in these burial contexts is further suggestive of their appropriateness for the burial sphere.

7.2. A case study of an Egyptian town – the Sai necropolis

The first case study focuses on necropolis SAC5 at Sai Island, which contains tombs built between the mid-18th dynasty to the Ramesside period. Sporadic reuse of the tombs in later periods means Napatan and Meroitic grave goods also appear in some burials.

This site was chosen as a case study in order to present a well-published cemetery established in the 18th dynasty as a comparison to Sanam in the early Napatan period. As a site utilised primarily during Egypt's colonial era, its material culture is heavily Egyptian/'Egyptianised' (see Section 1.4.4) and its ceramic material reflects this, with the majority of pots being Egyptian or 'Egyptian-style'. The ceramics of the site have been well published, and Julia Budka gave permission for me to access current, unpublished data, making it possible to assess flask numbers and distribution patterns effectively.

7.2.1. Introduction to the Excavation

The island encompasses an area of 50km², and is located within the Batn el-Hagar region of Lower Nubia, between the Second and Third Cataract. Excavation of the site began with a French concession in 1954 under the direction of Jean Vercoutter (Vercoutter 1956; 1986) and has continued in the town (Azim 1975; Doyen 2014; Budka 2011; 2014; 2014b; 2016; 2017) and the necropolis (Gratien 1975; Minault-Gout and Thill 2012) to the present day under the University Charles-de-Gaulle-Lille 3.

Azim's (1975: 93–95) excavations identified six occupation levels for the town, with Pharaonic, Meroitic, Post-Meroitic, Christian and Islamic phases. However, work in the necropolis uncovered surface Palaeolithic stone tools (Arkell 1949: 43) as well as substantial Kerma remains (Gratien 1975; 1986), indicating that the island was well established as a strategic point on the Nile from an early period. Azim (1975: 95) advised that the site's ceaseless occupation meant the interpretation of its strata was problematic, due to practices of reusing stone blocks and continual soil erosion.

The Pharaonic town, *mnw šz't*, was built on the northeast bank of the island, meaning parts have collapsed into the river and are now missing. Preserved architecture indicates that the settlement was designed to an orthogonal plan, and encompassed a sandstone temple built by Thutmose III, based on surviving foundation deposits; as well as residential quarters and a fortified wall (Doyen 2014: 369). The variety of artefacts found within the settlement, including grindstones, fishing net weights, storage jars and religious items relating to the goddess Hathor (Doyen 2014: 374–375) attests to the broad range of activities in the town. Large installations such as silos (Azim 1975: pl. xii) suggest the permanency of this settlement. The material culture is culturally Egyptian; however, Nubian designs on Egyptian ceramics were also found (Miellé 2014), suggesting that the Egyptian community was interested in these styles and that Nubians were likely still living among them.

The New Kingdom necropolis, SAC5, is located in a 300m long space to the northeast of the island, aligned north–south, between two wadis (see **Figure 7.1**). The area is positioned on a sandstone plateau south of the later medieval fortress. It was part of a string of cemeteries from different epochs branching along the island. This case study focuses on this New Kingdom cemetery, using Minault-Gout and Thill's 2012 publication, along with unpublished information from Budka's contemporary work on the site (Budka pers. comm.).

In total, 49 pilgrim flasks were found in 11 tombs: Tombs 1, 2, 3, 5, 7, 8, 14, 15, 20, 21 and 26, across a cemetery of 25 excavated graves. An additional flask has no recorded context. It is possible that further graves remain unexcavated within the necropolis area. The excavated material is now held either in the Université Paris-Sorbonne, or in the National Museum, Khartoum.

7.2.2. Tombs across the cemetery

The 25 tombs in SAC5 are all multiple-interment, and were marked with a variety of superstructures. Minault-Gout and Thill differentiated 4 types:

Type 0: No discernable superstructure (Tombs 2, 3, 5, 15, 19)

Type 1: Simple enclosure walls, acting as a chapel (Tombs 1, 7, 14, 16)

Type 2: A small chapel attached to a small pyramid (Tombs 6, 8, 10)

Type 3: A chapel with a pyramid (Tombs 9, 11, 20, 25, 21, 18)

They note that those assigned to Type 0 may have once had superstructures that have since been damaged or eroded away, but there are no remains attesting to this. Beneath each superstructure, a rectangular shaft leads to up to four chambers hewn out of the rock, except for Tomb 24, which is unusually brick vaulted and probably of a later, Meroitic date.

24 tombs were excavated by Minault-Gout and Thill, and a further example, Tomb 26, has recently been excavated by the Charles-de-Gaulle-Lille team led by Julia Budka. In total, 11 tombs contained pilgrim flasks. Of these, 4 had no discernable superstructure, and the remaining 9 had surrounds ranging from simple walled enclosures to pyramidal structures (see **Graph 21**).

The cemetery is dated to the New Kingdom, with the oldest tombs thought to date to the end of the Second Intermediate/beginning of the 18th dynasty (Tomb 7) and the very beginning of the 18th dynasty (Tomb 11, 13, 14, 16). Most continued to be occupied through the 19th–20th dynasties, and there is evidence in the majority for Post New Kingdom and Napatan reuse (Tombs 2, 3, 5, 6, 7, 8, 14, 15, 20, 21, 25). A Meroitic sherd appears in Tomb 25 (Minault-Gout and Thill 2012: pl. 167).

The oldest tombs are found to the south of the necropolis, and proceed in date as they spread north; however, Tombs 18 and 19 in the northern zone are exceptions to this rule.

The majority of tombs were not only multiple interment, but were also heavily looted and disturbed. This rendered assigning bodies to their associated burial goods problematic, an issue that resurfaced frequently in New Kingdom Nubian cemeteries.

A large percentage of tombs containing pilgrim flasks were clustered in the southern half of the cemetery (see **Figure 7.1**), although Tombs 20 and 21, in the north, also contain examples. However, given the multiple burials in the graves at Sai, this is likely less significant for suggesting social ties than it is at Sanam (see Section 7.3).

7.2.3. A discussion of the pilgrim flasks at Sai

In the 2012 publication of the Sai Necropolis, Ceramic Type J encompasses pilgrim flasks, termed ‘Bouteilles du Nouvel An’ (Minault-Gout and Thill 2012: 354–358). 33 examples are dated to the New Kingdom, and 12 to the Post New Kingdom. One ceramic New Year’s flask was also found. The scholars divide pilgrim flasks into a New Kingdom and a Post New Kingdom Type-series based upon different rim, handle, and decoration types. I applied my typology to the data instead because it was more strictly organised and spanned the entire New Kingdom to Napatan period, which is more useful for comparison.

The variety of morphologies in the flasks correlates with the long-term use of the site (see **Graph 34**). A total of 30% of flasks were Type Ai.1, with 15 examples. However the second most common, at 22%, were Type Aiv. This is a Nubian-specific form often manufactured in Egypt and it is notable that it is a significant presence in culturally Egyptian urban contexts in Nubia such as the colonial town of Sai. A variety of other flask types appeared sporadically, including examples with lug or parallel handles, miniature, and double vessels. Examples of B (Tomb 14, 20), E (Tomb 3, 8), F (Tomb 7, 20) and G (Tomb 3, 15) were likely later deposits. Flasks were covered with white, red-pink, beige-orange or pale pink slips. 10 examples were decorated with brown/black painted concentric circles.

Unfortunately, the published report does not use the Vienna system to identify fabrics, and often only describes the colour and consistency of the slip decoration, not the clay beneath. The authors themselves were only able to advise that some marl examples were undoubtedly

among the vessels (Minault-Gout pers. comm.). The three flasks found by Budka in Tomb 26, however, have been confirmed to be of marl A4 (Budka pers. comm.). As for the other flasks, I would suggest, based on the provided description, that approximately 21 flasks (Cat. Nos 281–344) were manufactured in marl clay.

The high presence of marl in the cemetery points to established trading links with Egypt. Indeed the majority of grave goods in the necropolis and the superstructures follow Egyptian funerary practices. This is supported by the evidence of hieroglyphic writing on scarabs and the presence of shabtis, which are at least in the 18th dynasty likely to have come from Egyptian workshops and may suggest the following of Egyptian ideological practices (for parallels at Fadrus, see Smith 2003: 159). Some of those interred in the Sai necropolis undoubtedly self-identified as Egyptian – Hornakht in Tomb 26 was a high official during the reign of Ramesses II (Budka 2016) and Khnummose, the Master Goldworker in Tomb 26, may also have been Egyptian. However, this cemetery was used to bury only a small sector of the population living on Sai Island, and was likely a space restricted to elite individuals. As such, this evidence does not necessarily equate to an Egyptian ethnicity across the entire settlement. Others may have been local elites who were pragmatically following the status quo for political gain. Strategic ‘Egyptianisation’ practices among local elites (Török 2009: 275; see Section 1.4.4), the mass-production and availability of Egyptian goods (Paul Van Pelt 2013: 540) and exogamous intermarriage across communities (Buzon 2006; Smith and Buzon 2014: 432; Spencer 2014: 480) all led to the selective adoption of certain Egyptian habits among members of indigenous communities, which makes them difficult to distinguish in the archaeological record (see Section 1.5.4).

In addition to the flasks found within the necropolis, 14 fragments were also found in the town (Budka pers. comm.). All were in marl clay, save for two imports, one from the Oases and one from the Levant. This testifies that the flasks were not just intended for dedicatory funerary offerings, but rather were also utilised within specific practices within settlement activities. The Oasis fragment is particularly significant as this is to my knowledge the only Oasis flask found in a Nubian context.

7.2.4. Flask placement within graves

The concept of the ceremonial placement of objects within graves has been postulated for the Predynastic period in Egypt (Stevenson 2009: 130) and C-group contexts in Sudan (Steffenson 2007), and is likely to have been a key aspect of the cultural aspects surrounding burial (Parker Pearson 2009). Such action alluded to ancestral memories (Dann 2009: 248), and senses of group identity and symbolism were invoked through creating a ‘material performance of goods around the bodies’ in a tomb (Stevenson 2009: 14), which involved practices such as placing items in traditional positions around the deceased, as well as invisible practices such as the order of placement, ritual speeches and music surrounding activities. It is probable that similar practices and symbolism lay behind the choice of items in the Sai necropolis – the predominance of Egyptian style pottery, for example, a deliberate choice to express an Egyptian identity. The multiple-interment burials and their typically disturbed nature however mean it is extremely difficult to analyse the exact nature of such performative activities at Sai, and how pilgrim flasks may have played into them. That they were considered an appropriate ‘Egyptian’ feature is likely.

The majority of flasks were disassociated with an articulated body. Some exceptions do exist: In Tomb 1, 2 flasks were placed by the feet of an individual, and based on the body’s preservation this was their original locale (Minault-Goult and Thill 2012: pl.51). In Tomb 3, 3 flasks were found around a preserved body, with 1 placed by the feet and 2 by the upper torso (Minault-Gout and Thill 2012: pl. 54). In Tomb 14, 2 flasks in Chamber Cb were clustered together with a vase and a jug by the head of a slightly disturbed skeleton (Minault-Gout and Thill 2012: pl. 71). Finally, in Tomb 20, a Napatan flask is positioned next to the upper torso of a skeleton (Minault-Gout and Thill 2012: pl. 77). The remainder of flasks in the cemetery were either disassociated with a body or were surrounded by bones in disarray, and were likely not in their original position. Based on the small data set, it is possible flasks were traditionally placed by the head or the feet of the deceased; but there is not enough secure information to confirm this hypothesis.

The admixture of objects and confusion between layers is clear upon closer analysis of graves. The following analysis of Tomb 20 demonstrates this point.

Tomb 20 is found in the north of the necropolis (see **Figure 7.1**), and has a Type 3 superstructure, consisting of a chapel covering the grave shaft, and a small pyramid attached to the western end. This tomb contained 3 distinct layers in the grave shaft itself, and one in the chambers. A total of 20 individuals were interred here: 2 in the grave shaft, 14 in the Main Chamber, 3 in Chamber B, and 3 in Chamber C. Out of a total of 114 grave good items, 44 were ceramic vessels. 11 pilgrim flasks were included in the tomb, 25% of the ceramic deposit, and 10% of the entire grave assemblage. Notably, a large quantity of wooden items survived, thanks to excellent levels of preservation. Grave goods were scattered across the layers as follows:

- A large Nubian cooking pot was found close to the surface of the grave. This likely represents funerary rites conducted at the site.
- Layer 1 contained a single skeleton, with no discernible grave goods.
- Layer 2 contained one skeleton, along with no grave goods.
- Layer 3 (see **Figure 7.2**) was at the base of the grave shaft. It was much richer in grave goods, mainly ceramic. It contained 9 pilgrim flasks. These vary substantially in morphology. 7 of these flasks were plain – 2, P33 and P14, have black painted concentric circle decoration.
- Layer 4 (see **Figure 7.3**) encompasses the contexts within the grave chambers. It has a greater variety of grave goods than the previous levels, characterised by wooden fragments of sarcophagi, metal objects, shabtis and fine vessels, more so than any other grave in the cemetery. 3 pilgrim flasks were interred here (See Fig. 7). This was the original burial layer, with the majority of artefacts dating from the end of the 18th dynasty through to the 20th; however, an example of Type F.i, Ca61, with an engraved ankh on the body, suggests a Napatan reuse of the space.

The flasks contained within the chambers (see **Figure 7.4**) suggest that it was in use from the 18th dynasty to the Napatan period, so across the time-span of the cemetery itself. There are no Type Ai.2 flasks in the grave, which have been demonstrated to date primarily to the mid 18th dynasty, from the reign of Thuthmosis III (see Section 4.4.1). The presence of flasks with a variety of handle positions – the rim, the middle of the neck, and lug handles – indicates a span of time across the New Kingdom. Type Fi only occurs in the Napatan period, and the fact it is interred within the main burial chamber rather than in a secondary shaft burial indicates the continuation of a community on the island that felt ancestral links to this cemetery into the Post New Kingdom; and, moreover, that either tomb superstructures were still present or that a memory of where the graves were positioned was preserved in some other way. This suggests it is likely they felt a connection with the individuals buried in the tombs.

Graves without flasks contained a higher quantity of storage jars (e.g. Tomb 7: Minault-Gout and Thill 2012: pl. 60). In addition, no tombs in the necropolis contained both pilgrim flasks and beer jars. Vincentelli (2006: 57; 134) has postulated the existence of an inverse relationship between these two forms at Hillat el-Arab, with pilgrim flask numbers increasing as those of beer jars decrease. This phenomenon has been observed at other New Kingdom and Post New Kingdom sites and likely reflects changes in funerary ritual (see Section 8.6.3 for full discussion).

The fact pilgrim flasks number 25% of the ceramic material in this tomb is notable and indicates the form was considered appropriate for an elite funerary space; however, it must be acknowledged that this grave is multiple-interment and as such was in use for an extended timespan, perhaps 200 years. Pilgrim flasks were evidently not indispensable grave goods, essential to include in each burial as beer jars were in the Egyptian New Kingdom, and may have been restricted items or perhaps the contents of a few flasks were shared among a community. In contemporary burials in Mycenaean Greece, pilgrim flasks have been theorised to be included in multiple-interment burials to mask the smell of rotting bodies when the tomb was reopened (Stockhammer 2012b: 99). The prolonged interest in the form suggests that pilgrim flasks were perceived as relevant to these communities over a long time span,

unlike other forms such as beer jars, which have been demonstrated to disappear at contemporary sites (Vincentelli 2006).

7.2.5. Assessment of accompanying grave goods (Graph 35)

Ceramic material made up a large percentage of the grave goods in the discussed tombs, with 275 vessels appearing in the cemetery. A significant proportion of this pottery was bowl/plate forms (Minault-Gout and Thill 2012: 362–366), with 102 specimens observed across the 11 tombs. This is common across both New Kingdom settlements (Miellé 2016: 426) and cemeteries (e.g. Binder Spencer and Millet 2010) in Nubia. Storage jars and amphorae were also particularly common (Minault-Gout and Thill 2012: 344–350).

The grave goods attest to a preference for an Egyptian burial. Items such as shabtis, scarabs, and, more rarely, model canopic jars, indicates an adherence to Egyptian funerary beliefs (Williams 2017), while the appearance of mummy masks, stucco coffin fragments, and eye inlays (e.g. Tomb 14: Minault-Gout and Thill 2012: pl. 71) suggests that burial was in traditional Egyptian coffins. There is little evidence for Nubian funerary ritual within the graves themselves – no funeral beds were found, and Nubian pottery was rare and restricted to an occasional cooking pot (e.g. Tomb 16: Minault-Gout and Thill 2012: pl.165). Similar evidence of predominantly Egyptian material culture in tomb contexts across Lower Nubia has been used as evidence for the widespread adoption of Egyptian religion and culture (e.g. Williams 2017). However, the appearance of a Nubian cooking pot on the surface of Tomb 20 suggests funerary practices were more complex and perhaps that rather than being absent, Nubian ritual practices were considered more appropriate for post-burial activities.

The inclusion of golden jewellery and bronze tools, along with stucco coffin fragments also emphasises the wealth of the necropolis, and it is likely this space was reserved for the elite of the Pharaonic colonial town. The inclusion of pilgrim flasks within this context may suggest that in the colonial town of Sai, pilgrim flasks and their contents were relatively restricted and/or valuable.

Other grave goods attest to the participation of Sai and, thus Nubia, within the Mediterranean trading network. A Mycenaean stirrup jar was found in Tomb 21 (Minault-Gout and Thill 2012: pl.161) and is one of a very limited quantity of Aegean artefacts from contemporary Nubian contexts (Schiller 2018). The miniature amphora in Tomb 20 (Minault-Gout and Thill 2012: 50; pl.120) was likely intended as a symbolic good, and certifies the important role of trade in these early Pharaonic-style settlements (Paul Van Pelt 2013). The Egyptian origin of many items indicates that Sai was linked with the Egyptian administration to the north. Many Colonial towns may have ultimately acted as centres for Egyptian trade distribution.

7.2.6. How does pilgrim flask analysis add to our understanding of SAC5?

As discussed in my Introduction, an in-depth study of pilgrim flask morphology and deposition patterns promises to broaden our understanding of communities living in Nubia from the New Kingdom to the Napatan period.

Using the typologies in Chapters 5 and 6 to assess the flasks at Sai firstly has allowed a tighter chronology to be put in place. The discovery of flasks from the entire dateable sequence suggests that the form was continually known on the island from the mid 18th dynasty to the Early Napatan, with forms displaying a variety of handle positions, culminating in the ‘pinched’ vessels of Type E. That graves were in continual use throughout this period suggests the continuation of community practices over the Post New Kingdom period, when the majority of Nubia was historically thought abandoned (Firth 1912; Adams 1964b; Edwards 2004: 109).

Fourteen flask Types were present at the site (see **Graph 34**). Some of these were later chronological developments, such as Type E; however the contemporary use of a multitude of Type A flasks may attest to a variety of contents in circulation, with different handle positions and rim shapes likely designed for pouring and holding in different ways (see Section 3.2). The existence of flask Types such as Type K (miniature flasks) and Type H (double flasks) may point to the association of some of these flasks with ritual practices, because these were not utilitarian vessels. Type H flasks are particularly rare in Nubia and only occur in New Kingdom contexts with strong Egyptian associations, which supports the interpretation that

Sai was a key bureaucratic centre for the Egyptian colonial administration. Although the fabric descriptions in the 2012 publication make the presence of marl difficult to verify, the fact that the 3 flasks excavated in Tomb 26 (Cat. Nos 264–266; Budka pers. comm) were of marl A4 clay indicates that trade with Egypt remained a key economic practice in these sites.

Certain pilgrim flask features are distinct from contemporary examples in Egypt, which suggests that even in an elite burial ground in a strategic Egyptian colonial site, entangled identities were strongly present. Type Aiv flasks, with a cup-mouth, occur frequently at Sai but only occur once in Egypt (see Section 5.6.1). This form also appears at other sites such as Amara West (Cat. No. 259), Semna East (Cat. No. 337), Debeira East (Cat. No. 675), and Hillat el-Arab (Cat. No. 71), which suggests Sai was part of a broader community of practice across Nubia, and used pilgrim flasks in specific Nubian practices. Some of these flasks, such as those from Tomb 26, were produced in marl clay, which points to the existence of a specific export market in Egypt. Other artefacts including ceramic New Year flasks (Minault-Gout and Thill 2012: pl. 171) and pilgrim flasks with applied decoration (Minault-Gout and Thill 2012: pl. 141) attest to the early development of new *habitus* practices in the town.

7.2.7. Is this pattern similar across other contemporary sites?

Sai was an important Kerman site prior to Egyptian expansion (Gratien 1978; 1986), and was thus a key strategic point for the Egyptians to establish a presence. The construction of the Pharaonic town at the site is part of a broader colonial trend in the 18th dynasty, whereby temple-towns were built along an Egyptian architectural template and used as centres of Egyptian culture and administration (see Section 1.4.4). These ‘colonial’ towns typically contained high levels of Egyptian material culture, and were partially inhabited by select Egyptian officials in the 18th and 19th dynasties. Other examples include Amara West (Binder, Spencer and Millet 2010; Binder 2011; 2017; 2017b; Spencer 2009; 2010; 2014; 2017), Sesebi (Spence and Rose 2009; 2014; Spence 2011; Rose 2012; 2017), Tombos (Smith 2007; Smith and Buzon 2014; 2017), and Kawa (Macadam 1949; 1955; Welsby 1993; 2004; 2015; 2017).

However, some of these other sites have more of a focus on Nubian funerary ritual than SAC5. At Amara West, burials in Cemetery C to the north and D to the northeast of the town combine Egyptian and Nubian funerary elements, often in one grave. 7 pilgrim flask fragments in total were found in the necropolis at Amara West. One was a Levantine import, again attesting to the position of these colonial towns within the trading networks of the Late Bronze Age. However, this quantity is significantly smaller than that at Sai. Grave 244 in Cemetery C (Binder 2017: 599) was dated to the 20th dynasty and was a typical Egyptian-style chamber tomb with coffin fragments and wheel-made pottery, but was topped with a Nubian tumulus superstructure. This burial was in the middle of the Egyptian-style cemetery, and would have stood out as an outspoken expression of Nubian identity. Others contained funerary bed remains, which were an element of Nubian traditional burial practices (Lehmann 2017). These differences may relate to the earlier construction of SAC5, with the majority of tombs built in the 18th/19th dynasties.

The necropolis is perhaps more analogous to the cemetery at Tombos (Smith 2003; 2007), which was similarly occupied by important Egyptian officials during the New Kingdom – notably the Colonial administrator Siamun and his mother Weren, who were buried in a Pyramid tomb decorated with Theban-style funerary cones (Smith 2003: 197). Burials at the site projected an Egyptian identity; however, the presence of Nubian pottery in the forecourt of Siamun’s funerary chapel (Smith and Buzon 2017: fig. 13) implies that Nubians were using traditional practices in post-burial funerary rites such as funerary feasts. A similar dynamic may have existed at Sai, culminating in the deposition of the cooking pot above Tomb 20.

In contrast, some indigenous sites contained few pilgrim flasks. The city of Kerma, the capital of the Kerma kingdom, was sacked and the Western Defuffa burnt by Thuthmosis III, but the site was not abandoned and was swiftly repopulated (Török 2009: 160). It was once thought that the Egyptians established a new colonial settlement at Kerma, Dokki Gel (Török 2009: 186); however, recent excavation has revealed levels in the site dating back to the *Kerma Ancien* period, and it is now thought to have originally functioned as a Nubian ceremonial site (Bonnet 2017: 107; fig. 1). This site contained only a single pilgrim flask rim sherd in Nile silt, found in the northeastern quarter of ‘Nubian Palace A’ (Ruffieux, pers. Comm). While this could suggest that pilgrim flasks were associated with Egyptian practices and identities in

Nubia during the New Kingdom, the existence of 25 flasks in the necropolis at Site 176 Debeira East (Säve-Söderbergh 1989) and 10 flasks in the town at site H25 (Thomas 2014; pers. obs.) contradicts this theory. It is clear that different modes of expression were in existence across Nubia during the New Kingdom, and that communities were interacting with and using pilgrim flasks in very different ways across the Middle Nile Region.

7.2.8. Sai: summary

Analysis of the material culture at SAC5 suggests this necropolis was a restricted, elite space, with luxury items such as gold, bronze tools, and stucco coffin material attesting to access to wealth. The multiple interment nature of the burials moreover suggests family ties in the settlement over a long period.

The 49 pilgrim flasks present across 11 of the 25 graves excavated encompass a large amount of the ceramic grave deposits in SAC5. However, this quantity is less significant when compared with other ceramic forms such as bowls/plates, particularly when we consider the multiple-interment nature of these tombs. This suggests that, unlike beer jars, they were not a prerequisite for a 'good burial'. However, their continued presence over a period of c. 400 years testifies to an ongoing interest in the form and the permanent relevance of its use within certain aspects of elite society. Their presence signifies that they were often considered appropriate for a burial, but were not essential items for the afterlife.

7.3. A case study for the early Napatan period – the Sanam necropolis

The second case study, the extensive cemetery at Sanam, was chosen because it is the only non-royal burial site currently dateable to the Early Napatan period. Furthermore, a significant quantity of pilgrim flasks from this period were from the necropolis and associated settlement, 90%, suggesting this site was particularly significant. The grave goods interred in burials indicate the necropolis was established during the Post New Kingdom Period, with elements suggesting certain tombs can be dated to the New Kingdom (Morkot 2000: 138; Lohwasser 2010: 91).

This site is an appropriate comparison to SAC5 at Sai Island, as the flasks here date to a period when Egyptian control had been withdrawn from Nubia for a substantial amount of time (c. 400 years). By comparing the flask patterns at Sanam with those from Sai in Section 2, any changes in use or significance will become apparent.

Griffith's original publication (1931) did not discuss pilgrim flasks in detail. However, the site has recently been reanalysed and published by Angelika Lohwasser (2012), and this new work presents Griffith's excavation report more fully. In addition, the original grave records for the site were available in the Griffith Institute in Oxford and some of the pilgrim flasks are in the Ashmolean collection, making both sources available for primary study.

7.3.1. Introduction to the excavation

Located 25km south of the 4th Cataract, at the junction of the Nile and the Wadi Abu Dom, Sanam was excavated by Griffith as part of the Oxford Excavations in Nubia in 1912–1913 (Griffith 1931). The cemetery consists of approximately 1619 graves, although Griffith theorised that possibly 100 were destroyed in earlier building work or were overlooked in excavations. In addition, areas under the main road and a nearby hospital could not be excavated (see **Figure 7.5**).

As the largest non-royal burial site of its period, Sanam is invaluable for research on the early Napatan period (Lohwasser 2010: 17). While burials were imperfectly preserved, many still contained both skeletons and grave goods, particularly from the later periods. Griffith (1931: 75) does state however that the 'plundering that took place in antiquity was extensive among all except the poorest graves. Often only scattered bones represented original skeletons, and when graves were reused, generally only one at the top retained beads or any other antiquities, suggesting that the burying party robbed all previous interments'.

The cemetery was associated with a nearby settlement, containing a temple and treasury constructed by Taharqa, perhaps above an earlier building (Griffith 1931: 85), along with other stone and brick structures (Vincentelli 2011: 269). The royal stores have recently been

re-excavated by Vincentelli (2011; 2018) and were in use between the reigns of Piankhy and Aspelta and revealed large quantities of storage jars demonstrating the import of foodstuffs from Egypt and Phoenecia. Pilgrim flasks from the Theban area were particularly prevalent, with 299 examples found across rooms 301, 303, 305, 307, and the courtyard (Vincentelli 2018: tab. 2). Within the settlement and treasury, the presence of luxury materials including gold and silver jewellery (Lohwasser 2012: 96–97), lapis-lazuli (Lohwasser 2010: fig. 37), and 17 Phoenician amphorae (Vincentelli 2011; 2018) suggests Sanam was well-connected to the Near East and Eastern Mediterranean trade routes and was an important trade nexus in the Napatan kingdom. The presence of Type E and F pilgrim flasks should be considered within this milieu.

The Sanam grave goods are spread across several museums: The Ägyptisches Museum Berlin, the National Museum Khartoum, the Ashmolean Museum, the Pitt-Rivers Museum, the Fitzwilliam Museum, the Bolton Museum, the Manchester Museum, the Brighton Museum, the British Museum, the Petrie Museum, the Staatliches Museum Ägyptischer Kunst, the Antikenmuseum Basel, the Rijksmuseum Van Oudheden, and the Musées Royaux d'Art et d'Histoire. In addition some items were given to private sponsors, such as Henry Wellcome, Freiherr von Bissing, and William Spiegelberg (Lohwasser 2010: 13). However my work here focuses only upon the 42 graves that included a pilgrim flask among the grave goods.

7.3.2. The tombs across the cemetery

Griffith divided the tombs in the cemetery into 8 subtypes, numbered A–H; however, this means some grave types only contain one or two burials, which is not helpful when analysing distribution of material culture. Lohwasser in her reassessment of the excavation reports has refined this to encompass only 4 distinct types:

- 1: Cave graves
- 2: Tombs with brick structures, including rectangular bricked and staircase tombs
- 3: Shaft tombs, which have round, oval, rectangular or irregular shafts as well as lateral niche graves - all these tombs lack any brick structure

4: Sand graves, where the burial is interred directly into the sand without an architectural feature that could be called a tomb.

In this discussion I will refer to Lohwasser's subtypes, because Griffith's fine categories are too restrictive for understanding the broad distribution of pilgrim flasks across the cemetery. In addition, my references to Lohwasser's studies on the material culture of the site (2010; 2012) mean using her subtypes clarifies the discussion.

In total, 41 graves contained pilgrim flasks. Many of the graves in the cemetery were looted; however, pottery is usually left behind when graves are robbed, because it is heavy and non-valuable. 48% of graves containing flasks were of Lohwasser's Type 2 - rectangular bricked tombs (see **Graph 35**). This was also the most common grave type across the whole cemetery, with 42% or 680 graves out of the total 1619 (Lohwasser 2010: 34). The second most common were sand graves, which however include 'shapeless' graves that were often badly destroyed and may once have contained some sort of definition. Although there were 165 Cave tombs in the cemetery, in only one case was a pilgrim flask deposited in a cave tomb, a marl Type Fi found in Grave 167 (See **Figure 7.6**).

Griffith suggested that the necropolis was founded between the reigns of Piye and Aspelta. However Lohwasser (2010: 36) and Morkot (2000: 138) have suggested its origin should be pushed back to the New Kingdom, with the multi-roomed cave tombs of Type 1 dating to this earlier phase. Griffith noted the presence of certain New Kingdom scarabs in some of the tombs (1931: 83; 111–112; pls xli–xlii), and Lohwasser further dated several other items to the New Kingdom, including three ivory headrests from Graves 44, 963 and 976 (Lohwasser 2010: fig. 1) and a faience cosmetic spoon (Lohwasser 2010: fig. 2). As such, the foundation of the cemetery in the New Kingdom is considered likely. She theorised that at least 39 graves date to the New Kingdom period. If correct, it is then striking that no pilgrim flasks of New Kingdom morphology appear at the site, unlike at Sai, which would be contemporary to this earlier phase. The sole presence of a Type Fi flask in a cave tomb casts doubt on the idea these tombs can be solely dated to the New Kingdom. However, this example could represent a later Napatan reuse of a cave tomb. The lack of any New Kingdom forms may suggest that pilgrim flasks only became of interest to the town at a later period, when different cultural

traditions around vessels and their contents had developed during the Post New Kingdom phase. This may also be related to the development of Sanam as a trading nexus in the early Napatan, which saw the increased availability of Type Fi flasks in particular.

Whilst Grave 167 may then been established in the New Kingdom, the fact the only grave good included was of a Type Fi flask signifies it was certainly in use in the early Napatan period. Unfortunately, Grave 167 was badly destroyed, meaning Griffith was uncertain of the amount of bodies interred within. This destruction may explain why no New Kingdom artefacts were found inside.

Most of the burials at Sanam were single interment. However, it should be noted that two of the smaller, shaft graves containing pilgrim flasks included 2 or 3 bodies in the same pit; Grave 1062 and Grave 653. Twenty-six out of the 42 graves that contained pilgrim flasks were sufficiently preserved to judge body position, and they showed an overwhelming preference for the laying of bodies in an extended position. Six examples however had contracted bodies, suggesting a degree of flexibility in burial practices, and perhaps shifting diachronic preferences.

Graves containing flasks were dispersed throughout the cemetery (see **Figure 7.5**). Examination of this map revealed cluster patterns within these graves. There is a large cluster of 18 graves towards the northern border of the cemetery (Graves 543, 522, 524, 470, 467, 465, 458, 419, 428, 378, 369, 357, 373, 286, 224, 233, 257 and 258). There is a second potential cluster to the southern end of the site (Graves 112, 658, 653, 644, 1009, 1001 and 1003). Finally, we have 4 neighbouring graves in the middle of the northeastern area (Graves 1061, 1062, 1099 and 1100, with Grave 714 slightly at a distance but possibly part of the same trend). These grave clusters contained both Type E and Type F flasks, but always in separate graves – these may have a chronological or social distinction, but this is as yet unknown. However, the clusters of Type E and of Type F both mirror similar patterns across the cemetery, suggesting that they were perhaps in use by related groups.

It is possible that graves concentrated together were positioned according to family or social ties. Lohwasser (2010: 457) mentions the possibility that the New Kingdom cave tombs were

used continually as family graves, something which is suggested also at Hillat el-Arab (Vincentelli 2006: 140) and Sai (see Section 6.2) by the fact the grave goods could be dated to all periods of the cemetery's use, indicating continuous burials over generations. It is possible that once multiple-interment fell out of fashion, family members were buried in close proximity rather than in the same grave. If correct, this may mean that the types of goods considered appropriate for deposition were affected by group dynamics. Pilgrim flasks found in these clusters were perhaps relevant to specific group identity, or perhaps were reflective of frequent activity by the groups that chose to include them, perhaps related to the royal storerooms.

7.3.3. A discussion of the pilgrim flasks at Sanam

43 flasks in total appeared in the Sanam necropolis, typically with one flask per grave, although Graves 714, 843, and 653 contained two.

Griffith's pottery typology (1931: 95–104) contained two vessel forms that correspond to pilgrim flasks: V and VII – these were rebranded as Lohwasser's types F and G, and are Types E and F respectively in the typology found in Chapter 4 (see **Figure 7.7; Graph 36**). No other Types appear at the site.

- Type E. Pinched flasks (see Section 6.4). These are formed in one piece on the wheel, predominantly in porous, coarse Nile silt with heavy straw, stone and mica temper, but occasionally are described as being in a pale clay which may indicate examples were sometimes manufactured in kaolinite clay. A small lentoid body is paired with a squat neck with a simple rim, and two handles squashed flat against the neck. This form is typically left unfinished and examples range in size, with the largest c.36cm tall and c.26cm in diameter (Lohwasser 2012: Tab.II.3.110) and the smallest only 6.6cm in height (see Cat. No. 118); on average, they have a small volume capacity. Griffith incorrectly described these as being made in two halves, but their shape suggests they were produced in one piece on the wheel. Griffith considered these true pilgrim flasks and termed them Type VII (Lohwasser's Type G). 28 flasks were of Type E in the cemetery.

- Type F. Tapered flasks (see Section 6.4). These are formed in one piece on the wheel in a vertical position, with a flared neck and a modelled, pointed rim. This type is divided into Fi – produced in marl A5 or A4 variant 2 in southern Egypt with emphasised rilling marks on the body – and Fii – typically produced in Nile silt with no rilling marks, likely representing local imitations. This suggests strong trading links with southern Egypt, particularly the Theban region, during the 25th and 26th dynasties (Aston 1999: 4; Vincentelli 2018: 179). 299 examples of Type Fi were also found in the royal storerooms (Vincentelli 2018). The form was relatively standardised in size, with an average example measuring 19.7cm in height and 14.2cm in diameter (see Cat. No. 121). Griffith includes some examples without handles in his typology, which have been omitted from this study based on the parameters of my research (see Section 0.1.1). These correlate to Griffith's Type V, termed 'flasks with handles', and Lohwasser's Type F. 15 flasks in the cemetery were of Type F.

Types E and F never appeared in the same grave. Based on their morphological disparity, these forms were probably used for different contents, and, perhaps, different practices. Type F flasks were viable containers in hard-fired clay with solid handles and ribbing (in the case of Fi flasks) to aid in handling. In contrast, Type E flasks were produced in a coarse, crumbling fabric and were on average small, holding only a small volume of liquid. In addition, the 'pinched' handles could not be used in practice for holding and pouring, which would result in different use patterns. These features may signify Type E flasks had developed a symbolic rather than practical use by the Early Napatan period (see Chapter 8).

Sixty-two percent of the 43 flasks at Sanam are in marl clay. This signifies that the import of pottery from Egypt was economically still important during the Early Napatan period. This is supported by the presence of 299 Type Fi flasks in the royal storerooms (Vincentelli 2018) as well as their presence in this contemporary non-elite burial context. Imported Egyptian pottery was easily available at Sanam, meaning marl pilgrim flasks were accessible to the less wealthy. Both types also demonstrate a change in manufacturing practices by this phase – Type E is made in one piece horizontally on the wheel (not in a mold as Griffith suggested),

whereas Type F is made vertically, in the manner of a jar. Certain marl forms of Type E are an exception, and appear to be made in the traditional manner of a classic flask, in two halves. This may suggest that two different potting workshops or communities of practice were responsible for producing the different types. The development of Type Fii flasks in Nile silt clay likely reflects local imitations of Egyptian Type Fi flasks. These imitations may have been inspired by decreasing availability of Egyptian imports over the course of the Early Napatan period and are likely slightly later deposits. Notably, Type Fii flasks never have ribbing formed on the belly, indicating that Nubians did not consider this morphological aspect important.

No painted decoration was added to the Sanam flasks. The style of painted black/red concentric circles on the body is thought to be an imitation of Levantine and Cypriote flask styles (see Sections 3.3.4v and 3.3.5), and appears on some flasks during the New Kingdom in both Egypt and Nubia. However, pilgrim flasks were likely absorbed into Nubia from the Egyptian sphere rather than the Levant directly, and the decorative element is clearly no longer associated with the flask form in Nubia by this period; indeed many vessels were roughly made and left unfinished. The most common aesthetic addition appears on Type Fi vessels, where ribbing is added around the body of the flask, in the similar style as large Napatan storage jars (see for example Lohwasser 2012: Gefäss Typ C, 211). This is only on a portion of the body, and so seems likely to be partially aesthetic; and partially perhaps to aid in holding the vessel.

7.3.4. Flask placement within graves

Graph 37 shows the extensive variety of pilgrim flask placement in the Sanam necropolis. However, intentional patterned deposition of grave goods is difficult to ascertain, because graves were often looted and Griffith did not record exact object placement in some cases. The area of the head appears slightly favoured, with a total of 10 flasks placed around a head. However more data would be needed before this is conclusive.

Lohwasser (2010: 132) notes that the ‘pinched’ Type E flasks were only found with extended burials, which may indicate the flask was included as a grave good in a specific chronological window. However, more data will be needed to confirm this.

7.3.5. Accompanying grave goods.

A large variety of grave goods were deposited alongside the pilgrim flasks in the necropolis (see **Graph 38**). Griffith (1931) often did not specify the quantity of a particular item found in a grave. For example, in Grave 714:

‘(3) on neck, silver crescent with disc in centre hung from string of silver beads; silver barrel beads; string of silver ball beads; string of small turquoise glaze beads with silver coiled wire and other silver beads; string of short cylindrical red glass beads; string of similar beads greenish....string, apparently in double row, of small bluish glaze ring beads interrupted by scarabs....’

(Card 714, Griffith Archive).

In such cases, each mention of a different material was counted as one appearance in the grave. This is problematic but unfortunately was the only course of action for items not in the Ashmolean museum.

Other pottery was uncommon, with only 38 vessels in addition to the pilgrim flasks across the 42 graves in question; and it was typical to have only one or two vessels in each grave. Jewellery was the most common item in burials, with stone, shell, silver, glass and faience pieces. A lone instance of ceramic jewellery also appears.

Lohwasser (2010: 116; fig. 51) tracked the appearance of ‘luxury objects’ across the cemetery – defined as limestone alabaster, bronze or faience vessels, mirrors and precious metals. This excludes any organic materials that may not have survived. Across the cemetery, 45.2% of the total graves containing any ‘luxury objects’ were bricked tombs, while 20.2% were rectangular shaft tombs. This correlates with pilgrim flask distribution, which also appear primarily in bricked tombs, perhaps signifying that their contents were considered luxurious by this non-elite community.

Foreign materials appeared in some of the tombs, with a Mycenaean jug in Type 2 Grave 1416 (Lohwasser 2010: photo 23) pointing to the site’s connection with broader Mediterranean trading routes already observed with the Phoenician jars in the contemporary royal storerooms

(Vincentelli 2018). Evidently some of the high-value commodities within these storerooms were available to the local Sanam market. Jugs of alabaster and bronze in Type 2 Tombs 337 (Lohwasser 2010: photos 21–22), and faience in Tomb 662 (Lohwasser 2010: fig. 40) point to the wealth of some tomb owners. The presence of Mycenaean, Phoenecian, and Levantine (Vincentelli pers. comm.) imports in the storerooms and cemetery may point to broader elite practices using imported liquids. Such vessels were rarely found at Meroe and never to the north (Lohwasser 2010: 84). However none of these imports appear in graves containing pilgrim flasks, suggesting while imported from Egypt, pilgrim flasks circulated in a lower social sphere, and were perhaps used in similar practices to these non-ceramic vessels, but were less valuable and less restricted.

Graves containing pilgrim flasks contained a high proportion of ideological paraphernalia such as scarabs, scaraboids, figurines (typically of deities – three faience frogs were placed in Grave 313, and a faience Isis nursing Horus in Grave 714) and amulets (frequently wedjat-eye plaques but also Hathor-heads, such as in Grave 237). However, the cemetery was completely absent of shabtis, even though moulds for their manufacture were found in the temple excavations (Griffith 1931: 76), and there was similarly no evidence of canopic jars or mummification ritual. This is in contrast to the grave goods in SAC5 in Sai, and suggests that Egyptian ideological practices were not followed among the lower eschelons of Early Napatan society.

7.3.6. How does pilgrim flask analysis add to our understanding of Sanam?

The differences between the pilgrim flask distributions in SAC5 at Sai, and those in the necropolis at Sanam, are instrumental in revealing changes in Nubian society between the end of the New Kingdom and the beginning of the Early Napatan period. The fact that ‘classic’ Type A flasks no longer appear suggests substantial changes in vessel use (see Chapter 7). Indeed less types were in circulation overall, when compared to Sai Island. This calls into question the theory that the cemetery was founded in the New Kingdom, as no ceramic material appears to support this.

The two types of flask present points to at least two different contents that were in circulation in Early Napatan society. However, the flasks have not become ubiquitous grave goods, suggesting that their purpose was still limited and perhaps that access to the contents was restricted. The two flask types never appear in the same grave, which may indicate a chronological distinction that is as yet little understood. The Type E vessels also appear in royal tombs at El-Kurru (Dunham 1950; Cat. Nos 341–344), along with Type G flasks which do not appear at Sanam. Both these Types may be slightly later and contemporary with the locally produced Type Fii flasks, representing local innovations of the pilgrim flask form.

The presence of the marl clay flasks signifies that Sanam was taking part in systems of exchange with Egypt, which were centralised in the royal storerooms (Vincentelli 2018) and then distributed to certain non-elite members of society in the cemetery. The high presence of imported flasks in the necropolis indicates the high consumer desire for a specific Egyptian product. Since by this period in Egypt the majority of pilgrim flasks were sourced from the Western Oases (89%; see Section 5.7), the dominance of these marl A5/A4 variant 2 flasks in a centralised Nubian distribution site points to the manufacture of pilgrim flasks in Egypt specifically for export to Nubia, and furthermore, that they contained different contents from the likely regionally specific Oasis examples. Hope has suggested that these contained wine; as such the Egyptian examples likely contained a different product not desired in Egypt itself. I consider it likely they contained an oil-based product (see Section 4.6). Their presence attests to the ability of the Early Napatan kingdom to access luxurious commodities as well as other high-value resources, and Sanam's involvement in a broad trading network. However, the appearance of Type Fii flasks in Nile silt clay may suggest that access to this market decreased over time and forced the development of local imitations.

7.3.7. Is this pattern similar to other contemporary sites?

Few other sites display similar trends to the Sanam necropolis. The site is unique with its large, long-lasting cemetery and its position beside a clearly identified settlement area. In addition, non-elite burial spaces dating to the end of the New Kingdom to the Early Napatan are extremely limited.

Later deposits in the necropolis of Hillat el-Arab (Vincentelli 2006) bear some similarities with Sanam. The tombs at this site date primarily from the end of the New Kingdom and into the Post New Kingdom period, although sporadic Napatan and Meroitic artefacts appear. The flasks here were also predominantly in a marl fabric, with 46 marl examples attesting to considerable trading links with Egypt. However, out of the 53 pilgrim flask vessels interred in the tombs, almost all were Types A or B: only one was a Type E (Vincentelli 2006: 47; fig. 2.28 no 162) and none a Type F, with flask forms of Type A and B most prevalent and one each of Type K, D and L. This suggests it was only rarely used by the Early Napatan period. In addition, no associated settlement has been found for the site.

Two Type F vessels and one Type E were found at Missiminia (Vila 1980), a cemetery originally dated to the Napatan period but that likely ranged over the Post New Kingdom Period. A lone Type E flask was found at Qustul (Williams 1990) in Grave W43, where an adult female was buried with a newborn infant between her legs. The fabric here has been too darkened by the contents to identify (Williams 1990: table 6). A further Type Fi flask (Cat. No. 302) and two Type E flasks (Cat. Nos 290, 306) are known from Sai Island (Minault-Goult and Thill 2012: pl. 141). While the prevalence of flasks at Sanam suggests the site enjoyed a strategic trading position and was perhaps a distribution site for Egyptian imports, the deposition of Type E flasks in sites geographically removed from one another further supports the hypothesis that new *habitus* practices were fully developed by the Early Napatan period, reflecting the ethnogenesis of new identities during the New Kingdom and Post New Kingdom period. The lack of shabtis and mummification practices at Sanam is in contrast to the contemporary royal graves at Nuri and El Kurru, and further supports the theory that pilgrim flasks were by this stage embedded objects and no longer reflect a focus on Egyptian cultural practices. The desire to express Egyptian ideology is now restricted to the royal sphere.

The preference for marl vessels at many of these sites is in contrast to the situation at the royal sites of Nuri and El Kurru, where the majority of flasks are in Nile Silt, or in alternative materials such as travertine. While these two sites are broadly contemporary with Sanam, the royal nature of these burials makes comparisons difficult. However, it is notable that the royal

sites favour Type E, as well as the larger Type G variety, which seems by its larger size designed for storage.

After the New Kingdom, sites across Nubia display substantially different morphological preference and distribution patterns, pointing to a greater degree of cultural regionalisation in this later period. Lohwasser (2010: 106) has noted that the regions in Sudan appear to be archaeologically heterogeneous at this time, probably indicating the development of specific regional identities. This may be related to the kingdoms that likely evolved after Egyptian withdrawal of control at the end of the New Kingdom. Although the region was now unified under the Napatan rulers, these cultural differences may have persisted, as they did in Egypt within nomes (see Section 1.4.4); and this was likely expressed by the preference for specific material culture pointing to specific regional activities.

7.3.8. Sanam: summary

The grave contents suggest this to be a ‘middling’ cemetery – containing non-elite members of society with access to some social ranking - with a wide spectrum of the community interred in the necropolis. The lack of high quantities of gold, or any mummification rituals, emphasises this social position. It is clear that by the Early Napatan period, the ‘colonial entanglement’ occurring across New Kingdom Nubia and the subsequent development of an *urban habitus* (Smith 2003; Paul Van Pelt 2013; Smith and Buzon 2014; 2017; see Section 1.5.4) have now become deeply embedded in the creolised Napatan culture, formed from the hybrid practices in colonial towns which ultimately led to the ethnogenesis of a new, Kushite identity. Elements of earlier Egyptian and Nubian traditions appear homogeneously in graves without conflict. It is probable that Egyptian elements were now considered local traditions.

The fact that pilgrim flasks are only present in 42 of the 1619 graves in the site signifies that they were not a prerequisite for a ‘good burial’. However their selection by certain members who chose to be buried close to each other may suggest they were a popular element for certain members of the community, for whom they may have held resonance; perhaps those more closely linked to the royal storerooms. Their inclusion in single-interment graves during this phase further indicates that any relationship the form may have had to the practicalities of

multiple-interment burial (such as to cover the smell of decaying bodies; see Stockhammer 2012b: 93) were now no longer applicable. In particular, I consider it likely that the form had developed a symbolic resonance, based on their appearance in the royal tombs of the early Kushite state.

7.4. Conclusion

In this chapter, I used two case studies to explore changing levels of pilgrim flask morphology and distribution before and after Egyptian withdrawal from Nubia at the end of the New Kingdom. Comparing pilgrim flask changes across two necropolises at Sai Island and Sanam allows a window into the societal changes within Nubia during the ‘dark age’ of the Post New Kingdom period. Pilgrim flasks were the one of the only vessel forms to persist through the New Kingdom and to then subsequently be adopted within Nubian culture, to the extent that they were locally manufactured and considered appropriate for royal burials at El-Kurru and Nuri.

In SAC5 at Sai, the variety of Type A flasks points to the presence of slightly different liquid contents used in different ways, perhaps oils of different thickness or simply those intended for different usage – specimens of Type Aiv with its cup mouth, for example, would have poured out liquid very differently from those of Aiii with its thickened neck and inward-turning rim. It also indicates a continuing inspiration from the Eastern Mediterranean, with parallels for these forms known in the Levant and Cyprus (see Sections 3.3.4 and 3.3.5).

The disappearance of these classic Type A flasks by the Early Napatan suggests that by this stage, any understanding of the original Levantine and Cypriote flasks from which locally manufactured examples were inspired was lost. The later Types E and F were forms that developed at the end of the Post New Kingdom period, and reflect the establishment of different use patterns for smaller storage containers (see Chapters 6, 8). Although these bear similarities to contemporary Oasis vessels, the fact that no example in an oasis fabric has been observed in Nubia suggests the Nubian form was inspired by Egyptian models (see Section 6.9.2). Furthermore, the distinction between the two forms suggests each was designed for a

different purpose. The non-utilitarian shape of Type E, with its rudimentary handles and crude, unfinished exterior, is likely to be to some extent symbolic.

The fact that the pilgrim flask form has persisted for almost a thousand years (c. 1550 BCE–500 BCE) is astonishing. It is, furthermore, the only Egyptian vessel form to have been adopted in this way into Nubian culture, first in the hybridised cultures that developed in the ‘colonial’ towns of the New Kingdom, and subsequently by the societies that forged new communities after Egyptian withdrawal. This intimates that pilgrim flasks were considered relevant to Nubian cultural etiquette, so much so that they were considered appropriate to place in royal burial spaces.

In the final chapter, I move away from the typological approach upon which I have focused throughout Chapters 4–6, in order to develop theories of use for the pilgrim flask. I will apply models of Practice Theory and anthropological discussions to both the Egyptian and Nubian data, in order to explore the synchronic and diachronic meanings these Types may have held across the Nile Valley. This chapter ultimately aims to develop theories of use around this vessel type, and what this can reveal about broader cultural practices and social change from the 18th dynasty (c. 1550–1292 BCE) to the Late Period/Early Napatan (c. 700–500 BCE), particularly regarding the distinct *habitus* behaviours between Egypt and Nubia.

Chapter 8. Accessing the Meaning behind Pilgrim Flasks

8.1. Introduction

In the previous chapter, I applied my typology of Nubian pilgrim flasks to the cemeteries at Sai (Budka 2011; 2014b; 2016; 2017; Minault-Gout and Thill 2012) and Sanam (Griffith 1931; Lohwasser 2010; 2010b; 2012), and presented a quantitative approach to the site data. The results demonstrated that pilgrim flasks show different morphological and distribution patterns in Nubia between the New Kingdom and in the early Napatan state. This now raises the question: what was the *meaning* behind their use and distribution within Egypt and Nubia? In this chapter, I move away from typological studies and focus on the potential anthropological models and Practice Theory hold for understanding changes in Nubian social practices and identities, as expressed through material culture.

Pottery represents a complex set of behaviours by individuals who manufactured, distributed, and used ceramic vessels. Although the economic side of these processes has been discussed in Egyptological literature, other questions – including the social boundaries embedded in clay vessels, the relationship between pottery and identity, and the way a vessel can be interpreted very differently by two cultural groups – have been less well explored.

Numerous scholars have addressed the ability of utilitarian items such as pottery to ‘carry and communicate cultural meaning’ within social environments (McCracken 1986: 71; also Sahlins 1976; Douglas 1996). The concept of what McCracken terms ‘Person-object relations’ has been studied within Anthropology since the 1970s (e.g. Felson 1976; Levy 1978; McCracken 1985), but this has rarely been applied to Egyptological contexts (*contra* see Stevenson 2009; Hulin 2013) and even less to Nubian material culture (Kendall 1989: 629; *contra* see Steffenson 2007; Dann 2009). Expanding the field of study to incorporate such ideas has the potential to elucidate little-understood aspects of the historical arena. Ceramic material is particularly informative, as it acts as a representation of community *habitus* – its involvement in daily activities such as food preparation, storage, and consumption mean it is a constantly present background feature (Miller 2005; Dann 2009: 248).

The wholesale adoption of the pilgrim flask form in Nubia from the New Kingdom (c. 1550–1070 BCE) to the Early Napatan period (c. 700–500 BCE) raises important questions about the interactions between people and pots, particularly in such a charged colonial and post-colonial environment. In order to explore this link, I pose three research questions in this chapter:

1. How did pilgrim flasks fit into the world-views of ancient Egypt and Nubia?
2. Can they act as distinct markers of identity?
3. What do changes in pilgrim flasks from the New Kingdom to the Napatan in Nubia reveal about changes in society over this politically charged period?

In the first part of this chapter, I discuss the application of theoretical models of Practice Theory to utilitarian products. I draw upon several theoretical perspectives including Bourdieu's *habitus*, the concept of object worlds, and the agency of artefacts, to raise the manner in which vessels might create, and be created by, community etiquette and symbolic practice; thus elucidating the potential of pottery in assessing changing social boundaries within a transforming political environment.

Next I assess the capacity for applying these theoretical approaches to pilgrim flasks, to explore how pottery expressed local tastes, practices and etiquette. I look at known Egyptian colonial parallels in the Late Bronze Age Levant and Middle Kingdom Nubia to assess how political situations can affect ceramic culture; and discuss the different *habitus* practices realised within Egyptian and Nubian worlds and how this resulted in differing patterns of material culture.

Finally I review what the adoption of pilgrim flasks into both the Egyptian and the Nubian cultural spheres might signify, both about the wider object worlds in which they were situated and surrounding political activities. In particular, I suggest a link with Egyptian perfume consumption and Nubian libation traditions. Within such a charged political and social environment, ceramics have the potential to shed light on how such political changes affected the local populace. Whilst the Egyptianisation of local communities is often a major scholarly

focus of this period, studies of other frontier zones suggest that this is a major oversimplification. I present known parallels for such colonial contexts and suggest a process of ethnogenesis within the colonial towns, which had a significant effect on later Kushite development.

8.2. The Meaning of Pottery

Ceramic vessels have typically been approached within archaeology purely as functional items; and a typological focus has prevailed since since the late 19th century (e.g. Petrie 1896; Fischer 1965; Holthoer 1997). The materiality of pottery – and how it relates to the people who create, use, and discard it – has however been increasingly explored over the past two decades (e.g. Wiessner 1983; Rice 2015; Blinkhorn 1997; Parker-Pearson 2009; Amundsen-Meyer, Engel and Pickering 2010; Steel 2013; Rice 2015). The ability of utilitarian items in particular to carry and convey cultural meaning (McCracken 1986: 71; Robb 2010: 509), especially when considered as a group (Hulin 2013: 365), imbues them with a powerful symbolism that allows access into contemporary senses of group identity. These artefacts form part of a specific field of action (Robb 2010: 498) that the archaeologist can reconstruct. The relationship between pottery and residence patterns, for example, can allow us to reconstruct elements of social organisation such as matrilineal residence after marriage (e.g. Longacre 1966: 28). The constant presence of such mundane items acts as an anchor to cultural memories (Miller 2005; Dann 2009: 248), with these pieces visual aspects of a community *habitus*.

8.2.1. Using pottery in interpretative studies

Pottery was a basic item in Egypt and Nubia – an easy resource to access. Across Nubia ceramic distribution and the variable range of fabrics are suggestive of small-scale, local production (de Souza 2016: 81–82; see Section 0.2). Although Egyptian pottery in the New Kingdom was likely produced by specialised craftsmen, these ceramics, including pilgrim flasks, were frequent imports, and were highly visible to Nubian communities in Lower Nubia, as well as in parts of Upper Nubia with an Egyptian presence such as Gebel Barkal (e.g. Vincentelli 2006; 2018). As such, they are an ideal mechanism for accessing local habits and

practices as diverse as cooking and dining, storage, identity, migration patterns, and the aesthetics of funerary practice. Robb (2010: 506) outlines how ceramics are part of this theoretical framework:

‘A pottery vessel might reference structural meanings such as colour symbolisms, aesthetic design principles and gender or class values which turn up in many fields of action. It might incorporate generic meanings deriving from the genre of social action it formed a part of, for instance a vessel form associated with a particular food or drink consumed in a particular context or a design scheme appropriate for pots of its category... it might reference contextual meanings which comment upon how that specific pot relates to the kind of pot it is or how its user relates to the kind of user who might be expected to use such a pot’.

The same ceramic vessel type can hold myriad meanings across cultural groups, and the relational entanglement of alien forms into new cultures (Stockhammer 2012) can result in a pot’s incorporation into local value systems and social practices in numerous ways, often culminating in their holding of contradictory iconographical connotations. This can be observed in the adoption of Mycenaean pottery across the Near East in the Bronze Age (Mommsen, Schwedt and Oren 2005). Different regions exhibit preferences for certain types (Wijngaarden 2002: 12–13; Bushnell 2016: 144), which may be due to one or a combination of economic, social, or proximity factors. Mycenaean vessels were widely assimilated into daily life in Ugarit, for example, but were primarily reserved for funerary contexts in Cyprus with only a limited incorporation into domestic activities. In Egypt and Nubia, the forms were often restricted to high status frameworks (Steel 2013: 128), although the quantities at Amarna (Hankey 1973; 1997) may suggest a particularly strong interest and link with the Berbati workshop over a restricted timeframe (Wijngaarden 2002: 13). In the Sinai, Mycenaean pottery was more easily available than across much of Egypt (Mommsen, Schwedt and Oren 2005: fig. 1), potentially due to proximity to these northern markets. While containers such as pilgrim flasks were undoubtedly a tradable commodity, their value and meaning within communities was not restricted to this. In this section I use Practice Theory and the models outlined in Chapter 1 to analyse how etiquette and *habitus* may have influenced these associations.

8.2.2. Accessing an emic World-View

When analysing material culture, it can be difficult to access indigenous perceptions of artefacts, particularly when limited textual sources are available as in the case of ancient Nubia. Understanding the mindset of a community is a key aspect in breaking down boundaries of time and space and accessing objects from an emic, rather than an outsider's etic, viewpoint.

A key concept within Practice Theory for understanding perceptions of artefacts is Bourdieu's *habitus*. As discussed in Section 1.5.1, the *habitus* model outlines the mechanisms by which individual and community practices are dictated by surrounding social and environmental mechanisms, which result in the unknowing naturalisation of unconscious beliefs and values (Bourdieu 1977). The embodied history of this *habitus* is directly linked to the material culture a group manufactures and uses, which surrounds them as an expression of a culturally constituted world (McCracken 1986: 72). Blinkhorn (1997) discussed how items then become significant beyond their original functionality, as social groups firmly retain certain styles of vessels even when impractical. Tribal groups living around Lake Baringo in Kenya (Hodder 1979) each used a slightly different coarse water jar – and rejected those belonging to a different tribe, even though functionally it made no difference. Each jar form was seen as inherently linked to the self-identity and membership of a particular tribe. Highland groups in Guatemala (Rice 2015) similarly used water jars featuring diverse styles of handle positioning, which allowed them to be used in particular ways. If the vessel was simply a practical tool, it would have made most sense to own one jar of each type for utmost flexibility – and yet this was never done. Such examples demonstrate how the *habitus* of a group may override functional efficiency, and emphasise the relationship between material culture and social boundaries – the conceptual and behavioural practices that divide individuals into social groups based on culturally defined components (Eckert 2008: 2). This means that artefacts are intricately linked to public demonstrations of identity and feature as visual cues (Blinkhorn 1997: 115), particularly in the case of vessels intended for serving and display (Smith and Buzon 2017: 622). Ceramics are ideal items for tracking these practices, because their important utilitarian roles in daily life make them conspicuous in a variety of social contexts (Eckert 2008: 58).

Smith (2003; Smith and Buzon 2014; 2017) has demonstrated the applicability of the *habitus* model to Nubia. Under environmental stresses such as colonial occupation, communities can consciously manipulate power dynamics via material culture within this community *habitus* (Dietler 2010; Comaroff and Comaroff 1991: 217; Tsakos 2009: 65). Nubian individuals may have deliberately constructed practices and identities in colonial environments in order to continue displaying a conscious Nubian identity (Smith 2003: 204–205). Large quantities of pilgrim flasks from Nubia were found across both indigenous and colonial necropolis contexts, with the burial practices within these spaces constituting a critical arena for the negotiation of cultural identities (Smith and Buzon 2017), because funerary ritual is a key part of social and cultural reproduction (Stutz 2015: 2). Their position as mortuary goods is significant, as the concluding stage of an object's life biography is fundamental for understanding the cultural concerns of its users (Steel 2013: 192), with valued objects more likely to be included in burial contexts (Hoskins 1998: 21). This does not necessarily mean all pilgrim flasks in burial contexts were of high value, but rather of high relevance to a community.

Ceramic transformation provides a window onto broader processes of social change. During the Late Cypriote period, significant changes in ceramic repertoire can be observed including the decline of traditional Red Polished pottery, which was replaced by a plethora of new forms in Base Ring and White Slip wares. This was accompanied by morphological shifts to flat instead of traditional round bases (Steel 2013: 184–189). Base-ring pottery was integral to these innovations and demonstrates the development of different social behaviours at this time. Cups were related to consumption practices, whilst juglets were often deposited in tombs and were likely integral aspects of commodity trade. This new style of pottery was used in the construction of Late Cypriote material worlds and social identities (Steel 2013: 188). It is probably that the overwhelming adoption of Egyptian pottery in Nubia during the New Kingdom similarly reflected the creation of a new material world, with Egyptian vessels used to enhance prestige and providing new functional categories for hybridised practices. Pilgrim flasks were deposited in burial contexts and used in settlements as part of these new social behaviours.

Habitus practices were expressed in social behaviours and structures, which allowed individuals to acquire, use, and perhaps display pilgrim flasks in sanctioned ways. This would have involved social interactions that consistently reaffirmed group identity (e.g. Robb 2010: 513). However, the secondary agency of pilgrim flasks should also be considered. Appadurai (1986: 20) notes the key position shells play in the *kula* gift exchange system of Melanesia. Without these shells, men, as arbitrators of social relationships, cannot define their own value, and as such these shells are key agents in the policy of male value-making. Gell (1998: 17–19) discusses secondary agency in the context of ritualised objects, but I would argue that the ability of common, domestic artefacts to create and be created by cultural mechanisms and meaning (Hodder 1982; Steffenson 2007: 150; Tilley 1989: 188; 2006) suggests they are a significant element of such processes. This cultural significance and social use of pilgrim flasks changed and adapted across the New Kingdom, as *habitus* practices also shifted (Steel 2013: 191). In Egypt during the Early New Kingdom they were likely ‘exotic’ items, before being appropriated and indigenised. In Nubia by the Early Napatan period, flasks had, by contrast, taken on ritual elements of meaning (see Section 8.6.4).

8.2.3. Understanding Local Etiquette

The *habitus* in a given culture is intricately related to consumption practices within a community, and particularly reflects invisible etiquettes – behaviours that are considered ‘appropriate’ or ‘polite’. The wider social group regulates these correct practices, both consciously and subconsciously. As such, learned ways of food preparation and consumption, appearance and dress, and ritual activities create a culturally specific ambience (Dann 2009: 248; Hulin 2013: 354). The presence of vessels associated with these behaviours then creates a particular atmosphere within a specific social setting, because they evoke memories within individuals and direct the body into set patterns of behaviour. Thanks to these intimate links with personal and group identity, pottery can be understood as reflective of local tastes, practices and etiquette (Douglas 1996: 63; Hulin 2013). This ambience is in constant flux, changing and adapting generation by generation (Robb 2010: 495), which is reflected in changing material culture. We can see this in the changing forms used to store precious liquids across the Near East. Juglets were common deposits across the Levant in the Middle Bronze Age and appear in the Egyptian Delta in large numbers. However, the development of

morphologically similar vessels with two handles – including pilgrim flasks – suggests that new practices developed in the Late Bronze Age that required different movements from the one-handled examples. These two-handled flasks originated in the Minoan and Mycenaean worlds – but the early globular examples were adapted in the Levant to suit the local partiality for lentoid flasks (Bushnell 2016: 146; 150). These new styles fit seamlessly into the pre-existing trade in numerous juglet types, and gradually superseded these old forms as fashions changed (Steel 2013: 131). The shift to using these ‘alien’ ceramic vessels in Egypt reflects a fashion trend – and the allure of these foreign pots and their contents was likely related to new behaviours related to applying oil to the body spreading across the Eastern Mediterranean in Late Bronze Age internationalism (Bushnell 2016: 161). Pilgrim flasks were a key part of a new fashionable etiquette spreading across the Eastern Mediterranean.

In many societies in the Late Bronze Age, the presence of foreign material culture is understood to represent the elite use of valued goods for prestige purposes (Higginbotham 2000; see Section 1.4.4). Such ‘emulation’ is visible across the Levant (e.g. Liebowitz 2003: 241ff; Martin 2004; 2011; 2011b) and Nubia (e.g. Debeira East: Säve-Söderbergh 1989; Török 2009: 264 ff). However, Hulin’s (2013) study of ceramic deposition patterns at the Egyptian garrison site of Beth Shan suggests that this is an oversimplification – and that specific aesthetic cultural sensibilities may be played out even within ‘alien’ material cultures (Hulin 2013: 365; Warnier 2016), with no guarantee that the community that subsequently acquired them interpreted such items in the same manner as intended. Dann (2009: 142–143) has cautioned that artefacts with Classical, Kushite, and Egyptian motifs in later X-Group tombs at Qustul and Ballana (Emery and Kirwan 1938) could have been valued because they contained meaningful symbolism – or could in fact have been unreadable but simply valued for their material or been aesthetically pleasing. Mycenaean pottery was easily available across the Levant in the Late Bronze and Early Iron Age. However, it was not immediately appropriated into Levantine ‘elite behaviour’ (Stockhammer 2012b: 100). Once it became a personal possession it was absorbed into local classification systems and acquired a new meaning (Stockhammer 2012b: 90). Analysis of Aegean pottery at Hazor, Megiddo, Tell el-Ajjul and the tomb of Nahalat Ahim across the Late Bronze Age and Early Iron Age displays contradictory results for the way Aegean pottery was used across the region; feasting vessels were restricted to religious and elite contexts to maintain social significance in some sites, but

were in others used only in elite contexts and strictly controlled; and in others were available to a broader set of the populace (Stockhammer 2012b: 91). The adoption of material culture into non-indigenous communities across the Eastern Mediterranean likely relates to whether they were considered ‘appropriate’ for utilitarian or social use within indigenous *habitus* frameworks (Dietler 2010: 17). The hybrid practices that developed in New Kingdom Nubia resulted in changes to preferred items over time (Robb 2010: 498), perhaps related to prestige or even class, gender, or age (Douglas 1996: 59–63). The appropriation of the pilgrim flask suggests that it was considered applicable to behaviours across both Egypt and Nubia in different ways. This ultimately allowed it to become embedded in local practices.

In Egypt, Mycenaean rhyta, Cypriote and Levantine juglets and Syrian spindle bottles were a selection of forms that were used in Egypt for a time (e.g. Merrillees 1968; Bell 1982; Hankey 1973; 1997; Wijngaarten 2002), but were rarely imitated by local potters (but see Aston 1996b; Aston et al. 2007; Ayers 2015), suggesting that they were not absorbed into Egyptian classification systems. The fact they were imitated in higher-value materials such as faience and glass (e.g. Bell 1982: 150; Friedman 1998: 228; Säve-Söderbergh 1989: pl. 63) suggests that their value rather lay in their exoticness and that the contents but not the containers were considered elite. This is in contrast to the appropriation of the ceramic pilgrim flask form, which suggests it was considered applicable to an Egyptian context.

In Nubia, a more limited variety of foreign vessels were available, and the majority of imported pottery was Egyptian. However, there is no guarantee that Egyptian vessels were used in the same way as in Egypt. Evidence suggests that although Egyptian material culture was adopted across Nubia, this was interpreted into a Nubian value system, or relationally entangled. The absence of important funerary artefacts including canopic jars at sites such as Fadrus (Török 2009: 279), for example, suggests that Nubian communities were selecting certain Egyptian items rather than appropriating the full ideological package.

The pilgrim flask was transformed within the Nubian psyche into an autochthonous artefact. Although it was likely locally manufactured at least during the early Napatan period and possibly earlier, the focus on imported examples has parallels with earlier Pan-grave, C-group and Kerma mortuary contexts, where Egyptian jars were included alongside traditional vessels

(e.g. Bourriau 2004b; Gatto, Gallorini and Roma 2012), as well as Kerma. This is in contrast to the overwhelming preference for hand-made pottery throughout Nubian history, even though potters would have encountered the kick wheel through contact with Egyptian settlers (Bourriau, Nicholson and Rose 2009: 125–126). The profound rejection of wheel technology may be related to the more domestic organisation of ceramic production in Nubia, where it did not become a core manufacturing practice (de Souza 2016: 81–82; see Section 0.2). A parallel may be found in the adoption of Palestinian juglets in Egypt. In the Delta, the form was common and became integral to core practices. However it was not absorbed in Middle and Upper Egypt, where different practices may have caused its rejection (Bushnell 2016: 211). The adoption of the pilgrim flask into Nubian contexts in the New Kingdom and its preservation into the Napatan period is thus all the more significant when projected onto this background.

8.2.4. Political ramifications in Nubia

Pilgrim flasks first entered Nubia in the 18th dynasty. A large proportion of these were destined for the colonial towns founded across the region in the New Kingdom (see Section 2.3.1), where the aggregation of Egyptians and Nubians during the New Kingdom forged political and social tension. Subsequent transformations in the use of material culture, including pilgrim flasks (see Section 8.6.4) are evidence of the coping mechanisms developed in response to the clash of Egyptian and Nubian culture, which resulted in a process of ethnogenesis across Nubia.

The first stage of entanglement involves the appropriation of foreign material culture – by both the indigenous and colonising groups. This results in the use of foreign artefacts for local practices – termed ‘relational entanglement’ (Stockhammer 2013; see Section 1.5.4). An entangled identity is first visible across Nubia in the New Kingdom, with some communities using Egyptian vessels for indigenous mortuary practices. The development of hybridised practices is then visible in New Kingdom colonial towns, with the appearance of artefacts displaying ‘material entanglement’. Finally, these towns generated a creolised identity that I term the *urban habitus*, which ultimately was the influence behind the development of the

Kushite state and which appropriated select aspects of Egyptian social and ideological practice and combined these with indigenous traditions.

Pottery is central to the understanding of colonisation, because it reflects the introduction of new social practices and etiquettes (Steel 2013: 41). Understanding Egypto-Nubian interrelations in the ‘frontier zones’ of Colonial towns in the New Kingdom has however been marred by a tendency for scholars to approach the topic through an evolutionary diffusionist lens (Matić 2017): Indigenous communities were perceived as naturally adopting ‘superior’ Egyptian practices and material culture after New Kingdom expansion into the region (e.g. Adams 1977: 229–230; Kemp 1978: 34–35; Grimal 1992: 134; Shaw 2003b: 320). Whilst there is evidence for the widespread adoption of particular Egyptian items and practices, especially among the elite (Török 2009: 264ff; see Section 2.3.1), these traditional ‘Egyptianisation’ studies can only offer limited information on such enigmatic issues as self-identity and individual resistance, especially when we consider the potential for individuals to possess multiple fluid identities (Dann 2009: 100). Such identities are situational (Buzon 2006) – one may be a mother, daughter, and priestess, simultaneously, for example, or project an Egyptian identity in life, but a Nubian one in death. The burial of a woman in a traditionally Nubian, flexed position in an Egyptian cemetery at Tombos, but wearing Egyptian Bes amulets around her neck, reflects how such multi-faceted identities could be projected in the mortuary sphere (Smith 2003: 165–166).

Such cases rather represent the entanglement of Egyptian and Nubian cultural practices, caused by the mixed communities inhabiting colonial towns (see Section 1.5.4). This framework has been suggested as the ideal mechanism to understand Egypto-Nubian relations in Nubia during the New Kingdom (Paul van Pelt 2013; Matic 2017: 100). During the New Kingdom, this entanglement resulted in the interweaving of Egyptian and Nubian cultural identities or hybridisation, produced by an accumulation of individual choices over time (Smith and Buzon 2017: 615). Eckert’s study of the Lower Rio Puerco in the 14th century epitomises the relationship between conflicting *habitus* styles and pottery. Two indigenous communities of practice in the region were joined by a third, likely stemming from the influx of immigrant groups. Each community of practice used different morphological and decorative forms to produce its pottery, and as they came into contact, ideas were shared and

new hybridised styles appeared (Eckert 2008: 40–41), ultimately resulting in the ethnogenesis of a new identity. Webster (2001) has commented that a model of creolisation is more appropriate for understanding the provinces absorbed into the Roman Empire, rather than the traditional model of Romanisation. This simplistic model has similar problems to the Egyptianisation model. A creolisation framework involves the blending of two different types of material culture, which were used by communities in different contexts. In Nubia, this followed from the relational and material entanglements of objects during the New Kingdom, and the subsequent hybrid Egypto-Nubian practices. The use of pilgrim flasks must be considered against this background.

Parallels with ethnographic studies of colonialism (Ferguson 1992), would suggest that Egyptian pottery such as pilgrim flasks was first appropriated into a traditionally Nubian value system, with flasks relationally entangled at sites such as Debeira East (Säve-Söderbergh 1989: 203). The possibility of the continuation of indigenous cultural practices via ‘alien’ repertoires has been demonstrated by studying deposition patterns across Egyptian colonial sites (e.g. Tsakos 2009: 65; Hulin 2013: 365). This also applies to indigenous-controlled sites: Smith (2003: 83) has noted the tendency for Kermans to borrow Egyptian motifs, practices, and technologies, while using them to suit Kerman norms. This firstly means that Egyptian vessels in Nubia likely had a higher value index, because there is evidence that pottery was higher on the Nubian wealth framework (Smith 2003: 34; Nordström 2004). The use of Egyptian pottery such as pilgrim flasks could thus appear Egyptianised, but was operating under a different set of underlying rules (Webster 2001: 219) and likely encompassed different practices engaging with the vessel. Such changes are often almost invisible in the archaeological record, but studying deposition patterns can provide an insight into previously unknown Nubian etiquette systems.

The case of Egyptian imported flasks at the 18th dynasty site of Debeira East in Lower Nubia (Säve-Söderbergh 1989: 203) is an example of indigenous groups manipulating the colonial ‘status quo’ via Egyptian media, which is perhaps related to a mode of resistance under colonial rule (Hu 2013: 385–386). Twenty-five flasks were deposited in this cemetery complex in Lower Nubia, with some placed in funerary chapels attached to tumuli (Kendall 1999: 19). Some of these flasks were ritually killed via the drilling of a hole in the body of the vessel. This

practice was common in C-group cemetery deposits (Steffenson 2007: 145–146), but was typically applied to traditional Nubian bowls. The application of this custom to imported, Egyptian vessels is suggestive of the manipulation of Egyptian material culture flooding into Nubia for traditional practices. The development of new social practices and meaning to an appropriated object has been termed ‘relational entanglement’ by Stockhammer (2012: 50; see Section 1.5.4) and is more difficult to access in the archaeological record than ‘material entanglement’, which results in the creative development of entirely new objects. This relational entanglement and the hybridisation of practices that it represents can be observed by the context within which particular artefacts were framed. Debeira East is contemporary with the mass adoption of Egyptian material culture and practices in Lower Nubia, yet includes distinctly Nubian mortuary practices such as the building of tumuli superstructures. This retention of significant Nubian practices in an area almost exclusively using Egyptian pottery by the later New Kingdom is important and reflects one community’s response to and rejection of colonial rule. Its selective use of pilgrim flasks is significant and represents the early appropriation of this vessel form into indigenous *habitus* behaviours and etiquettes.

The development of a hybrid identity in Nubia can also be observed in official Egyptian spaces, notably in the colonial towns established in Lower and Upper Nubia during the New Kingdom (see Section 2.3.1). These colonial contexts contained 24% of the pilgrim flasks from Nubia in the Catalogue (Vol. II), and it is likely that the form was first exported into the region by the Egyptian administration. However, evidence also suggests that these flasks in colonial towns continued to be used in hybrid practices, with material culture pointing to subtle shifts in behaviour (Hu 2013: 391; Weik 2014). Amara West, as the administrative centre for Upper Nubia in the Ramesside Period, is a case in point. The retention of traditional Nubian mortuary practices such as the use of tumuli (Binder 2017: 599) at this key Egyptian locus suggests the continuation of some aspects of a Nubian *habitus*. Hybrid practices also appear in the settlement, where the presence of indigenous traditions such as rounded architecture (Spencer 2010) and hand-made pottery (Spencer 2014: 479–480) among Egyptian material culture, indicates this negotiation for ethnic identity was expressed among the living as well as the dead. Such combinations of cultural elements indicate new responses to materiality were occurring in these tense border spaces between the Egyptian and the Nubian world (Buzon, Smith, and Simonetti 2016: 295), where the population was increasingly

of mixed Egyptian-Nubian descent (Buzon 2006; Smith and Buzon 2014: 432; Spencer 2014: 480).

One of the key aspects of this hybridity was the development of unusual ceramic ligatures, or ‘material entanglements’ (Stockhammer 2012: 50; see Section 1.5.4). These morphological changes demonstrate the creative process inspired by a potter’s encounter with an ‘alien’ vessel, and often occur after a stage of ‘relational entanglement’ in material culture (Stockhammer 2012b: 99). The repertoire of Egyptian style pottery can be observed to diverge from contemporary Egyptian typologies by the Late Ramesside period. Beer jars – a staple vessel form from the Old Kingdom (Hawass and Senussi 2008: 194–195; Warden 2014: 44) into the New Kingdom (see Wodzińska 2010: no. 79–82) – were present across Colonial sites (see Section 7.6.3) and many Nubian examples in graves have degraded to have an unstable base (Holthoer 1977: pl.42,3), meaning they were unable to stand unaided, unlike contemporary Egyptian beer jars (e.g. B. Aston 2011: fig. vi.12, 99–101). Other examples were pierced through the base (e.g. Minault-Gout and Thill 2012: pl. 133: T17.9) and were perhaps ritually killed. No pot stands have been found which could be paired with this vessel form, and the correlation of this debased base with other careless morphological features including thin cracked bases and barely hollow interiors suggests the form had developed a symbolic rather than practical use (**Figure 8.1**).

A further innovation were imitation Egyptian bowls (**Figure 8.2**, see Section 5.2). Despite the presence of the kick wheel – used by contemporary potters in Nubia to make Egyptian-style vessels – these bowls were handmade from a traditional Nubian fabric (Gratien 1978) and showed a black core, indicating they were fired at a low temperature. These vessels were then slipped beige, and given a red painted rim, to mimic true Egyptian examples that were fired at a higher, consistent temperature of c. 500–800°C (Holthoer 1977: 62). Contemporary Egyptian-style examples were, by the later Ramesside, given a red painted rim with a thinner paint with drips down the vessel walls, which I term ‘sloppy bowls’ (**Figure 8.3**). The imitation bowls also copied this aspect, suggesting that this was a deliberate style akin to the ‘splash decoration’ known during the reign of Thuthmosis III (Aston 2006). I have observed examples of these bowls at Amara West (Binder, Spencer and Millet 2010: pl. 14; Spataro et al. 2015: 418) and H25 (pers. ob. no. 7391x), and they are identifiable in publications of Hillat el-

Arab (Vincentelli 2006: fig. 2.56 322; fig. 2.64 386) and Dorginarti (Heidorn 1992: fig. 25). Such imitation vessels were creative results of the clash of Egyptian and Nubian material cultures and social boundaries. Similar examples exist with Egyptian manufactured bowls painted to mimic a C-ware bowl found at Hierakonpolis (Friedman 2001: fig. 2) and Kerma (Dunham 1982: 249, Type CI). Raue (2017: 529, fig. 5) notes ‘medjay imitations’ were popular among the majority of Egyptian households in the late 17th and early 18th dynasty. Others are known from Sai (Budka 2017: 440; Pappa 2013: 36). An inverse example has been published at Sesebi (see Rose 2017: fig. 1:6, 2), where a wheelmade beaker with a flat base and rough burnishing bears similarities to Kerma Classique beakers (Rose 2017: 466). All these features represent creative responses by indigenous potters (Pappa 2013: 36) to the new forms being used in these aggregated towns. The standard decoration was added to these pots – however the method of manufacture was not adopted, because technology was more conservative than decoration in such environments (Eckert 2008: 31).

The new collection of social practices and beliefs developed from the aggregation of Egyptians and Nubians in a cramped urban setting, which resulted in creative responses to Egyptian material culture – such as the use of Nubian cooking pots in Egyptian funerary practices (e.g. Smith 2003: 197). Although Egyptian material culture predominated, evidence suggests that Nubian practices continued and were incorporated into and around these Egyptian systems, in a hybrid style (Spencer 2014; Buzon, Smith, and Simonetti 2016: 295). This hybridity had profound, unintended consequences for the communities in Nubia after the withdrawal of Egyptian control – directly influencing the budding kingdoms in the region in this power vacuum and ultimately culminating in a creolised material culture and with it, social practices, behaviours, and beliefs. It was the ethnogenesis of this creole *urban habitus*, rather than the pure Egyptian practices, that had a significant impact on the later Kushite state; and it is via this background that we must look at pilgrim flask use across Nubia.

8.3. Contextualising pilgrim flasks

When material culture is transported across cultures, items rarely arrive with the same meanings and practices originally associated with their use (Bourdieu 1990; Eckert 2008: 40–41; Dietler 2010: 8). By the time they were brought to Nubia, pilgrim flasks had crossed as

many as three cultural frontiers – from Crete to the Levant; from the Levant to Egypt; and from Egypt to Nubia (see Chapter 3 for full discussion). That they were used in the same way across these frontiers is unlikely. In Section 4.6, I outline the evidence for pilgrim flask contents, suggesting that all contained semi-precious liquid contents (Eriksson 1988: 177), and suggesting that – based on their morphology, distribution and residue analysis – a large majority were a part of the Mediterranean aromatic oil trade (Steel 2013: 133; Bushnell 2016: 41). However, how the vessel and this oil was used and perceived by each culture differed according to specific habits and social boundaries within particular communities (Eckert 2008; Stockhammer 2012: 50–51). Archaeological deposits across the Late Bronze Age and Early Iron Age Levant for example demonstrate a plethora of responses to imported Aegean and Aegean-style pottery across settlement and mortuary contexts (Stockhammer 2012b). The use of three early pilgrim flasks in Egypt for wine, likely for ritual purposes, may represent an early response to the form – a relational entanglement (see Stockhammer 2012; Paul Van Pelt 2013; Section 1.5.4).

In Nubia, communities took activity cues for the pilgrim flask from the Egyptian sphere, not the Levantine sphere. However, the form and its related practices were interpreted via a Nubian value system. Accessing the emic attributes of these contents is difficult. Myrrh is a useful example to illustrate this point. In Catholic culture it is associated with the funerary realm and death (Rhind 2013: 174) – the smell would provoke memories of past funerals attended, and would prompt a particular psychological (and possibly biological) response (Parker-Pearson 2009: 11). In modern Sudan however, myrrh is used as an air freshener for the house and to make cups smell attractive (Taha pers. Comm.), and would promote a different response to an individual from this *habitus* background. The oil contained within pilgrim flasks likely held specific associations to the consumer that are challenging to access in the archaeological record. It is clear that understanding the specific cultural context of consumption is necessary to fully comprehend meaning.

While an integral part of pilgrim flask meaning was derived from its contents, I do not consider the pilgrim flask's meaning to have been entirely composed of this. The way certain items are retained reveals how meaning and value was accrued through their reuse and recycling (Feldman 2014: 172). The presence of heirloom flasks (e.g. Cat. No. 259) as well as

crude Type E flasks in royal contexts of the early Napatan period suggests that the form of the pilgrim flask had developed in relevance over the New Kingdom and had perhaps become symbolic of *ideal* contents in its own right, similar to model vessels in Old Kingdom (Rzeuska 2006: 451) and New Kingdom (Holthoer 1993: 70–76; Bourriau et al. 2005: fig. 6 25–29; Minault-Gout and Thill 2012: 50, pl.120) contexts, particularly foundation deposits (Weinstein 1973). Some model vessels were inscribed to presumably ensure the magical appearance of contents (Schneider 1996: pl. 49 13).

In addition, it is important to remember the transformation of a community's *habitus* over time and space (Bourdieu 1990; Eckert 2008: 40–41). Throughout its history, Sudan encompassed myriad distinct cultural groups (Edwards 2004: 10), which formed particular relationships with specific object-worlds. The agency of an individual, a group, or an object is always historically situated (Robb 2010: 499) and as such the *habitus* is both synchronically and diachronically fluid – belief systems relating to pilgrim flasks may have differed between contemporary Debeira East and Kerma, or between a Nubian woman at Tombos and a prince of Tekhet. The object-worlds relevant to individuals will certainly have evolved between the period of colonial towns and the later burials at sites such as Hillat el-Arab (Vincentelli 2006). I discuss how these might have been expressed in the following three sections.

8.4. Parallels for Egyptian use of pottery abroad

Parallels for the use of Egyptian pottery in Nubia can be found in the Middle Kingdom fortresses established across Lower Nubia in the 12th dynasty (Baines and Målek 2000: 41). Pottery at these sites was overwhelmingly Egyptian (e.g. Smith 1995; Knoblauch 2011). However, this did not extend to cooking pots, which were exclusively in the Nubian cultural tradition, suggesting that even in a military outpost, there was room for Nubian presence. Smith (2003: 119–123) has demonstrated that Nubian food was produced in these cooking pots at Askut (Smith 2003: 118, table 5.4), suggesting that that Egyptians were eating Nubian cuisine. Food preparation is a key feature of a particular *habitus* and is often resistant to change; thus acting as a crucial identity marker (Riggs and Baines 2012: 3).

Egyptian pottery was also used outside of its indigenous context across the Late Bronze Age Levant. Egyptian material culture and architecture are found at Late Bronze Age sites such as Megiddo (Guy and Enberg 1938; Loud 1948; Martin 2011), Beth Shan (James et al. 1993; Mazar 2003; 2006; Hulin 2013), and Ashkelon (Martin 2008). Vessels termed ‘Egyptian style’ have been found at these sites (Martin 2011; 2011b; Killebrew 1999: 140ff). Pots from the contemporary Egyptian repertoire – specifically bowls, beer jars, and handled cups – were locally manufactured in a *terra rosa* clay, a source that appears to have been exploited due to its similarities to Nile silt (Martin 2004: 277). These forms were fired at a lower temperature than contemporary Levantine forms, and contained a large quantity of straw temper (Martin 2004: 276), mimicking features of Egyptian but not Levantine pottery, suggesting they were intending to recreate an Egyptian-like fabric. This domestic pottery indicates an Egyptian colonial presence, because these items were unlikely to be involved in elite emulation (Martin 2004: 279). Rather, it suggests a model of ‘direct rule’ in certain parts of the Levant (Martin 2011b: 259). Indeed, the presence of such low prestige pottery is considered an important Egyptian ethnic marker (Martin 2011b: 259), representing attempts to recreate traditional production practices and their products far from home.

Attempts to project an Egyptian *habitus* abroad can also be served in Late Bronze Age and Early Iron Age sites in the Levant (Stockhammer 2012b). The association of Mycenaean pilgrim flasks with Levantine burials and unusual associated structures such as Area AA, Locus 2131 at Megiddo (Loud 1948: pl. 63–67) suggests these vessels were part of burial rituals (Stockhammer 2012b: 93), with their contents perhaps poured over bodies – recent scientific analysis indicates that bodies were covered in oils and textiles before being dried on a fire (Pfälzner 2009: 242). The vessels were then deposited in the tomb after use. The example at Megiddo was accompanied by pottery associated with Egyptian contexts, leading Stockhammer (2012b: 93) to postulate these were Egyptian burial practices, and represent an attempt to recreate Egyptian *habitus* mortuary practices – perhaps relating to embalming – via foreign material culture, in order to reproduce their social identity in an alien environment.

Hulin’s (2013) study of the use of Cypriote, Mycenaean and Canaanite ceramics at the Egyptian garrison site of Beth Shan identified another ‘Egyptian’ use of foreign forms, with a preference for brightly decorated vessels in Egyptian contexts and a relative indifference

towards jugs, kraters, and other dining vessels (Hulin 2013: fig. 3). The high numbers of restricted small containers in these spaces supports the Egyptian predilection for perfumes (e.g. Foster 1974; Byl 2012; Hulin 2013: 363). Although ceramic repertoires within Egypt were typically plain, the interest expressed in decorative vessels here might have been a substitution of the original preference for faience and metal forms (Hulin 2013: 363–364).

These deposition patterns support the idea that a society's specific practices and cultural sensibilities may be expressed and persist even when using 'alien' material culture (Hulin 2013: 365; Warnier 2016). This idea has been broached in Nubian burial practices, where it has been suggested that the lack of religious paraphernalia such as shabtis, offering equipment and amulets in 'Egyptianised' burials in Lower Nubia might represent the selective appropriation of Egyptian material by indigenous groups, with approved items perhaps used to express local cultural vocabulary (Paul Van Pelt 2013: 539; Stockhammer 2012: 50–51). I suggest that the use of 'Egyptian' pilgrim flasks in Nubia represents a similar idea.

8.5. Understanding the adoption of pilgrim flasks in Egypt

The Egyptian expansion into Nubia, the hybridised traditions that developed in colonial towns and the subsequent display of a creolised, *urban habitus*, were key stages in the ultimate development of the Napatan state (see Section 8.6.1), with select Egyptian motifs appropriated and manipulated to express this burgeoning culture (Edwards 2004: 139). In order to understand the mechanisms behind this, it is important to establish the meaning of pilgrim flasks in their 'original' Egyptian context – the region from which Nubia took its activity cues for the vessel – before assessing how they were transformed in Nubian communities.

8.5.1. Perfume brands

As discussed in Chapter 2, Egypt was an international participant on the Late Bronze Age stage. Royal correspondence (Moran 1992), diplomatic marriage to foreign princesses (Schulman 1979; Lilyquist 2003), and the import of desirable foreign goods (Hankey 1997;

Kelder 2002; Bushnell 2013; 2016) were all key aspects of Egyptian elite culture in the New Kingdom (c. 1550–1070 BCE), of which pilgrim flasks were but one aspect.

I have suggested here that a large majority were a part of the Mediterranean aromatic oil trade (Steel 2013: 133; Bushnell 2016: 41), based on their morphology, distribution and residue analysis (see Section 4.6). While three examples in Egypt contained wine for ritual use, I suggest this is an early relational entanglement of the form that did not persist, and the majority were used for perfumed oil. Foster (1974: 44) notes that use of perfumes and unguents was considered a necessity in the Mediterranean world throughout antiquity. The Egyptians used oils for religious purposes in particular (Foster 1974: 36), but also in daily activities, and this is reflected in the diverse collections of perfume containers in local containers as well as imports from Mycenaean Greece, Cyprus, and the Levant into New Kingdom Egyptian contexts.

Perfume was a highly valued commodity in ancient Egypt, and the Egyptians were famed for their perfumes in the ancient world (Manniche 2006: 48). The presence of perfume containers in both elite (Lilyquist 2003: 103–212) and poor burials (Amarna: Cat. No. 771; Stevens et al. 2013) attest to the availability of perfumes to many members of society. ‘Exotic’ or rare perfumes would have been restricted to the wealthy (Byl 2012: 93), but certain unguents would have been available to broader spectrums of society (Dayagi-Mendels 1989: 8). Vessels with restricted openings and small volume capacities were ideal for the storage of precious liquids; and indeed the term *rdw*, liquid, used in connection with perfume, is linked to these vessels (Byl 2012: 92). By the Ptolemaic period, the Egyptian interest in perfumes and resins had led to their fame throughout the ancient world (Pliny vol. xiii ch. 6: trans. Bostock 1855). Scents were extracted by steeping plants or wood in oil or fat (Manniche 1999: 12; 2006: 48). The process of extracting oils, for both perfume and culinary purposes, is shown in an 18th dynasty tomb from Gurna (Wreszinski 1923: Tafel 356) as well as in an uncontextualised relief in the Louvre collection (see Bénédict 1921). Hawass (2006: 152–153) has noted that these perfumes were composed of plant essences combined with oils and fats (Byl 2012: 89); indeed a tomb relief at Thebes dating c. 1500 BCE depicts the mixing of herbs with fats in a perfume workshop (Forbes 1954: 292, fig. 190). This is supported by Cat. No. 25 (Gurob: see Section 4.2.1), which Serpico identified contained a lipid substance.

Perfume had myriad uses in Egyptian contexts. Reliefs on temple walls identify the presence of perfumed incense in ritual spaces (Eaton 2013: 140), while solid ‘perfume cones’ were used in feasting contexts, placed on top of guests’ wigs (e.g. Theban Tomb 181: Parkinson 2008: 89). A scene in the Tomb of Rekhmire shows perfume being poured into the hands of guests (Davies 1943: pl. lxiv) from a double vessel resembling a one-handled pilgrim flask. While none of these depict pilgrim flasks, they show that similar small vessels were used to contain perfume in Egyptian contexts. This integral role in so many aspects of elite and (one may presume) non-elite life made perfume a fundamental aspect of the Egyptian *habitus* (Byl 2012: 315). Stockhammer (2012b: 99) has suggested that the inclusion of copious Aegean pilgrim flasks in tombs at sites such as Tell el-Ajjul were intended to create a powerful perfume, to mask the smell of rotting bodies when these multiple-interment tombs were periodically reopened. Perhaps pilgrim flasks in multiple-interment mortuary contexts in the Nile valley were also used for this purpose.

Perfumed oils were a key aspect of gift exchange during the New Kingdom, with royal letters from Amarna including perfume containers among a list of gifts from the Mitannian king Tušratta (Moran 1992: 55). However they were also exchanged as commodities in large quantities, as the Uluburun shipwreck demonstrates (Bass and Pulak 1989; Yalçın et al. 2005). During the 18th and 19th dynasties, many perfume containers were imported into Egypt (Manniche 1999: 7; Byl 2012: 53; Steel 2013: 134). Pilgrim flasks, based on different origins of their fabrics (see Section 4.2.1) likely contained multiple specific oil contents from across the Eastern Mediterranean: the Egyptian restricted preference for small closed vessels such as pilgrim flasks and stirrup jars from Mycenaean Greece points to a specific demand for select perfumed oil from this region (Bell 1982; Hankey 1997; Steel 2013: 134), perhaps related to an association with elite embalming rituals (Stockhammer 2012b: 93). However, pilgrim flasks were not depicted in any known temple and tomb reliefs, suggesting that while their physical form was considered appropriate for the burial sphere, their iconography was not.

The variety of pilgrim flask fabrics at royal city sites such as Memphis (Bourriau 2010) and Qantir (Aston 1998; Aston et al. 2007) suggests a significant network connected Egypt within the Near East, with the Levant a major resin producer (Serpico and White 2000: 895). Serpico

(1997: 444) has suggested that the export of perfume was a 'hidden' commodity and was particularly difficult to trace in the archaeological record. However, textual evidence from the annals of Thutmose III (Serpico 1997: 138) and the Great Harris Papyrus (Grandet 1994) does suggest that significant quantities of perfume and incense were obtained from the Levant, with the production of aromatic oils well established from an early stage (Brun 2000: 279; Byl 2012: 324–326).

Smaller vessels could have easily been incorporated inside and around the larger storage jars in trade cargos, which made up the majority of consignments in ancient shipwrecks (Knapp and Demesticha 2016), with the Uluburun shipwreck containing at least 51 pilgrim flasks of three different sizes as well as a tin example (Bass and Pulak 1989: fig. 22). The increase in imported pilgrim flasks during the Ramesside period may reflect an increased interest in specific perfumes from particular regions as access to Levantine sites stabilised through an increased Egyptian presence (Martin 2011b: 18–19). The early appearance of locally manufactured forms was likely then an attempt to capitalise upon these popular brands. Perfume was intricately linked to religion and ritual (Byl 2012: 150), but its use in more mundane aspects of life should not be ignored.

However, the difference in climatic environments between these regions mean it is likely that local pilgrim flasks rather contained the different range of ingredients available in Egypt (Byl 2012: 67–73). Why then, were the morphological and decorative standards retained? Eckert (2008: 31) has noted that technological methods were characterised by strong levels of conservatism, which leads to persistence in form. However the retention of vessel style across a large chronological or geographical distribution can also suggest that a form was being used as a brand, to advertise a certain product to the market (Bushnell 2016: 163), and to cement the content's perceived authenticity among consumers. The concept of a brand is here understood not as an early version of Western commodity branding, but rather a system of product marking that conveyed a message (Wengrow 2010: 11–13); the form and decoration a visual cue, part of a symbolic language acting as a potential advertisement for certain reputable contents or sellers. The consumer may have relied upon the recognisable form and decoration to identify the contents of vessels, which we should remember were not filled by the potters themselves (Bushnell 2016: 145). During the Byzantine period, amphorae of specific forms

and fabrics across the Near East were associated with specific contents in a similar form of advertising to the consumer. Imitations of these specific types may have been intended to fool the consumer; or alternatively indicate the contents were considered close enough to the original in some way (Dark 2001: 40). Such branded goods can be used as mediators of social relationships (Wengrow 2010: 21).

The variety of decorative styles observable on ancient vessels have often been used by archaeologists as a means of making inferences about social, artistic and economic interaction (Rice 2015: 245). General artistic additions are relatively standardised within communities, which allowed them to be recognisable to other members of a given societal group, and reinforce cultural beliefs and practices (McCracken 1986: 71; Dann 2009: 248). However, the link between artefacts and their symbolism was dynamic (Wiessner 1983) and constantly adapting, as the ‘landscape of action’ and subsequently the *habitus* shifted according to circumstance (Robb 2010: 498). Material culture was not merely a passive reflection of these changes, but was actively used and negotiated in political, social and economic relations, to project a sense of identity and to manipulate the surrounding environment (Hodder 1982: 185). Decoration was a method by which this could be visually projected to the consumer. Across the Eastern Mediterranean, the variety of flask designs reflects the local agency of each area, with potters creatively interacting with this vessel form. The dominance of plain flasks in Egypt and Sudan suggests that morphology rather than decoration was used as an advertisement in these regions. However, decoration likely facilitated the recognition of specific commodities in certain cases (Bushnell 2016: 163). The data (see Chapter 5) suggests that while painted concentric circle designs were common on Late Bronze Age pilgrim flasks in the Levant (Amiran 1969: pl. 51), they were not ubiquitous on the Egyptian market. Although several decorative styles such as rosettes and blue paint are noted in the 18th dynasty (see Section 4.5.3), slips were dominant through all periods. During the Ramesside period, for example, only 30% of the locally manufactured flasks in the catalogue bore a concentric circle or spiraloid decoration, even including the increase in Levantine imports in this phase. In Iron Age Levantine contexts, the majority of pilgrim flasks were decorated (Namdar et al. 2013: 2). Yet of the 41 Levantine examples dating to this period in the database, only 6 bore a concentric circle decoration. This suggests that a market specifically designed for export to Egypt – and Egyptian tastes – may have existed in the Levant at this

time. A targeted market system is similarly visible in contemporary Mycenaean Greece, where the amphoroid krater was purposely created for export and appears far more frequently in Eastern deposits than in Greece itself (Steel 2013: 135). In Egypt, perhaps red slipped pilgrim flasks advertised one perfume, cream slips a second, and the rare concentric circles a particularly expensive content, the latter a deliberate market strategy to embellish its exotic connotations and link to Levantine examples (Sherratt 1999).

During the Late Period, the use of the pilgrim flask appears to shift significantly, with the appearance of Oasis flasks and New Year Flasks. The former dominated the pilgrim flask market, particularly at Karnak (Jacquet-Gordon 2012) with the larger examples perhaps used for water or wine, since the Oases had a thriving wine industry from the New Kingdom (Aston 2004: 200) and the smaller for as yet unknown contents (Hope 2000: 190). The latter were most popular in the 26th dynasty (Blanquet 1991: 52) and may have been used for water from the Nile Inundation (Blanquet 1991: 52; Friedman 1998: 229–230) or possibly wine in common with the three inscribed examples found in TT99 (Bohleke 2016: 243–245; Rose 2016: 201–203). It is likely that the contents of the form changed with the desires of the consumer market, which now appeared to prefer Oasis to Levantine contents. The meaning behind the original ceramic form also altered at this point. Their popularity was primarily restricted to Oasis vessels, with only 11% of flasks manufactured in Nile silt or Marl clay. The appearance of pilgrim flask amulets in faience and stone (see the Museum of Fine Arts acc. no. 64.2257; Fitzwilliam Museum acc. nos E273/1932, E274/1932), unpublished but thought to date to the Third Intermediate Period (pers. obs.), further suggests the shape developed specific apotropaic qualities in Egypt. These amulets are typically unprovenanced, but to my knowledge, none have been found in Nubia, and they are likely to be intended to represent the newly developed New Year's Flask, rather than the ceramic pilgrim flask (Kilroe in preparation). I suggest that while the form had become symbolic in both Egypt and Nubia, the particular symbolism inherent in the form was ultimately different.

8.6. Transformations of pilgrim flasks in Nubia

Pilgrim flasks were less common in Nubian than Egyptian contexts – with the catalogue containing only 653 confirmed examples from Sudanese contexts as opposed to the 980 from Egyptian contexts. Furthermore, it is unlikely that Nubia had direct contact with the Levant during the New Kingdom. How then did pilgrim flasks come to be used as part of Nubian materiality strategies?

The appearance and spread of pilgrim flasks through Nubia can be divided into three main periods:

1. The spread of pilgrim flasks into Nubia via trade and adoption as part of the *urban habitus* of New Kingdom colonial towns.
2. A shift in their use and relevance during the Post New Kingdom period.
3. The appearance of pilgrim flasks in both royal and non-elite tombs of the Early Napatan period.

These stages encompass significant developments in the cultural symbolism behind the form, in combination with the more general shifts occurring across the Nubian world-view at this time. Across this chronological phasing, distribution patterns were routinely centred on necropolises, although examples from settlements do occur, particularly in the Early Napatan. This may suggest a role related to the funerary sphere, although the bias of excavation in Nubia discussed in Section 1.3.2 must also be considered. While the pilgrim flask was closely associated with the perfume context in Egypt, in Nubia evidence suggests a closer link with mortuary libations. These three junctures will be discussed in the following section.

8.6.1. The *urban habitus* of the Nubian New Kingdom

The aggregation of Egyptian and Nubian cultural behaviours and practices in these constructed, Egyptianised urban spaces led to the ethnogenesis of new social mechanisms and interactions, which I term the *urban habitus* (see Section 1.5.4; 8.4.2). Of the pilgrim flasks in the dataset, 24% were found in colonial towns, settlements that were founded as part of a process of bringing Nubia under Egyptian administrative rule and into the realm of *mat*; i.e. to

keep Kerman ambitions under control and to protect Egypt's interests in the area's natural resources (see Section 2.3.1). A secondary intention might have been to encourage the Nubians to 'become' Egyptian, much as European colonialists aimed to promote Western values in colonised states in the 18th Century. However, such charged spaces take on a life of their own, and after a few generations 'the dynamic unfolding of *unintended consequences*' (Dietler 2010: 2) can be seen in these environments (Liszka 2011; Hu 2013; Weik 2014). The entanglement of Egyptian and Nubian practices (via relational entanglement) resulted in the development of hybrid material culture (via material entanglement), and ultimately the ethnogenesis of a new, creolised identity, caused by the tension inherent in two *habitus* systems acclimatising to a changed social environment with a diverse and aggregated population (Eckert 2008: 81). The entanglement and subsequent hybridity of Egyptian and Nubian cultural practices (e.g. Binder 2014; Smith and Buzon 2014: 440; Spencer 2010) attests to the complexity of this admixture, and the appearance of materially entangled vessels indicates local creative responses to colonialism were expressed via pottery. Appreciating these levels from appropriation to the creolisation of material culture in New Kingdom Nubia is crucial when analysing pilgrim flask distribution.

The pilgrim flasks within these spaces were frequently imported from Egypt, with 13 of the 22 pilgrim flasks found at Amara West manufactured from a marl clay (see Section 5.7.2), and three further examples imported from the Eastern Mediterranean (Spataro et al. 2015). This pattern is repeated across these towns – two Mycenaean globular flasks at Tombos (Smith 2007), for example, remain some of the only examples known in Sudan to this date (Schiller 2018). This suggests that at this stage, pilgrim flasks were still an item associated with the Egyptian administration, and were probably entering Nubia via the movement of select groups such as elite officials or the military (Bergoffen 1999: 309).

However this developing *urban habitus* also had an impact on communities living outside Egyptian dominance, whether by choice or by force, with pilgrim flasks also present in indigenous centres from the 18th dynasty. A significant quantity of Nubian sites shifted to use of Egyptian material culture at this stage (Edwards 2004: 107–108), although this does not necessarily equate to the adoption of Egyptian cultural practices (Hulin 2013: 365; Warnier 2016) and a significant proportion of sites are now known to have retained indigenous

material culture (e.g. Welsby and Welsby-Sjöström 2007; Vincentelli 2006; Spencer 2014: 479–80). At Debeira East in Lower Nubia, the Scandinavian Joint Expedition (Säve-Söderbergh 1989: 203; see Section 8.2.4) found 24 marl clay pilgrim flasks in a small cemetery north of the Wadi Halfa. Many were ‘ritually killed’ with a hole drilled into the base. This treatment was a common approach to Nubian vessels after death – in C-group (Steffenson 2007: 134) and Kerman (Smith 2003: 83) contexts, bowls were often upturned above or outside graves, with holes blown in the base (Giuliani 2004: 53, fig. 4de; Steffenson 2007: fig. 5). Such different approaches to ‘functionality’ were likely part of a deliberate strategy in the negotiation of values, and acted as emic ‘statements’ (Pollard 2001: 316) at what was likely a very public funerary ritual. Evidence of these practices in non-local, Egyptian media, demonstrates the ability of communities to reinterpret foreign artefacts to suit local mortuary practices, something noted in another ‘colonial’ context at Beth Shan (Hulin 2013: 365). This ‘relational entanglement’ demonstrates a key creative approach to this influx of Egyptian goods on the part of indigenous communities (Stockhammer 2012: 50–51). The significant number of pilgrim flask fragments at Site H25 (pers. obs.), theorised to be a distribution centre on a now defunct Nile paleochannel (Thomas 2014: 67), attests to further practices of relational entanglement. This site contained only 30% Egyptian pottery, primarily storage jars, with the persistence of large quantities of Nubian style cooking pots and bowls suggesting the retention of significant indigenous practices. However, the presence of 10 pilgrim flask fragments, many overlarge (pers. obs.), suggests a broad interest in Egyptian contents even among communities further removed from urban centres. The distribution of pilgrim flasks across a multitude of site types suggests a high interest in their contents, and the form’s potential for use in local practices.

8.6.2. Change in the Post New Kingdom period

Official Egyptian withdrawal from Sudan was likely an extensive process. Control of Lower Nubia was retained until the reign of Ramesses XI (Edwards 2004: 117), although administration in Upper Nubia may have been abandoned as early as the end of the 19th dynasty (Edwards 2004: 117). Many sites were abandoned, sometimes as a result of the drying up of Nile paleochannels (Edwards 2004: 109; Spencer et al. 2012) and increased desertification (Edwards 2004: 109). This withdrawal was historically thought to coincide with

a depopulation of Lower Nubia, characterised by communities returning to nomadic lifeways (Firth 1912; Adams 1964b). While it is likely that Lower Nubia, under higher levels of aridity, had become increasingly inhospitable (Edwards 2004: 109), certain sites were in continuous use from the New Kingdom through to the Napatan period, such as Hillat el-Arab (Vincentelli 2006) and Tombos (Smith 2007). Other sites designated as Early Napatan, such as Sanam (Griffith 1931; Lohwasser 2012) and Missiminia (Vila 1980) were likely founded in the late New Kingdom (Morkot 2000: 138; Lohwasser 2010: 91), based on the material culture present. Even in areas occupied by nomadic groups, later ephemeral structures above settlement architecture (Spencer et al. 2012: 40; Thomas 2014) and respect for earlier burials suggest reuse of these spaces, with communities perhaps retaining links to these ancestral landscapes (Dann 2009: 130–131).

Identifying ceramic developments of this phase in Sudan is difficult (see Section 6.8). Pilgrim flasks continue to appear in burials of this period, sometimes as the sole grave good, such as in Tomb 199 at Missiminia (Vila 1980: 73–74, fig. 70). The presence of both Type A and the beginnings of cruder pilgrim flasks in contexts likely dating to this period suggests the symbolism and use of the form was beginning to express greater levels of relational and material entanglement (Stockhammer 2012: 50–51), as the world-views of communities shifted following Egyptian withdrawal and the formulation of new power structures.

Certain changes in pilgrim flasks are observable (see Chapter 6). The cluster of Post New Kingdom and early Napatan sites containing pilgrim flasks in the Gebel Barkal area (see **Map 7**) may suggest this region had a continued strong trading link with Egypt, via an Eastern desert route, in this period. The marl clay preference at Hillat el-Arab (Vincentelli 2006), with 87% of the 46 flasks in marl clay and thus Egyptian imports, supports this idea. The significant quantity of pilgrim flasks at this necropolis may indicate that the associated settlement, now lost, was a key point for trade with Egypt in Upper Nubia; or that the community had strong links with the nearby Sanam settlement which became important in the next phase (Vincentelli 2018).

The appearance of the new types E, F, and G across Nubia in the late Post New Kingdom period (see Section 6.9) is indicative of the development of different use patterns around the

pilgrim flask form. By this period, the *habitus* of these Nubian communities moving across the landscape had evolved from the *urban habitus* noticeable in the New Kingdom, and creolised distinct social practices had arisen which can be seen through the appearance of new material culture, including the new types of materially entangled pilgrim flasks. The form of these vessels was altered to suit new behavioural practices and activities in both the funerary and the living sphere (see Section 8.6.4) – much as Mycenaean vessels were imitated in specific Levantine funerary contexts (e.g. Stockhammer 2012b: 99). As traditional settlements were abandoned and new sites formed, the *habitus* of communities shifted as their fields of action changed (Robb 2010: 495), particularly as there was no longer an oppressive Egyptian presence. With the change in activities, the interaction of people with their surrounding objects will also have shifted. Subsequent technological changes accompanied this shift, and the link between such adjustments in production and accompanying changes in social organisation is an area of increasing interest to scholars (e.g. Stark 2006: 18). This was not necessarily as a collective; the sheer range of flask types in contemporary circulation suggests that people were using these vessels in several ways, and developing different ways to incorporate them into their new *habitus*, both consciously and subconsciously. Each pilgrim flask form now present was morphologically distinct enough to reference distinct use practices, suggesting the new Nubian power centres were experimenting with forms of material culture in this formative stage.

8.6.3. Pilgrim flasks and beer jars – an inverse relationship

One particularly notable way these use patterns were shifting lies in the inverse relationship between pilgrim flasks and beer jars. Vincentelli (2006: 57; 134) has noted the propensity for the number of beer jars placed in burials at Hillat el-Arab to decrease over time, and for the number of pilgrim flasks to correspondingly increase. In Tomb 4, for example, dateable to the 19th dynasty, beer jars made up 50% of the total pottery interred with the burial, accompanied by only one pilgrim flask fragment (Vincentelli 2006: fig. 2.12–2.14). In Tomb 19, by contrast – in use from the 19th to the 25th dynasties – only one beer jar was interred, but 18 pilgrim flasks were deposited (Vincentelli 2006: fig. 2.85–2.97). This pattern is visible across the majority of burials at the site. A similar inverse relationship is visible at the Sai Island necropolis

SAC5 (Minault-Gout and Thill 2012). As yet no similar study has been conducted on Egyptian necropolises to assess whether this inverse relationship also occurs in Egypt.

The 'beer jar' first appeared in the Predynastic and was widely distributed across tombs and settlements from the Old Kingdom (Hawass and Senussi 2008: 194–195). The form was likely used for 'bread and beer' payments in the Old Kingdom (Warden 2014: 44), and El Senussi (2013: 41) has furthermore noted its use in offering scenes during the Old Kingdom. Beer jars can have a flat or rounded base in the New Kingdom (see Wodzińska 2010: nos 79–82), but the forms with flat bases were dominant in Nubian contexts. Large quantities of beer jar fragments have been found across Colonial settlement sites in Nubia (e.g. Binder 2011: pl. 10; 2017: fig. 13). By the Ramesside period, however, examples have unsmoothed bases, pushed roughly off the wheel by the potter's thumb, and many were unable to stand unaided (pers. obs.). Some were ritually killed (Minault-Gout and Thill 2012: pl. 133, T17.9). Many were interred in burials (e.g. Vincentelli 2006; Binder et al. 2010; Binder 2011) until the Post New Kingdom period, when they were no longer included among the now limited grave goods placed with the deceased. The disappearance of beer jars in Nubian contexts, so integral to New Kingdom society and burial practices, suggests a shift in Nubian funerary ritual across the end of the New Kingdom and into the Post New Kingdom period. What form this might have taken is complicated by the fact it is by no means certain that beer jars were used for the same purposes in Nubian contexts as they were in Egyptian contexts (e.g. Stockhammer 2012: 50). It is likely that they were used in settlement contexts as short-term containers for a liquid, perhaps beer, as they were in earlier Old Kingdom contexts. However, the change in the stability of the beer jar base in the later Ramesside period in Nubia may indicate the form was no longer a practical, utilitarian ware, but was predominantly intended as symbolic for the funerary sphere. This is supported by the decline in their deposition in later New Kingdom contexts. Their presence in the eastern temple at Dokki Gel, where traces of libations were clearly visible, may indicate they were associated with libation rituals (Ruffieux 2009; Bonnet 2017: 115). The remains of 30 beer jars outside Grave 301 at Amara West (Binder et al. 2010: 37) supports their inclusion in funerary rituals. The observable inverse relationship between beer jars and pilgrim flasks may

suggest that pilgrim flasks took on a symbolic role related to that of beer jars, and were deemed capable of fulfilling a similar part of funerary ritual perhaps even more suitable to local practices.

8.6.4. Cultural practices of the Early Napatan period

The tendency within postcolonial contexts of the formerly subjugated to remake themselves in the image of their oppressors has been remarked upon (Freire 1970), with their hierarchies, attitudes and practices often incorporated into new political systems. However, although the use of Egyptian royal iconography, writing system, and architecture in the Napatan kingdom, particularly in the early period, has been noted (Edwards 2004: 107; Török 2009: 330ff), it is likely that this stems from the *urban habitus* which developed across Nubian colonial towns rather than representing an Egyptian emulation.

Ceramic technology underwent significant changes in this time period, and the use of the wheel was finally adopted in the 7th century BCE, almost two millennia after it appeared in Egypt. This was used to produce Egyptian style vessels as well as uniquely Nubian forms, such as tall, wheelmade, burnished beakers that are known from cemetery sites (e.g. Vila 1980: fig. 145). Use of the wheel was by no means ubiquitous, however, with black-topped red ware bowls and cooking pots continuing in the handmade tradition.

Only very select Egyptian styles were retained. There is a continued interest in red rims on bowls, although these are now distinctly greater in depth and often hand made (Welsby-Sjöström and Thomas 2011: 64). Amphorae and storage jars continue to be imported from Egypt, with later examples perhaps manufactured locally (Welsby-Sjöström and Thomas 2011: 64). However, the only New Kingdom form to have been continually manufactured is the pilgrim flask. Why did this vessel remain in circulation and production, when so many others did not?

Three pilgrim flask types were in circulation during the Early Napatan period – Types E, F, and G (see Section 6.4). Only limited quantities of sites dating to the early–mid Napatan period have been excavated, and these demonstrate a notable bias towards mortuary archaeology, particularly royal cemeteries (Dunham 1950; 1953): Sanam (Griffith 1931; Lohwasser 2012) remains the only non-royal necropolis explored. The major city at Kawa

(Welsby 1993; 2004; 2015; 2017; Welsby-Sjöström and Thomas 2011) remains the only major Napatan settlement excavated, but no pilgrim flasks have been found here. Morphological and compositional characteristics of these three pilgrim flasks however offer insight into their now differentiated use. Type E, for example, was predominantly manufactured in heavily coarse Nile silt. Type G was ubiquitously produced from a finely sorted Nile silt clay, which was then slipped red and burnished. Type F was typically in marl A5/A4 Variant 2 and was produced in Egypt specifically for the export to Nubia. Their distribution in approximately the same time frame suggests that the form's use had split into three clearly differentiated roles. It is certain that Types E and G and Types G and F were in circulation at the same time – however, it is possible that Types E and F may have a subtle chronological distinction, as no examples of the two forms in the same context appear. The large storage capacity of Type G flasks, as well as their continued presence in Egypt (e.g. Hölscher 1954: pl. 47, U7) suggests this form became a key storage vessel for the trade in commodities.

8.6.5. A Royal/elite link?

Evidence from the early Kushite kingdom suggests that pilgrim flasks were related to royal ritual activity during funerary rites for a select period of time. The presence of 4 Aiii flasks, 4 Type E flasks, a Type K, and a Type Gi in Ku. 72, the burial of a presumed Queen interred by Shebitqo (Dunham 1950: 103), is particularly striking. Other flasks were deposited in Ku. 54 (an unknown queen); Ku. 55 (an unknown queen); and at Nuri in Nu. 3 (King Senkamanisken); Nu. 6 (King Anlamani); Nu. 21 (an unknown queen); Nu. 22 (an unknown queen); and Nu. 55 (Queen Atmataqa); All are royal burials, with the earliest, Ku. 72, dating c. 714–705 BCE and the latest, Nu. 55, dating to c. 553 BCE. Thus a key link between pilgrim flasks and the royal funerary sphere appears to have existed for c. 200 years. The presence of vessels that would typically be considered cheap and non-valuable (particularly Type E) suggests they were relevant to a broader ritualistic context that necessitated their inclusion.

The majority of these royal burials are of queens, which may suggest that the form was related to the female sphere. However, I suggest this idea with some caution, as many of the queens' burials were only 'presumed' female (for parallels see Parker-Pearson 2009). If correct, the contents of these pilgrim flask types – or the contents that they represented – may have been

gender specific. This royal inclusion only occurred for a restricted time frame. Although pilgrim flask forms do continue to appear in the Southern and Western cemeteries at Meroe after this period (Dunham 1963), they were no longer included in the royal burials after 553 BCE.

Many of these flasks are roughly manufactured and have an unfinished surface (e.g. El-Kurru – Cat. Nos 341–346), which is unusual in a royal burial space. However, expecting ancient vessels to have been valued according to modern, western sensibilities is an etic response to material culture. What makes an item ‘special’ may be something unrelated to its aesthetic beauty – or, perhaps, *because* of its lack of beauty (Gell 1992). The deliberately unfinished appearance of Type E flasks suggests the shape itself had taken on the symbolic value of its contents in Nubia by this period. The lack of a similar distribution of Type E flasks in Egypt however suggests even if it did occur, it did not encompass the use of coarse, crudely finished vessels as in El-Kurru and Nuri.

8.7. A new theory of use for Nubia

Pilgrim flasks were absorbed into Nubian cultural practices across the New Kingdom, leading to the form becoming the only Egyptian-type New Kingdom vessel to be retained and locally manufactured into the Post New Kingdom Period. The form in particular appears to have accrued a key significance in tomb contexts of the Early Napatan period, both in ‘ordinary’ cemetery contexts such as Sanam as well as royal female burials at El-Kurru and Nuri.

As discussed earlier, there is no guarantee that pilgrim flasks, and Egyptian vessels in general, were being used in the way intended by their manufacturers (Ferguson 1992; Dann 2009: 142–143; Tsakos 2009: 65; Hulin 2013: 365; Warnier 2016). Their adoption within Nubia suggests that rather they fit into local modes of etiquette and behaviour. The reason for this difference may be distinct traditional usage of oils in local practices. In Egypt, the pilgrim flask’s ability to contain perfumed oil fits with key aspects of Egyptian *habitus* behaviour centring upon perfume and the body (see Section 7.4). In Nubia, there is no evidence that perfume and other forms of bodily decoration such as makeup were in common use (Walsh in press). As such,

pilgrim flasks were unlikely to have been adopted for this same purpose. I suggest that beer jars were used for libation practices in Nubia, and their replacement by pilgrim flasks reflects the overlapping function of these forms in a Nubian New Kingdom context, with pilgrim flasks similarly used for libations.

There is some evidence for the use of aromatic essences within the A-group, which increased exponentially in the Meroitic period (Baldi 2014: 74). The main way in which these essences were used was for the burning of incense (e.g. Williams 1986: pls 33, 34; Baldi 2014: 81). However, the lack of small jars prior to the Napatan period suggests different use patterns and behavioural gestures around these essences, and these essences were perhaps used in libatory practices.

Evidence suggests there was a strong focus on libations and libation vessels in Nubia. These rituals are less visible in the archaeological record prior to the Napatan period; however deliberately broken vessels outside tombs during the Middle Kerma period suggest the existence of funerary/ancestor rituals including libations (Bonnet 1992: 622) – a practice that continues into the New Kingdom, where remains of broken Nubian pottery bowls outside tombs attest to the continuation of indigenous practices (Smith 2003; Steffenson 2007). The presence of beer jar sherds close to visible traces of libations in the eastern temple at Dokki Gel, built by Thuthmosis I, may suggest that in Nubian contexts, beer jars were used for this purpose in contemporary settings; although the appearance of pilgrim flasks in funerary chapels during the 18th dynasty at Debeira East (Säve-Söderbergh 1989; Steffenson 2007) may be an early use of the form for similar purposes. Although the buildings at this site were built to Egyptian external architectural standards, many of the internal features reflect more indigenous practices (Bonnet 2017: 155) and this use of beer jars may be further evidence of the relational entanglement of Egyptian-style vessels. A sandstone stele found in SAV1 at Sai supports the idea that libation activities were active in the region: it depicts a man offering a libation, with a small vessel (Budka 2014: fig. 11). Unfortunately the stele was too eroded to identify the vessel type.

During the Meroitic period, libation rituals became increasingly visible. Offering tables depicting deities – usually Anubis and a companion – pouring a milk offering are known at

several sites (Abdalla 1982), including Sai (Geus 1996: fig. 20) and Meroe (Yellin 1982). These practices, based at Philae, were followed across Nubia in the Meroitic period, with bronze and ceramic deep bowls used for libations (Török 2011: 108) and evidence that these offerings were subsequently poured onto cloth at Qasr Ibrim (Adams 1997: 264). By this period, small ‘perfume bottles’ for these purposes were in circulation. These were usually ceramic, although glass vases containing solidified perfume were also found at Sai (Geus 1996: 1187). These vessels could be handleless, or have two handles, and had a variety of rim and neck types (Lenoble 1998: fig. 1). These flasks are termed aryballoi, or alabastra, depending on whether they have handles – but look remarkably similar to the earlier pilgrim flasks, particularly Type Aiv, a form almost entirely restricted to Nubian contexts. Lenoble (1998) suggests that these were used for libation rituals, rather than as perfume in a modern sense. Libation rituals involving such flasks were intended to transform the deceased into an Osiris figure (Lenoble 1998: 137–138). It should be noted that the majority of these libation vessels, particularly on offering tables, are shown to have a leather or fabric handle which twists around the wrist. It is possible that pilgrim flasks were also used in this way in earlier Nubian contexts, with pilgrim flask handles used to attach a strap in the New Kingdom. Later Greek images show similar vessels being used in this way (**Figure 8.4**).

It is suggested here that pilgrim flasks across Nubia were not used in the same way as in contemporary Egypt. Rather, the form became relationally entangled within Nubian communities early in the 18th dynasty, and was used in libation activities, as signified by practices at Debeira East. This link was part of the developing *urban habitus* in New Kingdom colonial towns and persisted through the Post New Kingdom, culminating in the increased deposition of flasks in funerary spaces, where they replaced both traditionally manufactured bowls and Egyptian beer jars as the libation vessel of choice. The use of pilgrim flasks expanded in the early Napatan period, where three form types represent three distinct use practices. Type G represents a large-scale liquid commodity. Type E was related to libation activities. Type F contained a desired content from contemporary Egypt, but housed in a morphological style known to be popular in Nubia and was perhaps also used for mortuary libations. The pilgrim flask was briefly particularly important in royal and high elite contexts between c. 714–553 BCE. However, as libation rituals became more visible in the Meroitic,

pilgrim flasks, and particularly the Nubian-specific Type Aiv were the inspiration behind the new development of libation ‘perfume’ bottles.

8.8. Conclusion.

The anthropological study in this chapter allows us to begin to consider the human aspect of pilgrim flasks, and the decisions individuals and communities were making in obtaining and using such vessels over time – particularly which vessels to incorporate in indigenous practices.

In this chapter I have demonstrated that pilgrim flasks were viewed and used differently in the world-views of ancient Egypt and Nubia, and act as distinct markers of the changing identities in colonial Nubia during the New Kingdom. Using pilgrim flasks as a case study can reveal the process of entanglement, hybridity, and ultimately ethnogenesis of a creolised identity occurring in Nubia over the New Kingdom and Post New Kingdom period, and how society was changing over these politically charged phases. Although Egyptian material culture and practices – such as pilgrim flasks – were exported wholesale into Nubia and adopted by much of the populace (Edwards 2004: 107), identities in both Colonial towns and indigenous settlements were negotiated through the active manipulation of these artefacts. The tension between the oppressive Egyptian forces and the local populations resulted in the creative use of ‘alien’ vessels and relationally and materially entangled artefacts and practices used to express the *urban habitus*. I suggest that this situation was instrumental in the development of the new Napatan cultural identity, with this ‘entangled’ group taking inspiration both from Egypt and from earlier Nubian kingdoms such as Irem and Kerma (Edwards 2004: 139). The pilgrim flasks across these periods were similarly ‘entangled’ in a mesh of cultural practices, with Egyptian, C-group and Kerman *habitus* practices applied to forms from different cultural groups.

The adoption of the pilgrim flask into Kushite culture is particularly striking given earlier Nubian resistance to Egyptian ceramic technology. This sudden change is likely related to the presence of the ‘colonial’ towns across Nubia in the New Kingdom, as well as the flask’s

perceived relevance to the incipient Kushite identity in these spaces. The form's appearance across burial spaces suggests that its use, already likely relationally entangled during the 18th dynasty, had been transformed by the late New Kingdom into a vehicle related to funerary ritual, with its oil contents perhaps used in funerary preparation. This ultimately resulted in their brief key role in Napatan royal burial contexts between the 8th and 6th centuries BCE.

This chapter followed on from the Typological discussions of Chapters 4 and 5 and applied Practice Theoretical models to my data, in order to shed light upon Kushite ethnogenesis from the New Kingdom. In particular it elucidated how artefacts such as the pilgrim flask may reveal aspects of identity that culminated in the rise of the Napatan state. In the following conclusion, I draw together the information discussed across the previous chapters, to summarise the inferences made towards understanding the transformations in society revealed by a study of pilgrim flasks.

Chapter 9. Conclusions

9.1. Why do pots matter?

Ceramic vessels are a key aspect of material culture. Pottery had an integral utilitarian role in domestic practices involving the cooking, serving, and consumption of food, as well as in more esoteric beautification and ritual practices, and so was conspicuous in a wide variety of social functions (Eckert 2008: 41). As such ceramic vessels act as a conscious and subconscious representation of community *habitus* (Miller 2005; Dann 2009: 248) and can be used as an identity marker in the archaeological record. Within a colonial environment such as Egyptian-occupied Nubia during the New Kingdom, the tension between cohabiting *habitus* practices and material culture resulted in the ethnogenesis of new identities in the Nubian environment, which were expressed in part through this ceramic material. The pilgrim flask is an ideal case study for exploring this phenomenon, because it was present in both settlement and cemetery deposits in Nubia from the 18th dynasty (c. 1550–1292 BCE) and was retained through to the development of the Napatan state. It therefore has the potential to reflect how the changing political and social environment could affect pottery.

9.2. Answering the research questions

In Section 0.1.1, I introduced three research questions, which I sought to address in my research:

1. How does pilgrim flask morphology change as it moves across the cultural landscape between Egypt and Nubia?
2. How were pilgrim flasks used? Do the deposition patterns of flasks suggest shifting usage between the New Kingdom (c. 1550–1070 BCE) and the Early Napatan period (c. 700–500 BCE) in these regions?
3. What can these vessels ultimately reveal about cultural practices in Nubia, both before and after the withdrawal of Egyptian colonial control at the end of the New Kingdom?

The pilgrim flask form was in circulation across the Eastern Mediterranean throughout the Late Bronze (c. 1550–1200 BCE) and Early Iron Age (c. 1200–1000 BCE). Evidence suggests that the form originated in Crete during the early Late Minoan IB period (Evans 1928: 179; Tzedakis 1971; Mountjoy 1993: 72; Killebrew 1999: 125 note 327; Martin 2013: 391). The form displayed a range of decorative styles and motifs and was a key part of the commodity exchange observed across the ancient Near East. The Egyptians experienced this world during military excursions into the Levant during the 18th dynasty, and encountered the exchange of myriad foreign vessels. However, only select vessel forms were chosen as acceptable for an Egyptian context – the Levantine, Mycenaean, and occasionally Cypriote pilgrim flask among them. Nubian communities took activity cues for the pilgrim flask from this Egyptian context, although adapted them to local practices as early as the 18th dynasty.

Pilgrim flask morphology exhibited both synchronic and diachronic changes across its use in Egypt and Nubia. My Type-series in Chapters 5 and 6 demonstrated that different forms were preferred in Egypt and Nubia. The manufacture of Nubian-specific types in marl clay suggested the existence of an export market in Egyptian workshops, with vessels produced for trade to the south. Types Aiv and F in particular showed strong regional distribution, and almost ubiquitously only appeared in Nubian contexts, with Type E in addition very common in Nubia. Although there is evidence for a creative process applied by Egyptian potters to this Levantine-inspired form – with a variety of decorative patterns observed on 18th dynasty flasks including blue-painted garlands, geometric patterns and figural molding – by the Ramesside period both regions shared a preference for plain flasks, in contrast to contemporary Levantine vessels.

Analysis of flask deposition also identified distinct patterns across these changing social and political landscapes. The increase in quantities of pilgrim flasks in Egypt throughout the 18th dynasty and into the Ramesside period – both imported from the Levant and locally produced – attests to their growing popularity over the New Kingdom. A majority were found in settlement sites, with Late Period examples almost exclusively from this context. However, the fact that they occurred in both poor burials, such as the simple sand cut grave at in the South cemetery at Amarna (Cat. No. 771 – Stevens et al. 2013: 9; fig. 6), and wealthy burials, such as

the Tomb of Maya (Cat. Nos 1626–1627 – Aston pers. Comm.), suggests the contents were accessible to a broad spectrum of society. The increase in Egyptian flask quantities during the Ramesside period may be linked to the shift towards multiple interment tombs and a desire to perfume the air when using these spaces (Stockhammer 2012b: 99; Bushnell 2016: 381). A significant shift is evident in the Late Period, where pilgrim flasks are almost predominantly imported from the Western Oases to Karnak, pointing to a change in trading networks and consumer desire. In Nubia, larger quantities of pilgrim flasks were from funerary contexts. This may suggest they were considered more relevant to funerary ritual in Nubian cultural practices. However, the mortuary bias in Nubian excavation may also be a factor in this. Similarly to Egypt, there is a significant increase in imported pilgrim flasks in the Early Napatan period, concentrated in a specific area – in this case, Sanam; however, in Nubia this is comprised entirely of Egyptian imported flasks from the Theban area.

The presence of foreign flasks in Egypt and less commonly Nubia may be explained by commodity and perhaps gift exchange. At the harbour town of Qantir, large quantities of Levantine and Mycenaean flasks (Aston 1998; Mommsen and Mountjoy 2001; Aston et al. 2007; Laemmel 2008) suggest that this city was a port of entry for the form. Evidence of flasks from multiple regions in the Levant (Vincentelli 2006: 138; Wilson 2011: 169–171; Spataro et al. 2015; Budka pers. comm.) Mycenaean Greece (Hankey 1973; 1977; Bell 1982; 1985; Hankey and Aston 1995; Mommsen and Mountjoy 2001; Smith 2007: pl. 3; Nordström and Bourriau 1993: 184; Aston et al. 2007; Hassler 2015; Schiller 2018) and Cyprus (Bergoffen 1990; Eriksson 2001; 2006; Bourriau 2010; Gasperini 2014; Spataro et al. 2015; Garnett, pers. comm.) indicates these flasks came from a wide area and may have contained a variety of contents. Several factors suggest this was an oil-based perfume (see Chapters 4 and 8), including the specific morphology of the pilgrim flask, the integral role of oil in daily and ritual activities across the Eastern Mediterranean (Foster 1974: 33) and limited residue analyses (Quibell 1901: 142–143; Tzedakis and Martlew 1999: nos 29–30; Namdar et al. 2013).

My combined typological and anthropological approach strongly suggests the development of distinct use patterns in Nubia, related to traditional Nubian cultural practices that were preserved through local creative interactions with Egyptian material culture during the Egyptian imperialistic expansion and control of the region in the New Kingdom. Approaching

ceramic material through a framework of entanglement (Stockhammer 2012; 2012b; 2013; Paul van Pelt 2013; Smith and Buzon 2014; 2017) suggests that a concept of ‘Egyptianisation’ in New Kingdom Nubia, based on the use of Egyptian and Egyptian-style material culture, is over-simplistic. By understanding evidence for relational and material entanglement in such colonial societies, it is possible to identify indigenous appropriation of objects such as pilgrim flasks. This transformation ultimately led to new cultural identities and associated practices during the Post New Kingdom period, most visible in the Early Napatan state. My analysis of this data ultimately suggests that while the pilgrim flask form was used for perfume in Egypt, it was in contrast used for libation purposes in Nubia.

9.3. Significance of this work

A major aim for this project was to develop a detailed Type-series for the pilgrim flask in both Egypt and Nubia across the periods in question. These typologies are especially important when analysing the Third Intermediate period in Egypt and the Post New Kingdom/Early Napatan period in Nubia. These phases are still poorly understood, and ceramic material is key to their elucidation. Furthermore, many burials in the Post New Kingdom/Early Napatan period in Nubia have extremely limited grave goods, which renders their dating difficult and likely contributes to the perceived lack of burials dating to this phase. Indeed some burials contained only a single pilgrim flask (e.g. Vila 1977: fig. 110). The refinement of a typology for this form is very useful for dating contexts in the field, and I hope to have contributed to ceramic knowledge within Nubian archaeological contexts.

My project has also shed light upon practices surrounding the form. Although pilgrim flasks have traditionally been labelled as prestige goods containing expensive oils, evidence suggests the form was instead accessible to some extent by a broad section of the populace. By studying the pilgrim flask in depth, it has become clear that the form was in use across a broad spectrum of society and the practices surrounding it changed and developed across the New Kingdom.

Although this project focused on a single ceramic form – the pilgrim flask – across both Egypt and Nubia, it has a broader significance for scholarly understanding both of Egypto-Nubian relations and for the potential of ceramic evidence in reconstructing ancient lifeways. The movement of pilgrim flasks first into Egypt, and subsequently Nubia, is a useful case study to inform understandings of how artefacts move, adapt, and transform between cultural groups. The complexities of material culture appropriation are vast, and relate to existing *habitus* practices within a given group. Through the application of Practice Theory to my typological data, I have demonstrated the research potential inherent in a social analysis of ceramic material.

9.4. Potential for future investigation

Archaeological interest in Nubia is increasing annually. As archaeologists explore regions outside the Egyptian stronghold of Lower Nubia (e.g. Welsby 2003; Vincentelli 2006; Kolosowska and El-Tayeb 2012), it is possible to assess a broader geographical expanse that will have significant implications for our understanding of Egypto-Nubian relations, from a Nubian worldview. As more pilgrim flasks are unearthed across Nubia, the newly developed Type-series can be further refined and used for more detailed dating of archaeological sites. In the concluding stages of this project, for example, more pilgrim flasks were identified during my final season at H25. However, based on time constraints, the decision was made to exclude these at the current time.

This project could in the future be expanded to consider pilgrim flasks across the rest of the Mediterranean, which would allow for a full exploration of changing use patterns of ceramic vessels across time and space, and how this related to their involvement in both commodity and gift exchange. In addition, more residue analysis on complete pilgrim flasks would be a key next step for comparing vessel use across the Eastern Mediterranean, and how one form can be interpreted in myriad ways.