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ARCHAEOLOGICAL TEXTS AND CONTEXTS ON THE RED SEA: THE SHEIKH'S HOUSE AT QUSEIR AL-QADIM

VOLUME ONE

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DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS

 $\mathbf{B}\mathbf{Y}$

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PREFACE

Except in the cases of wills, deeds of sale, *waqfiyya*, and other similar documents that provide descriptions of property, most archaeological texts do not illuminate the physical context in which they are found so much as the persons that once inhabited that context. The same can be said of the documents from the Sheikh's House at Quseir al-Qadim, which provide profound insight into the social and commercial activities at Ayyubid Quseir while never referring directly to the house in which they were found, even though the business letters are often addressed "to the storeroom of Sheikh Abu Mufarrij." Perhaps only the common directive found in the shipping notes regarding merchandise and other goods to "put it in a safe place" extends to the archaeologist the invitation to describe that place. This tendency of archaeological texts not to specifically describe their contexts is characteristic of archaeological data generally, which does not produce specific information on events or persons, but rather reveals patterns. It can both illuminate broad questions of social and economic history, and "provide information on a microsocial level," that of households, which is not always found in historical documents (Rautman 1990: 151). In using both primary and secondary modes of analysis, the textual and archaeological evidence from the Sheikh's House together provide a microsocial context detailing the economic activities of a small group of people. They also supply information relevant to Ayyubid social and economic history in the evidence of far-flung trading contacts with India and China via the Yemen, and in the port's position as provisioner of the Haramayn, the holy cities of Mecca and Medina, as well as a node on the *hajj* route. This contextualization of Quseir al-Qadim links it to the wider world of the Red Sea littoral and Indian Ocean trade under the Ayyubids.

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I am also thankful to the NELC department for travel funds. Monies from the Helen Rich Memorial Fund in 2002 allowed site reconnaissance in Egypt, and in 2006 provided for comparative research with ceramics of the Mediterranean littoral. During the latter trip I viewed extensive collections of unpublished ceramic assemblages excavated in Israel mostly from coastal sites. This underscored the value in identifying a Red Sea littoral ceramic assemblage, as it is entirely different from the contemporaneous Mediterranean assemblage. I am especially grateful to Yael Arnon, Katia Cytryn-Silverman, and Edna J. Stern for their personal and scholarly generosity before, during, and after my visit.

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Tony Mills was quite generous to host me at the Dakhleh Oasis Project's headquarters outside of Mut, and I enjoyed a restful few days there learning about the work of Fred Leemhuis and Ruud Peters on the Beit al-Qadi and Beit al-Qurashi in al-Qasr, which provides a parallel to the Sheikh's House in a domestic context with letters and documents found inside. Also at the DOP I met Anetta Łyżwa-Piber who is working on the Islamic ceramics from the al-Qasr excavations and was so generous as to share her findings on the late Islamic ceramic assemblage in Dakhleh and take me to a modern potter's workshop in Qasr.

I am enormously grateful for the support and advice provided by my dissertation committee, Fred Donner, Li Guo, and David Schloen, from whom I learned much in and outside of class. I am exceedingly grateful to Li Guo, upon whose editions, translations, and analysis of the Sheikh's House texts I have so heavily relied; he gave me an introduction to the Quseir al-Qadim texts in an epigraphy course designed just for me and graciously answered questions about them while I wrote Chapter Four. I also owe a particular debt of gratitude to Donald Whitcomb and Janet Johnson for their generosity in offering me this topic and providing me with access to all of the excavation records and the artifacts themselves. Dr. Whitcomb in particular provided guidance but also allowed me great latitude in the interpretation of the site and in my approach to the analysis and presentation of the materials. His expertise and enthusiasm for the subject have continually sparked my own interest in Islamic archaeology, and I have benefited enormously by being his student. The traces of his influence are I think evident in every aspect of this work, but any and all errors are of course my own.

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ABBREVIATIONS

AD AH	Anno Domini Anno Hegira
c .	century
ca.	circa
cm	centimeter
diam.	diameter
frag.	fragment
m	meter
n.d.	not dated
Pl.	plate
pl.	plural
RN	Registration Number
sing.	singular
str.	street
unid.	unidentified
unk.	unknown
unpub.	unpublished
unstr.	unstratified

INTRODUCTION

The site of Quseir al-Qadim ("old Quseir") on the Red Sea coast of Egypt offers a rare opportunity to explore texts as artifacts and the relationship between textual data and material data, questions that have been debated among archaeologists and historians since at least the 1970s. A discrete domestic area of the site known as the Sheikh's House, a complex of two houses, a row of storerooms, and the connecting corridor, has never been published, despite its promise to address these concerns. Over 1,445 fragments of letters and documents written in Arabic on paper were recovered during the excavations. As is often the case in Egypt, a wide range of artifacts was also preserved at the Sheikh's House due to its arid environment, including wood, leather, fiber, basketry, floor matting, bundles of reeds, cloth, paper, plant matter, ceramic, glass, and stone. The preservation of so much of the material remains, as well as documents in contexts, affords a rare opportunity in historical archaeology to study written texts in their material contexts, and to aid the archaeological reconstruction of life at the site with textual data from the site itself. The texts and their contexts can also be tested against each other to illuminate the strengths and weaknesses of each type of data. In addition, reading the texts in their stratigraphic order provides a more nuanced understanding of events at the Sheikh's House than is available without the archaeological evidence. At the same time, the contents of the letters illuminate the phases of building, rebuilding, and use of this domestic and mercantile complex throughout the over half-century in which it functioned as part of this shipping node on the Red Sea.

Trade and cultural exchange within the Red Sea is only part of a vast network of trading relationships that comprise the Indian Ocean trade and includes ports in the Persian Gulf, the Gulf of Oman, the Arabian Sea, the Bay of Bengal, and continues eastward through the Straits of Malacca to the South China Sea (Figure 1). These relationships are evident in the material culture at Quseir al-Qadim, which has similarities not only with Egyptian and other Red Sea sites, but also sites in the greater Indian Ocean littoral, especially its western half. For example, as will be discussed in the following chapters, ceramic and glass types present at Quseir al-Qadim have been found, among other sites, in East Africa at the major entrepôt of Kilwa, and also Gedi, Shanga, and Manda; in the Yemen at Athar, Sana'a, Zabid, Hays, Mokha, Mawza', the primary Red Sea entrepôt of Aden, Kawd am-Saila, at-Tariya, al-Qaraw, al-Quraya, Jebelain, Khanfar (all in the vicinity of Aden), the important port of al-Shihr, Sharma (both in the Hadhramaut); in the Gulf of Oman at Sohar, Kush, and Ras al-Khaima, and on the Persian side at Hormuz; and in the Persian Gulf at the major entrepôt of Siraf on the Persian side and Qal'at al-Bahrayn on the Arabian side. Numerous additional sites have produced Indian ceramics (Kervran 1996) and Chinese porcelains and stonewares of this period (Rougeulle 1996), reflecting the vast quantities of imported housewares and luxury wares that were seemingly part of daily life on the Indian Ocean littoral at this time. Architectural evidence, on the other hand, seems to indicate that Quseir al-Qadim's ties with the Red Sea were the strongest.

The occupation of the Sheikh's House at Quseir al-Qadim occurs during a period that is important in the history of the central Islamic lands' connections with China and other parts of Asia. At this time the Ayyubids held Egypt, much of Syria, and parts of Arabia, Yemen, and North Africa, if only for a short while. While Salah al-Din and his successors conducted war and negotiated peace with Latin kingdoms in the Levant and crusading forces there and in Egypt, the presence of the Europeans since the early twelfth century had allowed for and encouraged an increase of trade across the Mediterranean with European city-states such as Venice and Genoa. The Muslim world had become the conduit between the Far East and Europe under the later Fatimids, bringing items from China and India for its own consumption and for exchange with European merchants. The increased presence of European traders at Middle Eastern ports at the end of the eleventh century had raised the demand for Far Eastern goods by Europeans. Thus the introduction of greater numbers of European merchants on the Middle Eastern scene also led to a shift in the trading patterns of Egyptian merchants towards the Indian Ocean trade. The Egyptians expanded their purview to serve the increased numbers of European customers, and captured "a new set of long-distance profits...abandoning the collection of staple commodities to lesser merchants," which had been the eleventh-century pattern (Goldberg 2005: 394).¹ They were aided in this by the Fatimid and then early Ayyubid government's policy of keeping European merchants out of the Red Sea, allowing Egyptian and Arabian merchants monopoly of the lucrative route to India. This combined with the free movement of Indian, Chinese, and Muslim merchants at this time culminated in the flourit of Indian Ocean trade via the Red Sea that took place under the Mamluks (see, e.g., Fischel 1958; Garcin 1974; Meloy 1998; Mortel 1995; Wansborough 1965; Wiet 1955).

Thus the trading pattern of Egyptian merchants under the Ayyubids reflects a new emphasis that had been established in the twelfth century on commerce via Yemen across

¹ Here Goldberg, in her recent dissertation using the Cairo Geniza documents, offers a new interpretation to Goitein's explanation of this shift as being forced upon the Egyptian merchants by European merchants keen to dominate the Mediterranean.

For more on the Geniza documents, see Chapter Four, note 2.

the Indian Ocean to ports in western India, which in turn were collecting goods from east India, south Asia, and China. The Ayyubids largely adopted the policies and practices of the Fatimids, and fought to maintain control of the Hijaz and Yemen in order to control the Red Sea ports, although they were not entirely successful in this. Nevertheless their interest in the Eastern trade coincided with the beginning of Chinese orientation towards the Indian Ocean under the Southern Song empire (AD 1127–1279), leading to the height of Chinese maritime activity, which continued under their Mongol successors, the Yuan (AD 1279–1368, Toussaint 1966: 74–77). The expansion of China's seaborne trade led to a large increase in the demand for foreign goods in China, to the benefit of merchants from the Middle East (Chaudhuri 1986: 53; also see Wheatley 1959). Also increasing the importance of the Red Sea-Indian Ocean route to East Asia were disruptions in the central Asian caravan trade due to Mongol attacks on northwest China where the eastwest overland routes commenced,² and also a decline in Persian Gulf trade due to Seljuk inability to maintain stability during the latter part of their rule (Labib 1974: 231–32; David Morgan 1988: 56; Rossabi 1990).

The excavations at Quseir al-Qadim provides new information on this important era of Red Sea trade under the Ayyubids, as well as the larger culture of the Red Sea littoral, as it is one of the few port cities on the Red Sea to have been excavated. While several Islamic ports on both the Egyptian and Arabian sides of the Red Sea are known from literature and archaeological reconnaissance (e.g., see Zarins 1989; Zarins, Murad and al-Yaish 1981), only Quseir al-Qadim on the Egyptian coast, Ayla on the Gulf of Aqaba (Whitcomb 1994b; 1995a), at-Tur in the Sinai (Kawatoko 1995; 1998; 2003;

 $^{^{2}}$ Axelle Rougeulle points out that no Chinese porcelain of the twelfth through fourteenth centuries has been found on the overland routes (1996: 160).

2004a), and Athar on the southern Arabian coast (Zarins 1989) have been excavated, while 'Aydhab has been the subject of some reconnaissance and a test trench (Hobson 1928; Kawatoko 1993b; Paul 1955). Of the four excavated, only Quseir al-Qadim has produced remains from the Ayyubid period; closest to this in date is at-Tur, the harbors of which were active in the early Islamic period through the eleventh century, and again in the Mamluk and Ottoman periods. Excavations at Ayla indicate occupation of the town was confined to the Roman and early Islamic through the Fatimid period, and again from the late Mamluk period (De Meulemeester et al. 2002; De Meulemeester and Pringle 2000; 2001; al-Fakhri 2001). An offshore fortress seems to be the only locus of Ayyubid occupation, but archaeological research there has gone largely unpublished aside from the textile assemblage (Baginski and Shamir 1998; 2002). The port of Athar is said to have been abandoned by AH 453 / AD 1061 due to the silting of the harbor and lack of fresh water, and although a village should have remained, no Ayyubid-era occupation was excavated (Zarins and Zahrani 1985: 70).³

Likewise Aden at the entrance of the Red Sea on the Yemeni coast was the thriving entrepôt of trade under the Ayyubids and then the Rasulids in these same centuries, but only a few nearby sites have been the subject of surface survey, not Aden itself. Ceramics and glass collected from its vicinity confirm dates and some trading connections, but can reveal nothing of the harbor, the market, the domestic areas, or indeed anything further of the town. Also, the Ayyubid Red Sea is less well documented textually than either the preceding Fatimid period or the subsequent Mamluk period, which witnessed the height of Indian Ocean trade. The excavation of Quseir al-Qadim, therefore, with its extensive Ayyubid remains, fills a large gap in our knowledge of ports

³ See Chapter Five for more detailed discussions of these ports.

and trading practices for this important transitional period that will not otherwise be remedied until 'Aydhab is excavated.

In the following chapters I introduce the site and provide a history of the archaeological work to date (Chapter One). In the same chapter I describe in detail the excavation of the Sheikh's House at Quseir al-Qadim, and explain its archaeological phasing. Chapter Two treats the ceramics excavated from the Sheikh's House, with reference to other assemblages at Quseir al-Qadim and comparative material from other excavated sites in the region. It uses the ceramics both as a tool for understanding the date of the settlement and for exploring the trading contacts the residents enjoyed. Chapter Three treats some categories of small finds that represent both items of daily use and trade goods, examining their distribution over the Sheikh's House and seeking to understand what the patterns together reveal about the use of the site and the habits of its occupants. Chapter Four explores how archaeological texts have been treated to date and what methodological approach might provide a model. I then undertake a detailed examination of the Sheikh's House texts, describing the context of each and what information each small assemblage contains. I compare what was known about the Sheikh's House before the archaeology and the texts were integrated, and after. In the final chapter I seek to contextualize the Sheikh's House, and Quseir al-Qadim within Egypt and the Red Sea trade, finally identifying a common culture that is traceable in the Red Sea littoral through a period of time far longer than occupation at either the Sheikh's House or Quseir al-Qadim alone.

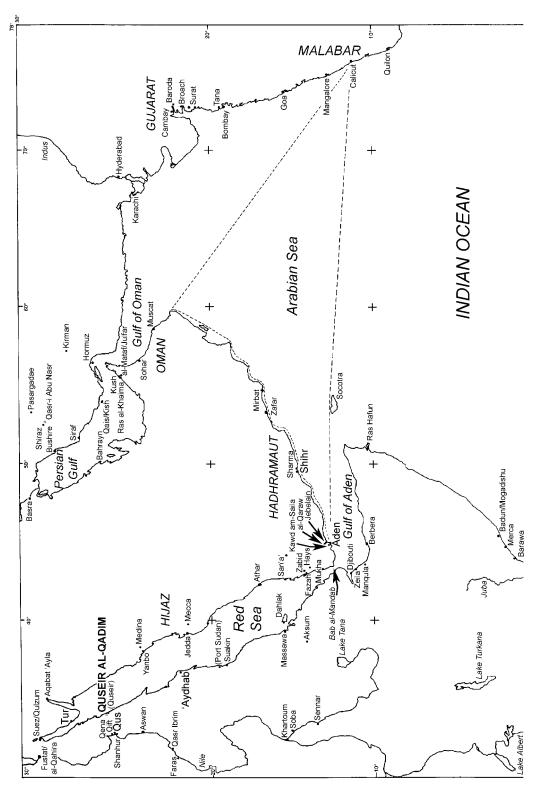


Figure 1. The Indian Ocean Littoral in the Ayyubid and Mamluk Periods (after Meyer 1992: Figure 5)

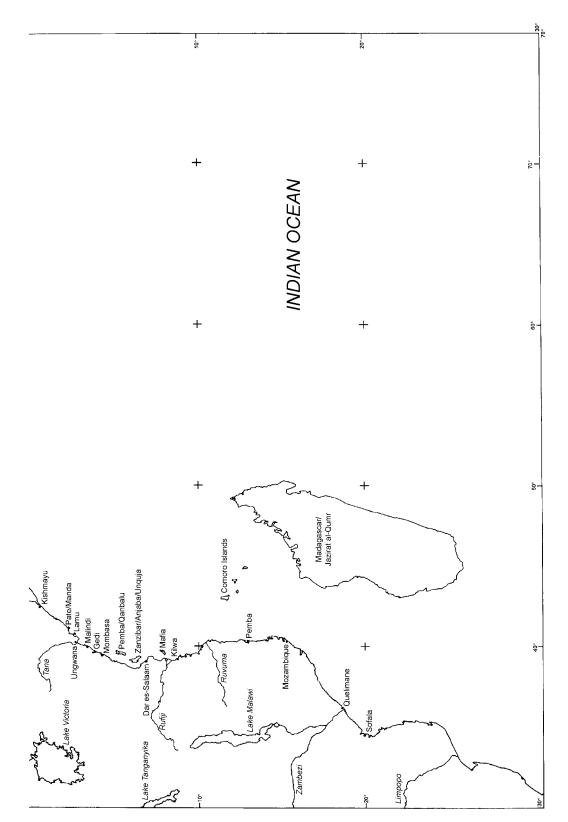


Figure 1, continued

CHAPTER ONE

QUSEIR AL-QADIM AND THE SHEIKH'S HOUSE

Quseir al-Qadim is an ancient port town that lies on the Red Sea coast of Egypt, in one of the narrowest parts of the Eastern Desert where the Nile bends eastward at Qena, Qift, Qus, and Luxor. It is connected to these towns by several traversable wadis that have been used for centuries, possibly millennia, at this shortest route between the Red Sea and the Nile.¹ The site lies close to the beach on the narrow coastal plain, perhaps 2 km from the foothills of the Red Sea mountains to the west (Barron and Hume 1902: 61), on a Late Pleistocene coral reef that extends southward into extensive mud flats, or *sebakh*. The *sebakh* indicates the presence of a former lagoon that was used as the Roman and Islamic harbors (Sandford and Arkell 1939: 67).² Vegetation is sparse and consists mainly of small shrubs in the immediate vicinity, while tamarisk, rushes, and a few acacia trees grow in the surrounding wadis (Klunzinger 1878; Prickett 1979: 274; Wetterstrom 1982). The area is extremely arid, having a mean annual rainfall of 3.4 mm (Prickett 1979: 270–73).

¹ Helene Kantor was perhaps the first (in 1954) to suggest this route may have been used as early as the Predynastic period, as a point of entry for the protoliterate cultures of Mesopotamia to Egypt (1992: 16–17).

² "A narrow cove, 150m large, is the only outlet to an elongate sebakh depression (2200×500 m) parallel to the shore, 500 m inland" (Plaziat, Baltzer, Choukri et al. 1995: 14; also see Peacock and Blue 2006: Chapter Four, "The Sedimentary History of the Harbour Area").

The significance of Quseir al-Qadim's placement at this access point to the Nile Valley via the Wadi Hammamat, the Wadi Quseir al-Qadim, and the Wadi an-Nakhil (Prickett 1979: 320–24, Pl. 84) is underscored by the presence of numerous way stations, mines, and graffiti from Ptolemaic and Roman times in the Wadi Hammamat (see Bernand 1972).³ This wadi system continued as the major route between this part of the Nile and the Red Sea in the Islamic periods (Murray 1925; Zitterkopf and Sidebotham 1989)⁴ when Quseir al-Qadim became a station on the *hajj* route, bringing Muslim pilgrims from the west across the sea to Mecca, and perhaps most importantly, supplying that region with grain grown in Upper Egypt. Nearly as important was its role in the Red Sea and Indian Ocean trade of the Ayyubid and Mamluk periods, receiving Yemeni ships carrying luxury and staple goods that had originated in India and China, to the entrepôts of Egypt, where they could be purchased by customers from as far away as Europe (Garcin 1986b; 1991: 2044; Whitcomb and Johnson 1982a: 1). The prosperity of this small but active port for any period of time is all the more remarkable when one realizes its almost complete dependence on imported foodstuffs and water.⁵

³ This route is only part of five or six possible routes and their multiple sub-routes from Quseir al-Qadim identified by Prickett.

⁴ Martha Pricket's regional survey of the area emphasized the importance of the wadis as "the most intensively used of the topographic features" in the region (1979: 257). Also see the survey of the Byzantine gold mining town at Bir Umm Fawakhir and its surrounding area by Carol Meyer and team (Meyer 1995; Meyer et al. 2000).

⁵ In addition to several commodities listed in small amounts and thus intended for local consumption, the documents excavated at Quseir al-Qadim indicate water was shipped in from the Nile Valley: "To be delivered by Nassar are one load of water, four waybas of barley…" (Guo 2004: Text 251). The water carrier (*saqqa*'), who is mentioned in a list of accounts, would have been in charge of the delivery of water to the various households and businesses at Quseir al-Qadim, probably usually brought from local wells rather than all the way from the Nile (Guo 2004: Text 67; cf. Goitein 1983: 232). A few brackish springs and several wells were identified in the Quseir Regional Survey (Prickett 1979: 270–72). Water from the farthest of these would have been sweetest, and thus have been more expensive to purchase from the *saqqa*'. Nile water must have been a rare luxury.

Jules Couyat-Barthoux (1910) was perhaps the first scholar to note the existence of medieval ruins at Quseir al-Qadim, corroborated a few years later by George W. Murray (1925: 142) who reported Islamic pottery along with matting and date pits "of very recent appearance" on the surface (Whitcomb 1996: 747, n. 1). James Burton had also noted "Arab tombs" on his map of the region in 1822–23 (Whitcomb and Johnson 1979: 59); these were later excavated by the University of Chicago.⁶ Excavations by Janet Johnson and Donald Whitcomb at Quseir al-Qadim in the late 1970s and early 1980s, and also by the University of Southampton in the period 1999–2003, indicate that the two main periods of occupation and use of the port are the Roman (when it was known as *Myos Hormos*, one of two major Roman ports on the Red Sea)⁷ and the Ayyubid to Mamluk periods.

⁶ This followed a brief excavation by Prof. Abdel Monem Sayed of the University of Alexandria in the burial grounds, which have apparently not been published (Whitcomb and Johnson 1979: 57).

⁷ The Roman remains at Quseir al-Qadim were not identified as Myos Hormos until relatively recently, as they were thought to be Leukos Limen during the University of Chicago excavations. However, Myos Hormos has been a possible identification since at least 1910, suggested by Raymond Weill in his report on the excavations at Coptos (1910). A comparison of the physical descriptions of the site in the classical sources, paired with ostraca mentioning Myos Hormos found at Quseir al-Qadim (Bagnall 1986: cat. 45.5) and at Zerqa fort on the Coptos road (Bülow-Jacobsen, Cuvigny, and Fournet 1994), make its identification certain. The history of the debate and an investigation of the textual and archaeological evidence are chronicled by Donald Whitcomb (1996: 747–49, 57–62) and David Peacock (1993; 2006: 4–5). Also see the entry on Myos Hormos in Getzel Cohen's study of Hellenistic settlements, which reviews the argument, cataloging the historical information and making use of published and unpublished archaeological evidence (2006: 332–38).

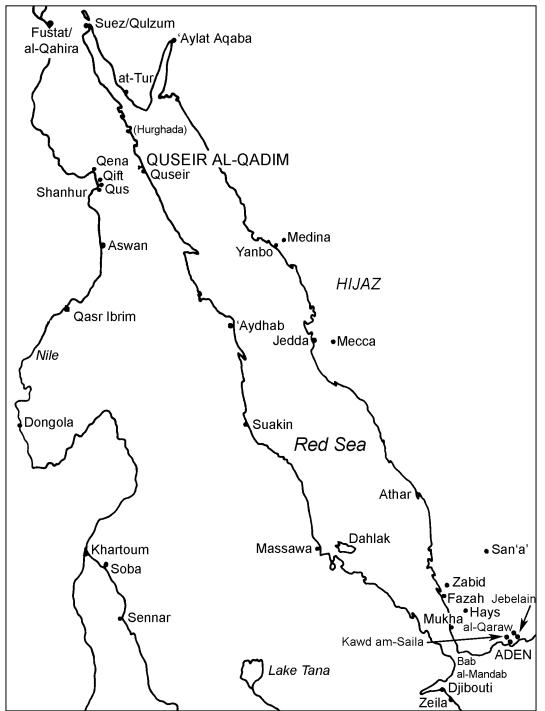


Figure 2. Map of Egypt and Western Arabia (after Meyer 1992: Fig. 5)

A. **PREVIOUS SCHOLARSHIP ON QUSEIR AL-QADIM**

1. TEXTUAL SOURCES AND HISTORICAL TREATMENTS

Quseir al-Qadim does not figure prominently in Arabic textual sources, and there is scant evidence for it before the Ayyubid period. As a consequence there is little modern scholarship concerning the medieval town, although it is sometimes mentioned in treatments of Red Sea trade (e.g., Garcin 1978: 311; Labib 1965: 237–38, 376, 81; 1974: 225). Evidence for its possible existence as early as the eighth century AD is recorded in Yaqut circa AD 1225, who references a debate among eighth and ninth-century geographers as to whether there was a port at Quseir. The confusion likely stems from the existence of two places named Quseir, and as a Quseir on the road to Damascus is mentioned by Ibn Jubayr in the early thirteenth century and Magrizi in the fifteenth century, the second Quseir may be the Egyptian Red Sea site (Frantz-Murphy 1982: 266, n. 1). Nevertheless, no traces of an early Islamic town have been detected. There is firmer textual evidence for some Fatimid-period activity: a Christian pilgrim whose travels in Egypt have been dated to the early eleventh century refers to Quseir's role in the spice trade and the route between it and Qus, the Nile port. Also, al-Musabbihi's eleventhcentury history of Egypt mentions a town by that name (Frantz-Murphy 1982: 266). This would fit well into what is known about Fatimid expansion of Red Sea trade, but aside from a few pottery types that continue into the Ayyubid period, no Fatimid occupation has yet been detected at the site.

Most of the Arabic sources that describe Quseir as the port of Qus date from the late twelfth or early thirteenth century, after Qus had become the capital of Upper Egypt at the end of the eleventh century (Garcin 1976: 6, n. 1). These sources provide fairly minimal data—several Arabic geographers simply refer to Quseir as "the port of Qus," providing variable figures on its distance from that city on the Nile, and its location

between the ports of Qulzum and 'Aydhab on the Red Sea (al-Kutubi 1981: 98; Abu'l-Fida 1840: 111; al-Maqrizi 1911: 61; al-Nuwayri 1964: vol. 1, p. 243). Yaqut provides the most tantalizing clue to activity there, in his observation that it is frequented by Yemeni vessels (cited in Guo 2004: 29; Yaqut 1955: vol. 4, 367). This point becomes even more important when examining the results of the excavations. A recently published Rasulid court archival text that is dated ca. 693/1293 lists Quseir and at-Tur as optional Egyptian ports to 'Aydhab (Jazm 2003–2005: 492).⁸ The Mamluk historian Qalqashandi (d. 821/1418) includes Quseir among four Egyptian ports in the Red Sea (moving south to north: 'Aydhab, Quseir, Tur, and Suez) and notes that it does not get as much traffic as 'Aydhab (al-Qalqashandi 1964: v. 3, p. 464–66),⁹ which is additional evidence that 'Aydhab and Quseir were operating at the same time (Garcin 1976: 399).¹⁰ Qalqashandi also firmly places Quseir on the Red Sea to Nile Valley trade route, as he details that

⁸ The passage explains the reasons why Karimi merchants (see note 11) are not allowed to own ships in Aden under the Rasulid sultan al-Malik al-Muzaffar. One of them is that the ships might not only stop at 'Aydhab, but also at Quseir or at-Tur where they could pick up Egyptian (Mamluk) soldiers and bring them secretly to Aden to take the Rasulid regime by surprise.

⁹ For a brief overview of the historical and archaeological evidence for Quseir al-Qadim in the Mamluk period, see the entry on Quseir al-Qadim in the Chicago Online Encyclopedia of Mamluk Studies (Burke 2006).

¹⁰ Jean Maspero and Gaston Wiet gathered many of these Arabic references to Quseir as the port (*furda*) of Qus in their *Matériaux pour servir à la géographie de l'Egypte* (Maspero and Wiet 1919: 147), and they have been more recently collected and evaluated by Garcin, who notes that the repetitive use of the phrase seems to indicate it was copied from one geographer to another without reference to current activity at the port (1976: 6, n. 1). Gladys Frantz-Murphy reviewed the textual evidence of Quseir al-Qadim from outside and within the site for the second preliminary report on the excavations (1982). The Rasulid *daftar* has only recently been published and this reference to Queseir has not entered the literature on Red Sea trade.

from Quseir goods are taken to Qus and from Qus to the *funduq* of the Karim in Fustat (al-Qalqashandi 1964: v. 3, p. 465).¹¹

In spite of or perhaps because of the dearth of textual sources on the history of Quseir al-Qadim, both editions of the Encyclopedia of Islam have relied on supposition in their absence. Martin Plessner inexplicably asserts that the port flourished in the 'Abbasid period (Plessner 1927: 1157), while Garcin supposes that it was important in the Middle Kingdom and Pharaonic periods, lost its importance in the Roman period, regained it in the Byzantine period, and became an important *hajj* station at the beginning of the Islamic period (1986b: 519). None of these statements is supported by the archaeological or textual evidence, however, as will be discussed below.

2. GEOLOGICAL AND GEOGRAPHICAL STUDIES

The geography and antiquities of the Quseir region have been described in passing by many travelers since the late eighteenth century (for which see Bernand 1972). As part of Napoleon's Expedition, François-Michel de Rozière made a detailed study in

¹¹ The Karim or Karimi were a loose organization, association, or guild of Muslim merchants that have their origins in the Fatimid period, rose to prominence under the Ayyubids, had become very powerful in the Indian Ocean trade by the Mamluk period, and declined in the fifteenth century. They are mentioned in documents such as the letters of the Cairo Geniza as early as the mid-twelfth century (e.g. Goitein 1958), and in other Ayyubid and Mamluk histories such as Magrizi. Medieval almanacs list them among the many merchant groups (e.g., Mogadishans, Egyptians, Hadramis, Hurmuzis, Qalhatis, Ceylonese, Somalis, etc.) arriving or departing the Yemeni port of Aden at specific times during the year (Serjeant 1988a: 164), and by the Ayyubid and Mamluk periods they appear to have close governmental connections (Meloy 1998: 68-71). Whereas their decline has been attributed to the Mamluk sultan Barsbay's monopolies on longdistance trade (see references in Meloy 1998: 71), new evidence from the aforementioned daftar of the Rasulid sultan al-Malik al-Muzaffar suggests his policy of preventing Karimis owning ships shoud be considered a contributing factor to their decline (Jazm 2003-2005: 492-93, n. 3579). The origin of the terms used to refer to the group or to desribe individuals or their ships, al-Karim, Karimi, Karimiyah is unknown, likely not Arabic, and has prompted much discussion, along with the origins of the group itself (e.g., Ashtor 1983; Fischel 1958; Garcin 1978; Goitein 1958; 1966; Issawi 1970; Labib 1952; 1970; Mortel 1994; Wiet 1955). For a thorough review of scholarship on the Karimi and a discussion of their activities and organization, see John Meloy's University of Chicago dissertation (1998: 68-73). Also see Garcin's discussion of their activities in Mamluk Upper Egypt (Garcin 1976: 260-65).

1812 that included descriptions of the soil and the formation of the harbor (Bernand 1972: 62–66). The first comprehensive geological study was undertaken by Thomas Barron and William F. Hume (1902), and has since been updated by numerous geologists (Beadnell 1924; Büdel 1952; see discussion in Prickett 1979; Said 1962; Sandford and Arkell 1939; Youssef 1949; 1957). The most recent summary description of the Quseir area's geology can be found in the University of Southampton preliminary report (Peacock and Blue 2006).

3. ARCHAEOLOGICAL TREATMENTS

Quseir al-Qadim was first visited by the University of Chicago in 1977, and studied between 1978 and 1982. They carried out a regional survey, geological studies, and excavation. Subsequent survey and excavation was undertaken by the University of Southampton between 1999 and 2003.

a. The University of Chicago Expedition

The University of Chicago sent an expedition to Quseir al-Qadim under the direction of Donald Whitcomb and Janet Johnson. They completed one season of surface reconnaissance in 1977 and three seasons of excavation in 1978, 1980, and 1982, as well as concurrent geographical and archaeological surveys of the modern town and the surrounding landscape. They investigated both the Roman and the Ayyubid-Mamluk towns and harbors.

Initial mapping and survey of undisturbed areas of the 10 hectare site indicated four distinct subdivisions: an Islamic area east of the modern road, a mixed Islamic and Roman area at the southern edge of the site west of the modern road, and two Roman areas at the northern and western parts of the site (Whitcomb and Johnson 1982c: 5). A contraction of the town after the early Roman period is evidenced by the early cessation of occupation in the northern and western parts of the site, and their use for refuse. These

middens produced a wealth of remains related to mercantile activities and fishing, the only local means of provision (Whitcomb and Johnson 1982c: 7).¹²

Islamic remains are concentrated in the center of the site, built over Roman remains, and at its southern and northeastern peripheries. Two large domestic complexes were found in the center of the site on high ground, the Sheikh's House, which is the focus of this study, and the Merchants' Houses about 120 m to its south-southwest. The latter, excavated in 1978 (in trenches P7–P8), is a neighborhood of at least five housing units consisting of a combination of open courtyards and closed rooms, along with a north-south street and an east-west alleyway. The complex sits on the slope of a hill and made use of Roman remains to fill in low places in the terrain. The best-preserved rooms contain floor mats in situ made to fit the rooms, and mud brick built-in furniture (mastabas). Wooden doorsills and door sockets were also preserved in situ (Whitcomb and Johnson 1979: 49–56). One hundred fragments of Arabic documents and letters written on paper were found in this complex, most of which await publication.¹³

Islamic occupation was discovered in several other areas of the central and eastern site, often in thin levels overlying Roman architecture. For example, over the Roman structure referred to as Central Building A layers of Islamic trash had accumulated, a large latrine pit had been dug (trench F10a, Whitcomb and Johnson 1979: 32), and over another part of it an Islamic room was excavated (trench G8b). The latter was likely part

¹² For more information on Roman Quseir, known as Myos Hormos, see Whitcomb 1996; Whitcomb and Johnson 1981; 1982a; 1982b, the University of Chicago's preliminary reports (Whitcomb and Johnson 1979; 1982c) and publications of certain artifact categories (Bagnall 1986; Hiebert 1991; Meyer 1992; Vogelsang-Eastwood 1984), and also the University of Southampton's preliminary report (Peacock and Blue 2006) and other publications (Blue 2002; forthcoming; Peacock 1993).

¹³ Three documents from the Merchants' Houses have been preliminarily published by Michael Dols, Galal el-Nahal, Carolyn Killean, and Gladys Frantz-Murphy in the preliminary excavation reports. One letter is dated 615/1218 (Dols 1979: 248; Frantz-Murphy 1982).

of a house and contained several hearths made of pots, inserted into the floor and containing ashes (Whitcomb and Johnson 1982c: 39); several fragments of silk woven with linen were found here, in addition to cotton and wool fabrics and three resist-dyed cottons, likely from India (Vogelsang-Eastwood 1989: Nos. 50, 56, 64). South of this Islamic trash and ephemeral occupation lay over Roman remains in squares H8a, J8a, and J8c crossing the center of the site (Whitcomb and Johnson 1982c: 43). About 70 m east of Central Building A, Central Building B also proved to have thin Islamic remains overtop, perhaps domestic occupation (Whitcomb and Johnson 1982c: 44). South of this trench J14a contained Islamic dumps over a series of Roman rooms (Whitcomb and Johnson 1982c: 45–46).

Another Islamic occupation area was excavated about 65 m southwest of the Sheikh's House and 80 m north of the Merchants' Houses, in squares L7–L8 on the silted-in floor of the Roman harbor. The central feature of the trenches was a large circular oven made of mud bricks, burned red on top, dating to the Roman period. Nearby small rooms or bins were full of ashes, over which lay numerous fragments of heat-cracked basalt grinding stones. A small courtyard northeast of this contained a small hearth and a flooring of sherds over which the walls had been built (Whitcomb 1996: 754–55; Whitcomb and Johnson 1982a: 35). The large oven appears to have been simply built over in the Islamic period (Whitcomb, personal communication, December 2006). The finds in this area were rather rich in textiles and included eight fragments of resist-dyed cottons imported from India (RNs 921, 924, 926, 928–29, 932–34, Vogelsang-Eastwood 1989: Nos. 59–63, 65–67), a linen bag and several other fragments of linen, wool and brocaded wool, two fragments of linen woven with silk, and one of pure silk; silks and combinations of silks are rather rare at the site overall.

Burial areas and a distinct type of architecture were found on the periphery of the site, and represent a later occupation than that in the central areas. About 50 m west of the Merchants' Houses a test trench (Q6a) uncovered a pit with human bones at the bottom, in association with "ash and a hard, bright red fired area" (Whitcomb and Johnson 1979: 57, 61). A similar find came to light about 160 m southwest of the Merchants' Houses, on a raised knoll referred to as "the island" as it sits in the silted-in Roman harbor, excavated in trenches S11b and S12a. Islamic burials of four individuals, with large quantities of ash and burned bricks in the burial pits were cut into a previous Islamic domestic structure. This structure (possibly structures) was a barasti or 'arish hut, built of low-mudbrick walls over which superstructures of timber and matting were raised (Whitcomb and Johnson 1979: 39, 43–44).¹⁴ This type of construction mirrors that of a large neighborhood on the beach about 360 m northeast of the Sheikh's House, referred to as the "Eastern Area," and representing the nucleus of a slightly later town than in the central area. This complex neighborhood in trenches E18-19 and F18-E19 contained a shallow deposition, nevertheless representing several occupational phases of numerous courtyards and rooms. Surface remains to the north and south suggested two additional neighborhoods, separate from but connected to the one excavated (Whitcomb and Johnson 1982c: 117–31). Despite the seemingly poor appearance of the reed-hut settlement, the rich finds included Chinese porcelains and celadons, dating from the fourteenth century and later (Carswell 1982), Indian batik-printed textiles in greater quantities than anywhere else on the site (Vogelsang-Eastwood 1989: 34-51, 86-111,

¹⁴ As will be discussed in Chapter Five, there are numerous comparanda for this type of construction for all periods, around the coasts of the Red Sea and the Gulf of Oman (King 2001: 85–86, 90).

16–21, 23, Nos. 2–44, 47–50), Indian and Yemeni ceramics, and East African paddlestamped pottery (Whitcomb and Johnson 1982c: Pls. 37, 41:e–f, 45, 46:j–k).

Northeast of these neighborhoods quite close to the water additional burial grounds were excavated. In trench A22d the remains of seven burials were excavated, with no clear pit lines to differentiate them from each other. The interments had been disturbed by a coral-block structure built on the site in association with ostrich egg shells, which may be a funerary shrine of later Islamic date (Whitcomb and Johnson 1979: 57–59).

Much of the University of Chicago's work has been published in the form of preliminary reports of the 1978 and 1980 seasons, as well as specific studies of glass, textiles, and Arabic documents. Numerous shorter reports also appeared in the Oriental Institute Annual Report. Much of the material of the 1982 season has not been published, however, and there is no preliminary report. Exceptions are a few categories of small finds.¹⁵ Unpublished reports have been prepared on numismatic, faunal (avian only), and macrobotanical finds. Awaiting analysis and integration with the unpublished and published specialists' reports are all of the ceramics, the stratigraphic sequence, and architectural remains.

¹⁵ Artifact studies of the 1982 season include textiles published by Gillian Vogelsang-Eastwood (1983a; 1983b; 1983c; 1987; 1983d; 1989), resist-dyed textiles discussed in context by myself and Donald Whitcomb (Burke and Whitcomb forthcoming), glass, published by Whitcomb (1983a) and Carol Meyer (1992), wooden objects by Fredrik Hiebert (1991).

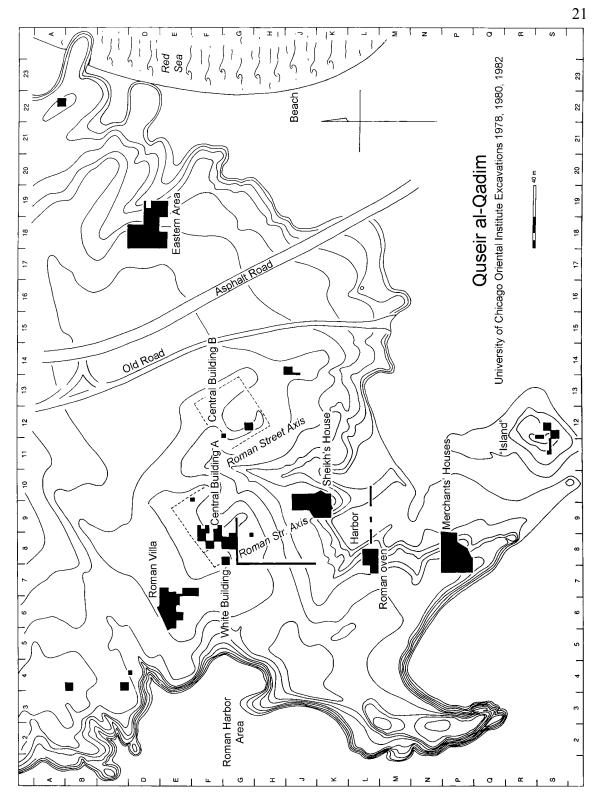


Figure 3. The University of Chicago's Excavations at Quseir al-Qadim in 1978, 1980, and 1982 (after Meyer 1992: Fig. 2)

b. The University of Southampton Expedition

The University of Southampton excavated Quseir al-Qadim from 1999 to 2003 under the direction of David Peacock. They continued the work of mapping the extent of settlement in the Roman and Ayyubid-Mamluk towns and analyzing the use and sedimentation of the harbors. Whereas the full extent of the Roman harbor has been mapped, the outlines of the Islamic harbor are not as clear. Nevertheless there are some points at which the Islamic shoreline has been identified. For example, near Trench 16A an area containing wood chips is interpreted as a boat-repair station on the water's edge (Blue, Beadsmoore, and Phillips 2006: 115).

Several areas of domestic occupation have also been identified by the University of Southampton. In Trench 8A, about 125 m southwest of the Sheikh's House and west of the Merchants' Houses, Structure 15 was built reusing stones from a nearby Roman monumental structure and on the same alignment as the Roman buildings. It consists of a single room, 8×6 m, with a post-hole at the center to support the roof. Immediately outside the building, in the *sebakh* adjacent to the western corner, a hoard of over 500 coins and coin fragments were unearthed that date between AD 1180 and 1238, falling squarely in the Ayyubid period.¹⁶ Other finds within the *sebakh* surrounding the building seem to be the remains of a high-status household, perhaps the occupants of Structure 15: children's leather shoes and clothing, adult clothing, jewelry, paper documents and a

¹⁶ The Cairo Geniza documents indicate that it was the habit of merchants not to keep large sums of cash around, but to invest it in merchandise. Yet other documents attest to the habit of some people to keep large sums of cash in secret, perhaps as they neared death; another well-known reason to hoard money would be in times of political insecurity and unrest (Goitein 1967: 263–66). The short reign of al-Malik al-'Adil Abu Bakr II, who ascended the throne upon the death of his father al-Kamil Muhammad in 635/1238, was according to Maqrizi marked by strife with his brother and wide dissatisfaction at his corrupt ways, and he was deposed by his father's emirs and replaced with his brother in 637/1240 (al-Maqrizi 1980: 229–57). These events may have produced unease even in those far away from it at Quseir al-Qadim, filtered through the government in Qus.

stylus, an amulet in a leather case, frankincense, and a soapstone incense burner. Other finds are wooden and stone bowls, basketry, reed pots with lids, and water skins. Ceramics include "high quality early [sic] Islamic glazed wares and a significant quantity of Yemeni wares" (Thomas and Masser 2006: 138–9).¹⁷ A single Arabic letter has been published from this context, bearing the name of the same person whose name appears on most of the documents found in the University of Chicago excavations at the Sheikh's House, Sheikh Abu Mufarrij (Regourd forthcoming).¹⁸

Traces of domestic activity are also seen in Trench 3 (Bridgman 2006), and possibly in Trench 4 (Blue 2006), Trench 2B (Copeland 2006: 124), and Trench 13 (Agius and Masser 2006). An animal pen containing tethering pegs and quantities of dung, camel skulls, and goat hair was excavated in part of Trench 2B (Copeland 2006: 124). About 15 m north of Trench 2B, Trenches 2A and 2D contained a poorly preserved house.¹⁹ Domestic activity is confirmed by cooking pots and hearths, while small-scale leatherworks is indicated by over two hundred fragments of leather in one locus of Trench 2D, "including a variety of workings, patches and marks." Leather finds were also frequent in Trench 2A (Flatman and Thomas 2006: 162–63; Poppy 2006).

Along with the leather works, a possible textile dyeing and fulling works has been uncovered in Trench 2C, in its last phase of use (Poppy and Flatman 2006: 166). Industrial activity of an unclear nature was detected in Trench 16A (Blue, Beadsmoore,

¹⁷ The ceramics are not likely to be "early Islamic," as the online ceramic reports by Southampton give no indication of early Islamic pottery found in these excavations, so perhaps the authors mean "early" as in Ayyubid, rather than Mamluk.

¹⁸ I am grateful to Anne Regourd for discussing her work on the Quseir documents with me.

¹⁹ Several pieces of paper with Arabic script were also found (Poppy 2006: 168).

and Phillips 2006) containing an ovens or kiln, pits filled with ash, mudbrick basins, pieces of furnace lining, and burnt artifacts (Blue, Beadsmoore, and Phillips 2006: 111).

A possible caravanserai or *wikala*, or even a series of small shops, underscores Quseir al-Qadim's focus on trade. About 20 m south of the Merchants' Houses a long narrow limestone-walled building comprised of a series of sixteen small rooms of identical size was excavated in Trench 9 (Blue, Beadsmoore, and Phillips 2006).

Trench 5, northwest of the Sheikh's House may contain an institution of the town, and if so the only one excavated to date. The building is relatively large and well-built of stone or mudbrick walls, with stone or brick floors, painted plaster, and a carved limestone screen. Some undisclosed quantity of paper documents were recovered, including one dated AD 1300 (Beadsmoore and Walsh 2006). Ceramics include many glazed and imported wares like those found in domestic Structure 15 (Thomas and Masser 2006).

The University of Southampton also replicated the University of Chicago's findings in the eastern part of the site. Trench 1, 20 m northeast of the University of Chicago's "Eastern Area" (E18–F19) contained "a series of multi-roomed buildings" aligned northeast-southwest (Phillips 2006). The plan is more rectilinear than that of the Eastern Area, however, and there is only one phase of occupation in contrast to the successive reuses of trenches E18–F19. Northeast of this Trench 1A expanded the University of Chicago's trench A22d to complete excavation of the possible shrine and at least eighty burials. Most of the burials appear to be part of a mass grave, or are possibly individual burials made all at the same time (Macklin 2006). The Southampton team also detected the same difference in ceramic assemblages from the central part of the site, showing that the beach settlement is later in date (Bridgman 2002).

The University of Southampton published preliminary reports of each season on the department of archaeology's website (http://www.arch.soton.ac.uk/Research/Quseir/), and volume one of the preliminary reports has just come out in print (Peacock and Blue 2006). This volume contains overviews of the regional survey and excavations of the Roman and Islamic towns and harbors, while future volumes will concentrate on small finds, epigraphy; and the burial grounds.

c. Ongoing Work

Analysis of the finds from both archaeological missions is ongoing. Li Guo continues his work on many of the smaller fragments of documents from the University of Chicago excavations, and Dionysius Agius and Anne Regourd are working on the Arabic texts from the University of Southampton excavations (Agius 2005; Regourd 2004; forthcoming). Most of the letters excavated by the University of Southampton were found in trash pits and dumps and cannot therefore be connected with a specific occupational area at the site (Regourd, personal communication, April 2006).

B. THE SHEIKH'S HOUSE: A THIRTEENTH CENTURY DWELLING AND BUSINESS

Excavation was begun on the area now known as the Sheikh's House in 1978, with a single trench revealing what is now referred to as Room B of the South House. Excavations were resumed in this trench in 1982 and it was expanded to include three nearby trenches. The full extent of the houses and most of the storerooms were uncovered at this time.

The Sheikh's House is a domestic/mercantile complex sitting atop a low rise which overlooks an area of mud flats adjacent to the shore of Quseir bay. The complex consists of two adjoining houses, their associated storerooms, and a passageway or narrow courtyard that provides access to both the houses and storerooms. The arid environment at Quseir al-Qadim allowed for preservation of a wide range of artifacts, including wood, leather, fiber, basketry, floor matting, bundles of reeds (for roofing), cloth, paper and plant matter, ceramic, glass, and stone, and included several hundreds of fragments of letters and documents written in Arabic on paper. Although this is not a unique circumstance in Egyptian archaeology, the extensive preservation of artifacts is rather remarkable in Islamic studies generally, and allows a rare opportunity to study written texts in their material contexts. Even more unusually, it affords us the exciting chance to reconstruct nearly completely the living contexts of the occupants of the Sheikh's House not only from archaeology, but in their own words.

1. LOCATION AND LAYOUT

Excavations have revealed that the extent of the Ayyubid-Mamluk town was rather large, extending not only over the former coral reef but down into the silted-up Roman harbor (Peacock and Blue 2006: 60). The Sheikh's House sits approximately in the center of the site, on the upper terrace in a neighborhood of other well-built houses of the period, which include the Merchants' Houses excavated by the University of Chicago (Peacock and Blue 2006: 6; Whitcomb and Johnson 1979: 49–56). Orientation of the town buildings is not uniform and reflects an interest in adapting to local conditions rather than imposing new organization. This is seen primarily in building strong north walls to protect against the prevailing north winds, which is a feature of the Sheikh's House, but occasional reuse of Roman walls as well (Whitcomb and Johnson 1979: 37). The University of Southampton's work to delineate the extent of the Islamic harbor indicates that the Sheikh's House would have lain about 250 m northwest of the shore of the harbor, and only slightly farther from the sea itself (Peacock and Blue 2006: Figs. 1.2, 4.14), perhaps explaining the address "to the shore of Quseir" found in many of the business letters from the house (Guo 2004: 14, 157, 166, 174, 176, 198, 200, 239, 245–

46, 250, 252). David Peacock surmises entry to the settlement must have been from the north, over the high ground rather than in the *sebakh*-filled Roman harbor at the south and west (Peacock 2006: 9, Fig. 2.1). Martha Prickett identified a footpath in this direction that eventually leads to the Wadi al-'Anz or the Wadi Nakheil, the main routes to the Nile Valley (Prickett 1979: Pls. 77, 84). Few streets or lanes have been uncovered, however, and the formal layout or grid of the town is not yet known. Information in some of the excavated documents indicate that institutions existed in the town that have yet to be discovered: the mosque, and municipal and religious law courts.

The two adjoining houses comprising the Sheikh's House are each on the "bayt" plan consisting of one large living room (a *majlis*) with two smaller rooms adjacent.²⁰ The houses must have had usable space on the roof, as each contains a stairway with at least one wooden tread preserved. Many of the walls are built on limestone foundations with mud brick upper courses, although some have upper courses of limestone and coral block, and are preserved to a maximum height of about 1.5 m.²¹ The houses do not

²⁰ Houses of similar plan although earlier in date have been excavated in the Mahra quarter in Fustat by K. Sakurai and Mutsuo Kawatoko (Kawatoko 2005b: Fig. 2; Sakurai and Kawatoko 1992: Pl. II-3-1). Fustat-C houses also have some similarities to the Quseir al-Qadim houses in their use of varied construction materials and number of rooms, which is two or three, laid out in a linear fashion, but differ largely in the linear plans and having latrines in the front room, and plumbing systems even in the second stories (Kubiak and Scanlon 1989: 11–31, Plan I). Some similarity of plan can also be seen in buildings inside the Raya/at-Tur fort in the Sinai, dated ninth to eleventh centuries, although some of these units may be shops rather than houses, and not all of the relationships are clear (Kawatoko 2003: 2–3, Pls. 8–9).

The term *majlis* is used in the mostly Fatimid and Ayyubid documents of the Cairo Geniza to describe the main living room of a house, while the main floor is referred to as a *qa'a*. The *majlis* was often flanked by smaller accessory chambers (Goitein 1983: 63–70).

²¹ The use of multiple types of building materials is seen at other Red Sea port sites. At Athar, for example, a ninth to eleventh century port site on the Yemeni coast in the Tihama plain, roughly-shaped coral block, mud brick, fired brick, and local sandstone were all used in the same walls (e.g., Zarins and Zahrani 1985: 73). In the similarly dated fort at Raya/at-Tur, some buildings were compsed of both coral-block walls and mud brick walls (Kawatoko 2005a: 5). Survey of the large buildings at 'Aydhab indicate they were built of unshaped coral blocks with mud mortar, but excavations may show use of additional building materials (Paul 1955: 67).

connect directly, but each is entered from the same corridor (D) that also provides access to a row of storerooms across from the houses, referred to as *shunat* (singular *shuna*) after the Arabic documents found on site.²² The discovery of two wooden keys found beneath the brick threshold at the entrance to one of these storerooms, as well as a wooden lock in a storeroom secondary deposit (Hiebert 1991: 157), indicates the stored goods sent to the shore of Quseir were indeed kept "in a safe place" as requested by at least two of the senders of goods in the shipping notes (Guo 2004: 143, 162).

The North House is oriented north-south, with the large living room (C) at the north and the two smaller rooms (A and B) to its south (Figure 4). An add-on room, E, lies west of Room C and appears to have had a separate entrance outside the house; it was likely built after the first phase of occupation. The South House is oriented east-west and adjoins the north house along its southern wall; the two smaller rooms (A and B) lie on the western end, and the large living room (C) on the eastern end. It is entered at the south end of Corridor D through a door with a wooden threshold which leads into a small *dihliz*, or entrance vestibule, F.²³ This vestibule gives entrance to living room C to the west, to *Shuna* F to the east, and to the roof via a staircase straight ahead. Behind the

²² Compare the terms for storerooms found in urban houses described in the Cairo Geniza documents: *matmura* (an underground room or cellar), *khanduj* (a cupboard-like compartment), and *makhzan* (a regular, usually unroofed storeroom). The *makhzan* could also be a separate building, and was often used for habitation as well as storage (Goitein 1983: 74–75).

The storerooms measure anywhere from 4×2 m to 4×5 m. The houses and storerooms have previously been described in an article on the contextualization of the block-printed textiles (see Burke and Whitcomb In press).

²³ Wooden thresholds are found in other domestic structures of the Ayyubid period found on the site (Copeland 2006: 124; Whitcomb and Johnson 1979: 51, 53). Compare wooden doorsills in Fustat-C, occupation of which is dated eighth to eleventh centuries (Kubiak and Scanlon 1989: Figs. 13, 34), and inside the fort at Raya/at-Tur, which was built in the sixth century and used until the tenth century AD (Kawatoko 2003: Pl. 23:3).

Dihliz is the term for entrance hall or vestibule used in the Cairo Geniza documents, which sometimes contained a staircase leading to the upper floors (Goitein 1983: 62–63).

stairs is another small room, D, which held a hearth, but entrance to this room is unclear. The houses do not directly communicate.

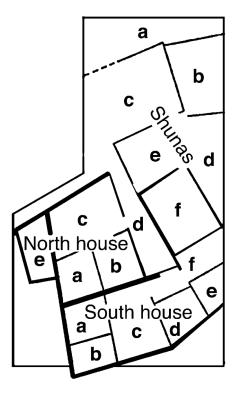


Figure 4. Sketch Plan of the Excavated Area and the Walls of the Sheikh's House (Courtesy D. Whitcomb)

Shunas E and F lie opposite the North House and are entered off Corridor D. *Shuna* F is immediately adjacent to and communicates with corridor F, which extends from the vestibule of the south house. In its second phase of use *Shuna* F extended all the way into room E of the South house; in the course of excavation it was noted that the two walls that once delineated the north side of room E and the north side of Corridor F lie under a plastered floor, and thus represent an earlier partitioning of the space that was removed during the main occupation of the Sheikh's House.

Shuna C lies directly north of Shuna E, and Shuna B is adjacent to the east. As no trace of a western wall was discovered for this room (Shuna C), it is to be interpreted as

an open courtyard. Excavations of the eastern extent of *Shuna* B were never completed so it is unknown whether it also was a courtyard open to the east, or walled. Its northern Wall A was built over a layer of floor matting, and abuts the eastern end of Wall C and the northern end of Wall D. Wall B does not connect fully with the southern end of Wall D. Thus it appears *Shuna* B was built after *Shuna* C.

The full extent of *Shuna* D, directly east of *Shunas* E and F, is not known because the eastern extent of it was never excavated. The frequency of finds within this space suggest it could be an indoor space and not external to the complex. It is not clear that any of the storerooms were roofed, as few ceiling or roofing mats were found in the excavations.

2. EXCAVATION OF THE COMPLEX

In 1978, the first season of excavations, the site of Quseir al-Qadim was gridded in 20 \times 20 m squares, numbered 1–23 from west to east and lettered A–S from north to south. Each 20 \times 20 m grid square was further subdivided into four 5 \times 5 m trenches, designated by lower case letter a–d clockwise beginning with the northwestern square. Within each 5 \times 5 m trench, for example K9b (the northeastern square in the 20 \times 20 grid K9), the excavated units, or loci, are numbered from 1 to infinity: K9b-1, K9b-2, K9b-3, etc. (Whitcomb and Johnson 1979: 11), and the walls are lettered beginning with A, but not prefixed with the trench number. The Sheikh's House is located in grids J9, J10, K9, and K10, but the designation of the 5 \times 5 m trenches was not strictly followed in the course of excavations, especially when a trench was extended, and often the same sequence of locus numbers would be kept as in the previous trench. Floors were usually not assigned separate locus numbers, but given the locus number of the debris lying atop it, or less often, of the fill below it. The excavation of the Sheikh's House complex was accomplished in two seasons. A single 5×5 m trench, K9b, which contained Room A of the South House, was completely excavated in 1978. The remainder of the complex was excavated in the winter of 1982 over a period of about three weeks. Twelve 5×5 m trenches, plus western extensions of the two K9b trenches and a J9d trench, and an eastern extension of a K10a trench, were laid out over the area.

The account of the excavations that follows is by room rather than by trench, for the sake of clarity. It is based primarily on an unpublished report of the 1982 season by Donald Whitcomb, but also makes extensive use of trench supervisors' final reports, the field notebooks, locus sheets, locus matrices, and record sheets for artifacts. The accompanying site plan (Figure 5), provided by Whitcomb, is a block drawing showing outlines of walls, mud brick staircases, and mastabas. It includes trench and locus numbers; the number of the main floor for each area is shown in bold. Stippled areas represent finds of ash and/or charcoal, circles represent pits, and dark lines are wooden boards. Dotted trench lines and the letters beside them provide a key to the section drawings. Section drawings are dispersed throughout the text according to the area discussed.

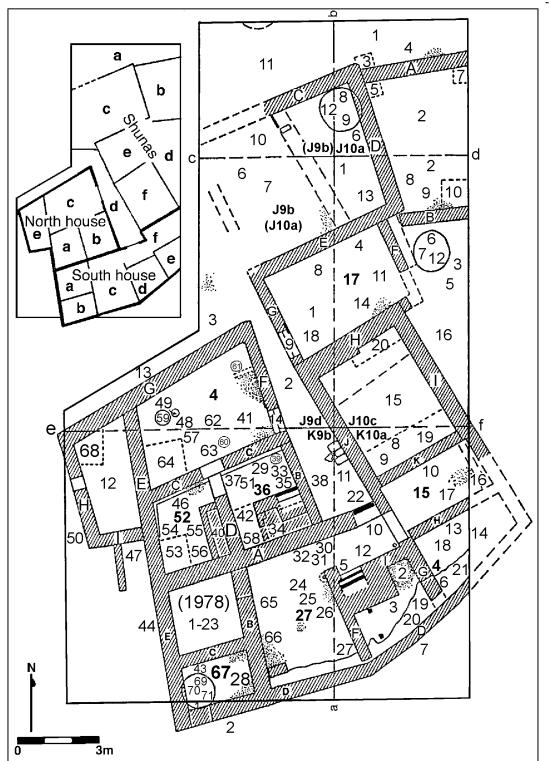


Figure 5. Block Plan of the Sheikh's House Showing Trench and Locus Numbers (Courtesy D. Whitcomb)

a. The *Shunas* (Storerooms)

Area A lies outside the Sheikh's House proper, to the north, but as its boundaries were not excavated, and the density of finds was similar to that of other storerooms, with an average of 1.2 pottery sherds per cubic meter,²⁴ it may be another *shuna*. It stretches across the northern portions of two trenches, J9b to the west and J10a to the east, and is bounded by east-west walls A and C at the south and by baulks to the west, north, and east. Deposition here was shallow and consisted of sand and gravel 20-27 cm above bedrock. In the western trench removal of locus J9d-11, which contained Greek papyrus fragments, revealed a concentration of organic debris against the northern baulk, possibly the edge of a large pit. In the eastern trench, after excavation of Locus J10a-1 revealed a dark organic layer beneath it, a 50×50 cm test trench was laid at the intersection of walls A, C, and D, excavated as Locus J10a-3. The latter two walls were found to rest on bedrock, while Wall A was built over this organic matter, which proved to be a layer of matting and fiber. The test trench was expanded and the remainder of trench J10a was excavated as Locus J10a-4, revealing a small hearth against the north face of Wall A. Finds in these loci included fragments of textiles, rope, matting and fishnets, leather, worked wood, metal nails, ninety date pits, and 609 sherds of pottery.

Shuna B is south of the eastern portion of Area A and is bounded by Wall A to the north, Wall D to the west, Wall B to the south, and the baulk to the east. Wall A of *Shuna* B abuts Wall D of *Shuna* C to its west, and Wall B of this storeroom does not join well with Wall D. Also, the aforementioned matting running under Wall A leads to the

²⁴ Compare an average of 2.1 sherds per cubic meter of excavated soil in *Shuna* B and 1.5 sherds per cubic meter in *Shuna* C.

conclusion that this storeroom was built after *Shuna* C. It lies across trenches J10a in the northern half and J10c in the southern half, and was excavated accordingly.

J10a-2, the surface layer of sand and gravel in the north half of the room, was equivalent to J10c-2 in the south half, although it was 15–20 cm deep in the north and only 10 cm deep in the south. In the south excavation of this locus revealed a small ash deposit, possibly a hearth, against the north face of Wall B. Loci J10a-2 and J10c-2 lay over organic materials similar to those in Area A. Two 50×50 cm test trenches were dug against the south side of Wall A at its eastern (J10a-7) and western (J10a-5) limits, which determined that the organic material ran all the way under Wall A, but was deeper in the western test, J10a-5.

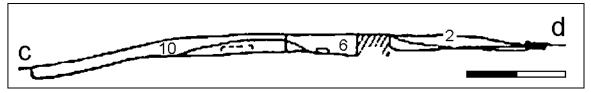


Figure 6. North Section of J10a, through *Shunas* B and C (Courtesy D. Whitcomb)

In the southern part of the trench locus J10c-2 was shallower than its counterpart in the north because it lay over an accumulation of debris piled up against Wall B, sloping downwards to the north. This debris consisted of laminations of matting and sand, excavated as Loci J10c-8, J10c-9,²⁵ and J10c-10. (J10c-10 was a test trench to probe against the wall.) The total depth from surface in this area was 30 cm. Although bedrock was not reached, the pinkish soil reached at the bottom of test trench J10c-10 seemed to indicate bedrock was not far below. It is possible that this room, given its

²⁵ This locus contained a tiny scrap of an amulet with only two lines of writing (see Guo 2004: 80, RN 985a). Another unpublished document (RN 984b) folded and tied with string is addressed to the *shuna* of Abu Mufarrij (Guo 2004: 2, Pl. 4).

informal structure built over matting, never had a deliberately built floor, but mats were spread out over the ground to use as flooring.

The remainder of the contents of these loci were identical to those in Area A, with the addition of two fragments of basalt grindstones, two small brushes (one a wooden toothbrush), a plaster plug, a bundle of yarns for weaving, a wooden bowl, a few scraps of leather, two Arabic ostraca, and Arabic letters. The addition of the basalt grinders and the yarns, as well as the presence of the hearth, indicates that this area was used for domestic activities as well as for storage.

Shuna C is an open area directly west of Shuna B and south of Area A. It is enclosed by Wall C to the north, Wall D to the east, Wall E to the south, and is unwalled at the west. The eastern portion of the room lies in trenches J10a to the north and J10c to the south, while the western portion is in trench J9d. The surface stratum here was as in the previous two rooms, sand and gravel to a depth of 10 cm, sloping down to the west. It was excavated as Loci J9d-6, J9d-10, J10a-6, and J10c-1. In the northern portion of the room excavation of this uppermost stratum, Locus J9d-10, revealed a mass of brick fall and a piece of wood. The brick fall (with bricks measuring $32 \times 15 \times 12$ cm) continued south into Locus J9d-6 and in the next layer below, Locus J9d-7, to bedrock. Locus J9d-6 also contained the only sherds of Chinese stoneware jars found in the Sheikh's House. In Locus J10a-6 a mass of burnt bricks and caliche (cement-like salt-hardened dirt) was unearthed that continued south into Locus J10c-13, below J10c-1. Artifacts found in association with the fallen and burnt bricks included a large quantity of Roman sherds and Greek papyrus fragments. Although a specific orientation of the bricks was not discernable, the excavators interpreted this feature as a possible Roman wall crossing the room from northwest to southeast. Some ash was found in the corner of this feature and Wall E.

Under Locus J10a-6 in the northeast corner of the room, a large round pit was discovered. It was excavated as Locus J9d-12 in the western portion, and Loci J9d-8 and 9 in the eastern portion. The pit is round at the top but with irregular walls and bottom, and reaches 96 cm to bedrock at its deepest part. It was found to have been dug before Wall D was built, and was filled with dark brown soil containing substantial quantities of chicken eggshells, chicken bones (over fifty fragments, Reese n.d.: 3), and Islamic artifacts, including a rectangular bronze coin (RN 681 in Locus J10a-9, Fatimid or Ayyubid in date), an inscribed ostrich eggshell, a large reconstructable glass jar, a glass cup with gold-leaf prunts, and a wooden lock that would have been used with a metal key (RN 504, see Hiebert 1991: 135, 57, Fig. 10). Locus J9d-12 also contained eight fragments of papyrus with Greek inscriptions RN 1161).

Finds in the upper stratum of the room contain the usual fragments of textile, wood, metal, ceramics, and glass, with the addition of a whetstone and two pieces of animal hide with the fur still on them.

Shuna D is south of Shuna B and east of Shunas E and F. This may be exterior to the house rather than another storage area. It was not completely excavated because the eastern portion fell outside the limits of the trench, so only a roughly triangular shape, a portion of its western half, is known. It is bounded by Wall B to the north, the baulk to the east, and walls F and I to the southwest. It falls within two 5×5 m trenches that divide the area roughly in half.

The top 10 cm in the northern part of the room, Locus J10c-3, was composed of wind-blown sand with some brick detritus. Below it, J10c-5 was a coarse layer of salty caliche 25 cm deep containing numerous fragments of textiles, paper, and other artifacts. Removal of this caliche revealed a mass of mud brick and stone along Wall F, which is the remains of either a mastaba or the upper portion of Wall F. This material had fallen

over a pit like that in *Shuna* C, 95 cm deep, and containing dark brown organic soil excavated as Loci J10c-6, 7, and 12. Locus J10c-6 was dense with matting and textiles and contained a fragment of a fiber brush; Locus J10c-7 was composed mostly of stone but also contained artifacts, including a wooden comb and toothbrush; and Locus J10c-12 was the final layer of soft brown dirt in the bottom of the pit containing only a few sherds and fragments of nails along with a few scraps of leather, one braided. This pit lines up with the pit in *Shuna* C and with the possible pit in Area A. Whitcomb postulates that this is a line of pits dug for trees or shrubs in the Roman period, and re-used as trash pits in the Islamic period, aligned with the possible Roman wall that runs north-south across *Shuna* C, and other concentrations of brick masses in rooms D, E, and F. He notes that similar stone-lined pits were found in another domestic/mercantile complex at Quseir al-Qadim in area P7–P8 (Whitcomb and Johnson 1979: 53, Pl. 17).

In the southern half of the room Locus J10c-16 was excavated from the surface about 10 cm deep. It contained a very large quantity of brick fall along Wall I to the west, and artifacts of ceramic, textile, matting, rope, glass, and wood.

The density of finds in this area was on the low end of the scale, 0.99 sherds per cubic meter compared to 1.2 sherds per cubic meter in Area A, 1.5 in *Shuna* C, and 2.1 in *Shuna* B, therefore *Shuna* D may not have been a formal storage area.

Shuna E is directly south of *Shuna C*, the storeroom at the northernmost end of Corridor D, across the corridor from Room C of the North House. *Shuna* E is enclosed by Wall E to the north, Wall H to the south, Wall F to the east (all stone walls founded on bedrock), and Wall G to the west (stone founded on fiber and dirt above bedrock). Wall F does not continue all the way south to meet Wall H, but traces of limestone found here suggest this opening was once filled in or reconstructed. In addition, Wall F abuts Wall E to the north; this and its placement suggest this Storeroom was once a three-walled room.

Its western wall, G, abuts Wall H of *Shuna* F; *Shuna* F was built before *Shuna* E. The depth of accumulation to bedrock in this room was 20–25 cm.

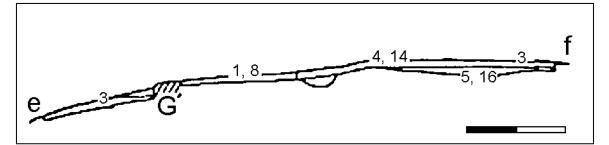


Figure 7. North Section of J9d, through *Shuna* E and the North End of Corridor D (Courtesy D. Whitcomb)

Loci J9d-1 and 8 comprised the sandy surface layer in the western half of the room, and Loci J10c-4 and 14 were their equivalents in the eastern half of the room, 10–20 cm deep. Under Locus J10c-14 a small patch of baked brick was found, near the center of the room. Under Locus J10c-4, north of Locus J10c-14, another layer of sand and matting, Locus J10c-11, reached 10–15 cm to bedrock and to a concentration of caliche in the northeast corner. This locus contained an Arabic letter on paper, RN 988 dated 633/1235.

In the southern half of the room Locus J10c-17 lay under Locus J9d-14 and proved to be the debris sitting on top of a floor that crossed much of the room.²⁶ It contained a half dirham (RN 696) dating AD 1242–49, and also most of a glazed lamp, sitting under a large piece of matting that lay on a hard-packed surface. The surface was much deteriorated and had a burned patched containing carbonized grain. A 1.5×1.5 m

²⁶ The excavators suggest that the height of the bedrock in this part of the compound led to the eroding away of the floor in this room. They suggest that the surface that remains, the highly eroded J10c-17, was a surface used in construction of the room rather than a living surface, which would also explain why Wall G is founded on it. This might also explain the height of the brick sill, which seems intended for a floor higher than the one extant. This interpretation has not been adopted here, however.

test trench, Locus J10c-18, was dug through this floor in the southwest corner. A large sack made of matting under the floor was removed and under it a thin layer of sand resting on bedrock, containing a fairly high density of small finds and date pits, the only evidence of another phase of use in this room.²⁷ The test trench also revealed a doorway in the southern portion of Wall G, with a piece of wood remaining against the wall to the north of it. The high brick sill was dismantled as Locus J9d-9, revealing two wooden keys, one of which is inscribed in black ink, possibly reading *miftah al-hajj baraka*, "key of Hajj Baraka" (Hiebert 1991: 157, Fig. 10). It also contained a fragment of a debased silver coin (RN 687), only identifiable as Islamic. Also in the southern portion of the room a concentration of ash, possibly a hearth, was discovered against the eastern end of Wall H.

Shuna **F**, south of *Shuna* E, is a long hall that runs north-south, extending to and connecting with the eastern end of the South House. It is bounded by walls J to the west, H to the north, I to the east, and partly by Wall D to the south. Stone walls J and H are contiguous, built at the same time. Wall I is also of stone. The northeastern two thirds were excavated as part of trench J10c, and the southwestern third as part of trench K10a. The southeast corner of the room was eroded away, and excavation outside the bounds of the trench here revealed only a thin layer of sand on bedrock, Loci K10a-14 and 16. Although they contained very few artifacts, one complete rope coil was found in Locus K10a-14.

²⁷ The sack was likely a container for shipping flax or grain. Coarse sacks called *tillis* used for grain are mentioned in the Cairo Geniza documents (Goitein 1967: 333), and the term is used to refer to sacks for shipping flax in one of the Sheikh's House documents (RN 1004c) from Phase IIb. This letter also notifies the recipient of a shipment that includes three empty *shuwalat*, another term for sack (sing. *shuwal*, see Guo 2004: 203).

In the northern two-thirds of the room Locus J10c-15 was excavated to a depth of 47 cm from the surface, down to a plaster floor 3 cm thick. The plaster extended up the western face of Wall I to the east, the eastern face of Wall J to the west, and the southern face of Wall H to the north, at its west end. The surface of the plaster on the floor and walls contained loose pieces of fiber pressed into it. The debris in this room consisted mostly of wind-blown sand, with much brick fall mixed in with it in the southern half of the room (brick sizes were $23 \times 17 \times 6$, $23 \times 11 \times 5$, and $22 \times 8.5 \times 8$). A concentration of paper with Arabic writing was found in the west of the room, against Wall J. Other finds included the usual pottery, glass, rope, wood, and textile, including some blue-dyed fibers ready to be woven into cloth (wooden spindle whorls were found in nearby contexts, see Hiebert 1991: 150–52). A 2 \times 0.5 m test trench placed in the northeast corner of the room against walls H and I produced 30 cm of sand below the plaster floor, Locus J10c-20, which lay over bedrock. This locus contained numerous pottery sherds and artifacts, including fragments of a basalt grindstone, a piece of wood with bone inlay (perhaps from a piece of furniture), a wooden toothbrush, a string bobbin, and a bundle of yarns for weaving.

In the southwestern corner of the room the uppermost layer of sand and brick fall was excavated as Locus K10a-8, 10 cm of sand blown over Locus K10a-9, a 45 cm-deep layer of brick fall on top of the floor, which was covered with matting in this part of the room. Locus K10a-9 revealed another collection of paper with Arabic writing, and a nearly complete basket along the east face of Wall J.

A 1×3 m test trench was laid across the room in the area of Loci K10a-8 and 9 to the south, along a low wall the top few cm of which had been revealed by Locus K10a-9. The trench produced 30 cm of sand, Locus J10c-19, down to bedrock, and also revealed more of Wall K, parallel to Wall H, but covered by the plaster floor. This

represents an earlier partitioning of this space, later dismantled and plastered over in order to enlarge the room.

b. Areas outside the North House

This describes the area southwest of *Shuna* C and immediately north of the northernmost wall of Room C of the North House, and also excavations immediately west and south of room E of the North House. The northern area lies just outside the main entrance to the complex, Corridor D. The corridor, which is open at the north end, represents the heart of the Sheikh's House as it contains the entrances to both houses and to *Shunas* E and F. The area outside it would have seen all of the traffic of those coming to do business with the sheikh, and must contain a mix of debris from the house and from the houses of other buildings nearby. Locus J9d-13 is a narrow strip of soil half a meter wide and seven meters long that was excavated along the north face of Wall G, the northern wall of the North House. It is contiguous with and west of Locus J9d-3, which is in the corridor proper. Locus J9d-13 is 10–20 cm deep from the surface of the topsoil, and the quantity of finds was very rich compared to J9d-3 (2.6 sherds per cubic meter in Locus J9d-13 versus 0.3 in Locus J9d-3), which indicates it was a less frequently-traveled area than that immediately north of Corridor D. Thus the approach to the house was not from the west along the northern wall, but from the north.

West of Wall H, outside of Room E, Locus K9b-50 was $300 \times 100 \times 35$ cm of caliche and brick tumble, revealing few artifacts. Southeast of this, south of Wall I and west of Wall E, outside Room A of the North House, excavation of K9b-47, a layer of sand and caliche 70 cm deep revealed a line of stones extending south 1.5 m from the middle of Wall I.

c. The Corridor (D)

This area is a long north-south passageway between the two building complexes, the houses to the west and south, and the storerooms to the east. It is bounded by walls F and B to the west, A to the south, and J and G to the east, and is open at the north end. It extends over three trenches, J9d, K9b, and K10a, and was excavated accordingly.

At the northern end of the corridor Locus J9d-3 was excavated. This locus extends outside the corridor proper around the corner to the area just north of the eastern end of Wall G, the north wall of the North House. This deposit consisted of wind-blown sand and brick tumble 10–30 cm deep to bedrock (which slopes here to the west), containing a relative paucity of small finds. To the south of this Locus J9d-2 was excavated as the uppermost stratum in the corridor proper, equivalent to J9d-3. However, J9d-2 reached 80–90 cm down to bedrock and was full of fallen bricks of varying sizes, from $24 \times 12 \times 5$ cm to $21 \times 11 \times 6$ cm. Excavation of this locus revealed a doorway, the entrance to Room C of the north house in the southern end of Wall F, which was excavated as Locus J9d-14. It appeared that the doorway had been cut crudely through the mud brick wall.

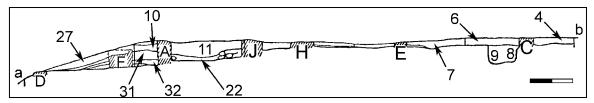


Figure 8. West Section of J10c, through *Shunas* C, E, and F, Corridor D, South House Vestibule F, and South House Room C (Courtesy D. Whitcomb)

Locus J9d-4 is contiguous with Locus K9b-38 to its south, the top 5 cm of sand above which had been removed as Locus K9b-29, and K10a-11 to the east of K9b-38, over which 10 cm of wind-blown sand had been excavated as K10a-8. These three locus designations of the build-up of erosional debris in Corridor D contained an abundance of artifacts, paper documents,²⁸ matting, basketry, date pits, and other fragments of fruits and nuts, which had blown in and collected quite deeply in this narrow space (1–2 m wide). The order of deposition here, with matting being close to the floor, covering chicken bones and organic debris like eggshells and garlic cloves, along with paper, and debris from fallen walls lying on top of it, may indicate the passageway was roofed. At the southern end of the corridor excavation of Locus K10a-11 revealed three large stones placed against Wall J, with a fourth stone lying adjacent to the west. Locus K10a-11 lay over a compacted layer of sand, gravel, and floor plaster 5–15 cm deep to bedrock, interpreted as a badly damaged plastered floor at this southern end of the corridor, in front of the entrance to the South House, and excavated as Locus K10a-22. This floor, although badly deteriorated, is a continuation of the floor of Locus K9b-36 in Room B to the west.

d. The North House

Room C is the largest living room of the North House and the northernmost room; it was the best-preserved room in the complex. It is bounded by Wall C to the south, F to the east, G to the north, and E to the west. Wall G is a large stone wall that angles north following the line of the bedrock. Wall F is a mud brick wall on a few courses of flat stones, also founded on bedrock, but Wall C is mudbrick founded on large stones sitting on dirt over bedrock. Wall E, like G, is wide and stone-built on bedrock. All the walls were founded below floor level. Excavation in this room began with Locus J9d-4 in the largest, northeast portion of the room, Locus K9b-41 in the southeast corner (below Locus K9b-29), and Locus K9b-48 in the southwest corner. This stratum, which sloped in from the east down to the west, was composed of 35–105 cm of caliche (in the top 15–20

²⁸ Some of them were wrapped around eggshells, indicating the trashy nature of the deposit.

cm) and deteriorated mud brick, mixed with large pieces of ceiling matting and loose bundles of reeds, which were especially prevalent in Loci K9b-41 and 48. Food remains in these loci included four chicken bones (Reese n.d.: 3, 5-6), twenty-one hazelnuts, and much lesser quantities of walnuts, pistachio, pomegranate, apricot, citrus, and a piece of gourd (See Tables 19, 21, and also Wetterstrom n.d.: Table 2). Two dated letters were also unearthed here, RN 967b from Locus J9d-4 dated 612/1215 (Guo 2004: 245-46), and RN 1017g from Locus K9b-48, dated 626/1228 (Guo 2004: 3). In the center of the room, just above the floor level, sat baskets and a thick coil of rope in a bundle. Excavation of this uppermost layer revealed a semi-circular hearth in the northeast corner against Wall F, adjacent to a narrow brick wall perpendicular to Wall F, 50 cm long and one brick wide, on the other side of which was a small pit 40 cm in diameter and 5 cm deep, K9b-61 (initially labeled J9d-5). The pit was filled with ash, perhaps from regular cleaning of the hearth, and also contained a wooden stake. In the northeast corner of the room near pit K9b-61 a large flat grindstone and a concentration of leather, possibly the remains of a leather waterskin or a batta container (discussed in Chapter Four), were found. To the east in front of the threshold a mat was found with several fragments of celadon pushed underneath it.

Below these loci the hard floor of mixed earth and plaster (the bottom of Locus K9b-48) extended almost all the way across the room, although it had eroded away 35 cm from Wall E to the west. A wide, shallow pit, Locus K9b-49, 75 cm in diameter and 12 cm deep had been dug into this floor in the northwest corner of the room. The pit contained dark brown soil and a fairly dense concentration of small finds, including an Arabic letter on paper dated AD 1224–31. 10 cm of plaster and mud brick detritus below the floor of K9b-48, excavated as Locus K9b-57, revealed another floor, plastered, but badly damaged. The debris sealed between the plaster floors was dense with small finds

including a fishing net and several wooden domestic objects (such as a spindle whorl and a comb) and also contained a late Fatimid "black" dirham (RN 699). In the southeast corner near Wall C another pit only 40 cm in diameter and 5 cm deep was excavated as Locus K9b-60. It proved to be a seep hole in the caliche.

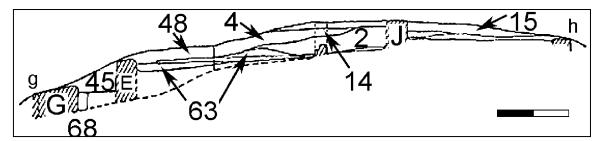


Figure 9. North Section of K10a, through North House Rooms E and C, Corridor D, and Shuna F (Courtesy D. Whitcomb)

Below the surface of the upper floor (K9b-48) and adjacent to pit K9b-49, another pit or lens, 60 cm in diameter and 25 cm deep, was excavated as Locus K9b-59. It was lined with mats and also contained significant quantities of inorganic (glass, pottery) and organic small finds (rope, matting, worked leather and wood)²⁹ and organic matter (leaves and seaweed), but almost no dirt. The pit had been dug into the fill of the upper floor before the surface of mixed plaster and earth was laid, and cut through the plaster of a lower floor at the bottom of Locus K9b-57.³⁰ The lower plaster floor, at the bottom of

²⁹ The worked wood included an incised acacia bowl and a carved lid of unidentified wood (RNs 511–512, see Hiebert 1991: 143, 45, 47). Most of the wood from the Sheikh's House is Egyptian rather than imported (Hiebert 1991: 141).

³⁰ This bears some resemblance to the storage pits found in contemporaneous Late Christian Qasr Ibrim, in Nubia. Small pits like this, dug into floors of houses to store valuables, were occasionally sealed by later floors. Larger storage pits of 1 m diameter and 1–1.5 m depth located outside houses were usually lined with several pieces of basketry or matting (W. Y. Adams 1996c: 63–64). Those excavated in the houses sometimes contained the same assortment of debris as those from the Sheikh's House. For example, storage pits in Rooms 7 and 8 of House 763 together yielded "2 objects of stone, 2 of metal, 3 of mud, 20 of pottery, 21 of glass, 61 of wood, 27 of leather, 15 of basketry and cordage, and 2 of textile" in addition to 1,279 paper fragments with writing in several languages, all "simply part of the refuse deposited in the pits" (W. Y. Adams 1996c: 45).

Locus K9b-57 and the top of locus K9b-63, was quite deteriorated and also had eroded all around the perimeter, perhaps due to the slope, and did not meet either Wall C or Wall E. The excavators suggest that when the plaster of K9b-57 became too deteriorated a thicker plaster floor was laid over both the floor itself (the bottom of Locus K9b-48) and even the trash lying on it (K9b-59).

Fill beneath the lower plaster floor was 20 cm deep to bedrock in the eastern half of the room, dug as K9b-62. In the western half of the room this fill underneath K9b-57 was much deeper as the bedrock dropped sharply to the west. This western locus, K9b-63, contained a square cut silver coin with a date range of AD 1246–1248 (RN 694). It was only 12 cm deep to a deposit of rope, palm fiber, matting, fine textiles and many poorly preserved paper documents (which were found in a clump against Wall E to the west) including a block-printed fragment of the Qur'an. This dense deposit may represent an earlier surface upon which all these objects accumulated and the floor of K9b-57 was built, although the excavators were not certain of this interpretation. The eastern half of this surface could have been the bedrock itself, as two 12 cm long sticks were found stuck upright in the bedrock, their purpose unclear. A test was done here in the southwest corner of the room underneath K9b-63; the 1.5×1.5 m probe produced 80 cm of soft brown sand and pebbles, Locus K9b-64. It contained few artifacts, but the pebbly upper part may have been constructional fill for the possible surface of K9b-63. It ended at a layer of relatively clean, moist sand several centimeters above bedrock.

The south wall, C, proved to have an opening in the center which provides entrance to both Rooms A and B. The main entrance to Room C, in its southeast corner in Wall F, was discovered during the excavation of Corridor D and was treated in that section.

Room A is the southwestern-most room of the North House, south of living room C and west of Room B. It is bounded by Wall C to the north, Wall D to the east, Wall A to the south and Wall E to the west and is entered by the aforementioned opening in Wall C and Wall D. Wall C is a mud brick wall founded on stones laid on dirt, as it is in the eastern extent of this wall in Room B. Wall D is a mud brick wall partitioning Rooms A and B that was founded on the lowest floor in this room. As in Room C, excavation began with Locus K9b-29, a 5 cm-thick layer of fine, compacted light brown brick detritus in the southeast corner, and below that Locus K9b-40, a 35–40 cm-thick layer of caliche and brick detritus also in the southeast corner. This revealed a sturdy mastaba, or bench, built of mud bricks measuring $26 \times 12 \times 6$ cm along Wall D and preserved 18 cm high. It also revealed Locus K9b-46, a layer of softer brick material mixed with trashy organic debris (including chicken bones, date pits, citrus rind, and an almond: see Tables 19, 21, and Wetterstrom n.d.: Table 2) in the remainder of the room (northwest of K9b-40), 5–25 cm deep down to a possible compacted surface of earth mixed with plaster. Up against the south wall of the room a concentration of paper and organic debris represented a wind-blown deposit within this locus. (Wind-blown deposits were also features of the passageway D and Locus J9d-4.) Removal of Locus K9b-40 showed that the south face of Wall C was plastered, and that this plaster and the wall behind it had been burned at the east end of the wall; the burn mark had subsequently been replastered. Bricks in the wall measured $24 \times 12 \times 6$ cm. A concentration of ash was found here on the floor and excavated as Locus K9b-52. The ash continued across the room and down 35 cm to a lower plastered floor, which ran up against the mastaba; this room had clearly been badly burned.

In the southwest corner of the room a 1×1.2 m test trench was laid to probe beneath the plaster floor. Locus K9b-53, a layer of fine compacted brown dirt, contained an extremely dense concentration of sherds (23.8 sherds per cubic meter) 70 cm deep to bedrock, with greater concentrations of sherds and bird bones at the bottom of the locus, and must represent a dump or deliberate fill on which to build the plaster floor.

The plaster floor, about 3 cm thick, was removed in the remainder of the trench as Locus K9b-54, below which was a layer of caliche and sand 10–15 cm deep, containing a concentration of ash in the northwest corner. This deposit, containing a relatively high 4.9 pottery sherds per cubic meter (including numerous Roman amphorae as well as Black on Yellow glazed ware and turquoise glazed Marl 4 ware), was excavated as Locus K9b-55. The remains of a medicinal plant, the Jericho rose, were found in this locus, along with seven hazelnuts (Tables 19, 21, Wetterstrom n.d.: 3, Table 2). Excavation of Locus K9b-55 revealed that the mastaba was founded below the lowest floor level. A tall, roundbottomed handmade Nubia 2 jar was found buried upright in front of the mastaba, its rim broken off just under the plaster floor. The base of the pot sat about 12 cm above bedrock, in Locus K9b-56 below. The presence of this jar may indicate that the floor was used for a short while unplastered, as jars buried up to the rim are found in the floors of contemporaneous houses at Qasr Ibrim in Nubia, used for storage (e.g., Houses 177, 849, W. Y. Adams 1996c: 49, 57). Alternatively it may have been deliberately sealed under the plaster for safekeeping of its contents, as is seen in a storage basket containing durra grain at Qasr Ibrim (W. Y. Adams 1996c: 49), although no contents were reported for this jar.

Below Locus K9b-55, a loose brown layer of trashy fill 65 cm deep, Locus K9b-56, filled in the room above bedrock, which slopes down to the west. This locus contained only 3.7 sherds per cubic meter (a low density compared to Locus K9b-53), but it is contiguous with Locus K9b-53 and indeed both loci produced sherds from the same vessel (K9b56_14/RN 262 and K9b53_7/RN 269). The trashy nature of the deposit was emphasized by the presence of two whole fish in the debris.

The excavators interpret the lower floor, K9b-54, as the original floor of this room, in use concurrently with the mastaba. After a major fire (seen in the ash of K9b-52), the ash and debris were leveled to the top of the mastaba, where a new floor (K9b-46) of earth mixed with plaster was built. Below the lowest floor the extremely high density of finds suggests a trash dump against the northern wall of the South House, which was eventually leveled to build the earliest floor.

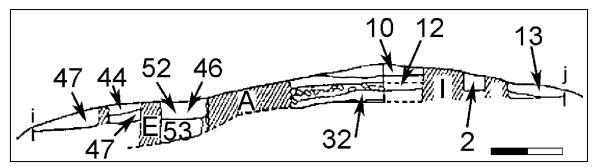


Figure 10. North Section of K9b, Right to Left through the North House Exterior, North House Room A, South House Room C, South House Vestibule F, and South House Rooms D and E (Courtesy D. Whitcomb)

Room B is east of Room A, and of roughly the same size. A doorway with a stone sill in Wall D leads from one room into the other. The room is bounded by Wall D to the west, Wall A to the south, Wall B to the east, and Wall C to the north. Wall A, sturdy and stone-built, is the only wall founded directly on bedrock: Wall D is of mud brick and founded just below the floor, Wall C, the upper courses of which are mud brick, has a large stone foundation that sits on dirt just above bedrock, and mud brick Wall B is founded on the floor of this room and is clearly a later addition.

The uppermost stratum of this room, as the southeast corner of Room A, was excavated as Locus K9b-29, a 5 cm-thick layer of fine, compacted light brown brick detritus which slopes to the south; it is a hard crust of caliche. Below this lay Locus K9b-

33, a hard, salty layer of debris similar to K9b-29, 10–15 cm deep, and level. Near the top of this locus in the corner of walls B and C were pockets of seeds amongst the brick fall and matting, and a leather pouch possibly containing carob pods was found as well. It contained food refuse in the form of four chicken bones and one bone of a sand partridge (Reese n.d.: 4-5). Excavation of Locus K9b-33 revealed a mass of brick fall in the northern half of the room, excavated as Locus K9b-35, which also contained two small bits of paper and the stone of a particular unknown fruit that is likely an import and is found in several other rooms of the Sheikh's house (Wetterstrom n.d.: 4). Removal of Locus K9b-33 also revealed Locus K9b-36, 50-55 cm of fine, compacted light brown debris down to the compacted earthen floor, which like K9b-33 contained matting and blocks of mud bricks along with faunal remains of nearly a whole chicken, and six bones from a crowned sandgrouse (Reese n.d.: 5), twenty-one hazelnuts, eight of the same unknown fruits as in the previous locus, and two fragments of pomegranate rind (Tables 19, 21; Wetterstrom n.d.: Table 2). A shallow pit was dug through the floor in the northeast corner of the room, excavated as Locus K9b-39 ($33 \times 42 \times 12$ cm) and containing a globular half dirham of al-Kamil Muhammad (RN 683), dating 1218-38, thirteen pottery sherds, one fragment of textile, three pieces of shell, six rope segments, and 157 date pits. In the northwest corner of the room, in front of the doorway, a concentration of organic matter appeared to be the remains of a doormat, and was excavated as Locus K9b-37 ($70 \times 50 \times 2-3$ cm). A test trench was dug below the floor of Locus K9b-36 to bedrock. Locus K9b-51 is a 52-82 cm-deep layer of compacted sand and gravel on a thin layer of natural soil above bedrock. Although it contains finds from every category, they are in low concentrations, and pottery is distributed at only 0.7 sherds per cubic meter. This locus could represent construction fill for the floor.

In the southern half of Room B excavation of Locus K9b-33 revealed a brick platform with stone facing on the north and west sides, and the brick fall south of it, Locus K9b-34. The platform is founded 15 cm below floor level, and contains a staircase leading south with two steps preserved, the lowest of which retained its wooden tread. The stone-faced portion is likely the pier that held up the upper portion of the staircase. Between the platform and Wall A to the south a mass of caliche and stone, Locus K9b-34, is interpreted as the collapsed arch from under the stairs. Locus K9b-42, a layer of caliche and brick fall in the southwest corner of the room, also extended 15 cm below the level of the floor and revealed that one course of Wall D mudbricks were below the floor of this room. Below Locus K9b-42 was K9b-58, first was taken to be a pit, but then realized to be a seep hole in the caliche. This area was not excavated to bedrock.

Room E is a long room west of Rooms C and A. It is bounded by Wall E to the east, Wall I to the south, Wall H to the west, and a western extension of Wall G to the north, all founded on bedrock. Excavation in this room yielded 40 cm of caliche and brick wall tumble, very difficult indeed to penetrate. This layer, Locus K9b-45, sloped down from east to west and likely contained material from Room C. It produced few artifacts, however (.06 sherds per cubic meter). Below it a 1.2×1.2 m test trench in the northwest corner of the room produced 40 more cm of caliche and mud brick debris to bedrock. Finds in this lower stratum, Locus K9b-68, yielded a greater concentration of small finds (.63 sherds per cubic meter), including a stone *mano*, a precursor to the pestle. The slope of the hill is sharply westward in this area and it is possible that the floor was simply eroded away, as none was found. It appears this room was accessed through an opening in the western exterior wall (H) rather than via Room C or A of the North House. The excavators suggest that this room may not belong to the original occupation of the Sheikh's House, but may represent a later construction making use of walls E and G.

e. The South House

Corridor/Entryway F refers both to the vestibule inside the entrance to the South House and to the area east of it extending into *Shuna* F, beyond the doorway into that storeroom. These two areas are treated separately here.

The vestibule bounded by Wall A to the north, Room C to the west, Wall I to the south, and the stone threshold dividing walls J and G to the east falls into two 5×5 m trenches in K10a, and was excavated accordingly. The top 10 cm of windblown sand at the surface, as in the southern part of *Shuna* F, was excavated as Locus K10a-8. Below this a deep layer of coarse brown sand and brick debris filled up the vestibule 60 cm deep and was excavated as Locus K10a-10. Below this another layer of brick debris from fallen walls, Locus K10a-12, lay 20 cm deep on the plaster floor, which rested directly on bedrock. Excavation of this locus revealed a door socket in the floor, directly in front of the entrance east to *Shuna* F. This locus also contained a letter, RN 1063a dated 612/1215. The bricks in these loci measured $29 \times 13 \times 7$, $23.5 \times 11 \times 6$, or $21 \times 12.5 \times 5.5$ cm.

Loci K10a-10 and 12 were immediately adjacent to Locus K10a-5 to the south, a $85 \times 90 \times 69$ cm layer of brick detritus filling up a staircase found in the north side of Wall I. Excavation of the locus revealed the staircase and two wooden treads extant on the stairs, but little material culture was found in the soil matrix; only two sherds were recovered from this locus.

East of the threshold is an extension of Vestibule F, in the first phase of use of the house probably a small *shuna*. Locus K10a-10, a layer of coarse sand and brick detritus, although predominantly in Vestibule F, extended east into *Shuna* F, and in this area was found under the 10 cm-deep layer of wind-blown sand at the surface, Locus K10a-8. In this area Locus K10a-10 lay over a rough surface contiguous with the upper plaster

surface in *Shuna* F to the north. Below this surface, Locus K10a-15, a 15 cm-deep layer of light brown coarse sand with some dissolved bricks lay on a lower surface, this one plastered. K10a-15 contained much loose fiber, many date pits, a few whole dates, and half of a *mano*. Fallen bricks here measured $21.5 \times 10.5 \times 7$ cm. Removal of this locus also revealed plaster on the face of Wall I, and large stones and ash near Wall H. The plaster floor below K10a-15 had a large burn spot in the eastern part, and as expected was better preserved at the edges of the room than in the center. Excavation below the lower plaster floor revealed only 5–10 cm of constructional fill over bedrock, Locus K10a-17. The area outside the trench to the southeast was excavated as Locus K10a-16 in an attempt to reveal the corner of walls I and H. The walls were not found, and neither was the upper floor, but traces of the lower floor were found, continuing to the south as Locus K10a-6.

A document was found in this most southerly part of *Shuna* F, divided into two pieces; one fragment was found in Locus K10a-12 (in the South House, vestibule F) and one in Locus K10a-13 (in the South House, Room E), both of the same phase. The letter is dated 612/1215.

Room *C* is the largest room of the South House and its main living room. It is bounded by Wall A to the north, Wall F to the east, Wall D to the south, and Wall B to the west, all of which consisted of several courses of stone founded on bedrock. Wall F to the east does not extend all the way south to Wall D, but the 45-cm gap seems to have been purposeful. The room falls across three 5×5 m trenches and was excavated accordingly. The depositions in this room sloped sharply to the south, so that Wall D is much lower than Wall A, existing only as a sub-floor foundation, and almost the last meter of most loci were lost to the south, eroded down the slope.

The top 10–20 cm of brick wall tumble in Room C as well as in much of Rooms A and B was excavated as Locus K9b-24. This locus slopes to the south and contains Roman material mixed in with the Islamic materials. A similar layer of brick wall tumble, 10-80 cm deep and sloping to the south, was excavated underneath K9b-24 across most of Room C as Locus K9b-25. Among other small finds it contained a small band of silk (RN 1164), five pieces of matting (from the ceiling), eighty fragments of wood, and peach pits, a fruit known to have been grown in the Fayum in this period (Keenan 1999: 292), but possibly also in the immediate region. It concealed a lens of sand and palm fronds lying against Wall F, excavated as Locus K9b-26. Below this was another layer of brick, matting (including a circular mat), and bundles of reeds, Locus K9b-27, which contained a debased silver coin (RN 675), only identifiable as Islamic, and large pieces of matting, along with date pits, a carob pod, citrus remains, and the remains of several imported fruits (Tables 19, 21; Wetterstrom n.d.: Table 2). Loci K9b-25-27 are interpreted as wall, ceiling, and roof fall onto the compact earth-mixed-with-plaster floor of the room, together about 105 cm deep. The bricks in this wall fall measured $27 \times 15 \times$ 7.5 and $20 \times 12.5 \times 6.5$ cm. Locus K9b-27 contained three ash lenses; one against Wall B, one against Wall F and one in the center of the room. In the northeastern portion of the room Loci K9b-30-32 are equivalent to Loci K9b-24, 25, and 27. Similar stratigraphy was unable to be recovered from the southeastern corner of the room because the material was extremely crumbly and as mentioned above severely sloped to the south. It became necessary to remove this corner all as one locus, K10a-27.

A door socket was uncovered in the floor of this room, at the northern end of Wall F, indicating that the room could be closed off from Vestibule F, the entryway to the South House. In the northern half of the room the plaster floor and 15–35 cm of constructional fill beneath it was removed to bedrock as Locus K9b-65. As this locus was

traced towards the center of the room an upper layer of plaster and fiber appeared that had not been detectable in the northern portion of the room, Locus K9b-66. It sat about 9 cm above Locus K9b-65 and extended as far as the erosional slope to the south. This floor was removed before excavation of Locus K9b-65 could continue, which also ended at the southern erosional slope.

In the southwest corner of the room on the upper floor, a fireplace was found against a small two-course stone wall that extended into the room from the west, abutting Wall B and sitting on the earlier floor of the room, about 20 cm north of Wall D. Near this a circle of plaster with raised edges, 18 cm in diameter, may have been a place to set a bowl or jar. The plaster was unburned. This is the only part of the room that had evidence of domestic use; it appeared that the earlier floor had been swept relatively clean to prepare for its replastering.

Room B is west of Room C and south of B, bounded by Wall E to the west, D to the south, B to the east, and C to the north. The interior walls, C (which was stone-built) and B (mud brick on stone foundations) were founded on bedrock. The exterior walls, D and E, by contrast, were founded on dirt just above bedrock in this area. Most of this room falls within the boundaries of trench K9b, but a very small portion of the southwest corner is in trench K9d and was excavated accordingly. The surface cleaning, the upper 10–20 cm of mud brick debris with some reeds in this area and Room C to the east, was removed as Locus K9b-24. It slopes dramatically to the south. Below this in the eastern half of the room a layer of compacted, moist sand and organic materials (including remains of twenty unidentified imported fruits: Table 21, Wetterstrom n.d.: Table 2) was excavated to depths of 58–99 cm, Locus K9b-28. It also contained burned pottery, a fired brick ($14 \times 8 \times 3$ cm), and ash, in addition to the usual types of small finds, as well as traces of an earthen surface. Locus K9b-28 corresponds to Locus K9b-43 in the western

half of the room and to K9d-1 in the southwestern corner of the room. The former, K9b-43, was composed mostly of fine brown sand but also contained a fired brick ($11 \times 6 \times$ 3.5 cm) and two tiles measuring $16 \times 15 \times 3$ cm, and had a depth of 50 cm to bedrock, while K9d-1, similarly composed, reached only 10 cm deep owing to the dramatic slope of the bedrock in this area. It contained the rim of a repaired stone bowl (RN 826) and a dirham of the Damascus ruler al-Salih Isma'il and the caliph al-Musta'sim (RN 698), thus dating 1242–45. No traces of the K9b-28 surface were found in either of these loci.

Below this uppermost stratum of K9d-1, K9b-28 and K9b-43, a layer of brick tumble and sand Locus K9b-67, was excavated about 10 cm down to bedrock. It contained a debased silver coin (RN 695), Ayyubid, datable to 1246–49, a mano and a grindstone fragment along with two partially vitrified burned bricks ($27 \times 14 \times 6$ cm and $26 \times 20 \times 7$ cm) and other debris. As it was traced down to the west the top of a large pit was detected in the southwest corner of the room. This pit had been dug into the bedrock at a depth of 240 cm, and contained great quantities of Islamic pottery. The first 80 cm from the top of fine brown compacted sand was excavated as Locus K9b-69. The second 40 cm, which was dark brown moist compacted sand was excavated as Locus K9b-70, and the final 20 cm of gray to dark brown fine sand and medium gravel was excavated as Locus K9b-71. After excavating the pit it became apparent that some of the pottery sherds from Locus K9b-69 mended with those from K9b-70, so the distinctions in the appearance of the pit fills may not represent a significant time difference in deposition. The relationship of the pit fill to the floor of Locus K9b-28 is unclear. The carefully-dug pit was possibly intended and first used for water storage, but the masses of dark organic material and chicken bones (Reese n.d.: 6-7) indicate its later use a toilet and refuse dump.

Room A, west of Room C and north of Room B is bounded by Wall A, the long northern wall of the South House to the north, Wall E to the west, and Wall B to the east. It was entirely excavated in the 1978 season (Whitcomb and Johnson 1979: 47-49, Pl. 16). In the southern part of the trench Locus K9b-1 (equivalent to Locus K9b-17 in the northern part of the trench) was the top few cm of surface debris, the former of which lay over an accumulation of organic debris, Locus K9b-2, consisting mostly of fragments of woven matting associated with fragments of a wooden frame. The possibilities of interpretation for this feature are several: bed frame, room partition, or ceiling/roof matting. Locus K9b-2 was adjacent to K9b-3 and K9b-4, levels of brick debris from the collapse of walls. Under this collapse (Locus K9b-4) against Wall A in the northern part of the room a hearth with associated cooking pot and animal bones was discovered and excavated as Locus K9b-8. The hearth is opposite three stones placed against Wall C, which may be the stone foundations of a mud brick bench. The bench and hearth both sit on a floor, Locus K9b-9, which was present across the room but best preserved in the western half. This assemblage of hearth and bench represent the latest phase of use of this room. The entrance to the room at this time seems to be in the northern part of Wall B (Whitcomb and Johnson 1979: 47–48).

Under floor K9b-9 in the southern half of the room layers of sand and brick wall fall that contained a thin layer of ash, charcoal and charred beams, Loci K9b-10–14 and K9b-16–20, lay on top of an earlier plastered floor, Locus K9b-21. Locus K9b-10 contained an anepigraphic green glass weight about 3 cm across. Test trenches in the east and west corners of the square revealed the same stratigraphy on top of the floor, dug as K9b-5 and K9b-7. This floor was level with bedrock in the eastern half of the room. Underneath Floor K9b-21, Loci K9b-15 and K9b-22–23, which were 20 cm deep at the deepest, provided a level fill for the construction of K9b-21 in the east where the bedrock

was deepest (Whitcomb and Johnson 1979: 47). In the southern part of the room a posthole in the bedrock of 15 cm diameter contained wooden fragments. The excavators suggest the post may have been for use in partitioning the room with mats.

The walls of this room also seem to provide evidence for a second phase of occupation and even rebuilding. Walls A, C, and B seem to have been rebuilt 50 cm above bedrock, with larger stones that are less carefully laid (Whitcomb and Johnson 1979: 49). This is at the same level as the uppermost floor, K9b-9.

Room D is in the southeast corner of the South House, east of Room C and south of the entryway corridor F. It is bounded by Wall G to the east (the southern extension of which was eroded away), Wall D to the south, Wall F to the west, and Wall I to the north. As mentioned in the description of Room C, the gap between walls F and D seems to have been purposeful. The surface cleaning from this area was a 10 cm deep layer of wind-blown sand that sloped very steeply to the south, and thus contained material from all other parts of the house; it was removed as K10a-1. It revealed the tops of all the walls in the room, including a 115×80 cm niche in the corner of walls I and G created by a mud-brick platform built against Wall I. On the opposite (north) side of Wall I, and west of the niche, a staircase was revealed with two wooden treads still in place on the lowest steps.

Locus K10a-2, a 10 cm-deep accumulation of ash, was excavated from the niche in the corner of walls I and G. This layer also contained at least fifteen pieces of wood charcoal, possibly from later transient use after the main occupations of the house. It was not sitting on any hardened surface but rather "floated" over 60 cm of mud brick debris and matting with few artifacts, Locus K10a-3. Several large mats in Locus K10a-3 lay flat (on the southward slope) about 5 cm above a plastered floor that extended only halfway across the room towards the south, having been eroded away due to the steep slope of the hill.³¹ The plaster extends up the walls and the niched area as well and shows areas of patching. Two rectangular post-holes were discovered cut into this floor to the west, containing remnants of wooden posts. There was no burning on this floor, and only one pottery sherd was sitting on it.

Removal of Locus K10a-19, 25-30 cm of fine, light brown sand and brick melt (plus a single intact brick measuring $25 \times 11 \times 6$ cm) below the floor at the bottom of Locus K10a-3, revealed a lower, unplastered surface that extended all the way to Wall G to the east. The material on this floor (Locus K10a-19) was rich in small finds, pottery and date pits, and even included two whole dates. The surface itself was badly deteriorated. The rocky constructional fill under this floor, Locus K10a-20, reached a depth of about 27 cm over bedrock with a medium concentration of pottery and other small finds (1.9 sherds per cubic meter), containing some fibrous material just below the surface and one of the few resist-dyed textiles found in the Sheikh's House (RN 939, Burke and Whitcomb forthcoming; Vogelsang-Eastwood 1989: 115, No. 58). Entrance to this room is unclear and may have been from *Shuna* F to the east, but is now obscured by erosion.

Room E is east of room D and south of the eastern extension of Corridor F. In its first use it was bounded by Wall G to the west, Wall H to the north, and Wall D to the south. Wall H is only one course wide and one course tall, of stone. The walls are all badly eroded and preserved only one or two courses high. The southeastern corner of the room fell outside the trench, but upon later excavation it was revealed that in this corner

³¹ Locus K10a-3 is identical to Locus K10a-4 excavated in the room to the north, Vestibule/Corridor F.

only a thin layer of sand, Locus K10a-14, remained above bedrock. This part of the room extends over two 5×5 m trenches and was excavated accordingly.

In the southern portion the debris just under the surface cleaning of K10a-1, which was mounded quite high next to Wall G, was excavated as Locus K10a-4. It is identical to Locus K10a-3 in room D to the west. Removal of 15 cm of debris revealed a plaster floor identical to and at about the same level as the plaster floor in Room D. Severe erosion in this area made determination of the relationship of the floors in the two rooms difficult, however. Removal of this floor led to the discovery of large amounts of grain in Locus K10a-6 below, which was a 25 cm deep accumulation of sand and organic matter on top of a lower pebbly surface. In the northern portion of this room Loci K10a-13 and 18 correspond to Loci K10a-4 and K10a-6, although no trace of the upper plaster floor was found in this area. K10a-18 contained 750 date pits, but few sherds. Matting lying on this lower floor extended over the remains of Wall H; as with Wall K, it had likely been dismantled to lengthen Shuna F during the room's second phase of use. The lower pebbly floor and the constructional fill underneath it (consisting of coarse compacted sand with few sherds) were removed to bedrock as Locus K10a-21. The excavators conjecture that this lower floor is equivalent to the lower surface in the room adjacent to the west, room D. In room E Wall H was founded on this surface, and the foundations of Wall D are below this surface.

f. Area outside the South House

This area consists of the loci excavated outside the walls of the South House. To the west of Rooms A and B $100 \times 500 \times 50$ cm was excavated west of Wall E, as Locus K9b-44. This locus, which slopes to the west, consisted primarily of sand and caliche and contained very few artifacts (.4 sherds per cubic meter). It is contiguous with Locus K9b-47 to the north.

South of Room B of the South House, a level deposit of fine light brown sand with a layer of caliche at the top was excavated along Wall D as Locus K9d-2. It also contained a paucity of artifacts and occupational debris (.09 sherds per cubic meter). It is contiguous with Locus K10a-7 to the east, south of Wall D in the southeast corner of the Sheikh's House excavations. This latter locus is simply the brush cleaning of the area outside the house walls, but artifacts (including a globular half dirham, RN 682, dating approximately 1225–1250), bones and date pits occur rather more frequently here than in the other areas external to the house (.9 sherds per cubic meter), because the southeastern downslope of the site here causes accumulation of artifacts eroding from the upper levels of the house site.

g. Summary

The exterior walls of the house generally follow the contours of the bedrock, which in this area of the site is a small projection southwards over the *sebakh* of the former harbor. Outside of the stone-built exterior walls the ground surface drops considerably. The surface of the bedrock is uneven, and in parts of the house the depth to bedrock is much steeper than others, sometimes necessitating earthen fills to even out the ground for the building of floors, even over natural sand. However, no foundation trenches dug to bedrock for the building of walls were detected; walls appear to have been founded on bedrock where it was exposed and on dirt where it was not. Most of the walls of the Sheikh's House, particularly the exterior walls, were built on bedrock, however. A few interior walls were later additions founded on floors. While most of the original floors of the house and at least parts of the walls were plastered, secondary floors are usually tamped earth or mixtures of earth and plaster. The presence of a threshold is often announced by a gap in the foundation, reflecting an economical use of stones.

The northernmost storerooms, A, B, C and D, all have hearths placed against the north face of the southern wall. This and the presence of grindstones in *Shuna* B indicate these spaces were used for domestic purposes as well as for storage of commodities like wheat, textiles, dried dates, ropes, and metal weaponry. It is not likely that any of the storerooms were formally roofed, but they probably had a covering of matting and reed bundles to keep out the sun, a technique used at least since Roman times in the Eastern Desert and seen in medieval and modern Nubia, and twentieth century Sinai (W. Y. Adams 1996c; Kawatoko 1996: 29; Schijns, Kila, and Harrell 1999: 101).³² This was also probably the treatment for the corridor and possibly for the entire North House, as only the stone-built exterior walls for this unit seem capable of holding a second story. Also, the South House had the deepest accumulations of what seem to be second-story or roofing debris. Thus the staircases in both houses may both have led to the roof of the South House, which was likely subdivided using mats to create private quarters for sleeping.³³

³² A related technique is seen in the roofs of houses and shops inside the early Islamic fort at Raya/at-Tur in the Sinai, in which date or dom "palm trunks were used for beams and the branches were fastened with ropes of twisted fiber from palm trees. These were laid on the beams. Palm leaves or mats from woven leaves were laid over these and clay mortar was added on top" (Kawatoko 2003: 3, Pl. 26:3, 5). Very few beams survived in the Sheikh's House; with wood being at a premium, they were probably looted and used in later buildings. Matting with ceiling mud still clinging to it was excavated from Locus K9b-33 in Room B of the North House, however, and palm fiber with a bituminous or resinous substance was excavated from Locus K9b-59, in Room C of the North House.

³³ Compare the huts called *akhsas* (sing. *khuss*) made of mats or reeds built on the roofs of Fatimid and Ayyubid houses in Fustat described in the Cairo Geniza documents (Goitein 1983: 72). An ethnographic parallel called *badjir* may be found in mid-twentieth century Suhar, Oman (Costa 2002: Pl. 10).

3. ARCHAEOLOGICAL PHASING

a. Roman Period

The Roman period is represented in the Sheikh's House by a row of three large pits in Area A, *Shuna* C, and *Shuna* D, perhaps dug for trees or shrubs. All three pits are aligned with a brick wall across *Shuna* C, which had many Roman pottery sherds in association, especially from Loci J10c-1, J9d-7, and J9d-10. In addition, Area A contained fragments of Greek papyri. Although a substantial number of strata in the Sheikh's House contain residual Roman pottery (for which see Plate 69), especially in Room A of the North House (which also contained two Greek ostraca) and Room C of the South House, no purely Roman stratum remains.

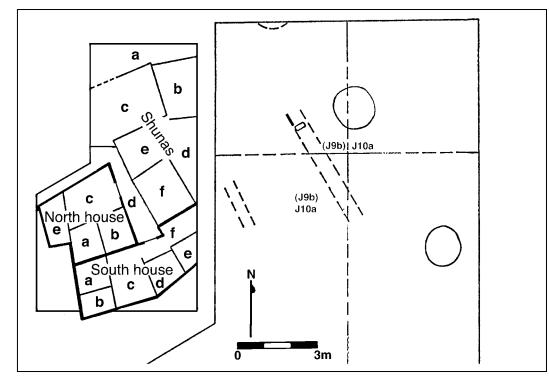


Figure 11. Roman Remains under the Sheikh's House

b. Islamic Period

The building and use of the houses and storerooms took place in the Islamic period, specifically during the latter part of the Ayyubid era. The pattern of building and rebuilding indicates expansion of the complex over time, and includes the patching of floors, the rebuilding of other floors and parts of walls, and the addition of rooms. In some instances the depth of accumulation between floors seems to indicate some period of disuse of a room, allowing parts of the walls to collapse; this is the case in Room A of the South House. In other parts of the complex the secondary floors are only about 9 cm above the older floors, suggesting continuous use of these areas. This is seen particularly in Room C of the South House and Room C of the North House.

Because of this pattern of continued use and reuse there are no undisturbed contexts for the earliest occupation. The best-preserved rooms, where nearly complete reconstructable ceramic vessels and other objects were found in perhaps reconstructable original assemblages, are on the upper or rebuilt floors of the main living rooms of the two houses. (Reconstructable vessels otherwise were found, as expected, in some of the fills under floors and in refuse pits.)

Two phases of use of the Sheikh's House are proposed, with the second divided into two sub phases, a and b. Phase I encompasses the building of the South House and two storerooms, and in Phase II the North House was built, as well as additional storerooms. Phase II is subdivided to account for what appear to be gradual additions of space. It is not always possible to correlate phases of use across the entire complex, however. The phasing suggested below, while clear for individual units, can for some relationships between areas of the complex only be hypothesized.

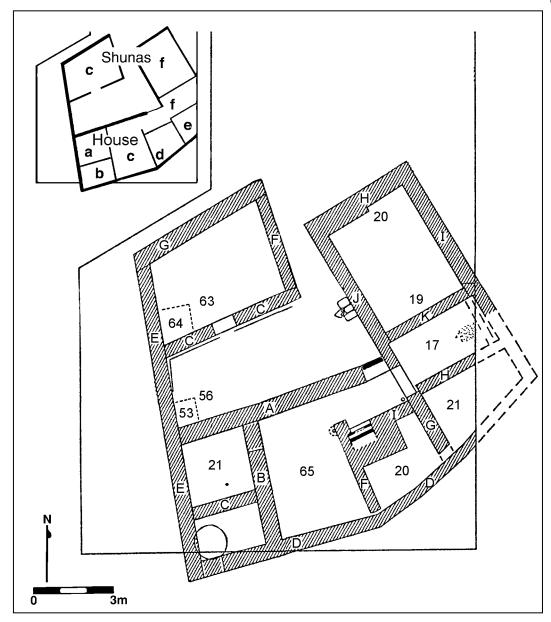


Figure 12. Islamic Phase I: South House, Courtyard, and First Shunas

Islamic Phase I. Walls G, E, D, and A, enclosing the complex on the north, west, and south sides, and dividing the South House from the North House, are all stone-built walls founded on bedrock or partly on natural soil where the bedrock is deeper. (This is the case for the south end of Wall E and for most of Wall D.) The interior walls B and C dividing the rooms in the South House are also founded on bedrock. The earliest floors in

the South House are all built subsequent to their associated walls. By contrast in the North House only the walls of Room C are founded on bedrock (Wall F) or on natural soil above bedrock (Wall C). Interior Wall D (not the East-West wall enclosing the complex to the south) is a shallow mud-brick partition wall, although it was built before the floor in Room B, as one course of mud bricks was found below the floor. Evidence below this floor indicates that the floor was not built in the earliest use of the house, however, as Locus K9b-53 is so dense with artifacts that it must be interpreted as a refuse area outside the South House. The floor of Room B to the east is contiguous with the floor of Corridor D. The eastern wall of this room, Wall B, was built on top of this floor.

Thus Phase I is reconstructed as follows: The entire South House was built at this time, with a bedrock and plaster floor in Room A and a plastered floor in Rooms C and D. Room B probably had a dirt floor and the deep bedrock-dug pit in this room may have been used for water storage or may have already been used as a latrine. Room E had a pebble floor as did *Shuna* F. At this time *Shuna* F was a long building along the eastern edge of the complex divided into three rooms by walls K and H (Figure 12), with hard pebbly flooring.

In the area of the eventual North House, Room C existed as a *shuna*. The floor of the room at this time was informal, using bedrock in the eastern part of the room and natural sand and gravel (Locus K9b-64) in the western part of the room, covered with matting upon which accumulated Locus K9b-63. Between this storeroom and the South House was a courtyard bounded by Wall A to the south, Wall E to the west, and Wall C to the north. The southwest corner of the courtyard was used as a dumping area up against the north wall of the South House, as evinced by the extremely dense collection

of artifacts in Locus K9b-53.³⁴ A pot was buried in the ground in this area, although its use is unknown. It is unclear how the space in the southeast of the courtyard was used; the "floor" of this area simply consisted of bedrock and natural soil with no indication of cooking or other activity. No compacted surface was detected, but in the arid climate of the Eastern Desert exterior surfaces would be extremely difficult to find, as they would not have been subjected to the compaction of rain.

³⁴ Modern correlates to using part of inhabited space as a trash dump are seen in the excavations of houses in at-Tur in the Sinai that were abandoned in 1967. In some cases an entire room seems to be reserved as a "dump room" (e.g., in block 15, Kawatoko 2003: 2), while in others a multipurpose room could be used for trash: "The bathroom and toilet occupied the southern two-thirds of Room 31-206, which was also a laundry room with a washing machine. The rest of the room has no flooring and was used as a garbage dump" (Kawatoko 1998: 5).

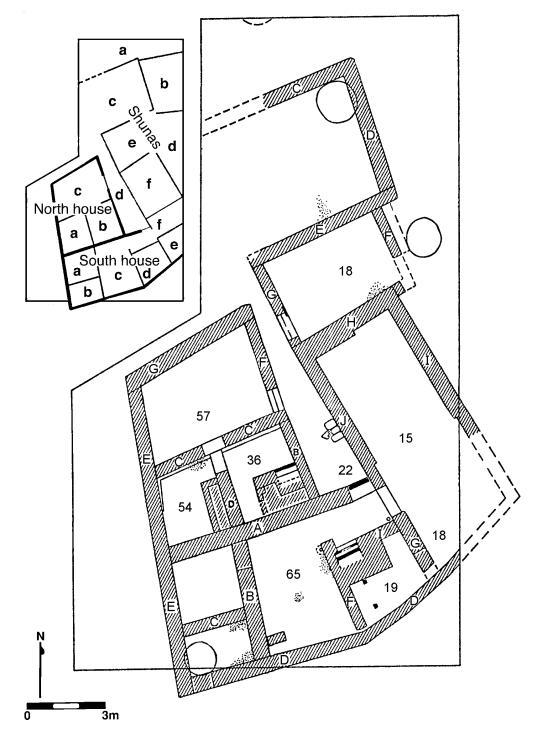


Figure 13. Islamic Phase IIa: North House Rooms A and B, *Shunas* C and E Added; *Shuna* F Partitions Removed; South House Room D Floor Plastered

Islamic Phase IIa. In Phase IIa the space in the courtyard just north of the South House was partitioned to create the North House, and work proceeded generally from west to east, likely because of the constraints of working in an enclosed space. Wall D was built as a partition between the newly created Rooms A and B, after which the mastaba (K9b-40) and floor (K9b-54) in Room A were built, and the staircase of Room B was built, in that order (Figure 13). The floor of Room B, which seems to extend all along Corridor D, was then put in, and there would have been a rather steep step down from this room into Room A. The eastern wall of Room B, Wall B, was then built across this floor to enclose the whole space, and an entrance was cut into Wall F of Room C to provide an exterior entrance for the North House, with the foundation stones serving as a threshold. The *shuna* at the north end of the courtyard thus became Room C of the North House, the floor of which, K9b-57, was plastered. The continued digging of pits in this room indicates that it continued to be used as a multipurpose room, for storage and refuse, as well as some domestic activities.

In *Shuna* F, crosswalls K and H were dismantled and the floor was replastered over them to create one long room stretching the length of the complex. This new floor is at the same level as the secondary plastered floor in Room D of the South House, which must have been built at this time.

Two storerooms north of *Shuna* F were likely built at this time, to make up for the loss of Room C. *Shuna* E was built immediately north of *Shuna* F, but at first perhaps as an open three-walled courtyard with Wall F to the east being added later. The contiguity of walls suggest it and *Shuna* C may have been built at the same time, the latter of which remained a three-walled room. The low elevation of the pebble floor in *Shuna* E suggests the possibility of an upper, later floor in a subsequent phase, but this is not certain. All of

the storerooms are built on the highest part of the knoll and are heavily eroded, only preserving one phase of use.

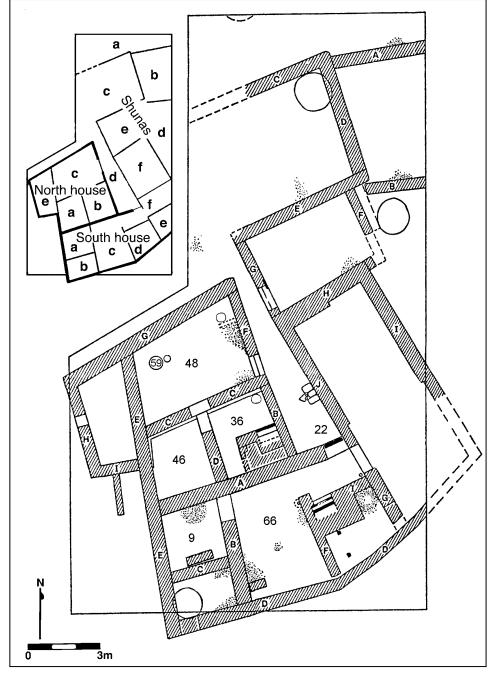


Figure 14. Islamic Phase IIb: Floors Rebuilt, Shunas A, B, and D Added

Islamic Phase IIb comprises further modifications to the living spaces, repairs, and the building of the last storerooms. In Corridor D the plaster floor was patched. A fire in Room A of the North House necessitated the building of a new floor (K9b-46) in that room, atop the ash and at the level of the mastaba, incorporating it into the floor, and patching the plaster on the walls (Figure 14). This would bring the floor in Room A to nearly the level of the floor in the neighboring room B. In Room C another floor, Locus K9b-48, of tamped earth mixed with plaster, was built over K9b-57 and some of the debris on it in order to repair it. Before the plaster was laid on the floor, a shallow pit, K9b-59, was dug in the fill for the new floor, lined with mats, and filled with trash.³⁵ During the use of floor K9b-48, two other pits were dug into it and used for refuse. A hearth was built on this floor, with a low wall beside it. Room E to the west may also have been built at this time.

The earthen floor of secondary use in Room A of the South House, Locus K9b-9, was built over 50 cm of wall collapse, indicating the room had been in disuse for some time. On the floor were a hearth and a stone bench opposite. The walls were repaired at this time as well, using larger stones. The second plaster floor, 9 cm above the earlier floor, may also have been laid in Room C of the South House at this time. As in Room C of the North House, a fireplace was built with a low wall beside it.

To the north (in J10a), Walls A and B in the area of *Shunas* B and D were built over matting, abutting the walls of *Shuna* C. This created *Shuna* B and *Shuna* D, although it is not conclusive that the latter was enclosed space.

³⁵ This was the practice for the mat-lined storage pits of Late Christian Qasr Ibrim. If they were not being used to store grain or other goods, they were temporarily filled with rubbish so as to avoid leaving an open hole in the ground (W. Y. Adams 1996c: 64–65).

Post-Occupation. After the abandonment at the Sheikh's House the ceiling mats begin to fall onto the floors and the upper courses of the mud brick walls followed. Windblown sand and other debris built up on the floors, especially in the main corridor, D, and the saltiness of the soil created very hard laminations of caliche. The hearth of Locus K10a-2, on top of wall collapse, is the only evidence of temporary occupation in the complex.

CHAPTER TWO

BARNIYA OR JARRA? CERAMICS FROM THE SHEIKH'S HOUSE

In the letters and shipping notes found in and near the Sheikh's House, ceramics appear as commodities (pottery, earthenware, and stoneware cups) and as containers for other goods (*jarra, barniya*, Guo 2004: 68, Table 1).¹ Several liquid commodities are mentioned in the documents that would likely have been shipped in these containers, such as water, milk, oil, clarified butter, sugar/syrup,² liquor, lighting oil, rose water, perfume, and medicine; perhaps many of the dried food goods and other solids (such as soap, which is shipped in jars in Text 27) would have been carried in ceramic vessels as well (Guo 2004: 67, Table 1). There is no easy way to correlate ceramics mentioned in the texts with the finds, other than the *jirar* (sing. *jarra*), usually translated "jars," which are of course numerous and of varied forms and wares in the ceramic corpus.³ *Hajar kizan*, or "stone cups," are mentioned in Text 54 as part of a shipment that also included wheat, a *batta* of sugar, a juice-presser, and eleven fine sprinkler bottles (*qumqum mumtaz*, presumably of glass: Guo 2004: 39, 68, 249–50, Table 1). It is not known whether this

¹ Terms in the texts are *khazaf*, earthenware (Edward William Lane 1985: v. 2), from Text 68 outside the Sheikh's House; *fukhar*, pottery, from Text 22; and *hajar kizan*, from Text 54 (Guo 2004: 84, 187, 249).

² In Text 54, the term *battat qitara* can be taken to mean either a *batta* of sugar, which is most likely, or a specific type of *batta*—a sugar container (Guo 2004: 33-34, 150-51).

³ *Jirar* are also mentioned in eighth to tenth century AD Arabic papyri from Madinat Fayum and Edfu (Vorderstrasse forthcoming). Modern usage seems to denote keg-shaped vessels for carrying water, as at Qasr in the Dakhleh Oasis (Henein 1992: 53).

term refers to high-fired pottery or to actual stone. True stoneware, which must be fired at temperatures well over 1000° C, could not be made in Egypt but was imported from China (Rye 1981: 35). Chinese stoneware is found at the Sheikh's House, but only in jar form. A few stone vessels are found at the Sheikh's House, but these are the usual steatite cooking pots or basins rather than cups; a single rim fragment of a small stone bowl was found elsewhere in the site.⁴ *Barani* (sing. *barniya*) are mentioned as containers of lighting oil, and likely would have been ceramic bottles of some kind, perhaps glazed to prevent the oil from seeping through (Guo 2004: 238–40).⁵

A. **POTTERY PROFILE**

Nearly 14,000 sherds were collected and recorded from the Sheikh's House. Although the percentage of ceramics kept from the excavations is rather small (5%) a sketch of the entire assemblage can be reconstructed from the pottery sheets, as the sherds were recorded by color of ware (five categories), fineness and type of temper (four categories), and color of glaze (eleven categories). Other surface treatments such as slips, paint, and incising were noted as well, so that about twenty-five percent of the ceramics described in the sheets can be correlated with the types that were kept, and a better estimate of quantities and proportions of various types can be achieved (Table 12). The

⁴ The stone bowl or possibly cup rim is from Locus L7d-10/RN 835. Stone basins or cooking pots at the Sheikh's House were found in the South House, Room B (K9d-1/RN 826, the rim of a large vessel), and in Corridor D (K10a-11/RN 828, a fragment of a large bowl).

⁵ Another type of container mentioned frequently in the documents is a *batta* (literally "duck"). While it is most likely of leather, one cannot rule out the possibility that *batta* could sometimes refer to a ceramic container (Guo 2004: 33–34). Glazed stoneware containers with lids in the shape of ducks were collected from the site of Muara Jambi, Sumatra, in association with Chinese T'ang, Song, and Yüe celadons and porcelains (Ridho 1988: 112).

The few container types appearing in the Sheikh's House documents is only a fraction of the earthenwares described in the Cairo Geniza documents as containers for various types of goods (Goitein 1967: 334, n. 8).

approximately 850 sherds that were kept were visually inspected using a $10\times$ hand lens and sorted into groups by fabric, and within them wares, according to surface treatment and form.⁶ For the sake of internal consistency, Munsell Soil Color numbers were used to describe the colors of the sherd surfaces, core, and margins. A count of solid inclusions, voids, and pores was estimated on a scale of abundant, common, moderate, or sparse, and their sizes were estimated according to the Wentworth grain size scale.⁷

When analyzing a site ceramic corpus, it is useful to draw comparisons with sites that are close geographically and temporally, in order to establish the identity of the cultural assemblage that signifies this place and time, and to evaluate regional contacts. Unfortunately that is not simple in Egypt, where relatively few Islamic sites have been well excavated or published. The most obvious choice for a large ceramic corpus is Fustat, which has been excavated and published throughout the twentieth and into the present century, and the kilns of which produced pottery that was sent throughout Egypt. Fustat was the source for many of the Egyptian wares found at Quseir al-Qadim, although other local wares were made in the Nile Valley, perhaps at Aswan,⁸ Ballas, or Qena, all

⁶ As is often the case, in the intervening years between the moment the sherds were taken out of the ground and the moment I began my analysis, a certain amount of attrition occurred. This is especially noticeable with the earlier group, the corpus excavated in 1978 from Room B of the South House. Fortunately, most of these were published in the first preliminary report (Whitcomb and Johnson 1979: 104–07, Pls. 39–40). Of these I was unable to locate only twelve sherds to examine and draw them myself, thus for these twelve I am entirely dependent on the previous publication (Whitcomb and Johnson 1979: Pls. 39: c, d, m, 40: a, c–f, h, i, l).

⁷ 64–6 mm pebble, 4–2 mm granule, 2–1 mm very coarse sand grain, 1–0.5 mm coarse sand grain, 0.5–0.25 mm medium sand grain, 0.25–0.125 mm, fine sand grain, 0.125–0.06 mm very fine sand grain, 0.06–0.004 mm silt particle, 0.004–0 mm clay particle (Wentworth 1922).

⁸ Jars (*kuz*) from Aswan meant to hold honey wine called *fuqqa*' are mentioned in an early thirteenth century Armenian text about the monasteries and churches of Egypt (Milwright 1999: 506). The term *fuqqa*' may be derived from a type of jar known in Fatimid times, as in the Cairo Geniza documents and other Arabic papyri it refers to a jar often used to hold honey or mercury (Goitein 1967: 334, n. 8;

of which have well-known pottery traditions, and the latter of which was a trading partner with Quseir al-Qadim, as we know from the business letters found at the site (Guo 2004: 59).⁹ It is not likely that any ceramics would have been made in the town itself, due to the need for steady quantities of fuel and water; although seawater could have been used, the only fuel source would have been animal dung and the few scrubby plants and acacia trees that dot the landscape (Prickett 1979: 274).

Because of Quseir al-Qadim's position on the Red Sea coast, the ceramic corpus differs from that of other Egyptian sites of the same period. For example, the Ayyubid levels from the Aga Khan's excavations along the city wall of Cairo built by Salah al-Din, particularly at Bab al-Mahruq, contain a ceramic assemblage that appears to overlap with that of the Sheikh's House at Quseir al-Qadim in only three wares: Nile silt water jars that are slipped white, painted in red and brown, and often also incised with wavy lines (these were also found in Old Cairo and at Fustat), marl clay water jars that fire a greenish-white, and monochrome glazed incised marl fabric (perhaps stonepaste) bowls.¹⁰ It is also interesting to note that the assemblage at the Ayyubid wall differs considerably from the assemblages excavated in Old Cairo, from the same period, although they share several wares in common. This emphasizes the caution that is

^{1983: 261).} In any case it is not possible to identify any of the Aswan ceramics from the Sheikh's House as these particular honey or wine jars.

⁹ See the work of Nessim Henein for an ethnographic survey of the popular products of selected Egyptian aeteliers, matched with Arabic proverbs about pottery (1992).

¹⁰ Julie Monchamp, meetings and discussions February–May 2006. Of course we may have been able to identify more similarities in the corpus with a comparison of the coarse wares.

necessary in attempting to reconstruct a ceramic typology; it may not be applicable for different types of sites even within the same small geographic area.¹¹

Similarly dated contexts at Kom al-Dikka in Alexandria contain *Yemen 1* (or possibly a local Nile silt version of) Black on Yellow glazed redware bowls (discussed below), and monochrome glazed stonepaste ceramics (Gayraud 1984: 244).¹² One notable difference in the locally made wares is in the presence of "Mamluk" sgraffiato and slip painted wares at Alexandria, the former of which occurs only in one sherd found on the surface at the Sheikh's House, and the latter of which does not occur (François 1999: 29). Alexandria in the thirteenth and fourteenth centuries also received imports from Greece, Cyprus, Turkey, Italy, Spain, and North Africa, which it continued to do into the fifteenth century (François 1998; 1999).¹³ Numerous northern and western Mediterranean imports were also found at Fustat into the thirteenth century (Kubiak 1998), but these northern and western Mediterranean wares do not occur at Quseir al-Qadim because its overseas trading contacts are oriented towards the Red Sea and Indian Ocean rather than the Mediterranean. (Although a merchant of Alexandria is known to have supplied Quseir al-Qadim with flax, he clearly was not sending Mediterranean ceramics as well [Guo 2004: 248–49].)

¹¹ This is well illustrated by Raz Kletter and Edna Stern in their recent article on Mamluk Khirbat Burin in the eastern Sharon Plain, Israel. By comparing quantitative data from other Mamluk area sites they were able to discern different trends in the ceramic makeup of urban versus rural sites, and also in Muslim versus Crusader towns (Kletter and Stern 2006, see esp. 197–200).

¹² On the other hand, classic Mamluk sgraffiato and slip-painted sherds have been found together in the surface scatter of site 33-390 H8.1B, surveyed in the Dakhleh Oasis (Keall 1981: 217), but Black on Yellow bowls are not mentioned.

¹³ Spanish and North African pottery has been found in Kom al-Dikka strata dating to the eleventh and twelfth centuries as well (Zagórska 1990: 85).

Glazed wares represent nearly 13% of all recorded pottery from the Sheikh's House, by sherd count. This relatively high percentage can be explained by pottery and porcelains being among the commodities shipped through the port, as the shipping notes reveal (Guo 2004: Table 1). It is possible that a count of all ceramics excavated at the site might yield a slightly lower percentage, however, as the Sheikh's storerooms were a particular locus of trade in the town. The number falls between that of two other small coastal sites of the preceding period: In Sharma, a small port town on the Hadhramaut coast of southwest Arabia, where occupation is dated ca. AD 980–1140, glazed wares make up only 6.61% of the assemblage (Rougeulle 2005: 225–26). They are 26% of the assemblage at the port town of Athar, which had its heyday from the early ninth century to the mid to late eleventh (Zarins 1989: 248). By contrast in the same periods at Qasr Ibrim above the Nile in Christian Nubia, a site not known as a shipping node, the glazed wares constitute only 3% of total ceramics (William Y. Adams 1986b: 585).

Throughout the discussion that follows I have also made comparison by ware with other parts of the site of Quseir al-Qadim (see Figure 15). The most pertinent points of comparison are with the "Merchants' Houses" (grids P7–P8) neighboring the Sheikh's House, which as described in the previous chapter is an area analogous to the Sheikh's House in form and function and contains a very similar artifact assemblage (Whitcomb and Johnson 1979: 247–49; 1982c: 10). By contrast the beach village referred to as the Eastern Area (grids E18–F19), is slightly later in date than the western part of the site (Whitcomb 1983a: 104; Whitcomb and Johnson 1982c: 148). The comparison is apt because for all three areas the available data is from a selection of sherds, rather than from all sherds excavated. In the case of the Merchants' House the selection treated here is the group intended to be published in the preliminary report for the 1982 season.

Comparisons made among these areas further elucidates the dating and function not only of the eastern and western parts of the site, but also certain well-known pottery types the dating of which can be refined by this study.

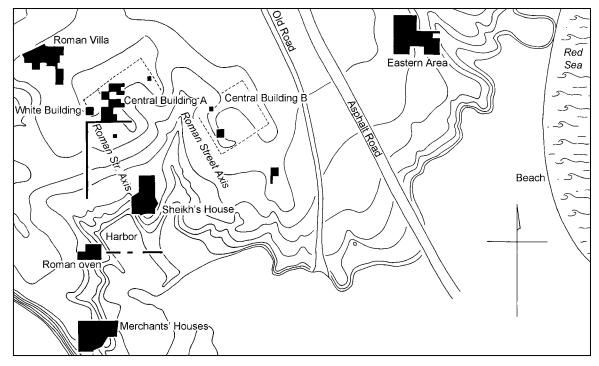


Figure 15. Location of the Merchants' Houses and Eastern Area in relation to the Sheikh's House (after Meyer 1992: Fig. 2.)

1. EGYPTIAN CLAY BODIES

The Sheikh's House ceramics have been divided into fabric groups by firing color and temper, and subdivided into wares by surface treatment and vessel form. The fabric groups have been provisionally identified with the known clays of Egypt: Kaolinite clays from the vicinity of Aswan, marl clays from the deserts, alluvial clays from the Nile or wadis, and naturally mixed clays of alluvium and marl or other fine clays (Norström and Bourriau 1993: 160–61). The difficulty in these assignations, however, is that Egyptian Islamic fabrics rarely contain only one clay type. Even if Nile mud or marl desert clay is predominant, the fabric is likely to contain admixtures of other clays (e.g., Butzer 1974: 381), and in any case distinctions between clay types may be blurred by the use of similar temper (Norström and Bourriau 1993: 66). Therefore the Sheikh's House Egyptian fabrics types have been grouped into marl-dominant and Nile-dominant fabrics on the basis of visual criteria, although this categorization itself might eventually be disproved with chemical or petrographic analysis and can only be considered provisional.

In sorting the sherds by clay fabric, and within the fabric group by ware, I have followed William Y. Adams' 1986 publication of pottery found in medieval Nubia. I have also largely relied on his classifications for some Egyptian and Nubian or Nubian-influenced wares.¹⁴ Although Adams' classification of Egyptian wares is limited to those exported to Nubia, and as such must be used with much caution, it remains the most thorough attempt at classification of Egyptian unglazed Islamic wares.¹⁵ Many of the ware types found at the Sheikh's House seem to have affinities with his fabric groups, if not into the actual wares within each group. If they do belong to his groups but are previously unseen wares, then this may reflect a tendency for Egyptian potters to export only certain forms, decorative schemes, and surface treatments to Nubia and reserve others for local sale.

Using the same classification technique, several categories of imports from the Yemen and farther afield to India and China are also grouped according to fabric, and within the fabric group, by ware. Wares are distinguished from each other primarily by

¹⁴ Because I have used only his publications and have not been able to personally observe any of the corpora Adams used, suggested relationships with fabric groups or wares he identified in Nubia can only be considered tentative.

¹⁵ I have partly followed Alison Gascoigne in adopting Adams' system. She is using it as a classification aide and starting point for the Aswan wares in her publication of the Islamic ceramics from Old Cairo, and it is my hope that my use of it will allow relatively easy correlation of the Sheikh's House ceramics with the Old Cairo ceramics and publications of other sites in Egypt and Nubia.

surface treatment, decorative techniques, and vessel forms, but sometimes also by additives to the clay, and firing. Tables 10–11 provide summaries of the fabric groups and wares described below.¹⁶

a. Aswan Fabric

Pottery of the distinctive kaolinite Aswan clay is known in the Roman and Islamic assemblages at the Sheikh's House. Those from the Islamic levels can all be grouped into one fabric, *Aswan*. It is characterized by being fine, fairly dense, and well kneaded, containing fine sand in abundance as well as abundant additions of very fine to fine red and black particles, the black particles being most conspicuous. Mica is usually undetectable, and no organic inclusions are visible. The vessels fire hard, to a reddish yellow or pink; the most common Munsell readings are 7.5YR 7/6, reddish yellow and 10YR 7/4 very pale brown. Vessels that are slightly overfired or those used as cooking pots or lamps have light brownish-gray margins and surfaces. None has a dark core. Surface treatments include slips or washes (J9d2_15, K10a20_1, K9b29_3, K9b36_1–4, K9b71_50), and/or paint in shades of red (J9d2_4, K9b1_1, K9b48_1, K9b49_1), but not on all vessels.

This group is similar to Adams' Group A.IV, manufactured in the vicinity of Aswan and imported into Nubia between the years AD 950 and 1500 (William Y. Adams 1986b: 556–60). The various forms and surface treatments (slips and painting) found on the Sheikh's House sherds are usually analogous to a particular ware identified by Adams in this group.

¹⁶ Descriptions of bowl forms generally follow Robert Mason's classification, in which he defines conical, proto-conical, biconical, cono-segmental, segmental, and hemispherical forms (Mason 2004: 19). Only conical, biconical, segmental, and hemispherical forms have been identified at Quseir al-Qadim. I have not adopted his terminology for rim or base forms, however.

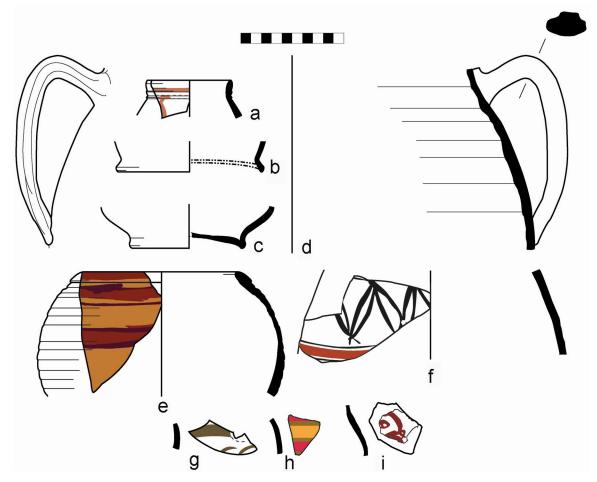


Figure 16. Aswan Painted Ware, Phase I (a), Phase IIa (d–e), and Phase IIb (b–c, f–j): a) K9b63_1/RN 48, b) J9d2_15/RN 30, c) K9b36_1–4/RN 86, d) K9b69_67/RN 347, e) J9d2_3–7/RN 82, f) K9b69_120/RN 349, g) J10c8_5/RN 284, h) K9b48_1/RN 315, i) K9b49_1/RN 49,

The Aswan Painted Ware vessels (Figure 16) are slipped cream to orange, generally Munsell 10YR 8/2 white to 7.5YR 7/8 reddish yellow, although a few examples are closer to red. Forms are closed, varying in size from small to medium. Mostly bodysherds, bases, and handle sherds are known at the Sheikh's House; only two rims have been identified. Handles from large and small jars, as well as bodysherds are all slipped white or pale yellow. Concave jar bases are all slipped 7.5YR 7/6 reddish yellow

to 10YR 8/6 yellow and burnished (Figure 16:b–c).¹⁷ They seem related to Adams' Ware W12, "Aswan Medieval White Wares," which were imported to Nubia between 950 and 1300. Decoration does not appear on any of the Sheikh's House base sherds, probably because, if they are like those found in Nubia, these vessels were usually decorated on their bodies (William Y. Adams 1986b: 559).

The decorated rim and bodysherds of ware Aswan Painted Ware conform to their "cousins" found in Nubia in having dark brown or black as primary decorative color, and red or reddish brown as secondary color, with a few variations, but present some different styles to those known in Nubia. The rim sherd in Figure 16:a is only decorated in dark red, perhaps with a rim stripe, although it is too decayed to be certain. The mended bodysherds in Figure 16:f are painted in black and red with a simpler but well-executed version of leaf motif A.IV 14-1 (William Y. Adams 1986b: Fig. 226). An identical but better-preserved vessel from the Eastern Area of Quseir al-Qadim indicates the jar is globular with a groove and painted red stripe around the top of the rim (Whitcomb, 1982; Whitcomb and Johnson 1979: Pl. 45:g).¹⁸ Bodysherd Figure 16:i bears a curvilinear motif that is difficult to identify but may be figural, in which case it may relate to rare motifs normally seen on the earlier version of Ware W12, W22, "Aswan Early Islamic White Ware" (William Y. Adams 1986b: 552-53, Fig. 219: HM). Figure 16:g is too small to identify its decorative motif, but may bear a simple black-painted frieze (William Y. Adams 1986b: Fig. 225). It appears to have a decayed and now mat clear glaze applied over the slip and paint, which never occurs on Nubian vessels of ware W12.

¹⁷ Adams notes that slip color varies considerably due to firing conditions (William Y. Adams 1986b: 558).

¹⁸ A related sherd was found in the same locus, only with a lighter red slip and red paint added to fill in black shapes: (Whitcomb and Johnson 1979: Pl. 45:f)

The final decorated sherds of Aswan Painted Ware are painted entirely in horizontal stripes of brown and red. The rim and bodysherds of a ribbed, globular jar with no neck and a turned out, flattened rim show that the vessel has been slipped 2.5YR 5/6 red on the exterior and 3–4 cm inside the rim, over which horizontal stripes in black and dark brown have been rather carelessly painted (Figure 16:e). The pattern of a wide red stripe framed with two narrower black stripes is repeated with wide gaps between so that the entire vessel is striped orange, red, and black. The same treatment has been applied to Figure 16:h, although the vessel is not ribbed and the sherd is too small to deduce the form. These decorations may be seen as variations of the plain body stripes Adams notes as common for Aswan Medieval White Ware (William Y. Adams 1986b: Fig. 224:C).

The second major ware represented in the Aswan fabric group is distinguished from the preceding ware by surface treatment and vessel form. The Aswan Utility Ware vessels (Figure 17) seem to be related to Adams' Ware U6, "Aswan Medieval Grey Utility Ware." They are usually, but not always, covered with a thin brown wash or slip, perhaps meant to simulate the appearance of iron, and varying in color due to firing conditions (William Y. Adams 1986b: 559). Forms present at the Sheikh's House are cooking pots, lamps, and jars, but the cooking pots do not entirely conform to those found in Nubia.

Figure 17:b of Aswan Utility Ware is a small, conical, flat-based bowl with a grayish-brown wash (Munsell 10YR 4/2 dark grayish brown) used as a lamp, and much like Adams' form P28. Two identical vessels were recovered from the Merchants' Houses at Quseir al-Qadim, and possibly one in the Eastern Area (Whitcomb and

Johnson 1979: Pls. 43:1, 47:d; 1982c: Pl. 49:c).¹⁹ The same wash appears on cooking pots Figure 17:c, and Figure 17:e, but the surface of Figure 17:d is so blackened the slip, if there is any, is obscured. These vessels have in common a short, straight neck, square rim, and ledge handle that has been pressed in and usually deformed. The form bears a resemblance to form U16 (William Y. Adams 1986b: Fig. 312: U16). Two nearly identical vessels were excavated from the Merchants' Houses, and one very similar vessel was recovered from the Eastern Area at Quseir al-Qadim (Whitcomb and Johnson 1979: Pls. 42:m, 45:a; 1982c: Pl. 50:c).²⁰ Figure 17:f is a cooking pot with the same brown wash and a very similar overall shape and handle, but the neck and rim are modeled and distinct.²¹ The form of a ribbed cooking pot cannot be deduced from its badly burned bodysherds (J9d2 22-23/RN 30 and K9b36 23-26/RN 332, not illustrated). A shallow cooking bowl with a single rib or rounded ledge about 2 cm below the rim exterior has no parallels in the Nubian assemblage and like Figure 17:c is too blackened to detect the brown slip (Figure 17:g), but the fabric clearly belongs in this group. Also included in this ware is Figure 13:a, the rim of a neckless jar from the Sheikh's House that was previously published (Whitcomb and Johnson 1979: Pl. 39h).

¹⁹ Also compare lamps from Faras (Michałowski 1965: Pl. 17:5–7, described on p. 64, nos. 10– 12) which should be Late Christian in Date, AD 1100–1400, according to Adams' discussion of lamp forms in his publication of the West Bank Survey from Faras to Gemai (William Y. Adams 2005: 151).

²⁰ Another cooking pot from the Eastern Area seems to be of this ware, but has a thin-walled body and an everted, flat rim (Whitcomb and Johnson 1982c: Pl. 44:h)

²¹ This form bears an uncanny resemblance to Levantine cooking pots of the Fatimid period (Stacey 2004: Fig. 5.32:13).

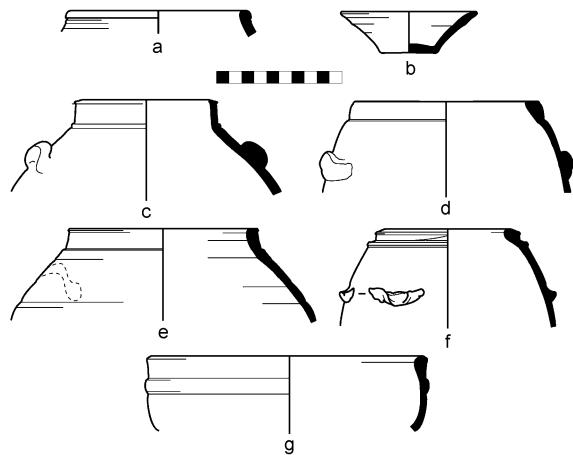


Figure 17. Aswan Utility Ware, Phase I (c–d), Phase IIa (e), Phase IIb (a, f–g), and surface layers (b): a) K9b5_5/RN 678, b) K9b29_3/RN 277, c) K9b56_17/RN262, d) K9b56_1/RN 98, e) K9b70_6/RN 346, f) K9b36_6-8/RN 197, g) J9d4_2/RN 44

b. Marl-dominant Fabrics

There are several marl-dominant fabrics in the Sheikh's House assemblage, most of which are only represented by one ware. The largest fabric group is *Marl 1* (Figure 19), comprising 10% of total sherds excavated. It is characterized by a coarse, lightweight calcitic clay body with a variety of tempering material, including sand, chaff, and black and red particles in various sizes. It usually fires to a medium-hard body with a chalky surface that is cream to greenish (most often Munsell 2.5Y 8/2 white), and crumbly. A few have retained a pinkish-buff core due to less time in the kiln (e.g., Figure 20:b). At

the Sheikh's House it occurs almost exclusively in water jars (known as *qullas* or perhaps *mashrabiyyas*, cf. Henein 1992), sometimes with a filter in the neck; this ware is referred to as Marl 1 Utility Ware. (At the Sheikh's House few filters have been found, however.)²² A ware much like it is well known from the excavations at Fustat and was probably made there beginning in the eighth century and continuing into the late Mamluk and even Ottoman periods, although there is no kiln evidence as yet (Gascoigne personal communication, Mason and Keall 1990: 175). Similar *qullas* have also been found in the excavations at Old Cairo in a fabric much like Marl 1 (IM2) and a second fabric much like Marl 2 described below (IM3), and at the Ayyubid Wall (personal observation; Alison Gascoigne, personal communications December 2005–November 2006; personal observation and discussion with Julie Monchamp, February 2006).²³

A ware much like it was exported from Egypt to Nubia, where Adams has termed it Ware U13, "Fostat Ordinary Utility Ware," and where it occurs chiefly between AD 1300 and 1400. The body is so lightweight and porous that Adams suggests ash has been mixed in with the clay (William Y. Adams 1986b: 576). In Nubia water jars and pilgrim flasks are very often decorated with incising or barbotine (William Y. Adams 1986b: Fig. 318:H4), or with paint on the neck and sometimes shoulder (Michałowski 1965: Pl. 16:4– 5, but also see Pl. 17:1–3), but very few incised sherds and no painted sherds were found

²² At the Sheikh's House only one sherd of those kept represents an open form: K9b56_10/RN 262 (Plate 41:c) is possibly the rim of a very fine ribbed bowl, as its curvature is too pronounced for it to belong to a *qulla* with a ribbed neck, which according to Scanlon represents the earliest types of *qullas* found at Fustat (Scanlon 1986: 4, Figs. 4–5). According to Julie Monchamp something very like this occurs with a clear glaze in the Fatimid levels at the Ayyubid wall (personal communication).

²³ Gascoigne points out that the geology of Egypt should permit manufacture of this ware all along the Nile, at least to Silsila on the border with Nubia, where the geology changes (personal communication, November 28, 2006). For detailed descriptions of the geology of Egypt, see studies by Rushdi Said (1962) and E. Tawadros (2001).

at the Sheikh's House: one from a pilgrim flask bears an elaborate drawing of a water wheel (Figure 18:a), and one probably from a *qulla* (Figure 18:b) has a more random pattern of incisions.²⁴

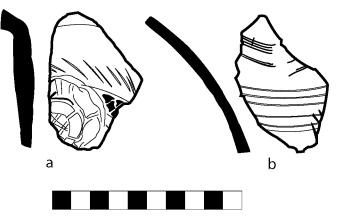


Figure 18. Marl 1 Utility Vessels, Incised: (a) K9b70_5/RN 346, (b) K9b70_72/RN 348

Marl 1 Utility Ware *qullas*, eight with filters (including a nearly complete vessel), and a few other jar forms are known from other parts of the site of Quseir al-Qadim. Comparison of the forms found in the central and eastern parts of the site reveals a transition in ware forms. Compare vessels found in the 1978 season (Whitcomb and Johnson 1979: Pls. 38:b, c, 43:a, c–d, 44:d–e, 46:a, d, 48:a–b, f–g, p, 49:g), the majority of which come from the Merchants' Houses, which are identical with those from the Sheikh's House (Figure 19). By contrast the Marl 1 Utility vessels from the Eastern Area, while they include at least six filterneck jugs like those in central Quseir al-Qadim, also include *qullas* with pedestal vases that are not found in the central part of the site

²⁴ In Nubia Ware U19 is a variant of U13, but with "fugitive painted decoration in red and green" (William Y. Adams 1986b: 576). One sherd at the Sheikh's House is reported in the pottery records as having brown and black painted decoration, from Phase IIa, and two or three others are described as red slipped, but without visual inspection it is impossible to say if they belong to Ware U19.

(Whitcomb and Johnson 1982c: 139–40, Pl. 40:k–l, p–r).²⁵ Seemingly identical marl ware pedestal bases came from the Mamluk levels at the Cairo Ayyubid wall excavations (Julie Monchamp, personal communication, and personal observation, February 2006). Thus this base form signifies a later stage of production of these vessels that can be dated beginning in the late Mamluk period, and continuing into the Ottoman (Alison Gascoigne, personal communication, November 28, 2006).²⁶

²⁵ An interesting sidebar is that a higher proportion of pilgrim flasks—vessels for traveling occur in the Eastern Area than in the central part of the site, and may indicate seasonality of occupation in this area (Whitcomb and Johnson 1982c: 139–40, Pls. 39–40). Complex rim forms and long, narrow necks are also evident in the Eastern Area assemblage (Whitcomb and Johnson 1982c: Pl. 40:e–i, m–n), while the *Marl 1* vessels in the central part of the site always have simple rims and short necks.

²⁶ It seems the utility of calcitic marls for water jugs was recognized in many parts of the medieval Muslim world. Similar water jars made from a cream-firing kaolinite clay were found in the Zabid area of Yemen, dated 1150–1350 (Ciuk and Keall 1996: 42, Pl. 95/12). Many are mold-made with relief decoration on the body. They are found with ring bases like those in the Sheikh's House and pedestal bases like those in the Eastern Area; apparently no distinction in date by base form has been detected in the Zabid area. But it should be noted that the phases of pottery production in the Zabid region have been arbitrarily assigned date ranges of 200 years (Ciuk and Keall 1996: 4–5). *Qullas* of fine calcitic marl, often relief-decorated, have also been found at Ras al-Khaima in Oman and numerous other sites in the Gulf region, where it is quite common from the ninth to the sixteenth centuries (Kennet 2004: 57).

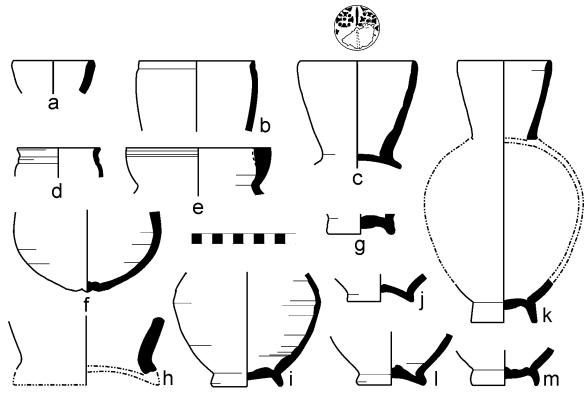


Figure 19. Sample of Marl 1 Utility Ware *Qullas* **and Other Forms**: a) K9b48_3/RN 315, b) J10c2_2/RN289, c) K9b69_1/RN 346, d) K9b69_56/RN 346, e) K9b71_24/RN 348, f) K9b71_8/RN 346, g) K9b69_113/RN 348, h) K9b69_109/RN 348, i) K9b69_2/RN 346, j) K9b71_52/RN 348, k) K9b69_62–63/RN 346, l) K9b71_13–19/RN 348, m) K9b70_79/RN 348

A second ware in the Marl 1 fabric group, Marl 1 Glazed Ware, is covered with clear glaze (Figure 20), making the vessel surfaces appear light green or light greenish-yellow.²⁷ By clay body these appear to fit into the category Adams terms Group G.III "Dull glazed wares" imported into Nubia 1100–1500, but made earlier at Fustat, although clear glazes do not seem to occur in the Nubian samples (William Y. Adams 1986b: 578–

²⁷ Compare Whitcomb and Johnson 1979: Pl. 47:h, which is possibly a clear glazed *Marl 1* jar. It seems that several more *Marl 1* vessels with clear glazes were excavated at the Sheikh's House. Although the description of the ware of clear-glazed vessels is identical to that of *Marl 4*, among the sample kept no *Marl 4* sherd is known to have clear glaze, so I have counted them as *Marl 1* vessels: see Table 9. "Marl monochromes" of various clay bodies were also found by the University of Southampton's excavations, with group IIIa corresponding to the glazed *Marl 1* sherds described here (Bridgman 2000: Pl. 3).

79, 94; Kubiak and Scanlon 1989: 42–46, Figs. 59–60, 62–65). Adams includes glazed wares of other fabrics in this group, but none of the Marl 2 vessels at Quseir al-Qadim is glazed. Three of the clear glazed vessels at the Sheikh's House also have a black painted underglaze stripe near the rim. Forms represented are jars and conical or hemispherical bowls.

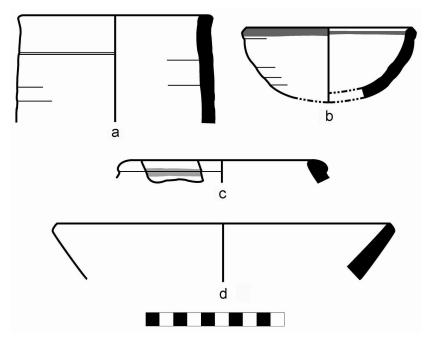


Figure 20. Marl 1 Glazed Wares: a) K9b17_2/RN 173, b) K9b13_1/RN 678, c) K9b46_1/RN 20, d) K9b53_4/RN 269

The *Marl 2* fabric (Figure 21) is very similar to Marl 1 in makeup and inclusions, but is finer and always fires a uniform pinkish brown (commonly Munsell 7.5YR 6/4 light brown); it may contain a small admixture of alluvial silt. Only one ware is found in this fabric, Marl 2 Utility Ware. Almost all forms are closed, probably *qullas* as in Marl 1 Utility Ware. Two samples, both small handles, are slipped, either bright orange (Figure 21:a), or dark red (Plate 26:b), and perhaps should be considered as a separate ware or subgroup. Another representing the only open form has traces of a possible glaze on the interior (Plate 61:b). Examples from Fustat of vessels similar in fabric and form are

dubbed "brown-buff," and usually take the form of filterneck jugs. George Scanlon dates them to the eighth to ninth century (Scanlon 1974b: 68, Fig. 7; 1986: 2, Figs. 1–2). Similar *qullas* of various sizes, with or without handles, and always with crude filternecks have been found in Deir al-Naqlun, the vases of which are especially comparable to Figure 21: e–f. They have been dated by association with splash glazed bowls ("Fayumi ware") to the ninth through eleventh centuries AD (Górecki 1994: 75, Figs. 3–4). It is not demonstrable at Quseir al-Qadim that the Marl 2 fabric is earlier than Marl 1 fabric, however (see Table 11), and as is discussed below, the numismatic and epigraphic evidence dates the ceramics to the thirteenth century.²⁸

²⁸ This ware may be distantly related to Adams' Ware U17, "Buff Utility Ware with a Drab Surface," a fairly heterogeneous group imported to Nubia probably from Fustat between AD 1050 and 1300, although unlike those found in Nubia it usually lacks the surface discoloration made by soluble salts. Also, none of the vessels found in Nubia is slipped and the only form found there is the *zir* (William Y. Adams 1986b: 578–79).

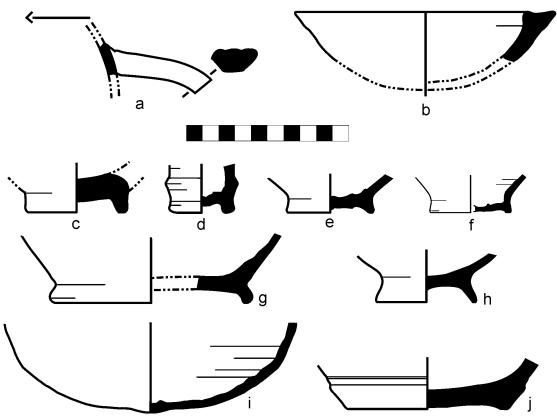


Figure 21. Marl 2 Utility Ware *Qullas* **and Other Forms**: a) K9b14_1/RN 173, b) J9d13_2/RN 260, c) K9b71_11/RN 346, d) K9b69_57/RN 346, e) K9b70_3/RN 346, f) K10a13_3/RN 45, g) K9b69_54/RN 346, h) K9b70_2/RN 376, i) K9b70_71/RN 348, j) K9b70_66/RN 348

Marl 3 (Figure 22) is another fabric only represented by one ware (Marl 3 Glazed Ware), appearing in two glazed closed-form vessels at the Sheikh's House. They were both found in surface levels just outside the walls of the house to the west, where the downhill slope should have taken them from the Sheikh's House. The Marl 3 fabric falls between Marl 4, having almost the same stonepaste-like density and fineness (discussed below), and Marl 1, as it contains moderate amounts of fine red and black inclusions, and sparse medium white inclusions. It fires to a hard 10YR 7/4 very pale brown or with a core of 2.5Y 6/2 light brownish gray and margins of 2.5Y 7/4 pale yellow. The glazes are polychrome, either black on green (in the form of a single in-glaze vertical black stripe on a green ground, Figure 22:b) or blue and brown on light blue (in the form of long, thick

drips of blue or brown glaze on a light blue glaze that fades to clear at the bottom of the vessel, Figure 22:a). This would fit fairly well into Adams' Group G.III "Dull glazed wares" category, imported to Nubia from 1000 to 1500 AD. However, his is a rather broad group used to refer to more than one fabric: a marl that is similar to his U13 and U19 wares, and a possible Nile silt of a similar fabric to ware U17 (Adams 1986: 578). In the Nubian glazed vessels black on green is a common color combination, but dark blue and brown on light blue is not found (William Y. Adams 1986b: 594–95). The form of Figure 22:b is that of a large ribbed jar, and it is glazed clear on the interior. No comparanda have been published from Fustat or Alexandria, but a sherd from a nearly identical vessel was excavated by the University of Southampton at Quseir al-Qadim.²⁹

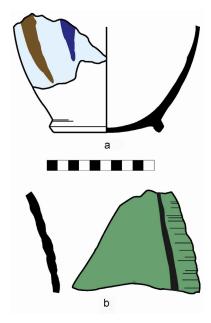


Figure 22. Marl 3 Glazed Ware: a) K9b47_1-7/RN 331, b) K9b29_2/RN 277, both found in surface debris.

²⁹ This is also from a medium-sized closed form, and its petrofabric as described is close to those of the "monochrome marls," analogous with the clear-glazed Marl 1 Glazed Ware vessels discussed above (Bridgman 2000: 50, Pl. 11c).

The body of the Marl 4 group (Figure 23) is the fabric closest to a stonepaste found at the Sheikh's House. Stonepaste (also referred to as fritware, soft-paste, or faience) is a distinctive pottery fabric type made for glazed vessels. It is characterized by the addition of large amounts of ground quartz to small amounts of white kaolinite clay and either glass frit or, more likely, glaze mix. Robert Mason has investigated the development of this technology, and has traced the evolution from a "proto-stonepaste" of primarily clay with additions of quartz and glass, made in Iraq in the eighth and ninth centuries and then in tenth-century Egypt, to a "true" stonepaste of primarily quartz (60– 70%) with additions of roughly equal parts clay and glass (Mason and Tite 1994: 83–90). These proportions were apparently first used in early eleventh century Egypt, after which the technology quickly moved to Syria; a stonepaste body (fritware 1) has been excavated from the earliest phase at Qal'at Ja'bar, which is dated using textual evidence to the mid-eleventh century (Tonghini 1998: 40).³⁰ Because I examined the Sheikh's House sherds using a 10X hand lens I cannot determine whether the clay does indeed contain the minimum 50% quartz grains Mason would require to identify it as "true" stonepaste. It seems likely that makers of the Quseir al-Qadim vessels followed the standard practice of Egyptian potters identified by Mason and Edward Keall, which was simply to add a large amount of quartz sand to clay mixtures (Mason and Keall 1990: 177–78). Marl 4 is well kneaded with abundant fine pores and abundant fine white sand; no other inclusions are visible. The body fires to a pale cream, 2.5Y 8/4 pale yellow or 2.5Y 8/2 white, and occasionally is whiter than can be measured on the Munsell chart. It

 $^{^{30}}$ Also see Tonghini (1998: 38. 40–42) for a review of the literature regarding stone paste ceramics.

tends to be hard, brittle, and sometimes crumbly. Several wares are present at the Sheikh's House, distinguished by incising and different styles of glazed decoration.

The largest ware in terms of sherd quantity having the Marl 4 fabric is glazed monochrome (Monochrome Glazed Ware). Greenish-white and white are the most popular glaze colors after turquoise used on this ware, and many of them seem to be made in imitation of Chinese celadons and porcelains in form and sometimes glaze color.³¹ A second ware is distinguished by incised decoration directly on the clay body and under the monochrome glaze, which is common on bowls and jars; a few turquoise-glazed jars have molded or incised decoration (Incised Monochrome Glazed Ware). Some underglaze painting is found on bowls (Underglaze Painted Ware), as well as multiple colors of glaze (Blue, Purple, White Drip Ware). Glaze colors used on the Marl 4 vessels are yellow, blue-green or turquoise, green, cobalt blue, manganese purple, greenish-white, white, or clear.

Forms made in the Marl 4 fabric are limited to small bowls and jars (with the exception of one footed cup and two lamps), but in a variety of shapes. Conical bowls on high footrings or segmental bowls with everted lip on a low footring are most common, but other forms are represented. Jars are less variable, having wide shoulders tapering to

³¹ This ware was also found in Nubia, but because Egyptian glazed wares have been more intensively studied than coarsewares, it is unnecessary to rely on Adams' classification. The Sheikh's House wares are related to his category Group G.II, "Later Gloss Glazed Wares," imported to Nubia 1100–1500. The same glaze colors occur in the Nubian specimens (bright yellow, pale green, dark green, pale blue, aquamarine, dark blue, aubergine) as well as two of the same decorative regimes: "monochrome glazed" and "monochrome carved." A third category in Group G.II that Adams terms "polychrome silhouette," decorated with low relief designs in thick white slip under a dark green glaze, seems to be the "Mamluk Slip-painted ware" on a red clay body dating to the fourteenth and fifteenth centuries at Fustat and also occurring in a manganese-glazed variety (William Y. Adams 1986b: 592–93; Scanlon 1971: 229). (This is not to be confused with Adams' Group G.IV, "Mameluke Glazed Wares.") Samples of the green and purple-brown types occur in the late Mamluk-dated Eastern Area of Quseir al-Qadim, but not at the Sheikh's House or the Merchants' Houses of P7–P8 (Whitcomb and Johnson 1982c: Pl. 36); see Figure 53 below.

narrower bodies sitting on a low footring; necks are of medium height with everted rims. Tiny horizontal strap handles are found on one jar.

The Monochrome Glazed Marl 4 bowls and jars at the Sheikh's House (Figure 23) are the most common decorated ware in the assemblage, and make up 6–10% (by phase) of all sherds excavated in all phases, being slightly more abundant in Phase IIa than in Phase I (Tables 11–13). They comprise the vast majority of all Marl 4 sherds at 90%. Glazes occur in translucent purple (rare), opaque blue-green or translucent turquoise, translucent green, translucent light green, greenish-white, white, or opaque yellow, with turquoise and green being most common.³² Rim sherds indicate forms are usually conical bowls with straight rims (Figure 23:a, i–k, p–q), but one has a rolled rim (Figure 23:g) similar to a shape found in Jingdezhen white porcelain of the early eleventh century (Bing 2004: Fig. 1:5), and two are segmental with slightly everted rims (Figure 23:f, h).

 $^{^{32}}$ The same glaze colors appear on the Merchants' Houses vessels. In the Eastern Area, by contrast, purple is almost as common as turquoise.

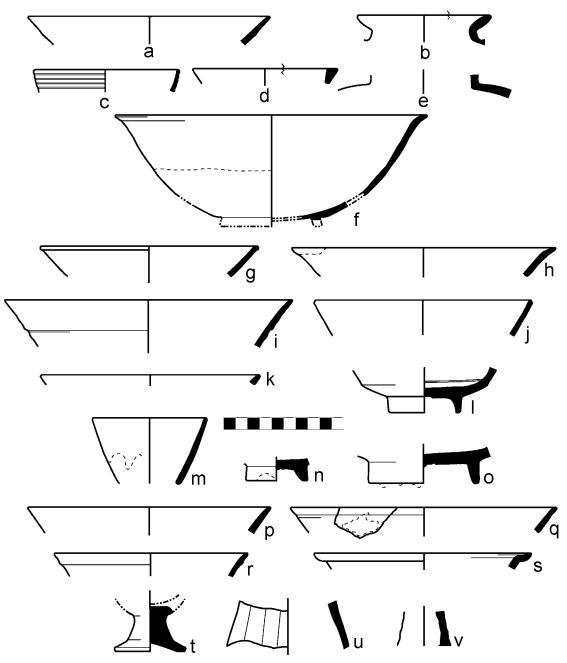


Figure 23. Marl 4 Glazed Monochrome Ware: a) K9b56_19/RN 280, b) K9b56_13/ no RN, c) K9b48_5/RN 315, d) K9b48_43/RN 173, e) K9b19_3/RN 262, f) K9b48_7-17/RN 340, g) K9b7_2/RN 678, h) K9b48_18/RN 340, i) K9b5_6/RN 678, j) K9b12_1/RN 678, k) K9b48_44/RN 340, l) J9d4_10/RN 233, m) K9b71_25/RN 349 n) K9b70_82/RN 349, o) K9b71_49/RN 349, p) K9b70_86/RN 349, q) K9b70_81/RN 349, r), K9b25&27_2/RN 341, s) K9b25&27_17/RN 341, t) K9b50_1/RN 282, u) J10c14_1/RN 287, v) K9b3_3/RN 678

Few bases survive, Figure 23:1, which is glazed white with a blue crackle inside, is that of a biconical bowl the form of which Mason suggests may be Ayyubid in date (the examples he cites are incised monochrome glazed: Mason 2004: 68–69). The second high ring base (Figure 23:0) may belong to a bowl of the same shape. The Quseir al-Qadim examples come from Phase IIa–b and thus date this form into the late Ayyubid period. Likewise, the glaze colors present at Quseir al-Qadim may also revise the usual dating of monochrome-glazed creamwares. Plain white-glazed bowls are generally taken to be evidence of ninth and tenth century occupation (e.g., Horton 1996: 277);³³ the Sheikh's House examples indicate carved successors to these bowls were in use well beyond this date in Egypt.³⁴

Two unusual rim shapes from Phase IIb seem to be made in imitation of celadon bowl forms (Figure 23:r–s); compare the latter with a celadon bowl imported from China at al-Qaraw, Yemen (Hardy-Guilbert and Rougeulle 1995: Fig. 4:16) and another at Akko

³³ White tin-glazed vessels with a "buff clay body" were the second most popular glazed ceramic type at Athar, where it is dated to the ninth century and later based on the Siraf material (Zarins and Zahrani 1985: 77). Also, numerous white-glazed stonepaste bowls were found at Tinnis in Egypt, although they are possibly imports from Iran (Alison Gascoigne, personal communication, December 2006).

At Sharma on the south Yemeni coast the "fine, buff or pale yellow" sherds with opaque white glaze are dated to the earliest occupation in the late tenth century (Rougeulle 2005: 227).

³⁴ At Shanga the white-glazed bowls, which often have blue or green and yellow splashes, are not present in the earliest levels and are dated to AD 800–1000. They also differ from the Sheikh's House pieces in fabric, which is "soft buff" and by their shape, which is a segmental or hemispherical bowl with everted rim and ring foot, rather than the conical bowl seen on the majority of white glazed bowls at Quseir al-Qadim (Horton 1996: 276–7, Fig. 199). Only two sherds of "fritwares," one with a white glaze and one with a greenish-white glaze referred to as "imitation celadon" can be compared with those at the Sheikh's House. The latter is dated to the fourteenth or fifteenth century based on comparisons with Iranian material (Horton 1996: 296, Fig. 19:c). The other monochrome glazed bowls reported at Shanga also occur in different types of fabrics than those at Quseir al-Qadim, with green, clear, or blue glaze, although it should be noted that these are the most common colors at Quseir al-Qadim as well (Horton 1996: 293).

(personal observation)³⁵ and numerous Longquan celadon bowls of various sizes dating between the early thirteenth and early fourteenth century found in surface survey at Hormuz in the Persian Gulf (Morgan 1991: Figs. 8:40–41, 44–48, 9:68–69). Identical vessels were found in the Merchants' Houses (Whitcomb and Johnson 1979: Pls. 43q, 44s). It is interesting to note that this bowl form survives in the later part of the site, the Eastern Area, as well, but there it is glazed turquoise rather than the pale bluish-green that adheres more closely to the color of the Chinese prototype (Whitcomb and Johnson 1982c: Pl. 33:aa, bb).

Only a few monochrome-glazed vessels depart from the two primary bowl forms, most of which were found either in Phase IIb or in the surface debris, the top 10 cm of soil excavated all over the site. Aside from turquoise-glazed jars (discussed below), there are sherds from the shoulder (Figure 23:e from Phase IIa) and rim (Figure 23:b, from Phase I) of two white-glazed jars of similar shape. Another example with in-glaze painting (Figure 28:b, from surface debris) indicates some of these jars were decorated. Other rare forms are a stemmed goblet (Figure 23:t) and a faceted bodysherd that may have come from a ewer (Figure 23:u), both of which are from surface layers. Figure 23:v (Phase IIb) may be either a lamp chimney or bottle neck. A small bowl with plain rim and narrow horizontal ribs (Figure 23:c, Phase IIb) may be an imitation of a steatite vessel, such as the one found at early Islamic al-Mabiyat (Gilmore et al. 1985: Pl. 105:2).

³⁵ I am grateful to Edna J. Stern for showing me many of the ceramics from Akko that are discussed in her PhD dissertation (E. J. Stern 2007) and will soon be published in a preliminary excavation report for Akko.

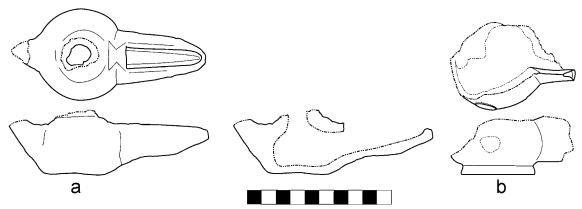


Figure 24. Marl 4 Monochrome Glazed Lamps: a) K9b67_1/RN 224, b) K9b33_1/RN 227

Only two Islamic lamps from the Sheikh's House (Figure 24) were available for study, both from Phase IIb. Both are monochrome-glazed over the foot, Type I in Kubiak's typology. Both base types and the two major colors seen in Type I of Fustat are represented at the Sheikh's House. Type I can occur with either a flat foot (Figure 24:b), or on a ring foot with an incised ring inside (Figure 24:a). Half of those at Fustat are glazed turquoise (Figure 24:a), and half transparent green (Figure 24:b). This type was first produced in the second half of the twelfth century and continued in use through the fourteenth century or later (Kubiak 1970: 13–15, Figs. 12–14).

Marl 4 Incised Monochrome Glazed Ware at the Sheikh's House (Figure 25) make up 11% of all Marl 4 Monochrome Glazed Ware in Phase I, 9% in Phase IIa, 6% in Phase IIb, and 3% in surface and unstratified levels. They occur in yellow (the most frequently found color by tabulation of sherds listed in the pottery sheets), translucent light yellow-green, green, opaque blue-green or translucent turquoise, translucent cobalt blue,³⁶ transparent (clear), or white monochrome glazes. The incised design tends to occur in a band on the interior of conical (Figure 25:a, j–k, n) hemispherical (Figure 25:e,

³⁶ Scanlon notes that blue glazes are common in the Fatimid period, but do not seem to last into the thirteenth and fourteenth centuries at Fustat (Scanlon 1971: 229).

l-m), or segmental bowls with a slightly everted rim (Figure 26:e), and which sit on a low ring foot that is also sometimes out-turned (Figure 25:1).³⁷ Two ledge-rimmed bowls are also present, with simple curved lines in pairs on or just inside the ledge (Figure 25:c-d, g).

Designs are not limited to casually executed arabesques (Figure 25:h, j, l) but include more carefully executed designs dense with filler in the form of scale or featherlike motifs (Figure 25:a, k), reminiscent of dragon and phoenix motifs on Chinese stonewares (Mikami 1980–1981: Fig. 1; Scanlon 1970: Pl. 12a), one of which was found at the Sheikh's House, discussed below in the section on Chinese imports (Figure 51:d). Other copies of dragon and phoenix motifs in similar fabric under a turquoise glaze are known from Fustat (Bahgat and Massoul 1930: Color plate 2:d), where they were probably produced, and Yemen, to whence they were exported from Fustat beginning in the twelfth century (Rougeulle 1999: Fig. 8:7). They are also known in Syria, probably of local production, and dated to the eleventh century (Tonghini 1998: 39).

³⁷ This wedge-shaped foot from Phase IIb fits in Mason's Group Two of Egyptian Incised Wares (part of a typology by petrofabric, form, and decorative style), which he suggests may date as late as Ayyubid (Mason 2004: 69, Fig. 4.8).

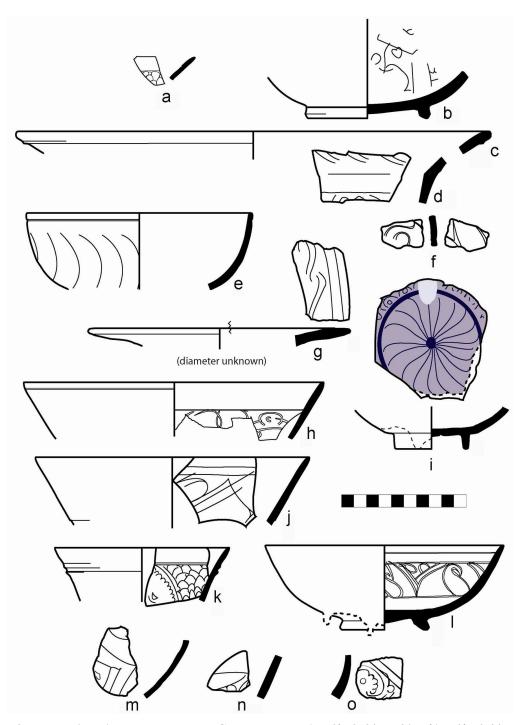


Figure 25. Marl 4 Incised Monochrome Glazed Ware: a) K9b59_2/RN 307, b) K9b56_2/RN 262, c–d) J10c11_1–2/ RN 294 e) K9b71_37–38/RN 349, f) K9b71_36/RN 349, g) K9b68_1/RN 334, h) K9b71_39–46/RN 349, i) K9b70_80/RN 349, j) K9b29_1/RN 277, k) J10a2_4/RN 278, l) K9b25&27_3–15/RN 341, m) K9b3_4/RN 678, n) J10a2_5/RN 278, o) K10a11_3/RN 312

Only two sherds from the Sheikh's House bear an incised design on the interior of a bowl base. The base of bowl (Figure 25:b), which is on a low, beveled footring, has an unidentifiable incised design under a yellowish glaze. More clearly identifiable is a bowl that bears a series of gently curved lines radiating from the center, surrounded by a wide incised band, which is in turn surrounded by a repeating set of simple curvilinear motifs, all under a blue glaze (Figure 25:i). The incising is rather deep so that the design shows up dark blue in the translucent glaze. Bowls with identical design but under a yellow or green glaze were found at Fustat, dated to the tenth to eleventh centuries (Mikami 1980– 1981: Fig. 28; 1988: Fig. 15a). The design used on these bowls seems to be derived from celadon dishes; Basil Gray notes that radial stripes occur frequently on gingbai bowls and dishes of the Northern Song period (1977). Also in imitation of celadon is Figure 25:0, the bodysherd of a jar that has a rosette which Mason notes is in imitation of those on Song vessels (2004: 68, Fig. 4.3). Figure 25:e is the rim of a bowl that may more be more appropriately placed in the monochrome glazed group. The incised lines on the exterior are most likely meant to represent vertical fluting like that on the exteriors of exported celadon bowls, such as the Longquan piece found in a fourteenth century context at Kilwa (Chittick 1974a: Pl. 130:d).

Marl 4 Incised Monochrome Glazed Ware has been found elsewhere in Quseir al-Qadim, at the Merchants' Houses (Area P7–P8: Whitcomb and Johnson 1979: Pl. 41:h, 42:e), Trench S12c (Whitcomb and Johnson 1979: Pl. 38:e), in Central Building A (Whitcomb and Johnson 1982c: Pl. 51:j), in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 33:n, o, q), and from the surface (Whitcomb and Johnson 1979: Pl. 50:d, e). The University of Southampton also recovered some sherds of this ware, referred to as "Tell Minis" ware and attributed to Syrian production (Bridgman 2000: 20, Pl. 2).³⁸ Venetia Porter and Oliver Watson attribute the production of glazed wares in Syria at this time to Egyptian potters (Porter and Watson 1987: 189–91).

A subgroup of the monochrome incised wares contains designs that are seemingly unique to Quseir al-Qadim, perhaps unique to the Sheikh's House (Figure 26). This is a group of four bowls, three of which are conical with a plain rim (Figure 26:a–c) and one of which is segmental with an everted rim (Figure 26:d). All were found in the Phase IIa sanitation pit in Room B of the South House. Under the white glaze on the interior is a band of medium-sized cross-hatching incised into the clay, creating an inverted waffle effect. The conical bowls also all have one or two horizontal lines incised around the exteriors, about 2 cm below the rims, and are glazed on the exterior, although it is unknown whether the bowl foot was glazed. A similarly unusual design is found on a bowl of similar form to Figure 26:d, with a carved or excised design consisting of a series of loops in a band around the interior, under the white glaze (Figure 26:e). This and especially the "waffle bowls" may be variants of the "cut glass wares" found by the University of Southampton, molded or carved to imitate glass or celadon, and covered with a tin-opacified light blue-green glaze containing both lead and alkali fluxes. The clay body of these vessels is similar to Syrian, especially Damascene, stonepaste petrofabrics (Bridgman 2000: 44-45, Pl. 5). The Sheikh's House samples are perhaps later manifestations of the earlier plain "fine yellow ware" bowls with white glaze and no incising or other decoration found at Athar and at sites in the Hadhramaut, dated to the eleventh century at the latest (Rougeulle 2001: Fig. 5:7–9; Zarins 1989: 251).

³⁸ It is significant that the Quseir al-Qadim examples do not seem to correspond with any of the monochrome-glazed and incised forms found at Naqlun near the Fayyum, which were found in Fatimid and Ayyubid period graves (Łyżwa 2002).

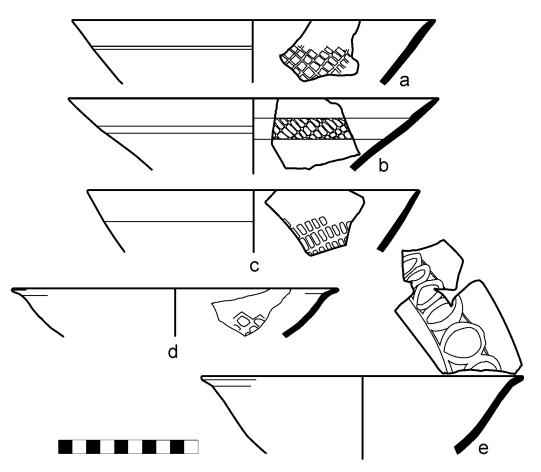


Figure 26. Marl 4 Incised Monochrome Glazed Ware, "Waffle" (a–d) and Carved (e) Types: a) K9b70_88–91/RN 349, b) K9b69_117/RN 349, c) K9b69_141/RN 349, d) K9b71_31/RN 349, e) J9d13 3/RN 260

Monochrome-glazed jars, plain or decorated in relief (Figure 27), represent the continuation of a long tradition of blue-green glazed jars in the Persian Gulf and throughout the early Islamic world, including at Fustat (Sakurai and Kawatoko 1992: Pl. IV-3-7: 1), Siraf, and numerous sites in Bilad al-Sham, beginning in the ninth century (e.g., Avissar and Stern 2005: Pl. 9:2, dated twelfth and thirteenth centuries).³⁹ But whereas this tradition describes large and small jars with transparent turquoise or green

³⁹ They also appear at eleventh-century Athar (Zarins 1989: 250).

glaze on the exterior and sometimes black on the interior, and relief decoration in the form of applied ropes of clay or of stamped or impressed designs (e.g., Chittick 1984: 71, Pl. 26; Horton 1996: Fig. 196, 274–77; Zarins 1989: 249–50, Fig. 6), the vessels at the Sheikh's House only superficially share these decorative characteristics and have no similarities in form except for the ring foot that is occasionally found on the earlier vessels, the latest of which are eleventh century. The Quseir al-Qadim vessels can thus be considered Egyptian successors to this tradition, which is believed to have originated in the Persian Gulf.

Three nearly whole vessels can be reconstructed from the sherds at the Sheikh's House, along with four rim sherds from an additional four jars. They are glazed an opaque greenish-blue that tends to run in thick drips down to the exterior base and inside the vessel to the shoulder.⁴⁰ The jars have wide, curved shoulders and a somewhat tapered body sitting on a low footring. The neck is straight and short, 1.5–2 cm tall, to a triangular or square everted rim with a flat top. The jar in Figure 27:a (from Phase IIb) is the most finely potted of the group and also has tiny strap handles on its shoulders. It is decorated with a molded pattern of repeating wide almond-shaped protuberances, dimpled in the center. The jar depicted in Figure 27:d (also of Phase IIb) has repeated horseshoe-shaped incisions that seem to mimic the effect of the molded vessel. The lower part of the body is scored with diagonal lines under the very thick glaze. Figure 27:e (Phase IIa) seems to have no incised or molded decoration, although there may be some decorations on the missing bodysherds from the center of the vessel. For comparison with

⁴⁰ Sherds from Quseir al-Qadim of similar ware to this and glazed opaque turquoise were analyzed petrographically by Bridgman. She found that this glaze, like that of the whitish-green glaze on the "cut glass" wares mentioned above, is also a tin-opacified lead-alkali glaze, a technique known since the eighth century. The clay fabric also shares similarities with those from Syria (Bridgman 2000: 46).

other parts of the site, two plain turquoise-glazed jars like Figure 27:e were excavated from the Merchants' Houses (Area P7–P8) in 1978 (Whitcomb and Johnson 1979: Pl. 44: h, j), along with one dark blue-green glazed jar with a very round and wide body having wide vertical grooves and tiny strap handles identical to those on Figure 27:a (Whitcomb and Johnson 1979: Pl. 42:k). Excavations in Central Building A yielded a green-glazed creamware jar with incised geometric and arabesque-type designs in an Islamic domestic context (Whitcomb and Johnson 1982c: 39, Pl. 51:j). Surface finds from the 1978 season included a turquoise-glazed *Marl 4* jar with molded pseudo-calligraphy (Whitcomb and Johnson 1982c: Pl. 50:h). In the Eastern Area a smaller vessel with a green glaze and molded decoration in the form of narrow vertical ribs is in the same class (Whitcomb and Johnson 1982c: Pl. 33:l). Also a bodysherd that looks as if it could have come from the jar of Figure 27:a was unearthed in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 33:s).

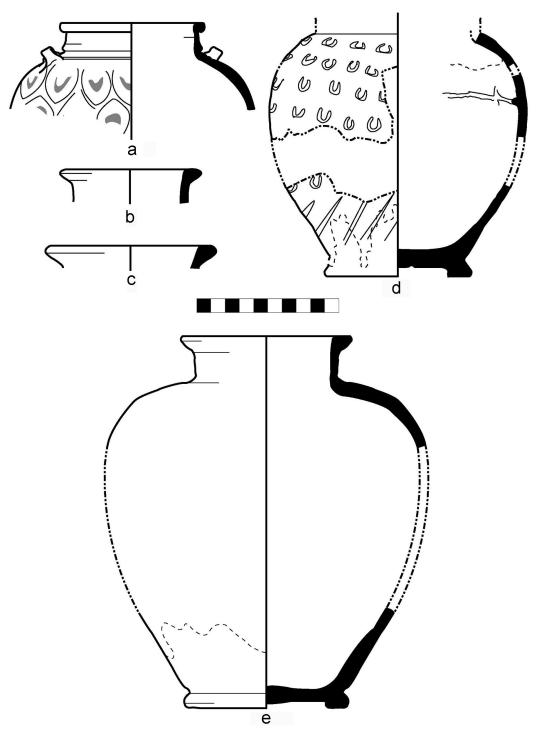


Figure 27. Marl 4 Monochrome Glazed and Incised Monochrome Glazed Jars: a) J9d2–3_1–3/RN 30 (Phase IIb), b) K9b7_1/RN 678 (Phase IIb), c) K9d2_1/RN 300 (surface layer), d) J9d4_14–21/RN 337 (Phase IIb), e) K9b69_122–139/RN 349 (Phase IIa)

Two types of polychrome glazed vessels were recovered from the Sheikh's House, one of Marl 4 fabric and another of Nile 3 fabric. The former is represented by one sherd of "Splashed wh, blu, purp," as it is noted in the pottery sheets (Blue, Purple, White Drip Ware), which was kept out of forty-five initially collected. Figure 28:a is the footring, with a slight bevel on the inside, of a bowl covered with a light blue glaze and decorated with drips of cobalt blue and manganese purple glazes. The drips just reach the bottom of the bowl and do not converge at the center.⁴¹ It is related to the jar mentioned above, Figure 22:a, in a Marl 3 fabric, and indeed manganese is used to produce both brown and purple glazes; the vessels could have been made at the same pottery. Five sherds of this ware were recovered in the Sheikh's House surface collection (e.g., Plate 70:a), and tabulation of the pottery sheets indicates almost equal proportions of sherds were found in all phases and sub phases at the Sheikh's House, making up 5% of all Marl 4 wares (Tables 12–13). Several sherds of bowls and jars were excavated from an Islamic context in trench S12c and from the Merchants' Houses (Whitcomb and Johnson 1979: 107, Pls. 38:n, 41:a, 46:c, 47k, Fig.7). When rims are found they are usually notched or scalloped, although none is known from the Sheikh's House,⁴² One related piece with more deliberate painting came from the Eastern Area (Whitcomb and Johnson 1982c: Pl. 38:0). Samples of the ware were also recovered in the University of Southampton's excavations (Bridgman 2000: Pl. 11b).

⁴¹ Also compare earlier vessels from Athar: bowls on ring bases of buff clay with white glaze and cobalt blue paint dripping down to the center from the rim (Zarins and Zahrani 1985: 78, Pl. 74:13–14).

⁴² The notched rim also appears on a Marl 4 monochrome bowl from the Merchants' Houses (Whitcomb and Johnson 1982c: Pl. 44c) and in Marl 4 monochrome and incised monochrome bowls in the Eastern Area (Whitcomb and Johnson 1982a: Pl. 33:m–n).

This Blue, Purple, White Drip Ware can be categorized as "Fayumi," wasters of which have been found at Fustat (George T. Scanlon, personal communication March 2006), but which are a widely-distributed ceramic type. While the term "Fayumi" tends to be a catch-all for polychrome glazed wares of any color scheme in which the glazed decoration has either been allowed to drip down the vessel ("splash") or was painted in simple geometric designs (and not made in the Fayum), there are vessels at Fustat of this appellation that bear a resemblance to those at Quseir al-Qadim. Bowls with the same color scheme, but a different decorative scheme consisting of dots and semicircles of the colored glazes were excavated at Fustat in a pit that dates pre-eleventh century, and may represent precursors to the type found in the Sheikh's House (Scanlon 1974b: 73, Pl. 18:6).⁴³ The dripped decorative style of the Sheikh's House sherds is also known very early at Fustat, and the Quseir al-Qadim evidence indicates the rather long life of this decorative style, from at least 975 to some time after 1300 (also see Mason 2004: 67–68).

In-glaze or underglaze painting in a transparent glaze is only found on one sherd at the Sheikh's House, from a surface layer, belonging to the shoulder of a jar of similar shape to the turquoise-glazed jars described above. The jar in Figure 28:b is decorated with a simple line-drawn cobalt blue flower, which has become blurry under the clear glaze. Blue in-glaze design occurs on early stonepaste ceramics in Egypt and Syria (Tonghini 1998: Fig. 48c, ware H, fritware 1, dated eleventh–twelfth century). A few jars with carinated bases at Athar (ninth to eleventh century) in the Yemen are decorated with floral patterns in black under a clear glaze, and are related to bowls decorated with geometric patterns (Zarins and Zahrani 1985: 78).

⁴³ Also compare samples from the necropolis at Kom al-Dikka in Alexandria with green, blue, and purple (or one of these colors), applied in irregular fashion or in geometric designs on a white glaze. They are said to date from the tenth to the twelfth century (Zagórska 1990: 84, photo 1).

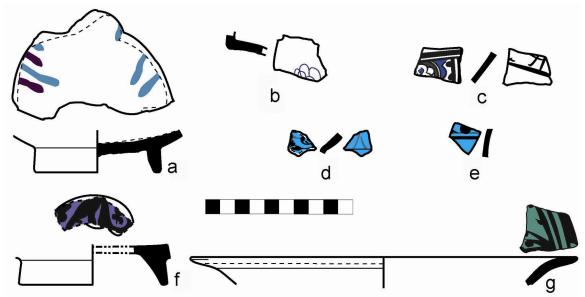


Figure 28. Marl 4 Bichrome and Polychrome Glazed Wares: a) J9d3_1/RN 249, b) J10c2_3/RN 289, c) J9d6_2/RN 322, d) K10a20_3/RN 239, e) J10c18_1/RN 256, f) J10c6_1/RN 288, g) K9b42_1/RN 329

Far fewer Underglaze-painted Wares are found in the Sheikh's House assemblage than monochrome or monochrome incised wares, but they are of two familiar types. Despite the use of a light-colored clay the vessels are slipped white and then finely painted using black pigment, after which they are either glazed turquoise (Figure 28:d–e, from Phases I and IIa; and Plate 70:d–f, surface finds), or if blue pigment has been added as a filler, they are glazed clear (Figure 28:c, and surface collections Plate 70:b–c).⁴⁴ Decoration occurs on both the interiors and exteriors of bowls, which at the Sheikh's House tend to have a ledge rim; no bases are in evidence. Very few of both of these types were recovered from the stratified levels and from the surface. These are likely of Fustat manufacture, as Aly Bahgat excavated a kiln of supposed fourteenth-century date in

⁴⁴ The surface find shown in Plate 70:c is comparable to a sherd from Qasr Ibrim, the petrofabric of which is said to have been made in Fustat (Bridgman 2000: 50, Pl. 10a:IB7). Bridgman tested other underglaze-painted sherds from Quseir al-Qadim alongside this one and determined them to be of Syrian origin.

Fustat (Bahgat 1914), and as the fabric contains the large amounts of sand that Mason attributes to Fustat potters, but as he also points out, there are insufficient petrographic studies of wasters of these types of wares and the possibility remains that they were fabricated in Syria (Mason and Keall 1990: 181).⁴⁵ François attributes similar sherds found at Alexandria to northern Syria production (François 1999: 25, Pl. 16:24). Mason et al assert that the technique of underglaze-painting using pure pigments applied to an unslipped body under a glaze was developed in twelfth century Syria, but that the silhouette type seen here possibly developed independently in Iran after 1200 AD (Mason, Tite et al. 2001: 201).

A subgroup of underglaze-painted ware is represented by two sherds of "silhouette" ware from Phase IIb,⁴⁶ the decoration of which consists of robust black designs painted on a light ground (in this case the color of the clay body, not a white slip) under a translucent dark blue (Figure 28:f) or dark green glaze (Figure 28:g).⁴⁷ Scanlon notes that while Egyptian potters preferred green glazes, the Syrian and Persian potters

⁴⁵ Compare Syrian finds dated to the twelfth and thirteenth centuries (Avissar and Stern 2005: 26, 28, Figs. 9:5–7, 11: 1, 3, 4, 12:5, Pls. 9:1, 3–5 [Types I.2.3.1 and I.2.3.3]; Tonghini 1998: 47, Figs. 65a, 66d, g, h, l, 68a, 70 [Wares Y and AH, fritware 2]), or thirteenth and fourteenth centuries (Touier 1973–1974: 213–14, Pls. Pls. IIB, IIIA). The pieces from the Sheikh's House and elsewhere in Quseir al-Qadim do not fit Tonghini's description of Fritware 3, with its excessively thick, carelessly applied glazes and lack of slip, neither do the illustrated sherds have any similarity to those found at Quseir al-Qadim, although the dating of Fritware 3 squarely in the Mamluk period, especially the thirteenth and fourteenth centuries, would seemingly be a better fit for the Sheikh's House dates (Tonghini 1998: 51–54, Figs. 71–75), making these parallel productions.

Egyptian parallels for pottery with black paint under a turquoise glaze come from Kom el-Dikka in Alexandria. Those of the twelfth and thirteenth centuries are attributed to Syrian or Egyptian production (François 1998: 326). A group with black and blue paint under clear glaze is dated to the fourteenth century and is also attributed to "Syro-Egyptian" production (Redlak 2003: Fig. 1, Type 4).

⁴⁶ Another with green glaze was found in Phase IIa and is described in the pottery sheets.

⁴⁷ Compare a green-glazed sherd found in the University of Southampton excavations (Bridgman 2000: Pl. 8b)

producing the same types of ware tended to use cobalt blue glaze, and indeed dark blue is generally a rather rare glaze color in both the Sheikh's House assemblage and the Cairo Ayyubid wall assemblage (Julie Monchamp, personal communication). Scanlon gives this ware a date similar to that of the Fustat mounds in which it was found, that is to say 1200–1400 or possibly after, which broadly fits with the date of the Sheikh's House assemblage (Scanlon 1971: 231, Pl. 3: f–j). Again, it is possible that one or both of these vessels were actually imported from Syria.

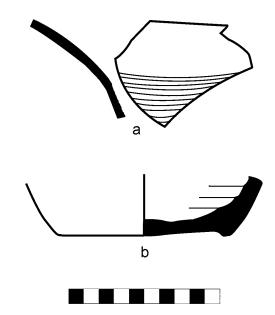


Figure 29. Marl 5 Ballas Ware: a) K9b71_9/RN 347, b) K9b67_3/RN 261

The *Marl 5* fabric (Figure 29) is product of the nearby town of Ballas just north of Qus in Upper Egypt, and the utility ware made from it at Quseir al-Qadim is termed Ballas Ware. Ballas has a long tradition of pottery manufacture, using the local highly calcareous clay from the hills west of the town, although modern potters occasionally add 5–10% of Nile silt (Matson 1974: 134, 38). Because of its proximity to Quseir al-Qadim one would expect to find more Ballas vessels at the Sheikh's House, but it is possible that several are to be found among the bodysherds tabulated and discarded at the site. The

surfaces of medieval Ballas ware vessels are often covered with a light colored "scum" of soluble salts that travel to and remain on the surface during firing (Matson 1974: 137–8; Nicholson and Patterson 1989: 75). (This phenomenon is noticeable on other wares at the Sheikh's House as well.) The body is characterized as being hard and rather dense, and fires to a light to medium red-brown or orange brown (Munsell 7.5YR 6/4 light brown, 5YR 5/4 reddish brown at the Sheikh's House). The inclusions are perhaps the most distinctive aspect of the ware: in addition to moderate amounts of sand and sparse chaff, the clay is often tempered with large quantities of a soft yellow material, most likely limestone, which tends to burn away leaving yellow-rimmed voids. The sherds at the Sheikh's House are very similar to Adams' Ware U12, "Ballas Drab Utility Ware," imported to Nubia from Ballas between 1100 and 1500 (William Y. Adams 1986b: 571–75). Forms represented are store jars (Figure 29:b) or kegs (Figure 29:a).

Marl 6 (Figure 30) represents another departure from the first four marl fabrics at the Sheikh's House, as it is finer and denser, tempered only with a moderate amount of fine to coarse sand, and non-calcitic. It tends to fire to a hard orange body that is orange to cream on the exterior from varying firing conditions in the kiln (common Munsell colors 7.5YR 6/6 reddish yellow, 10YR 6/4 light yellowish brown). Only one utility ware was manufactured of this fabric, at least among those present at Quseir al-Qadim. Forms are medium (Figure 30:a, c) to very large storage jars (Figure 30:b), amphorae (Figure 30:d), and kegs or butter churns (Figure 30:e). A very thick-walled vessel has incised decoration on the exterior (Figure 30:b), and the ends of the keg have fine narrow, deep ribbing. The forms are very similar to those found in the preceding group, Marl 5, the well-known products of Ballas. However, the Marl 6 fabric does not contain the high quantities of limestone characteristic of Ballas ware. All of the kept samples of Marl 6

Utility Ware were found in a Phase IIa pit at the Sheikh's House, but it is possible this ware occurred in other phases and is not recognizable from the pottery sheet descriptions.

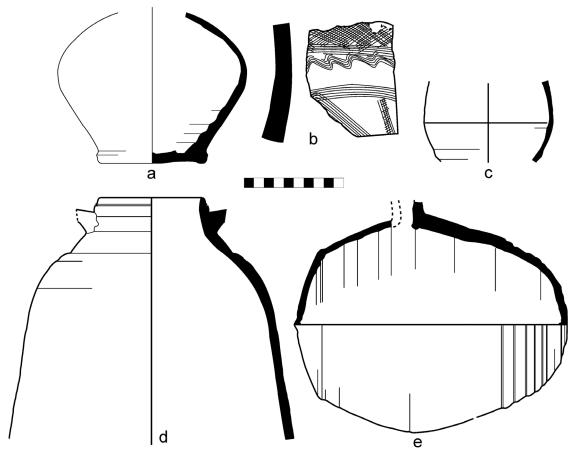


Figure 30. Marl 6 Utility Ware: a) K9b69_51–52/RN 346, b) K9b69_68/RN 347, c) K9b71_51/RN 347, d) K9b70_9/RN 347, e) K9b70_12–13, 92/RN 347

c. Nile-dominant Fabrics

Fabrics composed of predominantly Nile silt combined with other clays (see discussion of Egyptian clay bodies above) make up a large part of the corpus from the Sheikh's House. They are sorted into seven fabrics, some of which are further subdivided into several wares, although, as with the marl-dominant fabrics, a number of fabrics are only represented by one ware at the Sheikh's House.

The *Nile 1* fabric is of medium density with common silt-very fine sand and voids and sparse coarse inclusions of dark particles. The thick sherds, 10–15 mm wide, have been fired to a very hard 5YR 6/6 reddish yellow on the exterior and 5YR 5/2 reddishgray to 2.5YR 5/2 weak red on the interior. They are from the same large spouted jug, found in the pit in Room B of the South House (Figure 31 and sherds K9b70_11/RN 347, not illustrated). The vessel, put in its own category of Nile 1 Utility Ware, is perhaps a precursor of a ware exported to Nubia from Egypt slightly later than the occupation at the Sheikh's House. This is comparable to Adams' Ware U21, "Mameluke Heavy Utility Ware," which made its appearance in Nubia (at Qasr Ibrim and Meinarti) around AD 1350, but was primarily imported from Egypt in the years 1400–1500. Adams reports seeing it on the surface at Fustat as well (William Y. Adams 1986b: 571).

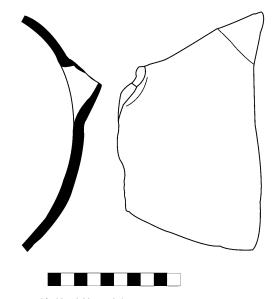


Figure 31. Nile 1 Utility Ware: K9b69_66/RN 347

Nile 2 is, like Nile 1, a rather narrow category, as the one ware within this fabric group is represented by one form at the Sheikh's House. These are slip-painted, spouted water jugs that have parallels at Fustat, the Ayyubid wall, and Old Cairo, referred to at

the Sheikh's House as Nile 2 Decorated Ware (Figure 32). The body is compact, hard, tempered with moderate amounts of very fine sand and sparse medium to coarse dark particles, and fired Munsell 5YR 5/4 reddish brown or 10R 4/6 red. The vessel form is round, on a low footring, with a spout on one side and a handle on the other extending up to the rim of the tall, straight neck, which has a filter inside. The body may be slipped red, over which a band of white slip is painted. A double wavy line is then incised through the white slip and the white band is outlined in black or brown (Figure 32:b-c, e).⁴⁸ Often the lower dark line is placed not over the edge of the line of white slip, but just above it, so that a single narrow line of white slip shows beneath the dark line. Examples from the Ayyubid wall and Fustat fit this description, the former dated to the eleventh and twelfth centuries and the latter not later than Mamluk (Julie Monchamp, personal communication April 2006, Bahgat and Massoul 1930: Pl. LX:6; Sakurai and Kawatoko 1992: p.vi, no. 13, p. 267 no. 2, p. 93, nos. 6-7; Scanlon 1974b: Pl. 16:2; 1986: Figs. 180, 84, 85).⁴⁹ Other varieties have a much wider band of white slip that may or may not be incised with a much wider wavy line (i.e., Figure 32:a; Julie Monchamp, personal communication February 2006; Alison Gascoigne, personal communication April 2006).⁵⁰ This second type also seems to have been found in Aden, and rims from these bottles appear in the Eastern Area assemblage (Harding 1964: Pls. IV: 34, VI: 3-4; Whitcomb and Johnson 1982c: Pl. 50:d-e). Various types of red ware jars or jugs, some

 $^{^{48}}$ The bodysherd of one of these jugs was found in the Merchants' Houses (Whitcomb and Johnson 1979: Pl. 43g).

⁴⁹ I am grateful to Sylvie Marchand of IFAO for loaning me her copy of this very hard-to-get publication.

⁵⁰ I am indebted to Alison Gascoigne who showed me reconstructed samples of these water bottles from the excavations at Old Cairo, without which I could not have provided the description here.

with filternecks, and some painted, were found in the Merchants' Houses and may represent variations of this ware (Whitcomb and Johnson 1979: Pls. 41:a–b, 43:b, d, 44:e). The few sherds of Nile 2 Decorated Ware that were kept from the Sheikh's House excavations were described in the pottery sheets as "red-orange fine ware, cream slipped," or "red-orange fine ware, cream slipped, incised." A tabulation of all sherds described the same way suggests these jars were extremely rare in Phase I at the Sheikh's House, but became increasingly popular through Phases IIa and IIb (Table 12).

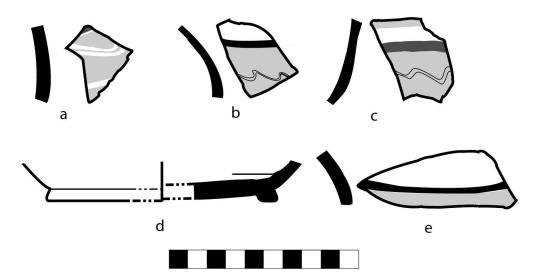


Figure 32. Nile 2 Decorated Ware: a) K9b52_1/RN 47, b) J10c8_4/RN 284, c) K9b59_3/RN 307, d) K9b16_1/RN 173, e) K9b23_3/RN 578

Nile 3 is a rather loose fabric group of which several fine glazed table wares were made (Figure 33). It is hard fired to a 2.5YR 4/4 reddish brown-2.5YR 4/6 red or similar color, but is tempered with varying amounts (sparse to abundant) of very fine sand depending on the ware. This group includes samples of Monochrome Glazed Ware (green glazed as in Figure 33:e; or white glazed as in Figure 33:c),⁵¹ Blue and Yellow

⁵¹ These may be related to Adams' Group G.IV. Mameluke Glazed Wares, imported to Nubia beginning in AD 1200, but being especially prevalent between AD 1300 and 1500 (William Y. Adams 1986b: 596–7). Green, but not white glaze, is present in that assemblage.

Glazed Ware (Figure 33:f), and Slip-painted Glazed Ware (Figure 33:d; another sample is simply slipped and glazed, K9b69_118/RN 349, not illustrated),⁵² as well as an unusual sgraffiato piece with light incising under the light-colored slip, a clear glaze, and application of a secondary color (dark brown) in a very thick glaze (Figure 33:b). It also includes the only lead-glazed polychrome sgraffiato sherd with white slip found at the Sheikh's House (albeit from two different surface loci). A sherd count of glazed redwares in the pottery sheets reveals that monochrome glazed ware was the most commonly found type of decorated red-firing tableware, and was far more numerous than any other type of glazed redware (but is present in only one-tenth the quantities of Marl 4 Monochrome Glazed Ware). It was equally common in Phases I and IIa of occupation, and even more abundant in Phase IIb (Tables 11–12). Monochrome glaze colors, in order from most commonly found to least commonly found (by sherd count), are clear, green, yellow, turquoise, green-yellow, dark brown, white, light green, and blue.

Figure 33:a, found in two surface layers, is the aforementioned single example of lead-glazed polychrome sgraffiato with white slip. This is the bodysherd of a bowl fired 2.5YR 4/6 red, of a hard, compact body sparsely tempered with fine to coarse sand. It has been slipped on the interior and much of the exterior in light orange (5YR 7/6 reddish yellow). On the interior this slip was incised with three sets of double lines that would have begun at or near the rim and converged at the base. A brown "v" shape is painted on the slip in one of the triangular spaces between the sets of lines. Over this a yellowish glaze has been applied, with green in-glaze stripes decorating the triangular spaces on either side of the one containing the brown "v." The overall design of the bowl would

⁵² Compare the base of conical bowl of redware with yellow glaze inside, slightly crackled and opaque (on a white slip?) with decoration of dots and lines (Hardy-Guilbert and Rougeulle 1995: Fig. 4:12).

have been lines radiating from the center.⁵³ Red ware vessels with white slip, incised decoration, and polychrome glazes were produced as early as the tenth and early eleventh centuries. For example, they appear at Sharma in the Yemen in the late tenth century (Hardy-Guilbert 2005), at Shanga in East Africa in post-1000 contexts (Horton 1996: 15), and eleventh century Siraf (Whitehouse 1975: 265–67). This sherd fits more closely with the group of "Late sgraffiato pottery" at Shanga, however, particularly the "Champlevé decorated" type with radiating lines, dating between 1000 and 1300 (Horton 1996: 285–89). Vessels with similar decorative schemes were found at Qal'at Ja'bar in Syria dated to the first half of the fourteenth century (Tonghini 1998: 58, Figs. 89:k, 91:e, i) and at Capernaum in the Galilee where it is dated to AD 1033 at the latest (Berman 1989: Fig. 71:25).

Various types of polychrome sgraffiato were made in Fustat, and also at numerous sites in Greater Syria, Cyprus, and the northern Mediterranean in the thirteenth and fourteenth centuries, and it circulated widely in these regions and the Persian Gulf (Hardy-Guilbert 2005; Kubiak 1998; Scanlon 1980; Tonghini 1998: 57–62).⁵⁴ It is significant that this most popular type of pottery produced in the Mamluk period is only present in the Eastern Area at Quseir al-Qadim and in one sherd from a surface layer at the Sheikh's House (Figure 33:a). A count of the pottery sheets reveals that very few incised redware sherds were found at all in the Sheikh's House: one each from Phases I

⁵³ Compare a nearly identical sherd from at-Tur in the Sinai peninsula, which was found in mixed modern layers (Kawatoko 1996: Pl. 32:5).

⁵⁴ Robert Mason has tested wasters of Mamluk sgraffiato from Fustat and found that they are indeed of Nile paste (Mason and Keall 1990: 180). For distribution of incised wares in Palestine and a discussion of their occurrence in Persian Gulf sites, see the work of Miriam Avissar and Edna Stern, and Derek Kennnet (Avissar and Stern 2005: 38, 42–43, 46–47, 54–56, 60–62, 72–73; Kennet 2004: 34–37). A few pieces were also picked up in surface survey in the Dakhleh Oasis of Egypt as well (Keall 1981: Fig. 1:1, 3–4).

and IIb, and four from surface layers (Table 12). These are all of the simple type with no slip and a monochrome glaze, similar to the one incised redware at the Merchants' Houses (Whitcomb and Johnson 1979: 107, Pl. 44:o).⁵⁵ The Eastern Area contains examples of both simple and complex sgraffiato, the latter more like the sgraffiato that is known from Fustat and around the Mamluk world, similar to Figure 33:a (Table 11). This type is slipped white, incised with epigraphic or floral designs, and glazed in either yellow or green, or sometimes a combination of both. Eleven sherds of this type have been published from this later part of the site (Whitcomb and Johnson 1982c: Pl. 35:a–b, d, f, h, j, p–r, t, x); thirteen additional sherds are of the simpler type with no slip and incised decoration consisting of straight lines, or occasional curvilinear motifs (Whitcomb and Johnson 1982c: Pl. 35:c, g, i, k–o, s, u–w).

The bichrome Blue and Yellow Glazed Ware sherd of group Nile 3 (Figure 33:f) is a ware that occurs only in Phase IIb at the Sheikh's House; twenty-eight sherds were collected representing 20% of all Nile 3 sherds. (Thirty-three sherds were found in surface levels; see Table 12). Very little was recovered from the remainder of the site; only seven sherds came from mostly upper levels in the Eastern Area (Whitcomb and Johnson 1982c: 138, Pl. 38: v–aa). This piece is from a shallow segmental bowl, lightly ribbed in the interior, with an incurving rim. The ware is hard, dense, moderately tempered with fine sand, and fired 2.5YR 4/4 reddish brown. The vessel was first glazed yellow on the outside and the inside. It seems a second coat was applied to the interior, as here the glaze is thick and shiny, whereas on the exterior it is thin and partly flaked away. A blue glaze was applied along parts of the rim and allowed to drip down in thick bands

⁵⁵ Monochrome sgraffiato was also found by the University of Southampton (Bridgman 2000: Pl. 1a).

into the interior of the bowl; this glaze also remains thick and shiny. Similar sherds have been recovered at Fustat by the Japanese team and dated to the tenth century (Sakurai and Kawatoko 1992: p. x, no. 8, p. 359 (Pl. IV-3-3), nos. 5, 7, and Pl. 407 (Pl. IV-3-3), nos. 1, 3). If this is the same ware, it is curious that if it was made already in the tenth century it did not appear earlier at Quseir al-Qadim. Its presence in Phase IIb and on the surface, the periods of the Sheikh's House last use and abandonment, as well as in the Eastern Area, should extend its production into the fourteenth century.

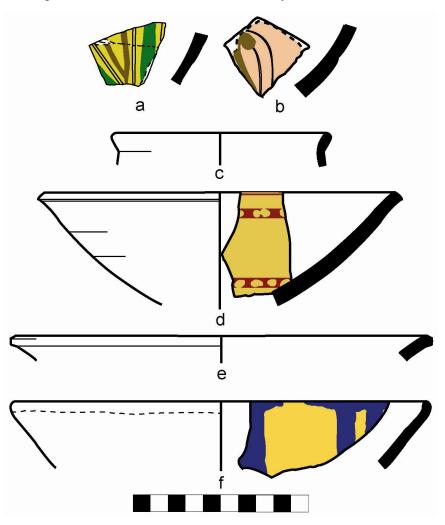


Figure 33. Nile 3 Glazed Table Wares: a) K9d2_2/RN 300, b) K10a10_2/RN 308, c) K9b53_10/RN 269, d) J10c8_1/RN 284, e) K9b56_24/RN 280, f) J10c9_1/RN 286

Nile 4 is a fabric group used to make coarse utility vessels with abundant quantities of fine to coarse sand, limestone fragments, and red and black particles, possibly grog (Figure 34). A few vessels are chaff-tempered as well. They are all hard, and have fired to a dark reddish brown, most commonly Munsell 2.5YR 5/6 red or 5YR 5/6 yellowish red, although the third group fires 7.5YR 5/4 brown. A few sherds have a very dark core. Forms represented are jars of various types, bowls, and cooking pots. The fabric group is loosely subdivided into three wares based on temper, firing, and form, but they may be considered slightly different fabrics, made from the same clay.

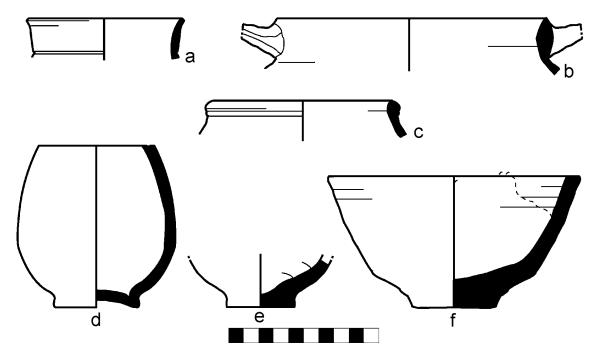


Figure 34. Nile 4 Utility Wares 1, 2, and 3: a) K9b53_11/RN 269, b) J9d2_10&11/RN 264, c) J10c16_2/RN 13, d) J9d12_1/RN 117, e) K9b3_5/RN 678, f) K9b46_3/RN 257

Nile 4 Utility Ware 1, from Phases I and IIa, is seen in Figure 34:a–b and the unillustrated bodysherd K9b51_1/RN 94. These are cooking pots of compact clay that were tempered with moderate amounts of very fine sand and sparse amounts of coarse dark inclusions. They fire in the 2.5YR 4/2–4/6 range, show a gray core and, near the

bottom of the pot, a black surface and grey exterior margin. Nile 4 Utility Ware 2 is represented by bodysherds (K9b69 101/RN 358, not illustrated, from Phase IIa) and rim the sherds of Figure 34:c (surface debris), jars of a medium-density clay, tempered with moderate to abundant amounts of fine to medium sand and black particles. They fire to 2.5YR 5/6 red. Figure 34:f (Phase IIb), a rim-to-base sherd from a carelessly potted conical bowl with a flat string-cut foot, may belong to this subgroup or ware, but it is also chaff-tempered and the core has fired 2.5YR 5/4 reddish brown. It contains some kind of bituminous substance that may have been used to coat the exteriors of boats, or for other waterproofing purposes. Nile 4 Utility Ware 3, found in Phase IIb, is the coarsest of the group, seen in Figure 34:e, the string-cut base of a loosely potted coarseware jar, but the clay of the latter is tempered with common amounts of very fine to coarse sand; no chaff is in evidence. It is fired 7.5YR 5/4 brown to 7.5YR 5/6 strong brown. It is very similar in fabric to Figure 34:d from the Phase IIb pit in Shuna C. The clay body of Figure 34:d is not very dense, containing abundant fine to medium sand and abundant coarse sand and voids with evidence of sparse chaff (perhaps accidental). It fires 7.5YR 5/4 brown and is covered with a bright red wash or slip, 2.5YR 5/6 red.

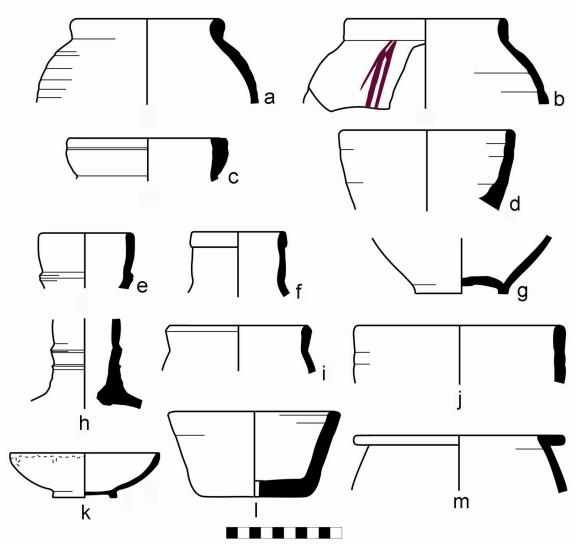


Figure 35. Nile 5 Utility Ware: a) K9b70_7/RN 347, b) K9b71_32/RN 349, c) J9d11_1/RN 14, d) K9b69_69/RN 348, e) K10a15_1/RN 66, f) K9b21_3/RN 584, g) K9b69_65/RN 346, h) K10a15_2/RN 66, i) J10c8_2/RN 284, j) K9b70_36/RN 348, k) K9b71_30/RN 349, l) K9b70_14/RN 347, m) J9d13_1/RN 260

The *Nile 5* fabric can be characterized as being of medium density, tempered with moderate to common amounts of very fine to medium sand (Figure 35). A few vessels have a small amount of chaff, and a few others have sparse inclusions of coarse dark particles. It usually fires 5YR 6/6 reddish yellow, occasionally with a brown core. One utility ware is present: almost all vessels are of closed forms, *qullas* seeming to

predominate, but sizes and thickness of potting vary greatly. *Qullas* are represented by rim sherds (Figure 35:c–d, f) and a base sherd (Figure 35:g). Rim and neck sherds (Figure 35:e, h) perhaps from the same *qulla* in Phase IIb, have parallels in the Old Cairo, Shaft 4 Mamluk assemblage (Alison Gascoigne, personal communication April 2006). Large and small storage jars (Figure 35:i–j) and small red slipped or painted globular jars with rounded rims and short necks (Figure 35:a–b), as well as a small clear-glazed bowl (Figure 35:k) are also present. Finally Figure 35:m is from an unusually-shaped jar with a distinct ledge rim, and is glazed yellow-green, although most of this has worn off.

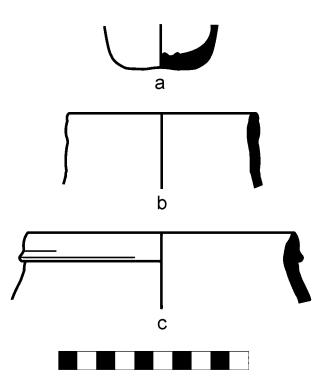


Figure 36. Nile 6 Coarse Utility Ware: a) K9b17or18_1/RN 678, b) K9b5_1/FN 11b.1, c) K9b5_4/RN 678/FN 115.2

Nile 6 is of similar clay body to Nile 5 but with a less dense paste and is generally coarser (Figure 36). Chaff inclusions are common and the vessels fire 5YR 5/6 yellowish red to 5YR 5/4 reddish brown. Rims, bases, and bodysherds of medium-sized store jars

are represented, referred to as Nile 6 Coarse Utility Ware. The rim sherd in Figure 36:c has a parallel in Jebelain, dated AD 800–1150 (Whitcomb 1988: Fig. 2h). All are from Phase IIb.

The *Nile 7* fabric is fairly dense, fired hard, usually 5YR 5/4 reddish brown to 7.5YR 6/6 reddish yellow. It is tempered with moderate to abundant amounts of very fine to medium sand and black particles. All of the vessels in this fabric can be grouped into one ware, Nile 7 Decorated Ware, found in Phase IIb and among the uppermost (surface) layers. The ware forms includes jars of varying shapes, and one bowl with incurving, triangular rim. Surfaces are nearly always slipped and usually painted as well. One vessel has tooled decoration. Painted designs are simple and reminiscent of Aswan and Nubian styles. They are probably related to several painted vessels excavated from the Eastern Area at Quseir al-Qadim (Whitcomb and Johnson 1982: Pl. 41: h–y).

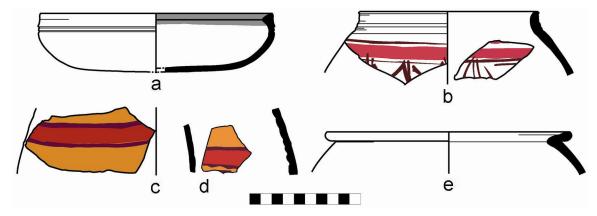


Figure 37. Nile 7 Decorated Ware: a) K9b38_1-15, b) K9b3_1-2, c) J9d2_8, d) K9b70_84, e) K10a15_3

The bodysherds in Figure 37:c (from surface debris) and Figure 37:d (Phase IIa) are from two similar vessels that have been slipped 5YR 6/6–6/8 reddish yellow, and painted with a wide red band outlined in dark reddish-brown or black on either side. Surfaces are mat. This simple decoration is reminiscent of that on earlier Nubian samples, and may be influenced by this style (William Y. Adams 1986b: 494, 500, Fig. 163:1–5).

Related to these are sherds, from a jar with a low, very slightly everted rim and a tiny carination at the neck and shoulder join (Figure 37:b, Phase IIb). The polished slip (5YR 6/6 reddish yellow) is well-preserved, thick, and smooth, but the design painted on it in black and red is fragmentary. The design is perhaps similar to the repetitive leaf motif on an Aswan specimen seen above (Figure 16:f), but the fabric of the vessel does not match the Aswan group. A cooking bowl is illustrated in Figure 37:a (Phase IIb); it is thin-walled and flat-bottomed with curved sides and an incurved, triangular rim that is painted black. Two shallow grooves decorate the exterior just below the rim. The vessel is slipped 7.5YR 7/6 reddish yellow to 10YR 8/6 yellow and bears no other decoration than the painted rim stripe and tooled grooves.

d. Stonewares

Two of the vessels at the Sheikh's House are of a type of fabric that is close to stoneware in being very high-fired so that it is partly vitrified, and non-porous, but it is not imported from China. Those in the Sheikh's House selected sherds are not of identical fabric, but are grouped together because they are of the same distinctive type of vessel and do not fit into any of the other clay categories. "Stoneware" vessels as noted in the pottery sheets are in relative abundance in the first phase, but are reduced by half in the second phase. Preserved examples are from Phase I and IIb. Figure 38:b (Phase I) is of a hard, dense fabric with a rather smooth fracture that fires 2.5Y 7/2 light gray. It has abundant very fine-fine black sand and voids, and sparse coarse voids. This is almost the complete nozzle, shoulder, and body of a sphero-conical vessel with wheel marks on the interior. The surface is a glassy 5YR 4/4 reddish brown, the result either of vitrification from high kiln temperatures, or possibly a translucent glaze with holes worn through. The possible remains of its contents in the form of a hardened oxidized substance (perhaps tree resin?) have spilled out of the nozzle and over the rim and shoulder. It was first

published in the 1978 season preliminary report (Whitcomb and Johnson 1979: Pl. 40:q), and vessels identical in form and surface treatment were found in the Merchants' Houses (Whitcomb and Johnson 1979: Pls. 41:g, 47:q). Also compare the form of finds at Fustat (Sakurai and Kawatoko 1992: p. 229, no. 2, p. 79, no. 9).

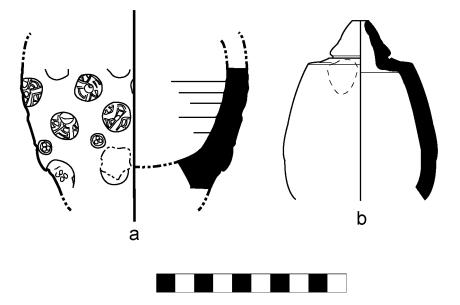


Figure 38. Stoneware Sphero-Conical Vessels: a) K10a11_1/RN 248, b) K9b23_2/RN 578&173

The second sphero-conical vessel (Figure 38:a, Phase IIb), is much larger than the first. It is again of a very hard paste, with somewhat grainy fracture and this time with no temper visible but common very fine voids. It is fired to 2.5Y 3/0 very dark gray with an interior surface discolored 5YR 3/3 dark reddish brown. Nothing of the nozzle remains, but the body is covered with circular stamps, deeply impressed into the clay, which have a geometric design inside them. The surface is a fairly uniform 5YR 2.5/1 black, probably a result of overfiring rather than a slip. Stamped designs like this are not unusual on sphero-conical vessels and other types of pottery; nearly identical stamps are found on a green-glazed lamp from Fustat, dated to the eleventh century (Scanlon 1974b: Fig. 3). A sphero-conical vessel of similar size was found in the Eastern Area, with

surface treatment similar to Figure 38:b in its plain purple glaze (Whitcomb and Johnson 1982c: Pl.49:k, l).

The identification and purpose of these types of vessels is debated. They are found in numerous sites all over the Islamic Middle East from the tenth to the thirteenth century, although at least one excavated group is known from a fourteenth century (Iranian) context (William Y. Adams 2002: Pl. 16:e3; Ghouchani and Adle 1992b: 72; Keall 1992b: 12). They have been suggested to be grenades or fire-blowers (e.g., Hildburgh 1951; Pentz 1988), although this is not convincing due to their thickness, hardness, and durability (e.g., see the arguments of Ettinghausen 1965; and Seyrig 1959). Other suggestions include their use as alchemical vessels, as containers for precious liquids such as wine, perfume, or mercury, or as parts of water-pipes (Ghouchani and Adle 1992b; Keall 1992a; 1992b; 1993).⁵⁶ 'Abd Allah Ghouchani and Chahryar Adle point out that they have been found in quantities too large to permit their exclusive use for mercury, which is a rare substance, and note that as Michael Rogers argued, they seem to have been used for a variety of functions (Ghouchani and Adle 1992b: 72, 74, 86–87; Rogers 1969). Additionally they provide suggestive evidence in some inscribed vessels and comparisons to Persian poetry that some of the samples from Persia were used as beer gourds (Ghouchani and Adle 1992b: 74-86).

2. INDICATIONS OF REGIONAL CONNECTIONS: IMPORTED WARES

a. Nubia

A very few of the vessels found at the Sheikh's House seem to have been made in Nubia, or are Egyptian and have affinities with Nubian pottery. It is unknown how far

⁵⁶ For further investigations of these objects, see Brosh (1980), Dumarçay (1965), Ghouchani and Adle (1992a; 1992b), Poulsen (1957), and Savage-Smith (1997).

Nubian pottery extended into Egypt in this period, as it has not been identified at Nile Valley sites (Pamela Rose, personal communication; Adams 1977: 520). Nevertheless Nile river trade relations seem to have persisted between Nubia and Egypt despite the hostile relations between their governments at the beginning of the Ayyubid period (William Y. Adams 1977: 456, 525–31; Garcin 1976: 92, 126–27, 211–16; 1978: 305).⁵⁷ Excavations at the site of Meinarti, just below the second Nile cataract, have yielded numerous imports of glazed pottery, glass, and linen textiles from Ayyubid and later, Mamluk Egypt. In contrast to preceding periods, however, the imports in the Ayyubid period seem to have come from Middle and Lower Egypt rather than Upper Egypt (William Y. Adams 2002: 93–94), which correlates with few Nubian sherds being found in Quseir al-Qadim in Upper Egypt.

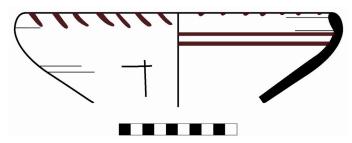


Figure 39. Nubia 1 Decorated Ware: K9b51_2/RN 94

Nubia 1 (Figure 39) is a relatively dense fabric, containing moderate amounts of very fine sand and voids. It fires to a hard buff or reddish brown with a slightly darker core (Munsell 5YR 5/4 light reddish brown, 5YR 6/4 reddish brown). At the Sheikh's

 $^{^{57}}$ The persistence of trade through the Ayyubid period was initially a supposition based on the lack of textual evidence available to characterize the relationship between Egypt and Nubia between AD 1172 and 1268 (Hasan 1967: 96–99). Because no further hostilities were catalogued it was assumed peaceful trade must have resumed as it had in the Fatimid period (for which there is textual evidence excavated at Qasr Ibrim, in addition to numerous Egyptian ceramic imports to Nubia), since the initial treaty, the *Baqt*, had been enacted between the Egyptians and the Nubians (Adams 1977: 452, 464–66, 469, 504, 522).

House this only appears in the sherds of one bowl, assigned to its own ware, Nubia 1 Decorated Ware. Figure 39:a⁵⁸ depicts the conical bowl with incurving rounded rim, which may be related to ware R21, "Post-Classic Christian Polished Orange Ware," dated AD 1000–1300 (William Y. Adams 1986b: 497–98). The form corresponds well to Adams' bowl form C36, which has a rounded base, but may actually belong to a footed bowl form such as D23 (William Y. Adams 1986b: Figs. 118, 282). The bowl is slipped 5YR 5/6 yellowish red and polished, then painted in the interior with two horizontal stripes of dark red, and on the rim with diagonal ticking, corresponding to Adams' decorative style A.II, sometimes seen on this ware (William Y. Adams 1986b: Fig. 215:8-1, 1-1). A pot mark incised before firing is seen on the exterior. The blackened surfaces near the base of the vessel indicate its use as a cooking bowl.

The *Nubia 2* fabric group contains one specimen of one ware, Nubia 2 Utility Ware. This is the only handmade vessel of possible Nubian manufacture to be found at the Sheikh's House (Figure 40). This is a tall, long-necked jar with a round body and base and a plain rim from Phase I. The Nile silt body is very heavy and dense, having abundant mica, moderate coarse to granule-sized sand, and common fine-medium sand and dark particles, possibly grog. It is medium hard and is fired 5YR 4/3 reddish brown to 10YR 5/3 brown, with a black core. This seems related to Ware H4, "Later Domestic Plain Utility Ware," a very coarse and heavy plain handmade ware manufactured, as most of the D.III group, between AD 1000 and 1600. The form is not in Adams' typology, but he does mention that not all the forms are known, due to insufficient samples of whole

⁵⁸ Compare an East African basin found in the Hadhramaut (Rougeulle 1999: Fig. 8:15).

specimens (William Y. Adams 1986b: 427).⁵⁹ For example, sherds of this ware were particularly abundant at Meinarti in the Late Christian period (AD 1200–1365), but only five vessels forms could be distinguished (William Y. Adams 2002: 61). Photographs of the few whole vessels found illustrate the similarity of crude manufacture technique with the jar found at the Sheikh's House (William Y. Adams 2002: Pl. 15:a1 ,a2 ,a9 , d, e4).

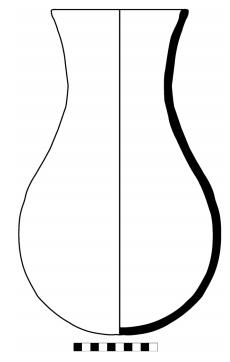


Figure 40. Nubia 2 Utility Ware: K9b56_44-48/RN 119

Nubia 3 is a fabric group containing two vessels of the same ware, Figural Painted Ware. This ware cannot with certainty be attributed to Nubia, but seems more at home there than in Egypt. The vessels are two globular jars with short, straight,

⁵⁹ There are some similarities in form with jars found in small quantities in Period II contexts (mid-eleventh to late thirteenth century) and later at Manda in East Africa. The fabric of the Manda vessels is that of the great majority of pottery on this site, however, which was made on the East African coast: soft, sandy, and friable with a black core and wildly varying surface color due to open-air firing. No mention is made of mica as a temper (Chittick 1984: 108, Fig. 86).

corrugated necks and noticeable but not exaggerated rotation marks in and out (Figure 41:a–b), found in the third phase of occupation (Phase IIb) in Room C of the North House. The fabric is of a well-kneaded, medium density Nile silt, and is tempered with a moderate amount of fine sand and sparse coarse dark particles, possibly grog. It fires to a hard 5YR 4/4–5/4 reddish brown. Both jars are slipped 5YR 6/6 reddish yellow to 10YR 7/6 yellow and painted with either black or dark red paint (the slip is splashed over the rim inside the neck and a bit onto the interior walls). Both pots bear the same decorative scheme, which is the use of two motifs on the sides of the jar, alternating twice so that there are four figures total. The same motifs are also used on both jars, one of which is a standing crescent, and the other of which may be a highly stylized standing snake or other figure. The decorative scheme could possibly be fit into Adams' N.IVA, in which representational motifs reappear in Nubian ceramic art for the first time since the Meroitic period, and tend to be highly stylized. Pots bearing this decorative scheme have been found in the Red Sea Hills from 850 to 1100 AD (William Y. Adams 1986b: 245-47). The shape of the pot, treatment of the rim, and clay body do not conform to any of the vessels on which N.IVA is usually found, neither do the form and clay conform to any combination that is known in Nubian pottery. The clay body and surface treatment are familiar, however. For example, Ware W6, Classic Christian Mat Yellow Ware, is a dense, medium-textured Nile mud ordinarily fired to a medium-hard 2.5YR 5/4 to 5YR 5/4, having abundant medium-sized temper, especially rounded quartz but also black and red material and occasional straw. It is slipped 10YR 8/4 or 10YR 8/6, and painted in red or brown, and early specimens are sometimes painted in N.IVA style. It is used in Nubia from ca. 850 until 1150 and sherds persist until 1250 (Adams 1986: 490, 493-4). These

Nubia 3 Figural Painted Ware vessels may represent a rare or unknown ware in the Nubian group, related to $W6.^{60}$

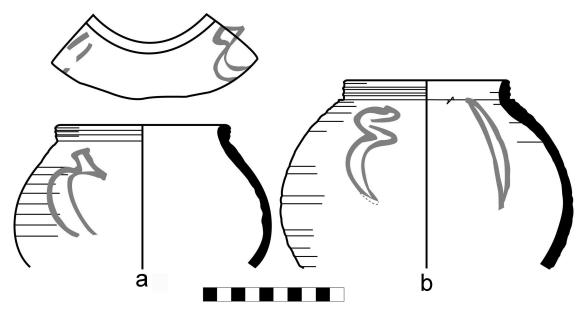


Figure 41. Nubia 3 Figural Painted Ware Jars: a) J9d4_4/RN 95, b) J9d4_8/RN 97

b. Yemen

Yemen appears in the Quseir al-Qadim documents only a few times. For example, Text 67 mentions "Yemen," the writers of Text 9 are stuck in Qasr al-Yamani, presumably a reference to a Yemeni town, and a fragmentary text, RN 1056b, makes reference to the important port of Aden (Guo 2004: 62, 155, 281). Nevertheless, several

⁶⁰ Several people knowledgeable of Egyptian and Nubian ceramics were kind enough to examine photographs and drawings of these sherds (William Y. Adams, Alison Gascoigne, Sylvie Marchand, Julie Monchamp, Gillian Pyke, Pamela Rose, and George T. Scanlon), but they remain a mystery. The opinion of Adams is that they are not Meroitic, and although the painting style is similar to that on Ware W12, Aswan Medieval White Ware, the clay body is certainly not Aswani (personal communication, 27 September 2006). Pamela Rose notes that "in shape and surface style the most likely Nubian period is NIII, Early Christian, at which time isolated side designs are found," but remains unconvinced they are of Nubian manufacture (Rose, personal communication, 11 December 2006). Their recovery from a clearly Islamic context and their nearly completely reconstructable preservation indicates that they are products of the Islamic period rather than residual Roman or Early Christian period vessels.

types of ceramics substantiate Quseir al-Qadim's participation in the trading contacts between Egypt and Yemen first well attested in the Fatimid period (Goitein 1980; 1988; al-Shamrookh 1993), which was Quseir al-Qadim's link to Indian Ocean trade. The other import goods found at Quseir al-Qadim, namely resist-dyed textiles from India (or possibly Yemen) and Chinese porcelains, were procured by the Quseiri merchants from Yemeni ships.

Yemen 1 is a clay body of medium density and medium fineness, tempered with moderate to common amounts of fine to medium-sized sand and medium-sized dark particles. A sparse amount of chaff is also present, and moderate amounts of mica are detectable in over half the sherds. (Sometimes mica is visible in one sherd while being invisible in another from the same vessel.) The clay body fires a hard reddish brown, normally either Munsell 5YR 5/4 reddish brown or 7.5YR 6/4 light brown, with surfaces sometimes covered with a thin wash as light as 10YR 7/3-7/4 very pale brown. Only one ware is present in this group: "Black on Yellow Ware." Forms are almost exclusively segmental bowls on low ring feet, with ledge rim (Figure 43) or simple everted rim (Figure 42). Some bear the marks of having been pared on the exterior (e.g., Figure 42:eg). One very rare filterneck jug is in the assemblage (Figure 42:h). The vessels are not all slipped, but all are glazed yellow on the interior and just over the rim, and most are then decorated with simple curvilinear designs in brown paint. Very few also have green painted accents. On most of the sherds the yellow glaze has decayed to a powdery coating, and often the brown painted design has nearly entirely faded; few vessels retain their original gloss.

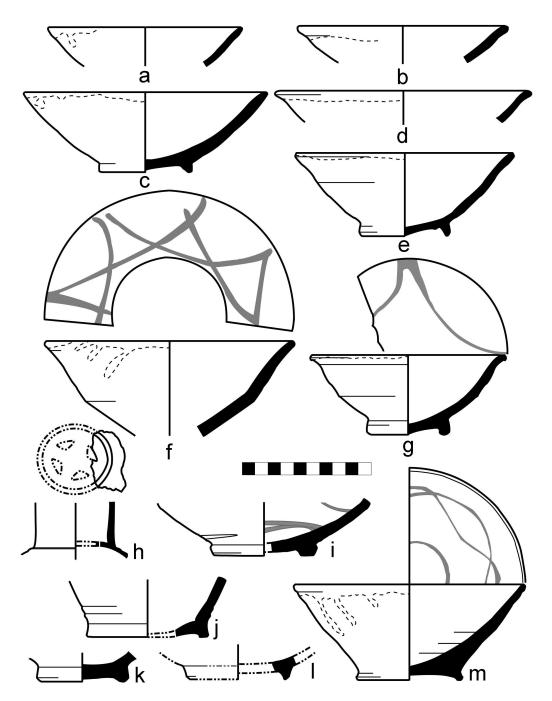


Figure 42. Yemen 1 "Black on Yellow Ware" Small Bowls, Phase I (a–b, e, h, k–l), IIa (g, i–j), and IIb (c–d, f): a) K9b56_31/RN 297, b) K9b56_30/RN 297, c) K9b67_4/RN 343, d) K9b67_2/RN 261, e) K9b53_14-19/RN 338, f) J10a9_1/RN 342, g) K9b71_34-35/RN 349, h) K9b53_8/RN 269, i) K9b70_83/RN 349, j) K9b71_33/RN 349, k) K9b23_5/RN 678, l) K9b53_20/RN 338, m) J9d4_23/RN 339

"Black on Yellow Ware," or "Mustardware," as Whitcomb and Johnson first termed it, was found in significant quantities at Quseir al-Qadim and also at the Sheikh's House, in all phases and sub phases.⁶¹ It has been found in numerous locations in Egypt, Nubia, East Africa, the Yemen, Oman, and Northwest Arabia, usually appearing in the thirteenth century and lasting into the fourteenth (William Y. Adams 1986b: 597; Chittick 1974b: Fig. 91:b–c, Pl.112:b, 304; 1984: 12, 81–2, Fig. 39; Ciuk and Keall 1996: Pls. 95/45:a, f–h, 95/46:a, c, c'; Gayraud 1984: 244; Hardy-Guilbert 2004: Fig. 17:1–3; Horton 1996: 291, Figs. 15, 16:a–f; Kawatoko 1988; 1993b; 1995; Kennet 2004: 41–42; Rougeulle 2005: 229–44; Whitcomb and Johnson 1979: 105–06; 1982c: 137–38; Zarins 1980: Pl. 24:10–12; Zarins and al-Badr 1986: 56).⁶² Its origin has long been speculated to be in southwest Arabia, but it seems to have eventually been made in multiple locations. It was found in large quantities at Fustat in post-1200 contexts by the American excavations, although never published. They assumed it to have been made in Aswan.⁶³

⁶¹ 228 sherds were found at the Sheikh's House alone. Also from the central parts of the site: nine vessels from the Merchants' Houses (Whitcomb and Johnson 1979: Pls. 41:c, f, 42:b, 43:k, 44:g, 46:b, 48:d–e, k), two vessels from Central Building A (Whitcomb and Johnson 1982c: Pl. 51:d, e), two from F8–F9 (Whitcomb and Johnson 1979: Pl. 36:d, f), three from F10a (Whitcomb and Johnson 1979: Pl. 37: e–g), and two from S12c (Whitcomb and Johnson 1979: Pl. 38: g–h). Eighteen vessels have been published from the Eastern Area (Whitcomb and Johnson 1982c: Pl. 37). Forms and decorative styles do not vary significantly between the central areas of the site and the Eastern Area.

 $^{^{62}}$ At Kilwa it is predominantly a fourteenth century ware, even if it appears earlier.

At Manda it is found Period II, late thirteenth to fourteenth century, in association with "poor sgraffiato," "Early Islamic Monochrome" wares of lightish green glaze over a buff body, and also rarely with celadon.

At Shanga it seems to have arrived around AD 1250 and continued in circulation until the midfourteenth century, but there are "significant residual occurrences in the later phases." At this site it has a complementary distribution to that of late sgraffiato pottery.

⁶³ According to George Scanlon, at Fustat it always came from post-1200 contexts and was referred to as "Aswan ware" after W. Y. Adams. Wladyslaw Kubiak had always intended to publish it (George T. Scanlon, personal communication, March 14, 2006).

the fourteenth century (mentioned in the report on 'Aydhab and Badi', Kawatoko 1993b: 206). Also, Gascoigne and Monchamp both have quantities of yellow glazed Nile silt bowls that decay to a powdery finish at their respective sites in Cairo, some of which are decorated in brown or black paint, but both feel certain it is a locally-made variant of Black-on-yellow (personal communications).⁶⁴ Very similar pieces to those found at all parts of Quseir al-Qadim (in form and decoration) have been excavated at Alexandria, which François attributes to Yemeni production (François 1999: 139, Pl. 15:340–42, 44–47). At Ras al-Khaima on the Gulf coast of Oman it seems to occur in more than one clay body, adding to the complication (Kennet 2004: 41).

Rebecca Bridgman undertook petrographic analysis of some sherds from Shanga on the East Africa coast, Qasr Ibrim in Nubia, and Quseir al-Qadim for her recent Master's Dissertation at the University of Southampton (Bridgman 2000: Pl. 7).⁶⁵ She found that the sherds from Shanga and from Quseir al-Qadim contained basalt and other volcanic elements, pointing to a possible origin on the Tihamah plain where volcanic deposits are common.⁶⁶ The sherds from Qasr Ibrim, on the other hand, have a lead glaze and a body that seems to be of Aswan clay (Bridgman 2000: 47–48). This accords with Adams' original assessment that the samples of this ware found in Nubia were made at Aswan (William Y. Adams 1986b: 597), and affirms the hypothesis of multiple points of manufacture. The distribution pattern of *Yemen 1* wares in the Sheikh's House may

⁶⁴ Mutsuo Kawatoko suggests it was made at Fustat, however, from whence it made its way to Quseir al-Qadim, 'Aydhab, and across the Red Sea to Yemen (1993b: 206).

⁶⁵ I am grateful to Ms. Bridgman for providing me with a copy of her unpublished thesis and allowing me to cite it.

⁶⁶ An Egyptian source cannot be ruled out, however, because there are several sources of basalt in Egypt, most notably in the Fayum (Said 1962).

support this point; although the bowls occur in the *shunas*, they are in far lesser quantities than in the houses, which have equivalent high concentrations. Thus it seems these tablewares were bought from Yemeni merchants who anchored at Quseir al-Qadim, and used in the household, but may not have been an item sent to the Nile Valley. Alternatively, the trade in these bowls was relatively low volume, providing just enough for them to be seen by local potters and imitated in potteries at Aswan and Fustat.

A clue to the change of this ware over time can be detected in the differences between the Sheikh's House assemblage and those of the other parts of Quseir al-Qadim. A particular form occurs once in the Merchants' Houses (Whitcomb and Johnson 1979: Pl. 48:k), once on the surface at the Sheikh's House (Plate 69:a), and at least twice in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 37:i, j). This is a large dish with very thick walls (almost 2 cm) the form of which is incurved or even carinated up to a plain rim. It has a parallel in the Black-on-Yellow or locally made variant in the Mamluk levels at the Ayyubid wall (personal observation; Julie Monchamp, personal communication).

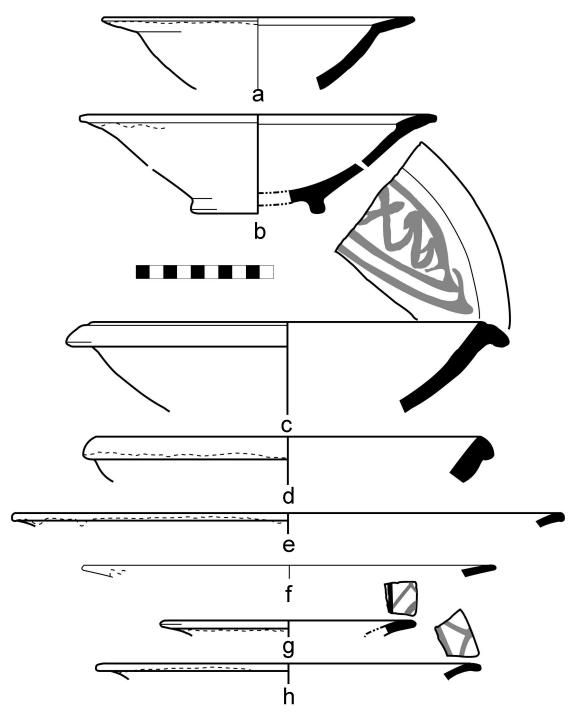


Figure 43. Yemen 1 "Black on Yellow Ware" Large, Ledge-rimmed Bowls, Phase I (b, d–h), Phase IIa (a), and Phase IIb (c): a) K9b71_47/RN 349, b) K9b56_25and32/RN 297, c) J9d4_24/RN 330, d) K9b53_12/RN 338, e) K9b53_13/RN 338, f) K9b56_27/RN 297, g) K9b21_2/RN 584, h) K9b56_27/RN 297

Yemen 2 is a less well-defined group than *Yemen 1*. The fabric is very similar, but finer and with less temper; moderate amounts of sand and dark particles (possibly grog) are found along with sparse mica. A few vessels have sparse chaff. It fires to similar colors as *Yemen 1*, usually Munsell 5YR 5/6 yellowish red. Two known wares are represented in this group, and each by one vessel (Figure 44); the remainder of the sherds are not readily identifiable and thus their assignation to a "Yemen" group can only be considered speculative (Figure 45). Examples were found in all phases and sub phases, and in surface debris.

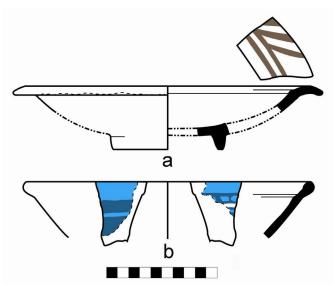


Figure 44. Yemen 2 Wares, Brown Painted (a) and Turquoise Slip-painted (b): a) J10c19_2-4/RN247, b) K9b_surf_16/RN 367

The first ware in the *Yemen 2* fabric group is represented by a shallow bowl on a low footring with sides that curve up to a wide everted rim with a groove at the join between cavetto and rim, from Phase I (Figure 44:a). The vessel has been slipped white and painted in a simple linear style with brown paint under a light brown glaze. It seems to be imitative of lusterware, and has close affinities in shape and decorative style to a "Blue Tihama" bowl found at al-Shihr (Hardy-Guilbert 2004: Fig. 17:8). "Brown-painted

ware" bowls with white slip, brown paint, and clear glaze were picked up in surface survey of the Zabid area and occur in the same fabric as Turquoise slip-painted; although no wasters were found petrographic tests indicate they were made at Hays in the thirteenth to fifteenth centuries (Mason and Keall 1988: 454, 57, Fig. 4:b).

The second ware in the *Yemen 2* group is a sherd picked up with the initial surface collection at the Sheikh's House; dubbed "Turquoise slip painted," it is a redware with simple bead and line designs painted in white slip under a turquoise glaze, making a pattern of light and dark turquoise on the surface (Figure 44:b). Wasters of this ware have been found in the vicinity of Zabid, and it also may have been manufactured at Hays. It has also been found at sites in the vicinity of Aden at Khanfar and Kawd am-Saila (Hardy-Guilbert and Rougeulle 1995: Figs. 4:10, 5:3 from Mawza' and Hays; Mason and Keall 1988: 462; Whitcomb 1988: 189, fig. 10c–d). Mason and Keall suggest a thirteenth-fifteenth century range corresponding with Rasulid rule, but Whitcomb suggests that due to its presence at Mokha it may date into the sixteenth century (Mason and Keall 1988: 462; Whitcomb 1988: 189). At Quseir al-Qadim two stratified sherds of this ware are found in the Eastern Area, in association with other types of slip-painted wares and slip-painted monochrome sgraffiatos (Whitcomb 1983b: 104; 1988: 189; Whitcomb and Johnson 1982c: Pl. 36:a, d).

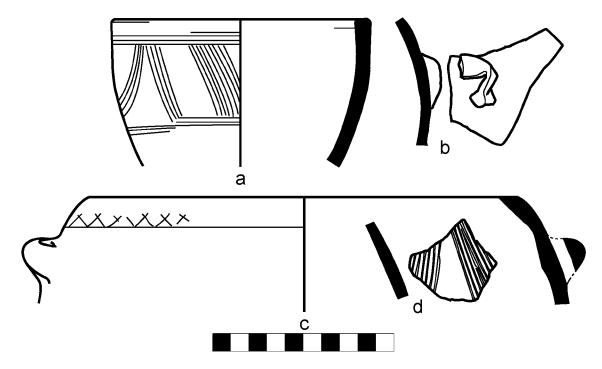


Figure 45. Yemen 2 Utility Ware, Phase IIa (b–c), and Phase IIb (a): a) J9d4_1/RN 44, b) K9b70_4/RN 346, c) K9b52_2/RN 47

The remainder of the sherds in the *Yemen 2* group (Figure 45) are in the Yemen 2 Utility Ware group, and include a lightly comb-incised cup (possibly with traces of slip, Figure 45:a), and sherds from three cooking pots. Although the cup in Figure 45:a has similarities to small bowls of Yemeni trackware, its ware is unlike the majority of trackware sherds at the Sheikh's House, discussed below (Ciuk and Keall 1996: Pl. 95/43:d–e). The cooking pot in Figure 45:b shows some affinities to cooking pots from San'a' (Warburton 1998: Figs. 3:k, 4:a–d). The cooking pot with cut rim (Figure 45:c) is coarser than the other sherds of this group, with abundant additions of fine to medium sand, and firing 2.5YR 4/6 red. The surface is slipped 10R 4/4 weak red. It is similar to those found in Aden (Harding 1964: Pls. IV: 34, VI: 3–4).

The *Yemen 3* fabric (Figure 46) is distinguished mostly by its difference from *Yemen 1* and 2. It is dense, tempered with moderate amounts of fine to medium sand and

sparsely with coarse sand. It fires most often to a hard 10YR 6/4 light yellowish brown, with an occasional brown core. The one ware made from this fabric is referred to as Yemen 3 Utility Ware. A slipped and painted bodysherd of an unidentifiable jar form is in the group (Figure 46:b), but the remainder are undecorated utility forms: mixing bowls (Figure 46:e) and wide-mouthed jars (Figure 46:d). Among them are two basins found in a deep pit in the South House, Room B (Figure 46:a, c). They have a distinctive cylindrical shape, with the mouth wider than the base and the proportions being similar to modern (American) terra cotta flower pots, which is what Whitcomb and Johnson originally dubbed them.⁶⁷ Their walls curve in slightly to a rim that is thicker than the wall, but flat across the top. The two Sheikh's House examples each have only an incised straight horizontal line about 2 cm below the rim exterior, but in form they compare well to basins of Zabid "Wavy Line Ware," a precursor of "Trackware" dating to AD 950–1150 (Ciuk and Keall 1996: Pl. 95/32: c, d).⁶⁸

⁶⁷ Basins of a similar shape and clay body were found in the Eastern Area in great quantities (Whitcomb and Johnson 1982c: Pl. 42:1–m, Whitcomb personal communication).

⁶⁸ The clay of Wavy Line Ware has been tested by Mason and Keall and found to be of a different petrofabric than Track Ware (Mason and Keall 1988: 454, 56). Ciuk and Keall's illustrated trackware vessels are fine to medium clay, red-buff in color with medium temper (Ciuk and Keall 1996: 46). At Quseir al-Qadim the ware is coarse buff-orange with moderate medium sand, vegetal temper, and black particles. They were also exported to al-Shihr, although the brown-red clay of vessels found there often includes mica (see Hardy-Guilbert 2004: Fig. 12: 1–9, cf. esp. 1, 6). Compare unslipped vessels seemingly of the same clay and with comb-incised wavy-line decoration found at Quseir al-Qadim in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 43:m), the Merchants' Houses (Whitcomb and Johnson 1979: Pl. 45:n), and F8d-F9c (Whitcomb and Johnson 1979: Pl. 36:r). A similar piece was also picked up in the Hadhramaut (Whitcomb 1988: Fig. 8:j).

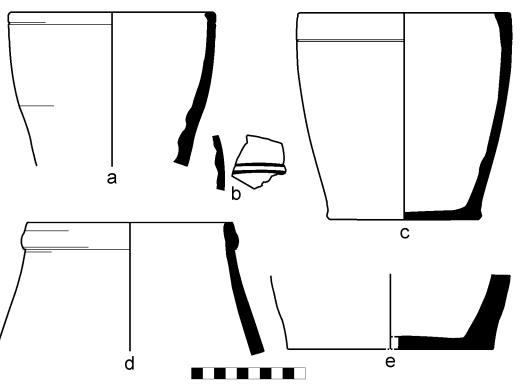


Figure 46. Yemen 3 Utility Ware, Phase IIa (a, c–e) and Phase IIb (b): a) K9b70_10/RN 347, b) J10c16_3/RN 13, c) K9b70_8/RNs 347–8, d) K9b71_10/RN 347, e) K9b70_15/RN 347

Yemen 4 fabric (Figure 47) is a fairly dense clay body of medium fineness tempered with common to abundant quantities of fine to medium sand, and occasionally medium-sized red and black particles that may include grog. It is also often tempered with a soft yellow material, probably limestone, which burns away during firing to produce yellow-rimmed medium-sized voids. The clay body fires to a hard Munsell 5YR 5/4 reddish brown or purplish 10R 6/3 pale red, sometimes with a brown core. As with group *Yemen 1*, it also occurs only in one ware at the Sheikh's House: Yemen 4 "Track Ware," identified by Ciuk and Keall at Zabid, and also seen at Sharma, Shihr, al-Quraya, and other sites in the Hadhramaut and Abyan district (Ciuk and Keall 1996: Pls. 95/14:f, h, 95/32:d, k, Pl. 95/42:e, h, k; Hardy-Guilbert and Rougeulle 1995; 1997a: Fig. 2:8; Rougeulle 2004: Fig. 12:9–16). The exterior surfaces of the vessels are usually slipped

greenish-cream or light brown and often incised with parallel wavy lines or various patterns of straight lines, which often cross (Figure 47:a–g, i).⁶⁹ The vessels, which are mostly medium to large basins or gourd-shaped jars, are handmade. Most of the Quseir al-Qadim sherds bear cloth imprints on the interior; the vessels may have been built by pressing clay around a cloth bag filled with sand. In Zabid, where the ware was manufactured, it is dated to the "Islam 4" phase, given an arbitrary date of AD 1150–1350, but this fits the Sheikh's House dating well.

⁶⁹ Compare vessels from Zabid (Ciuk and Keall 1996: Pls. 95/14:a, e–g, 95/15:b), Mawza', and Hays (Hardy-Guilbert 2004: Fig. 12:10–18; Hardy-Guilbert and Rougeulle 1995: Fig. 5:18). These have also been found at at-Tariya and al-Quraya in the Abyan district of southern Yemen, imported from Zabid (Hardy-Guilbert and Rougeulle 1997b: Fig. 2:14–15).

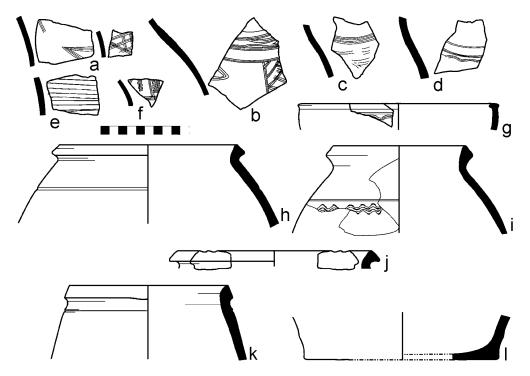


Figure 47. Yemen 4 Trackware, Phase I (a–f, m), Phase IIa (j, l), Phase IIb (g–i), and the surface (k): a) K9b56_7and8/RN 262, b) K9b53_5/RN 269, c) K9b56_9/RN 262, d) K9b56_12/RN 262, e) K9b56_11/RN 262, f) K9b23_4/RN 578, g) J9d4_3/RN 44, h) K9b5_2/RN 678, i) K10a15_5/RN 100, j) K9b69_60/RN 346, k) K10a15_4/RN 66, l) K9b21_1/RN 173

Among the trackwares at the Sheikh's House is a group of three jars with very short necks and triangular rims, which seems to be a rare form (Figure 47:h–j). All three vessels have a light-colored surface, possibly from a slip or wash, but only Figure 47:i has incised decoration, in the form of a comb-incised wavy line. These vessels are identical in ware, form, and decoration to a sherd picked up by D. B. Doe in Jebelain in the Abyan district of southern Yemen, dated to AD 800–1150 by Whitcomb (Whitcomb 1988: 181, Fig. 2:e) and quite similar to one surface find from Athar (Zarins and Zahrani 1985: Pl. 76:14). A sherd identical to Figure 47:i was petrographically analyzed by Rebecca Bridgman, who found that the fabric contains basalt and other volcanic elements, likely confirming its origin in southwest Arabia based on previous work by

Robert Mason and Edward Keall in identifying Yemeni petrofabrics (Bridgman 2000: 52, Pl. 13b). Four similar jars were also excavated from the Eastern Area at Quseir al-Qadim (Whitcomb and Johnson 1982c: Pl. 46:h–k), and one from the Merchants' Houses (Whitcomb and Johnson 1979: Pl. 45:h).

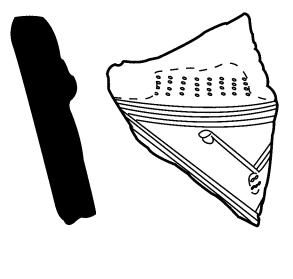


Figure 48. Yemen 5 Decorated Utility Ware: J9d3_2/RN 263

Finally one sherd comprises its own *Yemen 5* fabric group (Figure 48). Found in a surface layer, this is the very thick bodysherd of a *zir* with a greenish-cream slip and raised and incised decoration, referred to as a specimen of Yemen 5 Decorated Utility Ware. Despite its superficial similarity to Trackware the clay body is most unlike that of *Yemen 4*, being very hard and dense, tempered with common fine to medium sand, and firing to 7.5YR 6/4 light brown, slightly darker at the core. A nearly identical sherd to this was tested by Bridgman and found to be of likely Yemeni origin, due to volcanic inclusions (Bridgman 2000: Pl. 12c).

c. India

Eleven sherds (and perhaps more not recognizable in the pottery sheets) representing seven or eight vessels are identifiable as cooking pots (*handi*) made in India (Figure 49). Indian cooking pots seem to have been widely traded and occur at sites in the Yemen and the Gulf,⁷⁰ although it is not clear why these coarsewares should appear alongside the decorated, finely-potted wares. Other Indian products that were known in Egypt (and in East Africa, cf. Chittick 1970: 103) are pepper, coconuts, and carnelian beads (although carnelian was also a product of the Yemen, al-Shamrookh 1993: 142–44), all of which are found in the Sheikh's House, and of course textiles, of which resist-dyed cotton samples were found in the Sheikh's House and elsewhere at Quseir al-Qadim, as discussed in Chapter Four. Numerous other Indian goods such as perfumed woods, cardamom, betel nuts, lac, leather sandals, silks, steel, iron, bronze or copper implements and beads are not in evidence but may have passed through the port (Goitein 1954: 193; 1973: 188; Serjeant 1988a). Indian glass was also an export commodity but it is not clear that any of the Quseir al-Qadim glass is Indian.

Two fabrics are present at the Sheikh's House, but they seem to have the same base clay. Each fabric is represented by one ware.

India 1 Black Utility Ware is represented by cooking pots with modeled, heavily ribbed, wide everted rims that serve as handles, and store jars and cooking pots with carinated bodies that have incised wavy lines above the shoulder. The fairly dense, medium-textured clay is tempered with common amounts of fine to medium sand and dark particles, and moderate amounts of coarse dark inclusions and fired mottled 5YR 5/4

 $^{^{70}}$ For a summary and classification of Indian pottery in the Persian Gulf and Arabia, see the article by Monik Kervran (1996).

reddish brown and black on the rim, but tends to be completely black on the body. The surfaces are burnished and incised before firing. The Sheikh's House examples occur only in Phases I and IIa, and in surface debris. Two rim sherds likely belong to the same cooking pot were found in the uppermost stratum (surface debris) of *Shuna* B (Figure 49:d–e). Two additional sherds appear to be from the same large cooking pot with carinated body, but as one was found in the deep pit in the South House, Room B, and one in the surface debris of *Shuna* B, they are likely from different but identical vessels. Bodysherds, burnished on the surface, and decorated with incised straight and wavy horizontal lines above the shoulder, also belong in this group (see Figure 49:g, identical to the sherd in Plate 9:g). Figure 49:f is a rim sherd of a black ware jar or possibly carinated cooking pot that may or may not be the rim of the same vessel as the shoulder sherd in Figure 49:g, from the pit in the South House, Room B. It is a simple rim, rounded with a flat top.

Kennet identifies this ware at Ras al-Khaimah in Oman as "Black Burnished," corresponding to "coarse grey," "coarse black," or "burnished black" wares in early Medieval India (Kennet 2004: 66). They fit very well into a series of Indian cooking pots and other Indian vessels found at the coastal site of Sharma in the Yemen (Rougeulle 2004: Fig. 11:1–13).⁷¹ The main period of occupation at the site is dated AD 980–1140, but most of the Indian ceramics were found in levels from some of the earliest occupation, suggesting a long period of export for this type of pot (Rougeulle 2004: 205, 21). Monik Kervran, who studied the appearance of these black and red burnished coarseware cooking pots at coastal sites in the Gulf, noted that there is no discernable

⁷¹ Also compare vessels excavated at Athar in significant quantities. The excavators date the abandonment of the site to the eleventh century based on literary evidence (Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: 70, 91–92, Pl. 75:2).

change in morphology from the tenth to the fifteenth century AD (Kervran 1996: 38). Examples of these vessels have been found at multiple sites in the Yemen, East Africa, the Persian Gulf, and in Male in the Maldives primarily in contexts dating from the tenth to thirteenth centuries (Carswell 1977: 1977: 160, Fig. 13–14; Chittick 1974a: 318, Fig. 141:a–b; 1984: 101, Fig. 54; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Kervran 1996; Zarins and Zahrani 1985: Pl. 75:2),⁷² although Qal'at al-Bahrayn has examples from the thirteenth and fourteenth centuries, and Sohar from the fifteenth and sixteenth centuries and later (Kervran 1996: 43, Figs. 8–9).

Parallels in form have been excavated at the pre-Mughal site (dating late twelfth to mid-fourteenth centuries) of Lal Kot in New Delhi (Mani 1997: 8; 2000: Fig. 7: 1–3, 10, 13, 15) in black-slipped gray ware, which often are incised with wavy lines or a series of small triangles. Delhi was a production center for cloth and other items of export that made their way to Yemen in the fourteenth century (Serjeant 1988a: 165). Possible thirteenth-century contexts at Barabati Fort in Cuttack near the Bay of Bengal also yielded similar rim and body shapes in gray ware or dull red ware (Rao 2002: Fig. 8: 1, 6–8), suggesting a very wide distribution of this ceramic in India, through overland trade or multiple manufacture centers. Kervran noted that production of pottery sent to the Persian Gulf between the Sasanian and Islamic periods shifted westward in India (Kervran 1996: 43); a detailed study of vessels imported in the later Islamic periods

⁷² The majority of these vessels found at Manda are from Periods I and II, a bit earlier than those at Quseir al-Qadim: 60% are from Period I (mid-ninth to early eleventh century) and 25% from Period II (mid-eleventh to late thirteenth century). Likewise those found at Athar would be dated eleventh century at the latest (Zarins and Zahrani 1985).

The vessel from Mokha is of black-slipped grayware like those excavated in New Delhi (Hardy-Guilbert and Rougeulle 1995: Fig. 6:24).

might detect more precise trading patterns with manufacturing sites in India, but medieval ceramic study in India is still not adequate for this purpose.⁷³

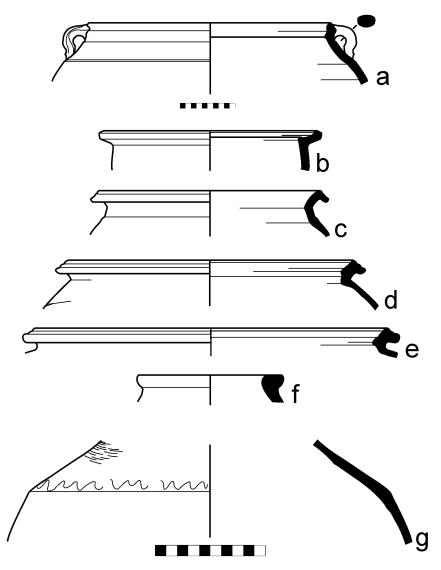


Figure 49. India 1 Black Utility Ware (d–g) and India 2 Red Utility Ware (a–c): a) K9b53_1/RN 118, b) K9b53_3/RN 269, c) K9b64_1/RN 116, d) J10c2_1/RN 289, e) J10a2_3/RN 278, f) K9b71_2/RN 346, g) K9b71_3/RN 346

 $^{^{73}}$ B. P. Mazumdar does discuss developments in pottery production and its internal movements (and those of other goods) in north India, but for ceramics his analysis is confined to the ninth century (2000: 257).

India 2 Red Utility Ware is represented by an open-mouthed jar, possibly a cooking pot, a large store jar with two handles, and a cooking pot rim similar to those of India Ware 1. They only occur in Phase I at the Sheikh's House. While seemingly of the same clay as *India 1 Black Utility Ware*, these vessels are distinguished by much greater quantities of coarse temper, and the texture of the potting is also coarse rather than dense; the surfaces are not burnished but they seem to have been slipped in the same color clay, although surfaces are much degraded. The vessel walls are thicker than those of *India 1* Black Utility Ware. They have been fired 5YR 5/6 yellowish red or 2.5YR 4/6 red with a core of brown or gray, 10YR 5/3 brown to 7.5YR 4/0 dark gray. Kennet identifies these as "Fine Indian Red," a catch-all for coarse slipped redwares that may come from several places in Asia and appear in all levels at Kush, which dates from the fifth to the seventeenth centuries AD (Kennet 2004: 66). The rim of a cooking pot of the same general shape as those in India 1 Black Utility Ware, but with only one rib on the top (Figure 49:c) came from under the earliest floor of the North House, Room C (Hardy-Guilbert and Rougeulle 1997b: Fig. 5:1).⁷⁴ It has been fired almost completely black with only the edge of the rim still red. It fits into the same series of black and red ware Indian cooking pots found at Sharma as those in India 1 Black Utility Ware (Rougeulle 2004: Fig. 11:8–13).

One rim of a jar or cooking pot is of an unusual shape (Figure 49:b).⁷⁵ It has straight sides and an everted rim with a ridge in the interior and a triangular end. Identical

⁷⁴ Found in al-Shihr layer 6; layer 8 above it is dated eleventh to thirteenth centuries due to the presence of black-on-yellow/mustard ware and polychrome sgraffiato; Attributed to India. Also found in later seasons at al-Shihr (Compare Rougeulle 2004: Fig. 11:2, 21).

⁷⁵ Rougeulle 2004, but see especially no. 22: "599/1. Col de pot; pâte moyenne gris-beige, dégraissant minéral; engobe intérieur et extérieur brun-orangé légèrement lissé sous la lèvre, brûlé a l'extérieur."

in firing color and texture is a large storage jar from the same locus (Figure 49:a). It has a short neck and a triangular rim, to which one end of the vertical handle is attached.

A very few cooking pots, basins, and jars, possibly of Indian origin and including black-slipped gray ware and red slipped red ware (Kennet's "Fine Indian Red") were unearthed in the central parts of Quseir al-Qadim, from F9d-F9c (Whitcomb and Johnson 1979: Pl. 36:m, p), the Merchants' Houses (Whitcomb and Johnson 1979: Pls. 41:e, 44:j, 45:d, 48n), and Central Building A (Whitcomb and Johnson 1982c: Pl. 51:q). Numerous cooking pots of *India 1 Black Utility Ware* were excavated in the Eastern Area, however, twenty-seven of which were published in the preliminary report (Whitcomb and Johnson 1982c: 143–44, Pl. 45).

d. China

During the Ayyubid period (AD 1171–1250), which overlaps with the Southern Song Dynasty (AD 1127–1279), Egypt imported ceramics produced in several southern kilns near the Chinese coast.⁷⁶ Celadons, with gray stoneware bodies and distinctive green glazes, came from Yüe and Longquan in Chekiang Province and from kilns in the province of Fujian or Guangdong; *yingqing* and other white wares were brought from Fujian Province and Jingdezhen (in Kiangsi province); and brown wares came from the Fujian and Guangdong Provinces. Blue-tinged qingbai white wares were made in Jingdezhen, Guangdong, and Nanfeng (Bing 2004: 258–61; Mikami 1980–1981), and *Kinuta* celadons with a milky blue or green glaze and pale gray body were popular as well (Mikami 1988: 11). In the early (Bahri) Mamluk period (1250–1382), concurrent with the end of the Southern Song and the Yuan (Mongol) dynasties (AD 1279–1368),

 $^{^{76}}$ On the Muslim West's trade with China, the early work of Wilhelm von Heyd is still a good place to start (1967).

qingbai wares were fading out but celadons from the Longquan region and other white wares from Jingdezhen were in high demand (Mikami 1980–1981: 81; 1988: 11). Some time in the fourteenth century, under either the later Yuan or early Ming Dynasty in China, white porcelains painted with blue cobalt from Jingdezhen were introduced and soon afterwards became popular, so that they were rather abundant by the fifteenth century (Kawatoko 2001a: 55see table; Mikami 1988: 11; Scanlon 1971: 231–32).

This profile was established by the Fustat excavations, which produced an abundance of Chinese ceramics dating from the ninth through the fifteenth centuries (Gyllensvärd 1973: 92; 1975; Hobson 1932; Raphael 1923–24; Sasaki 1986; Scanlon 1970). Several other sites in the Red Sea, Persian Gulf, and Indian Ocean have produced similar ceramics or have illuminated part of this sequence,⁷⁷ and it appears several types of porcelains and celadon were made specifically for the Middle Eastern market (Gray 1977; 1984: 191–94). The entrance points to Egypt for the Chinese ceramics found at Fustat were most likely the port towns of 'Aydhab, Quseir al-Qadim, and at-Tur in the Sinai.

The percentage of the Sheikh's House assemblage represented by Chinese imports is rather small, only 0.25%, whereas a figure of 0.5–0.9% might be expected for a port site of this period (Rougeulle 2005: 227). Eighteen sherds from sixteen or fewer imported

⁷⁷ The site of at-Tur in the Sinai produced only celadons in the thirteenth and fourteenth century contexts, with blue and whites being introduced in small numbers in purely fourteenth century contexts. They slowly increase in quantity in fourteenth-fifteenth century contexts but are quite numerous in pure fifteenth century contexts (See the table in Kawatoko 2001b).

At Kom al-Dikka in Alexandria, Chinese imports consist of early Song qingbai porcelains, Ting porcelain (white-gray with incised decoration) from the end of the Northern Song, and celadons, which form the bulk of the Chinese imports. The celadons are mostly from the Yaouzhou kilns during the Southern Song (960–1126), but include thirteenth century Fujian wares, and Longquan wares (from 1135 to the beginning of the Ming Dynasty). One blue and white Yuan bowl of the beginning of the fourteenth century was recently unearthed at the site as well (François 1998: 325–26).

Chinese vessels, all bowls or basins, were found at the Sheikh's House from stratified contexts; a further twelve sherds from eight vessels were collected from surface survey and excavation. The surface collection includes sherds of blue and white porcelain, certainly post fourteenth century and perhaps fifteenth to seventeenth century;⁷⁸ the stratified Chinese sherds seem to date no later than the Song and early Yuan periods. I have divided them into three groups: white porcelain bowls (*China 1*), gray stoneware bowls (*China 2*), and stoneware jars (*China 3*).

There are approximately equal proportions of white porcelain and gray stoneware bowls from the Sheikh's House, and of the porcelains, most if not all are qingbai wares (Figure 50). These wares were first made in the tenth century, in the southern kilns of Fanchang in Anhui and at Jingdezhen at Jiangxi in imitation of white wares produced in the northern kiln of Ding at Hebei. Eventually dozens of kilns produced these vessels with an incised decoration under a transparent pale blue-tinged glaze, until the thirteenth century when production seems to have ended. The multiple manufacture sites explains the variations in fineness of the clay body, decoration, and glaze, and the color of the glaze; evidence suggests the finest qingbai were made in Jingdezhen and the coarsest in the kilns of Guangdong. The glaze can vary in blueness from clear to transparent pale blue to milky gray-blue, depending on the amount of iron included. The fine-grained dating of the variations in this ware is based on dozens of excavated burials in China (Bing 2004: 257–59), which does make this seriation suspect; the dating is less secure than it would be if the finds had been excavated from kiln sites, as burials are not guaranteed to contain only the most recently made pottery. The dating of manufacture

⁷⁸ See especially K9b_surf_17/RN 336 (Plate 71) and compare a bowl base painted with a horse and flames from the surface at Manda in East Africa (Chittick 1984: Pl. 25:d).

only loosely corresponds to the dating of the finds at Quseir al-Qadim, however, being generally earlier than the Sheikh's House occupation.

Of the qingbai sherds found at the Sheikh's House, all but two of which come from stratified contexts, all but one are quite fine, of a pure white body with sparse siltsized voids, and a well-fitting glaze with no crackle and only faintly tinged blue; some are glazed clear. Several of them are bodysherds so tiny that the vessel forms cannot be determined. They include Figure 50:f, the bodysherd of a bowl with finely incised decoration, perhaps cloud scrolls, in the interior, and glazed inside and outside (from a surface layer). Compare a bowl base found at Sharma dated to the eleventh century (Rougeulle 1999: Fig. 7:9).⁷⁹ One small sherd from a bowl with pale blue glaze (Figure 50:i) is incised with a series of small curved lines; the overall pattern is difficult to guess. The pattern incised on the sherd show in Figure 50:j with the same color glaze is similar. Both may conform to Zhao Bing's description of type PQB XI from the kilns of Jingdezhen, found in Phase IV at Sharma (which had an abundance of qingbai vessels), ca. AD 1120–1150: "Bols ou plats à fine incision dans une composition plus aérée sur la paroi intérieure" (Bing 2004).

Figure 50:e depicts the bodysherd of a very small bowl or cup with a molded faceted surface. It is incised with tiny leaves and vertical lines on the exterior, then glazed bluish clear. The curvature is pronounced enough that the diameter of the body can be estimated. Two bases very similar to each other, Figure 50:c, g, provide the best hint at a bowl form; they both are narrow ring bases conforming to part of Bing's description of PQB IV found in Phase III at Sharma, ca. AD 1050–1120: "Bols à large ouverture, bord éversé avec ou sans encoches, petit pied annulaire faiblement creusé, fours de Jingdezhen

⁷⁹ Also compare museum piece (Emerson, Chen, and Gates 2000: Pl. 4.1).

ou de Nanfeng au Jiangxi" (Bing 2004: 258).⁸⁰ The glaze on both has only the barest hint of blue or gray in the vessel interior where it is slightly thickened in the incised lines. Also compare bowl bases found in survey in the Hadhramaut (Rougeulle 1999: Fig. 7:9) dated to the eleventh century, and at Kawd am-Saila in the Abyan district of Yemen (King and Tonghini 1996: Pl. 29: bottom). The base in Figure 50:b has a wide, low ring, no incising, and a glaze that tends to the yellowish, 5Y 8/2 pale yellow and does not entirely cover the base. The cut rim of a very fine bowl, brilliant white with a clear glaze, has narrow vertical ribs molded around the exterior (Figure 50:h).

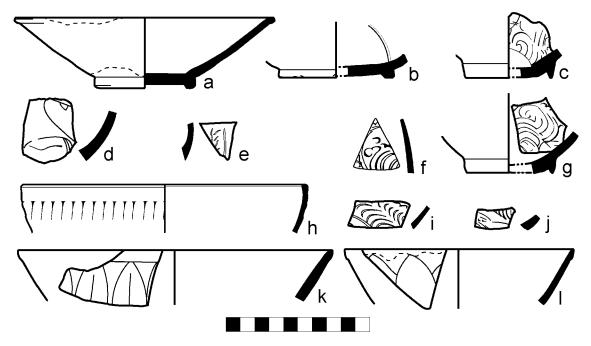


Figure 50. China 1 Qingbai Porcelains (a–c, e–j, l) and China 2 *Kinuta* Longquan Celadons (d, k); f and g are from the surface: a) K10a11_2and4/RN 302, b) K9b59_1/RN 307, c) J10c19_1/RN 299, d) K9b59_4/RN307, e) K9b48_4/RN 315, f) K9b45_1/RN 314, g) J10c16_5/RN 316, h) J10a9_2/RN 320, i) J9d12_2/RN 311, j) K9b43_1/RN 309, k) K9b36_10/RN 332, l) K9b41_1/RN 310

 $^{^{80}}$ These are not apparently of the same vessel, as one was found on the surface, and one in Phase I in fill under a floor.

A bowl on a low ring foot, conical with a slightly everted rim, has a different clay body than the other Ding imitations, having sparse silt-sized voids and moderate additions of silt, and also a high iron content (Figure 50:a). This is seen on the unglazed foot, which has been discolored pink, probably while air-drying before firing (Gompertz 1980). The vessel has been covered with two glazes, the first one pure white and over it a clear coating that has dripped over the rim.

The rim of a bowl from Phase IIb of the North House, Room C, is of the "standard" type of qingbai wares described by Bing in his analysis of the Chinese sherds at Sharma.⁸¹ This group has a grayish paste and glazes varying from bluish cream to light or dark blue-gray to pale gray (Bing 2004: 259). The bowl rim at the Sheikh's House (Figure 50:1) has a paste of 10YR 7/1 light gray, with moderate amounts of very fine voids and tempered with moderate amounts of very fine sand. The rim is slightly thickened and lotus leaves are lightly incised on the exterior of the vessel. The semi-transparent glaze is a pale bluish-gray and is applied twice, the second layer dripping down from the exterior rim. Compare Type PQB Va from the second phase at Sharma, dating from the end of the tenth century to the mid-eleventh (Bing 2004: Fig. 1:7).

The gray-firing stonewares at the Sheikh's House can all be described as celadons, falling into two groups. The first group has a light gray body rather like that of the "standard" qingbai, ranging from 5Y 8/1 white to 2.5Y 7/2 light gray with sparse to

⁸¹ The rim of a similar porcelain bowl was found in the surface collection at the Sheikh's House. K9b_surf_7/RN 336 has a white paste, with sparse very fine voids and sparse additions of silt to very fine sand and very fine dark impurities that show up on the surface under the clear glaze. The form is of a slightly everted bowl with lotus leaves carved all around the exterior. This type of decoration is found on all types of Chinese wares, including qingbai and celadon bowls with a range of dates. It seems closest to a sample found at Sharma in a fourteenth century context, however, and thought to have been made in the Dehua kilns (Hardy-Guilbert 2001: Fig. 6:4), but also compare an eleventh century sample from the Hadhramaut survey (Rougeulle 1999: Fig. 7:10).

moderate counts of very fine to fine voids. The thick glaze is a semi-opaque light greenblue or green-gray, with variations in thickness and an occasional tendency to crackle. These are *kinuta* celadons (Figure 50:d, k), produced at the Longquan kilns beginning in the Southern Song period (Gompertz 1980: 148, 64) and imported into Egypt through the fourteenth century (Scanlon 1971: 228).⁸² Figure 50:k, which was found in the layer of debris resting on the earthen floor of Room B in the North House, is the rim of a bowl with lotus leaves molded rather than incised around the exterior, and covered with a translucent but quite thick and bubbly light bluish-green glaze. As is often the case in these wares, the ribs of the molded vessel (in this case the leaf ribs) show through white (Gompertz 1980: Pl. 86A–B). It has close parallels in one of the sherds found on the surface of the Sheikh's House (see Plate 72:d), in a sherd from the Eastern Area excavations (Whitcomb and Johnson 1982c: Pl. 52:i), and in finds from Fustat (Sakurai and Kawatoko 1992: Pl. IV-4-10:2), al-Shihr (Hardy-Guilbert 2001: Fig. 7:2) and Hormuz, dated to the Southern Song (Morgan 1991: Fig. 7:22–23).⁸³ The second piece is a bodysherd from a segmental bowl with incised interior and medium-thick translucent light blue-gray glaze on the interior and exterior (Figure 50:d). Longquan celadon bowls of various shapes with incised decoration on the interior and none on the exterior were also found at Hormuz, of late Song or early Yuan date (Morgan 1991: Fig. 9:63-71, cf. esp. 66).

⁸² For a detailed study of the production of the over thirty kilns around the village of Longuan, see the work of A. Mark Pollard and Helen Hatcher who chemically analyzed sherds from excavations (Pollard and Hatcher 1986).

⁸³ The two samples from surface survey at or near Old Hormuz are the closest in rim shape.

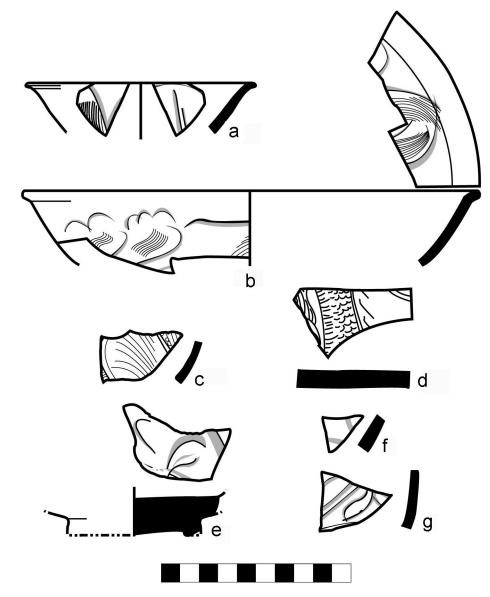


Figure 51. China 2 Celadons (d and f are from surface layers): a) J10a9_3/RN 321, b) J9d4_11-13/RN 237, c) K9b38_16/RN 313, d) J10a2_7/RN 278, e) K10a11_5/RN 312, f) J9d6_3/RN 322, g) K10a20_2/RN 239

Gray stoneware vessels with olive-green glazes were manufactured beginning in the eighth century in China. From the eighth to the twelfth century many kilns in northern Zhejiang produced stoneware with green glaze that are commonly referred to as "Yüe" celadons after one of the prolific kilns in the area. Celadons were also produced in the kilns of Fujian and Guangdong in the south beginning at the end of the tenth century. The kilns at Yaouzhou at Shaanxi in the northwest began producing celadon in the tenth century and in the second half of the eleventh century had added impressed designs in faint relief under the glaze, which was soon widely imitated. In the thirteenth and fourteenth centuries gray wares with green glazes were produced in the kilns of Longquan and Zhejiang as well (Bing 2004: 261).

The celadons at the Sheikh's House are all of a gray to dark gray paste, the common Munsell readings being 2.5Y 6/2 light brownish gray and 7.5YR 6/1 gray (Figure 51). Most are fairly fine, with sparse to moderate silt to very fine sand and voids. Glaze color ranges from 5Y 6/2 light olive gray to 5Y 5/3 olive or 2.5Y 4/4 olive brown. Despite these similarities differences in decorative techniques indicate origins in diverse kilns.

Three mendable sherds from the rim of a gray stoneware bowl were found in the uppermost stratum of the North House, Room C (Figure 51:b). The dark gray color of the paste (5Y 6/1 gray), olive color of the glaze (5Y 5/3–5/4 olive), and style of the combincised cloud scrolls suggest it was made in the Yaouzhou kilns or possibly those of Jingdezhen in the eleventh or twelfth century.⁸⁴ The form is that of a shallow segmental bowl with slightly everted rim. A much smaller bowl of the same form has what at first glance appears to be similar comb-incised decorations on the interior and exterior (Figure 51:a), but the combing effect is achieved with a single-pointed tool rather than a comb. The color of the paste (which has identical sparse silt-sized temper to the former bowl) is

⁸⁴ Compare Gray 1984: Pl. 26 and color plate A. These celadon sherds were previously identified (Burke and Whitcomb forthcoming). Similar sherds were found at Fustat, dating from the tenth to the thirteenth centuries (Gyllensvärd 1975: 97, Pl. 3:1–2, 4; Sakurai and Kawatoko 1992: Pl. IV-4-4: 12). Also compare Rougeulle 1991: 418; 1999: 1999: Fig. 7:22 for ware color.

7.5YR 6/1 and the glaze is a bluer 5Y 5/2 olive gray, also indicating a different provenance.

Figure 51:e is the low ring base of a large dish with faintly incised vegetal patterns on the interior under a 5Y 6/2 light olive gray glaze, possibly Yaouzhou ware (Gray 1984: Pl. 31).⁸⁵ The bodysherd of segmental bowl (Figure 51:g) has deeply incised vegetal forms (Gompertz 1980: Pls. 44–45) on an unevenly fired body of 7.5YR 6/1 gray with dark blotches that also has a large air bubble. The yellowish-clear glaze makes the surfaces appear 5Y 5/1 gray. Figure 51:c is the bodysherd of a similarly-shaped bowl, the clay of which includes moderate amounts of very fine sand and voids and is fired to 2.5Y 6/2 light brownish gray. The lightly incised decoration on the interior are possibly chrysanthemum petals, covered with a 5Y 6/3 pale olive glaze. A tiny bodysherd found in the surface layer of Shuna C (Figure 51:f) has rather deeply incised decoration on the 2.5Y 6/2 light brownish gray body that has no visible inclusions, but sparse very fine voids. The glaze is dark, 2.5Y 4/4 olive brown. In the surface layer of Shuna B, immediately east of Shuna C, a bodysherd from the base of a large stoneware dish (Figure 51:d) is like the previous two sherds of a light colored clay (2.5Y 6/2 light brownish gray), but has only sparse silt and is glazed clear rather than olive.⁸⁶ The decoration includes lightly and finely incised scales that must be part of a dragon, as this

⁸⁵ A base of similar size, shape, and decoration was found on the surface, K9b_surf_2/RN 335.

⁸⁶ Two surface sherds that appear to be from near the base (K9b_surf_12/RN 336) and in the cavetto (K9b_surf_20/RN 336) of the same bowl are also of this light clay (2.5Y 6/2 light brownish gray), and glazed clear. (This sherd is also bears a deeply incised design on the interior.) In fact all of the celadons from the surface collection at the Sheikh's House are fired this light color, but not all are glazed clear. The slightly everted rim of an otherwise undecorated bowl (K9b_surf_5/RN 336) is glazed translucent light greenish gray. A final sherd of stoneware is not a celadon, but is related. It is a tiny shallow bowl with a sharply scalloped rim of 10YR 7/1 light gray stoneware with fine-medium voids and glazed an opaque bluish-gray. It is possibly to be understood as "monochrome blue porcelains" (PMB) identified by Bing at Sharma as dating to the seventeenth century (Bing 2004: 262).

was a common motif on Yüe celadon (tenth–eleventh centuries, Mikami 1988: 10, Fig. 7a) and is reported at Fustat (Mikami 1980–1981: Fig. 1), at-Tur (Kawatoko 1995: 54, Pl. 35:7), and Athar (tenth-eleventh centuries, Zarins and Zahrani 1985: 78–79, Pl. 95C). As noted in the *Marl 4* section above, two sherds of imitation celadon glazed blue and incised with scales or feathers from a dragon or phoenix were found in the same locus, the surface layer of *Shuna* B (Figure 25:k).

Two stoneware jars intended for storage or shipping rather than decoration were found in the Sheikh's House, both in the surface layer of Shuna C (Figure 52). Three bodysherds of a thin-walled jar of gray stoneware are covered with a dark yellowish brown glaze (Figure 52:a). The clay body is tempered with common amounts of silt-very fine sand and voids and fired 2.5Y 5/2 grayish brown. The body of the vessel was fairly thin, about 5 mm thick, and the well-made 10YR 3/6 yellowish brown glaze has a fine crackle and several large black spots. Bodysherds similar to this were also found in context in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 52:s). Jars used as shipping containers are not very well dated, and the few comparanda available date as early as the twelfth century and as late as the fifteenth. The Jingdezhen kilns produced brown-glazed jars that were found in fifteenth-century contexts at Fustat (Mikami 1988: 12). On the other hand a series of similar Chinese gray stoneware jars with brown or yellowish-brown mottled glaze were recovered from a site in Allaipady, India, in an assemblage dated to ca. 1100 (Carswell 1979: fig. 12), and the rim of a gray stoneware jar with chocolate brown glaze was recovered from Qal'at al-Bahrayn, possibly dating to the thirteenth century (Pirazzoli-t'Sertsevens 1982: Fig. 15:1218.1).

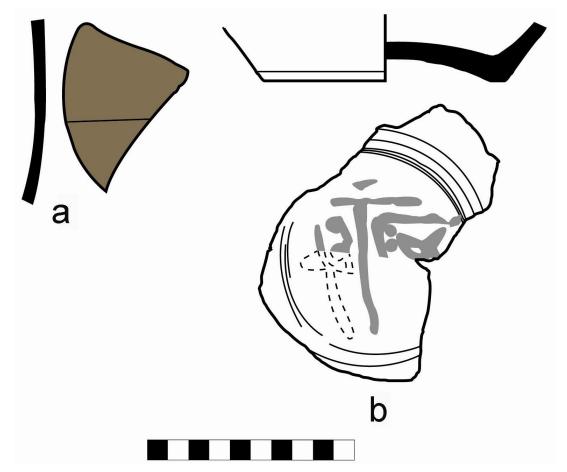


Figure 52. China 3 Stoneware Jars: a) J9d6_4-6/RN 322, b) J9d6_1 and J10a/RN 203

Of the second jar only the base is preserved (Figure 52:b); it had broken into two mendable pieces, one found in surface layer Locus J9d-6 with the brown-glazed jar, and one found in Locus J10a-9, the pit in the northeastern corner of *Shuna* C. It is buff-colored (surfaces 5YR 5/6 yellowish red to 10YR 7/6 yellow) stoneware with a gray core, and is poorly-kneaded, tempered with common amounts of silt and sand. The surfaces of the vessel are unglazed but drips of olive-yellow glaze have fallen into the interior. On the exterior of the base a Chinese inscription painted in black comprises three characters. "Mountain" and "field" are separated by a central T-shaped character which seems to be decorative or placed to organize the inscription, which should probably be understood as

the potter's name.⁸⁷ A jar similar to this in form and ware was picked up in the surface collection from the central part of the site in the first season (Whitcomb and Johnson 1979: Pl. 51:u). In form, particularly the concave base, it is like one of the abovementioned jars excavated in India (Carswell 1979: Fig. 12:518). A series of gray-beige jars with olive green glaze were excavated at Sharma, the earliest from Chaouzhou, made in the ninth to eleventh centuries (Bing 2004: Fig. 5:1), and the latest from Shiwan, dating eleventh to fourteenth centuries. (Bing 2004: Fig. 5:7). A jar of poorly levigated beige-gray stoneware with yellow-brown glaze was also excavated at Qal'at al-Bahrayn, possibly dating to the thirteenth century (Pirazzoli-t'Serstevens 1988: Fig. 15:1247.1).

It is interesting to note that there is more overlap in the assemblages of Chinese imports found in the Sheikh's House and the Eastern Area than in the Merchants' Houses. The Merchants' Houses yielded almost none; one base sherd of China 1 white porcelain with clear glaze and one sherd of China 2 celadon with gray paste, clear glaze, and incised decoration were found in different strata in the same trench (Whitcomb and Johnson 1979: Pl. 42:g, p).⁸⁸ The only other Chinese import pottery found in context in the first season is the bodysherd of a blue and white painted bowl, found with an African paddle-stamped vessel of the fifteenth century, in association with burials on the beach, which is essentially part of the Eastern Area settlement (Whitcomb and Johnson 1979: 58–59, 108, Pl. 49:d). The remaining thirteen sherds of blue and white porcelain, stoneware jars, qingbai wares, and celadons of various types, the last of which

⁸⁷ I am grateful to Tasha Vorderstrasse, who provided this reading from photographs on March 28, 2006.

⁸⁸ This along with the absence of resist-dyed textiles from India may indicate the commerce carried out in this part of the site was almost completely confined to grain exports and was not involved in importing merchandise from the Far East; it will be interesting to find out how or whether the textual evidence aligns with the archaeological, when the letters and documents are published.

predominate, all came from surface collections. Together they tend towards the later end of the dating spectrum at the site, some of them clearly dating beyond the fourteenth century, and even to the sixteenth century or later (Whitcomb and Johnson 1979: 109, Pls. 50:i, 51). By contrast sherds from twenty-one Chinese vessels were excavated in the 1980 season, all but three from the Eastern Area. (The three were found in surface collections in the area "west of the island.") Although the specific decorative styles differ from those in the Sheikh's House, the assemblage is largely of Southern Song and Yuan date (Carswell 1982), but a few pieces provide the crucial difference from the Sheikh's House assemblage. Three celadon sherds with finely molded decorations on the interior are of late Yuan or early Ming date (Whitcomb and Johnson 1982c: Pl. 52:m–o), and fragments of a blue and white bowl are Ming (Whitcomb and Johnson 1982c: Pl. 52: b– d). The scarcity of the Chinese sherds on the site overall most likely indicates this highvalue commodity was not for local consumption, but rather vessels were unloaded from ships and re-packed at Quseir al-Qadim for trans-shipment to the Nile.

B. DISCUSSION

Examination of the quantities and distributions of the fabric groups and wares identified above provides indications of change in the ceramic assemblage over time (schematically illustrated in Figure 53). This is traceable both in the phases of occupation and in the abandonment of the Sheikh's House and in a comparison between the Sheikh's House and either the Merchants' Houses (which tends to mirror the Sheikh's House assemblage) and the Eastern Area (which differs from it in a few key wares; see Tables 11–13). First, some continuities are notable. Decorated and undecorated wares from Aswan are present in all three parts of the site, and are slightly more prevalent in Phase

IIb than in Phases I and IIa at the Sheikh's House.⁸⁹ Aswan wares are especially notable among the cooking pots in all three areas.⁹⁰ Another major fabric, *Marl 1*, primarily used to make *qullas*, or water jars, is also present in all areas of the site in significant quantities,⁹¹ but in addition to illustrating continuity, demonstrates a change in vessel shape through time. In the Marl 1 Utility Ware several base types representing different manufacture techniques are present in the examples from both the Sheikh's House and the Merchants' Houses, but they are essentially all ring bases. In the Eastern Area, however, a new type of pedestal base is seen in the *qulla* form, which is also attested in Mamluk levels at Old Cairo and the Ayyubid Wall excavations. Changes in rim shape also seem to be a feature of the later forms.⁹²

Continuing with Egyptian-made wares, *Marl 4* monochrome glazed vessels make up a significant part of the Sheikh's House assemblage in every phase, with slightly more in Phase IIa, and are also important in the Merchants' Houses and the Eastern Area. The notable change between the central parts of the site and the Eastern Area (and thus through time) is the marked increase in the use of manganese purple glaze, which is

⁸⁹ Although far fewer painted wares, from Nubia, Aswan, or perhaps elsewhere in Egypt, were found in the central areas of the site total than in the Eastern Area. These include painted sherds (with black, brown, red, or yellow paint) described in the pottery sheets that defy categorization without visual inspection. There are extremely few of them overall.

⁹⁰ Smaller groups of cooking pots in the Sheikh's House assemblage belong to the *India*, *Yemen* 2, and *Nubia* fabric groups.

⁹¹ See previous discussions (Whitcomb and Johnson 1979: 105; 1982c: 139).

⁹² Highly decorated early eighteenth-century filterneck *qullas* found in two Red Sea shipwrecks off Sharm al-Sheikh and Sadana island display the pedestal base as well (Haldane 1996: Figs. 7–10; Raban 1971: 152–54). For the latest manifestation of this type of vessel in a very similar clay body, see the twentieth-century *qullas* excavated by the Japanese team at at-Tur in the Sinai (Kawatoko 1998: Pl. 16:1–9). They can have a pedestal base and an applied crimped decoration around the body (Kawatoko 1998: Pls. 13:8, 16:1). Another type has a spout and handle, but the base is not preserved (Kawatoko 1998: Pls. 13:9, 16:2).

rather less common in the central areas; bowl forms remain varied and no feature is more prevalent in the central versus the eastern part of the site. In the same group, *Marl 4* Blue, purple, and white drip bowls are prominent in the Sheikh's House and Merchants' Houses, but occur far less frequently in the Eastern Area. It is also perhaps significant that there are extremely few *Marl 4* slip-painted underglaze wares (blue and black under clear or black under turquoise), or silhouette wares on the site as a whole, and the former do not appear in stratified levels at the Sheikh's House. Tablewares are almost entirely represented by monochrome and monochrome incised *Marl 4* wares (with a few *Nile 3* monochrome glazed vessels); the only luxury wares present are Chinese imports, not found in great quantities.

Further breaks in continuity are seen in both utility wares and table wares. For example, glazed cooking pots are found in the Merchants' Houses and in the Eastern Area, of two different fabrics and forms. Neither type is found in the Sheikh's House most of the cooking vessels used there appear to be either made in Aswan or India. The earlier type is in the form of a thickly potted shallow basin with slightly concave cavetto, incurved rounded rim, probably flat base, and two horizontal handles that are pressed flat against the vessel wall. The fabric is described as "dark cream sandy," and the interior of the base and halfway up the sides is glazed yellow-brown (P8a-3/RN 165, Whitcomb and Johnson 1979: Pl. 42:f). The later samples, by contrast are nearly all of the thin-walled, deep variety, with everted, folded lip and vertical handles. They are of orange to gray-fired fabric with an olive green glaze that covers much more of the interior and is splashed sometimes over the rim (Whitcomb and Johnson 1982a: Pl. 44:j, l–r). Only one sample is of the shallow pan type close to the Merchants' Houses example, but it has a straight, flat rim, vertical handles, olive green glaze, and grey-buff fabric (Whitcomb and Johnson 1982a: Pl. 44:a). It is possible that some form of this vessel existed at the Sheikh's House but went unrecognized in the pottery sheets, and was in fragments too small to have been kept. Possible glaze colors suitable for cooking pots that are mentioned in the pottery sheets are dark brown (only seven sherds) and clear (seventy-three sherds), all occurring on "redware" vessels. Despite the gap in information, the evidence nevertheless indicates that there was a change in ware and preferred form of this category of vessel between the Ayyubid and Mamluk periods at Quseir al-Qadim.

The second break in continuity is seen in the Egyptian glazed tablewares, which are present in quantity at the Sheikh's House in only one red-firing group, *Nile 3* bowls. The most prevalent type is glazed in thick blue and yellow. Their presence only in Phase IIb of the Sheikh's House and in the Eastern Area suggests a date on the later end of the Quseir al-Qadim spectrum. Nile 3 sgraffiato bowls at Quseir al-Qadim, which are not present in large quantities, may provide some refinement in dating for the use of this technique in Egypt: simple sgraffiatos with no slip, usually one glaze color, and simple linear or curvilinear scratched designs are present in small quantities at the Sheikh's House and the Merchants' Houses. They occur in greater quantities in the Eastern Area, but there in nearly equal numbers to the more distinctive sgraffiatos with a thick white slip, green and/or yellow glazes, and a significant proportion of epigraphic motifs in the repertoire. Only one related sgraffiato sherd was found at the Sheikh's House, and as it is from the surface, it is not certain it originated in the Sheikh's House at all.

Continuities and change in the ceramic assemblage can also be traced in the imports. Discussion of sgraffiatos leads us to *Yemen 1* Black on Yellow (or "mustardware") bowls, which because of their occurrence in the thirteenth and fourteenth centuries are often found in context with Mamluk sgraffiatos (e.g., at Alexandria in Egypt, Gayraud 1984: 244; and al-Shihr in Yemen, Hardy-Guilbert 2005: 71). At Quseir al-Qadim, however, it is clear that *Yemen 1* bowls and basins were imported in similar

quantities in all periods of occupation, with slightly more occurring in Phase I, and are not in association with sgraffiatos. Incised wares occur very infrequently on the site, most commonly in the Eastern Area, and thus after the introduction of the Yemeni vessels. At Kush in the Persian Gulf, by contrast, YEMEN (Black on Yellow) ware appeared only after the introduction of monochrome incised redwares and even stonepaste ceramics (Kennet 2004: 42). This points to the peril of relying too much on comparative evidence for dating purposes, especially when ceramics are arriving from various parts of the known world to different sites at different times. Incised wares were produced all over the Mediterranean, which also contributes to their slightly different arrival times at different ports. As with the *Marl 1* Utility Ware vessels, a morphological change seems detectable in the Yemen 1 Black on Yellow Ware bowls at Quseir al-Qadim. A certain heavy basin form occurs rarely in the Merchants' Houses (only one is published: Whitcomb and Johnson 1979: Pl. 48:k), and once on the surface at the Sheikh's House, but more frequently in the Eastern Area (Whitcomb and Johnson 1982c: Pl. 37:i, j). It has a parallel in the Mamluk levels at the Ayyubid wall and seems to be a form that is only common in the later life of this ware and its imitations; perhaps the new form is an Egyptian innovation that eventually influences the Yemeni potters.

The abundance in all phases of *Yemen 1* Black on Yellow Ware vessels is not paralleled in the other major Yemeni import, *Yemen 4* Trackware jars. Whereas they occur in small quantities in all phases at the Sheikh's House, there is a significant dip in occurrence in Phase IIa, in contrast to the consistent quantities of Black on Yellow glazed redware bowls. Trackware jars are also present in the Eastern Area assemblage.

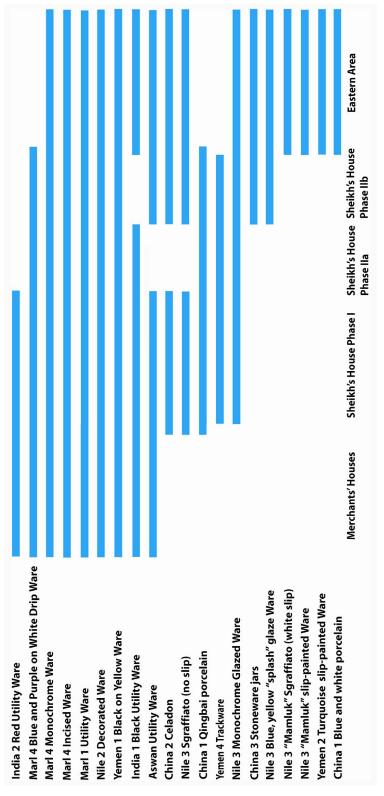


Figure 53. Changes in the Ceramic Assemblage of Quseir al-Qadim through Time

India 2 Red Utility Ware cooking pots and jars occur only in Phase I at the Sheikh's House, then disappear. *India 1* Black Utility Ware cooking pots appear only in Phases I and IIa, but they are also found in the Eastern Area in quantity so their apparent absence from Phase IIb can be discounted (Whitcomb and Johnson 1982c: 143–44, Pl. 45).⁹³

The final import category, those from China, occurs in rather small numbers, but quantification may still yield useful observations. Qingbai and other Ding-imitation white wares occur in equal quantity with gray-bodied celadons in the Sheikh's House. The white porcelains as a group date from the eleventh to thirteenth centuries, and the celadons date loosely from the eleventh to thirteenth centuries, although some forms continue into the fourteenth century at other sites. Nevertheless while the white wares occur in all phases, apart from one sherd in Phase I, celadons appear in Phase IIb and otherwise are found on the surface. This pattern fits with what is found in the Eastern Area and at other sites. The Eastern Area produced nearly entirely celadons, and almost twice as many as at the Sheikh's House; one sherd of qingbai porcelain and one of fifteenth century blue and white porcelain were also found.⁹⁴ Likewise assemblages of Chinese imports at Kom al-Dikka in Alexandria (during the fourteenth and perhaps fifteenth centuries) and at Kilwa in east Africa (during the fourteenth century) are almost entirely celadons with few porcelains; Kilwa also has a few pieces of Blue and White (Chittick 1970: 98; Gayraud 1984: 245). At at-Tur in the Sinai peninsula, the successor port to Quseir al-Qadim and 'Aydhab in the Red Sea, thirteenth-fourteenth century

⁹³ Their disappearance in Phase IIb is likely reflective of the limited nature of the total sample size from the Sheikh's House and has no real significance.

⁹⁴ The Merchants' Houses offer no real point of comparison, as only one of each type is present there.

contexts yield only celadons and no white porcelains. Thus celadons soon overtake white porcelains in popularity in several sites around the Red Sea and Egypt in the thirteenth century. Blue and white porcelains make a very gradual appearance in pure fourteenth century contexts and are abundant by the fifteenth century (Kawatoko 2001b: table).

C. DATING

The comparative ceramic evidence at the Sheikh's House, the Merchants' Houses, and the Eastern Area indicates occupation at the Sheikh's House ended before the turn of the fourteenth century, although how long before is not clear. Perhaps the most concrete evidence for this is blue and white Chinese porcelains, not manufactured until after the beginning of the Ming period, which are only found in the Eastern Area and on the surface at the Sheikh's House.⁹⁵ They are accompanied by certain ceramic wares considered "Ayyubid-Mamluk" at other sites but not found at the Sheikh's House. These are "Mamluk" sgraffiatos (with white slip and employing epigraphic and figural motifs) and "Mamluk" slip-painted wares, which were not suddenly manufactured upon the ascension of al-Mu'izz Aybak to the sultanate in Cairo, but were of course introduced somewhat later. They should perhaps now be considered fourteenth century type fossils in Egypt.⁹⁶ *Yemen 2* turquoise slip-painted wares are also introduced to Quseir al-Qadim at this time, although they are said to have been manufactured in Zabid beginning in the thirteenth century (Mason and Keall 1988: 462).

⁹⁵ An important distinction should be noted that these few porcelain sherds were picked up in surface collection done before any digging was begun, as opposed to other pottery also counted among surface finds that were excavated from the top 10cm of surface soil.

⁹⁶ At Qal'at Ja'bar in Syria their first appearance is dated to ca. AD 1300 (Tonghini 1998: 58, figs. 89:k, 91:e, I).

Although Figure 53 indicates a fair amount of overlap in the wares present in the Sheikh's House and in the Eastern Area, there is enough discontinuity to suggest some span of time elapsed between the end of occupation at the Sheikh's House and the building of the neighborhood of huts on the beach, which would have taken place a few years after 1300 at the earliest, but more likely in the mid or late fourteenth century. For example, *Yemen 4* Trackware, which occurs in all levels of the Sheikh's House, does not appear in the Eastern Area at all. Similarly *Marl 4* blue and purple on white splashware, which again is very popular in all levels at the Sheikh's House, only occurs in six sherds in the Eastern Area, few enough to be considered incidental. Even the blue and yellow splashed *Nile 3* bowls are more numerous in the last sub phase at the Sheikh's House than they are in the Eastern Area. The wares that show the strongest continuity through time are four: the *Marl 1* Utility Ware *qullas* (which as already noted change form), *Marl 4* monochrome glazed and incised monochrome glazed bowls and jars,⁹⁷ Nile 3

⁹⁷ Incised monochrome glazed wares, known as Fustat Fatimid Sgraffiato, were produced at Fustat beginning in the ninth century, with production petering out between 1150 and 1250 (Scanlon 1967: 75; 1971: 228). Examples from Kom al-Dikka in Alexandria are said to date probably from the eleventh to the decline of the Fustat ateliers (and mentioned in François 1998: 327; Zagórska 1990: 84, Pl. III). Monochrome glaze incised ceramics with a similar body have been found in Greater Syria and Iran, some of which are exported from Egypt and some of which are regionally-produced variants; a group found at Tell Minis near Ma'arat al-Numaan is dated to the eleventh and first half of the twelfth century, and others are thought to have been produced in Raqqa in the twelfth and early thirteenth centuries (Mason and Keall 1988: 461; Porter and Watson 1987; Tonghini 1998: 40, 44, 46–51). Examples from Sistan in Iran are visually distinguishable from the Syrian and Egyptian styles and are dated ca. 1400 (Mason 1996: 18, Pl. 13:SS.8, SS.15).

Occupation at the Sheikh's House (discussed more fully in Chapter Four), began around 1200 and lasted until around 1250, while occupation in the Eastern Area must have begun late in the fourteenth century. The significant presence of incised monochrome wares in both assemblages suggests that production of a successor ware to FFS continued in the vicinity of Fustat after Scanlon's proposed end date of production. Samples very similar to those at Quseir al-Qadim have also been found in Ayyubid levels and in the earliest Mamluk levels in the Ayyubid wall assemblage in Cairo (but not in late Mamluk or Ottoman contexts), which is a collection generally lacking in imports and with a paucity of glazed ceramics of any kind (Julie Monchamp, personal communications, February and August 2006), providing another clue to continued production of FFS or a related type in the area. Since the quality of the paste and the glazes generally seems less fine than the incised wares produced in the Fatimid periods, the incised monochromes at Quseir al-Qadim and the Cairo Ayyubid wall can be considered successors to this ware.

monochrome glazed bowls, and *Yemen 1* Black on Yellow ware bowls. This is a rather small part of the whole Eastern Area assemblage. It is of course impossible to guess the time span of the seeming gap between occupations, but it should be enough time for the wares that do not appear in the Eastern Area to gradually go out of use in this part of Egypt, and for the new pedestal base to be introduced into the *Marl 1* Utility Ware repertoire. This archaeological gap can possibly be explained by recourse to the history of the region, as is attempted in Chapter Four.

Dates for the beginning of occupation at the Sheikh's House are more difficult to ascertain using ceramic evidence, as many of the wares found there had been manufactured beginning in the ninth or tenth century and often lasting through the thirteenth. Clues are offered by several classes of only a few sherds each, however. For example, Nile 6 Coarse Utility Ware storage jars, found in Phase IIa, have parallels in Yemen that only date to ca. AD 1150 (Whitcomb 1988: fig. 2h). Yemen 4 "Trackware" from Zabid, which appears in Phase I, was probably first manufactured ca. 1150 and perhaps exported to Egypt soon after (Ciuk and Keall 1996: Pls. 95/14:f, h, 95/32:d, k, Pl. 95/42:e, h, k). Yemen I Black on Yellow ware is always said to appear in the thirteenth century, that is, no earlier than 1200. It also occurs in Phase I of the Sheikh's House. Some of the decorated table wares offer similar clues; Marl 4 Silhouette Ware, for example, was not manufactured at Fustat until ca. 1200 (Scanlon 1971: 231). The few sherds at the Sheikh's House are found in Phase IIa, meaning it could not have begun before 1200, if the sherds were made at Fustat. Nile 3 monochrome glazed bowls did not arrive in Nubia from Egypt until ca. 1200 (William Y. Adams 1986b: 596–7); we have no dating from Fustat, but it seems reasonable to assume manufacture was not begun much

⁽The only exception to this rule at the Sheikh's House is the large dish with a very fine, hard white paste, fine, precise incising and well-fitting opaque turquoise glaze, $J10c11_1-2/RN 294$.)

before this date. These several clues, however tenuous individually, together indicate the beginning of occupation at the Sheikh's House must have been around AD 1200. In sum, then, all phases of occupation at the Sheikh's House take place squarely in the thirteenth century, but do not span the entire 100 years.

CHAPTER THREE

SELECTED SMALL FINDS

Most of the categories of small finds excavated from the Sheikh's House have either been published (i.e., the glass, resist-dyed textiles, and wooden objects) or were examined by specialists and written up in unpublished reports (i.e., the coins, textiles, avian faunal finds, and macrobotanical finds). The purpose of this chapter is not to publish these artifact categories, but rather to provide a summary and overview, and when relevant, to derive data for dating. Most importantly, when their distribution throughout the Sheikh's House is examined, they can reveal patterns in the use of the space and in the living habits of the Sheikh's House residents, as well as cultural contacts with other locales in eastern Africa and the Red Sea.

A. FOOD ITEMS FOR LOCAL CONSUMPTION OR TRANS-SHIPMENT

Fishing implements and fish remains excavated from the Sheikh's House indicate that fish was a component of the Sheikh's family diet, although the relatively small proportion of items excavated indicate fishing provided only a supplementary means of subsistence. Fishing seems to be most important before and during the earliest phase of use of the complex, perhaps before regular shipments of victuals from the Nile Valley were established. By phase, fishing weights and fish bones were encountered in the fill under the Phase I floor of the South House, Room A (Loci K9b-22 and 23), two whole fish were found in the Phase I trash deposit of K9b-53 (in the courtyard outside the South House), and a net (possibly but not necessarily for fishing) was found in the fill for the Phase I floor in the North House, Room C (Locus K9b-62). No evidence of fishing was found in Phase IIa. In Phase IIb a net was found in Locus J9d-4, the material on the last floor of Room C in the South House. Finally surface loci produced nets in Locus J10c-14 in *Shuna* E, and in Area A north of the *shunas* (Locus J10a-1).

1. BOTANICAL FINDS

Macro-organics were examined by Wilma Wetterstrom and discussed in an unpublished report, referenced here. During the 1982 season a specialist was not on site to oversee botanical collection, so specimens were collected as they were encountered using dry sieving, biasing the sample in favor of large items. Tables 19–22 illustrate the types and quantities of nutshell pieces and fruits found in the K9b loci. Egyptian produce was represented by dom palm fruits, dates, *nabaq* (Christ's Thorn), apricots, and peach, the last four of which are known to have been grown in the Fayum (Keenan 1999: 292). Plums, watermelon, pomegranates, and citrus came either from the Nile Valley or the Mediterranean, while olives and almonds are known to have been grown in the Fayum or Mediterranean lands. Other Mediterranean imports probably included carob pods but were mainly represented by nuts: hazelnut, walnut, and pistachio were the most common types encountered, with hazelnuts being especially common throughout the K9b loci (also see Lev 2002; Wetterstrom n.d.). From India came coconut. An unidentifiable fruit dubbed by Wetterstrom "Unknown A," was among the commonest fruits and was also likely an import (Wetterstrom n.d.: 5). A rare few of these foods are mentioned in the Sheikh's House and other Quseir al-Qadim documents, detailed in the next chapter by locus. These are nuts, dates, watermelon, and lemons. Many more types of foods are mentioned, the remains of which have not been identified or would not be identifiable (Guo 2004: Table 1).

Wetterstrom's report only treats those macrobotanical samples collected from the K9b loci, and not from K10a, J10c, J10a, or J9d loci. As a consequence the only botanical item for which it is possible to examine the distribution across the Sheikh's House is the dried date, the pits of which were carefully counted and recorded in all locus sheets. This one of the rare foods mentioned in the Sheikh's House documents that is recognizable in the excavations (Guo 2004: Table 1).¹ Table 1 illustrates rates of occurrence of date pits throughout the complex, organized by area rather than detailed by locus. The rate of occurrence of date pits in the storerooms compared with that in the houses is a ratio of roughly 2:1, nicely illustrating the difference between storage areas and domestic space. Corridor D contains a large quantity of date pits as well, but this deep, narrow space, which is open to the north, accumulated high densities of small finds in general in comparison with the rest of the complex. Dates were exported to China and India (Wheatley 1959: 53), and they may have doubled as ballast on the Indian Ocean voyage (Chaudhuri 1986: 53).

Wetterstrom's report demonstrates that the botanical finds in the central Islamic areas of the site, the Ayyubid town, were much richer than in the Mamluk Eastern Area. While as already noted the Sheikh's House and the Ayyubid town in general had a rich assemblage of fruits and nuts from the Nile Valley, the Fayum, the Mediterranean, and

¹ Dried dates are only mentioned in one document, RN 1066a, but an entire half camel load of them is to be delivered, indicating they were probably for trans-shipment as well as local consumption (Guo 2004: 172–74).

As is discussed in the following chapter, grain is the food item most commonly referenced in the Sheikh's House documents. Although pockets of grain are described by the excavators of the Sheikh's House, Wetterstrom was apparently unaware of them, as only one wheat grain from the "Early Islamic Village" is recorded in her Table 5, comparing the Early and Late Islamic Villages (presumably the Sheikh's House and the Eastern Area). Because of different collection methods, numerous samples of barley, wheat, and sorghum grains were recovered in the Eastern Area excavations (Wetterstrom n.d.: Table 5).

even India, the inhabitants of the Eastern Area apparently had a much more restricted diet of which dates and dom palm fruits were a part, readily available in the Nile Valley, and which were rarely supplemented with watermelon, peach, *nabaq*, or almond (Wetterstrom n.d.: 4, Table 5). Coconuts were found, but in smaller quantities. This seems to contrast with the rich assemblage of ceramics from the Eastern Area that included numerous Indian cooking pots, discussed in Chapter Two, and the large proportion of resist-dyed textiles imported from India, mentioned above; perhaps this, along with the reed-hut architecture of the town, illustrates a greater disparity between the lifestyle of the brokers and the rich products they were trans-shipping than is seen in the Sheikh's House (also see Whitcomb 1995b).²

	House Exteriors	South House	North House	Shunas	Corridor D
Number of Date Pits	83	1,614	2,114	5,357	2,429
Volume of Excavated Soil in Cubic Meters	1,539	4,381 ^a	3,468	3,518	1,519
Date Pits per Cubic Meter	0.1	0.4	0.6	1.5	1.6

^a The volume of excavated soil in Room A is an estimate from plans and section drawings, as this data from the 1978 season is unavailable.

2. AVIAN FAUNAL REMAINS

The avian faunal remains from the 1982 excavations were examined and tabulated in an unpublished report by David Reese.³ They reveal, not unexpectedly, that the most common fowl eaten at Quseir was *gallus gallus*, the domesticated chicken, supplemented

² Nevertheless collection methods did allow for peppercorns and coriander to be collected from the Eastern Area, which cannot be compared with the Sheikh's House because the same collection methods were not employed (Wetterstrom n.d.: Table 5).

³ There is no report on the remainder of the faunal finds, which according to observations recorded in the field notebooks included camel bones.

by a few local wild species. The most common among the latter is the *pterocles coronatus*, or crowned sandgrouse, but the *ammoperdix heyi*, or sand partridge, is also present in the assemblage. One nearly complete left humerus from a *burhinus oedicnemus*, stone curlew or common thick knee, found on the Phase IIa floor of Locus K9b-57 in Room C of the North House, may indicate these migratory coastal birds that winter in southern Egypt were also occasionally trapped and eaten (Reese n.d.: 6, 8).

Most of the faunal remains, like most of the other small finds, were found in secondary deposits, but nevertheless were most commonly found in the domestic spaces.⁴ Apart from the pit in *Shuna* C (which yielded over 53 faunal fragments), very few bones were found in the *shunas* (only a few on the Phase IIb floor of *Shuna* E, Locus J10c-17, Reese n.d.: 4), indicating that aside from some milling (represented by the grindstones found in several *shunas*), they generally were not used for domestic purposes. The main exception is *Shuna* B, in which chicken bones and eggshells were found in five loci of Phase IIb and the surface layer.⁵ The chicken bones were found in association with grindstones (Reese n.d.: 3–4). In the South House, chicken bones were found only in Room B, in the Phase IIa pit and the floor above it, Locus K9b-67 (Reese n.d.: 6). This fits with the excavators' impression that the floor of Room C had been cleaned of any refuse.

⁴ They were also present in Corridor D, which as noted in Chapter One, accumulated a deep deposit of trash and debris from elsewhere in the house and outside it. Chicken bones occur in Loci J9d-2 (on the surface) and Phase IIb loci K9b-38 and K10a-11 (Reese n.d.: 3, 5, 7).

⁵ The Sheikh's House documents do not mention chicken or any other type of fowl or meat, but eggs do appear on a grocery list, and chicken eggs were found in various collections of refuse (Guo 2004: Text 62).

In the North House, Room C, bones of chickens, the crowned sandgrouse, and the common thick knee were found in all three phases, on top of and underneath floors, but were sparse in all phases. Locus K9b-64, the fill under the Phase I floor, contained the remains of a chicken leg and foot, while the single humerus of a crowned sandgrouse lay on the floor itself, amongst a concentration of small finds that appears to be a trash accumulation (discussed in the next chapter, Reese n.d.: 6). As mentioned above, K9b-57, the debris on the Phase IIa floor, contained few remains of a common thick knee and chicken as well (Reese n.d.: 6). Scattered throughout Loci J9d-4, K9b-41, and K9b-48, the Phase IIb floor and the thick wall fall on top of it, were very few chicken bones (Reese n.d.: 3, 5–6). By contrast Room B of the North House contained nearly a whole chicken, half of a crowned sandgrouse, and a single bone from a sand partridge in the debris on the Phase IIb floor, Loci K9b-33 and 36 (Reese n.d.: 5-6). In Room A, as well, faunal remains were relatively prevalent with eight chicken bone fragments lying in the debris on top of the Phase IIb floor, in Loci K9b-40 and 46 (Reese n.d.: 5). A few remains of a crowned sandgrouse were excavated from the probe beneath the Phase I floor, Locus K9b-53 (Reese n.d.: 6).

Because of the presence of two phases of use (with an additional sub phase), as noted in Chapter One, the earliest phases were disturbed by the later and it is not possible to accurately trace a change in dietary habits over time. The three Phase I loci that contained faunal remains did produce just as many crowned sandgrouse bones as chicken, and if these floors and sub floors were better preserved one might hypothesize that the first residents of the Sheikh's House were relying for food on fowl that could be caught locally, before any could be brought in from the Nile Valley. But the very small Phase I assemblage cautions against making any such assertion. The faunal remains best illustrate, as do the date pits and the textiles discussed below, the difference in the use of space between the houses and the *shunas*.

B. HOUSEHOLD ITEMS AND MERCHANDISE

1. TEXTILES

The textiles found at the Sheikh's House make an important contribution to our understanding of the site, and also to the realms of local agriculture, commodity production, regional and international trade, and textile and clothing fashions in Ayyubid Egypt and further afield. Gillian Vogelsang-Eastwood published a catalogue of textile finds from the 1978 season in the 1980 preliminary report. Numerous pieces from the Islamic levels of the Central Building and the Merchants' Houses were published, but only one came from the Sheikh's House in that season, RN 94 from Locus K9b-7 in the South House, Room B (Eastwood 1982: 307). The sample consists of two pieces of blue-dyed cotton sewn together.

Other dyed cottons found at the site are resist-dyed and usually block-printed textiles believed to be imported from India. Seven fragments were found in the Sheikh's House excavations (discussed in context in Chapter Four), none from the Merchants' Houses, and forty-seven from the Eastern Area (Vogelsang-Eastwood 1989: Nos. 2–44, 47–50). They have been published separately and contextualized among the Sheikh's House finds (Burke and Whitcomb forthcoming).

Vogelsang-Eastwood prepared an extensive but still unpublished catalogue of all textiles unearthed from all seasons of excavations, which will I hope be part of a future monograph on Quseir al-Qadim (Vogelsang-Eastwood 1989: 3, n. 2). However, using her references to Sheikh's House textiles in other publications, the preliminary field identifications recorded in the registration book and the artifact sheets for each locus, a

few general remarks can be made. As with those excavated in the 1978 season (Eastwood 1982: 286), the majority of the over 1,300 pieces excavated in 1982 at the Sheikh's House are woven from flax (linen), with lesser quantities woven of flax and cotton (fustian) or from cotton only; much fewer are woven of silk or wool. They are also usually undyed, with only about 36% having decoration primarily in blue stripes, blue checks, or much less often, red or brown striped, red and blue plaid, or solid red or blue. A few pieces were garment-dyed rather than yarn-dyed, however. The most common weave is tabby, the simplest type of weave. Blue stripes and checks such as this seem to be the fashion of the Ayyubid period in Egypt and beyond, as demonstrated by textile finds from other sites in the region, especially the Ayyubid fort on the island of Jazirat Fara'un near Ayla in the port of Aqaba, and Qarantal cave 38 in the Judean Desert east of Jericho in Palestine (Shamir and Baginski 2002: 136, 43, 54). A similar corpus of the same date has been unearthed at Qasr Ibrim in Christian Nubia, where it is presumed to have been imported from Egypt (e.g., Nettie K. Adams 1981: 7; 1986a: 25; Crowfoot 1979).⁶

Several kinds of textiles, clothing, and raw materials like flax (*kattan*) and cotton (*qutn*) figure prominently in the Sheikh's House shipping notes as items of sale (RNs 958b, 969*, 976*, 986a, 987, 1003b, 1004c, 1018c, 1021, 1027a, 1033e, 1054, 1055, 1059, 1064, 1077d, 1088, 1090a, see Guo 2004: 41–42, 68, Table 1). For the most part the textile pieces referred to are unsewn garments such as waist-wrappers, turbans, shawls, and women's wraps. A few sewn pieces are also mentioned, however, such as *kiswa*, a robe, *dhayl*, perhaps a long coat, and *thawb*, an item of dress or simply meaning

 $^{^{6}}$ Also compare the assemblage from Kulubnarti in northern Sudan (William Y. Adams and Adams 1997: 69–80).

cloth. Aside from cotton and flax fabric, the most readily identifiable terms are *jalalib* (sing. *jalabiyeh*), precursors to modern *galabiyehs*, fragments of which have been found in the excavations (Guo 2004: Table 1). *Tariz* (sing. *tiraz*), or embroidered cloth, is also mentioned in a Phase IIa shipping note as having arrived safely at Quseir al-Qadim (RN 1027a, Guo 2004: 215); two fragments of silk on linen embroidery were found in Corridor D, Phase IIb (Vogelsang-Eastwood 1983b).

The predominance of unsewn clothing over sewn items in the textual evidence is in accord with the excavated corpus—relatively few sewn pieces were unearthed. When their original shape can be determined, these consist of caps (from Loci K9b-53, K10a-13, and J10c-6), quilted caps padded with raw cotton (from Loci K9b-52, 53, 65), veiling (from Loci K9b-55, J10a-1, 2, J10c-3, J10c-6), and parts of *jalalib* [such as gussets from Loci K10a-9, 10, J10a-2; sleeves from K9b-24, K10a-2, J10c-6; necklines from J9d-1, J10c-6 and a diamond-shaped neck opening from K9b-48 (this last mentioned in Vogelsang-Eastwood 1983c: 44); gores from K10a-22, J10c-6; and groups of several panels sewn together from K10a-2, 9, 11, 20, J9d-2, 4, 8, J10c-8, 11, 15]. The numerous other pieces of cloth can be presumed to belong to any of the abovementioned unsewn garments, or are so fragmentary that the original object is not discernable.

Importantly, the sewn clothing finds at the Sheikh's House, notably the *jalabiyeh* fragments, illustrate the type of cut-to-shape dress that became common in Egypt and elsewhere in the Muslim world after the twelfth century, and certainly by the fourteenth century. These superseded clothes woven either from three pieces on a narrow, single warp (a common technique by the mid-fifth century AD), or of once piece on a wide warp (the earlier technique, see Carroll 1988: 34–44), methods of construction that had remained popular in Egypt and elsewhere in the Near East well after the Muslim conquest, even as cut-to-shape pieces gradually became more widely used. Some use of

cutting and piecing together garments is known from before the conquest in the Near East, but it is not common. For example, excavations at Faq el-Gamous show gores were used in Egyptian garments as early as the fifth century AD (Linscheid 2001: 75; referencing South, Kuchar and Griggs 1998), cut tunics are known from sixth century AD Halabiyeh in Syria, and shirts and jackets cut and sewn to shape, probably Persian, are known from the sixth century AD Antinoë, Egypt, but these are the exceptions rather than the rule (Gervers 1983: 310; Granger 1983: 12). This technique may be attributable to Persian influence and may ultimately originate farther east (Gervers 1983: 310 and n. 43).

After the Muslim conquest of Egypt, samples of cut-to-shape clothing become much more common (Granger 1983: 10–12), and the evidence from Quseir al-Qadim and contemporaneous sites suggests that it was not until the Ayyubid period or early Mamluk that *galabiyeh* garments became widespread.⁷ A contemporaneous assemblage from Jazirat Fara'un in the Gulf of Aqaba also contains fragments of gores from *galabiyehs* (Baginski and Shamir 1998). Fourteenth century examples come from the Eastern Area in Quseir al-Qadim, in the form of two nearly complete children's garments. One

⁷ Publications of Coptic and Nubian textiles indicate that the woven to shape technique, as well as construction using three tubular pieces, were the primary techniques of clothing construction even in later periods (e.g., du Bourguet 1964: 527, 34, 72–3, eleventh century; du Bourguet and Grémont 1977; Kybalová 1967; Maguire 1999; Thompson 1971: 84–86, tenth century; Thurman and Williams 1979: 41–42, 120). Publications of Islamic textiles indicate that clothing items constructed of several panels sewn together, using side gores and often triangular underarm panels, are usually dated not earlier than the thirteenth century (e.g., Crowfoot 1977; Kühnel 1927: Tafel 35). It must be cautioned, however, that difficulty lies in the dating of Coptic textiles generally, as most were exhumed by amateurs from graveyards without regard to context (see Erikson 1997: 20–25 for a history of the excavation, collection, and study of Coptic textiles). They have thus been dated according to stylistic typologies of their decorated panels, and when possible (if the decorated pieces have not been cut out of the original textile) also by weaving techniques. Stylistic typologies are not uniform, however, and are hampered by the use of the same motif over hundreds of years (Carroll 1988: 2). Thus archaeological finds that are well excavated and well recorded are crucial to understanding continuities and changes in textile and clothing production.

The textiles excavated from Berenike on the Red Sea coast, dating from the first to fifth centuries AD, have been well published, but are too fragmentary to determine clothing styles (van Waveren and Wendrich 1995; Wild and Wild 1996; 1998; 2000).

(Galabiyeh A) has side panels and triangular underarm gussets and is thus "a typical product of the period" (Vogelsang-Eastwood 1987: 142).

A similar pattern is discernable from textiles in Nubia, which as noted above, were largely imported from Egypt (also see W. Y. Adams 1996c: 250), although clothing styles may have changed at a slightly slower pace than Egypt. Excavations of Early Christian (AD 600-850) graveyards at Kulubnarti in Middle Nubia have yielded six garments (out of 470 textile specimens) that Nettie K. Adams describes as precursors to the modern *galabiveh*: "It is a flowing gown with long sleeves, a shaped neckline, and side gores...made of wool, cotton, or linen. Often the neck opening was closed with a cloth button and string loop. Square gussets reinforced the underarm area of the sleeves" (Nettie K. Adams 1999: 55).⁸ Seven additional samples were of seamed garments of unidentifiable form (Nettie K. Adams 1999: 55, Tables 8-9). The Qasr Ibrim assemblage, while consisting mostly of small fragments, has several types of cotton textiles recognized as having been used for *galabiyeh*-type garments, as well as veils. This is based on comparisons with samples from Kulubnarti, Quseir al-Qadim, and other sites in Nubia as well as on larger garment fragments at Qasr Ibrim. These textiles are fairly rare in the Late Christian 1 period (ca. 1150–1250), but increase greatly over time so that they are 29% of all cloth dating from the Terminal Christian period (ca. 1400–1500) at Qasr Ibrim (Nettie K. Adams 1996a: 161).⁹ Several types of linens and fustians (almost certainly Egyptian imports) were also recognized as having been used for galabiyehs or

⁸ The early appearance of the *galabiyeh* in Nubia is also attested in art. Wall painting no. 22 from the Faras cathedral depicts a procession of Nubian clergy dressed in flowing white garments that Kazimierz Michałowski interprets as *galabiyehs*. He dates the painting to the second half of the ninth century (1974: 148).

⁹ Also see a nearly complete galabiyeh-type garment from the fourteenth-century burial of a bishop at Qasr Ibrim, published by Elisabeth Crowfoot (Crowfoot 1977).

tunics, depending on the period (Nettie K. Adams 1996a: 163).¹⁰ W. Y. Adams has composed a detailed description of the likely dress of men and women in Nubia that was common by the fifteenth century, which includes *galabiyehs*, trousers, and belts for men, and trousers and woolen wraps for women (William Y. Adams 1996b: 171–75; cf. William Y. Adams and Adams 1997: 59–62). The *galabiyeh* may have been the common dress in Egypt for some time before that.

The primacy of linen cloth, which is woven from flax, in the Sheikh's House textile corpus is significant as well. Flax had been Egypt's primary export in the Tulunid and Fatimid periods, supplying the textile industries of Tunisia and Sicily, and was therefore a mainstay of the economy (Frantz-Murphy 1981; Gil 2004; Udovitch 1999). Flax and textiles woven from it were widely exported to Africa, Spain, and elsewhere in Europe (Udovitch 1999: 269). Its mention in at least six of the Quseir al-Qadim documents and presence in raw form at the Sheikh's House (mentioned in Chapter Four) indicates its continued importance in Ayyubid Upper Egypt, despite its apparent decline in the thirteenth-century Fayum (Udovitch 1999: 283).¹¹ Additionally, according to

¹⁰ Elisabeth Crowfoot seems to have been the first to identify this style of clothing as that of a "galabiyeh" (hence making connections to modern dress) rather than a "tunic," in her detailed description of the burial clothing of Bishop Timotheos (1977). Vogelsang-Eastwood uses the same term in reference to the Quseir al-Qadim textiles, but also declines to discusses the favored new technique (1983c: 44). Alisa Baginski and Orit Shamir, in their publication of the textiles from Jazirat Fara'un, for which they make use of the comparative Quseir al-Qadim (Eastern Area) and Qasr Ibrim material, are more explicit in their assertion that the types of garments found in these excavated assemblages and those from Tellem burial caves in the Dogon region of Mali, West Africa, are a development of the thirteenth century (although the Mali examples are said to date to the eleventh century), but they do not put forth an argument for their case (and repeated in Baginski 2001; Baginski and Shamir 1998: 47; and in Baginski and Shamir 2002; also see Bolland 1991: 34–35, 52–64). W. Y. Adams makes the clearest case for the gradual introduction to this clothing type to Nubia at Qasr Ibrim (1996b: 171–72).

¹¹ Although there seems to have been a gradual decline in Egypt's production of flax over time, during Mediterranean trade with Europeans, flax from Romania, France, the Low Countries, and the Baltic region seems not to have superseded Egyptian flax until the seventeenth century (Issawi 1970: 257).

textual evidence Qus was well known for its textile products after this period, including linens. A list of items taxed at the port of Aden in the beginning of the fifteenth century, for example, lists six different items produced at Qus, among them simple unsewn pieces like those mentioned in the Sheikh's House documents: turbans, linen cloth, women's wraps, shawls, and napkins (Cahen and Serjeant 1957; Garcin 1976: 228, n. 5). Upper Egypt was also known for wool production, and numerous towns are mentioned in the textual sources as producers of woolen cloth and clothing, including Asyut, Akhmim, and Bahnasa (Serjeant 1972: 155–56). A noted above, woolens are not prominent in the Sheikh's House textiles corpus, but are present; several leather fragments discussed in Chapter Four have wool attached.

	House Exteriors	South House	North House	Shunas	Corridor D
Phase I	0	26	47	7	0
Phase IIa	0	22	53	14	9
Phase IIb	0	142	212	269	70
Surface/Unstratified	34	33	0	260	7
Totals	34	223	312	550	86

The distribution of textiles throughout the Sheikh's House (Table 2) indicates the bulk of them were intended for resale rather than household use. Despite the shallow depth of accumulation in the storehouses, by far the greatest proportion of textiles were found in this area, not much less than the number of fragments found in both houses and Corridor D combined. Of the *shunas*, the largest number were found in *Shunas* B and D. As is expected, Room C of the North House had the greatest number of textile fragments, 197, of any living room in either house, and produced significant quantities from all

phases. Rooms A and B of the North House accumulated few textiles before Phase IIb, however. In the South House, numerous fragments were thrown away in Room B, but Rooms A and C had modest accumulations from household use in Phase IIb. The percentage of dyed textiles does not vary significantly by location in the house or over time, thus the assemblage of textiles to be resold was virtually the same as the assemblage of those in use in the house. This distinction is rather blurred, however, as living rooms were also used for storage of goods.

The presence of spindle whorls for spinning yarn, and spun yarn ready for weaving indicates the presence of a small cottage industry at Quseir al-Qadim. It is unclear whether the locally-spun cloth would have been for resale or home use; Goitein mentions that the spinning of yarn was an ordinary part of the household activities of women in Fustat (Goitein 1967: 100). The distribution of these items probably does not reflect the location of the activity at the Sheikh's House, however, but of secondary deposition. Yarns were found only in Locus J10c-15, the Phase IIb collapse onto the floor of *Shuna* F, and Locus J10c-2, one of the uppermost layers of *Shuna* B. Wooden spindle whorls were found in trash deposits outside the house (J9d-13, RN 554) and in Corridor D (K9b-38, RN 523), and also in living rooms: One was unearthed in Locus K9b-24 (RN 529), the surface debris in Room C of the South House, and one in K9b-57 (RN 521), the accumulation on the Phase IIa floor of the North House, Room C (Hiebert 1991: 150–52).¹²

 $^{^{12}}$ A copper needle was found in the Phase I trash deposit of Locus K9b-53, in what was then the courtyard outside the South House.

2. BASKETRY

Baskets are only mentioned once in the read Quseir al-Qadim documents, but they were likely a common type of shipping container for packing items such as pottery, fruits and vegetables, and other small household items.¹³ They are mentioned frequently in the Cairo Geniza documents dating to the Fatimid and Ayyubid periods as shipping containers for copper, glass vessels, antimony, sal ammoniac, and books. They could sometimes be quite large and carry up to 400 pounds (Goitein 1967: 334). The distribution of basketry remains at the Sheikh's House seems to reflect more of a domestic than mercantile function, however. They were not as numerous as matting or rope remains in the Sheikh's House (which were found in nearly every locus), but they were found in several rooms, concentrated in domestic spaces. For example, in Phase IIb of the North House, a whole, two-handled basket was found in Room C. Locus J9d-4¹⁴ and two fragments were found in Room B (K9b-33/RN 648). In the South House, parts of four coiled bases were excavated from Vestibule F (K10a-12), and in Room C baskets were found in two phases: a whole basket in Locus K9b-27/RN 656 (Phase IIb), and a coiled basket lid decorated with leather strips in the surface locus K9b-30/RN 568. The only storeroom to produce basketry remains was *Shuna* F, in both sub phases of Phase II: half of a small basket was excavated from Locus K10a-19 (Phase IIa), while a whole basket came from K10a-9 (RN 657), in Phase IIb. Finally in the trash accumulation in Corridor D, Locus K10a-11 (Phase IIb) yielded a coiled basket lid (RN 515).

 $^{^{13}}$ A basket (*quffa*, a term also found in the Cairo Geniza documents) is mentioned in one text from outside the Sheikh's House as a container for shipped apples, and leather baskets are referred to in another text (Goitein 1967: 334, n. 9; Guo 2004: Texts 37, 55).

¹⁴ For which compare an unprovenienced post-twelfth century Egytian carrier basket (Wendrich 1999: Pl. 11–6)

3. GLASS

Most of the glass from the University of Chicago's excavations at Quseir al-Qadim, including from the Sheikh's House, was published by Carol Meyer in 1992. Ann Roth published the 1978 season (1979), which includes sherds from the South House, Room A, and Donald Whitcomb published glass from the 1982 season in the *Journal of Glass Studies* (1983a). None of the glass from Islamic Quseir al-Qadim can be dated very precisely, and the Sheikh's House glass has parallels from numerous sites from Egypt and beyond at Siraf, Manda, Kilwa, Gedi, Aqaba, 'Aydhab, and Kawd am-Saila (near Aden), with dates all together ranging from the eighth to the sixteenth century AD. Each readable sherd (Table 14) has either a very wide range of possible dates, or is dated earlier than the Islamic settlement at Quseir al-Qadim (Meyer 1992: 77–88, 184, 86–7, Pls. 15–19).¹⁵ The dating of the glass corpus can, however, be fit into a general thirteenth century date for the Sheikh's House site.

Concentrations of glass were, as expected, found in the trash deposits, such as Loci K9b-53 and 56, in Phase I of what later became Room A of the South House, the pit in Room B of the South House, and the pit in *Shuna* C. Within the houses the majority of the glass was found in the large living rooms (all phases of the North House, Room C, and Phases I and IIb of the South House, Room C). Quantities were also collected from Room B of the North House and Room A of the South House. The vast majority of the pieces belonged to Phase IIb, the best-preserved phase, while in the *shunas* an equal quantity came from the surface strata. The discernable difference between the houses. Thus one

¹⁵ The thirty-one sherds of Sheikh's House glass discussed by Meyer are numbered as follows (the six unillustrated sherds are not numbered): 381, 388, 389, 397, 399–401, 412, 415–416, 419, 429, 431, 435, 437, 446, 464, 472–473, 476, 495, 511, 514, 519, 522.

could generalize that the finer pieces were reserved for home use while more utilitarian pieces were either commodities themselves or were perhaps used to ship medicines or food items.¹⁶

Only one of the glass pieces can be linked directly to the Quseir al-Qadim documents. A fragment of a glass sprinkler bottle from Locus K10a-3 (Phase IIb) of Room D in the South House (Meyer 1992: 78–79, Pl. 15:397) can be linked to a shipping note, RN 1022, found in a pit in the Phase IIa floor of Room C in the North House. It details a shipment to Quseir al-Qadim of wheat, stoneware cups, a *batta* of sugar,¹⁷ a juice presser, and eleven fine sprinkler bottles (Guo 2004: 249–50). Sprinkler bottles were used for perfume, which is another commodity found in the shipping notes (Guo 2004: 163–67).¹⁸ The distribution of the glass finds in the Sheikh's House is in step with their limited appearance in the documents and indicates their primary domestic function over mercantile. The majority of glass finds came from the South House, followed by the North House and distantly by the *shunas*. The quantity of glass sherds here was half that of the glass finds in the North House.

The significance of the glass at the Sheikh's House lies in the absence of certain techniques and forms when compared to the Eastern Area, which as previously

¹⁶ In an eleventh-century letter preserved in the Cairo Geniza documents, the writer requests the gift of a glass jar of salted tuna fish (Goitein 1973: 117).

¹⁷ Qus was known as a center of sugar production from this period, the thirteenth century. The production methods were chronicled for the end of the fourteenth century by al-Nuwayri. It was also produced in Cairo: In Ibn Duqmaq's description of fourteenth century Cairo, he lists sixty-seven sugar refineries (LaGro 2002: 10–14, which includes a translation of the relevant passage in al-Nuwayri). The Cairo Geniza documents also indicate it was a vigorous industry under the Fatimids, which produced much wealth (Goitein 1967: 126).

¹⁸ For an in-depth discussion of trade carried on at Quseir al-Qadim, and the place of glass in it, see Carol Meyer's Chapter Five (1992: 97–131).

mentioned also contains distinctive ceramic categories such as Mamluk slipware and sgraffiato, and Blue and White porcelain, which are conspicuously absent from the Sheikh's House ceramic assemblage. As Whitcomb points out, the Sheikh's House glass corpus contains only one glass bangle (indeed the entire central part of Quseir al-Qadim contains very few), and no marvered or enameled pieces, whereas all of these categories occur in relative abundance in the Eastern Area (Whitcomb 1983a: 104; Whitcomb and Johnson 1982a; 1982b; 1982c: 148). Glass bracelets were known from Umayyad times (and had been made in the Roman and Byzantine periods as well) but suddenly became extremely popular in Egypt and the Levant in the fourteenth century AD (Meyer 1992: 90–94; Spaer 1992: 56).

The single Sheikh's House example is from Phase IIb, and was found in a storeroom: RN 433, a simple drawn bracelet of solid green with a triangular cross-section, is from Locus J10c-15 in *Shuna* F, the mudbrick wall collapse onto the floor. The bracelet falls into Yoko Shindo's subtype A3, a type also found elsewhere at Quseir al-Qadim¹⁹ and in test excavations at 'Aydhab, but almost never occurring in the later assemblage at at-Tur, which begins in the late fourteenth century (Shindo 2001: 81, 93).²⁰ Simple triangular bracelets of solid dark colors were also found in surface survey at three sites in the Wadi Hadhramaut in southern Yemen (19, 20, and 48), which have been dated by seriation to the early Islamic to the late twelfth or early thirteenth century (Whitcomb

¹⁹ Several unornamented bracelets with triangular cross-section like this were found in the Eastern Area, among many more ornamented types with triangular or other cross-section (Meyer 1992: Pl. 20: 554–61). Colors represented are dark turquoise, turquoise, blue, dark blue, green, blue-green, amber, and opaque black.

²⁰ Dark, opaque colors are common in Egypt (Shindo 2001: 77; Spaer 1992: 57, Table 1).

For a thorough review of glass bracelets found in archaeological sites all over the Muslim world, see the discussion by Yoko Shindo (2001: 74–77).

1988: Table D, Fig. 21:a–d). Two similar examples were found in survey at al-Qaraw, which has a thirteenth-fourteenth century Chinese porcelain assemblage (Whitcomb 1988: 100, Fig. 21: o, q). These may all may be products of Kawd am-Saila near Aden, which possessed its own glass factory for bracelets of this description (Théodore Monod's Family I, not illustrated) as well as several ornamented types (Doe 1963; Arthur Lane and Serjeant 1948: 109, 29–31; Monod 1978: 113–14). Thus the glass evidence at the Sheikh's House parallels the ceramic evidence, providing an end of occupation at the Sheikh's House sometime in the thirteenth century, and indicates another likely connection to the Yemen.

C. COINS

The Sheikh's House documents indicate that although payments at Quseir al-Qadim, especially taxes, were often made in kind or using notes of credit, coin was also used to purchase goods (Guo 2004: 51–58). The coins from the 1978 season of excavations were published by Michael Bates in that preliminary report (Bates 1979).²¹ Only one numismatic object came from the South House, Room A in that season, however, and it is not a coin; RN 27 is from Locus K9b-10, in the accumulation on top of the floor in Phase IIa. It is a stamped green glass weight, about 3 cm in diameter and 0.75 cm high, used to check the weights of coins. It was not weighed. According to Bates, although it is anepigraphic, weights of similar design and shape have traditionally been broadly dated to the Mamluk period (also see Balog 1980: 65; Bates 1979: 231, Pl. 74:j; e.g., Lane-Poole 1891: 101–04).²² Judith Kolbas' statistical study of the colors of glass

²¹ See Table 15 for a full list of Sheikh's House coins.

²² Paul Balog argued that Fatimid and Ayyubid glass jetons were used as fiduciary currency (1966; 1981), which Bates disputes (1981).

weights over time suggests it could also be Ayyubid (Kolbas 1983: 96), and its presence in the Sheikh's House suggests an Ayyubid date for this example.

The second coin weight found in the Sheikh's House belongs to Phase IIa as well, and was found in Locus K9b-57 in Room C of the North House. RN 732, weighing 15.13g (slightly over five times the dirham standard of 2.97g) and measuring 1.5 (diam.) \times 1.1 cm (height), is an pigraphic, but its top is incised with concentric circles and has a lathe-point at the center. The shape is of a "truncated double cone" (Balog 1970: 235) with a distinct edge where the cones meet at its equator.²³ Bronze barrel weights of 1, 2, 3, 5, 10, 15, 20, and 50-dirham denominations for weighing silver and silver coins are known in Museum collections from Egypt and Syria dating from the Fatimid through the Ottoman period, and early Islamic barrel weights were found in the excavations at Aqaba (Balog 1970: 244–54; 1981: 107; Whitcomb 1994a). Bronze weights for measuring gold and gold dinars are in weight multiples of the *mithqal* (5, 10, 15, 40, and 50) and are octagonal in shape (Balog 1981: 107); none are known at Quseir al-Qadim despite dinars being mentioned as a desired form of payment in the business letters.

Twenty-one coins were excavated from the Sheikh's House in the 1982 season, six of them from the surface. They were cleaned,²⁴ weighed, and measured in the field; photographs and casts were taken as well. Michael Bates did the preliminary identification in 1982, as he had for the earlier two seasons. I have made my own analysis

There are precious few anepigraphic weights published. Stanley Lane-Poole published twenty-one in the British Museum having "devices only," but none of these bears a simple grid design like the Sheikh's House example. He does not suggest a date for them, but they are presumably post-Fatimid. (1891: xx–xxi, 101–04).

²³ Compare Ayyubid epigraphic barrel weights nos. 14, 15, and 21, and Ottoman weight no. 24, all of five-dirham denomination from collections (Balog 1970).

²⁴ Depending on the amount of corrosion they were either treated with Rochelle salts or a 10% solution of formic acid, or both. A few of them were simply rinsed in distilled water, however.

and can provide additional information on three of them.²⁵ See Table 15 for a list of the coins and their contexts. The six surface coins are worn but identifiable as Islamic. Of the sixteen found in the Sheikh's House strata, two are unidentifiable (RNs 668 and 670), two are Roman (RNs 665 and 705), one RN 687, is only identifiable as Islamic, and one is Fatimid. The Fatimid coin, RN 699 from Locus K9b-57, is a black dirham (dirham *aswad* or dirham *waraq*) minted between AD 1100 and 1169. The same type was minted in the Ayyubid period up to 622/1225, but the name 'Ali in the central field leaves no doubt it is a product of the *shi'a* government. The ten remaining coins are Ayyubid. No Mamluk coins were found in the Sheikh's House or indeed from the nearby areas such as the Roman oven in L8–L10 (which had a single Ayyubid dirham) or the Merchants' Houses in P7–P8.

The remaining clearly identifiable coins are datable to the latter half of the Ayyubid period. For example, RNs 682 and 683, respectively from Loci K10a-7 and K10a-9 are silver coins, globular dirhams or half-dirhams, which are known to have been issued by al-Malik al-Kamil Nasir al-Din Muhammad I in 622/1225 (Album 1998: 49; Schultz 1998). Also from his reign (615–35/1218–38) is a *fals* (pl. *fulus*), or copper coin, RN 685 from Locus K9b-46. The final three clearly identifiable coins are dirhams or half dirhams, all minted in Damascus. RN 694 from Locus K9b-63 (in Room C of the North House) is an issue of Sultan al-Salih Najm al-Din Ayyub, (regnal dates 636–57/1239–49) with Caliph al-Musta'sim, (reigned 639–55/1242–58 in Baghdad). This type of coin with

²⁵ These are RNs 694, 696, and 698. I had access to twenty-seven coins from the University of Chicago's excavations at Quseir al-Qadim in the Egyptian Museum in November 2005. Because they had accessioned them to the museum not all of the original information, such as the excavation's registration number, had been kept with each coin. Thus I was only able to identify nine coins, retaining their RNs and sometimes locus numbers, as being definitely from the Sheikh's House. The remainder were so worn that they were difficult to identify at all.

the dodecalobe-in-circle design is known to have been struck in Damascus during 644– 46/1246–48 (Album 1998: 50). RN 696 is a square-in-circle half dirham, reading *al-Malik al-Salih* on the obverse and *al-Imam al-Musta'sim* on the reverse. It is impossible to distinguish the Damascene issues of Sultan al-Salih Najm al-Din Ayyub from those of al-Salih Isma'il b. Abu Bakr, Ayyubid governor of Damascus 638–64/1239–45 (Album 1998: 50). It must date sometime between AD 1242 and 1245. Finally RN 698 from Locus K9d-1 is a square-in-circle dirham with readable central fields: *al-Malik al-Salih Imad al-Dunya wa'l Din Isma'il b. Abu Bakr* on the obverse and *al-Imam al-Musta'sim bi-llah Abu Ahmad Amir al-Mu'minin* on the reverse. It was struck in Damascus and must also date between AD 1242 and 1245 (Album 1998: 50).²⁶

Thus numismatic evidence provides one date cluster of 1218–49 (ten coins) at the end of the Ayyubid period. It is significant that no Mamluk coins appear in the Sheikh's House. This suggests that the end of occupation could not have occurred too long after the first Mamluk coins were minted in Cairo in 648/1250, as the Nile Valley trade would surely have brought dirhams of al-Mu'izz al-Din Aybak to Quseir al-Qadim quite quickly once they entered circulation, considering the length of the journey from Cairo to Qus could be as short as one week (Garcin 1978: 307).²⁷ Refinement of the dating of occupation at the site and the phases within can be done using the paper documents, some

²⁶ Album points out that coins of Isma'il were widely imitated by Crusaders, but these tend to keep the name of the previous caliph, al-Mustansir Abu Ja'far, and issue coins in his name posthumously (Album 1998; also see Balog 1952).

²⁷ A weekly mail service from Cairo to Qus in the Fatimid and Ayyubid periods is attested in the Cairo Geniza documents, but sometimes the courier service could be exceedingly slow, in one case it took fifty days for a letter to reach that city, and in another a family required forty-five days to make the journey (Goitein 1967: 287, 90, 98).

The Ayyubid/Mamluk queen Shajar ad-Durr did issue dinars and globular dirhams in the same year, but they are exceedingly rare (Album 1998: 51).

of which are dated, and reinserting them along with the coins into their contexts by phase; this is attempted in the following chapter.

CHAPTER FOUR

TEXTS IN CONTEXT

The documents from the Sheikh's House are rare examples of Arabic texts for which the original contexts are known. Most known Arabic documents pertaining to Egypt (although this could be generalized to all Islamic lands) come from archive collections (see, e.g., the publications of Grohmann 1949–1950; 1963; Raghib 1992; Sijpesteijn et al. 2006; S. M. Stern 1964; 1965; 1966 to cite only a few)¹ or from the primarily Fatimid-period Cairo Geniza, which were preserved in a synagogue storeroom rather than their original contexts (see especially Goitein 1967–1988; for a recent bibliography, see Jefferson and Hunter 2004).² Most of the documents published from the important archaeological site of Fustat made their way into collections early, having been retrieved either in illegal *sebakh* excavations or the early twentieth-century excavations of Aly Bahgat, and the context has been lost (see, e.g. Abdel Rahman 2000 among

¹ The Arabic Papyrology Database is also a useful source, at http://orientx.unizh.ch:9080/apd/project.jsp.

² This is a collection of letters, deeds, bills of sale, lease agreements, and other documents produced mainly by the Jewish community of Egypt and the surrounding countries, and are mostly dated from the tenth to the thirteenth centuries. Because anything on which the name of God was written could not be thrown away, vast quantities of documents dealing with daily life (which began with the standard line "In the name of God…") were collected in a storehouse for later burial. The storehouse (or *geniza*) was discovered adjoining the Ben Ezra synagogue in Cairo in the nineteenth century, and many of its documents translated and synthesized into a social history of these communities with implications for long-distance trade, Egyptian agriculture and crafts, and numerous other topics by S. D. Goitein and others. 2,000 searchable documents have been recently made available to the public by the Princeton Geniza Project at http://gravitas.princeton.edu/tg/tt/.

others). The Islamic period that is best-represented by archaeological texts in Egypt is now (arguably) the Ottoman and modern eras,³ for which we have some of the documents from at-Tur and we will shortly have those from al-Qasr in the Dakhleh Oasis, on which study has just begun.

The methodology for the study of archaeological texts should have numerous good examples in Egyptian archaeology. But it has not always been the case that texts were excavated carefully or their contexts recorded, or even that the documents were published with reference to their contexts. This is changing quickly for the Roman period, which has benefited from the work of Roger S. Bagnall and others to use texts together with archaeology to understand Roman and Byzantine Egypt, which sometimes includes integrating textual data with archaeological data from the same site (e.g., Bagnall 1988; 1995; 2003; Maehler 1983; Wendrich et al. 2003).⁴ Likewise Near Eastern archaeology, with excavations of thousands of tablets on numerous sites from Mesopotamia to the Levant has generally not fully exploited archaeological texts. Aside

³ As more attention is paid by archaeologists to the Coptic period and to Coptic communities that lasted into the Islamic periods, the chance increases that extant texts can be correlated with archaeological finds, and that more texts will be excavated from well-recorded contexts.

⁴ Ongoing work at Kellis and Trimthis in the Dakhleh Oasis, Mons Claudianus on the Red Sea coast, and Kysis in the Khargha Oasis is promising for future studies of primarily Roman and Late Antique Egyptian society, in which texts will be or already are able to be integrated with information about their specific and general contexts. Preliminary reports for Kysis have been published (Barakat and Baum 1992; Dunand 1992; 2005; Reddé 1992; 2004). Several Mons Claudianus reports are also available (Bingen 1992–2000; Maxfield and Peacock 1997; 2001; D. P. S. Peacock 1992), and for this site ostraca have been used for dating as well as understanding the use of various rooms in the fort (e.g., Bingen 1996). For Kellis (Ismant al-Kharab) and Trimithis (Amheida), see the bibliography on the Dakhleh Oasis Project's website: http://arts.monash.edu.au/archaeology/excavations/dakhleh/bibliography.pdf.

Trianos Gagos has written on the need for better integration of texts and archaeology and has experimented with the possibilities for Houses 2 and 3 in his review of the published papyri and ostraca from Kellis (1999). Scott Bucking has also recently argued for the need for papyrologists studying Hellenistic, Roman, and Byzantine Egypt to understand inscribed objects as archaeological material first and text second (2006).

from the pioneering work of Elizabeth Stone in Mesopotamia (Stone 1979; 1981; 1987),⁵ it is still relatively rare for excavated tablets to be analyzed according to findspot or context, or used to shed light on those immediate contexts (Zimansky 2005: 316).⁶

A. TEXTS AND CONTEXT: THEORETICAL AND METHODOLOGICAL APPROACHES

Many historians and practitioners of various fields of historical archaeology have examined the relationship of archaeological evidence to textual evidence, and more broadly, the relationship of the study of history to the study of archaeology (e.g., Arnold 1986; Carver 2002; Charlton 1981; Deagan 1982; Driscoll 1988; Dymond 1974; Dyson 1995; Funari 1999; Galloway 2006; Hodder 1987; Johnson 1999; Leone and Crosby 1987; Little 1992; Lloyd 1986; Rautman 1990; Rowland 1992; Small 1999; Trigger 1978; 1985; 1995; Yoffee and Crowell 2006). Indeed because of the rarity of textual preservation outside Egypt, little discussion has been generated about treatment of texts as artifacts as well as sources for historical narrative. The debate has rather focused on external written sources, the kind of "history" that archaeology can produce versus the "history" produced by textual sources (Deagan 1982: 160; Singleton 1992), and how to use them in an integrated fashion, yet be aware of the limitations of both lines of evidence (Deagan 1982: 171; Galloway 2006; McKee, Hood and Macpherson 1992; Yoffee and Crowell 2006: 11). Archaeologists argue against privileging the kind of

⁵ She examined property contracts on cuneiform tablets excavated from houses in Nippur along with the archaeological data to correlate structural alterations seen in the houses with the negotiations read in the texts.

⁶ But see the forthcoming University of Chicago Ph.D. dissertation on Middle Bronze Age Akkadian tablets from Alalakh in Turkey by Jacob Lauinger.

Other historical archaeologies are making efforts to better integrate textual data. For example, efforts have been made in Indian archaeology to treat texts as artifacts (see, e.g., Morrison and Lycett 1997 drawing on previous archaeological studies of Indian texts).

information produced by texts, which would relegate archaeological information to the supplemental or contextual, providing generalizations about culture against which the specific events of history are understood (e.g., Kohl 2006; Rautman 1990). Conversely, in the same debate some have accused historical archaeologists who avoid using texts as "little better than antiquarians," ignoring an entire aspect of the discourse of meanings produced by a culture that is recoverable by study of its mortuary practices, architecture, clothing, and so on (e.g., see Deagan's critique of Rahz and South using Deetz in Deagan 1982).

In the field of Islamic studies the history-archaeology debate is also underway (Walmsley 2004: 326). Archaeology is seen as the tool of history (e.g., Hourani 1976: 104), and texts are privileged over archaeology even by archaeologists (e.g., Northedge 1999: 1080). Some historians recognize both the tendency of texts to obscure the view of the long-term, chopping up history into "discrete bits" (Conrad 1990: 264; Northedge 1999: 1081), and the contribution of archaeology to the understanding of long-term social and economic evolution. Nevertheless, for the later Islamic periods, for which texts are so abundant and multitudes of which await study, archaeology is seen as able to contribute little (Northedge 1999: 1081). It can be argued that this view of history allows the texts themselves by virtue of the kinds of information they contain to define history, relegating all else, including archaeology, to the realm of "not history."

Despite this prejudice there is simultaneously a growing recognition among historians of the Islamic Near East of the usefulness of archaeological inquiry, its ability to broaden understanding of past cultures, and the need for historians to make better use of it (Hourani 1976: 104; Humphreys 1991: 59–65; Morony 1995; Northedge 1999: 1081; Redman 1980: 1). This necessitates a response from archaeologists, calling on them to include more synthesis in archaeological reports and in general make efforts to

provide information that is accessible to historians (Insoll 1999: 4; Walmsley 2004: 326; Whitcomb 1995c: 63). Many if not most archaeological studies of Islamic period sites in the Near East do make efforts to situate them within their regional and historical framework (e.g., Tonghini 1998; Walmsley 1988), and others use both types of data to explore a question (e.g., Johns 2003). Another option is of course for textual historians and archaeologists to cooperate, and there have been efforts to integrate the two fields around a specific topic of inquiry (see especially studies on Amman by Alastair Northedge 1992; Samarra by Chase Robinson 2001; and a general investigation of "everyday life" edited by David Waines, 2002).

Yet the attempt to make use of both kinds of evidence in the field of historical archaeology, whether the texts are products of the site or from outside it, will eventually lead one to confront the problem that textual and archaeological data may not necessarily correlate but may in fact contrast (Charlton 1981: 155). This is a point noted by Lewis Binford and others as an opportunity to produce new information and re-examine the proper approaches to both kinds of evidence (William Y. Adams 1979; Andrén 1998; Binford 1987; Charlton 1981; Leone and Crosby 1987: 409). This tack is adopted by the excavators of Roman Berenike (see below), who explain discrepancies between various types of data partly by their inherent biases, and recognize that an integrated study is one way to balance these biases against each other. They also seek explanations for these discrepancies in the wider world of Roman culture to which the study of Berenike contributes, resulting in an important insight on the essential place of ports in understanding Rome's import economy (Wendrich et al. 2003).

Anders Andrén has identified five methodological approaches to examining the encounter of texts and artifacts that are employed by various historical archaeologies, and apply to excavated texts as well as extra-site texts (Andrén 1998: 157–75). All of the

methodologies hinge on the debatable yet fundamental differences between the two forms of cultural expression, written and material, rather than their similarities as objects (1998: 147–48). The encounter of texts and material culture creates a new discursive context, which must itself be interpreted (1998: 155).

New contexts are created by the methodologies of correspondence (three different types), association, and contrast (Andrén 1998: 155). Classification, or seeking to establish classificatory similarity between artifacts and texts, is a type of correspondence that requires spatial or temporal closeness between texts and artifacts (Andrén 1998: 160– 61). It is heavily text-dependent and "normally... is a matter of taking written descriptions" of various defined classes and trying to obtain an idea of their form" (Andrén 1998: 161). An even more specific type of correspondence, requiring greater closeness of text and artifact is *identification*, often built on classification, and used to establish chronologies in archaeology (Andrén 1998: 162-63). Correlation, the third form of correspondence, also presupposes classification, but is not a given, rather it is based on probabilities. It seeks similar structures or patterns in artifact and text that can explain analytical concepts, such as economy (Andrén 1998: 164-68). Association is "trying to open an object of study to as many connections as possible" (1998: 168), and in historical archaeology refers to the interaction of a text and its archaeological context, which is reciprocal and complementary. "The texts can provide new perspectives on the function and meaning of the sites, and the find context can simultaneously deepen our understanding of the written documents" (Andrén 1998: 170). Contrast searches for the differences between text and material culture for a variety of purposes. It can be used to "stress the complexity and provisional picture of the past," to "detect where material conditions are out of phase with social norms and ideology," or to "avoid historical archaeology's dependence on texts and its tautological character" (Andrén 1998: 171). This methodology requires

sensitivity to discern whether perceived discrepancies between texts and material culture are due to a lack of information, incompatibility of data, or "actual' differences in the past" (Andrén 1998: 174–75).

Andrén's approach is descriptive of methodological strategies already employed in historical archaeologies, yet prescriptive in assembling them together to counteract the tautological conception of historical archaeology discussed above, that is that archaeology is redundant for places and times for which texts are numerous. His plea is for historical archaeology as a broad methodological approach, used even in prehistoric archaeology when possible, "which might not lead to an archaeology without boundaries, but it may lead to an archaeology with fewer limits" (Andrén 1998: 181).

In the field of Islamic archaeology Donald Whitcomb has already answered this plea (before the fact) in his study of commerce in the Fars province of Medieval Iran. He has outlined a tripartite system for the integration and cooperation of artifactual and documentary lines of evidence that is more specifically applicable to archaeological texts (Whitcomb 1979: 199–204, Fig. 33). He notes that treating the texts as artifacts accords them a primary degree of relationship with the other artifacts found at the site. To each artifact type a specific method of identification and analysis is applied (in the case of documents this could include analysis of the paper and inks), yet they are all also treated stratigraphically; the artifact categories provide parallel lines of evidence. A secondary degree of relationship is established when the texts are treated as external documents; their contents are read and generalized for the study of history or culture. In this way they parallel artifact assemblages (to which they also belong, in the case of the archaeological texts) rather than individual artifact categories; in a similar way assemblages provide more general information on technologies, economics, and social organization of the culture under study (Whitcomb 1979: 200). (This secondary degree of relationship would

encompass Andrén's methodologies.) The tertiary treatment of texts is to use the information they provide on the region in question in a study of that region in a time period other than the one in which the texts originate. This is the common approach for texts that are intentionally written histories referring to the past, but the conditions of trade in the Eastern Desert described in the Quseir al-Qadim texts could equally be tested against evidence for the immediately preceding period, that is the Fatimid, or indeed, can be compared with what is known of Eastern Desert trade in the Roman period from archaeological evidence at Quseir al-Qadim and Berenike. Whitcomb compares this use of texts to methodological testing in archaeology, applying hypotheses or models to artifact data (Whitcomb 1979: 203).

The primary treatment of texts, according to Whitcomb's scheme, would not only be to analyze them materially, but also to place them in their stratigraphic context, quantifying their occurrence spatially and diachronically. This kind of information can provide clues to the uses of rooms, for example, and how they change through time. It also may provide clues to the importance of these artifacts to the persons who created and used them, as their discard patterns are studied.

Once they have been read, Andrén's methodologies, including *association*, can be employed: re-integration of the texts into their stratigraphic contexts provides a richer reading of the secondary information within them. For example, as will be shown below, once the texts have been stratified it becomes apparent that not all of them are in their context of origin, and more importantly, not in their phase of origin. Events described in some of the texts helps to re-order the remainder vis a vis the stratigraphy. The stratigraphy also provides a certain order of events described in the texts that cannot be otherwise established. Consequently the texts take on a narrative flow, from the beginning of occupation at the Sheikh's House to the end, that is not possible when the phasing of the site is not correlated with the reading of the texts. The texts also illuminate the use of the site through time in another way, as modifications made to living and storage spaces can be understood in relation to activities and purposes gleaned from the texts.

B. PREVIOUS AND CURRENT TREATMENTS OF ARCHAEOLOGICAL TEXTS

The following examples illustrate the variability of success in previous efforts to analyze archaeological texts from Roman and Islamic sites in Egypt. This is not meant to be a comprehensive catalogue, but it does illustrate most approaches to archaeological texts undertaken to date. They can be roughly divided into integrative approaches, which make use of the textual and archaeological evidence to provide a richer history of the site, and pre-integrative, which have not yet exploited the texts found at the site to their potential. The few projects that have been able to attempt some kind of integration of texts and archaeology, or creative approaches to using texts, have been variable in their success, usually due to circumstances beyond their control such as the occurrence of texts primarily in dumps, as at Berenike, or incomplete excavation records, as at Karanis and Jême. Occasionally the lack of integration is probably due to the overwhelming number of documents excavated, for which much time is needed to preserve and study them, and then read them against the archaeology, such as at at-Tur.

There is a third approach, however, apparently not attempted by any of these projects, which is not only to create an integrated narrative but to undertake a stratigraphic reading of the texts. Study of the texts is usually undertaken by an epigrapher, who typically can make little reference to the archaeological context. For many of these sites, the next step would be to return the texts to the archaeologist, who can situate them in their context within the site and produce both a narrative of the site that is enriched by the texts, and conversely a reading of the texts that is informed by the order of their deposition within the site. Most of the sites described below have the potential for this kind of study but have not yet realized it.

1. PRE-INTEGRATIVE APPROACHES

a. Nessana, Negev

The Nessana papyri were found in a situation akin to the Cairo Geniza documents, in room 3 of the south church and room 8 of the north church excavated at the site of Nessana in the Negev. These rooms are not archives as such, but places of disposal, like the Geniza of the Cairo synagogue, collecting pieces of papyrus or paper that bore the name of God, and in use from the sixth to the tenth centuries AD. Nevertheless the documents are sortable into five groups, some of which are personal archives.⁷ They are: (1) seventeen legal documents dealing with a soldier's business affairs, dating AD 582–90?; (2) thirteen personal papers of Patrick son of Sergius; (3) the personal papers of Patrick's descendants, about 100 years later; (4) forty miscellaneous post-conquest documents, some in Arabic, relating to the Early Islamic administration (including tax collecting); and (5) literary and religious books. Thus the papers do not shed direct light on their physical context, but they do illuminate the city of Nessana: two khans in the town are mentioned that have not yet been located by archaeologists (Kraemer 1958). Although a stratigraphic reading of these texts is not possible, an integrated reading of them against the excavated remains, is.

⁷ The "archives" are such in the sense that some are groups of documents belonging to a particular person, but not in the sense that they were kept as records for future reference. The same criterion was applied to the Berenike ostraca so that they are referred to as archives even though they were excavated from a midden. "Archive" is not used to refer to the Sheikh's House documents, even though most of them clearly refer to the business conducted by a small group of people. Their treatment as trash results in a certain randomness of survival, in contrast to a more complete assemblage of texts that might have survived had they all been deliberately collected and stored.

b. Fustat

In the 1980 season of excavation at Fustat C, 441 pieces of paper, parchment, and papyrus were recovered, along with a large number of inscribed eggshell fragments too tiny to reconstruct or decipher (Richards 1989). In volume two of the Fustat final report, Donald S. Richards summarizes and preliminarily publishes the textual finds, and fully publishes three of the most complete documents. The 177 readable scraps seem to belong to 124 individual documents, which he lists by findspot in the excavations. Although Richards discusses the context of one block-printed text, perhaps because it comes from a layer of rubble he can only summarize the dating of the pottery, textiles, and other material from the same context. Thanks to his list of documents by location, the quadrant in which the three complete documents were found can be located on Plan II, and descriptions of most contexts can be located in the reports on strata and architecture. Unfortunately there is no attempt to re-read the documents within their excavated contexts. Aside from two fragments from a slave-dealer's *daftar*, or day book, the remaining readable (but fragmentary) texts from the excavations have not been published, and are not currently being studied (Richards 1991, Scanlon, personal communication 16 September, 2006, Richards, personal communication 18 September, 2006). When and if they are published they will provide an interesting comparison with those from Quseir al-Qadim, as the Fustat documents (which date roughly between AD 950 and 1050) were also "discarded remnants" rather than archival material (Richards 1991: 88).

c. Naqlun

Excavations directed by Włodzimierz Godlewski at this monastery near the Fayum have produced several dozen fragments of papyri, paper, and occasionally parchment in Greek, Coptic, and Arabic over several years of excavations (Godlewski 1990; 1991; 1992; 1993; 1996; 1998; 2000; 2003; 2004; Godlewski and Parandowska

1994; 1997). The monastery was founded in the fifth century AD and used into the nineteenth, although to date the Greek documents in the sixth century AD and the Arabic and Coptic documents seem to cluster in the Fatimid and Mamluk periods. Some of these are quires of codices, and one complete codex of Christian works, such as the Gospel of John in Sahidic found in the eleventh century AD or later mausoleum of a well-off couple in 2002 (van der Vliet 2003). Preliminary reports on the documents usually occur alongside the preliminary excavation report for that year or the subsequent year (Derda 1993; Derda 1997; Derda and Urbaniak-Walczak 1996; Gaubert 1998; Kaper 1991; van der Vliet 2000). To date these reports contain little information on findspot or context, although the documents are occasionally used in the dating of the excavations (e.g., Derda 1991: 54).

d. Al-Qasr, Dakhleh Oasis

Work on excavation and restoration of ancient houses, and study of the texts within them in the old town of al-Qasr in the Dakhleh Oasis has been undertaken by Fred Leemhuis under the umbrella of the Dakhleh Oasis Project. The mud-brick portion of the town, containing standing buildings some of which were initially built in the sixteenth century, has been the subject of conservation efforts on the part of the Supreme Council of Antiquities for several years.⁸ Leemhuis has joined in the effort to make the old town once again habitable by offering to restore a family's house if they will in turn allow him to publish their family archive. He has been successful in this regard with two houses belonging to a local family, the adjoining Beit al-Qadi and the Beit al-Qurashi, which both have yielded medieval and early modern documents within the houses under restoration. In the Beit al-Qadi, for example, clearance of collapsed part of the house

⁸ For an architectural history of al-Qasr, see Sa'd 'Abd al-Karīm Shihāb (2001).

revealed a cache of documents that seemed to have fallen from a cupboard in the upper storey. These documents contain fragments of the Qur'an, magical texts, personal and business letters belonging to the Qurashi family (said to have originated in Mecca), such as deeds of sale and documents pertaining to agricultural land use, the oldest of which date to the early 1600s (Leemhuis 2003: 18–19). In the Beit al-Qurashi the *khatim*, or signet of a woman named Halima 'Uthman was accompanied by several letters addressed to her found nearby, from the turn of the twentieth century. Other epigraphic finds in the house included fragments of literary (such as the Thousand and One Nights) and religious texts, including a manual on the writing of *hegap* amulets, in addition to many amulets of this type (*hegap* amulets were also found in the Sheikh's House, discussed below, Leemhuis 2004: 50–51). Perhaps the most important group of documents is a cache of thirty-four folded documents, found together, that contain the proceedings of the shari'a court in Qasr, dating from the early twelfth/seventeenth century to the early thirteenth/nineteenth century (Leemhuis 2004: 52). Leemhuis and Ruud Peters are both undertaking publication of the documents and both are only at the beginning of their study.⁹

⁹ I am grateful to Professors Leemhuis and Peters for the time they took to share their research with me during my visit to the Dakhleh Oasis Project headquarters at the 'Ain el-Gindi camp in March 2006. Preliminary reports have been published on the project website, at http://arts.monash.edu.au/archaeology/excavations/dakhleh/index.html#reports.

A test trench dug against the foundations of both houses, along the façades, produced pottery from the Fatimid through Mamluk periods, including vessels of *Marl 4* or similar fabric. Types are incised monochrome wares, slip-painted wares, and blue and black on white underglaze painted wares, the latter two types dated to the Mamluk period (Leemhuis 2004: 52).

2. INTEGRATIVE APPROACHES

a. at-Tur

The extensive excavations at at-Tur on the Sinai peninsula have unearthed several thousand documents in various parts of the site or sites since 1985, the bulk of them of the nineteenth and twentieth centuries, but about 1,000 dating from the mid-fifteenth to the mid-sixteenth century (Kawatoko 2001b: 52). It is clear that Mutsuo Kawatoko and team are interested in using the documents to understand the site and indeed the medieval world, and this extends to documents housed in the nearby St. Catherine's Monastery. For example, Kawatoko's article on coffee drinking at at-Tur makes use of several documents dating from the fifteenth to eighteenth century along with ceramic evidence, particularly imported Chinese tea bowls and Turkish coffee cups from Kutahya (Kawatoko 2001b: 52). However, contexts of the texts are not mentioned, although occasionally it is noted that a certain text was found with another.

Excavated documents from at-Tur are yet to be published with detailed descriptions of their contexts or an attempt to stratify them, although preliminary reports provide some information (Kawatoko 1989; 1992; 1993a; 1996; 1998). For example, in 1994 over 1,000 documents were found in Area B, north of the shipyard, in the modern strata. These applications for travel permits, applications to leave port and to build ships; certificates for passing quarantine, personal identifications, official receipts, acknowledgement of debts, tribal census records, records of sale on credit, miscellaneous notes, and personal correspondence all date between the 1890s and 1960s and were preliminarily published in the report for that year (Kawatoko 1995: 11–21, Pls. 25–26). The description of the room in which the vast majority of them were found is quite brief, however, and there is no attempt to understand why the documents were discovered in

that particular room, given that the function of the room is interpreted to be both a workshop for making sandals from tires and a jeweler's workshop (Kawatoko 1995: 7).

In 1996 over 1,000 documents were found in 422 "clusters" in various modern rooms in the area north of the shipyard. Several hundred of them from a storeroom in Modern House No. 31 belong to a single merchant family, the Rādī Family, who conducted business at at-Tur beginning in the mid-nineteenth century. Seven of these documents were published in the preliminary report, using some information from interviews with their descendants (Kawatoko 1998: 55–66). Future studies of this family are planned using the documents, interviews, and information from excavated and standing remains in the modern town (Kawatoko 2005b). There is great potential at the site for detailed studies of Ottoman, but mostly modern at-Tur.

a. Jême

Thousands of ostraca and papyri were found during the excavations of Jême, the extensive Coptic city built around and in the temple of Medinat Habu in Western Thebes, which was inhabited at least through the eighth century AD. Terry Wilfong has made this town a focus of his research. He has used the archaeological evidence with the textual (thousands of texts have been published) to create an integrated history of the town, but has also tried to make specific correlations of texts and their contexts when possible. Poor preservation and quality of excavation records has not always allowed this, but extant remains of excavated buildings and one published plan at least allow analysis of architecture (Wilfong 1989: See esp. 97–98).

Wilfong published a group of ostraca from Jême that trace the money lending activities of a woman named Kolôje and her family. Because so many of the original 1929 excavation records were lost, he is unable to make the archaeological correlations he wished. Wilfong is only able to determine that the group of ostraca were found in the cellar of house 34, but because individual findspots are unavailable it is uncertain whether the ostraca were thrown away there, or "filed" there for future consultation (Wilfong 1990: 171, n. 8). He does reproduce the house plan, and describe some of the other finds from the cellar, in an attempt to provide some context for the documents (Wilfong 1990: 170, Fig. 1).

b. Syene

Geneviève Husson made an attempt to correlate documents and archaeology, although she was not working with texts for which archaeological contexts were preserved. She examined Greek papyri (wills, deeds of sale, settlements between heirs) from the Patermouthis Archive concerning houses in the settlement of Syene (now Aswan) in the late fifth to end of the sixth centuries AD. Her main interest was in reconstructing house plans from the documents in the archive, and noting continuities across time such as with eighth century AD Coptic documents from Jême. Husson was also able to illustrate a certain elements of houses found in the Syene texts using circa fifth century B.C. houses excavated at Elephantine, and pointed to the potential of this kind of correlation for future research on domestic architecture in Egypt (Husson 1990: 136). This approach is similar to that of S. D. Goitein in reconstructing house plans from wills, deeds of sale, and other descriptive documents in the Cairo Geniza collection, and drawing comparisons with houses excavated at Fustat (Goitein 1977; 1978b).

c. Karanis

Herwig Maehler was among the first to use archaeological and textual evidence together for classical Egypt (Bagnall 1988: 198). His study of papyri related to houses establishes the typical kinds of houses that were purchased or rented, for what price and by what size of family, and compares them to houses excavated by the University of Michigan in Karanis and Soknopaiou Nesos (Dimê). He can make no direct correlations but sees similarities in the small mudbrick houses excavated, and those the purchases of which in the texts are made for the price of a camel (Maehler 1983).

Peter van Minnen advocated a "house by house" approach to the study of Karanis, using the archaeological data from each excavated house along with the papyri found therein. He only experimented with this approach, examining about 200 papyri from one house, which belonged to a certain Socrates and his family. Whereas he was able to reconstruct some of Socrates' biography, family, and neighbors, the archaeological record was so fragmentary that van Minnen was unable to reconstruct even the plan of Socrates' house and thus was unable to determine the findspots or stratigraphy of the papyri (van Minnen 1994: 240–44). He was able only to tell in which general area of the site the house was located, that it had been of relatively large size, and that one of its doors had a locking mechanism (van Minnen 1994: 239). Despite his failure to closely correlate an archaeological history with his documentary history, van Minnen is nevertheless optimistic about the usefulness of this approach for future study of Karanis (van Minnen 1994: 249).

d. Berenike

The texts found at Berenike, a Ptolemaic-Roman-Byzantine port on the Red Sea south of Quseir al-Qadim, have been published by several experts in the various languages in which the texts were written. The bulk are Greek ostraca with a few papyri and inscribed objects, published by Roger Bagnall and team both in the preliminary excavation reports and in two volumes that present final reports on the texts only. In the preliminary reports the textual finds are summarized and the excavation trench is identified, but locus number and description are not provided (Bagnall, Helms, and Verhoogt 2000; 2005; Gragg 1996; Mahadevan 1996; Verhoogt 1995; 1996; 1998). Often, but not always, one can turn to the trench report and find reference to an ostracon,

however, so that something of its context can be understood. In the final reports the authors provide the context of the texts and some speculation on their place in the context of the ancient town. As with the Nessana papyri, texts are grouped by "archive" based on contents, not findspots (Bagnall, Helms, and Verhoogt 1999). This is probably partly to do with the distribution of the texts; the vast majority were found in the large Roman trash dump northwest of the main town, "rather than from occupation contexts in which we might hope to link the documents to the use of particular buildings and rooms" (Bagnall, Helms, and Verhoogt 2005: 1). Nevertheless the content of the documents does shed light on the town, particularly the group of ostraca from the customs house, which has not been identified in the excavations (Bagnall, Helms, and Verhoogt 2000: 1).

The excavators have made efforts to integrate the textual data from the site with the archaeological evidence and contemporaneous textual sources from outside the excavations, notably in a long article co-authored by several members of the team (Wendrich et al. 2003). Because most of the early Roman textual material was found in dumps, they cannot be read stratigraphically. Nevertheless the approach taken is to compare the textual evidence (from within and outside of the site) for goods shipped to Berenike against finds at Berenike, recognizing that both types of data have their inherent biases, and thus attempting to correct these biases (Wendrich et al. 2003: 2, 83). When the two lines of evidence contrast, the opportunity is taken to investigate that seeming contradiction. For example, numerous botanical remains of plants imported from India and other exotic locales at Berenike are not found in any textual source and have no counterparts in Rome, despite the fact that they exist at Berenike in large enough quantities to have been meant for transshipment to Rome. Their absence at Rome can partly be explained by the scant publication of organic remains, and partly by the poor preservation there as opposed to the Eastern Desert (Wendrich et al. 2003: 69). Their seeming absence from texts must partly be due to the difficulty of interpreting ancient terms for plants. The significant presence of these plant remains at Berenike nevertheless indicates that transshipment ports should be viewed primarily as "places for studying exotic commodities for the Roman market" (Wendrich et al. 2003: 70).

e. Qasr Ibrim, Nubia

At the fortified town of Qasr Ibrim in Nubia (now Egypt), excavations by the Egypt Exploration Society since 1963 have yielded large quantities of documents in Demotic, Greek, Latin, Meroitic, Coptic, medieval Nubian, medieval Arabic, Ottoman Arabic, and Turkish, many of which have been published (for Old Nubian, see Browne 1981; Browne 1989; 1991; e.g., for Latin texts see Capasso 2003; for Coptic, Greek, and Old Nubian, see Frend 1972; Frend 1978; 1986; Hinds and Sakkout 1981; for Coptic and Arabic, see Plumley 1975; Plumley 1978; 1979; 1980; Plumley and Browne 1988; for Demotic see Ray 2005; for Arabic see Sartain 1996a; Sartain 1996b). Textual finds included both discarded writings usually found in the trash fill of storage pits, and deliberately preserved archives often buried in jars. For example, a group of Ottoman Arabic documents was discovered wrapped in eight discrete bundles of leather, linen, or paper and concealed inside an earthenware pot with a lid. The pot had been buried in the courtyard floor of a large domestic complex. Aside from two documents that refer to and describe "the well-known house of *tubshi* Ibraim," the bulk of the documents found in the pot do not relate to the house itself, but to civil or military matters concerning the fortress and its inhabitants (Hinds and Sakkout 1986: vii-viii, 1-3).

Most of the Arabic documents¹⁰ and 168 Turkish Ottoman documents have been published in two volumes by Martin Hinds, Hamdi Sakkout, and Victor Ménage. Their studies have illuminated both the internal workings of the Ottoman fortress, which at the time was the principal Turkish fortress between the First and Second Cataracts, and its relationship to its immediate agricultural environment, and have also contributed to the hitherto poorly understood history of Lower Nubia in the sixteenth through eighteenth centuries (Hinds and Sakkout 1986: 3). The publications provide an Arabic or Turkish transcription, English translation or summary, and commentary for each text. Nevertheless there are few links made between the texts and their specific contexts; aside from the preface of the first volume, there is no discussion of the relationship between the Arabic texts and the house, or even the relationship between the house and the fortress, for around half of the documents in the pot were of an official military nature. The Turkish documents have even less concrete links to the site, as they are simply described as being "from various seasons and from various provenances on the site" (Hinds and Ménage 1991: 1).¹¹

Preliminary reports of the excavations tend to discuss the findspot and condition of texts, however (see, e.g., Frend 1974: 41–42), and the final report on the Late medieval periods (contemporaneous with the Ayyubids and Mamluks in Egypt) at Qasr Ibrim incorporates the excavated texts into numerous archaeological and historical discussions.

¹⁰ The most numerous and best-preserved group of Arabic documents preserved at the site to date, according to Martin Hinds (Hinds and Ménage 1991: 15).

¹¹ Quseir is actually mentioned in two of the Turkish documents published in the second volume. It is certainly the later town, and the Ottoman fortress, which is referred to, and not the Ayyubid-Mamluk town. Document C10, a fragmentary letter of instructions to a *Havāle* (paymaster) of the fortress of Ibrim, refers to people, perhaps tax-farmers, who are about to "set out to go again to Qusayr" (Hinds and Ménage 1991: 95, 108). Document A1 gives instructions for the payment of a debt owed to a man named Bekr who is a *serbölük* (head of a section) of the fortress of Quseir (Hinds and Ménage 1991: 82, 110).

The texts have been used throughout the report to present integrated histories of the site and of Nubia (W. Y. Adams 1996c: 1–8, 22–29, 253–55) and to identify and date the structures in which they were found (e.g., Houses 763, 177, 178, 170, 171 in 1996c: 43– 47, 49–50, 53, 61). Several chapters are devoted to translations of texts, classified by category (W. Y. Adams 1996c: 213–43), and chapter eight is an attempt to summarize the new information provided and questions raised by the Qasr Ibrim texts regarding politics, administration, economy, society, law, and religion (W. Y. Adams 1996c: 244–52). A summary chapter at the beginning of the section on texts introduces them and their state of preservation. Contextual discussion is limited, but does include quantification and spatial distribution throughout the site, which reveals that even the discards are found in highest proportions in and around the five houses belonging to eparchs (W. Y. Adams 1996c: 216). There seems to be ample room for future detailed studies of single structures, or perhaps the group of eparchal houses, and the documents contained within, read stratigraphically.

C. THE SHEIKH'S HOUSE TEXTS

The study of the texts from the Sheikh's House at Quseir al-Qadim draws on the integrative methodologies proposed or tried at several of the sites mentioned above. For example, Peter van Minnen sought to correlate documents belonging to Socrates and his family with the house at Karanis within which they were found, but was hampered by the excavation records. This approach has succeeded at Quseir al-Qadim, where findspots of documents illuminate the activities of the house residents and use of the space. Likewise the use of texts and archaeology to compose an integrated narrative of the site as at Qasr Ibrim been attempted here, in the latter part of this chapter and in Chapter Five. Perhaps most successful has been the adoption of the technique of contrasting the texts and

material throughout this study, as at Berenike, in order to take advantage of the different information gained from texts versus that gained from archaeology.

In contrast to most of the sites described above, the documents from the Sheikh's house were not found primarily in dumps, or stored in pots, genizas, or other deliberate caches. Rather the texts from the Sheikh's House, numbering at least 1,523 fragments, were found in nearly all strata of the building, occupation, and abandonment of the complex, mostly crumpled in wads and strewn about. A few of them had been carefully folded and tied with string, however.¹² The corpus consists of cut paper sheets, in various states of preservation, written in black ink. Red and brown ink has been used on some drawings and block-printed fragments, however. Pieces of paper were often reused, and two letters or shipping notes may appear on the same leaf, or the back of a letter is used for an account (Guo 2004: 110–11). Paper and inks have not been chemically analyzed or studied microscopically, but the paper is likely to be made from cotton and linen rag, and may have been imported from Syria, although Egypt is also known to have produced it (Amar 2002; Goitein 1967: 112; 1973: 196; Serjeant 1972: 136). Because so many of the documents are fragmentary, only the best-preserved have been studied to date, although work is ongoing to salvage what information can be gained from the small fragments.

1. DISPOSITION OF THE LETTERS

The preservation of letters in the Sheikh's House is not even throughout the complex (Table 3). The North House yielded 830, by far the largest collection of paper fragments excavated on the site. By contrast only 221 fragments were found in the South House. A larger number, at least 322 fragments, came from all the storerooms combined;

 $^{^{12}}$ RN 976 from locus J9d-13 north of the house in a surface stratum remains in this condition, but two others have been opened and studied (Guo 2004: Pl. 4).

an additional forty-six were found in Corridor D running down the center of the complex. This distribution is probably primarily due to conditions on the site; the South House sits over the edge of the slope and was badly eroded compared to the North House. Much of its contents, at least of Phases IIa and IIb, may have simply eroded down the hill. Also, because the South House was built first, the likelihood of finding large numbers of documents under the floors is far less, and that is indeed the case. Keeping this in mind it is nevertheless tempting to interpret part of the reason for the difference in quantity as a result of a difference in the use of the houses; perhaps more business was contracted in the North House than in the South House.

	House Exteriors	South House	North House	Shunas	Corridor D	Phase Totals
Phase I	0	5	441	16	0	462
Phase IIa	0	0	173	15	0	188
Phase IIb	7	146	216	191	46	606
Surface/Unstratified	97	70	0	100	0	267
Area Totals	104	221	830	322	46	1523

Table 3. Distribution of Paper Finds across the Sheikh's House

Concentrations of letters occur in the main living rooms of both houses, and in *Shunas* B and F, but every room in the complex contains some quantity of paper fragments, however small. The largest proportion of paper fragments (at least 418) comes from a single layer, Locus K9b-63, which is the possible surface for the first use of Room C of the North House when it was a *shuna* in Phase I. The documents were for the most part clumped together in a mass against wall E to the west. It is unfortunate that none of these bear dates. There is only one stratum below Locus K9b-63, below which is bedrock; Locus K9b-64, probably simply natural soil, contained five letter fragments, but

only one is readable. The uppermost stratum of the North House, Room C (Loci J9d-4, K9b-41 and K9b-48 of Phase IIb) yielded 204 fragments of which thirty-six fragments came from a small pit dug into the occupation debris of K9b-48 (also Phase IIb) and eighty-three were found on top of the Phase IIa living surface in that room, Locus K9b-57.

2. CONTENT OF THE LETTERS

Only the contents of the best-preserved fragments are known, although analysis of the smaller fragments indicates they are of a similar nature to the readable documents. Of the over fourteen hundred fragments excavated, eighty-four texts have been published fully (in Guo 1999a; 2001; 2004), while the incomplete contents of an additional eighty-four are discussed (see index of documents in Guo 2004: 321–23). These latter texts are comprised of approximately 287 fragments of paper, providing an idea of the difficulty in reading the poorly preserved samples.

The majority of these 168 documents consist of business letters and shipping manifests regarding shipping and brokerage transactions that Sheikh Abu Mufarrij and his son Sheikh Ibrahim Abu Ishaq ran from their complex of houses and storehouses at Quseir al-Qadim (see Tables 16–17).¹³ The direction of traffic preserved in the shipping manifests is of course most often from the Nile Valley to the Red Sea shore of Quseir al-Qadim. The manifests take the form of a letter in which the recipient is notified of the quantity and quality of goods accompanying the note, the person accompanying them,

¹³ Li Guo of the University of Notre Dame has done the bulk of the work of editing and translating the Sheikh's House documents, and produced the most detailed study of the company, its business, and the religious lives of the Sheikh's House occupants in Part One of his book (1999; 1999b; 2001; 2003; 2004: 1–98). A few of the documents (RNs 968, 970, and 1003 and others) were used by Jennifer Thayer in her dissertation and a subsequent article, but her placement of the documents in the Mamluk period is problematic (1993; 1995).

and for whom they are intended, or he is otherwise given instructions regarding their disposition or sale. It is clear from the documents that some of the items, especially some food items, were meant for consumption in Quseir al-Qadim. Some business letters, which also served as shipping notes, additionally request items to be sent to them from Quseir al-Qadim (which would have come from ships anchored in the harbor), list prices of certain items, complain of shortages on previous shipments, ask for further instructions, or settle business accounts. A few outgoing letters from Quseir al-Qadim are preserved on the verso of letters that had arrived at the Red Sea shore, which report on prices or give instructions on how to buy or sell certain goods in the Nile Valley towns (Guo 2004: 186, 191, 215).¹⁴

Locations in the Nile Valley are not named with the exception of Qus, the district capital, and Qena, north of Qus on the Nile. Two locations are preserved in the *nisab* (sing. *nisba*) of individuals, however: Qift (*al-Qifti*), between Qus and Qena, the hometown of Abu Mufarrij himself (and the important Roman town of Coptos, Quseir al-Qadim's primary trading partner at that time), and Shanhur (*al-Shanhuri*), a town south of Qus on the Nile (see map in Figure 2;Guo 2004: 172–74, 247–48). Other *nisab* indicate several clients of this company had much more distant origins in Egypt and beyond, including the Fayum, the Delta, Alexandria, the Hijaz, Syria, and even Spain (Cordoba) and Persia (Istakhr, Guo 2004: 59, 64).

¹⁴ The business letters that give instructions to use the proceeds from the sale of a certain commodity to buy other commodities and ship them to the letter's sender are echoed in the mid-nineteenth century letters to a merchant family in at-Tur. Aside from conventions of paleography and phraseology, the at-Tur letters differ from the Quseir al-Qadim letters only in the kinds of commodities mentioned. In at-Tur these seem to be mostly *samn* (clarified butter) and coal, but pomegranates, almonds, onions, tobacco, coffee beans, *'adas* (lentils), ground wheat, and Indian millet are also mentioned (Kawatoko 1998: 58–61, but see esp. text TM-2164).

The trading business of the company (or companies, see Guo 2004: 5, 10–12, 18– 19, 22; Thayer 1993: 212) was primarily in flour and wheat, which they shipped across the Red Sea to the haramayn, Mecca and Medina, supplementing the function that the port of 'Aydhab had provided for Egypt since the Fatimid period (Garcin 1976: 103). As noted in Chapter One, pockets of grain were found in the excavations. Rice and barley also figure in the notes, but in smaller quantities and may therefore have been intended for consumption at Quseir al-Qadim; they are not found in the excavations.¹⁵ Textiles, clothing, bundles of flax, and rope were also quite important in the shipping documents and are prominent in the excavations, as discussed in Chapter Three. Some of the numerous kinds of food listed in the documents as both products of local consumption and commodities to be trans-shipped, such as lemons, watermelons, dried dates, beans, and almonds, were unearthed as well (Tables 19-22, Guo 2004: Table 1, 256-58, 277-83 Wetterstrom n.d.: Table 2). Other goods, including a few more expensive commodities such as pepper, mirrors, coral, and semi-precious stones, are named in the documents, but aside from carnelian beads (in Loci K9b-33, 49, 56 and J10c-17) left no detectable material remains.¹⁶ This can partly be explained by retrieval methods (in the case of

¹⁵ Rice figures in RNs 967a, 984a, 1018c, 1018d, and barley in RNs 979, 1018a, and 1037a. According to the evidence in the Cairo Geniza documents, barley was not consumed even by poor urbanites. It may have been more common in the countryside and small towns of Upper Egypt, or was used for animal fodder (Goitein 1967: 118–19; 1983: 243). The small quantities in the Sheikh's House shipping notes confirm the likelihood of its use for animal fodder at Quseir al-Qadim as well. Rice had been cultivated in the Nile Delta since the eleventh century AD (Goitein 1967: 119).

¹⁶ Pepper was found in the Eastern Area by the University of Chicago, and in Islamic trenches at Quseir al-Qadim by the University of Southampton, however (van der Veen 2004: 126). Saffron, rose water, Jew's mallow, and henna are items that only appear in one document found near the Sheikh's House, RN 1077b (Guo 2004: Text 68). (The saffron was likely imported from Tunisia, see Goitein 1967: 153.) Semi-precious stones, pearls, beads, and stable supplies from Persia are only mentioned in another document from outside the Sheikh's House, in the same location as RN 1077b, and addressed "to Quseir al-Qadim" (RN 1085: Guo 2004: Text 36).

peppercorns) and partly by the value of the commodities, which would have discouraged wastage and loss. In addition to shipping notes, other types of documents such as poems, prayers, sermons, block-printed and hand-written amulets, and astrological and lunar dials illuminate the religious lives of the Sheikh, his family, and the town.

Thus the secondary data as described in Whitcomb's outline of approach described at the beginning of this chapter has already been gathered from the Quseir al-Qadim texts. Most of the them have already been read independent of their individual contexts, although as noted Li Guo made much effort to correlate them generally with the site of Quseir al-Qadim using archaeological information from the preliminary reports and conversations with Donald Whitcomb. The information they provide not only regarding activities at the house and storerooms, but commerce between the Nile Valley and the Red Sea, and its regulation by the authorities, has been studied in detail. This mode of analysis can now be broadened by comparison with other artifact categories, such as the large quantity of date pits in the excavations (that occur in especially high proportions in the storerooms), which correlates with the single mention of dried dates as an item of trade in the texts, for example. In the section that follows each locus that contains readable texts is described, along with its contents and the content of the documents it contains. This allows the each small assemblage to be understood on its own, while patterns are simultaneously noted across the complex.

D. PHASE BY PHASE: THE SEQUENCE OF DOCUMENTS IN AND OUT OF CONTEXT

1. PHASE I

In the first phase, as discussed in Chapter One, the South House was built, *Shuna* F was built, and Room C of what later became the North House was built and used as a store room. The courtyard south of this room, just outside the strong north wall of the

South House, was used as a kind of dump or midden, concentrated in the southwest corner (Locus K9b-53). This phasing, based on stratigraphy, is bolstered by the disposition of the paper documents in this phase (Figure 54). It is significant that no documents were recovered from Locus K9b-53 or 56, even though the nature of these deposits is clearly that of trash. In addition, the highest density of documents was recovered from Locus K9b-63, the surface of Room C of the (future) North House in Phase I, proposed to have been used as a storeroom at this time. This suggests that initially the shipping notes and other documents, including sermons, amulets, and lunar and astrological dials, were not discarded but were kept at least temporarily for future reference.

The absence of documents from the earliest floors of the South House and paucity from *Shuna* F further bears out the sequence of phasing. In Room A of the South House, neither the floor (Locus K9b-21) nor the fill underneath it (K9b-22, 23), contained any paper. In Room C of the South House, only five small fragments were recovered from this phase, all seemingly from the same text; a few pieces were found scattered in the earliest plaster floor, Locus K9b-65. In *Shuna* F, the surface used in Phase I was reached in three places, Locus J10c-20, which produced no paper, Locus K10a-17, which contained ten fragments, and Locus J10c-19, which contained six fragments. These few fragments of paper must have been lost or discarded at the end of Phase I, just before the walls were dismantled and the plaster floor built in this room.

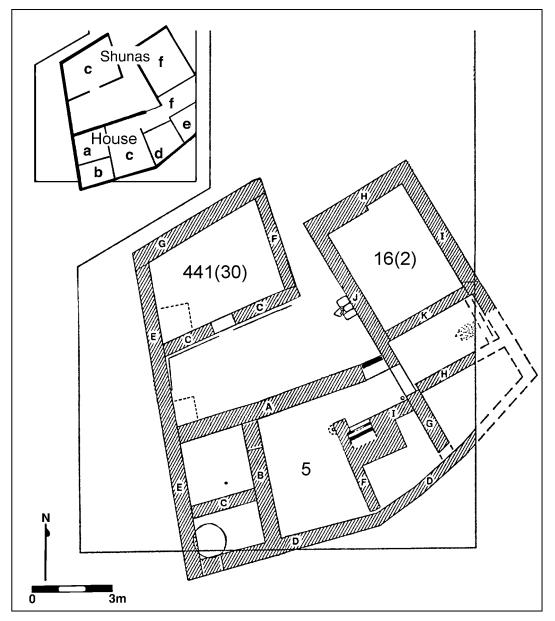


Figure 54. Sheikh's House Phase I, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

The single published document from Phase I in *Shuna* F, RN 991a, is a personal letter highlighting the perils of travel; the sender prays for the safe return of a group of people, including the (unnamed) recipient's niece, a second man named Abu Ahmad, and

all of the latter's friends (Guo 2004: 306–07).¹⁷ An unpublished document is of a type otherwise not seen in the Sheikh's House, a business diary (RN 991b) of daily transactions containing several references to pepper, which as previously noted ultimately came from India (Guo 2004: 43). Another (RN 1068a) is a letter or shipping note addressed to Ibrahim (Guo 2004: 3, 112). Locus J10c-19 in which they were found contains several imported items: Yemen 1 Black on Yellow Ware, the Yemen 2 brown painted ware bowl, and a sherd of gingbai porcelain from China. The porcelain and pepper were destined for Cairo, but the Yemeni ceramics may be only for local use. Textile finds included two sewn pieces, one of which had an inscription or pseudoinscription, which very likely could have been a commodity. Glass, rope, matting, and nails (one with wood attached) complete the material culture assemblage in this storeroom. The rope was also imported from the Nile Valley and may have been intended for resale to sailors, or was used by the merchants for securing their merchandise on the Aden-bound ships. Coir rope made from coconut fiber was manufactured in India and south Asia and traded across the Indian Ocean at this time (Kiribamune 1987: 74), for use in shipbuilding, which did not employ nails (Chakravarti 2002: 47). There is little documentation on its manufacture and circulation within Egypt, however.

The abundance of documents in Room C of the future North House produced relatively few that were readable. In Locus K9b-63, 418 paper fragments were recovered: business letters (RN 1037a, RN 1042a, and RN 1049, Guo 2001: Fig. 2; 2004: 251–53, 293–95), two block-printed amulets, one in red and black ink, guaranteeing the safety of the wearer (RNs 1038, 1039a in Guo 2004: 77–78, Pl. 1), two hand-written amulets with

¹⁷ The Cairo Geniza documents reveal that the prayers of loved ones and friends were relied upon for safety by Jewish travelers in the Fatimid and Ayyubid period, and were often asked for in letters (Goitein 1967: 346).

magic numbers and letters (RNs 1031b, 1039f in Guo 2004: 81), and several fragmentary sermons (Guo 2004: 72).¹⁸ In addition, at least five charts including zodiacs, astrological dials, lunar dials (Guo 2004: 82–83), and circular charts were in this group; the lunar dials were perhaps for keeping the religious calendar, including the correct times of prayer. Sheikh Ibrahim is referred to as a giver of sermons in a text found in Phase IIb (RN 1020b: Guo 2004: 176); perhaps these are his personal papers related to his duties at the mosque.

RN 1049 contains one of the few references in the Quseir al-Qadim documents to a high official. It is a petition the only surviving part of which contains the titles and part of the name of the official. One of his titles, *al-sadri*, could mean he is head of merchants, but equally could mean he is the head of any profession (Guo 2004: 293–95). The remaining two published documents are shipping notes concerning the delivery of various items to Ibrahim ibn Abu Mufarrij at the shore of Quseir al-Qadim, on behalf of a client: one note lists fresh water, barley, medicine,¹⁹ and leather baskets, and the second concerns delivery of three female camels and two loads of wheat (Guo 2004: 251–53). Another (fragmentary) letter is addressed to Ibrahim (RN 1050a), and RN 1040b appears to be a list of accounts of amounts of grain collected by 'Abd al-Rahman Abu Hamd from various people for Ibrahim (Guo 2004: 3, 19, 45). A letter (1040c) the recipient of which is missing mentions shipment of coral, pepper, and a flax comb (Guo 2004: 40–41, 43, 73). These are the first references to items from afar, the coral having come from either

¹⁸ Five additional fragments of this document were found in Loci K9b-64, 65, and 66, the fill below K9b-63 down to bedrock and the earliest surfaces in the South House, Room C.

¹⁹ One piece of a medicinal plant, Jericho rose, was found in Locus K9b-55 (also Phase I) in the area that was to become Room A of the North House. Extensive tables of medicines imported to Egypt and other countries from Bilad al-Sham in this period have been compiled by Efraim Lev from numerous textual sources (2002).

the Mediterranean or the Red Sea (Lewis 1976: 449) and the pepper, as previously mentioned, from India.

Other fragmentary texts may contain the first references to pilgrim traffic. One appears to be an official letter to a person of rank from a pilgrim who may himself be an administrator of pilgrims on their journey (RN 1037d, Guo 2004: 28). A possible business letter from 'Asakir 'Ali al-Mamluki contains several lines appropriate to a sermon (RN 1037c, Guo 2004: 18, 74); later business correspondence between Ibrahim and a *hajj* 'Asakir (RN 1015a, Phase IIb) may be the same person, who has undertaken the pilgrimage in the intervening years.

The locus in which these documents were found (K9b-63), although only 12 cm deep, contained an abundance of artifacts that reflect the mercantile activities taking place in this room and providing further proof of contacts with India and the Mediterranean. These include ceramics (403 sherds including *Nile 2* water jars, *Marl 4* monochromes, and *Marl 4* incised monochromes, possibly from Fustat), rope (78 fragments), two fragments of leather shoes,²⁰ glass, a stone bowl, and bits of bronze and iron. The last three items are common to domestic contexts and do not necessarily signify long-distance trade. The macrobotanical remains do, however: a few fragments of coconut (imported from India), hazelnut, pistachio (both from the Mediterranean), almond (from the Fayum or the Mediterranean) and dom palm fruits (from Egypt) were recovered, and date pits (also an Egyptian product) were found in significant quantities.

The twenty-three fragments of textiles from this locus included eleven pieces of blue dyed fustian (a mix of linen and cotton, made in Egypt) and two block-printed resist-

 $^{^{20}}$ Orders for leather shoes of all types are frequently found in the Cairo Geniza documents (Goitein 1967: 111).

dyed cotton pieces from India (RNs 922, 945, see Table 18 below and Vogelsang-Eastwood 1989: 112, Nos. 52–53). The significance of these examples is in the complexity and detail of the design, which is a stylized tree of life flanked by two pairs of animals, alternating with a saddled elephant. In the Eastern Area of the site, numerous fragments of block-printed textiles bear a much-simplified version of the tree of life motif (which alternates with a stylized rosette rather than an elephant); the detailed version seems to be an earlier manifestation of this pattern, the quality of which was not maintained over several years of production (Burke and Whitcomb In press; Vogelsang-Eastwood 1989: 18–19, 73–75).

Locus K9b-62 to the east was the thin layer of dirt over bedrock that composed the floor in this half of the room. One shipping note to Abu Mufarrij is unpublished from this locus, RN 1036a (Guo 2004: 2, 112). Another possible account (RN 1036b) contains quantities both written out in Arabic letters and denoted with Coptic numerals, an uncommon practice, but known in Egypt through the Ottoman period (references in Guo 2004: 116, n. 37; also see Kawatoko 1992; Kawatoko 1993a).

In summary, the shipping notes from Phase I indicate that Ibrahim, the son of Abu Mufarrij, was a grown man running his own business when this complex was built between circa AD 1200 and 1215. Abu Mufarrij may have begun his business before building this complex at Quseir al-Qadim, either elsewhere in the town or perhaps in the Nile Valley. The first mention of pilgrims appears in a Phase I document (RN 1037d), which along with the large quantities of wheat (two camel-loads in one shipment, Guo 2004: 28, 252–53) suggests provisioning the *haramayn* was already the focus of business at Quseir al-Qadim, and pilgrim traffic may already have begun to be accommodated. Documents and material evidence indicate links with India and the Mediterranean. The remainder of the deciphered documents on the floor of Room C are those that would have

been deliberately kept, at least initially: amulets, a block-printed quote from the Qur'an (probably part of an amulet), and a sermon. That they were left in a pile of junk when the floor of the room was plastered over indicates that they were no longer considered important or were damaged and unusable.

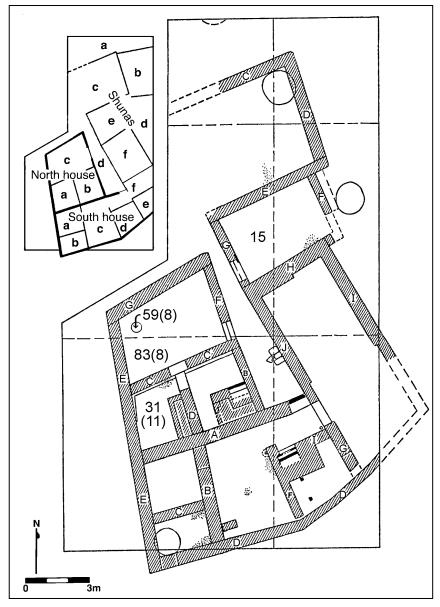


Figure 55. Sheikh's House Phase IIa, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

2. PHASE IIA

Some time after the building of the house and first storerooms, improvements and additions were made to accommodate expanding business, and perhaps expanding families. The courtyard was enclosed and partitioned to create Rooms A and B of the North House, and floors, mastabas, and a staircase were built to provide the residents of the North House access to their own sleeping quarters on the roof. Room C was given a plaster floor, and may have been used for domestic purposes in addition to storage or as an office. The partition walls in *Shuna* F were dismantled and the floor was given a new coat of plaster. *Shunas* E and C were built to its north.

Above the Phase IIa plaster floor in the North House, Room C, two decipherable documents were retrieved from Locus K9b-57 (out of eighty-three fragments unearthed), the thin layer of occupational debris accumulated on the first plastered floor. RN 1029a is a letter to Sheikh Ibrahim (called by his *kunya* Abu Ishaq here) instructing him to sell the pottery that he already has and give the money to another business associate. The sender of the letter, Abu 'Uthman, greets Sheikh Ibrahim's children and elders and extends a special blessing on Ibrahim's mother. The omission of Sheikh Abu Mufarrij by name is unexpected and rather mysterious (Guo 2004: 5, 187–89). It may be an oblique reference to his death, or perhaps the sender simply wanted to send special blessings to Abu Mufarrij's wife; he may have been her relative.²¹ The second text, RN 1031a, is an amulet for a woman who wants to bear a male child (Guo 2004: 311–12). Two other unpublished texts contain lunar and astrological dials, and block-printed Qur'anic

²¹ Text 23 is addressed to an Abu 'Uthman Mithqal and Muhammad, the son of Sheikh Abu Mufarrij, indicating that they are business partners, at least in this instance, indicating closeness to the family, as Goitein emphasizes that business partnerships were largely built on friendship and trust (Guo 2004: 191).

quotations, also likely belonging to Ibrahim like those on the previous floor (Guo 2004: 83).

The other material culture in Locus K9b-57 testifies both to Quseir al-Qadim's trading contacts and the domestic nature of this locus. Various wares of Marl 4 pottery such as monochrome glazed, incised monochrome glazed, blue, purple and white splash, and silhouette ware were probably made at Fustat. Fishing nets indicate a secondary source of income or subsistence, while the rope was a commodity commonly appearing in shipping notes. Aside from the uses suggested above, for ship's rigging or to tie down shipped commodities, another possibility for their use is to repair the boats, which were "sewn" with rope in this period rather than being nailed together (Chakravarti 2002: 47). Twenty-one hazelnuts, and much lesser quantities of walnuts, pistachio, pomegranate, apricot, citrus, and a piece of gourd testify to far-flung trading contacts (Tables 19, 21, Wetterstrom n.d.: Table 2). The pomegranate would have been quite expensive to ship and its presence at Quseir al-Qadim is certainly an indication of wealth, as well as is the apricot which would have come from the Fayum, while the nuts must have come from the Mediterranean (Wetterstrom n.d.: 5). A bronze barrel weight of five-dirham denomination would have been used to weigh coins in sales transactions (RN 732, see coin section above). A comb, spindle whorl, toothbrush, fragments of sewn leather, wood, shell, and metal items indicate domestic functions of the space. Twenty-two fragments of textiles, including a sewn piece found together with a clump of thread, were likely part of the merchandise as well.

In the matt-lined pit K9b-59, dug into the fill of locus K9b-57 but below the surface of the Phase IIa plaster floor, eight letters (RNs 1033a–e, 1034) were found, three of which were addressed to Abu Mufarrij, and one of which was sent to Abu Mufarrij (see Table 18). The documents were poorly preserved but contained mention of flax

(1033c) and colored textiles (1033e). An additional fragment of paper contains a drawing of lines and dots, and may be part of an astrological dial (RN 1035, Guo 2004: 2–3, 40–41, 83, 112).

In the North House, Room A, a layer of ashy debris (K9b-52) lay on the plaster floor. This debris testifies to an accidental fire in this room that necessitated the building of another floor and replastering of the walls in Phase IIb. The remains in the fire therefore belong to Phase IIa occupation and include 172 pottery sherds. Of those kept, one is from a large cooking pot. This along with an ashy area near the north wall of the room suggests the presence of a hearth (perhaps the origin of the fire). The rest of the locus' contents are the usual domestic items (sherds of glass vessels, a few fragments of cloth, a painted wooden jar stopper, and eight iron nails) and a few food items (one almond, likely from the Mediterranean, and five fragments of citrus rind), as well as sixty-six fragments of rope.

In addition, six decipherable documents were recovered out of thirty-one paper fragments, plus several unpublished documents: a hand-written amulet offering protection from a plague (RN 1026e: Guo 2004: 81), letters to Abu Mufarrij and Ibrahim (RNs 1025, 1026d Guo 2004: 2–3, 19), and two fragmentary business letters mentioning pepper, flour, and the delivery of a *bayan* certificate, RNs 1027c and 1027d (Guo 2004: 29, 43, 103, n. 8). The sender of RN 1026a, Ibrahim b. Nasr Allah, informs Abu Mufarrij (*sahib al-shuna*, "the owner of the warehouse") that he has arrived at Qus, confirming the well-known fact that Qus was not only the capital of the Sa'id but the shipping node for goods coming from Quseir al-Qadim to the Nile Valley (Garcin 1978: 311; Guo 1999a: Fig. 1; 2004: 148–51). RN 1026b informs us both that weapons were among the items brokered at Quseir al-Qadim, and that there was some pilgrim traffic at this early stage, before Quseir al-Qadim is well known as a port of embarkation for those on the *hajj*. In

this letter someone in the house (the addressee is missing) is informed about the delivery of wheat, but also asked to let Sheikh Abu Mufarrij know that the sword which the pilgrim has ordered will be sent soon (Guo 2004: 151–53).²² Although no swords have been found (the pilgrim no doubt took his with him), other weapons, mostly knives, were excavated in the storerooms of the Sheikh's House and may also have been commodities.²³

RN 1027a is one of the longest preserved texts from the Sheikh's House. It is a lengthy letter addressed neither to Sheikh Abu Mufarrij nor Sheikh Ibrahim, but to Sheikh Muhammad b. Ja'far, perhaps one of their trading associates. The bulk of the items shipped are the usual wheat and *barani* (clay vessels, singular *barniya*) of oil (*zayt*, olive oil, likely imported from Syria), as well as flour, but corals (Goitein 1954: 192; 1963: 198), mirrors, tiraz-fabrics, and *batta*-containers are also among the goods shipped (Guo 2004: 212–18).²⁴ Embroidered textiles, while rare, were excavated in the house and elsewhere on the site (Eastwood 1982: 290–92; Vogelsang-Eastwood 1983b). This is one of the few attestations that Quseir al-Qadim did participate in trade of high-priced

²² A letter in the Cairo Geniza documents also contains an order for a sword by an upper-class merchant (TS 13 J 15, f. 7, ll. 24–26). This is testimony to the perils of both water and overland travel that are recounted many times in the Cairo Geniza documents, including the tale of a bandit attack on a Nile boat (successfully fought off by the sailors and passengers) recounted in a letter sent from Qift to Fustat (Goitein 1967: 299). It should be added that some amount of danger was present at all times; during times of social unrest and upheaval people did not travel if they did not have to (Goitein 1967: 299).

²³ A good-sized iron knife with a wooden handle was discovered in Locus J10c-17 above the surface in *Shuna* E (Phase IIb), 26.5 cm long; in the same room an iron spear head and another knife blade were found (Locus J9d-1, the wind-blown surface debris in the western part of the *Shuna*). Finally a small sliver of bronze, possibly a knife blade, was recovered from Locus K9b-38 (Phase IIb) in Corridor D.

²⁴ The Crusades are also mentioned in RN 1027a; the writer of the letter Sunqur b. 'Ayyash b. al-'Asawiri, mentions that the troops have arrived, "one after the other," and that they are going to fight the Franks. This is useful for the discussion of dating below (Guo 2004: 212, Text 31).

items.²⁵ A few other expensive commodities are mentioned rarely in the texts. This includes a slave girl referred to in letter RN 1027g from this locus, who should have arrived at Quseir al-Qadim and is requested to be sent immediately to her purchaser or another broker in the unnamed town from which this letter is sent (Guo 2004: 218–20).²⁶

RN 1027b mentions an oil strainer, shipped with a large load of grain, which was intended for resale, although it seems strange that only one was sent. It is not known what an oil strainer looked like, but in the upper levels of a deep pit in Room B of the South House, a sherd was recovered that appears to be from a colander or strainer. If a piece of cloth were laid inside it, the vessel could have been placed over the mouth of a large, wide-mouthed jar and used to strain oil (sherd K9b69_64, RN 346). This text is also important because the boat coming to deliver these goods to Quseir al-Qadim (likely via Qus) has come "from the south," (*min al-qibl*) and "from outside" (*min kharij*), probably a Nile port in Upper Egypt or Nubia (Guo 2004: 234–36).

The last published document in this locus, RN 1027e, is a certificate of receipt of pepper issued by Abu Mufarrij (Guo 2004: 260–62). As noted above, due to collection methods pepper and other small items were unable to be retrieved in 1982 (Wetterstrom n.d.: 1, 4). Therefore although it is likely that pepper was present in the debris of the Sheikh's House, it was not detected in the excavations by the University of Chicago; elsewhere on the site pepper was found in "Mamluk" levels by the University of Southampton (see note 28) and in the Eastern Area by the University of Chicago. This

²⁵ For example, "women's wraps decorated with gold and gems" in RN 1003b (Guo 2004: 200, Text 26).

²⁶ This letter also discusses damaged goods that had arrived at Quseir al-Qadim and whether or not they will be able to be sold. For the treatment of slaves upon their arrival in the Yemeni port of Aden, see Ibn al-Mujawir's description recounted by G. Rex Smith (1995: 130).

document contains one of four references to pepper in the Sheikh's House documents (see Table 17), perhaps reflecting a relatively low volume of trade in this Indian product at Quseir al-Qadim.

In summary, in Phase IIa items mentioned in the shipping notes testify to trading contacts with India (pepper) and the Mediterranean (coral), and to limited trade in slaves. Qus, the district capital on the Nile, is mentioned by name, and reference is made to a shipping contact in "the south" which is also "outside," that is, foreign. A reference to a pilgrim who is at Quseir al-Qadim waiting for his sword indicates some *hajj* traffic is accommodated by the anchorage at this time.

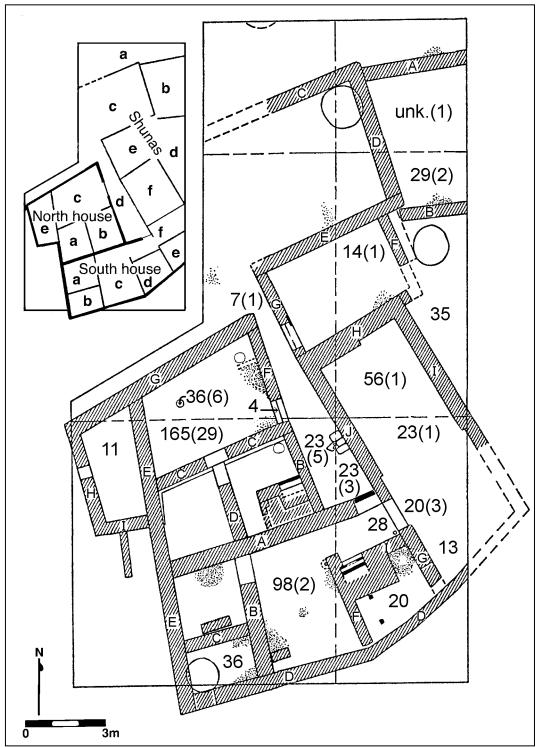


Figure 56. Sheikh's House Phase IIb, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

3. PHASE IIB

In Phase IIb, the floor of North House Room C was replastered and a new floor was also built in Room A after a fire, burying the mastaba within it. Plaster floors were resurfaced in Rooms C and D of the South House, and Room A of the South House, which appears to have been in disrepair, was rebuilt and a new earthen floor tamped down. The plaster floor in Corridor D was repaired. *Shunas* A, B, and D were added north of the existing storerooms.

Several decipherable letters and all five of the dated documents were recovered from this phase. Since the latter bear dates falling between 1215 and 1235, and Phase IIb is proposed to have begun around 1235, four of them must be residual from the preceding phases. This leads to the question of origin of several of the documents found in this phase: if the dated ones belong to earlier phases, why not others of the letters? This may certainly be the case, but without dates or other clues (internal or external), these fragments of paper cannot be willy-nilly assigned to previous phases and must be assumed to belong to the phase in which they were found. As for the dated letters, however, three are addressed to Ibrahim (RNs 967b, 1020a, and 1063a) and on a fourth the recipient is missing (RN 1017g), but it was found in "Ibrahim's room" (Room C of the North House). This suggests the possibility that Sheikh Ibrahim was in the habit of keeping his business letters, at least for a short time. He clearly did not usually keep them long term or documents addressed to him would not have been left on earlier floors, to be covered over with each new application of plaster. He may have had some purpose in keeping these letters, however, attaching an importance to them that is no longer evident. Alternatively, their existence in a later phase from the one in which they were produced is due to the same fragmentary state of the two plastered floors in that room (Room C of the

North House), and to the same pits in the floors that cast great doubt on the attribution of coin RN 694 to Phase I.

The largest proportion of readable documents in the Sheikh's House came from Phase IIb of the North House, Room C (Figure 56). The majority of these were excavated from Loci J9d-4, K9b-41, and K9b-48, which are all the same stratum of building collapse that lay on top of earthen floor K9b-48, the last floor built in this room. Locus J9d-4 represents the northeast portion of the room, K9b-48 the northwestern portion and about the same volume as J9d-4, and Locus K9b-41 the southeastern corner of the room. Locus J9d-4 contained a small cache of paper, although its precise location within the room was unfortunately not recorded. Directly on the floor were a few pieces of pottery, including three sherds from a celadon bowl of the Southern Song period, a piece of qingbai porcelain, and the base of a *Marl 4* turquoise-glazed jar. (Ceramics are mentioned as items of trade in one document from the preceding sub phase in this room, RN 1029a, Guo 2004: 187–89). In this part of the room, a mat (Figure 58), a very long piece of rope, a and a whole basket with handles were found together directly on the floor, and represent one of the very few relatively undisturbed depositions in the Sheikh's House.



Figure 57. Two Large Coils of Rope from Locus J9d-4 (Courtesy D. Whitcomb)

The large volume of Locus J9d-4 (640 cubic meters) translates to a substantial quantity of artifacts, many well preserved. Forty-two additional rope fragments, two large coils of rope (Figure 57), forty textile fragments and a bronze coin clearly attest to the

mercantile activities at the Sheikh's House. The textiles are so numerous that they must be intended for resale rather than domestic use; a text from this locus, RN 969, is a letter to Husayn (possibly the son of Abu Mufarrij), asking him to sell turbans for the sender, and requesting money to buy children's clothes. Long coats are also mentioned (Guo 2004: 192–96). Greetings are sent to a *faqih*, or jurist who may also have acted as a notary (Goitein 1971: 367). His position would have been a government appointment and therefore we can view this man as another official link between the government of Qus and Quseir al-Qadim. An unspecified disaster in the (unnamed) town from which the letter originates may be a reference to the plague of 633–34/1235–37, which according to the Mamluk historian al-Maqrizi (writing in the late fourteenth century) raged throughout Egypt and killed twelve thousand people in Fustat and Misr alone in the first year (al-Maqrizi 1980: 222, 25).



Figure 58. Matting from Locus J9d-4 (Courtesy D. Whitcomb)

More domestic, rather than mercantile, items from this locus are five pieces of worked wood, including a box with an Arabic inscription on the lid, matting, eighty-six sherds of glass and 337 sherds of pottery (among them numerous household vessels such as small storage jars, and seventy-six sherds of glazed table wares). A fishing net and a piece of ship's rigging illustrate the inhabitants' supplementary living by means of fishing, continuing the practice at least since the previous phase.

Large quantities of leather fragments were found in Locus J9d-4, in four concentrations. These concentrations may represent four leather objects or groups of leather vessels, waterskins or perhaps *batta*-containers, which are also referred to in a document from this locus. RN 968b (Guo 2004: 160–63).²⁷ Sixty-four of the fragments have wool attached to them, while 124 fragments do not. Additionally there are thirtyfour smaller fragments, and a few larger pieces that are stitched together (including one that is patched), although aside from one handle-like shape it is unclear what the final forms would have been. The large quantity of leather may alternatively indicate a cottage industry of leatherworking like that excavated by the University of Southampton nearby, or may itself be a product of the latter leatherworks (Peacock and Blue 2006: 166–68).²⁸ If this is the case, then it is likely that among the leather products made were *battat* (sing. *batta*), which are mentioned in several of the texts as a container for sugar, wheat, or barley, and as commodities themselves (Guo 2004: 162, 228, 244, 281). Batta (literally "duck") is a term that philologists have taken to mean a container of leather (or, less likely, glass), perhaps vaguely in the shape of a duck (Guo 2004: 33 n. 19), or as a measure of volume for flour equivalent to 1.5 waybas (Mortel 1990: 179). One of the Quseir al-Qadim documents reveals those used at Quseir al-Qadim could hold about eight

²⁷ This letter is sent to Brother Najib, addressed to him at the *shuna* of Abu Mufarrij, but although several persons are greeted, Abu Mufarrij is not among them.

²⁸ Numerous leather fragments and water skins were excavated at Qasr Ibrim in the Late and Terminal Christian strata (W. Y. Adams 1996c: 126).

kilograms of grain (Guo 2004: 243–44), although another text, which refers to a small *batta*-container sent to Quseir al-Qadim, indicates they were not all of one size (Guo 2004: 227–28). A few texts request *battat* to be sent from Quseir al-Qadim to the Nile Valley or acknowledge their arrival (Guo 2004: 203, 215, 227–28).²⁹ The small leatherworks at Quseir al-Qadim seems not to have made all of the containers needed for shipping, however, as sometimes they are sent to Quseir al-Qadim from the Nile Valley (e.g., RN 1017c, Guo 2004: 34).

Guo has published thirteen texts from Locus J9d-4, nearly thirty percent of the forty-seven that were recovered. Nine of these are shipping notes that either inform the recipient of the arrival of, or request him to purchase one or more of clothing, clarified butter, oil, flour (plain or described as "fine" or "sifted in a sieve for barley"), grain, wheat, rice, baked goods, nuts, and "crops" (Guo 2004: 135–38, 140–41, 160–63, 229–30, 240–42, 258–60, 265–73). Three of these, Texts 1, 3, and 38, are addressed to Abu Mufarrij; two additional texts are addressed to Abu Mufarrij but are otherwise too fragmentary to be published, RNs 966d and 967c (Guo, personal communication). Letters are also addressed to Brother Najib, Brother Ahmad, and Abu'l-Hamd, usually at the *shuna* of Abu Mufarrij.

The writer of RN 970a urges Abu Mufarrij to immediately sell the goods he is sending to him, and to accept payment only in Egyptian dinars rather than Meccan (Guo 2004: 135–38; Mortel 1989: 300). Dinars struck in Mecca were extremely uncommon

²⁹ Goitein remarks that leather bags of various sizes and shapes were the most common type of shipping container after canvas sacks encountered in the Cairo Geniza documents, which are earlier than and contemporaneous with the trade at Quseir al-Qadim (Goitein 1967: 334). *Battat*, makers of leather bottles, are also frequently mentioned, as is the *Zuqaq al-Battatin*, the lane of the leather bottle-makers in Fustat. These containers (also *ziqq*, *qirab*, *jirab*, and *mizwad*) and hides and skins were also frequently mentioned commodities in those documents (Goitein 1967: 111 n. 78, 334 n. 7).

before the early fifteenth century and are rarely mentioned in the Arabic literature (also see Jazm 2003–2005: 358–59, esp. n. 2607; Mortel 1989: 300); there seem to be no surviving dinars struck in Mecca by the Ayyubids or Rasulids known from excavations or collections (Album 1998). It is perhaps their unfamiliarity that leads them to be mistrusted.³⁰

RN 971 mentions a discrepancy between the weights of buyer and seller. The company must have had its own set of weights to check the shipments received, but only two coin weights were found in the excavations, both from Phase IIa, used to weigh out payments in coin (Guo 2004: 138–40).³¹ Texts RN 966a (fragmentary) and RN 966b (complete) together contain three lists of accounts, which help establish the price of grain in Quseir al-Qadim at the time and give a notion of the volume of grain passing through the port (Guo 2001: Fig. 5; 2004: 265–73). RN 966a is a list of accounts, perhaps of money owed to Ibrahim or the company for the certain amounts of grain listed next to individual names. It reveals that an *irdabb* of wheat (70 kilograms) costs nearly twenty-six dirhams, while the accounts in 966b total forty-three *irdabbs* of wheat, or about 3,000 kilograms passing through the *shuna* of Abu Mufarrij from only nine suppliers (Guo 2004: 35). RN 970b gives a glimpse into the organization of merchants and brokers, and reveals the relationship between the *himl*, a measure of volume, and the *irdabb*, a measure of weight: Abu Mufarrij is to receive five *himls* (loads) of wheat weighing

³⁰ Avraham Udovitch's investigation of the flax-sellers in the district of Bahnasa, Middle Egypt in the eleventh century AD indicates that "some types of coins were clearly preferred by certain sellers and other types by other sellers," but the logic of the circulation of different types of coins in this market is not yet understood (1999: 279).

³¹ These are a green glass weight from Locus K9b-10 in Room A of the South House and a bronze barrel weight (RN 732) of five-dirham denomination from Locus K9b-57 in Room C of the North House, for which see the section on coins in Chapter Three.

sixteen *irdabbs* from the *'arif*, or trade-head, Abu Umar, who would likely have been a government-appointee (Guo 2004: 229). Thus one *himl*-load weighs about 3.2 *irdabbs*, or 224 kilograms. The trade-head appears in RNs 966a and 977 as well. Letter RN 967b promises a tax payment, to be delivered to the shore of Quseir (*sahil* al-Quseir) to the care of Ibrahim b. Abu Mufarrij, and is dated "the end of Jumada I, the year 612" which is equivalent to the second half of September, AD 1215 (Guo 2004: 245–46). Additional contents seem to mention a herd of camels or perhaps even a troop of cavalry (Guo 2004: 245–47). The date of this letter seems to place it in Phase I rather than Phase IIb in which it was found.

RN 968c, the final text published from this locus, provides a respite from the dry shipping notes and business letters that form the bulk of the documents. It is a poem fitting to the lives of the inhabitants of the Sheikh's House, who were constantly welcoming friends and business associates and sending them off again on mercantile missions. I reproduce Guo's entire translation here:

Praise be to God alone. Pray at night! I am telling you; Be kind to those free-born men that have come to you. Let your eyes shed no tears, as I am leaving, [My] heart will stay, forever, with you (Guo 2004: 314).

Several of the letters in this locus name several individuals but do not refer directly to Sheikh Abu Mufarrij or to Sheikh Ibrahim. Letter 968b sends no greetings to Ibrahim or his family, even though the goods are shipped to the *shuna* of Abu Mufarrij. RN 967a, one of the rare complete letters, names several persons but not Sheikh Ibrahim or Abu Mufarrij (Guo 2001: Fig. 4; 2004: 258–60). The accounts in Texts RN 966a and RN 966b also do not mention Ibrahim or Abu Mufarrij. RN 969 includes greetings to several people, but Ibrahim and Abu Mufarrij are not among them. Thus in this third phase of occupation at the house, it seems that the business of Abu Mufarrij's company is run by several people, including his trusted associate Najib, although the warehouses are still known by his name. Alternatively, Abu Mufarrij is renting out space in his warehouse to several other brokers.

Locus K9b-41, the continuation of Locus J9d-4 to the south, contains much the same contents as the latter, including a piece of fishing net, and with the addition of a leather harness and a basket lid, which may have fit the basket in J9d-4. This locus as well as K9b-48 also contained many large pieces of floor matting and loose bundles of reeds from the ceiling, which probably fell into the room when the roof collapsed. Three texts were published from this locus, out of twelve fragments. RN 1004c is a shipping note with the addressee missing but sending greetings to Sheikh Nabij regarding several common items and luxury textiles sent to Quseir al-Qadim in return for cakes, flour, and "crops," a term connoting grain. The items received at Quseir al-Qadim are wheat, two jars (*jarratein*) of soap, three large sacks (*shuwalat*), three hawsers (ropes), rice, sacks (tillis) of flax,³² flour, "a fine kiswa-robe, tailored in pure silk, fine shawls, and fine galabiya clothes" (Guo 2004: 203). Ten fragments of textiles were recovered from Locus K9b-41, none of them silk-embroidered (silk textiles are rare at the site generally, and are usually woven with linen rather than pure silk), but they are serviceable for clothes. As mentioned in the ceramics discussion, the *jarra* referred to in this text is a common term for jars, also used in eighth to tenth century AD Arabic papyri from Madinat Fayum and Edfu (Vorderstrasse forthcoming). Soap was made in numerous places and exported to the east through Egypt and Yemen in skins or ceramic vessels: the soap mentioned in this

³² An empty sack was found under the floor of *Shuna* E in Locus J10c-17. *Tillis* refers to a coarse sack used for grain in the Cairo Geniza documents (Goitein 1967: 333).

document may have been brought from Tunisia, Greater Syria, or Iraq, or even have been made locally at Qift (Goitein 1967: 154; Golb 1974: 136; Smith 1995: 133). The upper part of the page is missing, so the recipient is unknown, but greetings are sent to Najib. The last two texts, RN 1004a and 1004b, are shipping notes to Abu Mufarrij (one of which greets Najib) about grain, one shipment possibly delivered by a boat named "Good Tidings" (Guo 2004: 231–33).

Locus K9b-48, the continuation of Loci J9d-4 and K9b-41 to the west, contained 116 fragments of paper, which include a drawing (four fragments), block-printed amulets containing quotations from the Qur'an (RN 1009a, b),³³ a hand-written amulet (RN 1016b), and eleven shipping notes (Guo 2004: 3, 12, 76–77, 80, 88, Pl. 1). One of these is addressed to Ibrahim and sends greetings to both his parents. It is about fine flour that is intended to feed the "youths," referring either to pilgrims or a military group (Guo 2004: 183–87). The verso contains a letter to the sender of the note on the recto, carried by Husayn, probably the brother of Ibrahim. Two unpublished shipping notes only preserve the addressee, Ibrahim, but none of the contents (RNs 1011, 1013a), and another to Najib (at the *shuna*) of Abu Mufarrij mentions *batta*-containers (RN 1017c). Four more are either addressed to Abu Mufarrij or send him and his sons greetings. They are shipping notes about barley, wheat, and oil, and business letters about transfer of debt or letters of account (Guo 2004: 143–48).

³³ A *hagap* amulet still in its leather pouch was unearthed in an Ayyubid dump by the University of Southampton (Phillips 2003; Thomas and Masser 2006: 139). Compare four of similar date unearthed at Qasr Ibrim (W. Y. Adams 1996c: Pl. 56).



Figure 59. Drawing or Map from Locus K9b-48 in Room C of the North House (Courtesy D. Whitcomb)

Several additional texts do not mention Sheikh Abu Mufarrij or Sheikh Ibrahim at all, but send information on shipments of fabric, waist-wrappers (an item of Yemeni dress, see Guo 2004: 62–63), cloaks, flour, and rice, and one also offers condolences on the death of the recipient's daughter (Guo 2004: 204–207, 292–93). It is tempting to draw a connection between this letter and RN 1018d also from this locus, in which a woman asks her son to buy medicine from the druggist for her daughter, who is very ill (Guo 2004: 207–10). RNs 1012b and 1013b, too fragmentary to be fully published, preserve a shipping note to Abu 'Ali (brother of Abu Mufarrij) and an outgoing letter sent to someone in the town of Qena on the Nile (Guo 2004: 59). RN 1015c appears to be the record of a witnessed court proceeding, or some kind of issue brought before a *qadi*, who is also a *faqih*, named Zayn al-Din.

This text is also of note because it seems to stipulate that fees are to be paid in dirhams *waraq*, the irregular cut-flan dirhams (also referred to as dirhams *aswad*, or "black" dirhams) that had been issued in Egypt since late Fatimid times, and which were replaced by globular dirhams of the same silver content but different appearance and manufacture technique by the sultan al-Kamil Muhammad in 622/1225 (Guo 2004: 287–89; Schultz 1998). At least one dirham *waraq* (RN 699) of the Fatimid period was found in the Sheikh's House in a Phase IIa context, while most of the remainder of the excavated dirhams are of the new globular type. It is possible that the stipulation was made out of suspicion of the new type of dirham, placing the document after 622/1225, or it was simply made out of preference for the familiar Egyptian dirham over Syrian dirhams or other foreign silver coinage circulating in Egypt and at Quseir al-Qadim at the time.

Locus K9b-49, a pit dug into the floor of K9b-48, contains various bits of detritus of domestic and mercantile function. In the domestic category are thirty-five pottery sherds, several shards of glass, seeds, bone, and two fragments of citrus rinds. The heel of a leather shoe, a carnelian bead, glass beads, date pits, hazelnuts, walnuts, numerous fragments of textiles and rope, and thirty-six paper fragments offer testimony to trade, however. The paper fragments include a letter, RN 1022, regarding the shipment to Ibrahim b. Abu Mufarrij at "the shore of Quseir al-Qadim" of wheat, stoneware cups, a sugar container, a juice presser, and eleven fine sprinkler bottles, the last of which would have been made of glass (Guo 2004: 249–50). A fragment of one glass sprinkler bottle has been excavated from the Sheikh's House, from Locus K10a-3 in Phase IIb of Room D in the South House (Meyer 1992: 78–79, Pl. 15:397). Another letter to Ibrahim, RN 1020b, informs us that he is a *khatib*, one who gives sermons, and that his father Abu Mufarrij, was a *hajj* himself; the sermons found in Phase I of the North House may have

been authored by Ibrahim. This letter also possibly reveals that Ibrahim is head of the trading guild, although the reading is tentative (Guo 2004: 176).³⁴ A letter dated AD 1224-31 and thus probably belonging to Phase IIa (RN 1020a) informs a son of Abu Mufarrij, most likely Ibrahim, of a shipment of ropes (Guo 2004: 175). RNs 1021a and 1021b are shipping note or certificates concerning clothes and flour (Guo 2004: 211, 262–63). RN 1023 is a lengthy list of accounts, one a list of names and the amount of money that they have either paid or owe, presumably to Ibrahim (although his name does not appear), and the other a list of cleared accounts. The document also provides the professions of several Quseiris: 'arif (superintendent), sirafi (money-changer), qadi (municipal judge), ra'is (head of a profession), wali (police chief, or mayor), najjar (carpenter-Guo indicates this could also be read as bahhar, sailor), and sagga' (water carrier-an extremely important profession in this dry town). Few commodities are listed: almonds, a *batta* of grain, clothes, a necklace, Ethiopian gowns, and "Jewish" cloaks. The Yemen (from whence the "Ethiopian gowns" probably came) is also directly mentioned for the first time (Guo 2004: 277-83). While almonds were not found in this stratum, a few were found in Phase IIb of Corridor D, Room A of the North House, and Room C of the South House (Table 19, after Wetterstrom n.d.: Table 2).

In the North House, Room A, above Locus K9b-52, which rested directly on the floor, lay Locus K9b-46, the collapse of the upper parts of the mud-brick walls of Room A. Thirty-one fragments of paper with Arabic writing were excavated from this locus, along with numerous household articles and items useful in the shipping and brokerage business, such as twenty-nine textile fragments, fragments of a leather shoe, thirty-four

 $^{^{34}}$ An unpublished letter from this locus, RN 1019d, is addressed to Abu Mufarrij (Guo, personal communication).

fragments of rope, bits of worked wood, iron nails, a copper coin (Ayyubid, AD 1218-1238), and 164 pottery sherds, four of which were kept. The document that is decipherable enough to be published from this group, RN 1008 (part of which was also found in Locus K9b-45 in Room E), is a shipping note rare in terms of its phraseology (Guo 2004: 103, 256–58).³⁵ but familiar in terms of the items mentioned. "Pure" grain. butter, chickpeas, soap, almonds, eggs, and a *barniya* of lighting oil are sent care of Abu Ishaq Ibrahim's agent; the almonds and eggs are gifts rather than merchandise. The soap, butter, and as is indicated here, oil, all would likely have been shipped in clay vessels. We would not expect to find the goods stored in the house, but the storerooms. Nevertheless it is interesting to note that one of the sherds kept from this locus is that of a two-handled jug with an everted rim and a narrow neck, of Marl 4 ware with monochrome dark green glaze. The glaze would have made it ideal for carrying oily liquids, preventing them from seeping through the vessel walls. Another large sherd of a coarse bowl is filled with a resinous substance. Although it has not been tested, eight sherds from the 1978 season containing similar material, including two from the Merchants' Houses (although none from the Sheikh's House), were tested and found to contain "nonaromatic resins of either coniferous or Burseracaean³⁶ [sic] origin" (Beck and Moray 1979). Tree resin, sandarus, is mentioned in a letter found outside the Sheikh's House (Guo 2004: 43–44),³⁷ and would have been a traded commodity in the

 $^{^{35}}$ A piece of this document was found in the surface debris of the neighboring room, Locus K9b-45 of the North House, Room E.

³⁶ *Burseraceae* is a family of trees and shrubs that secrete balsam and resin (Montasir and Hassib 1956: 276).

³⁷ RN 958a, found in trench G8b, in the Islamic levels of the Roman Central Building A.

medieval world, used in perfumes, ointments, and varnish.³⁸ Another use for resin at Quseir al-Qadim would likely have been to caulk the ships that anchored in the harbor. Ibn Jubayr noted that the *jilab* that plied the Red Sea, which he observed in port at 'Aydhab, were caulked with "the shaving of the palm trees" and, as previously mentioned, bound together with coconut fiber ropes rather than nails (Chakravarti 2002: 47).

In the North House, Room B, three paper fragments were excavated in Locus K9b-36, the debris lying on the floor, none of which are published, but two of which have been partially read. RN 999a mentions a merchant of Syrian origin (with the *nisba* "al-shami"), and RN 999b notes that "the slave boys from Qena…are coming in a boat" (Guo 2004: 59, 64). This locus contains a high density of sherds and other small finds, including date pits, and exotic hazelnuts, pistachio, remains of pomegranate and unknown fruits. While matting, glass, and wood are likely simple domestic debris, textiles and rope were shipped to the Sheikh's House in large quantities. Pottery includes numerous imports from the Nile Valley, perhaps Fustat, and from the Yemen and China: *Marl 1 qullas, Marl 4* monochrome bowls, and far fewer *Nile 2* water jars, and one sherd each of *Nile 3* monochrome, *Yemen 1* Black on Yellow, and celadon.

In the South House, Room C, Locus K9b-32 is the lowest layer of ceiling and mudbrick wall collapse onto the Phase IIb floor, the earthen surface K9b-27. Artifacts are not abundant, but nevertheless include imported items for transshipment such as six fragments of textile (four with blue dye), raw flax (a relatively rare find at Quseir al-

³⁸ A state-owned garden of balsam trees existed in Matariyya, a suburb of Cairo, from at least the tenth century AD, and was a popular place of pilgrimage from the twelfth through the fifteenth centuries. The aromatic balsam from the trees was traded widely for use in medicine and perfume. Cheaper products from these trees and substitutes such as balm of Mecca and oil of ben, horseradish, or olive, were available in the sugs of Cairo for similar purposes, and for use in varnish (Milwright 2001; 2003).

Qadim), a coconut, one fragment of rope. The prosaic items are four fragments of matting, seeds, bone, and one piece of worked wood, possibly a stylus. No date pits or glass fragments were found, and pottery, only forty-three sherds of it, includes imported *Marl 1* vessels, *Marl 4* monochromes, *Nile 3* blue and yellow "splash," *Nile 3* monochromes, and *Yemen 1* Black on yellow. Among the eleven fragments of paper documents in this locus are part of a hand-written amulet (RN 996b) protecting against speech impediments (or mis-speaking), lustful thoughts, and diseases (Guo 2004: 80–81).³⁹ RN 998 is an important shipping note, as it mentions the *ra'is al-tujjar*, a term believed to refer to the head of the Karimi guild of merchants (Guo 1999a: Fig. 2; 2004: 64, 179–83). RN 997 nicely correlates to the finds in the locus as it is a brief note to Ibrahim regarding a shipment of flax he is to receive from an Alexandrian merchant. In this note Ibrahim's *kunya* is "son of Abu Mufarrij," after which the phrase "may God have mercy on him" is inserted, clearly referring to Abu Mufarrij's death (Guo 1999a: Fig. 2; 2004: 248–49).

In the entryway to the South House, Vestibule F, Locus K10a-10 was a 60 cm deep layer of coarse brown sand and brick debris filling up this space at the entrance to the house, underneath surface debris K10a-8 on top of Locus K10a-12, the final 20 cm of debris on the floor. It is the final phase of collapse onto this floor, and contained artifacts of all categories, including worked wood (with drill holes), matting, glass, metal, bone, and eggshells (chicken eggs are mentioned in a shopping list found in Corridor D dating to this phase: Guo 2004: 263–65). The pottery included pieces from Yemen and the Nile Valley: one sherd of *Yemen 4* Trackware, *Yemen 1* Black on Yellow, *Nile 3* monochrome

³⁹ Fragments of the text of the RN 996 group were found in Loci 27, 28, 30, and 31.

glazed and incised, and several sherds of *Marl 1 qullas*. Mercantile activity is seen in the rope and textiles (including dyed fustian).

Two published and one unpublished document were found in this locus. RN 1057 is a petition to a high-ranking official on behalf of a group of young people, perhaps pilgrims or soldiers, who are in need of food and request a small amount of wheat (Guo 1999a: Fig. 4; 2004: 295–97). The names of the persons mentioned in the petition do not include either Abu Mufarrij or Ibrahim. Guo suggests the petition would have been submitted to the Ayyubid court in Qus or even in Cairo, but presented to Abu Mufarrij or Ibrahim as a certificate to be redeemed for the wheat (Guo 2004: 295). RN 1056a is both a shipping note and a personal letter, written by Ibrahim Abu Ishaq' nephew Nuh to the latter's mother, in reply to her own letter informing him she was ill (Guo 2004: 303–306). The ink on RN 1056b is largely too faded to read but for a mention of the entrepôt of Aden in the Yemen (Guo 2004: 62).

In Room E of the South House, Locus K10a-13 is the collapse of the mud brick walls onto the plastered floor of this room. It contained an abundance of material from the collapse and abandonment of this space, including matting, glass, metal, bone, seeds, and a rectangular piece of worked wood rectangular with a groove and a hole through which a fragment of rope had been threaded. Items for transshipment included date pits, textiles (including a fragment of silk), and rope. Pottery demonstrated connections with Yemen, the Nile Valley (possibly Fustat) and elsewhere in Upper Egypt: *Yemen 4* Trackware, *Marl 1 qullas*, a *Marl 2* jug, *Marl 4* Monochrome glazed wares, *Nile 3* monochrome glazed wares, and *Aswan* Medieval White Ware. Two readable letters out of eight paper fragments were also unearthed, both belonging to the first phase of occupation. The first, RN 1063b is a shipping note addressed to Abu Mufarrij (Guo 2004: 156–58). RN 1063a is a shipping note addressed to Ibrahim (here "Sheikh Abu Ishaq")

dated "the year six hundred and twelve" (AD 1215, Guo 2004: 244–45), which must have come from Phase I.

Shuna F contained two concentrations of paper fragments lying against the eastern face of Wall J in Phase IIb, one in locus J10c-15, and one in K10a-9, which are equivalent loci excavated in the northern and central parts of the room. They consist of the collapse of the mud brick walls onto the plaster floor that was laid at the beginning of Phase IIa and used through Phase IIb.

In Locus J10c-15 thirty-three fragments were recovered in one group, RN 987, and an additional twenty-three documents were scattered throughout the locus. RN 987b is a list of payment installments seemingly related to the *zakat* tax. Entries are in amounts of one thousand *waybas*, but the commodity (presumably grain) is not listed; no names are preserved on the document (Guo 2004: 275–76). The fragmentary unpublished documents include a shipping note mentioning brass and copper objects (RN 986b),⁴⁰ and other documents preserve references to textiles of various sorts: accounts contain lists of quantities of garments sold (RN 987), and a shipping note mentions cloth for burial shrouds (RN 986a, Guo 2004: 13, 40–42, 48). Numerous textile fragments in this context include undyed fabric, possibly appropriate for burial, as well as a few striped and checked pieces. Evidence of spinning is seen in a spindle whorl and a mass of fine z-spun fiber dyed dark blue and ready to be woven into cloth. A piece of cork, a peg base, and a stylus comprised the remainder of the wooden artifacts. The glass includes the single bracelet fragment found at the Sheikh's House, while other finds are the more usual metal, bone, seeds, and numerous fragments of matting. Items related to the trading

⁴⁰ It is possible that these objects were made in Qus; local toponyms preserve the memory of a copper quarter in the northern part of the town (Garcin 1976: 275). The Cairo Geniza documents also mention copper as an Egyptian export to the east (Goitein 1954: 192; 1973: 117, 79).

business are date pits and numerous rope fragments. As usual, the pottery includes sherds of *Nile 2* water jars, *Marl 4* monochrome and incised monochrome wares, and *Yemen 2* wares, indicating connections with the Yemen and the Nile Valley.

Finds were a bit sparser in Locus K10a-9, in this central portion of the room, but included the following mercantile objects: ninety-five rope fragments, 257 date pits, and twenty-three paper fragments. Domestic items were seeds, bone, and fragments of a bronze bowl. Pottery included *Yemen 4* trackware and *Marl 4* monochrome ware, showing Yemeni and Nile Valley connections. One document, RN 1055a, concerns a load of flax dispatched to Sheikh Abu Ishaq Ibrahim b. Abu Mufarrij, who is to put it in a secure place (Guo 2004: 253–56), and another (RN 1054) is too damaged to read anything but the mention of waist-wrappers, as noted above, a Yemeni item of dress (Guo 2004: 42).

To the south of this is the southern extension made in Phase IIa by the dismantling of walls K and H. This portion had previously been an eastern extension of the vestibule or corridor F in the South House, between these two walls. Locus K10a-15 is equivalent to J10c-15 and K10a-9 to its north, and is mud brick wall collapse onto the plaster floor at this southern end of the room. It is very rich in artifacts showing clear trading connections among items specifically for use in the business, and domestic items. Business items are rope and textiles, including two pieces of red resist-dyed cotton imported from India (RNs 937–938, Vogelsang-Eastwood 1989: 114, Nos. 56–57) and fustian dyed blue and red, along with eighteen paper fragments. Items more likely to be domestic include many fragments of iron nails and other iron items, a wooden implement with drill holes in it, and half of a *mano*, and over 300 pottery fragments. The pottery includes *Yemen 4* trackware, *Nubia 1* wares, *Marl 4* monochromes and *Marl 4* blue, purple and white wares. The *mano*, while seemingly an item for use in the house rather

than transshipment, is probably one piece of a hand-operated two-piece "millstone" Goitein describes in the Cairo Geniza documents, which were imported to Egypt from Syria in the Fatimid and early Ayyubid period (Goitein 1967: 153, 210).

A large number of date pits, 1,025 found in this *shuna* is by far the largest quantity of date pits in any one locus with the exception of the 1,206 found in Locus K10a-11, the thirty cubic meters of soil excavated from the southeast corner of Corridor D, and as mentioned in Chapter Three, clearly demonstrates the use of this space for storage. The published document, RN 1066a, concerns the shipment of not only two *qit'as* of flour, but also half of a *himl* (load) of dried dates, which would be about 112 kilograms of dates and the only mention of this apparently popular commodity in the documents. The letter is addressed to the shore of Quseir, to Abu Mufarrij, whose *nisba* here is *al-Qifti*, "from Qift," an ancient town just north of Qus on the Nile, and with Luxor an administrative center (*kura*) in the ninth and tenth centuries (Garcin 1976: 66; Guo 2004: 172–74). Abu Mufarrij seems to represent a typical Qifti, who are described by Yaqut (1179–1229) as entrepreneurial, even traveling to India (Golb 1974: 136).⁴¹ Another document from this locus makes mention of the city of Qus, the district capital (RN 1059) and a second one is addressed to Ibrahim (RN 1060a), but has no other contents preserved (Guo 2004: 3, 59).

In *Shuna* E to the north of *Shuna* F, in Locus J10c-11, RN 988c bears a zodiac chart and block-printed words in red and black (Guo 2001: Fig. 3; 2004: 88). A shipping note pieced together from two of the remainder of the fifteen RN 988 fragments is dated

⁴¹ Norman Golb has collected descriptions of Qift in the Fatimid and Ayyubid periods, and mentions in the Cairo Geniza documents, in his *Topography of the Jews of Medieval Egypt* (Golb 1974: 136). It was also known for the "mixed origins" of its population and very good soap, which was sold widely within and outside of Egypt.

the fourteenth of *Safar*, six hundred and thirty-three, or AD 1235. It lists items that have been sent to the *shuna* of Abu Mufarrij on behalf of Sheikh Nabigh and the jurist 'Uthman: twenty-seven *irdabbs* of wheat, seven *barani* of lighting oil, and ten hawsers or ropes (Guo 2004: 238–40). Locus J10c-11 is the main stratum of *Shuna* E's eastern half (under surface debris J10c-4). Once again the debris in the locus corresponds with the shipping note, as items recovered include twenty-four fragments of rope. Locus J10c-11 also contained five additional textile fragments, including sewn pieces from clothing, five fragments of a resinous substance, and another eighty-three date pits. Domestic remains included one iron nail fragment and animal bones. The mention of *barani* in RN 988 is tantalizing, but although twenty-one sherds are recorded for this locus, it is not certain which if any of them might represent the clay bottles for oil that are mentioned in the text. Only two sherds, both of a turquoise-glazed *Marl 4* vessel, were kept and drawn; the remainder are unidentified coarsewares.

Shuna B contained a fragment of a letter that was torn and dispersed over the site. Part of RN 977 was found in locus J10a-7, one piece was found in Locus J10a-6 (the surface debris of *Shuna* C), and one in J10a-1 of Area A (also surface debris). It has chancery elements and refers to the head of merchants, who has underwritten a loan for six Nile barges,⁴² which likely would have been made at Qus, a ship-building center in this period (Garcin 1976: 209; Guo 2004: 273–74). The reference to the head of merchants indicates the trade at Quseir al-Qadim was well regulated by the Ayyubid authorities. Locus J10a-7, which was a small test trench against Wall A in the north, contained very little in the way of material culture: ten sherds of pottery (including one

 $^{^{42}}$ Nile barges are also mentioned in a list of accounts found in a pit in the Phase IIa floor of the North House, Room C (Guo 2004: Text 67).

Marl 4 monochrome) and one fragment of a painted wooden bowl (RN 542, see Hiebert 1991: 145). Mercantile evidence is seen in three date pits and a piece of rope.

Also in this phase of Shuna B, Locus J10c-8 was one of three loci containing laminations of matting, used either for floors or ceiling, and sand, on the floor of the storeroom. Density of finds in this locus was average for a storage space, containing 1.97 sherds per cubic meter and 4.3 date pits per cubic meter. Finds related to the shipping and brokerage business included numerous fragments of textile (fifty-two fragments) and rope (113 fragments), two Arabic ostraca with black ink inscriptions (unstudied), and a plaster plug for a ceramic container. Domestic finds consisted of a small brush held together with twine, a wooden toothbrush, another wooden tool of some sort with leather covering one end, some sewn leather pieces, and two grindstone fragments. Ceramics included a few sherds of Yemen 4 trackware and Yemen 1 Black on Yellow ware, numerous sherds of Marl 1 gullas, and sherds from both Nile 3 monochrome and Marl 4 monochrome bowls. The grindstone and wooden toothbrush are clear indications that this space was used for domestic activities as well as for a storeroom, as the presence of a hearth against wall B suggests; perhaps one of the company's associates lived here and guarded this room. The published text, RN 983, is a shipping note concerning flour sent to Ibrahim b. Abu Mufarrij. The sender also instructs him to forgive the debts of the slave of Baraka and an unnamed porter (Guo 2004: 247-48). This man named Baraka is perhaps the same Hajj Baraka whose name appears on one of the wooden keys found in the threshold of Shuna E, also from this phase (Figure 55, Guo 2004: 248; Hiebert 1991: 157).



Figure 60. Wooden Keys from the Threshold of *Shuna* E. RN 524 measures 22.2 × 2.3 cm; RN 560 measures 21.7 × 2.2 cm (Courtesy D. Whitcomb)

In Locus K9b-38, a deep accumulation of debris at the south end of Corridor D, four paper fragments out of twenty-three were readable, which among them contain six documents, as two of the leaves were reused. RNs 1001a and 1003a are shipping notes sent to Sheikh Abu Mufarrij about deliveries of chickpeas, flour, and wheat (Guo 2001: Fig. 1; 2004: 142; Thayer 1993: 213). The paper of RN 1001a was reused to write several lines of magic characters on the verso as an amulet or charm (Guo 2004: 81, 230–31). RNs 1003c/1004d 1003b are business letters sent to Brother Najib at the *shuna* of Abu Mufarrij and to Sheikh Abu 'Ali Husayn at the shore of Quseir al-Qadim about perfume, riding animals, and "women's wraps decorated with gold and gems" (Guo 2004: 167, 200, 163–67, 198–200), and also reveal the exchange rate in Qena and Qus.

Because of the volume of soil excavated in this locus, the finds were numerous and included commercial items such as three sandals, modest quantities of textile and rope. Likely domestic objects were seventeen fragments of wooden objects, and a fair amount of matting, iron nails and a possible bronze knife blade, and bone. Organic finds were also particularly abundant and testify to distant trading contacts. Some of them were possibly meant for re-export: fifteen hazelnuts, three almonds, three pistachios fourteen desiccated whole specimens of an unknown fruit (an import), one lupine seed (a type of bean), three citrus rind fragments, a peach pit (perhaps from the Fayum), a pit of the *Nabaq*, or Christ's Thorn fruit (which grows wild in southern Egypt, Wetterstrom n.d.: 13), one garlic bulb, and one carob seed (Tables 19, 21 after Wetterstrom n.d.: Table 2). No glass was found. The pottery assemblage included recognizable imports from the Nile Valley, Yemen, and China: *Marl 1 qullas, Marl 4* monochrome and purple, blue, and white wares, *Nile 3* monochromes, *Yemen 1* Black on yellow sherds, and a fragment of a celadon bowl from China.

Locus K10a-11 is contiguous with K9b-38, and likewise was very rich in finds, trash blown in from elsewhere in the site. Among fifty-five fragments of dyed, striped, and checked textiles were two fragments of silk on linen embroidery in a pseudo-calligraphic style (Vogelsang-Eastwood 1983b), and a blue resist-dyed piece of coarse cotton from India (RN 927, Vogelsang-Eastwood 1989: 113, No. 55). (Embroidery is mentioned as having arrived at Quseir al-Qadim in a Phase IIb shipping note, RN 1027a, Guo 2004: 215.) The base of a stone bowl and a *mano* were both found, likely Syrian imports, but for domestic use. An object interpreted as a doll was also unearthed, composed of bone and stick wrapped in cloth (RN 567). The remainder of the objects was varied, comprised of household and personal items, some of which, such as the shoes and sandals, could be commodities for export: shoes of leather, a rope sandal, a small coil basket, wooden lids, worked leather, a bronze needle, a plaster plug, six ceramic net bobs (for fishing), and fragments of ostrich egg shell, one with traces of writing, and three chicken bones (Reese n.d.: 7).

Twenty-three fragments of paper were recovered from Locus K10a-11, a handful of which were decipherable. RN 1062b contains fourteen lines of a sermon-like text on both sides of the paper (Guo 2004: 70–72), perhaps authored by Sheikh Ibrahim, and is one of the most complete sermon fragments found in the Sheikh's House. RN 1062a is business correspondence between Muhammad b. Abu Mufarrij and a client (Guo 2004: 189–92). Two other important documents seemingly provide direct links to the Hijaz and to the Yemen. In RN 1059 three merchants (among them two sons of Abu Mufarrij) are stuck in "deadly" and "extremely cold" weather in a place called Qasr al-Yamani, presumably in the Yemen, and request food, water, and warm clothes (Guo 1999a: Fig. 3; 2004: 9, 153-56). RN 1060b is an official petition from Mecca, and confirms Quseir al-Qadim's place in provisioning the holy cities. It is from the Banu Shayba, "the pious guardians of the Holy Mosque" (Guo 2004: 297–300). Although the text is fragmentary the request is likely for grain or other foodstuffs for the mosque and the pilgrims who visit it. The letter must indicate some kind of hardship, like an increase in pilgrimage or a scarcity in Egypt, for the *sharifs* of Mecca had *waqf* lands in Upper Egypt at Qift, Qena, Damamin, and the district of Naqada, which supplied them wheat beginning in 569/1174 (Garcin 1976: 134, 244 nn. 3, 5-7, 45 n. 2; also see al-Magrizi 1980: 50, 56); a request for grain from the sharifs of Mecca to the sultan in a time of scarcity is reported for the Mamluk period in Magrizi's Suluk (Garcin 1976: 203 n. 5).

In summary, Phase IIb, because it contains the most documents, also contains the widest variety of references to trading partners with Quseir al-Qadim. Qift and Qus in the Nile Valley are mentioned by name, for example, as is the city of Damascus in Syria. Reference is also made to the Yemen, and flax is sent by a merchant of Alexandria. The involvement of the famed merchant guild, the Karimis, is also seen in documents from this phase. The proliferation of names of outsiders (not family members) testifies to the

use of the storerooms by numerous merchants and brokers. Documents illustrate the port of Quseir al-Qadim's official role in the supply of grain to the Hijaz, notably in the petition from Mecca, and the petition by pilgrims, and also its close supervision by the Ayyubid authorities, probably from Qus.

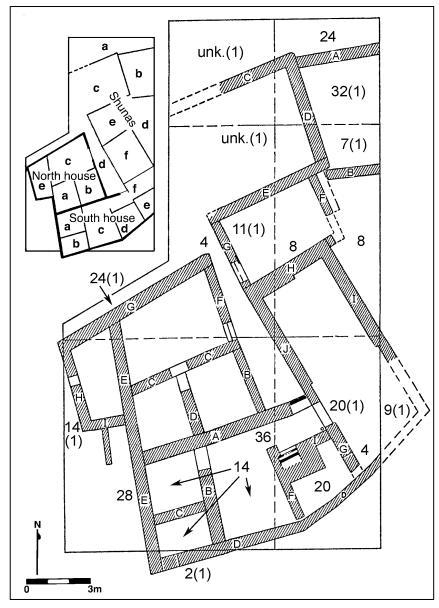


Figure 61. Surface Debris and Unstratified Loci, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

4. SURFACE DEBRIS AND UNSTRATIFIED LOCI

Several letters were also recovered from the surface layers, which although possibly contaminated by modern trash (although none was reported), and perhaps mixed in nature, nevertheless contain finds reflecting the area of the complex in which they are located (Figure 61). This is especially true for the storerooms, which because of their position on the top of the knoll were quite shallow, and in some cases excavation of the surface debris revealed bedrock only a few centimeters below. Many of the documents found in these uppermost strata seem to originate in Phase IIb.

In Area A, north of the northernmost storerooms, Locus J10a-1 is the surface to 27 cm below of debris against the north face of Wall A, composed of wind-blown sand and mudbrick debris from the collapse of the wall. Although the majority of the excavated pottery were Egyptian coarsewares such as *Nile 2* water jars and *Nile 3* monochrome glazed pottery, *Marl 4* monochrome glazed pottery perhaps from Fustat, and *Yemen 1* Black on Yellow Ware from the Yemen were also in evidence. Commodity remains, as usual were textiles, including veiling, rope, and date pits, and were found in a rich domestic assemblage of matting, metal, glass, bone, and other debris. The readable document from this locus (RN 977) was torn in three pieces, the other two of which were found in Locus J10a-6, surface debris in *Shuna* C, and Locus J10a-7 in Phase IIb of *Shuna* B, in which section it is described.

In Locus J9d-3, an 8 cm-deep layer of sandy debris to bedrock at the entrance of Corridor D, one decipherable document was found. RN 965, composed of four fragments, is a list of comestibles ordered and already paid for by at least four families in Quseir al-Qadim. They have both ordered goods for their households rather than for resale, which must have been shipped to *shuna* of Abu Mufarrij, although it is not mentioned. (The letter may belong to Phase IIb of the Sheikh's House, or may possibly have blown in

from elsewhere in Quseir al-Qadim after the abandonment of the complex.) The grocery items listed are flour, chickpeas, onions, lemons, carrots, milk, butter, chicken eggs, and "other items" (Guo 2004: 263–65).⁴³ Evidence of most of these would not be traceable in the excavations, but chicken (*gallus gallus*) eggshells were found in at least two trash contexts elsewhere on site (Reese n.d.: 5). Not much had accumulated in this $240 \times 280 \times 8$ cm area outside the North House, but one or two artifacts from nearly every category of domestic and mercantile items were found. Three wads of leather were found in this stratum as well, possibly representing containers for items shipped.

The surface debris in *Shuna* B was excavated as Locus J10a-2 in the northern half of the room and J10c-2 in the south, and reached bedrock very quickly in the northern three-quarters of the room. Readable documents were found in each half of the room. RN 979 in Locus J10a-2 refers to a shipment of flour and barley to the *shuna* of Abu Mufarrij, and reveals the conversions from *himl* to *irdabb* to *wayba*, and even to *batta* (It appears that one *batta* could hold eight kilograms of flour or barley: Guo 2004: 243–44). An unpublished fragmentary text from the same group (RN 979c) mentions an item coming from Damascus, and the city appears again in another unpublished document, RN 980b (Guo 2004: 64). Among the other thirty-one fragments of paper, one was complete, an amulet folded and tied with string (RN 978, in Guo 2004: Pl. 4). It contains twenty-nine lines with nearly 100 repetitions of the single word *huwa*, "he," referring to God (Guo 2004: 81). Locus J10c-2 contains RN 980a, a letter addressed to Abu Hasan 'Ali al-Mu'awwal, who is both a *qadi*, a judge at the *shari'a* court, and a *hakam*, a judge of the

⁴³ Compare a shopping list for a Jewish family probably living in Fustat, found in the Cairo Geniza documents: colocasia, coriander, garlic, "spices for soup," sesame oil, pepper, meat, dates, chickpeas, bitter oranges, and radishes. It includes payments made for the bathhouse and to the fuller, baker of bread (dough would have been provided by the family), and water carrier (Goitein 1983: 232).

municipal court. It is sent to him at *sahil al-Quseir al-Qadim*, the shore of Quseir al-Qadim (Guo 2004: 197–98). It reveals something of the institutions of the Ayyubid-Mamluk town, which aside from a possible administrative building unearthed by the University of Southampton, have not been traced in the excavations.⁴⁴ It also points again to Quseir al-Qadim's connection with Qus, as the position of *qadi* was an appointment by the provincial governor at Qus (Goitein 1971: 312).

The finds in Loci J10a-2 and J10c-2 were very rich and included 180 textile fragments, most of which must have been for export. Among them were the gusseted underarm of a *galabiyeh* and part of the neck of another garment, the significance of which has been discussed in Chapter Three. Fragments of veiling were also found. Imports were represented by a fragment of blue resist-dyed, very finely woven cotton from India (RN 923, Vogelsang-Eastwood 1989: 111, No. 51). Many of the remaining pieces were woven with narrow blue stripes, and many others bore a check pattern, the popular textile patterns of twelfth and thirteenth century Egypt, Nubia, and southern Syria/Palestine.

A bundle of blue yarns was also found in this stratum (loci J10a-2 and J10c-2), which also may be an item of export; spun thread or yarn occurs in lists of commodities transshipped via Aden from Egypt by the Karimi merchants, according to a late thirteenth century court archival text compiled for the Rasulid sultan al-Malik al-Muzaffar at Aden (Varisco 2002).⁴⁵ Other traded items included 121 fragments of rope and date pits, and several pottery types among the 300 sherds excavated indicate international connections:

⁴⁴ The *qadi* likely held court at the mosque (Hallaq 1998: 418), but other locales could be shops or, in a large enough town, at the gate of a neighborhood (Petry and Mendenhall 1978: 58).

⁴⁵ I am grateful to Professor Varisco for allowing me to cite this unpublished paper.

India 1 Black Utility Ware cooking pots, *Yemen 1* Black on yellow ware, a sherd of Yüe celadon from China. *Nile 3* monochromes are of Egyptian manufacture, and several sherds of *Marl 4* monochrome and incised wares were likely made in Fustat. Domestic items are represented by a "bobbin" of string (wrapped around wood), wooden implements including a box lid, nails, bones, and seeds (including date pits), and two fragments of a basalt grinding stone were found together with a few glass sherds. Finds of matting were particularly varied in this location: at least thirty-one types could be identified among the seventy-three fragments unearthed. This seems to indicate numerous sources for the matting, and it may be that this is a multi-purpose item used not only to cover floors and build ceilings, but also to pack commodities brought from various parts of Egypt and beyond for transshipment.



Figure 62. RN 576: String Bobbin Found in Locus J10a-6 of Shuna C (Courtesy D. Whitcomb)

Part of RN 977 was found in locus J10a-6 of *Shuna* C, one piece was found in Locus J10a-7 in Phase IIb of *Shuna* B, and one in J10a-1 of Area A (surface debris). See the latter for a description of the document. Locus J10a-6 is the surface debris 10 cm deep in *Shuna* C, and is fairly dense with material culture: 95 pottery sherds include locally made and Yemeni types: twenty-three *Marl 4* monochrome glazed pieces, four sherds belonging to a *Nile 2* water jar, and a sherd of *Yemen 1* Black on Yellow. Also in the mix were thirty pieces of textile, some with woven patterns of stripes and checks, and

twenty-five fragments of rope. Probable domestic items include another string bobbin (Figure 62), and few fragments of wood, metal, and matting.

Another document (RN 984b) folded and tied with string was found in this storeroom (*Shuna* B), in Locus J10c-9, which is composed of laminations of sand and matting found under Locus J10c-2. It is a letter including a prayer for the safety of loved ones addressed to the *shuna* of Abu Mufarrij (Guo 2004: 2, Pl. 4). The second unpublished document from this locus is a tiny scrap of an amulet with only two lines of writing (See Guo 2004: 80, RN 985a). RN 984a is a shipping note for wheat and rice to be delivered to the *shuna* of Abu Mufarrij (Guo 2004: 237–38). As in the surface levels of this storeroom the debris below, blown against the south wall, was rather dense in finds. Numerous fragments of textiles were found, including a scrap of black silk and fragments of sewn clothes, and other trade items were represented by date pits and rope fragments. Pottery included *Marl 1 qullas, Marl 4* monochrome and blue, purple, and white splash, *Nile 3* monochromes, and two sherds of the ubiquitous *Yemen 1* Black on Yellow. Fragments of a bronze bowl were among the more unusual finds, while the rest of the remains was the usual bone, wood, and matting domestic debris.

In *Shuna* E, Locus J9d-1 is wind-blown sand below the surface layer that filled up the western part of the room after its abandonment. Seven paper fragments were excavated, only one of which is readable. RN 964a consists of a scribal practice-sheet on one side, which may also be interpreted as a talisman in the form of repeated praises to God, and a poem on the other (Guo 2004: 307–09). A woman's name, Asma Um Musa, is also written on the verso, but up-side down to the poem. It is not clear how this text relates to the inhabitants of the Sheikh's House. It could have been produced by them or it may have blown in from elsewhere. The ceramics from this locus, twenty-six sherds in all, were recorded but not drawn or kept. They consist mostly of coarsewares and three

glazed sherds (all *Marl 4* wares with white, green, or turquoise monochrome glazes), all probably of Egyptian manufacture. The other contents of this locus are indeed that of a storeroom used for storing merchandise: twenty-three date pits, thirty-seven pieces of rope, seven pieces of wood, including bamboo and worked wood, an iron nail, and thirteen textile fragments including a hat and pieces of a brocaded veil. An iron knife blade and an iron spear head may be commodities like the pilgrim's sword discussed above, or weapons for protection of the house or community. Some of the locus contents suggest domestic activity as well, such as animal bones and matting, used for flooring or to roof the area. Hearths discovered against the walls in storerooms A, B, C, and D suggest the associates who used the storerooms of Abu Mufarrij spent considerable time there or even slept overnight to safeguard the goods.

Locus J9d-13 is a narrow strip of excavated soil half a meter wide and seven meters long that runs along the north face of Wall G, the northern wall of the North House. It is contiguous with and west of Locus J9d-3, which is in the corridor proper. Locus J9d-13 is 10–20 cm deep from the surface of the topsoil. In addition to 134 sherds of ceramics,⁴⁶ sundry other items were recovered from this locus, including domestic items such has a wooden spindle whorl, a wooden spoon and two other pieces of worked wood, and four fragments of matting. Commercial items are twenty-three fragments of paper documents, nineteen pieces of rope, thirteen fragments of textiles, and half of a basket. Baskets (*quffa*) are mentioned in a document from L7–L8 near the Sheikh's House as containers for shipped apples, which would have come all the way from Bilad al-Sham, probably dried (Guo 2004: 34, 227–28; Lev 2002: Table 2). The textiles are

 $^{^{46}}$ One of the ceramics is a lid which would fit inside the mouth of a large storage jar such as the one in Locus J9d-3.

interesting in the light of the text published from this context, which is a business letter to Sheikh Ibrahim about the shipping of black fabric (or possibly something else black in color) and cloaks, along with three other items, possibly textile, that are not readable due to the damaged paper (Guo 2004: 177–79). Black is a rare color in the textile assemblage, but a fragment of black cloth was excavated from Locus K9b-28 in the South House, Room B, and a fragment of black silk was found in Locus J10c-9 (Phase IIb) in *Shuna* B along with other textile finds.

The South House contained one readable document from a surface level. In Vestibule F, Locus K10a-8, the uppermost layer on the surface of this part of the site, contained twenty paper fragments, one of them a document with one of the few direct references to Muslim pilgrims at Quseir al-Qadim. This is text 1053a, which seems to describe a sale of sweetened flour to five pilgrims (*hujjaj*), presumably on their way to Mecca (Guo 2004: 220–21). The locus, because it is composed of wind-blown sand and other debris, contains a variety of materials of all categories mentioned before, including the fragment of a wooden bowl, dyed cloth and three scraps of resist-dyed cotton from the same piece of cloth, with a possibly epigraphic design, imported from India (RN 931, Vogelsang-Eastwood 1989: 113, No. 54).

Exterior of the South House, South of Wall D, Locus K9d-2 is simply surface cleaning, a level deposit of fine light brown sand with a layer of caliche at the top, but it contained a readable letter that along with the other material had probably eroded downslope from the house. Only two paper fragments were found; RN 1052 is a religious or magical text for putting out fires invoking the Christian legend of the "Men of the Cave" or the "Seven Sleepers" found in Qur'an Surat al-Kahf, which is commonly found on amulets (Canaan 2004: 133; Guo 2004: 312–313, Qur'an 18:9–22).

THE UNIVERSITY OF CHICAGO

ARCHAEOLOGICAL TEXTS AND CONTEXTS ON THE RED SEA: THE SHEIKH'S HOUSE AT QUSEIR AL-QADIM

VOLUME TWO

A DISSERTATION SUBMITTED TO THE FACULTY OF THE DIVISION OF THE HUMANITIES IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS

 $\mathbf{B}\mathbf{Y}$

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CHICAGO, ILLINOIS JUNE 2007 COPYRIGHT © 2007 by Katherine Strange Burke All rights reserved In summary, these surface documents provide the most concrete evidence for items coming from Damascus (RNs 979c, 980b). Syrian imports are possibly seen in the *Marl 4* underglaze-painted ceramics discussed in Chapter Two, and also in numerous kinds of nuts imported from Palestine and perhaps beyond, and possibly in basalt grindstones.

E. THE DATING OF THE SHEIKH'S HOUSE

The dated paper documents provide a narrow range of 612–633 AH, or between AD 1215 and 1235 (Table 4). Because the five dated letters represent so few of the paper documents, it is likely that we would find a somewhat wider range if we had better preservation of more documents. The numismatic evidence, discussed in Chapter Three, broadens the dating slightly so that together they provide a date range of AD 1215–49, the final years of Ayyubid rule in Egypt (Table 5), falling well within the thirteenth century parameters of the ceramics and glass.

Document No.	Date	Notes	Location	Published
RN 967b	"The end of Jumada I, the year 612" (Second half of September, 1215)	Goods sent care of Ibrahim b. Abu Mufarrij at the shore of Quseir al- Qadim	Locus J9d-4; N House, Rm C	Guo 2004: 246–47, Text 51
RN 1020a	"The month of Jumada, the year 62_" (anywhere in AD 1224–31)	Addressed to Sheikh Abu Ishaq Ibrahim b. Abu Mufarrij	Locus K9b-49; N House, Rm C	Guo 2004: 175, Text 17
RN 1017g	626/1228		Locus K9b-48; N House, Rm C	—

Table 4. Dated Letters and Shipping Notes

Document No.	Date	Notes	Location	Published
RN 1063a	612/1215	Addressed to Sheikh Abu Ishaq at the shore of Quseir al-Qadim	Loci K10a-12, 13; S House, Rms E–F	Guo 2004: 244–45, Text 50
RN 988	"The 14 th of the month of Safar, year 633" (29 October, 1235)	Addressed to Sheikh Nabigh at the shore of Quseir al- Qadim, the shuna of Abu Mufarrij	Locus J10c-11; Shuna E	Guo 2004: 238–40, Text 46

Table 4. Dated Letters and Shipping Notes, continued

Unfortunately when the site is examined by phase it does not work out that the earliest dated documents and coins come from Phase I, the latest from Phase IIb, and those in the middle from Phase IIa (Table 5). Indeed all dated letters, almost all coins, and most of the decipherable documents were found in Phase IIb contexts. Most of the dated documents are from the debris on the uppermost living surface, floor K9b-48, of Room C in the North House. Most of the late Ayyubid coins were found in Phase IIb contexts or on the surface. The exception is one dirham of al-Salih Najm al-Din Ayyub, dating AD 1246–1248, which was found in Room C of the North House, in the debris lying on the informal surface K9b-63 that provided the floor for the room when it was first used as a *shuna*. The highly eroded state of floor K9b-57 above K9b-63, and also of the floor above that, K9b-48, neither of which reached the walls of the room, along with the pits dug through several floor levels, makes the attribution of this coin to Locus K9b-63 uncertain and it cannot be used to date this surface. It should perhaps be attributed to a pit dug in Phase IIb, such as pit K9b-49, and is most useful when taken in the aggregate with the other coins.

The first Phase, during which the South House was built, *Shuna* F was used, Room C of the North House was used as a *shuna*, and what became Rooms A and B of the North House were used as a courtyard, can be estimated to have begun ca. AD 1215 or just before. As the coins and letters indicate, occupation at the Sheikh's House must have ended ca. AD 1250 or just after.⁴⁷ In terms of archaeological time this is already quite short,⁴⁸ but it may be useful to attempt an absolute dating of the phases. This would allow the remaining dated letters, which were found in Phase IIb, to be reinserted in their phase of origin, and may also lead to a fuller fleshing-out of the stories of the individuals at the Sheikh's House. Nevertheless, the subdivision of this forty-year occupation into dated phases can only be speculative and is best understood as a heuristic device.

The span of Phase IIb can be argued based on dates and terminology in some of the letters, and borrows from Guo's argument about the period of greatest activity of Abu Mufarrij and Ibrahim (Guo 2004: 3–4). RN 1063a, dated 612/1215, is addressed to Sheikh Abu Ishaq at the shore of Quseir al-Qadim. The use of the address "sheikh" indicates that by this date Ibrahim was considered a mature man, and must have been no younger than twenty (Putting his birthdate ca. 592/1195, Guo 2004: 3). This means that Abu Mufarrij must have been no younger than forty in 612/1215 (putting his birthdate ca. 572/1176). The letter with the latest date, RN 988, was written twenty years later in 633/1235, and is addressed to Sheikh Nabigh at the shore of Quseir al-Qadim, the *shuna* of Abu Mufarrij. According to Guo reference to his *shuna* is likely, although not

⁴⁷ See Table 5 for a summary of published documents by phase, including dated documents and coins.

⁴⁸ Indeed this is also short for the possible lifespan of a house. Compare urban houses refered to in numerous Cairo Geniza documents that are in existence for eighty to a hundred years, and perhaps longer (Goitein 1983: 97–101).

certainly, to have been made only during Abu Mufarrij's lifetime (personal communication October 11, 2006; 2004: 3), thus making him around sixty years of age. Also in Phase IIb a shipping note to Ibrahim, RN 997, refers to Abu Mufarrij's death. It was found in Locus K9b-32, the wall collapse onto the floor of Room C of the South House. Because numerous shipping notes addressed to Abu Mufarrij were found in this phase, if they do indeed belong to this phase, RN 997 must have been written some time after the beginning of the phase. Thus a date range of ca. AD 1235 to 1250 can be suggested for Phase IIb, during which time Abu Mufarrij died at an advanced age, perhaps nearing seventy-five.⁴⁹

This leaves ca. AD 1215–1235 to be divided between Phase I and sub phase IIa. An arbitrary but obvious division would be 1225, granting ten years to each phase or sub phase. Text 1027a of Phase IIa may provide a clue for a less arbitrary date, however. It mentions troops arriving in Quseir al-Qadim to go battle the Franks (Guo 2004: 212, 215). Despite Sultan al-'Adil's tendency to contract truces with the Franks, there were numerous battles in Syria to be entered before his death in 615/1218, as fighting raged along the coast and inland, and various towns and forts exchanged hands throughout the early 600s/1200s (e.g., al-Maqrizi 1980: 136–71). Nevertheless, the best candidate for a fight in which these soldiers might have participated is the siege of Damietta, also known

⁴⁹ This is not an unusually long lifespan compared to those of the educated men found in Udfuwi's biographical dictionary *Al-Badr al-sāfir wa tuhfat al-musāfir*, on which Garcin relies heavily for his religious history of Upper Egypt. For example, Majd al-Din al-Qushayri, eventually *qadi* of the region or perhaps of all Egypt, lived 581–667/1185–1269 (Garcin 1976: 174–75), and Ibrahim Abu Ishaq al-Shaybani (not to be confused with our Ibrahim Abu Ishaq), vizier of Aleppo from a Qifti family, lived 594–658/1198–1260 (Garcin 1976: 153).

Also compare the correspondence of the wealthy Jewish merchant of Fustat, Ibn 'Awkal, which spans thirty years. The oldest letter dated 1008 references two grown sons in business with him, indicating he must already be middle-aged. The last dated letter is from 1038, when he must have been seventy at the youngest (Stillman 1973: 17).

as the Fifth Crusade, begun in 1218 and lasting until 1219, when the city fell, with negotiations and uncertain military actions continuing until the Franks accepted terms from Sultan al-Kamil Muhammad and evacuated the city in 1221 (Chamberlain 1998: 222–23; Garcin 1976: 148; Holt 2004: 80–81; al-Maqrizi 1980: 166–67, 72–90).⁵⁰ For this engagement a general call to arms was issued throughout Egypt in the year 616/1219, from Aswan to Cairo, "and not a soul was to stay behind" (al-Maqrizi 1980: 180). This would make the date of this letter 1218 or 1219, and leads to 1218–1235 for the proposed date range of Phase IIa, with the proposed date range of Phase I then being 1215 (or just before) to 1218, and of Phase IIb being 1235–1250.⁵¹

The four remaining dated letters can then be assigned to their appropriate phase. RNs 967b and 1063a, both dating 612/1215, belong to Phase I, and RNs 988 and 1020a, which together date to 1224–31, belong to Phase IIa. As described above, that they were all found in Phase IIb, and that three were addressed to Ibrahim may indicate they had been kept, perhaps not with the intention of keeping them long-term, but for a time, perhaps to use as scrap paper. Alternatively the much pitted and damaged floors of the room caused these early documents to be churned up in Phase IIb, as they allowed a Phase IIb coin to fall into a Phase I locus.

⁵⁰ Guo suggests these soldiers are going to join one of the many Ayyubid battles against the Crusader states in Syria, which is also possible (2004: 65), especially if RN 1027a is residual from Phase I and does not belong to Phase IIa in which it was found. There were several engagements in the early 600s/1200s, but there were few occasions after 612/1215 in which al-'Adil rode out against the Franks with an Egyptian army. For example, in 614/1217 the Kingdom of Akko had received reinforcements and broken its truce, pillaging Baysan and its dependencies and unsuccessfully besieging the citadel on Mount Tabor. Al-'Adil had ridden out against them, but with too small an army to prevent the ruin of Baysan and its countryside (al-Maqrizi 1980: 164–65). For many years after this most of the Egyptian army's engagements were against the Rasulids, other Ayyubids, or the Seljuks.

⁵¹ This military incident had severe repercussions for the Indian Ocean trade, because Europeans were banned from Alexandria and goods could not be sold to them (Garcin 1976: 148).

Stratum Description	Phase	Locus Number	Dated Contents
North House, Room C			
Possible surface below plaster floor of K9b-57	Ι	K9b-63	RN 694, half dirham of al-Salih Najm al-Din Ayyub, dated 644–646/ 1246– 1248
Accumulation on plaster floor, below floor of K9b-48	IIa	K9b-57	RN 699, late Fatimid coin (AD 1100–1169)
Uppermost stratum, debris of room collapse on top of floor of K9b-48	IIb	J9d-4/K9b- 41/K9b-48	RN 967b, letter dated AD 1215 ; Letter RN 1017g dated 626/ 1228
North House, Room A			
Debris on floor	IIb	K9b-46	RN 685, <i>fals</i> of al- Kamil Muhammad, 1218–1238
North House, Room B			
Pit in northeast corner of K9b-36 floor	IIb	K9b-39	RN 683, globular half dirham of al- Kamil Muhammad, 1218–1238
Shuna E			
Wall collapse lying on floor of <i>shuna</i>	IIb	J10c-17	RN 696, half dirham datable to 1242–49
Wall collapse lying on floor of <i>shuna</i>	IIb	J10c-11	RN 988, letter dated 1235
South House, Vestibule F			
Wall collapse lying on plaster floor	IIb	K10a-12	RN 1063a, letter dated 612/ 1215
South House, Room B			
Mud brick wall and ceiling collapse, containing an earthen floor	IIb	K9d-1 (=K9b- 43, K9b-28)	RN 698, dirham o al-Salih Isma'il, 1242–45 (Damascus)
Brick tumble and sand underneath K9d-1 etc., 10 cm deep over bedrock, and over pit	IIb	K9b-67	RN 695, Ayyubid silver coin datable to 1246–49

Table 5. Dated Documents: Coins, Letters, and Shipping Notes

Stratum Description	Phase	Locus Number	Dated Contents
South House, Exterior			
Erosion from Room D to the south of the exterior wall, over the slope	_	K10a-7	RN 682, globular half dirham, possibly dating 1225–50

Table 5. Dated Documents: Coins, Letters, and Shipping Notes, continued

F. CORRELATION, INTERPRETATION, AND RE-TELLING: THE STORY OF THE SHEIKH'S HOUSE

Reading the letters in their stratigraphic order can provide a more nuanced understanding of events at the Sheikh's House than is available without the archaeological evidence. Events in the letters do not have a firm date, but when placed in order of the phasing of the strata can be understood in relative sequence. Understanding the phasing then allows dated documents that may be residual from later strata (such as those bearing early dates) to be reinserted into their strata of origin—a practice not possible with most other types of artifact. In this way a new sequence of events at the Sheikh's House and a new understanding of the business practices at Quseir al-Qadim can be achieved, which is also aided by hypothesizing absolute dates and examining the historical backdrop of events in Upper Egypt at this time. The phasing of the letters is summarized in Table 16 and detailed in Table 17.

Most of the extant letters from the Sheikh's House are missing the names of the sender and recipient. Of those that retain them over thirty are addressed to Abu Mufarrij,⁵² an almost equal number are addressed to his warehouse, and nearly thirty

⁵² Three letters addressed to Abu Mufarrij were found outside the Sheikh's House. Two were found by the University of Chicago team in the L7–L8 area of the large Roman oven (RN 1083b, 1077a: Guo personal communication, 2004: Text 44), and another was excavated by the University of Southampton in a trash pit containing rich finds and a hoard of 500 Ayyubid coins outside of a simple

letters are addressed to Ibrahim.⁵³ Letters sent to Abu Mufarrij and Ibrahim are never addressed to the *shuna* of Abu Mufarrij, but rather simply to Quseir or to the shore of Quseir, when a location is specified (Guo 2004: 2–3).⁵⁴ Letters are addressed to the *shuna* of Abu Mufarrij when they are sent to a business associate. Li Guo's analysis of the workings of the business indicate that even though each man dealt with similar commodities, the father and son each had mostly separate sets of suppliers and clients, and that Ibrahim had far fewer than his father of either (Table 6 and Guo 2004: 18–19, 22).⁵⁵ In addition, Abu Mufarrij had a close business associate, Sheikh Najib, who did not work for Ibrahim (Guo 2004: 11–13), and several other employees. All of this points to two separate businesses operating out of the same space (Guo 2004: 93).

Abu Mufarrij	The shuna of Abu Mufarrij	Ibrahim ibn Abu Mufarrij
Phase I		
'Asakir 'Ali al-Mamluki (RN 1037c, Phase I, 1066a, Phase IIb)		Yahya (RN 1037a)
		Saʻd al-Jamali (RN 1042a)
		ʻAbd al-Rahman Abu Hamd (RN 1040b)

house about 80 m west of the Sheikh's House (Trench 8A, structure 15 in Peacock and Blue 2006:138–39; Regourd forthcoming).

⁵³ A slightly different proposal for the organization of the Sheikh's House is argued in Burke and Whitcomb 2007, based on preliminary data from the letters and preliminary study of the archaeological record. This study supersedes that argument.

⁵⁴ On one occasion a letter to Abu Mufarrij is addressed "to the shore of Quseir" (RN 1063b: Guo 2004: Text 10) and in another he is described as "the owner of the warehouse" (RN 1026a: Guo 2004: Text 7).

⁵⁵ Guo's count of Abu Mufarrij's suppliers includes those sending shipping notes addressed to him, and those sending goods to the *shuna* of Abu Mufarrij.

Abu Mufarrij	The shuna of Abu Mufarrij	Ibrahim ibn Abu Mufarrij	
Phase IIa			
Ibrahim ibn Nasr Allah (RN 1026a)		Abu 'Uthman (RN 1029a)	
,		Ahmad (RN 1025)	
Phase IIb			
Al-Muzaffar and Abu Bakr (RN 970a)	'Ali ibn Ihsan (RN 966c)	Shaykh Hasan, "the merchant of Alexandria" (RN 997)	
<i>al-ʻarif</i> Abu ʻUmar…Daylam al- Maliki (RN 970b)	'Ali ibn Badr (RN 968b)	'Abd al-Akram (RN 981b)	
ʻAli ibn Husayn al-Jabiri (RN 972a)	Mubarak (RN 1005a, surface, 1018a, Phase IIb)	Hajj Ja'far (RN 1022)	
'Abd Allah (RN 972b, 1003c/1004d)	Rashid ibn Najm al-Din (RN 1026b)		
'Ajlan Abu Mahmud (RN 982a)			
Muhammad ibn Sharif al-Istakhri (RN 1001a)			
'Ali ibn Hijazi (RN 1003a)			
Naji (RN 1004a)			
Mu'in [al-Din] (RN 1004a)			
ʻAbd Abu al-Saʻada ibn Ridwan and Ibn Kilan (RN 1063b)			
Unnamed woman (RN 1021a)			
Surface			
'Umar al-'Adi (RN 975)			
Faraj al-Hatibi (RN 1064a)			
The 'Umar ibn Muhammad family (RN 1090a) – found outside the Sheikh's House in Trench L8c			

Table 6. Suppliers/Clients of Sheikh Abu Mufarrij and Sheikh Ibrahim, continued

Source: Guo 2004: 18-19

The presence of business letters addressed to Sheikh Ibrahim on the earliest floor of Room C, when it was used as a storeroom, indicates Sheikh Ibrahim was running his

own part of the business from the beginning.⁵⁶ This is corroborated by the earliest of the dated documents (which were all found in the latest phase) from AD 1215, also addressed to Ibrahim as *sheikh* (Guo 2004: 3). Since in one of the letters from that first floor he is addressed as Abu Ishaq, the third generation of the family had already begun by this time, if this *kunya* can be taken literally.⁵⁷ Numerous religious documents, including sermons and lunar dials, in the same stratum may point to this room's secondary use as Ibrahim's office, as we know from a Phase IIb text that he was a *khatib*, or sermon-giver at the local mosque (RN 1020b: Guo 2004: 176). One unpublished shipping note addressed to Abu Mufarrij was found on this floor as well (RN 1036a), indicating there was not a strict division of the space and Abu Mufarrij may have also conducted his own business from this room. The concentration of religious and magical texts in all phases of occupation would seem to indicate that this room remained the domain of Sheikh Ibrahim the sermon-giver and astronomer/astrologer throughout its use.⁵⁸

The stratification of the letters suggests that Abu Mufarrij did not enter into partnership with Sheikh Najib until Phase IIa, or perhaps even Phase IIb. Only one

⁵⁶ When the documents are read all together without reference to strata, one formulates the impression that there was a split between father and son at some point during their stay at Quseir al-Qadim (e.g., Guo 2004: 10, 93), rather than that they were independent, if cooperative, operators from the beginning.

⁵⁷ It should be noted that in al-Udfuwi's biographical dictionary of personages in Upper Egypt, six out of twenty-seven men named Ibrahim have the *kunya* Abu Ishaq, so perhaps it was simply a popular name (see the table of contents in Udfuwi 1914).

⁵⁸ The backdrop of events at the Sheikh's House includes the vaunted "sunni revival" of the central Islamic lands after the fall of the Fatimids, which was paralleled by a resurgence of sufism in Upper Egypt (Garcin 1997: 165–69). The prevalence of amulets among the Quseir al-Qadim documents indication of the vitality of sufism and popular religion at Quseir al-Qadim; since many of these are block-printed, they must have been widely available in Egypt (Guo 2004: 82–89). Ibrahim may represent one of the class of astronomer-astrologers employed by the local mosque, turning his attention to the lunar calendar, the times of prayer, and *qibla* computations for his duties there, but earning money on the side by forecasting horoscopes and writing talismans as well (Michot 2000: 149; also see Saliba 1993).

document mentioning Sheikh Najib is found in IIa, and all remaining documents that mention Sheikh Najib, either addressed to him or sending greetings to him, were found in Phase IIb. Text 8 (RN 1026b) from Phase IIa according to Guo indicates that Najib is an employee of Abu Mufarrij at this time (Guo 2004: 151). Texts from Phase IIb, on the other hand, illustrate a partnership between Abu Mufarrij and Najib that is of the *commenda* type also seen in relationships between merchants in the Cairo Geniza documents (Guo 2004: 13). Thus while Najib may have been hired during Phase IIa, he did not become a business partner until some time in Phase IIb.

The greatest proportion of letters addressed to other individuals also come from Phase IIb, indicating either that some of Abu Mufarrij's business was apportioned to others as he aged, that he was renting out space in the storerooms to other brokers in town, where they could receive mail.⁵⁹ Recipients of business letters and shipping notes, sent either to the *shuna* of Abu Mufarrij or the shore of Quseir al-Qadim (or which have no location specified) are Brother Ahmad, Abu'l-Hamd (who is accepting goods meant for "the master," which could refer to Sheikh Najib, Sheikh Abu Mufarrij, or Sheikh Ibrahim), Sheikh Abu 'Ali Husayn (the brother of Abu Mufarrij), Abu 'Arafat, Abu 'Uthman Mithqal, and Muhammad, the son of Abu Mufarrij. No business letters or shipping notes from the preceding sub phase, IIa, or even from Phase I, are addressed to anyone other than Abu Mufarrij or Ibrahim, making the appearance of these letters in Phase IIb all the more striking. Only one document from Phase I contains no mention of

⁵⁹ For this phase Sheikh Abu Mufarrij's activities are most comparable to the office of *wakil al-tujjar*, best known in Aden from Geniza documents, who was a legal representative or an attorney for other merchants that needed representation while traveling. He would have his own overseas business in which local merchants could buy a share, and build a large warehouse (*wikala*) where the merchandise of his clients would be stored. He could serve as a banker or agent, making payments for absent merchants who had left money with him, and his *wikala* also served as a post office (Goitein 1963: 201).

Ibrahim or Abu Mufarrij, and it is not a business letter but a petition to a high-ranking Ayyubid official named Rashid al-Din 'Ala' (RN 1049: Guo 2004: 293–95).

Evidence from the South House suggests that during Phase IIb Sheikh Abu Mufarrij died. In Locus K9b-32, the ceiling and wall collapse onto the secondary living surface of the South House, Room C, a shipping note is addressed to Ibrahim "the son of Abu Mufarrij—may God have mercy on him!" (Guo 2004: 249).⁶⁰ The multitude of shipping notes addressed or sending greetings to Abu Mufarrij from this phase (twenty-one of them) suggest that this likely took place late during this last use of the house.

The next step is to imagine these three stages of business alongside the three phases of use of the house and determine how well the changing business pattern is reflected in the architectural modifications: In Phase I, Abu Mufarrij, a respected broker from Qift, and a *hajj* with grown sons, builds a house on the Red Sea shore at Quseir al-Qadim with his son Ibrahim, also a broker. The younger sons may be with them at this time as well (Guo 2004: 10). The family may have been living elsewhere in Quseir al-Qadim in more temporary accommodations, or have moved from the Nile Valley directly. The house is suitable for their brisk business supplying grain and other commodities to the Hijaz, and receiving whatever Yemeni ships anchored at Quseir al-Qadim to send goods from India and China (which had come through Aden) up the Nile. Faithful from all over Egypt and the Maghreb were already taking advantage of the regular shipments

⁶⁰ Another letter in the debris lying on the second floor, Locus K9b-57, in Room C of the North House during Phase IIa could also be interpreted as having been written after Abu Mufarrij's death, but it is a bit too oblique to be certain. It is addressed to Ibrahim and sends greetings to his elders, presumably meaning both of his parents, and perhaps uncles, but then pronounces blessings on his mother but not his father: "Peace be upon your children and elders. God's blessing on the dear mother" (Guo 2004: 187–89, Text 22).

of grain across the Red Sea to make the *hajj*.⁶¹ The (South) House was used primarily for living, having a large living room (a *majlis*) with a fireplace, a smaller living room, and a room with a toilet. Small rooms behind and east of the staircase were used for storage, as they did not have hearths, and Room E contained a large amount of grain. Space on the roof was probably used for sleeping.

A long building northeast of the house, but entered from the same vestibule, held three storerooms with gravel or plaster floors. Already pepper from India and corals from the Mediterranean, the latter of which were outbound from Quseir al-Qadim, provided a glimmer of luxury among the numerous sacks of grain and flour in the storehouses.⁶² Outside the front door of the house, the left corner of the courtyard (far from the door) was used for trash, and opposite it a large room served as office for Ibrahim, who in addition to running his own brokerage business was writing amulets and sermons, the former of which he sold, and the latter of which he gave at the local mosque. He kept several lunar and astrological dials handy for keeping the Muslim calendar, and perhaps also for preparing horoscopes or other astrological forecasts. His father Abu Mufarrij tended to use this space as an office as well, but while Ibrahim kept goods in his office, Abu Mufarrij used the large storehouse across the corridor.

By around 1218 the grain business had increased and the same small quantities of high-priced commodities continued to arrive, including the occasional slave. Pilgrims continued to use the port, and the constant flow of travelers kept Sheikh Ibrahim busy with amulets for their protection. As Ibrahim had his own affairs to attend, Abu Mufarrij

⁶¹ Of the three preliminarily published letters from the Merchants' Houses, one of them mentions arrangements for the pilgrimage and is dated 615/1218, which falls within Phase I at the Sheikh's House (Frantz-Murphy 1982: 273).

⁶² Like the matting sack found in Locus J10c-17 in *Shuna* E.

hired Sheikh Najib to help with his shipments, and also occasionally rented out space in his warehouse to other brokers. It seems that Husayn and Muhammad acquired wives and children around this time, or they and their brother 'Umar moved from the Nile Valley to live with their father and older brother.⁶³ The addition of family members led to the decision to divide the courtyard into two rooms and create a second house on the same plan as the first (Phase IIa).⁶⁴ A comfortable brick mastaba was built (and covered with cushions), as well as a staircase so the residents of the North House would have their own access to private sleeping quarters on the roof. Floors and walls were plastered. While much business was still conducted in the large room that had become the living room of the North House, more storage space was needed. The dividing walls were dismantled and the tripartite storage building to the east became one long storeroom. An additional room was built to its north, with a high threshold and a door that locked.

Around AD 1235, Abu Mufarrij, by this time very aged, asked Sheikh Najib to partner with him and hired Abu 'Ali Nu'man to help as well. By now the *shuna* of Abu Mufarrij was the address for much of the official business conducted at Quseir al-Qadim, and even the local judges and jurists had their correspondence sent there. At least three

⁶³ The Cairo Geniza documents indicate families with four, five, or even six sons were not uncommon for well-to-do Jewish merchants, government servants, and physicians (Goitein 1978a: 237–40).

⁶⁴ According to Goitein, the most common incentive for building or acquiring a home was family adherence and social status (1983: 85). He points out that the desire for extended families to live in adjoining or the same houses, even in cities, was common in Muslim as well as Jewish families of the time. The co-resident household was often extended up or laterally, with parents and several married children living together (Goitein 1978a: 38–40). The Delta village of Badaway in the mid-nineteenth century provides not a direct correlate but an interesting comparison: census registers classify nearly sixty percent of households as extended or multiple family. In this case the high proportion is most often linked to the nineteenth century land inheritance system of the *fellahin* in rural Egypt, but some non-agriculturalists shared this household type as well (Cuno 1999: 317–23, Table 14.1). It is impossible to guess at the extent of this phenomenon in Ayyubid Egypt without systematic collection of data from the Cairo Geniza documents.

other brokers were making use of the storerooms, perhaps leasing space from the family, and Abu Mufarrij's brother and another son as well as Ibrahim continued to make use of Abu Mufarrij's storerooms for their own businesses. Nuh and Subayh, grandsons of Abu Mufarrij, were now old enough to be making business trips (RN 1056a) and to be greeted by name in correspondence to their elders (RN 976). The warehouse had more clients than ever, sixty-eight according to three different accounts made at this time (RNs 966a, 966b, and 1023), while the shipping notes indicate there were several more. The increase in volume made it necessary to add two further enclosures in order to make room for all the grain, clothing, rope, and the occasional luxury item such as perfume or women's wraps decorated with gemstones coming in, not to mention the basic provisions needed for Quseir al-Qadim residents from the Nile Valley, which were usually distributed from these storerooms.

Some time later Abu Mufarrij died, and for a while Ibrahim and the others carried on their affairs in Quseir al-Qadim, Ibrahim still keeping his office in Room C of the North House where he continued to write amulets for those who needed them, in addition to continuing his brokerage activities. But soon the family decided to leave Quseir al-Qadim, perhaps returning to their hometown of Qift, where if they wished they could continue to participate in Nile Valley trade. The decision was made all the easier by the great tribal revolt in the region that temporarily put a halt to all trade.

G. CONCLUSIONS

This imagined retelling of the history of the complex makes use of the texts and documents at more than one level, but both within Whitcomb's primary degree of relationship. On the simplest level the texts are corroborative of the archaeological evidence, and vice-versa. This is seen in the artifact and other material finds that match items listed in the shipping notes, such as rope, textiles and clothing, pottery, glass sprinkler bottles, grain, dried dates, citrus, and nuts, and even medicine and medicinal herbs. Discrepancies between the texts and finds at the Sheikh's House, as at the site of Berenike, can be explained by discard patterns, the varying likelihoods of preservation for different types of objects, and archaeological recovery methods. The mention of the *"shuna* of Abu Mufarrij" also leads us on a search for its correlate in the excavations, and thus aids the interpretation of certain rooms in the complex as primarily storerooms rather than as domestic spaces. This interpretation can be made with careful attention to the distribution of various types of finds (discussed in Chapter Three) such as date pits, always in higher quantity in the storerooms; textiles, which occurred in much greater quantities there; and faunal finds, which did not. It is also aided by the order of the rooms in relation to one another, and other clues like the presence of a *mastaba* or staircase or the occurrence of a fireplace beside a low wall, as in the largest rooms of each housing unit.

Continuing with this primary degree of relationship, the texts found in the Sheikh's House can be used with the archaeological evidence of Quseir al-Qadim to situate the complex within the town. The texts indicate the inhabitants had benefit of a mosque (which would be expected of a permanent settlement), since Sheikh Ibrahim is referred to as a *khatib*, or giver of sermons. The possible administrative building uncovered by the University of Southampton may have been the customs house, overseen by the chief of police or mayor (*wali*, who is mentioned in the Sheihk's House documents, Smith 1996: 211).⁶⁵ Another option would be a *dar al-zakah* for the

 $^{^{65}}$ As at Aden, the *wali* may have also inspected the inventory of the ships arriving at port (Varisco 2002).

collection of this tax on certain imports, as is known at Ayyubid Aden (Smith 1995: 134). Finally a *suq* is mentioned in the documents (RN 1015c), and there is a candidate for this in the long building subdivided into sixteen modular units excavated in Southampton Trench 9 (Blue, Beadsmoore, and Phillips 2006).

A secondary degree of relationship as defined by Whitcomb is established when the texts are generalized for the study of history or culture. One aspect of this is simply the description of thirteenth century Nile Valley-Red Sea shore trading relationships and regulation, and even more generally, Egypt's position as provisioner of Mecca and Medina. But another aspect of this secondary relationship is some limited demographic data for Ayyubid Egypt. For example, data from the Sheikh's House can inform methods of population estimate by floor space culled from modern ethnographic studies. By Phase IIb it is possible that three generations of the family were living in the Sheikh's House, including Abu Mufarrij's sons Muhammad and Husayn, who occasionally participated in his business not only at the warehouse (Guo 2004: 194), but as couriers (Guo 2004: 186) and perhaps buyers (Guo 2004: 155), along with their wives and children.⁶⁶ The estimated minimum number of persons is eleven, including another son 'Umar and his son Nuh, Subayh the son of Husayn, Ishaq the son of Ibrahim, and the wives of Abu Mufarrij, Ibrahim, Husayn, and 'Umar, the last of whom is the recipient of letter RN 1056a (no sons of Muhammad are mentioned in the texts, and therefore it is possible he was unmarried, see Guo 2004: 9). The total area of the living spaces in the houses, which counts the North House Rooms A, B, C, and E, plus rooms A and C of the South House, including Vestibule F (Room B not being counted because it is a toilet) is approximately

⁶⁶ Husayn seems to be particularly active and worked both for his brother Ibrahim and for his father Abu Mufarrij. Guo has outlined the family tree in his discussion of the Abu Mufarrij family (See Guo 2004: 9).

 60.2 m^2 . This would provide 5.47 m² available space per person, which falls close to the figure of 6 m² that Charles C. Kolb reached using data from ethnoarchaeological studies of Mesoamerican peasants. In doing so he refined the widely cited figure of 10 m² per person reached by Raoul Naroll in his study of floor area and population (1962: 588) by eliminating uninhabitable rooms such as bathrooms, sculleries, warehouses, offices, and shop rooms from his count of floor area (Kolb 1985: 584). Thus the estimated number of persons living in the complex is not unreasonable compared to modern populations living in pre-modern conditions.⁶⁷

Further possible generalizations of culture and history that can be gleaned from this textual and archaeological study of the Sheikh's House at Quseir al-Qadim are explored in the next chapter, which seeks to contextualize Quseir al-Qadim in Upper Egypt and the Red Sea littoral.

⁶⁷ The use of Mesoamerican ethnoarchaeological data has been adopted because there is to my knowledge no appropriate study for medieval Egypt or the Near East. S. D. Goitein's discussions of domestic architecture cannot provide directly comparable data because the measurements of houses were never included in descriptions found in the deeds, wills, and other documents (See Goitein 1983: 47–82, esp. 64). Although there are two well-known studies of modern *fellahin* in early twentieth-century Egypt, they unfortunately do not provide this kind of information (Ammar 1954; Blackman 2000), and neither does Bagnall and Frier's excellent demographic study of Roman Egypt (Bagnall and Frier 1994).

CHAPTER FIVE

THE SHEIKH'S HOUSE IN CONTEXT: QUSEIR AL-QADIM, EGYPT, AND BEYOND

The preceding chapters have of necessity been narrowly focused on the material culture of the Sheikh's House, although with numerous references to other parts of Quseir al-Qadim and farther afield. In order to more perfectly understand the Sheikh's House it is necessary to further widen our view to the town of Quseir al-Qadim. It is from the vantage of the Sheikh's House as an element of a town that it is most appropriate to explore, in ever widening circles, Quseir al-Qadim as an Upper Egyptian town, as a Red Sea port and thus a node in the Indian Ocean trade, and finally as part of a wider cultural community that includes ports on both shores of the Red Sea.

A. THE FOUNDATION OF QUSEIR AL-QADIM

The date for the founding of the Islamic port at Quseir al-Qadim is uncertain, but archaeological evidence suggests it could have been in the last quarter of the twelfth century, perhaps thirty-five years before the Sheikh's House was built. For example, the University of Southampton's Trench 9, containing a possible caravanserai or suq of the Ayyubid town, produced ceramics that may date to the late twelfth century (Blue, Beadsmoore, and Phillips 2006: 103). It is even possible that Quseir al-Qadim was settled as early as the end of the eleventh or beginning of the twelfth century (Whitcomb 1995b: 25), due to many ceramic types from multiple parts of the site, including the Sheikh's House, that were produced at this time or earlier elsewhere in Egypt (see Table 9). There is no architecture to go with these few sherds, however, and they may instead be seen as

types that had a relatively long life, continuing into the late twelfth or thirteenth century. A foundation just before the end of the twelfth century better fits the ceramic evidence.¹ This would coincide with the plundering of 'Aydhab by Renaud de Chatillon in 578/1182, from which it never fully recovered, although it continued to be an important node of trade until at least the mid-fifteenth century (Garcin 1976: 136, 422). Since 569/1174 de Chatillon had made the land route for the Muslim pilgrimage once again impassable, so that the sea route via 'Aydhab was the only available option until the treaty won by Salah al-Din in 592/1195 (Garcin 1976: 136–37). Quseir al-Qadim may have been founded in order to fill the immediate need for a southerly Egyptian port after the attack on 'Aydhab. Additionally, the additional pilgrim traffic that must necessarily have been routed through 'Aydhab since 569/1174 may have already been straining 'Aydhab's capacity as it accommodated commerce, grain shipments to the Hijaz, and the increasing number of pilgrims. An additional port would have been welcome regardless of the temporary halt of traffic at 'Aydhab in 578/1182.² Thus pilgrimage, the primary role of Ottoman and modern Quseir up to the nineteenth century, may be seen as the impetus for the founding of Quseir al-Qadim.

¹ This would mean that Quseir al-Qadim survived a famine in 591–92/1194–96, which Maqrizi mentions led to an outbreak of contagious disease killing many people in Qus and Upper Egypt; two earthquakes, one in 592/1195–96 and another in 597/1200; and most devastating, the great Egyptian famine of 595–98/1199–1202 (Chamberlain 1998: 220; al-Maqrizi 1980: 122–23). Since the primary commodity shipped from Quseir al-Qadim was grain, business must have slowed considerably, been temporarily suspended, or perhaps shifted to other Egyptian exports such as textiles and alum.

² This is *contra* Garcin, who retells Ibn Hawqal's tale of an attack by the Beja Bedouin on a caravan of pilgrims from Qift at the end of the ninth century, and speculates that they were intending to embark at Quseir al-Qadim (Garcin 1976: 52 n. 2). There is no archaeological evidence for occupation at Quseir al-Qadim in the ninth century.

Gladys Frantz-Murphy also emphasizes the role of the Crusades in bolstering Quseir al-Qadim's importance (Frantz-Murphy 1982: 267).

Even after the land route to the Hijaz was available again, the Sheikh's House documents indicate that even if much less safe than the land route, the sea route was still frequently used by pilgrims. This is supported by Ibn Jubayr's observations circa 579/1183 that the southerly route to Mecca was the one preferred by Maghrebi Muslims, who would sail up the Nile, visiting the birthplace of Moses, the prison where Joseph was held, and the mosque of Abraham, before continuing overland to make the sea voyage to Jeddah, the port of Mecca (Garcin 1976: 139, 60-65; Hasan 1967: 75).³ Further corroboration is found in the numbers of Maghrebi holy men who are known to have lived in Qift, Qena, and other Nile Valley towns, as they are listed in the biographical dictionaries even in the Mamluk period (Garcin 1976: 139, 60-65). Later Maghrebi connections with Quseir al-Qadim can be traced in a memorial mosque in the modern town, named after Sheikh Mohammed el-Fassy from Fez, Morocco, and said to have originally been built in Mamluk times (el-Zeini 1982: 404).⁴ Additionally, the southerly (sea) route for pilgrimage was necessary when the northern (land) route was closed due to war. Magrizi chronicled this for the year 648/1250, for example, when al-Malik al-Nasir had blocked access to the land route (Garcin 1976: 139, n. 1, referencing Suluk, 381-82). It was reportedly not until 1266, when the Mamluk Sultan Baybars sent the kiswa, the cloth covering the Ka'ba, to Mecca by the Sinai route through Qulzum and 'Ayla, that the northern (land) route once again became the normal pilgrimage route from lower Egypt and Syria, but the sea route was still used by African Muslims (Peters 1994: 93-94).

³ This was perhaps by means of the regular caravan from Sijilmasa to Egypt, reported in the Cairo Geniza documents for the Fatimid and Ayyubid period (Goitein 1967: 212, 79).

⁴ It is of course unlikely to have been built in the Mamluk period, as even the fortress had not yet been built, but a foundation in the sixteenth century is not impossible.

The rare references to trading activities at Quseir al-Qadim, found in Yaqut, Qalqashandi, and the Rasulid *daftar* (see Chapter One), reflect the status of Quseir as second in importance to 'Aydhab, and the archaeological evidence demonstrates its lively but not extremely high volume trade. By contrast the documents from the Sheikh's House, with their overwhelming references to grain, emphasize Quseir's role as provisioner to the Haramayn over its role in the Far Eastern trade. The relatively high volume of textiles, date pits, and Yemeni ceramics, and the presence of Chinese porcelains and Indian cooking pots indicate the latter was not necessarily a minor activity, however. In addition, a natural correlate of its duty as grain provisioner was conveyance of pilgrims to the Hijaz, a role that became increasingly important at Quseir. Thus Quseir al-Qadim can be said to have been founded to fill an immediate need for a port that could send grain and pilgrims to the Hijaz and harbor Yemeni ships to support the long-distance trade that Egypt so relied upon. Its utility extended beyond emergency and supplemented 'Aydhab throughout the Ayyubid and Mamluk periods; it doubtless also benefited by its proximity to the Nile entrepôt of Qus.

B. QUSEIR AL-QADIM IN UPPER EGYPT

Quseir al-Qadim's interaction with the city of Qus on the Nile is of primary importance, as it was situated in the hinterland of Qus, contributing to that city's prosperity and benefiting from, indeed depending on, its administrative organization. The Red Sea port relied upon Qus in its capacity as district capital for safeguarding the overland routes between the Red Sea and the Nile, via agreements with desert tribes, and for administrative oversight of trade. In addition, foodstuffs, pottery and other domestic goods came from the markets of Qus, as well as merchandise for the outbound trade,

especially the grain shipped to the Hijaz.⁵ As detailed in the previous chapter, several texts from the Sheikh's House indicate the role of Qus in overseeing and regulating business at Quseir al-Qadim in the Avyubid period (see discussion in Guo 2004: 25, 44-51). This is seen in the private mercantile and official juridical activity of *gadis*, religious judges, and *fagihs*, jurists (often the same person, in RNs 969, 980a, 1015c, 1064b; see Table 17), who were official appointees of the government, in this case the *qadi* of Qus, who in turn was appointed by the *qadi* of Misr (Garcin 1976: 325). We have three letters to *qadis*, and one also appears in an account of amounts paid or owed to the *shuna* of Abu Mufarrij. Qadis in Ayyubid and Mamluk Egypt were known to oversee more than religious and legal matters (Frenkel 2002: 104). In the Cairo Geniza documents, *gadis* of the Fatimid and Ayyubid periods are frequently engaged in mercantile activities and are very often ship-owners and owners of *dar wakala*, where merchants could stay overnight with their merchandise (Goitein 1971: 365, 67). More significantly, they sometimes acted as the *nazir*, or superintendent of the port, as at Ashkelon in Palestine, and in a small town could be the most important personage, acting as de-facto ruler (Goitein 1971: 365). This may provide a context for text RN 1015c, as the *qadi* in this case is ruling on an issue involving two shops in the *suq* of Quseir al-Qadim (Guo 2004: 287–89).⁶

⁵ The in-depth study of Jean-Claude Garcin on Qus and the entire Sa'id (1976) is invaluable for reconstructing Quseir al-Qadim's place in the economy and social life of Upper Egypt (but see also 1969; 1970; 1986a; 1991; Garcin, Arnaud, and Denoix 2000).

⁶ In the case of Quseir al-Qadim the local *qadi* would have shared power with the *wali* (RN 1023), the chief of police who performed the duties of mayor and could also act as inspector of ships' cargo, also a government appointee (Goitein 1971: 368). The functions of offices were not clearly delineated in Ayyubid Egypt and seemed to depend mostly upon the status and power of individuals, so we cannot surmise exactly how they shared responsibilities (Chamberlain 1998: 233). In addition the Sheikh's House documents do not give a hint of the activities of the local *qadi* and *wali* at Quseir al-Qadim other than their both being clients of Abu Mufarrij's *shuna* (Also see Guo 2004: 25). That we have two named *qadis* may indicate they are active in Quseir al-Qadim at different times. Udfuwi's biographies of religious men serving as *qadis*

Additional government connections are seen in references to the '*arif*, trade-head and possibly head of merchants (RNs 970b, 977), or a supervisor of the marketplace appointed by the market police to prevent fraud (Goitein 1967: 84).⁷ A petition to a high-ranking Ayyubid official named Rashid al-Din 'Ala' indicates he had some control over, or business interest in, the goings-on at Quseir al-Qadim (RN 1049: Guo 2004: 293–95). In several documents instruction that portions of shipments be withheld for payment of taxes indicates they were collected at Quseir al-Qadim itself (e.g., Guo 2004: 201–204, 212–18, 233–34, 245–47, 256–58). Certificates to be redeemed for wheat were apparently presented to Abu Mufarrij or Ibrahim, who must have then been compensated for it by the Ayyubid government; this is seen in the form of a petition to a high-ranking official on behalf of a group of soldiers or pilgrims (Guo 1999a: Fig. 4; 2004: 295).⁸ As previously mentioned, the suq at Quseir al-Qadim, on which the *qadi* in RN 1015c was supposed to rule, and over which the '*arif* mentioned in RNs 970b and 977 had jurisdiction, has possibly been identified in the University of Southampton's Trench 9.

Some limited archaeological work in Qus demonstrates the Sheikh's House architectural connections with inland Egyptian sites on the Nile Valley and in Lower Egypt. For example, unpublished excavations by the Supreme Council of Antiquities of Fatimid Qus uncovered large, well-built brick courtyard houses like those excavated at

and *faqihs* in Mamluk Upper Egypt indicates they serve in several towns successively (e.g., Udfuwi 1914: 301, entry 444).

⁷ Inspection at Quseir al-Qadim is referred to in Text 28: "You are my agent in charge of everything. If they inspect [the aforesaid commodities], then you should carry the task out on my behalf, and notify all [parties involved]..." (Guo 2004: 205). It is uncertain whether Quseir al-Qadim would have had its own market police or have been under the jurisdiction of the Qus market.

⁸ Although it is speculative, this note may refer to provisioning the Egyptian forces in the Hijaz, especially during the fighting between Yemen and Egypt that took place in the years 629–39/1232–42 (Garcin 1976: 134).

Fustat by Aly Bahgat and later by George Scanlon (Bahgat and Gabriel 1921; Scanlon 1966; 1967; 1974a; 1976; 1981; 1984; Whitcomb 1997). These are undoubtedly much finer and richer than the houses found in Quseir al-Qadim, but derive from the same architectural tradition of building orthogonal structures of brick (when possible), with an emphasis on courtyards and the use of wood for stair treads and thresholds.

There is less archaeological evidence of the Ayyubid and Mamluk periods excavated at Qus, as no architecture has been unearthed.⁹ Material remains nevertheless confirm the role of Qus in riverine and maritime trade and its enrichment from this enterprise. Although no excavations have been published, the Supreme Council of Antiquities uncovered a treasure-trove of gold dinars in 1966. Subsequently a copper basin wrapped in matting was unearthed, containing twenty brass and bronze luxury household objects (some with *niello* decoration, some with gold and silver inlay), two of enameled and gilt glass, three of earthenware, and two wooden objects. The metal and glass pieces date variously from the Fatimid to Mamluk period (el-Emary 1967). Chinese celadons were also excavated, alongside a wooden box painted in a Nubian or Ethiopian style, and probably of thirteenth to fifteenth century date (Garcin 1976: 265, Pl. XIX).

Qus is ideally placed on the rich plain of Thebes, and Arab geographers describe its excellent produce of legumes, cereals, and sugarcane in the twelfth and thirteenth centuries, which were widely exported within and outside of Egypt.¹⁰ The city itself was green; in the fourteenth century al-'Umari remarks on its numerous gardens, orchards,

⁹ A plaque on the mosque indicates it was repaired at the beginning of the Ayyubid period (Garcin 1976: 131).

¹⁰ No sugar mills or factories have been excavated in Egypt, but numerous excavations in North Africa, Syria, Cyprus, and Iran reveal their workings (See Burke 2004 for a summary of the archaeological evidence and bibliography of textual sources).

and herb gardens (Garcin 1976: 6).¹¹ It had long been a port on the Nile, shipping grain to Fustat, and also receiving Nubian goods that had come first through Aswan to send on to Fustat. It rose to importance under the Fatimids, who reorganized Upper Egypt, making Qus the capital and center of commercial and military power, while Aswan, situated on the frontier, continued to watch over the Nubian border (Garcin 1976: 73, 92; Hasan 1967: 96).¹² The Fustat-appointed governors of Qus, who oversaw the entire Sa'id, became second in importance only to the vizier of Egypt, to which post they were sometimes promoted (Garcin 1976: 84–85, 88, 102). Qus became a node on Egypt's Indian Ocean trade route, and received shipments of Chinese, Indian, and Yemeni goods brought overland from the Red Sea port of 'Aydhab.¹³ At Qus the goods were loaded on Nile barges and shipped downriver to warehouses in Fustat (Mackenzie 1992: 71). Likewise Syrian and other Mediterranean goods came up the Nile from Fustat and were sent out through 'Aydhab. By the end of the eleventh century a customs-house had been set up at Qus (Garcin 1976: 101), around the time that the Karimi organization of

¹¹ Garcin's sources are Idsrisi's *Description*, p. 49; Ibn Sai'd, *Kitab al-Jughrafiya*, *Monumenta*, t. III, fasc. 5, p. 1089 v; and al-'Umari, *Masalik al-Absar*, partly translated by Quatremère, *Mémoires géographiques* I, p. 194.

Qus is also frequently mentioned in the letters of the Cairo Geniza (Golb 1974: 136-37).

¹² Aswan was also receiving Red Sea commerce via the important port of Suakin, located nearly 65 km north of modern Port Sudan. It had risen in prominence over Qift, the Late Antique capital of Upper Egypt, known then as Coptos (Maspero and Wiet 1919: 157). This shift demonstrates what Garcin refers to as the plasticity of the spatial organization of pre-Islamic Egypt (Garcin 1980: 436).

¹³ According to evidence from Maqrizi and al-Qalqashandi the port of Suakin on the southern coast of the Red Sea was in use in the third century of Islam and into the Fatimid, Ayyubid, and Mamluk periods (Garcin 1976: 62, 209). Its closest trading partner on the Nile was Aswan, the early Islamic regional capital. Beginning in the Fatimid period, however, 'Aydhab was the port of choice for Egypt, and it continued to be the major Egyptian port until the rise of at-Tur in the Sinai in the last decades of the fourteenth century, which according to al-Qalqashandi precipitated the decline of 'Aydhab and Quseir al-Qadim (1964: vol. 3, pp. 464–66). For more on the history and standing remains of Suakin, which functioned until the early twentieth century, see (Bloss 1936a; 1936b; H. N. Chittick 1981; Greenlaw 1995; Matthews 1953).

merchants was beginning (see Chapter One, note 11), according to evidence in the Cairo Geniza documents (Garcin 1976: 102; Goitein 1968). Additional customs houses were placed at other ports along the Nile, at Akhmim, and Fustat, at the end of the eleventh century. At these places communities of Jewish, Christian, and Muslim merchants formed, and they were nodes of customs and local sale, where goods from the Maghreb, Mediterranean, and Lower Egypt found their way into the markets (Garcin 1978: 308; Golb 1974: 117, 128–29). The Quseir al-Qadim documents and material culture indicates a similar community of Muslim merchants, which perhaps included Karimi, had formed at this small port. Other merchant communities formed in 'Aydhab, on the island of Dahlak in the Red Sea, at the port of Aden, and at Indian and Chinese ports, composed of merchants from all parts of the Indian Ocean.

The success of the port, but more importantly, the administrative organization, also attracted Muslim pilgrims to Qus by the mid-eleventh century (Garcin 1976: 99–100), who had been traveling to the Hijaz through Aswan and 'Aydhab since at least the ninth century (Garcin 1976: 52, 96).¹⁴ Upper Egypt continued to attract pilgrims throughout the Ayyubid and Mamluk periods, even after the northern route was open, as discussed above (Garcin 1976: 114–115). By the Ayyubid period Qus was the seat of commerce, government, and military power in Upper Egypt.

C. THE RED SEA-INDIAN OCEAN TRADE AND THE CULTURE OF THE RED SEA LITTORAL

Aden, which is mentioned in one fragmentary Quseir al-Qadim document (RN 1056b) served as the primary transshipment entrepôt for goods coming to Egypt from

¹⁴ The main mosque, the Mosque of 'Amr, was probably built in the eleventh century in this otherwise largely Coptic town. For a brief description see Bahgat (1922), and for a more complete investigation see Garcin's lengthy article (1970; and also 1976: 37–38).

India and China, and vice-versa, and had since the tenth century AD or before (Varisco 2002).¹⁵ Textual documentation for the trading activities at Aden have particular significance for the Sheikh's House and Quseir al-Qadim. The Ta'rikh al-Mustabsir, written ca. 625/1228–29 by a merchant named Ibn al-Mujawir, lists the merchandise from Egypt and India that was transshipped via Aden (Ducatez 2003: 137–39).¹⁶ The list of Egyptian goods exempt from customs duties in Aden closely corresponds to the lists of items compiled from the Sheikh's House shipping notes: flour, sugar, rice, soap from Ragga in the Jazira, olive oil (which may have come from Bilad al-Sham), potash, *gutara* (a substitute for honey or sugar), flaxseed oil, olives marinated in vinegar, dried fruit, and honey. The list of Indian goods, in addition to several kinds of aromatic wood that were not found in the Quseir al-Qadim excavations, includes different types of Indian fabrics (al-'arabiya, presumably specifically for export to Muslim lands, and a type called *badigala*), dates with and without their pits, bracelets (presumably of glass), leather mats, sandals, fish, and male and female goats (Ducatez 2003: 153; also see Smith 1995: 133). A court archival text, or daftar, compiled ca. 692/1293 for the second Rasulid sultan al-Malik al-Muzaffar, also provides detailed lists of commodities shipped from Egypt and from India: Indian prickly ash, pepper, and resin (sandarus) came through Aden and then through Quseir al-Qadim to the Nile valley, as their mention in the slightly earlier Sheikh's House shipping notes attests. Spun thread or yarn, which occurs in the Sheikh's

¹⁵ Aden has never been excavated (aside from an underwater exploration of the harbor itself—see Prados 1994), but it has been the subject of textual studies, and several sites within and around it have been the subject of several surveys, mapping projects, ceramic and glass studies (Doe 1962; 1963; 1971; Harding 1964; Hardy-Guilbert and Rougeulle 1995; King and Tonghini 1996; Arthur Lane and Serjeant 1948; Margariti 2002; Norris and Penhey 1955; Serjeant 1974; Smith 1995; Whitcomb 1988).

¹⁶ It also contains short descriptions and histories of numerous ports and towns in the Hijaz and Yemen.

House excavations but not in shipping notes, flax, saffron, and *mahlab*, a perfumed bark, went via Quseir al-Qadim to Aden and then on to India (Guo 2004: Table 1; Jazm 2003–2005: 478–79; Varisco 2002).¹⁷

Archaeological work at Aden would perhaps reveal a settlement similar to that at Quseir al-Qadim, if much larger, fortified, and with a better harbor (Margariti 2002: 55, 60; Norris and Penhey 1955; Prados 1994: 301, 06). Architecture, while it would reflect local traditions, would undoubtedly provide much room for storage of goods as do the domestic compounds at Quseir al-Qadim. It is clear that the ports of Aden and Quseir al-Qadim trafficked in some of the same goods, and the ceramic and glass assemblage would also be very similar to those of the Sheikh's House and Eastern Area combined, just as it would compare favorably to numerous other sites in the region (cf. Doe 1963; Arthur Lane and Serjeant 1948). In addition, one would expect to find the *galabiyehs* and the blue and white checked or striped linens and plain linens, along with numerous other textile types, and unspun flax. Botanical remains should include all those items found at Quseir al-Qadim and more. All types of shipping containers, including sacking, basketry, and leather bags such as those excavated at Quseir al-Qadim should be in evidence.

The documentary evidence from Aden and the Sheikh's House combined with the archaeological evidence from Quseir al-Qadim illustrate the mechanisms of the Red Sea-Indian Ocean trade under the Ayyubids, and the numerous port cities that had contact with each other. The Ayyubid sultans set up no monopolies on the spice trade, as did their Mamluk successors, but they did make efforts to control and protect trade. This is seen in

¹⁷ This manuscript, entitled *al-Daftar al-Khalifi al-Sultani al-Muzaffari*, is in a private collection in San'a' but has been published by Muhammad Jazim (2003–2005). It contains one of the few known references to the port of Quseir, discussed in Chapter One. I am grateful to Daniel Varisco for allowing me to cite his unpublished paper on the daftar, and for providing the reference to the daftar.

their continued efforts to control the Yemen and the Hijaz, and during their brief rule in Yemen the Ayyubid governor set up a navy at Aden for the protection of merchant ships from pirates (Serjeant 1988b: 63).¹⁸ The Ayyubids also established new customs dues on goods coming in to that port (Smith 1988: 75) and according to textual evidence, built the harbor and the first known *gavsarivyah* in Aden in 571–79/1175–83 (Serjeant 1988a: 164; 1988b: 63).¹⁹ They also built a *dar al-zakah* for the collection of this tax on certain imports, and later a *dar al-wakala* in 625/1228 (Smith 1995: 134; 1996: 209). The Ayyubids likewise built the first *funduq* in Qus in 606/1210 for the use of all merchants (Garcin 1976: 141-42), and Salah al-Din abolished taxes on pilgrims and Yemeni merchants in 572/1176–77 in order to encourage commerce (al-Magrizi 1980: 65), although it is not clear it was enforced (Garcin 1976: 142). The local governors they installed at Qus clearly protected the land routes to the Red Sea ports, including Quseir al-Qadim. Government-appointed *qadis* provided arbitration for issues that arose regarding shipments or sales, and taxes on goods were collected by a tax farmer and sent to the local government. The actual commerce was driven by the private activity of merchants both from the region and farther afield, who formed partnerships to safely transport goods from one place to another. They sent goods camelback in sacks, leather skins, baskets, and sometimes ceramic jars to the port, where they were weighed,

¹⁸ The Fatimids had maintained contacts across the Red Sea with Yemen and the Hijaz, which the Ayyubids were able to retain once they had re-established sunnism in the Yemen, at least at the beginning of their suzerainty. This was strengthened by Upper Egypt's existing ties with the Yemen, which dated from the movement of several Yemeni tribal contingents into the Sa'id during the Muslim conquests (Garcin 1976: 45, 132).

¹⁹ This was the work of the Ayyubid deputy 'Uthman b. 'Ali al-Zinjili from Damascus (Serjeant 1988b: 63). The *qaysariyya* was rebuilt for chemists and perfumers by al-Malik al-Mas'ud, the last Ayyubid ruler in Yemen, between 612/1215 and 626/1228 (Serjeant 1988a: 164).

counted, and stored safely until the arrival of ships, or until they were put on market in the port's suq.

Indian Ocean commerce, despite the dangers of shipwreck, piracy, and high customs dues (e.g., Lewis 1976: 469–70), was conducted with regularity, which must have been one of the sustaining factors for the port towns surviving in the arid Eastern Desert of Egypt. Every year in the monsoon season, Indian ships would arrive in convoy bringing goods from India, China, and other parts of Asia to the coasts of Arabia, beginning at al-Shihr and moving clockwise to Aden and perhaps to Mokha, al-Buq'ah, or Fazah, and then to Jeddah and across the sea to the Egyptian ports (see Figure 1; Ducatez 2003: 140; Serjeant 1988b: 61).²⁰ Seventy to eighty ships would arrive each year in Aden until the end of February, and reports from Jeddah indicate they arrived there between March and May; they did not return to India until the first of August (Meloy 1998: 61; Serjeant 1988a: 164; Smith 1995: 129). On the return trip they would carry Egyptian, Yemeni, and Mediterranean goods, making one or two major stops on the Indian coast (Goitein 1963: 203).²¹

As a consequence of this commerce, sites in the Indian Ocean littoral display a certain similarity of ceramic assemblage (e.g., at at-Tur, Quseir al-Qadim, 'Aydhab, Aden, Shihr, and even farther out at Sohar, Kilwa, Shanga and Mafia, among others)²² or

²⁰ This changed somewhat after 1278 when the Rasulids conquered Zafar east of al-Shihr on the Yemeni coast (see Figure 1). Ships would first arrive at Zafar and then make their way to Shihr and the other ports. Also, under the Rasulids Indian ships were not allowed into the Red Sea, but cargo had to be reloaded on Yemeni ships (Vallet 2005: 289, 92), and in the late thirteenth century Egyptians were not allowed to bring ships to Aden; rather ships of the Rasulid diwan would visit the Egyptian ports (Jazm 1997: 492).

²¹ For other commodities of the Indian Ocean trade, especially those imported by the Chinese, see Wheatley (1959).

²² References for these sites have been given in Chapter Two on the pottery.

at least overlap in certain types, particularly imports from China and India.²³ Chapter Two on Quseir al-Qadim's pottery has emphasized these connections by noting numerous comparanda between the Sheikh's House ceramic assemblage and sites in Yemen, Oman, and East Africa, (most notably in *Yemen 1* Black on Yellow bowls, Chinese porcelain and stoneware bowls and jars, and Indian cooking vessels, but in other glazed wares and Yemeni coarsewares as well) while identifying only one comparable type found in Greater Syria (*Marl 4* underglaze painted ware).²⁴ Settlement organization and building styles also illustrate this common culture of the Red Sea littoral, which can be detailed in

²³ This parallels ceramics in the Mediterranean littoral, which reflect the interactions taking place primarily among the Latin States in Palestine, the Ayyubid domains in Palestine and Syria, Venetian and other Italian trading states, Cyprus, and Byzantium, with connections further afield to other parts of Europe and North Africa. This is vividly illustrated in certain types of ceramics in which similar decorative techniques, such as underglaze slip-painting and incising, are applied to different clays and differently-shaped dishes, employing different motifs depending on the region. Thus a thirteenth century Mediterranean littoral ceramic assemblage is identifiable, especially in excavated sites on the Eastern coast (notably at Alexandria, Caesarea, Akko, al-Mina, and Cypriot sites). This issue was first investigated by Denys Pringle (1986), but his conclusions have been reevaluated and expanded by Stern in her soon to be completed Haifa University Ph.D. dissertation in which she investigates Mediterranean trade as seen in the ceramics, especially at Alexandria, Akko, and Venice. She has noted not only imported glazed table wares but also amphorae and handmade cooking wares and jugs from numerous locales, reflecting the many ways in which ceramics were circulated in the Mediterranean in addition to their being traded as commodities (Stern, personal communication, December 11, 2006).

²⁴ A few other possibly Mediterranean connections are seen in the excavated remains of nuts and possibly fruits, olives, and olive oil either imported from Palestine or Greater Syria or the Fayum. Their quantity and distribution are suggestive of local consumption rather than trans-shipment. The Sheikh's House documents also have only two references to the Mediterranean world, the mention of the great Syrian city of Damascus (*Dimashq*) in one letter and of a merchant from Alexandria in another. The preponderance of connections in the material culture and the texts of the Sheikh's House instead indicate Quseir al-Qadim's Red Sea and Indian Ocean orientation. Thus the Sheikh's House provides further evidence for the separate but linked spheres of Mediterranean trade and Indian Ocean trade seen in the Cairo Geniza documents that are centered on Egypt (e.g., Goitein 1954: 187; Humphreys 1998), with numerous traders participating in both spheres (Friedman and Goitein forthcoming; Goitein 1963). The Sheikh's House evidence further illustrates that the natural division of these spheres is between Upper and Lower Egypt. Their point of connection is the Nile entrepôt of Qus, which received Lower Egyptian and Mediterranean imports from Fustat. While the residents of Quseir al-Qadim were in part supplied with these imported goods, the bulk of the merchandise they sent on Red Sea ships, notably grain, textiles, and dried dates, came from the much closer sources of Upper Egypt.

examples from several Red Sea ports for which we have archaeological and survey evidence.

'Aydhab, in whose shadow Quseir al-Qadim resided, is located about 450 km south of Quseir al-Qadim on the Red Sea and was Egypt's port of primary importance from the eleventh to the fourteenth century. It has been the subject of reconnaissance by several scholars, and a test excavation (Bent 1896; Hobson 1928; Kawatoko 1993b; Murray 1926; Paul 1955). The ceramic assemblage as a whole indicates activity at the site from the eleventh or twelfth to the fifteenth or sixteenth century, with the majority of finds dating to the thirteenth and fourteenth centuries (Kawatoko 1993b). The same is true for the glass corpus, which includes numerous glass bangles (Kawatoko 1993b: 207). The ceramic types, like those at the Sheikh's House, indicate 'Aydhab's numerous regional connections and include numerous sherds of *Yemen 1* Black on Yellow bowls, an Ayyubid-Mamluk *qulla*, and a few Egyptian earthenwares (one fragment of which was dated to the sixteenth century), white porcelains, blue and white porcelains, celadons, and brown-glazed jars (Kawatoko 1993b: 206–07, Fig. 2; Murray 1926).

Andrew Paul noted several rectilinear enclosures with groups of rooms built in the corners or along one or two sides, which in view of Ibn Jubayr's and Ibn Battuta's descriptions of the site as a village of huts he suggested are warehouses rather than dwellings (Paul 1955: 167). The enclosures were built of coral lumps rather than shaped blocks, using mud or lime mortar. Large cisterns lie at the northern and southern ends of the settlement for the benefit of the townsfolk and also the numerous pilgrims who passed through the port. The settlement is also flanked by cemeteries; one burial was excavated in the late nineteenth century (Bent 1896; Kawatoko 1993b: Map 2). A mosque has also been identified on the site (Murray 1926).

Textual evidence indicates 'Aydhab's port was used as early as the ninth century, but no evidence of this has yet been found, rather earliest occupation seems to have begun in the eleventh or twelfth century, as the ceramics and glass show (Kawatoko 1993b; Paul 1955: 65). Magrizi and Qalqashandi say trade had nearly ceased at 'Aydhab before the third quarter of the fourteenth century (Hasan 1967: 79), but it may have continued at least until 1426, at which time it was reportedly destroyed by the Mamluk sultan Baybars after the inhabitants plundered a caravan of goods on their way to Mecca (Paul 1955). Garcin has noted that a mid-fifteenth century terminal date for trade accords well with the Ming porcelain finds on the surface and the absence of 'Aydhab in midfifteenth century European traveler's accounts of the Red Sea (Garcin 1976: 422).²⁵ For example, when the Portuguese Don João de Castro sailed up the Red Sea in the midsixteenth century he attacked both the Sudanese port of Suakin and Quseir al-Qadim (the port of which he described as "the worst in all the coast") on his way to Suez at the north end of the sea. Tur, he observed, was quite pleasant, and he describes Suakin's dealings with Jedda, Cairo, Alexandria, and Ethiopia; his omission of 'Aydhab therefore is glaring and seems to signify that it is past importance as a trading center (Kennedy Cooke 1933: 151, 58–59). It was not, however, abandoned, nor without importance, as it is mentioned towards the end of the fifteenth century in Arabic sources as the field of a Mamluk emir, and as a possible destination for the fleeing son of the *Sharif* of Mecca (Hasan 1967: 82).

Moving to the northern end of the Red Sea, to 'Aydhab's successor in terms of trading dominance of the Egyptian coast, several seasons of excavation at at-Tur and the surrounding sites have produced an understanding of the use of the area since the

²⁵ Garcin revised this argument two years later and stated that the disturbances around 'Aydhab meant the abandonment of that port at the end of the fourteenth century and a subsequent boom in business at Quseir al-Qadim, despite the ceramic evidence (Garcin 1978: 311).

Byzantine period, and it is instructive for understanding Quseir al-Qadim.²⁶ The fortress at Raya, built in the sixth century and used to the twelfth century, is like a walled village, containing streets, residential neighborhoods, and a mosque (Kawatoko 2003; 2005a). As noted throughout Chapter One, materials and methods of construction for the Fatimid town closely match those at Ayyubid Quseir al-Qadim, especially at the Sheikh's House and the Merchants' Houses (see especially Kawatoko 2003: 2–3). The buildings are orthogonal, built of local materials such as coral block, local stone, and mud brick, employ wooden thresholds and stair treads, and are roofed with reeds, mud, and wood.

The sudden abandonment of the fortress in the twelfth century (perhaps due to the growth of coral reefs) simply meant the relocation of the port further up the coast, analogous with the relocation of Quseir to the modern site in the late fifteenth or early sixteenth century.²⁷ At al-Kilani, now part of the modern city of at-Tur, ceramic remains demonstrate some sort of occupation in the twelfth and thirteenth centuries, but no corresponding architecture has been located (Kawatoko 2004a). Surveys and test excavations indicate three main phases of occupation: fourteenth–sixteenth centuries (residential), sixteenth–eighteenth centuries (also residential), and eighteenth–twentieth centuries (public buildings, Kawatoko 2005b: 853). It is significant that the period that is least represented at at-Tur is the period of Quseir al-Qadim's flourit, in the thirteenth and early fourteenth centuries. Thus the archaeological evidence supports the textual evidence of 'Aydhab's primary importance and Quseir al-Qadim's secondary importance for Egypt

²⁶ In the sixth century AD the monastery of Wadi at-Tur, an outpost of St. Catherine's Monastery in the Sinai, was founded, along with a fortress and a port town at Raya south of modern at-Tur down the coast in order to supply both monasteries (Kawatoko 1995: 51; 1996: 67; 2004a; 2004b; 2005b: 849, 51).

²⁷ It appears that ar-Raya was not completely abandoned at this time, but probably used when wind and tides permitted (Kawatoko 2004a).

in the Ayyubid period and the beginning of the Mamluk period, both being replaced by at-Tur in the late fourteenth century (e.g., al-Qalqashandi 1964: vol. 3, p. 464–65).²⁸

In Athar on the Tihama coast of Yemen, Quseir al-Qadim perhaps finds its closest correlate, as it contains buildings of both the types found at Quseir al-Qadim: formal constructions of coral block, mud brick, and local sandstone, but also a neighborhood of *barasti* huts. The ruins of Athar are spread over a large area of *sebakh* and sand dunes, with the main area of occupation, Area B, built in the *sebakh*. This area is approximately 800 x 300 m and is comprised of structures built of partly shaped coral block, fired bricks, and *libn*. Two of these were excavated and interpreted as merchant quarters and the suq area because of the large quantities of Chinese porcelain found in the smaller of the two buildings (Zarins and Zahrani 1985: 74–75).²⁹

Area F is a neighborhood of *barasti* construction built on sand dunes, which left a dense concentration of material remains on the surface, but only to a depth of 20 cm. Areas G and C also produced remains of ephemeral occupation, most likely in circular huts like those in current use (Zarins 1989: 246; Zarins and Zahrani 1985: 73). The modern huts are built of stripped wooden poles, rope, and mud and dung plaster, without the benefit of low mudbrick walls like those in Quseir al-Qadim's Eastern Area (Zarins and Zahrani 1985: 71–72). The excavators suggest it is possible that this occupation post-dates the main use of the port, as Yaqut details several small settlements near Athar along the coast and inland. Since he is writing after the reputed collapse of the port in the

²⁸ Donald Whitcomb collected surface samples from the al-Kilani site as part of a survey of Egyptian ports in 1983 and found some overlap with ceramics from the Eastern Area of Quseir al-Qadim, also confirming the rise of at-Tur in the fourteenth century and its replacement of Quseir in terms of importance (personal communication, March 7, 2007).

²⁹ Other similarly-built houses and a possible mosque, all 'Abbasid in date, have also been excavated (Zarins and Zahrani 1985: 72–74, Pls. 70, 75:1, 15).

eleventh century, the *barasti* ruins may be the remains of one of these later villages (Zarins and Zahrani 1985: 71–72). On the other hand, Areas F and G contained fair amounts of bowls decorated with sgraffiato and dated to the tenth century based on comparisons with Siraf, which is during the port's heyday (Zarins and Zahrani 1985: 70, 77–78). Thus it seems likely that the informal and formal structures were both part of the port town in the Fatimid period.

We can now generalize from the medieval descriptions of these ports, compared with their excavated remains, to define a culture of the Red Sea that goes beyond the Ayyubid and Mamluk periods. The brief exploration of some of Quseir al-Qadim's sister ports illustrates a cultural continuity present not only in ceramic assemblages of Red Sea and Indian Ocean sites, but in architectural traditions of the Red Sea littoral, from at least the tenth century to the fourteenth, but likely beyond these dates. One architectural tradition is the use of *barasti* or *'arish* huts at Athar in the tenth century, described in 'Aydhab of the thirteenth and fourteenth centuries (but likely used in all periods of occupation), and in the Eastern Area at Quseir al-Qadim in the fourteenth century. Multiperiod parallels are found at al-Mataf/Julfar in Oman in the fourteenth century and later (King 2001: 90), at Shihr on the south Yemeni coast in the thirteenth and early fourteenth century (Hardy-Guilbert 2005: 71),³⁰ at Sharjah south of Athar in the Tihama plain, possibly dating to the fourteenth century,³¹ at modern Athar (Zarins 1989: 246), and at

³⁰ These palm-frond huts of Phase 5 replace Phase 3 (eleventh century) large mudbrick buildings faced with stone, which were destroyed in Phase 4 (twelfth century). The huts show evidence of numerous rebuilds, and are in association with several pits and ovens containing remains of ashes and fish. Ceramics include mustard ware (or Black on Yellow ware), "late sgraffiato," and Longquan celadon all dated to the thirteenth century. In the next phase of occupation the huts were replaced with mud brick and stone houses, used from the beginning of the fifteenth to the sixteenth century.

³¹ The ceramic assemblage at Sharjah seems to have many of the same wares as those found in the Eastern Area at Quseir al-Qadim, such as paddle-stamped wares, red wares with orange slip and purple

numerous sites around the Gulf and the coasts of Arabia even to the mid-twentieth century (Costa 2002; King 2001: 85–86).³² While the Athar neighborhoods seem rather ephemeral, the Eastern Area of Quseir al-Qadim showed continuous occupation, even rebuilding and reorganization of space over time.³³ The evidence of 'Aydhab, although it requires excavation to be certain of sequence and dating, seems to show use of this technique for domestic structures concurrently with the use of sturdier coral-block structures for storage of goods, which has not yet been documented at Athar or Quseir al-Qadim.

The second architectural technique is the erection of orthogonal structures using the local building materials of coral block, limestone, and mudbrick, roofed with wood, matting, reeds, and mud, and having wooden doorsills and wooden treads. This is used in the Sheikh's House and the Merchants' Houses in central Quseir al-Qadim, and as noted in Chapter One, also at at-Tur in the Sinai peninsula (ninth to eleventh century AD, Kawatoko 2003: 2–3, Pls. 8–9, 26:3, 5). It has inland connections to the Fatimid houses in Fustat C and the Fustat Mahra quarter in terms of building materials, orthogonal designs, and wooden doorsills (Kawatoko 2005b: Fig. 2; Kubiak and Scanlon 1989: 11–

paint, mustard wares, and Tihama blue glazed bowls (for the painted wares, cf. Whitcomb and Johnson 1982b: Pl. 41; Zarins and al-Badr 1986: 57).

³² The longevity of this type of building in the Batinah of Oman is attributed to its eminent suitability for coastal climates when defensibility is not a concern (Costa 2002: 77). Some examples from the Gulf and Arabian coasts date as early as the late Stone Age (King 2001: 85).

³³ Leo Africanus' description of Quseir al-Qadim in the early sixteenth century, while not likely first-hand and therefore somewhat suspect, is nevertheless interesting in this light. Referring to the place that is now the modern town, it depicts a village of huts on the beach, the occupants of which are engaged in trade and fishing (Africanus 1979: 615).

In Early Islamic East Africa, timber structures were precursors to stone buildings at Shanga (e.g., the seventh to ninth century timber mosques and adjacent building, Horton 1991; 1996) and Manda (e.g., the pre-tenth century timber structures, Chittick 1984), but may not be considered parallels to timber, reed, and mud domestic structures.

31, Plan I; Sakurai and Kawatoko 1992: Pl. II-3-1), and also to the Fatimid houses of Qus (Whitcomb 1997).

Thus two cultural traditions are detectable at Quseir al-Qadim in the archaeological evidence. The decision to build using one technique or the other is not random but rather reflects the traditional habitations of two populations. For example, wood and reed huts are evidently the choice of a population whose normal habitat is the coast, whether in Egypt or Arabia. The use of stone, coral block, and mud brick to build orthogonal structures indicates the presence of urban populations who have moved to the coast but build using traditional inland plans and techniques with locally available material. Thus central Quseir al-Qadim can be seen as an inland town in a coastal location, and part of an urban building tradition traceable from the previous Fatimid period at Qus and Fustat, and also seen at-Tur. When its residents moved back to the Nile Valley, a new population moved in from elsewhere on the coast and built the Eastern Area, a new port village very similar to contemporaneous 'Aydhab further south. This *barasti* tradition was likewise ancient, having been used four centuries earlier at Athar, and known earlier.

At present this interpretation can only be a hypothesis, however, and reflects absence of evidence for thirteenth and fourteenth century *barasti* settlements in inland Egypt. Nevertheless it fits rather neatly into the history of Upper Egypt. Upon the transition to Mamluk rule this region was thrown into chaos, when the Beni Kanz, a local *qaysi* tribe (originally from western Arabia) revolted in 650/1252–53, taking advantage of another Frankish siege of Damietta in 1250 and the death of the last Ayyubid sultan, as noted by Ibn Khaldun (Garcin 1976: 183–85, 372–79). Revolts like this, along with skirmishes between *qaysi* and Yemeni tribes, only intensified in the following decades, into the early fourteenth century, bringing massive Mamluk military operations into the

Sa'id to quell them, and disrupting the eastern desert routes to 'Aydhab and no doubt also to Quseir al-Qadim (Garcin 1976: 372-79). Because of the government's reliance on nomadic or semi-nomadic tribes (which made up a large portion of the Sa'id's population, see Garcin 1976: 372-73) to police trade and pilgrimage routes, traffic to Quseir al-Qadim may have been suspended for a time even though the revolt was not in the immediate vicinity of Qus or Quseir al-Qadim. This may have resulted in a temporary suspension of occupation at Quseir al-Qadim, as settlers from the Nile Valley moved back to the safety of their home towns. Even as the Mamluks gradually regained some control over Upper Egypt and the loci of trade there and in Nubia, despite many further revolts, there may have been little incentive for inlanders to return to the shore. If this hypothesis is correct, it would explain the perceived gap between the end of occupation at the Sheikh's House and the beginning of occupation in the Eastern Area found in the ceramic evidence; it remains to be seen whether this gap can be detected in the material from the excavations of the other Ayyubid areas in central Quseir al-Qadim when compared with the Eastern Area, and awaits full publication of the ceramics from the University of Southampton's excavations.

CHAPTER SIX

CONCLUSIONS

A. **Resume of Methodology**

This study has been a successful experiment in methodologies available to historical archaeology. Throughout this work I have followed Donald Whitcomb's tripartite system for using textual and material evidence. Beginning at the secondary relationship accorded between text and artifact, which uses the read contents of the texts to generalize about the history and activities at the site, I have employed many of the methodologies outlined by Anders Andrén. These methodologies are strategies he proposes using to avoid historical archaeology being seen as redundant and producing the same information that could be derived from texts. I have described and interpreted the Sheikh's House at Quseir al-Qadim using as many identifications, correlations, and associations as possible and appropriate between the Sheikh's House texts and the remainder of the material remains to produce new contexts and new information. For the most part the approaches most appropriate to the material at hand seemed to be *identification* and *contrast*, with *correlation* used in a final integration of all artifact and textual categories.

Beginning with a discussion of the excavation of the Sheikh's House that incorporated its architecture as well as stratigraphy, my interpretation was already informed by Guo's editions, translations, and interpretations of the Sheikh's House documents, as well as by comparison with outside texts such as the Cairo Geniza letters, and excavations of similar sites, such as at-Tur. Following the initial excavators, for example, I identified certain rooms as storerooms in the house, first in recognition of patterns in architecture and material remains, and then in response to Sheikh's House documents' references to *shunas*, or storerooms. I could also correlate the *shunas* with the oft-repeated request to "put it in a safe place" that occurs in several of the Sheikh's House shipping notes.

Examining several categories of artifact individually, I undertook both a broad comparison of artifacts, individually or as a class, with other archaeological evidence, and the method of textual identification, trying to determine whether objects excavated from the Sheikh's House were the same as certain named objects in the shipping notes and accounts. For example, examination of the ceramic corpus at the Sheikh's House (Chapter Two) began with a culling of the excavated documents for mentions of ceramic vessels and terms used for them, and for goods that would likely have been carried to the site or stored in ceramic vessels. It was demonstrated that although there are several mentions of ceramics collectively as commodities and also as containers (such as *barniya*, bottles of lighting oil), it was not possible to clearly identify sherds found at the site with these named objects. Among several mentions of ceramics either generally or specifically, only *jarra*, jars, were readily identifiable in numerous forms and sizes at the Sheikh's House. The wide variety of vessel types, such as dishes, bowls, basins, kegs, jars, spouted jugs, water jars, cooking pots, lids, and lamps, were not referred to in the texts.

Going outside the texts to archaeological comparanda then revealed connections between the Sheikh's House and numerous contemporaneous and nearly contemporaneous sites in Egypt, on the Red Sea coasts, in East Africa, in Yemen, in Oman, and to sites in Syria and Palestine on the basis of individual sherds, ware types, fabrics or fabric groups, and the corpus as a whole. No corpus was exactly like that at the Sheikh's House, since there are significant differences with Egyptian sites having a Mediterranean orientation like Fustat and Alexandria, and with Yemeni and East African sites, which naturally have much higher percentages of locally-made wares. 'Aydhab would be the site most likely to have a nearly identical corpus (with perhaps a higher percentage of East African wares), and descriptions of surface scatter indeed indicate several wares are in common with those at Quseir al-Qadim. Athar's corpus can perhaps be viewed as the predecessor to the corpus at the Sheikh's House, albeit with higher percentages of Yemeni wares, which is in turn the predecessor to the corpus of the Eastern Area and also at-Tur in the Sinai, but with the addition of Mediterranean wares. This points to the contrast between the Sheikh's House documents, which do not mention the origin of ceramics (although they do indicate some were shipped from the Nile Valley), and the objects, which indicate connections with places not named in the texts.

One item of the glass corpus (Chapter Three) could be identified with the one mentioned glass item, a sprinkler bottle, so the more pertinent examination of this class of objects was again to seek the contrast between objects and texts that reveals much more information. For example, the glass, like the pottery, has quite far-ranging parallels from East Africa to Yemen, and in the Persian Gulf. It is unusual, however, in including several types that are ordinarily dated as early as the eighth century AD, and thus provides clarification of the thirteenth century Red Sea littoral glass assemblage. Specific characterizations of the thirteenth century corpus derived from the Sheikh's House assemblage in comparison with that of the Eastern Area are the infrequency of marvering or enameling for decoration, techniques which were entirely absent from this corpus, and the paucity of glass bracelets, which when present is of the simple triangular type of dark, opaque glass. The single example found at the Sheikh's House may have been imported from Aden, where surface finds have produced evidence of a glass factory and bangles of this type. By contrast, both bracelets and marvering occur much more frequently in the Eastern Area glass assemblage.

Macro-organics (Chapter Three) were discussed with reference to the foodstuffs in the Sheikh's House letters, and only a few identifications could be made with the items there named. Perhaps due to the collection methods employed during the 1982 season, which did not include flotation, very small plant remains that would have identified many more types of edibles were not recovered. This is perhaps enough to explain the discrepancy between the long list of food items of the documents and the relatively short list of food items recovered. This also explains the lack of grain remains excavated from the Sheikh's House, which was only noticed when it collected together in corners or pockets. The documents indicate large quantities of grain were stored in the shunas, but this cannot be correlated with the archaeology. Dried dates, however, are an item that also appear in the documents as a commodity to be shipped, and their pits occur in large quantities in the excavations. An analysis of their distribution clearly illustrates the differences between storage areas and living spaces in the Sheikh's House (Table 1). This is the case for the avian faunal remains as well (Chapter Three), which despite being in secondary deposition, occurred in the domestic areas rather than storage, part of the pattern of material deposition that had enabled the identification of the *shunas*.

The study of the textiles (Chapter Three) proved to be significant. For example, four textile commodities named in the shipping notes are identifiable with the material remains: *jalalib* (garments like modern *galabiyehs*), *kattan* (flax), *qutn* (cotton), and *tariz* (sing. *tiraz*, embroidered cloth). *Classifications* could be hypothesized between the Sheikh's House textile corpus, the list of textiles compiled from the Sheikh's House shipping notes, and a list of textile commodities taxed at Aden but having been

manufactured at Qus. The corpus was then compared with other excavated assemblages and found to be quite similar to the few textile assemblages excavated from contemporaneous sites in the Red Sea littoral and Palestine. Together these assemblages illustrate a distinctly Islamic fashion of dress, the *jalabiyeh* (pl. *jalalib*), that was slow to become the norm in Egypt. Blue checked and striped fabrics were apparently popular in the thirteenth century as well. Textiles of all types, including numerous unsewn garments (such as shawls and wraps) appear frequently in the shipping notes, and occur in such quantities in the Sheikh's House, in all areas, that it can be little doubted they were a major item of export. More corroborative evidence is seen in the mention of various types of textiles from Qus (including the same garments occurring in the Sheikh's House documents), which occur in a list of taxed items coming through the port at Aden. The export of Egyptian textiles, particularly flax, is well known thanks to Robert Serjeant's studies of textual sources, and the Cairo Geniza documents provide more detailed information on the interior workings of the flax trade within Egypt. Archaeological assemblages of textiles to do with this trade are extremely rare, however, highlighting the importance of the Sheikh's House assemblage.

The chapter concerning the Sheikh's House texts proceeded as with the other artifact categories. Thus the methodology turned to Whitcomb's primary degree of relationship between text and artifact, which is to analyze them as objects. The first stage of this was to analyze the distribution of texts over the site, and determine the meaning or meanings of the pattern, both including and omitting the read contents of the distribution. To omit the readings was to learn something about erosion patterns and perhaps intensity of usage of different parts of the complex. To include the meanings was to consider how certain individuals used the space, and whether that changed over time. The second stage entailed a detailed recounting of the context of each document or group of documents, making any and all possible identifications between their read contents and the other objects in the same or nearby context. Once reinserted into their stratigraphy, the third stage was accomplished using what Andrén would refer to as *correlation*. The textual narrative of the Sheikh's House was ordered according to its archaeological phasing and patterns were sought between the textual meanings and the archaeological meanings by phase. In this effort the entire assemblage was used at once, drawing on the building remains, artifacts, and deposition of material to create a new narrative. This integrated narrative gave new meanings to the phases of use and modification of the buildings, suggesting motivations for actions recorded in the archaeology. Likewise the archaeology gave new meanings to the world described in the texts and ruled out certain interpretations. For example, it was shown that the father and son had run separate operations from the beginning, rather than a single business together that had eventually experienced a split. It also suggested that an improvement in business, seen in an increased number of named associates and clients, led to expansion of the storage space, with additional *shunas* being built over time.

The final step in the study of the Sheikh's House perhaps falls under Andrén's method of *association*, "trying to open an object of study to as many connections as possible" (1998: 168). The study of each artifact category includes numerous comparisons with other archaeological sites and making correspondences with exterior texts. These numerous connections collectively begin to reveal the way Quseir al-Qadim interacted with its surroundings and with other towns, which leads to an understanding of how it functioned within Egypt and within the Red Sea littoral (Chapter Five). For example, the fate of the town is bound up with the fate of Qus on the Nile, which had become prosperous under the Fatimids and well able to support a satellite port on the Red Sea by the end of that period or the beginning of Ayyubid rule, when circumstances

created a need for an additional Egyptian port. The strong government in Qus, Upper Egypt's capital, provided safety for the overland routes through deals with the desert tribes, and *qadis* and *walis* to regulate commerce. Its own wealthy merchants probably provided Quseir al-Qadim with its populace and arranged for provisions of food and water. The long-distance trade that had already been making its way through upper Egypt via 'Aydhab, Suakin, Aswan, and Qus, made its way to Quseir al-Qadim as well, and the Red Sea port became linked to Aden, the prosperous entrepôt of Indian Ocean trade in the Yemen so coveted by the Ayyubids that brought Indian and Chinese goods to the ports of the Red Sea.

Because of these connections, despite its reliance on the Nile Valley Quseir al-Qadim bears strong resemblances to other ports on the shores of the Red Sea, whether contemporaneous or from previous or later periods, whether on the Egyptian or Yemeni side. This is most recognizable in the small items of material culture, notably the durable pottery and glass. Similarities in building technique and style are unmistakable as well, however, and indicate that ports were operated by distinct populations, either habitually coastal, who built structures of mud and reeds, or habitually inland, who built houses of inland plan with mud brick and other locally available materials, such as stone and coral.

As the examples enumerated at the beginning of Chapter Four illustrate, too often excavated texts are simply handed over to epigraphers, and there is little attempt at synthesis of the different types of information that can be derived from archaeological and epigraphic modes of analysis, or of exploration of why the data they provide may seem to contradict each other.¹ Yet texts that are artifacts present an opportunity for a

¹ Martin Carver, in discussing the archaeology of any site that is also available for historical study, admonishes that even if a difference can be discerned between the methodologies of historians and archaeologist, this ought not to constitute "a divide between disciplines or between theory; just two

team of scholars to use textual evidence and archaeological evidence together in a way impossible with exterior texts, owing to the uniquely close relationship between text and material culture. In the ideal cooperative effort, while the archaeologist is largely dependent upon the epigrapher's interpretation of the texts, the epigrapher can also question the archaeologist in order to aid his interpretations of terminology in the texts. Thus the two lines of evidence are never entirely separate, but are interdependent interpretations.

This is the case for Quseir al-Qadim. I have relied upon Li Guo's editions, translations, and analyses of the texts to aid my understanding of the Sheikh's House and also the site of Quseir al-Qadim. He had already incorporated information from conversations with the excavator so that the texts could be best understood and contextualized. Circularity is avoided by integrating external comparative data from other archaeological sites and texts of the period into the analyses. My use of the texts has thus begun with Whitcomb's secondary stage in the use of archaeological texts, treating them as external documents and using their read contents to understand the "history" of the Sheikh's House. The texts are treated as parallel lines of evidence against the artifact assemblage. This is accomplished by testing the information gleaned from each architectural or artifact category against the contents of the texts for correlations, correspondences, and contrasts. Armed with this information, the associations between each text and its archaeological context are then explored with all possible connections named. Finally all the new information derived from these associations is brought

consecutive stages of the same project" (2002: 488). Barbara Little echoes this sentiment in her argument for a methodological framework to teach archaeologists how to use both kinds of information (1992: 1). Andrén argues that it matters little whether the dialogue between texts and artifacts is done by an individual or group, as long as it is attempted (1998: 181).

together to correlate changes in space over time perceived in the archaeology of the Sheikh's House with changes in the internal "world" of the documents.

B. Resume of the Archaeological and Textual Narrative

This exploration of the archaeology of the Sheikh's House at Quseir al-Qadim has demonstrated the importance of the Sheikh's House, and indeed the entire site, for understanding Ayyubid and Mamluk Red sea ports and their place in the local and Indian Ocean trade that is so important in these periods. It has revealed that when the Ayyubid government retained control of Upper Egypt, merchants, brokers, and others from the Nile Valley were encouraged to move to the Red Sea shore and build a town like those they knew inland, in style, technique, and types of buildings such as houses and shops. They could rely on the government to protect the routes between Qus, their main supplier in the Nile Valley, and the Red Sea, and to appoint a *wali* and *qadi* to ensure lawful business practices. From Qus, which was a Nile Valley entrepôt, the brokers and merchants at Quseir al-Qadim could get not only the produce of the region, but also the products of the Fayum, Mediterranean imports of various fruits and nuts, and other household items such as grindstones or wooden furniture.

The shipping notes they left behind indicate that the merchants at Quseir al-Qadim were primarily involved in shipping grain to the Hijaz, but were also concerned with transporting pilgrims there, and with exporting textiles and other goods that they had ordered from the Nile Valley. The excavations indicate that textiles were a major portion of the business at the Sheikh's House, with nearly twice as many remains found in the storerooms as in the domestic areas. The textiles that arrived at Quseir al-Qadim were most likely loaded onto ships bound for Yemen, as a fifteenth-century list of items taxed at Aden includes numerous textiles made in Qus, several types of which are named in the Quseir al-Qadim shipping notes. "Aden" also appears in an otherwise indecipherable text from the Sheikh's House. Other links with the Yemen are both material and textual. Material links are the several ceramic types manufactured in Yemen, as well as Chinese porcelains that must have first come through the entrepôt of Aden at the end of their journey across the Indian Ocean. These are found among the domestic debris at the Sheikh's House, but the paucity of Chinese sherds may indicate they were too high value to be used locally, and most were sent on to Qus and beyond. The larger quantities of Yemeni ceramic vessels indicate their popularity for domestic use at the Sheikh's House. Resist-dyed textiles, most likely made in India, and Indian-made cooking pots are further evidence of Yemeni ships anchoring off Quseir al-Qadim, as Yaqut notes.

The archaeology of the Sheikh's House and Li Guo's study of the Sheikh's House texts have been combined in an integrative approach that stratifies the documents and reads them against the archaeology. The generalized portrait of business dealings and family life gleaned from all the texts in each phase or sub-phase were compared with the reconstruction of the Sheikh's House for that phase. This produced a diachronic portrait of a father (Abu Mufarrij) and son (Ibrahim Abu Ishaq), each with his own brokerage business, coming to the Red Sea and beginning to take on shipments from the Nile Valley. They appear to be experienced in this business and have contacts and clients already in place. They build a house together at Quseir al-Qadim that is perhaps like the one they left behind in Qift. It includes storage space, and it appears that the son and his family live in one room attached to the father's house, or alternatively the families share the same domestic space and father and son use the son's attached room as a kind of office. A second archaeological phase shows that Ibrahim's room was expanded to a three-room house, with built-in furniture and a staircase to the roof. The long storeroom east of Abu Mufarrij's house was subdivided and two extra storerooms were added to the

complex. There is no real change in the businesses traceable in the letters, aside from the first vague mention of a foreign shipping contact to the south, but it is possible that the expansion of storerooms signifies an increase in business. Another subphase, which in the archaeological evidence is signaled by repairs to walls and floors in both houses and further expansion of storage space, is accompanied by a great many more documents and a great many more named clients and more named foreign places, including the Yemen and Damascus. At this time it seems numerous Quseiri residents are using Abu Mufarrij's storerooms as a locus of their own business; it has become a kind of hub for local brokers. It is also a postal destination for the local *qadi* and others.

When many of the local population of Upper Egypt revolted against the government upon the death of the last Ayyubid sultan, the merchants and brokers on the Red Sea shore lost their protection on the overland routes to the Nile Valley. They eventually found it impossible to receive regular shipments of goods, including provisions for their families, from Qus and the other Nile Valley towns. Ibrahim seems to have taken his widowed mother and the remainder of the family and returned to the Nile Valley, and it is likely that many or most of the town residents followed suit. A short while later a new population, with the knowledge that ships from Aden would be arriving soon, built a new village concentrated to the east on the beach, and continued the port activities largely as before.

The harsh, uninviting climate of the Red Sea coast, with its lack of water, dearth of vegetation, and strong north winds, has been the invisible character in this story. It has allowed occupation here only when the inland routes can be well protected so that provisions can be regularly brought to the shore. Yet the same unrelenting aridity that made life here so precarious has preserved many of its most delicate remnants. Thus food remains of seed, rind, and bone, and household items and merchandise of wood, textile, leather, reeds, and basketry, along with the more durable goods, can each tell stories not only of survival, but of lively commerce. Even the paper documents remain, preserving the mundane but vital transactions of regular deliveries of grain, textiles, food, and some exotic merchandise. The texts have perhaps most importantly introduced us to the people who inhabited this house and its village, as they reveal not only details of shipping, storing, and paying for goods, but also a rich social life of friendships and family relationships in the greetings they send to each other, the prayers they offer on behalf of one another, and the amulets they use for the protection of themselves and loved ones. The dry climate has also kept intact the predominantly mud-brick house and together with all the artifacts and strata within, allowed its division of space and phases of use to be understood. Reading the physical changes in the house and the artifacts through time alongside the texts has yielded a portrait of this family and this place that is both intimate and general, applicable to the many others making a living on the shores of the Red Sea in the thirteenth century and beyond.

APPENDIX A

LOCUS TABLES

Table 7. Locus List

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
J9d-1	J9d-8, J10c-4, J10c-14	Surface debris: wind-blown sand	Shuna E	0.5	
J9d-2	J9d-3	Wind-blown debris	Area A and Corridor D	0.4	
J9d-3	J9d-2	Wind-blown debris to bedrock	Corridor D	0.3	IIb
J9d-4	K9db-41, K9b-48	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	0.5	IIb
J9d-6	J9d-10, J10a-6, J10c-1	Surface debris: sand and gravel	Shuna C	0.04	—
J9d-7	J10c-13	Mud brick wall collapse and sand, to bedrock	Shuna C	0.5	IIa
J9d-8	J9d-1, J10c-4, J10c-14	Surface debris: wind-blown sand	Shuna E	1.1	—
J9d-9		Debris in door threshold	Shuna E	0.6	IIb
J9d-10	J9d-6, J10a-6, J10c-1	Surface debris: sand and gravel	Shuna C	4.6	
J9d-11	J10a-1	Surface debris: sand and gravel	Area A	1.5	—
J9d-12	J10a-8, J10a-9	Trash pit with organic and inorganic debris (western part)	Shuna C	0.04	IIb
J9d-13	_	Surface debris	Exterior of N House, north of Wall G	2.6	_
J9d-14	J9d-2, J9d-4	Debris in doorway	N House, Rm C	0.1	IIb
J10a-1	J9d-11	Surface debris: sand and gravel	Area A	1.0	—

Table 7. Locus List, continued

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
J10a-2	J10c-2	Surface debris: trash in open courtyard	Shuna B	2.0	
J10a-3	—	Test trench against N side of Wall A	Area A	0.5	IIb
J10a-4	_	Extension of J10a-3	Area A	1.8	IIb
J10a-5	_	Organic material on floor and under Wall A	Shuna B	2.4	IIb
J10a-6	J9d-6, J9d-10, J10c-1	Surface debris: sand and gravel	Shuna C	3.8	_
J10a-7	J10c-7	Organic material on floor and under Wall A	Shuna B	2.0	IIb
J10a-8	J9d-12	Trash pit with organic and inorganic debris (eastern part)	Shuna C	0.9	IIb
J10a-9	J9d-12	Trash pit with organic and inorganic debris (eastern part)	Shuna C	0.03	IIb
J10c-1	J9d-6, J9d-10, J10a-6	Surface debris: sand and gravel	Shuna C	3.6	—
J10c-2	J10a-2	Surface debris: trash in open courtyard	Shuna B	2.8	
J10c-3	J10c-16	Surface debris: wind-blown sand, bricky material	Shuna D	0.9	—
J10c-4	J9d-1, J9d-8, J10c-14	Surface debris: wind-blown sand	Shuna E	0.05	
J10c-5	—	Caliche and stony material	Shuna D	0.3	IIb
J10c-6		Organic material: uppermost pit refuse	Shuna D	1.9	IIb
J10c-7		Rocky organic material: middle layer of pit refuse	Shuna D	0.4	IIb
J10c-8	J10c-10	Laminations of matting and sand	Shuna B	2.0	IIb
J10c-9	J10c-10	Laminations of matting and sand to clean sand layer	Shuna B	0.4	IIb
J10c-10	J10c-8, J10c-9	Test trench: Laminations of matting and sand to clean sand, almost to bedrock	Shuna B	3.3	IIb
J10c-11		Sand and matting to bedrock	Shuna E	0.4	IIb

Table 7. Locus List, continued

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
J10c-12		Soft organic material: lowest layer of pit refuse	Shuna D	1.3	IIb
J10c-13	J9d-7	Rocky mud brick wall collapse and sand, to bedrock	Shuna C	0.04	IIa
J10c-14	J9d-1, J9d- 8, J10c-4	Surface debris: wind-blown sand	Shuna E	1.9	
J10c-15	K10a-9	Mud brick wall collapse onto plaster floor	<i>Shuna</i> F	0.3	IIb
J10c-16	J10c-3	Surface debris: wind-blown sand, bricky material	Shuna D	1.2	
J10c-17		Sand, matting, and fiber on floor	Shuna E	2.4	IIb
J10c-18	—	Test trench under surface of J10c-18: sand and matting (constructional fill)	<i>Shuna</i> E	4.3	IIa
J10c-19	J10c-20	Constructional fill under plaster surface of J10c-15	<i>Shuna</i> F	1.2	Ι
J10c-20	J10c-19	Test trench: constructional fill under plaster surface of J10c-15	<i>Shuna</i> F	0.6	Ι
K9b-1		Surface debris	S House, Rm A	Unk. ^a	_
K9b-2	—	Organic debris: woven matting and wooden frame	S House, Rm A	Unk.	IIb
K9b-3	—	Mud brick wall collapse	S House, Rm A	Unk.	IIb
K9b-4	—	Mud brick wall collapse and ceiling fall onto floor	S House, Rm A	Unk.	IIb
K9b-5	_	Test trench: Mud brick wall collapse and ceiling fall to floor K9b-9	S House, Rm A	Unk.	IIb
K9b-6	—	Test trench down to bedrock	S House, Rm A	Unk.	—
K9b-7	—	Cleaning of Locus K9b-4	S House, Rm A	Unk.	IIb
K9b-8	—	Hearth on floor K9b-9	S House, Rm A	Unk.	IIb
K9b-9		Latest floor (earthen)	S House, Rm A	Unk.	IIb

^a Data is unavailable for the quantities marked "unk." (unknown).

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
K9b-10		Sand and brick wall fall	S House, Rm A	Unk.	IIa
K9b-12		Sand and brick wall fall	S House, Rm A	Unk.	IIa
K9b-13		Sand and brick wall fall	S House, Rm A	Unk.	IIa
K9b-14		Sand and brick wall fall	S House, Rm A	Unk.	IIa
K9b-15		Debris/fill under level of Floor K9b-21, on bedrock	S House, Rm A	Unk.	Ι
K9b-16	K9b-18	Mud brick wall collapse and ceiling fall onto floor K9b-9	S House, Rm A	Unk.	IIb
K9b-17	—	Surface debris: mud brick wall collapse and ceiling fall onto hearth	S House, Rm A	Unk.	IIb
K9b-18	K9b-16	Sand and brick wall fall down to level of floor K9b-9	S House, Rm A	Unk.	IIb
K9b-19	K9b-20	Sand and brick wall fall under floor K9b-9	S House, Rm A	Unk.	IIa
K9b-20	K9b-19	Sand and brick wall fall under floor K9b-9	S House, Rm A	Unk.	IIa
K9b-21		Earliest floor	S House, Rm A	Unk.	Ι
K9b-22		Constructional fill for floor K9b-21	S House, Rm A	Unk.	Ι
K9b-23		Constructional fill for floor K9b-21	S House, Rm A	Unk.	Ι
K9b-24	K9b-30, K10a-27	Surface debris: mud brick wall tumble, reeds	S House, Rms A, B, C	0.3	—
K9b-25	K9b-31, K10a-27	Mud brick wall and ceiling collapse: mats, wooden poles	S House, Rm C	0.9	IIb
K9b-26	_	Lens of palm fronds from ceiling collapse	S House, Rm C	0	IIb
K9b-27	K9b-32, K10a-27	Mud brick wall and ceiling collapse onto earthen surface	S House, Rm C	0.1	IIb
K9b-28	K9b-43, K9d-1	Mud brick wall and ceiling collapse on earthen surface	S House, Rm B	0.5	IIb
K9b-29		Surface layer: caliche and mud brick collapse	N House, Rms A, B, C	0.9	_
K9b-30	K9b-24, K10a-27	Surface debris: mud brick wall and ceiling collapse	S House, Rm C	0.3	_
K9b-31	K10a-27	Lens of palm fronds from ceiling collapse	S House, Rm C	0.03	IIb

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
K9b-32	K9b-27, K10a-27	Mud brick wall and ceiling collapse onto earthen surface of K9b-27	S House, Rm C	0.6	IIb
K9b-33	—	Level caliche on top of mud brick wall collapse	N House, Rm B	0.4	IIb
K9b-34	—	Mud brick, stone, and caliche: collapse of staircase	N House, Rm B	1.9	IIb
K9b-35		Brick fall	N House, Rm B	0.2	IIb
K9b-36	—	Fine bricky debris on earthen and plaster floor	N House, Rm B	4.0	IIb
K9b-37	—	Remains of decayed mat on earthen floor of K9b-36	N House, Rm B	0	IIb
K9b-38	K10a-11	Mud brick wall collapse	Corridor D	0.3	IIb
K9b-39	—	Shallow pit dug into earthen floor of K9b-36	N House, Rm B	7.8	IIb
K9b-40	K9b-46	Caliche and mud brick collapse onto floor	N House, Rm A	1.3	IIb
K9b-41	K9b-48, J9d-4	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	0.1	IIb
K9b-42	—	Caliche and mud brick collapse	N House, Rm B	1.1	IIb
K9b-43	K9b-28, K9d-1	Mud brick wall and ceiling collapse	S House, Rm B	2.4	IIa
K9b-44		Surface debris	Exterior of S House, west of Wall E	0.4	_
K9b-45	—	Caliche and mud brick collapse	N House, Rm E	0.1	IIb
K9b-46	K9b-40	Earth and plaster floor, and mud brick and organic debris on top of it	N House, Rm A	3.6	IIb
K9b-47	_	Surface debris and caliche	Outside of N House, west of Wall E and south of Rm E	0.2	_
K9b-48	K9b-41, J9d-4	Wall and ceiling collapse onto earthen floor, and floor surface	N House, Rm C	1.2	IIb
K9b-49		Pit in floor of K9b-48	N House, Rm C	6.6	IIb

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
K9b-50		Surface debris and caliche	Outside of N House, west of Rm E	0.2	
K9b-51		Fill under floor of K9b-36	N House, Rm B	0.7	IIa
K9b-52		Burn layer on top of plaster floor K9b-54	N House, Rm A	0.7	IIa
K9b-53	K9b-55, K9b-56	Test trench: fill to bedrock below plaster floor of K9b-54	N House, Rm A	23.8	Ι
K9b-54		Plaster floor	N House, Rm A	8.1	IIa
K9b-55	K9b-53, K9b-56	Constructional fill below plaster floor of K9b-54	N House, Rm A	4.9	Ι
K9b-56	K9b-53, K9b-55	Constructional fill below plaster floor of K9b-54 to bedrock	N House, Rm A	3.7	Ι
K9b-57	_	Accumulation on plaster floor, below upper earthen surface of K9b-48	N House, Rm C	1.4	IIa
K9b-58	_	Seep hole	N House, Rm B	0	_
K9b-59		Pit dug into fill of floor of K9b-57	N House, Rm C	11	IIa
K9b-60		Seep hole	N House, Rm C	0	
K9b-61		Ash pit in floor of K9b-48	N House, Rm C	0	IIb
K9b-62	K9b-63	Possible surface below plaster floor of K9b-57	N House, Rm C	0.6	Ι
K9b-63	K9b-62	Possible surface below plaster floor of K9b-57	N House, Rm C	3.2	Ι
K9b-64	K9b-62, K9b-63	Sand and pebble below K9b- 63	N House, Rm C	0.8	Ι
K9b-65		Lower plaster surface	S House, Rm C	0.4	Ι
K9b-66	_	Upper plaster surface	S House, Rm C	2.5	IIb
K9b-67		Brick tumble and sand over bedrock-dug pit	S House, Rm B	0.9	IIb
K9b-68	_	Test trench in NW corner: mud brick debris	N House, Rm E	0.6	IIa
K9b-69		Bedrock-dug toilet pit, uppermost stratum	S House, Rm B	2.7	IIa
K9b-70	_	Bedrock-dug toilet pit, second stratum	S House, Rm B	3.0	IIa

Table 7. Locus List, continued

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
K9b-71		Bedrock-dug toilet pit, lowest stratum	S House, Rm B	8.4	IIa
K9d-1	K9b-28, K9b-43	Mud brick wall and ceiling collapse	S House, Rm B	14.1	IIb
K9d-2	_	Surface debris	Exterior of S House, south of Rm B, Wall D	0.1	—
K10a-1		Surface debris: wind- blown sand	S House, Rm D	0.2	_
K10a-2		Post-occupational ash (temporary hearth)	S House, Rm D	7.7	—
K10a-3	K10a-4, K10a-13	Mud brick wall collapse into niche, lying on plaster floor	S House, Rm D	0.5	IIb
K10a-4	K10a-13, K10a-3	Mud brick wall collapse onto plaster floor	S House, Rm E	2.9	IIb
K10a-5	K10a-10	Mud brick wall collapse into staircase	S House, Vestibule F	0.04	IIb
K10a-6	K10a-18	Fill below plaster floor of K10a-4 and on lower unplastered surface	S House, Rm E	0.2	IIa
K10a-7	_	Surface debris; erosion from Room D over the slope	Exterior of S House, south of Rm D, Wall D	0.9	
K10a-8	_	Surface debris: windblown sand	S House, Vestibule F, and <i>Shuna</i> F	6.8	
K10a-9	J10c-15	Mud brick wall collapse onto floor	<i>Shuna</i> F	0.6	IIb
K10a-10	K10a-5, K9b-27	Mud brick wall collapse and sand	S House, Vestibule F, and <i>Shuna</i> F	0.6	IIb
K10a-11	K9b-38	Mud brick wall collapse	Corridor D	5.2	IIb
K10a-12	_	Mud brick wall collapse onto plaster floor	S House, Vestibule I	0.9	IIb
K10a-13	K10a-3, K10a-4	Mud brick wall collapse	S House, Rm E	2.0	IIb
K10a-14		Cleaning for photo	S House, Rm E	1.0	

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic meter	Phase
K10a-15	_	Coarse sand and mud brick debris on plaster floor	S House, Vestibule I, and <i>Shuna</i> I	3.5	IIb
K10a-16	K10a-15, 17	Test trench outside square: erosion onto <i>shuna</i> floor	SE corner of <i>Shuna</i> I	0.1	—
K10a-17		Constructional fill on bedrock and under floor	Shuna I	0.4	Ι
K10a-18	K10a-6	Debris on lower unplastered surface	S House, Rm E	0.2	IIa
K10a-19	_	Fill under floor of K10a-3 and on top of lower unplastered floor	S House, Rm D	11.8	IIa
K10a-20	K10a-21	Fill below floor of K10a-19, to bedrock	S House, Rm D	1.9	Ι
K10a-21	K10a-20	Fill below floor of K10a-18 to bedrock	S House, Rm E	0.2	Ι
K10a-22	Floor of K9b- 36	Sand, gravel, and plaster floor and fill underneath	Corridor D	0.6	IIa
K10a-27	K9b-30–32, K9b-24–27	Surface debris: mud brick wall and ceiling collapse	S House, Rm C	Unk.	_

Table 8. Loci by Phase, with Dated Artifacts

Locus No.	Description	Location	Dated Artifact
Phase I			
J10c-19	Constructional fill under plaster surface of J10c-15	Shuna F	_
J10c-20	Test trench: constructional fill under plaster surface of J10c-15	Shuna F	—
K9b-15	Debris/fill under level of Floor K9b-21, on bedrock	S House, Rm A	—
K9b-21	Earliest floor	S House, Rm A	_
K9b-22	Constructional fill for floor K9b-21	S House, Rm A	_
K9b-23	Constructional fill for floor K9b-21	S House, Rm A	_
K9b-53	Test trench: fill to bedrock below plaster floor of K9b-54	N House, Rm A	_

Locus No.	Description	Location	Dated Artifact
Phase I, co	ontinued		
K9b-55	Constructional fill below plaster floor of K9b-54	N House, Rm A	
K9b-56	Constructional fill below plaster floor of K9b-54 to bedrock	N House, Rm A	_
K9b-62	Possible surface below plaster floor of K9b- 57	N House, Rm C	_
K9b-63	Possible surface below plaster floor of K9b- 57	N House, Rm C	AD 1246–48 (Ayyubid coin)
K9b-64	Sand and pebble below K9b-63	N House, Rm C	_
K9b-65	Lower plaster surface	S House, Rm C	_
K10a-17	Constructional fill on bedrock and under floor	Shuna F	—
K10a-20	Fill below floor of K10a-19, to bedrock	S House, Rm D	_
K10a-21	Fill below floor of K10a-18 to bedrock	S House, Rm E	_
Phase IIa			
J9d-7	Mud brick wall collapse and sand, to bedrock	Shuna C	
J10c-13	Rocky mud brick wall collapse and sand, to bedrock	Shuna C	—
J10c-18	Test trench under surface of J10c-18: sand and matting (constructional fill)	Shuna E	_
K9b-10	Sand and brick wall fall	S House, Rm A	_
K9b-12	Sand and brick wall fall	S House, Rm A	
K9b-13	Sand and brick wall fall	S House, Rm A	_
K9b-14	Sand and brick wall fall	S House, Rm A	—
K9b-19	Sand and brick wall fall under floor K9b-9	S House, Rm A	—
K9b-20	Sand and brick wall fall under floor K9b-9	S House, Rm A	—
K9b-43	Mud brick wall and ceiling collapse	S House, Rm B	_
K9b-51	Fill under floor of K9b-36	N House, Rm B	—
K9b-52	Burn layer on top of plaster floor K9b-54	N House, Rm A	—
K9b-54	Plaster floor	N House, Rm A	—
K9b-57	Accumulation on plaster floor, below upper earthen surface of K9b-48	N House, Rm C	AD 1100–1210 (Fatimid coin)
K9b-68	Test trench in NW corner: mud brick debris	N House, Rm E	—
K10a-6	Fill below plaster floor of K10a-4 and on lower unplastered surface	S House, Rm E	—
K10a-18	Debris on lower unplastered surface	S House, Rm E	_

Table 8. Loci by Phase, with Dated Artifacts, continued

Locus No.	Description	Location	Dated Artifact
Phase IIa	, continued		
K10a-19	Fill under floor of K10a-3 and on top of lower unplastered floor	S House, Rm D	_
K10a-22	Sand, gravel, and plaster floor and fill underneath	Corridor D	_
Phase IIa	Pits		
K9b-59	Pit dug into fill of floor of K9b-57	N House, Rm C	_
K9b-69	Bedrock-dug toilet pit, uppermost stratum	S House, Rm B	_
K9b-70	Bedrock-dug toilet pit, second stratum	S House, Rm B	_
K9b-71	Bedrock-dug toilet pit, lowest stratum	S House, Rm B	
Phase IIb			
J9d-2	Wind-blown debris	Corridor D	_
J9d-4	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	AD 1215 (RN 967b)
J9d-9	Debris in door threshold	Shuna E	_
J9d-12	Trash pit with organic and inorganic debris (western part)	Shuna C	_
J9d-14	Debris in doorway	N House, Rm C	_
J10a-3	Test trench against N side of Wall A	Area A	_
J10a-4	Extension of J10a-3	Area A	_
J10a-5	Organic material on floor and under Wall A	Shuna B	_
J10a-7	Organic material on floor and under Wall A	Shuna B	—
J10c-5	Caliche and stony material	Shuna D	—
J10c-8	Laminations of matting and sand	Shuna B	—
J10c-9	Laminations of matting and sand to clean sand layer	Shuna B	_
J10c-10	Test trench: Laminations of matting and sand to clean sand, almost to bedrock	Shuna B	
J10c-11	Mud brick wall collapse, sand and matting to bedrock	Shuna E	AD 1235 (RN 988)
J10c-15	Mud brick wall collapse onto plaster floor	<i>Shuna</i> F	_
J10c-17	Sand, matting, and fiber on floor	Shuna E	AD 1242–49 (Ayyubid coin)
K9b-2	Organic debris: woven matting and wooden frame	S House, Rm A	_
K9b-3	Mud brick wall collapse	S House, Rm A	—
K9b-4	Mud brick wall collapse and ceiling fall onto floor	S House, Rm A	_

Table 8. Loci by Phase, with Dated Artifacts, continued

Locus No.	Description	Location	Dated Artifact
Phase III	o, continued		
K9b-5	Test trench: Mud brick wall collapse and ceiling fall to floor K9b-9	S House, Rm A	_
K9b-7	Cleaning of Locus K9b-4	S House, Rm A	_
K9b-8	Hearth on floor K9b-9	S House, Rm A	—
K9b-9	Latest floor (earthen)	S House, Rm A	—
K9b-16	Mud brick wall collapse and ceiling fall onto floor K9b-9	S House, Rm A	—
K9b-17	Surface debris: mud brick wall collapse and ceiling fall onto hearth	S House, Rm A	_
K9b-18	Sand and brick wall fall down to level of floor K9b-9	S House, Rm A	—
K9b-25	Mud brick wall and ceiling collapse: mats, wooden poles	S House, Rm C	_
K9b-26	Lens of palm fronds from ceiling collapse	S House, Rm C	_
K9b-27	Mud brick wall and ceiling collapse onto earthen surface	S House, Rm C	_
K9b-28	Mud brick wall and ceiling collapse on earthen surface	S House, Rm B	_
K9b-31	Lens of palm fronds from ceiling collapse	S House, Rm C	_
K9b-32	Mud brick wall and ceiling collapse onto earthen surface of K9b-27	S House, Rm C	_
K9b-33	Level caliche on top of mud brick wall collapse	N House, Rm B	_
K9b-34	Mud brick, stone, and caliche: collapse of staircase	N House, Rm B	_
K9b-35	Brick fall	N House, Rm B	_
K9b-36	Fine bricky debris on earthen and plaster floor	N House, Rm B	_
K9b-37	Remains of decayed mat on earthen floor of K9b-36	N House, Rm B	—
K9b-38	Mud brick wall collapse	Corridor D	_
K9b-40	Caliche and mud brick collapse onto floor	N House, Rm A	—
K9b-41	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	_
K9b-42	Caliche and mud brick collapse	N House, Rm B	_
K9b-45	Caliche and mud brick collapse	N House, Rm E	—
K9b-46	Earth and plaster floor, and mud brick and organic debris on top of it	N House, Rm A	AD 1218–38 (Ayyubid coin)
K9b-48	Wall and ceiling collapse onto earthen floor, and floor surface	N House, Rm C	AD 1228 (RN 1017g)

Table 8. Loci by Phase, with Dated Artifacts, continued

Locus No.	Description	Location	Dated Artifact
Phase IIb,	continued		
K9b-66	Upper plaster surface	S House, Rm C	_
K9b-67	Brick tumble and sand over bedrock-dug pit	S House, Rm B	AD 1246–49 (Ayyubid coin)
K9d-1	Mud brick wall and ceiling collapse	S House, Rm B	AD 1242–45 (Ayyubid coin)
K10a-3	Mud brick wall collapse into niche, lying on plaster floor	S House, Rm D	—
K10a-4	Mud brick wall collapse onto plaster floor	S House, Rm E	—
K10a-5	Mud brick wall collapse into staircase	S House, Vestibule F	—
K10a-9	Mud brick wall collapse onto floor	<i>Shuna</i> F	—
K10a-10	Mud brick wall collapse and sand	S House, Vestibule F, and <i>Shuna</i> F	_
K10a-11	Mud brick wall collapse	Corridor D	—
K10a-12	Mud brick wall collapse onto plaster floor	S House, Vestibule F	AD 1215 (RN 1063a)
K10a-13	Mud brick wall collapse	S House, Rm E	—
K10a-15	Coarse sand and mud brick debris on plaster floor	S House, Vestibule F, and <i>Shuna</i> F	_
Phase IIb	Pits		
J10a-8	Trash pit with organic and inorganic debris (eastern part)	Shuna C	_
J10a-9	Trash pit with organic and inorganic debris (eastern part)	Shuna C	AD 1173–1258 (Ayyubid coin)
J10c-6	Organic material: uppermost pit refuse	Shuna D	—
J10c-7	Rocky organic material: middle layer of pit refuse	Shuna D	—
J10c-12	Soft organic material: lowest layer of pit refuse	Shuna D	—
K9b-39	Shallow pit dug into earthen floor of K9b-36	N House, Rm B	AD 1218–38 (Ayyubid coin)
K9b-49	Pit in floor of K9b-48	N House, Rm C	AD 1224–31 (RN 1020a)
K9b-61	Ash pit in floor of K9b-48	N House, Rm C	_

Table 8. Loci by Phase, with Dated Artifacts, continued

Locus No.	Description	Location	Dated Artifact
Surface I	Debris and Other Unstratified Loci		
J9d-1	Surface debris: wind-blown sand	Shuna E	_
J9d-3	Wind-blown debris to bedrock	Area A and Corridor D	_
J9d-6	Surface debris: sand and gravel	Shuna C	
J9d-8	Surface debris: wind-blown sand	Shuna E	
J9d-10	Surface debris: sand and gravel	Shuna C	
J9d-11	Surface debris: sand and gravel	Area A	
J9d-13	Surface debris	Exterior of N House, north of Wall G	
J10a-1	Surface debris: sand and gravel	Area A	—
J10a-2	Surface debris: trash in open courtyard	Shuna B	
J10a-6	Surface debris: sand and gravel	Shuna C	—
J10c-1	Surface debris: sand and gravel	Shuna C	
J10c-2	Surface debris: trash in open courtyard	Shuna B	
J10c-3	Surface debris: wind-blown sand, bricky material	Shuna D	
J10c-4	Surface debris: wind-blown sand	Shuna E	
J10c-14	Surface debris: wind-blown sand	Shuna E	
J10c-16	Surface debris: wind-blown sand, bricky material	Shuna D	
K9b-1	Surface debris	S House, Rm A	
K9b-6	Test trench down to bedrock	S House, Rm A	
K9b-24	Surface debris: mud brick wall tumble, reeds	S House, Rms A, B, C	_
K9b-29	Surface layer: caliche and mud brick collapse	N House, Rms A, B, C	_
K9b-30	Surface debris: mud brick wall and ceiling collapse	S House, Rm C	—
K9b-44	Surface debris	Exterior of S House, west of Wall E	_
K9b-47	Surface debris and caliche	Outside of N House, west of Wall E and south of Rm E	_
K9b-50	Surface debris and caliche	Outside of N House, west of Rm E	

 Table 8. Loci by Phase, with Dated Artifacts, continued

Locus No.	Description	Location	Dated Artifact
Surface D	ebris and Other Unstratified Loci, continued		
K9b-58	Seep hole	N House, Rm B	_
K9b-60	Seep hole	N House, Rm C	—
K9d-2	Surface debris	Exterior of S House, south of Rm B, Wall D	_
K10a-1	Surface debris: wind-blown sand	S House, Rm D	_
K10a-2	Post-occupational ash (temporary hearth)	S House, Rm D	—
K10a-7	Surface debris; erosion from Room D over the slope	Exterior of S House, south of Rm D, Wall D	AD 1225–50 (Ayyubid coin)
K10a-8	Surface debris: windblown sand	S House, Vestibule F, and <i>Shuna</i> F	_
K10a-14	Cleaning for photo	S House, Rm E	_
K10a-16	Test trench outside square: erosion onto <i>shuna</i> floor	SE corner of <i>Shuna</i> F	_
K10a-27	Surface debris: mud brick wall and ceiling collapse	S House, Rm C	_

Table 8. Loci by Phase, with Dated Artifacts, continued

APPENDIX **B**

POTTERY TABLES

Aswan	
Wares:	Painted Ware, Utility Ware
Manufacture:	Wheel
Texture:	Fine
Density:	Dense
Temper:	Abundant fine sand, very fine to fine red and black particles
Hardness:	Hard
Munsell Colors:	7.5YR 7/6, reddish yellow, 10YR 7/4 very pale brown
Surface Treatment:	Slip, burnishing, paint, depending on ware
Forms:	Large and small storage jars, neckless jars, spouted jugs, cooking pots, and lamps in the form of small flat-footed bowls.
Parallels/Dates:	Group A.IV, Ware W12. Aswan Medieval White Ware, AD 950-1400;
	Ware U6. Aswan Medieval Grey Utility Ware, AD 950-1500
Quseir al-Qadim Locations:	Sheikh's House; both wares also in Merchants' Houses, Eastern Area (in greater quantities)
Sheikh's House Phase:	Aswan Painted Ware: I–IIb; Aswan Utility Ware: I–IIb
Marl 1	
Wares:	Utility Ware, Glazed Ware
Manufacture:	Wheel
Texture:	Medium
Density:	coarse, lightweight
Temper:	Common fine-coarse sand, black and red particles, and chaff
Hardness:	Medium
Munsell Colors:	2.5Y 8/2 white
Surface Treatment:	Sometimes incising; glaze
Forms:	Qullas, filterneck jugs, pilgrim flasks, bowls
Parallels/Dates:	In Nubia AD 1300–1400 from Egypt (William Y. Adams 1986b: 576,
	78-79, 94) Fustat 9th-11th c. (Kubiak and Scanlon 1989: 42-46, Figs.
	59-60, 62-65; Scanlon 1986); and compare vessels in the Tihamah
	Plain, AD 1150–1350 (Ciuk and Keall 1996: Pl. 95/12:e) and the Gulf,
	9th–16th c. (Kennet 2004: 57)
Quseir al-Qadim Locations:	Larger proportion of filterneck jugs and <i>qullas</i> in the Merchants' Houses, Sheikh's House; larger proportion of pilgrim flasks in Eastern
	Area; pedestal bases in Eastern Area do not occur in central site
Sheikh's House Phase:	Marl 1 Utility: I–IIb; Marl 1 Glazed: I–IIb

Table 9. Egyptian Fabrics and Associated Wares, continued

Marl 2	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Fine-medium
Density:	Medium
Temper:	Common fine-coarse sand, black and red particles, and chaff
Hardness:	Medium-hard
Munsell Colors:	7.5YR 6/4 light brown
Surface Treatment:	Occasional slip
Forms:	Qullas
Parallels/Dates:	Fustat 8 th –9 th c. (Scanlon 1974b: 68, fig. 7; 1986: 2, figs. 1–2)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIa–IIb
Marl 3	
Ware:	Glazed Ware
Manufacture:	Wheel
Texture:	Medium fine
Density:	Dense
Temper:	Moderate fine red and black particles, sparse medium white inclusions
Hardness:	Hard
Munsell Colors:	2.5Y 7/4 pale yellow, 10YR 7/4 very pale brown
Surface Treatment:	Polychrome glaze
Forms:	Jars
Parallels/Dates:	Group G.III Dull glazed wares, in Nubia AD 1000–1500 from Egyp (William Y. Adams 1986b: 592)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Surface
Marl 4	
Wares:	Monochrome Glazed; Incised Monochrome Glazed; Underglaze Painted
	(Black under colored glaze or blue, black on white under clear); Blue
	Purple, White Drip
Manufacture:	Wheel
Texture:	Fine
Density:	Medium
Temper:	Abundant fine white sand
Hardness:	Hard, brittle
Munsell Colors:	2.5Y 8/4 pale yellow, 2.5Y 8/2 white
Surface Treatment:	Incising, painting, glazing
Forms:	Bowls, jars

 Table 9. Egyptian Fabrics and Associated Wares, continued

Marl 4, continued	
Parallels/Dates:	Various wares in Egypt and Syria:
	Monochrome Glazed bowls, Hadhramaut 11 th c. (Rougeulle 2001: fig.
	5:7–9), Manda mid-11 th -late 12 th c (Chittick 1984: 81, Pl. 35c); Lamps,
	Fustat 12 th -14 th c. (Kubiak 1970: 13-15, figs. 12-14) Incised
	Monochrome Glazed/Fustat Fatimid Sgraffiato (Scanlon 1967: 75;
	1971: 228, 9 th -mid-13 th c.), Tell Minis and Raqqa wares, 11 th -13 th c.
	Syria (Mason and Keall 1988: 461; Porter and Watson 1987; Tonghini
	1998: 40, 44, 46-51); Incised Monochrome Glazed, Dragon/Phoenix in
	Fustat (Bahgat and Massoul 1930: Color plate 2:d), Hadhramaut
	(Rougeulle 1999: fig. 8:7) Qal'at al-Ja'bar, 11 th c. (Tonghini 1998: 39);
	Incised Monochrome Glazed, Celadon radial design, Fustat 10 th -11 th c.
	(Mikami 1980–1981: fig. 28; 1988: fig. 15a); Turquoise-glazed jars,
	Fustat (Sakurai and Kawatoko 1992: Pl. IV-3-7: 1), various sites in Palaeting 12 th 12 th a (Avigage and Starr 2005: Pl. 0:2). Plug and pumple
	Palestine, 12 th –13 th c. (Avissar and Stern 2005: Pl. 9:2); Blue and purple polychrome drip, Fustat, 9 th –11 th c. (Scanlon 1974b: 73, Pl. 18:6); In-
	glaze cobalt paint, Qal'at al-Ja'bar, $11^{\text{th}}-12^{\text{th}}$ c. (Tonghini 1998: fig. 48c,
	ware H, fritware 1); Underglaze paint, sites in Palestine (Avissar and
	Stern 2005: 26, 28, figs. 9:5–7, 11: 1, 3, 4, 12:5, Pls. 9:1, 3–5 [Types
	I.2.3.1 and I.2.3.3]), Qal'at Ja'bar (Tonghini 1998: 47, figs. 65a, 66d, g,
	h, l, 68a, 70 [Wares Y and AH, fritware 2]); Silhouette ware, Fustat,
	1200–1400 (Scanlon 1971: 231, Pl. 3: f–j)
Quseir al-Qadim Locations:	Incised Monochrome: Merchants' Houses, Sheikh's House; Blue,
	Purple, White Drip: Merchants' Houses, Sheikh's House; Turquoise-
	glazed jars: Sheikh's House, Merchants' Houses, Eastern Area
Sheikh's House Phase:	Monochrome: I-IIb; Incised: I-IIb; Black under colored glaze: I-IIb;
	Blue, Purple, White Drip: I-IIb; Blue, Black on White: Surface
Marl 5	
Ware:	Ballas Ware
Manufacture:	Wheel
Texture:	Medium-fine
Density:	Dense
Temper:	Moderate sand; sparse chaff; abundant soft yellow material (limestone?)
Hardness:	Hard
Munsell Colors:	7.5YR 6/4 light brown, 5YR 5/4 reddish brown
Surface Treatment:	Fine ribbing
Forms:	Store jars Ware 1112 Dellas Drob Heilite Ware In Nubie 1100, 1500 from Dellas
Parallels/Dates:	Ware U12, Ballas Drab Utility Ware, In Nubia 1100–1500 from Ballas,
Quseir al-Qadim Locations:	Egypt (William Y. Adams 1986b: 571–75) Sheikh's House
Sheikh's House Phase:	IIa–IIb
Sherkii S mouse Pliase.	114-110
Marl 6	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Medium-fine
Density:	Dense
Temper:	Moderate fine to coarse sand

	Table 9. Egyptian Fabrics and Associated Wares, continu	ıed
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Table 9. Egyptian Fabrics and	d Associated Wares, continued
Marl 6, continued	
Hardness:	Hard
Color:	Munsell 7.5YR 6/6 reddish yellow, 10YR 6/4 light yellowish brown
Surface Treatment:	Some incising; deep, narrow ribbing
Forms:	Medium to very large store jars, amphorae, kegs/butter churns
Parallels/Dates:	
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIa
Nile 1	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Medium
Temper:	Common silt-very fine sand and voids; sparse coarse dark particles
Hardness:	Very hard
Munsell Colors:	Exterior 5YR 6/6 reddish yellow, interior 5YR 5/2 reddish-gray to 2.5YR 5/2 weak red
Surface Treatment:	fine, deep narrow ribbing
Forms:	Keg/butter churn
Parallels/Dates:	Ware U21, Mameluke Heavy Utility Ware, In Nubia 1400–1500 from
Turunois, Duces.	Egypt (William Y. Adams 1986b: 571) Fustat (Bahgat and Massoul 1930: Pl. LX:4)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ila
Nile 2	
Ware:	Decorated Ware
Manufacture:	Wheel
Texture:	Fine-medium
Density:	Medium
Temper:	Moderate very fine sand; sparse medium to coarse dark particles
Hardness:	Hard
Color:	Munsell 5YR 5/4 reddish brown,10R 4/6 red
Surface Treatment:	Slip-painted, incised
Forms:	Spouted water jug
Parallels/Dates:	Type 1: Fustat, 11 th -12 th c. (Bahgat and Massoul 1930: Pl. LX:6; Sakurai and Kawatoko 1992: p.vi, no. 13, p. 267 no. 2, p. 93, nos. 6-7;
	Scanlon 1974b: Pl. 16:2; 1986: figs. 180, 84, 85); Type 2: Aden
	(Harding 1964: Pls. IV: 34, VI: 3–4)
Quseir al-Qadim Locations: Sheikh's House Phase:	Type 1 Merchants' Houses, Sheikh's House; Type 2 Eastern Area I–IIb
Nile 3	
	Monochrome Glazed, Blue and Yellow Glazed, Slip-painted, Sgraffiato
Wares:	
Wares: Manufacture:	Wheel
Wares: Manufacture: Texture:	Wheel Varies by ware
Wares: Manufacture: Texture: Density: Temper:	Wheel

 Table 9. Egyptian Fabrics and Associated Wares, continued

 Nile 3 continued

Nile 3, continued	
Color:	Munsell 2.5YR 4/4 reddish brown, 2.5YR 4/6 red
Surface Treatment:	Incising, slip, glaze, slip-paint
Forms:	Bowls
Parallels/Dates:	Monochrome glazed in Nubia 1200–1500 from Egypt (William Y. Adams 1986b: 596–7); slip-painted, Aden (Hardy-Guilbert and Rougeulle 1995: fig. 4:12); "Mamluk" sgraffiato, Qal'at Ja'bar, 1300–1350 (Tonghini 1998: 58, figs. 89:k, 91:e, I), Capernaum, 11 th c. (Berman 1989: fig. 71:25); Blue and yellow drip glaze, Fustat, 10 th c (Sakurai and Kawatoko 1992: p. x, no. 8, p. 359 or Pl. IV-3-3, nos. 5, 7, and Pl. 407 or Pl. IV-3-3, nos. 1, 3.)
Quseir al-Qadim Locations:	Sgraffiato = one sherd each in Sheikh's House, Merchants' Houses, 29 sherds in the Eastern Area; Blue and yellow drip glaze much more common in Sheikh's House than in Eastern Area
Sheikh's House Phase:	Monochrome: I–IIb; Slip-painted: I, IIb; Blue and Yellow Glazed: IIb; Sgraffiato: surface
Nile 4	
Wares:	Utility Ware 1, Utility Ware 2, Utility Ware 3
Manufacture:	Wheel
Texture:	Coarse
Density:	Medium
Temper:	Abundant fine to coarse sand, limestone fragments, and red and black particles, possibly grog; some chaff temper
Hardness:	Hard
Munsell Colors:	2.5YR 5/6 red, 5YR 5/6 yellowish red
Surface Treatment:	None, or a bright red wash
Forms:	Jars, bowls, cooking pots
Parallels/Dates:	_
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	I–IIb, surface
Nile 5	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Medium
Temper:	Moderate to common very fine to medium sand; sometimes sparse chaff; sometimes sparse coarse dark particles
Hardness:	Hard
Color:	5YR 6/6 reddish yellow
Surface Treatment:	None
Forms:	Water jars
Parallels/Dates:	Mamluk Shaft 4, Old Cairo
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	I–IIb

Nile 6	
Ware:	Coarse Utility Ware
Manufacture:	Wheel
Texture:	Coarse
Density:	Medium
Temper:	Moderate to common very fine to medium sand; common chaff; some sparse coarse dark particles
Hardness:	Varies
Munsell Colors:	5YR 5/6 yellowish red, 5YR 5/4 reddish brown
Surface Treatment:	None
Forms:	Medium-sized store jars
Parallels/Dates/Dates:	Aden and the Hadhramaut, AD 800-1150 (Whitcomb 1988: fig. 2h)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIa
Nile 7	
Ware:	Decorated Ware
Manufacture:	Wheel
	Medium
Texture:	Medium-dense
Density:	
Temper: Hardness:	Moderate to abundant very fine to medium sand and black particles
Munsell Colors:	Hard 5VD 5/4 raddish brown 7 5VD 6/6 raddish vallow
Surface Treatment:	5YR 5/4 reddish brown, 7.5YR 6/6 reddish yellow
Forms:	Slipped 5YR 6/6–6/8 reddish yellow, 10YR 8/6 yellow Small-medium jars, small bowl
Pornis. Parallels/Dates:	Sinan-meurum jars, sinan bowi
Quseir al-Qadim Locations: Sheikh's House Phase:	Sheikh's House, Eastern Area IIb, surface
Sherkii S House I hase.	no, surface
Stoneware	
Ware:	Stoneware
Manufacture:	Wheel
Texture:	Fine
Density:	Dense
Temper:	Varies: Abundant very fine-fine black sand and voids, sparse coarse
	voids; or none visible
Hardness:	Very hard
Munsell Colors:	2.5Y 7/2 light gray, 2.5Y 3/0 very dark gray
Surface Treatment:	Stamped designs, slip, glaze
Forms:	Sphero-conical vessels
Parallels/Dates/Dates:	Fustat, Egypt, 11 th c (Scanlon 1974b: Fig. 3); Meinarti, Nubia, Late Christian, 1200–1365 (William Y. Adams 2002: Pl. 16:e3); Hama, Syria
	(Pentz 1988); Rayy, Iran (Ghouchani and Adle 1992b),
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	I–IIb
Shehar 5 House I huse.	1 110

Table 9. Egyptian Fabrics and Associated Wares, continued

Table 10. Imported Fabrics and Associated Wares

Nubia 1	
Ware:	Decorated Ware
Manufacture:	Wheel
Texture:	Fine-medium
Density:	Medium dense
Temper:	Moderate very fine sand and voids
Hardness:	Hard
Munsell Colors:	5YR 5/4 light reddish brown, core 5YR 6/4 reddish brown
Surface Treatment:	Slipped 5YR 5/6 yellowish red, polished, painted dark brown
Forms:	Bowl C36
Parallels/Dates:	Group N.V, Post-Classic Christian Nubian Wares, AD 1000-1300 Ware
	R21, Post-Classic Christian Polished Orange Ware, dated AD 1000-
	1300 (Adams 1986: 497–98)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIa
Nubia 2	TT. 111. TT.
Ware:	Utility Ware
Manufacture:	Handmade
Texture:	Medium
Density:	Dense
Temper:	Abundant mica, moderate coarse to granule-sized sand, common fine-
	medium sand and dark particles, possibly grog
Hardness:	Medium
Munsell Colors:	5YR 4/3 reddish brown, 10YR 5/3 brown
Surface Treatment:	None
Forms:	Long-necked jar with round body, round base, plain rim
Parallels/Dates:	Ware H4, Later Domestic Plain Utility Ware, 1000–1600 or later
	(Adams 1986: 426–27)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ι
Nubia 3	
Ware:	Figural Painted Ware
Manufacture:	Wheel
Texture:	Fine
Density:	Medium
Temper:	Moderate fine sand, sparse coarse dark particles, possibly grog
Hardness:	Hard
Munsell Colors:	5YR 4/4–5/4 reddish brown
Surface Treatment:	Slip, paint
Forms:	Globular jars with short, straight, corrugated necks and noticeable
i onnio.	rotation marks in and out
Parallels/Dates:	Nubian decorative style N.IVA, 850–1100 (William Y. Adams 1986b:
- urunoio/ 1/ urob.	52–3)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIb
Sherkii 5 House I huse.	110

Yemen 1	
Ware:	Black on Yellow Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Medium
Temper:	Common fine to medium-sized sand and medium-sized dark particles;
remper	sparse chaff; moderate mica
Hardness:	Hard
Munsell Colors:	Munsell 5YR 5/4 reddish brown, 7.5YR 6/4 light brown
Surface Treatment:	Sometimes slip or wash, always yellow glaze, usually brown, sometimes
Surface Treatment.	green paint
Forms:	Bowls on a low footring, either conical with plain rim or hemispherical
i onno.	with ledge rim; filterneck jug (one)
Parallels/Dates:	"Mustard Ware," "Black on Yellow Ware" 13 th –14 th c. from Fustat, at-
Taraneis/Dates.	Tur, 'Aydhab, Yemen, East Africa, Persian Gulf (William Y. Adams
	1986b: 597; Chittick 1974b: 304; 1984: 81–2; Ciuk and Keall 1996: Pls.
	95/45:a, f-h, 95/46:a, c, c'; Hardy-Guilbert 2004: Fig. 17:1–3; Horton
	1996: 291; Kawatoko 1988: 50; Kawatoko 1993b: 206; 1995: 53, Pl.
	34:6; Kennet 2004: 41–42; Rougeulle 2005: 229–44; Whitcomb and
	Johnson 1979: 105–06; 1982c: 137–38; Zarins, Whalen, Ibrahim et al.
Quseir al-Qadim Locations:	1980: Pl. 24:10–12) Eastern Area, Sheilth's Hausa, Marshanta' Hausas, Control Duilding A
Qusen al-Qadim Locations.	Eastern Area, Sheikh's House, Merchants' Houses, Central Building A,
Sheikh's House Phase:	F8–F9, F10a, S12c
Shelkh s House Phase:	I–IIb
Yemen 2	
Wares:	Brown-painted Ware, Turquoise Slip-painted Ware, Utility Ware
Manufacture:	Wheel
Texture:	Fine
Density:	Medium
Temper:	Moderate sand and dark particles (possibly grog), sparse mica, sparse chaff
Hardness:	Hard
Munsell Colors:	5YR 5/6 yellowish red
Surface Treatment:	Slip, paint, glaze
Forms:	Bowls
Parallels/Dates:	Brown-painted ware, 13 th -15 th c. Zabid (Mason and Keall 1988: 454,
	57, Fig. 4:b); Turquoise slip-painted ware, $13^{\text{th}}-15^{\text{th}}$ c Zabid, Aden
	(Mason and Keall 1988: 462; Whitcomb 1988: 189), the same as "Early
	Blue Tihama" ware at al-Qaraw, Mawza', and Hays dated 1250–1300
	(Hardy-Guilbert and Rougeulle 1995: Figs. 4:10, 5:3)
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area (only Turquoise slip-painted)
Sheikh's House Phase:	I–IIb
Sheikh s House I hase.	1-110
Yemen 3	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	_
Density:	Dense
Temper:	Moderate fine to medium sand; sparse coarse sand
I chiper.	

Table 10. Imported Fabrics and Associated Wares, continued

Table 10. Imported Fabrics and Associated Wares, continued

Yemen 3, continued	
Hardness:	Hard
Color:	10YR 6/4 light yellowish brown
Surface Treatment:	Sometimes slip-paint, single incised line or surface groove
Forms:	Jars, wide-mouthed jars, basins
Parallels/Dates:	Zabid "Wavy-line ware," AD 950-1150 (Ciuk and Keall 1996: Pl.
	95/32: c, d); al-Shihr (Hardy-Guilbert 2004: Fig. 18:3-5; Hardy-
	Guilbert and Rougeulle 1997b: Fig. 5:14); Sharma (Rougeulle 2004:
	Fig. 12:1–9, cf. esp. 1, 6); Abyan (Hardy-Guilbert and Rougeulle 1997b:
	Fig. 2:5-6); Hadhramaut (Whitcomb 1988: Fig. 8:j)
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area
Sheikh's House Phase:	IIa–IIb
Yemen 4	
Ware:	Trackware
Manufacture:	Handmade
Texture:	Medium-coarse
Density:	Dense
Temper:	Common to abundant fine to medium sand, sparse medium red and
	black particles that may include grog; often common soft yellow
	material (limestone?), burned away
Hardness:	Hard
Munsell Colors:	5YR 5/4 reddish brown, 10R 6/3 pale red
Surface Treatment:	Cream slip, comb-incised
Forms:	Store jars, basins
Parallels/Dates:	"Track Ware" made in Zabid (AD 1150-1350) and found at Jebelain,
	Sharma, Mawza' and Hays, Abyan (Ciuk and Keall 1996: Pls. 95/14:a,
	e-h, 95/15:b 95/32:d, k, Pl. 95/42:e, h, k; Hardy-Guilbert 2004: Fig.
	12:10–18; Hardy-Guilbert and Rougeulle 1995: Fig. 5:18; 1997a;
	1997b: Fig. 2:14–15; Rougeulle 2004: Fig. 12:9–17; Whitcomb 1988:
Quesir al Ordim Locations:	181, Fig. 2:e) Sheikh's House, Eastern Area
Quseir al-Qadim Locations: Sheikh's House Phase:	I–IIa
Sheikh S House Fliase.	1–11a
Yemen 5	
Ware:	Utility Ware
Manufacture:	Handmade
Texture:	Medium-fine
Density:	Dense
Temper:	Common fine to medium sand
Hardness:	Very hard
Color:	7.5YR 6/4 light brown
Surface Treatment:	Slip, applied and incised decoration
Forms:	Zir
Parallels/Dates:	
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Surface

Hardness:particlesHard2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13 th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12 th -mid-14 th c (Mani 2000: Fig. 7:1–3, 10, 15),13 th c. Cuttack (Rao 2002: Fig. 8:1)	India 1	
Manufacture:WheelTexture:MediumDensity:DenseTemper:Common fine to medium sand and dark temper, moderate coarse dark particlesHardness:HardColor:2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6-8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4-5; 14-25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1-3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but greater numbers in the Eastern AreaSheikh's House Phase:I-IIaIndia 2Ware:Red Utility Ware Manufacture:Ware:Kell Utility Ware Manufacture:Manufacture:Coarse		Black Utility Ware
Density:DenseTemper:Common fine to medium sand and dark temper, moderate coarse dark particlesHardness:HardColor:2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13 th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K88 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12 th -mid-14 th c (Mani 2000: Fig. 7:1–3, 10, 15), 13 th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but greater numbers in the Eastern AreaSheikh's House Phase:I-IIaIndia 2 Ware:Red Utility Ware Wheel Texture;Manufacture: CoarseWheel Coarse	Manufacture:	•
Temper:Common fine to medium sand and dark temper, moderate coarse dark particlesHardness:HardColor:2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but greater numbers in the Eastern AreaIndia 2Ware:Red Utility Ware WheelManufacture:WheelTexture:Coarse	Texture:	Medium
Temper:Common fine to medium sand and dark temper, moderate coarse dark particlesHardness:HardColor:2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but greater numbers in the Eastern AreaIndia 2Ware:Red Utility Ware WheelManufacture:WheelTexture:Coarse	Density:	Dense
Color:2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rimsSurface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but greater numbers in the Eastern AreaI-IIaIndia 2 Ware:Ware:Red Utility Ware Wheel Texture:CoarseCoarse		Common fine to medium sand and dark temper, moderate coarse dark particles
Surface Treatment:Burnished and incisedForms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House Phase:India 2 Ware:Red Utility Ware Manufacture:Ware:Red Utility Ware Wheel Texture:CoarseCoarse	Hardness:	Hard
Forms:Carinated cooking pots (handis)Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House Phase:India 2 Ware:Red Utility Ware Manufacture:Manufacture:Wheel Coarse	Color:	2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rims
Parallels/Dates:Black-slipped gray ware from pre-Mughal site in New Delhi (Mani 2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House Phase:India 2 Ware:Red Utility Ware Manufacture:Manufacture:Wheel Coarse	Surface Treatment:	Burnished and incised
2000: Fig. 7:1, 3, 13), Grey ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12th-mid-14th c (Mani 2000: Fig. 7:1–3, 10, 15),13th c. Cuttack (Rao 2002: Fig. 8:1)Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, I9d-I9c, Central Building A, but greater numbers in the Eastern AreaIndia 2 Ware:Red Utility Ware Wheel Texture:CoarseWheel Coarse	Forms:	
Quseir al-Qadim Locations:Sheikh's House, Merchants' Houses, I9d-I9c, Central Building A, but greater numbers in the Eastern AreaSheikh's House Phase:I–IIaIndia 2Red Utility WareWare:Red Utility WareManufacture:WheelTexture:Coarse	Parallels/Dates:	2000: Fig. 7:1, 3, 13), Grey ware from 13 th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8): Parallels at multiple sites in the Yemen, Persian Gulf, Maldives (Carswell 1977: 1977: 160, Fig. 13; Hardy-Guilbert and Rougeulle 1995: Fig. 6:24; 1997b: Fig. 5:1; Kennet 2004: Fig. 40:K4288, K89 [Type 78]; Rougeulle 2004: Fig. 11:4–5, 14–25; Zarins 1989: 238, Fig. 5, top right; Zarins and Zahrani 1985: Pl. 75:2); "Black Burnished ware" at Kush (Kennet 2004: 66) citing "coarse grey," "coarse black," or "burnished black" wares in early Medieval India; New Delhi late 12 th -mid-14 th c
Sheikh's House Phase:I–IIaIndia 2Ware:Red Utility WareManufacture:WheelTexture:Coarse	Quseir al-Qadim Locations:	Sheikh's House, Merchants' Houses, 19d-19c, Central Building A, but
Ware:Red Utility WareManufacture:WheelTexture:Coarse	Sheikh's House Phase:	•
Ware:Red Utility WareManufacture:WheelTexture:Coarse	India 2	
Manufacture:WheelTexture:Coarse		Red Utility Ware
Texture: Coarse		•
		Medium
		Moderate to abundant fine to coarse sand, sparse very coarse sand and
Hardness: Hard	Hardness:	Hard
Color: Surfaces 5YR 5/6 yellowish red-2.5YR 2.5/0 black; cores 7.5YR 4/0 dark gray-10YR 5/3 brown	Color:	Surfaces 5YR 5/6 yellowish red-2.5YR 2.5/0 black; cores 7.5YR 4/0 dark grav-10YR 5/3 brown
Surface Treatment: Slipped	Surface Treatment:	
Forms: Open-mouthed jars, storage jars, cooking pots	Forms:	
Parallels/Dates: Dull red ware from 13 th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8); "Fine Indian Red" from Kush,	Parallels/Dates:	Dull red ware from 13 th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002: Fig. 8:6–8); "Fine Indian Red" from Kush, 5 th –17 th c. AD (Kennet 2004: 66); al-Shihr (Hardy-Guilbert and
Quseir al-Qadim Locations: Sheikh's House, Merchants' Houses, I9d-I9c, Central Building A	Ouseir al-Oadim Locations.	
Sheikh's House Phase: I		

Table 10. Imported Fabrics and Associated Wares, continued

	Table 10. Im	ported Fabrics	and Associated	Wares, continued
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China 1: Porcelains	
Wares:	Qingbai, Ding imitations, unidentified white wares
Manufacture:	Wheel
Texture:	Fine
Density:	Dense (sparse very fine voids)
Temper:	None, or sparse silt to very fine sand
Hardness:	Very hard
Color:	White
Surface Treatment:	Incising, bluish-clear or white glaze
Forms:	Bowls
Parallels/Dates:	<i>Qingbai</i> wares, 10 th –13 th c. (Bing 2004: 258–59, Fig. 1:7; Emerson, Chen, and Gates 2000: Pl. 4.1; Hardy-Guilbert 2001: Fig. 6:4; King and Tonghini 1996: Pl. 29: bottom; Rougeulle 1999: Fig. 7:9–10); For Ding imitations, see Gompertz 1980.
Quseir al-Qadim Locations:	Sheikh's House, Merchants' Houses (1 sherd), Eastern Area
Sheikh's House Phase:	1–3
China 2: Celadons	
Wares:	Kinuta, Yüe, Yaouzhou, and Jingdezhen celadons
Manufacture:	Wheel
Texture:	Fine
Density:	Dense Sporse moderate gilt to years fine cond
Temper: Hardness:	Sparse-moderate silt to very fine sand
Color:	Very hard 5Y 8/1 white, 2.5Y 6/2 light brownish gray, 5Y 6/1 gray
Surface Treatment:	Molding; incising; milky greenish-blue, clear, or olive green glaze
Forms:	Bowls
Parallels/Dates:	<i>Kinuta</i> celadons, late 12 th –early 13 th c. (Gompertz 1980: 148, 64, Pl. 86A–B; Hardy-Guilbert 2001: Fig. 7:2; Morgan 1991: Fig. 7:22–23; Sakurai and Kawatoko 1992: Pl. IV-4-10:2; Scanlon 1971: 228). Yüe, Yaouzhou, and Jingdezhen celadons, late 12 th –14 th c. (Bing 2004: 261; Gompertz 1980: Pls. 44, 45; Gray 1984: Pl. 31; Mikami 1980–1981: Fig. 1; 1988: 10, Fig. 7a; Zarins and Zahrani 1985: 78–79)
Quseir al-Qadim Locations:	Sheikh's House, Merchants' Houses (1 sherd olive celadon), Eastern Area (<i>kinuta</i> and olive celadons)
Sheikh's House Phase:	I, IIb
China 3: Stoneware Jars	
Ware:	Stoneware Jars
Manufacture:	Wheel
Texture:	Fine
Density:	Dense
Temper:	Common silt-very fine sand
Hardness:	Very hard
Color:	2.5Y 5/2 grayish brown, 7.5YR 5/0 gray
Surface Treatment:	Glaze, paint
Forms:	Jars with concave base

China 3: Stoneware Jars, continued								
Parallels/Dates:	Jingdezhen brown-glazed jars, 15 th c (Mikami 1988: 12); yellowish- brown glazed jars, 12 th c (Carswell 1979: fig. 12);							
	Glazed buffware jars, 9^{th} – 14^{th} c: (Bing 2004: Fig. 5:1, 7; Carswell 1979:							
	fig. 12:518)							
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area							
Sheikh's House Phase:	Surface							

Table 11. Distribution of Wares at Quseir al-Qadim by Phase and Sub phase: Count by Vessel of Kept and Published Pottery

Ware	Phase I	Phase IIa	Phase IIa Pits	Phase IIb	Phase IIb pits	Surface Debris and Unstratified	Merchants' Houses	Eastern Area
Aswan Painted	1		2	6	1			1
Aswan Utility	2		1	3		1	4	2
Marl 1 Utility	1	1	26	5			11	5
Marl 1 Glazed	1	1		2				
Marl 2 Utility		2	7	1		1		
Marl 3 Glazed						2		
Marl 4	2	3	5	15		3	22	33
Monochrome								
Marl 4 Incised	1	1	9	5		4	4	7
Marl 4 Bichrome						1		
(blue paint under								
clear glaze)								
Marl 4 Bichrome	1	1				2		3
(black paint on								
white slip under								
turquoise glaze)								
Marl 4 Silhouette				1	1			
Ware (black paint								
under blue or								
green glaze)								
Marl 4						3		5
Polychrome (blue								
and black paint								
on white slip								
under clear glaze)								
Marl 4 Blue,						2	4	1
purple, white drip								
Marl 5: Ballas			1	1				
Marl 6			5					
Nile 1 Utility			2					

Ware	Phase I	Phase IIa	Phase IIa Pits	Phase IIb	Phase IIb pits	Surface Debris and Unstratified	Merchants' Houses	Eastern Area
Nile 2 Decorated	1	1	1	2				2
Ware (Slipped								
and incised								
water jars)								
Nile 3	2						3	19
Monochrome								
Glazed								
Nile 3 Blue or								5
black on white								
slip under clear								
glaze								
Nile 3 Lead-						1	1	11
glazed Sgraffiato								
on white slip								
Nile 3 White				1				
slip-painted								
under yellowish-								
clear glaze								
Nile 3 Incised				1				13
and glazed (no								
slip)								
Nile 3 Blue,				1				6
yellow "splash"								
glaze								
Nile 4 Utility	1	1						
Ware 1								
<i>Nile 4</i> Utility		1				1		
Ware 2								
<i>Nile 4</i> Utility				2				
Ware 3	1		-	2		2		
Nile 5 Utility	1	2	7	3		2		
Nile 6 Coarse		3						
Utility				4		1		
Nile 7 Decorated	1			4		1		
Stoneware	1	1		1				
Nubia 1		1						
Decorated	1							
Nubia 2 Utility	1							
Nubia 3 Figural				2				
Painted								

Table 11. Distribution of Wares at Quseir al-Qadim by Phase and Sub phase: Count by Vessel of Kept and Published Pottery, continued

Ware	Phase I	Phase Ha	Phase IIa Pits	Phase IIb	Phase IIb pits	Surface Debris and Unstratified	Merchants' Houses	Eastern Area
Yemen 1	12		3	4		1	9	18
(Black on								
Yellow)								
Yemen 2	1	1	1	1		1		
Yemen 3			4	1				
Utility								
Yemen 4	7	3				1		
Trackware								
Yemen 5						1		
India 1	3	2					4	27
Black								
Utility								
India 2	3					2		
Red								
Utility								
China 1:	1	3	2	5		2	1	1
qingbai								
porcelain								
and								
Kinuta								
celadon								
China 1:						4		1
Blue and								
White								
porcelain								
China 2:	1			4		8	1	18
Celadon								
China 3:						4		2
Stoneware								
jars								
Roman	6	5		4		7		

Table 11. Distribution of Wares at Quseir al-Qadim by Phase and Sub phase: Count by Vessel of Kept and Published Pottery, continued

	Phase I	Phase IIa	Phase IIa pits	Phase IIb	Phase IIb pits	Surface and Unstratified	Ware Totals
Marl 1 Utility	250	116	200	554	92	158	1,370
Marl 1 Glazed ^a	1	5	0	8	0	5	19
Marl 1 Painted	0	2	0	0	0	0	2
Marl 4 Monochrome ^b glazed	132	140	86	474	30	264	1,126
Marl 4 Incised ^C	17	8	13	32	0	9	79
<i>Marl 4</i> Bichrome (blue only or blue and white paint under clear glaze)	0	1	0	0	0	0	1
<i>Marl 4</i> Bichrome (black paint on white slip under turquoise)	1	1	0	0	0	0	2
<i>Marl 4</i> Silhouette Ware (black paint under blue or green)	0	1	0	1	1	0	3
Marl 4 black, blue under clear	0	1	0	0	0	0	1
Marl 4 Blue, purple, white drip	9	7	0	24	0	5	45
Marl 4 other splash ^d	0	1	0	1	0	0	2
Marl 4 Totals	159	160	<i>99</i>	532	31	278	1,259

Table 12. Distribution of Wares at the Sheikh's House by Phase and Sub phase: Count by Sherd of all Excavated Pottery

^a One of the sherds from Locus K9b-51, Phase IIa, is described as having brown paint, like several of those illustrated in Figure 20. Three of those found in Phase IIb (from Loci K9b-33 and K10a-3) are incised.

^b Described in the pottery sheets as "cream-buff ware with [color] glaze." Green, turquoise, and white are the most frequently occurring glaze colors. Sherds described as "cream-buff ware with clear glaze" have been grouped with the Marl 1 Glazed wares because in the kept sherds and the assemblages from elsewhere on the site, Marl 4 vessels with clear glaze are unknown except for the single example that has underglaze blue paint, J10c2_3/RN 289 (Figure 28).

^c Yellow is the most frequently occurring glaze color. One sherd, from Locus K9b-70, also has a splash of blue, but it is the only incised Marl 4 sherd with more than one glaze color.

^d This is not a single type, but refers to sherds with more than one color glaze in random "splashed" or dripped patterns. Often the glaze colors are blue and green together.

	Phase I	Phase IIa	Phase IIa pits	Phase IIb	Phase IIb pits	Surface and Unstratified	Ware Totals
Nile 2 Decorated Ware	1	10	1	55	0	44	
(Slipped and incised water							
jars) ^e							
<i>Nile 3</i> Monochrome glazed ^f	15	10	2	107	4	68	206
Nile 3 Slip-painted	1	0	0	1	0	0	2
<i>Nile 3</i> Blue and/or black on	0	0	0	2	0	0	2
white slip under clear glaze							
<i>Nile 3</i> Black under clear glaze	0	0	0	1	0	1	2
Nile 3 Sgraffiato (white slip)	0	0	0	0	0	2	2
Nile 3 Incised and glazed (no	1	0	0	0	0	4	5
slip) ^g							
<i>Nile 3</i> Blue, yellow "splash"	0	0	0	28	0	33	61
Nile 3 Totals	17	10	2	139	4	108	280
Stoneware	11	4	0	5	0	1	21
Yemen 1 (Black on Yellow)	54	17	30	48	2	13	164
<i>Yemen 4</i> Trackware ^h	22	1	5	11	1	10	50
China 1: qingbai porcelain	0	1	1	5	0	1	8
China 1: Blue and white	0	0	0	0	0	4	4
China 2: Celadon	1	0	1	9	0	2	13
China 3: Stoneware jars	0	0	0	0	0	5	5
Roman	67	35	0	16	0	18	136
Total identifiable sherds	624	361	334	1,382	130	647	3,478
Total sherds in pottery sheets	3,534	1,332	755	4,894	369	2,855	13,739
Phase Totals	3,534	2,0	087	5,	263	2,855	13,739

Table 12. Distribution of Wares at the Sheikh's House by Phase and Sub phase: Count by Sherd of all Excavated Pottery, continued

^e These sherds are identified by the description "red-orange fine ware, cream slipped," or less often "red-orange fine ware, cream slipped, incised." Dozens more sherds described as "red-orange fine ware" could belong to undecorated parts of the bodies of these vessels, but were not counted except for one spout, because examples of more complete vessels from Old Cairo have undecorated spouts. Sherds described as "red-orange medium ware, cream slipped," which were also in abundance, may refer to this type as well, but were not counted.

^f This category includes sherds with clear glaze. In the pottery sheets the ware is simply described as "red-orange," with no indication of temper.

^g One of these has polychrome decoration, but it is an unusual type: Sherd K10a10_2/RN 308 has incising under a light-colored slip, a thin clear glaze, and then a blob of brown glaze.

^h This ware is described as "brown-dark red medium ware, comb-incised," or "combed pot with purple body." The connection is made to trackware because this is how the few kept pieces of trackware are described.

Table 13. Fabrics as Percentage of Total Sherds

	Phase I	Phase IIa	Phase IIa pits	Phase IIb	Phase IIb pits	All Phases
Marl 1	7	9	26	11	2	11
Marl 4	5	8	13	11	8	9
Nile 3	0.5	0.7	0.3	3	1	2
Yemen 1	2	1	4	1	1	1
Yemen 4	0.6	0.07	0.7	0.2	0.3	0.4

APPENDIX C

GLASS AND COIN TABLES

Table 14. Glass

RN	Locus	Description	Color	Comparanda/Date	Published
5	K9b-3	Painted bodysherd	Transparent w/ blue, green, white, black paint	Manda mid-9 th -mid- 11 th c, al-Mina, Syria 12 th -13 th c, Meinarti 13 th -early 14 th c (Adams 2002: Pl. 19:b). Manufactured	Roth 1979: Pl 63:e; Meyer 1992: 89, 186
64	K9b-1	Ribbed bodysherd (bottle neck?)	Green tint, opaque magenta paint, many bubbles	in Syria or Cairo? ^a Al-Mina, Syria, 12 th – 13 th c.	Roth 1979: Pl 63:f (text), e (drawing); Meyer 1992: 89, 186
348	K9b-16	Bottle, very flaring rim	Green tint	Mostly 12 th c and earlier Manda, Mafia, Kilwa, al-Mina, Soba (Harden 1961: Fig. 37: 20, 21), Serçe Limani early 11 th c, Siraf 8 th – 11 th c, Corinth, Meinarti 13 th –early 14 th c (Adams 2002: Pl. 19:c2)	Roth 1979: Pl. 63:c (text), f (drawing); Meyer 1992: 77–78, Pl. 15:388
352	K9b-36	Coil base (beaker)	Green tint, bubbly	'Aydhab 11 th -14 th c	Meyer 1992: 80, Pl. 16:419
352	52 K9b-36 Blue coil base		Transparent and blue	No excavated parallels, close to a sherd found in Hama's uppermost stratum	Whitcomb 1983: Fig. 3r; Meyer 1992: 81, Pl. 16:429
354	K9b-36	Looped base	Green tint, bubbly	Too common to be useful in dating; numerous comparanda	Meyer 1992: 87, Pl. 19:514

Table 14. Glass, continued

RN	Locus	Description	Color	Comparanda/Date	Published
356	J10a-6	Bodysherd with incised design (from a molar or cut vial)	Transparent	b	
357	J10c-15	Blue coil base	Transparent and blue	No excavated parallels, close to a sherd found in Hama's uppermost stratum	Meyer 1992: 81, Pl. 16:431
364	K9b-67	Painted bodysherd	Transparent with gold and red paint	Al-Mina, Syria, 12 th – 13 th c. (Meyer 1992: 89)	_
373	K10a-8	Bubble neck bottle	Dark amber	Multiple sites: 10 th – 16 th c AD and earlier	Meyer 1992: 77, Pl. 15:381
373	K10a-3	Sprinkler bottle	Transparent	Very similar to Siraf $(8^{th}-11^{th} c)$	Meyer 1992: 78–79, Pl. 15:397
373	K10a-10	Coil base (beaker)	Light yellow- green	'Aydhab 11 th -14 th c	Meyer 1992: 80, 186
373	K10a-16	Vial mouth	Emerald green	Hadhramaut AD 1150–1500	Meyer 1992: 82, 186
374	J9d-8	Pedestal base	Transparent	^c Aydhab, 10 th –14 th c?, Naqlun, Fatimid or Ayyubid (Mossakowska- Gaubert 2001: types 6–7)	Meyer 1992: 81, Pl. 16:435
374	J9d-2	Molar/square flask	Blue	Early dates (9 th c and later) but this is a later continuation	Meyer 1992: 83, Pl. 17:472
374	J9d-6	Kick-up base	Purple-gray tint	Too common to be useful in dating; numerous comparanda	Meyer 1992: 86–87, Pl. 18:511
374	J9d-9	Unguentarium with folded-in rim	Green	Siraf, 8 th –11 th c	Meyer 1992: 86, 184

^a Unless otherwise noted, the comparanda and dates given are those suggested in Roth 1979, Meyer 1992, or Whitcomb 1983. For full glass references, see those publications.

^b According to Carol Meyer, cut glass vials and molars are usually dated to the ninth and tenth centuries, except for one example from Kilwa from a twelfth to late thirteenth century context (1992: 83–4). At Shanga, only six cut glass sherds were found, and their dating is unfortunately not discussed (Horton 1996: 318, Fig. 244).

Table 14. Glass, continued

RN	Locus	Description	Color	Comparanda/Date	Published	
374 J9d-4		Cut decoration (from a molar flask or cut vial)	Frosted transparent, curvilinear design	Kilwa, late 12 th –13 th c.?	Meyer 1992: 89, 187	
376	K9b-70	Bottle neck	Yellow-green tint	Mid-9 th –early 11 th c Manda	Meyer 1992: 78, Pl. 15:389	
376	K9b-33	Vial mouth	Light blue- green, bubbly	Serçe Limani, 11 th c	Whitcomb 1983: Fig. 3h Meyer 1992: 82, Pl. 17:447	
376	K9b-71	Jar, tall neck, slightly ribbed or tooled	Transparent(?)	Seems close to 'Abbasid styles	Whitcomb 1983: Fig. 3j; Meyer 1992: 79, Pl. 15:400	
376	K9b-70	Jar, tall neck, w/ trailed threads	Transparent	8 th -11 th c Siraf, 10 th - 14 th c 'Aydhab, Fatimid or Ayyubid Naqlun (Mossakowska- Gaubert 2001: type 6)	Meyer 1992: 79, Pl. 16:402	
376	K9b-28	Coil base (beaker), w/ trailed threads	Transparent	'Aydhab 11 th –14 th c	Whitcomb 1983: Fig. 3p Meyer 1992: 80, Pl. 16:412	
376	K9b-56	Coil base (beaker)	Light green	'Aydhab 11 th –14 th c	Meyer 1992: 80, Pl. 16:415	
376	K9b-69	Coil base (beaker)	Transparent	'Aydhab 11 th –14 th c	Meyer 1992: 80, Pl. 16:416	
376	K9b-64 Green bowl rim		Emerald green	Sparse if any comparanda: Hama, undated cup, Aqaba cup (emerald green)	Meyer 1992: 81, Pl. 16:437	
376	5 K9b-71 Vial mouth		Yellow-olive	Sparse comparanda: 14 th c and earlier Mafia, Hadhramaut?	Whitcomb 1983: Fig. 31 Meyer 1992: 82, Pl. 17:446	
376	K9b-65	Vial base	Cobalt blue, bubbly, iridescent	Numerous comparanda: AD 1000–1500 Ghors, Gedi, Kilwa, Hadhramaut, Aqaba	Whitcomb 1983: Fig. 3t; Meyer 1992: 82–83, Pl. 17:464	

Table 14. Glass, continued

RN	Locus	Description	Color	Comparanda/Date	Published	
376	K9b-28	Molar/square flask	Dark cobalt blue	Early dates (9 th c and later) but this is a later continuation	Whitcomb 1983: Fig. 3q; Meyer 1992: 83, Pl. 17:473	
376	K9b-71	Rim, slightly flaring (cup or beaker)	Light yellow- green	Soba, 9^{th} – $12^{th} c^{c}$	Whitcomb 1983: Fig. 3y; Meyer 1992: 86, Pl. 18:495	
376	K9b-57	Molded decoration	Pink tint, bubbly	Technique goes back to Roman but is common in 'Abbasid; few late Islamic examples; Naqlun, Fatimid or Ayyubid (Mossakowska- Gaubert 2001: type 5); Meinarti, 13 th –early 14 th c (Adams 2002: Pl. 19:d1–2)	Meyer 1992: 87–88, Pl. 19:522	
376	K9b-25	Looped base	Yellow tint, bubbly	Too common to be useful in dating; numerous comparanda	Meyer 1992: 87, Pl. 19:519	
378	J10a-9	Bubble neck bottle	Emerald green	Multiple sites: 10 th –16 th c AD and earlier	Meyer 1992: 77, 186	
382	J10a-9	Jar, tall neck (reconstructed)	Light green	8 th –11 th c Siraf, 10 th – 14 th c 'Aydhab	Meyer 1992: 79, Pl. 15:399	
433	· · · · · · · · · · · · · · · · · · ·		Dark green	Meiron 11 th –14 th c., ^d Qasr al-Hayr al-Sharqi (Meyer 1992: 91), al- Shihr 14 th c. (Hardy- Guilbert 2001: Fig. 3, center), al-Hasa, Arabia; Sharjah, Arabia (Zarins 1986:56)	_	
678	K9b-8	Hollow stem lamp (conical)	Dirty green, bubbly	'Aydhab, 10 th –14 th c, Kawd am-Saila, 14 th – 16 th c	Meyer 1992: 84, Pl. 18:476	

^c Rim of deep bowl or hanging lamp, 11 cm diameter, colorless with deep bubbles (Harden 1961: Fig. 36:9).

^d Three at Meiron have triangular cross-sections like this one (Meyers, Strange, and Meyers 1981: Pl. 9.7:3, 6, 9).

Table 15. Coins and Coin Weights

Year/ RN	Locus	Material	Condition	Description	Ruler/Dynasty	Date
78/27	K9b-10	glass	broken	Coin weight: green, stamped with a grid design	Late Ayyubid?	
82/665	J10c-5	bronze	complete	25.5 mm, 9.60 g	Agripina the Younger?	AD 67
82/667	surface	bronze	complete	21 mm, 3.77 g	—	Islamic
82/668	K9b-70	bronze	four powdery fragments	23 mm, 2.33 g	_	
82/670	J10c-15	bronze	fragment	Square coin or token; 10 mm × 0.9 g	—	
82/671	surface	bronze	fragment	Rectangular; 15 × 14 mm, 2.57 g	—	Islamic
82/673	surface	bronze	fragment	13 mm, 0.82 g	_	Islamic
82/675	K9b-27	silver	fragment	20 mm, 2.11 g	—	Islamic
82/676	surface	bronze	fragment	Rectangular, 3.94 g (Double trefoil design?)	Ayyubid	1169– 1250
82/677	surface	bronze	fragment	17.5 mm, 3.23 g	_	Islamic
82/678	surface	bronze	fragment	One cut edge; 24.5 mm, 3.96 g	_	Islamic
82/681	J10a-9	bronze	complete	Rectangular (cut); $9.5 \times 0.7 \text{ mm}$	Ayyubid	1169– 1250
82/682	K10a-7	silver	complete	Globular half- dirham; 9.0 mm, 0.81 g	Ayyubid	622–47 / 1225–50
82/683	K9b-39	silver	complete	Globular half- dirham; 6.5 mm, 0.38 g	Sultan al- Kamil I Nasir al-Din	615–35/ 1218–38
82/685	K9b-46	bronze	fragment	Fals (<i>Muhammad…al- malik al…</i>); 16 mm, 0.85 g	Muhammad ^a Sultan al- Kamil I Nasir al-Din Muhammad?	615–35/ 1218–38
82/687	J9d-9	silver	fragment	10 mm, 0.76 g	Islamic	

^a This could also be of al-Salih Najm al-Din Ayyub b. al-Kamil Muhammad I (Cf. Balog 537 in 1980: 185).

Year/ RN	Locus	Material	Condition	Description	Ruler/Dynasty	Date
82/694	K9b-63	silver	fragment	Half dirham, dodecalobe in circle (<i>al-Malik al</i> [Salih] / <i>al-Imam</i> <i>al-Musta'sim</i>); 11.5 × 10 mm, 2.13 g	al-Salih Najm al-Din Ayyub	644–46/ 1246–48 (Damasc us mint)
82/695	K9b-67	silver	fragment	16 mm, 1.18 g	Ayyubid	1246–49
82/696	J10c-17	silver	complete	Half dirham, square in circle (al-Malik al-Salih / al-Imam al- Musta'sim); 13 mm, 1.45 g	Either Sultan al-Salih Ayyub, or al- Salih Isma'il governor of Damascus, and Caliph al- Musta'sim	1242–49
82/698	K9d-1	silver	complete	Dirham, square in circle (al-Malik al-Salih Imad al- Dunya wa'l Din Isma'il b. Abu Bakr / al-Imam al- Musta'sim bi'llah Abu Ahmad Amir al-Mu'minin); 20 mm, 2.36 g	al-Salih Isma'il governor of Damascus, and Caliph al- Musta'sim	1242–45 / 641–43
82/699	K9b-57	silver	complete	Rectangular half dirham <i>aswad</i> ; 7– $9 \times 10-12.5$ mm, 1.36 g	Fatimid	1100– 1169
82/705	K9d-4	bronze	complete	25 mm, 4.52 g	Roman	
82/732	K9b-57	bronze	complete	Coin weight: anepigraphic; barrel-shaped; 1.5 cm (diam.) × 1.1 cm (height); 15.13g (5 dirham denomination)	Ayyubid	1169– 1250

Table 15. Coins and Coin Weights, continued

APPENDIX D

DOCUMENT TABLES

Table 16. Summary of Published Documents by Locus

Locus No.	Locus Description	Location	Published Documents: Text No./RN No.
Phase I			
K9b-63	Surface below plaster floor of K9b-57	N House, Rm C	55/1037a, 56/1042a, 73/1049 (Ayyubid coin dated AD 1246–1248)
J10c-19	Constructional fill under plaster surface of J10c-15	Shuna F	79/991a
Phase IIa Loci			
J10c-11	Sand and matting to bedrock	<i>Shuna</i> E	46/988 (dated AD 1235)
K9b-10	Sand and brick wall fall	S House, Rm A	(anepigraphic glass weight)
K9b-52	Burn layer on top of plaster floor of K9b-54	N House, Rm A	7/1026a, 8/1026b, 31/1027a, 43/1027b, 60/1027e, 32/1027g
K9b-57	Accumulation on plaster floor, below upper earthen surface	N House, Rm C	22/1029a, 82/1031a; (late Fatimid–early Ayyubid coin dated AD 1100–1210)
Phase IIb Loci			
J9d-3	Wind-blown debris to bedrock	Area A and Corridor D	62/965
J9d-4	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	1/970a, 2/971, 3/972a, 12/968b, 24/969, 38/970b 47/966c, 48/968a, 51/967 (dated AD 1215), 59/967a 63/966a, 64/966b, 84/968
J10a-7	Organic material on floor and under wall A	Shuna B	65/977
J10c-8	Laminations of matting and sand	Shuna B	52/983
J10c-9	Laminations of matting and sand to clean sand layer	Shuna B	45/984a
J10c-11	Sand and matting to bedrock	Shuna E	46/988

Locus No.	Locus Description	Location	Published Documents: Text No./RN No.
Phase IIb Loci	, continued		
J10c-15	Mudbrick wall collapse onto plaster floor	<i>Shuna</i> F	66/987b
J10c-17	Sand, matting, and fiber on surface	Shuna E	(Ayyubid coin dated AD 1242–49)
K9b-32	Mudbrick wall and ceiling collapse onto earthen surface of K9b-27	S House, Rm C	53/997, 20/998
K9b-38	Mudbrick wall collapse	Corridor D	4/1003a, 26/1003b, 13/1003c/1004d, 39/1001a
K9b-41	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	40/1004a, 41/1004b, 27/1004c,13/1004d
K9b-46	Earth and plaster floor, and soft mudbrick and organic debris on top of it	N House, Rm A	58/1008 (Ayyubid coin dated AD 1218–1238)
K9b-48	Wall and ceiling collapse onto earthen floor, and floor surface	N House, Rm C	21/1015a, 14/1015b, 70/1015c, 15/1016a, 81/1016b, 5/1017a, 72/1017b, 6/1018a, 28/1018c, 29/1018d, 1017g, unpub., dated AD 1228
K9b-67	Brick tumble and sand over bedrock-dug pit	S House, Rm B	(Ayyubid coin dated AD 1246–49)
K10a-9	Mudbrick wall collapse onto floor	Shuna F	57/1055a
K10a-10	Mudbrick wall collapse and sand	S House, Vestibule F, and <i>Shuna</i> F	78/1056a, 74/1057
K10a-11	Mudbrick wall collapse	Corridor D	9/1059, 75/1060b, 23/1062a
K10a-13	Mudbrick wall collapse	S House, Rm E	50/1063a (dated AD 1215), 10/1063b
K10a-15	Coarse sand and mudbrick debris on plaster floor	S House, Vestibule F, and <i>Shuna</i> F	16/1066a
Phase IIb Pits			
J10a-9	Trash pit with organic and inorganic debris (eastern part)	Shuna C	(Ayyubid coin dated AD 1173–1258)
K9b-39	Shallow pit dug into earthen floor of K9b-36	N House, Rm B	(Ayyubid coin dated AD 1218–1238)

Table 16. Summary of Published Documents by Locus, continued

Locus No.	Locus Description	Location	Published Documents: Text No./RN No.
Phase IIb Pit	s, continued		
K9b-49	Pit in floor of K9b-48	N House, Rm C	17/1020a (dated AD 1224–31), 18/1020b, 61/1021a, 30/1021b, 54/1022, 67/1023
Unstratified			
J9d-1	Surface debris: wind-blown sand	Shuna E	80/964a
J9d-13	Surface debris	Exterior of N House, N of Wall G	19/976
J10a-1	Surface debris: sand and gravel	Area A	65/977
J10a-2	Surface debris: trash in open courtyard	Shuna B	49/979
J10a-6	Surface debris: sand and gravel	Shuna C	65/977
J10c-2	Surface debris: trash in open courtyard	Shuna B	25/980a
K9b-50	Surface debris and caliche	Outside of N House, west of Rm E	42/1024
K9d-2	Surface debris	Exterior of S House, south of Rm B, wall D	83/1052
K10a-7	Surface debris; erosion from Room D over the slope	Exterior of S House, south of Rm D, wall D	(Ayyubid coin dated AD 1225–50)
K10a-8	Surface debris: windblown sand	S House, Vestibule F, and Shuna F	33/1053a
K10a-14	Cleaning for photo	S House, Rm E	11/1064a, 34/1064b
K10a-16	Test trench: erosion on <i>Shuna</i> F floor	Corridor F/ <i>Shuna</i> F	76/1069

Table 16. Summary of Published Documents by Locus, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I						
991a	79	306	J10c-19, Phase I	Personal letter or prayer		Recipient missing; prayers for safe travels for a group of people, including a woman
991b		43	J10c-19, Phase I	Business diary	Pepper	
1036a	—	2, 112	K9b-62, Phase I	Letter or note	—	To Abu Mufarrij
1036b	_	116	K9b-62, Phase I	Accounts?	_	Contains Coptic numerals with Arabic letter numbers
1037a	55	251	K9b-63, Phase I	Shipping note	Medicine, water, barley, leather baskets	To Ibrahim b. Abu Mufarrij at the shore of Quseir
1037b		72	K9b-63, Phase I	Sermon	_	_
1037c	_	18, 74	K9b-63, Phase I	Business letter including sermon?	_	From 'Asakir 'Ali al-Mamluki
1037d		28	K9b-63, Phase I	Official letter	_	To Rashid al- Jamali from 'Ali, administrator(?) of the pilgrims
1038	_	72, 76, 78–79, 89	K9b-63, Phase I	Block- printed amulet		_
1039	_	76–79, 82–83, 110	K9b-63, Phase I	Block- printed amulet containing zodiac	_	_
1039a		77, 89	K9b-63, Phase I	Block- printed amulet and Qur'an quotations	_	_

Table 17. Details of All Documents by Phase

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	, continu	ed				
1039b	—	82, 89	K9b-63, Phase I	Astrological dial	—	—
1039c		82, 89	K9b-63, Phase I	Astrological dial, spherical chart	_	_
1039d	—	82, 89	K9b-63, Phase I	Spherical dial	—	—
1039e	—	82, 89	K9b-63, Phase I	Astrological dial	_	_
1039f	—	81	K9b-63, Phase I	Magical text	_	_
1040	—	72, 105, 107	K9b-63, Phase I	Sermon	_	
1040Ь		3, 19, 45	K9b-63, Phase I	Account	Wheat	To Ibrahim from 'Abd al-Rahman Abu Hamd – a list of amounts or grain Ibrahim received from various individuals, collected by Abu Hamd
1040c		40–41, 43, 73	K9b-63, Phase I	Shipping note	Coral, a flax comb, pepper	—
1040d	—	73	K9b-63, Phase I	Sermon?		—
1041	—	72, 105	K9b-63, Phase I	Sermon	_	_
1042a	56	252	K9b-63, Phase I	Shipping note	Wheat, female camels	To Sheikh Ibrahim b. Abu Mufarrij, location missing
1042b		72–73	K9b-63, Phase I	Sermon	_	_
1043	—	72, 105	K9b-63, Phase I	Sermon	_	—
1047	—	72, 105	K9b-63, Phase I	Sermon	—	—

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	, continu	ed				
1047a		74	K9b-63, Phase I	Sermon		
1048	_	72, 75, 105	K9b-63, Phase I	Sermon		
1049	73	243	K9b-63, Phase I	Petition to a high- ranking official	_	To Rashid al-Din 'Ala'
1049b	_	36 n. 25, 42	K9b-63, Phase I	Shipping note	Ropes, crops	Reference to boar building?
1050, 1050b	—	72, 74, 105	K9b-63, Phase I	Sermon		
1050a		3	K9b-63, Phase I	Shipping note?		To Ibrahim
1051		72, 74, 105	K9b-64, 65, 66, Phase I	Sermon		
1068a		3, 112	K10a-17, Phase I	Shipping note?		To Ibrahim
Possible	e Phase I					
967b	51	245	J9d-4, Phase IIb	Shipping note	_	To Ibrahim Abu Mufarrij at the shore of Quseir al-Qadim; dated AH 612/AD 1215–16; <i>ghalla</i> (in kind) payments for taxes; cavalry
1063a	50	244	K10a-13, Phase IIb	Shipping note	_	To Sheikh Abu Ishaq at the shord of Quseir al- Qadim; dated AF 612/AD 1215–16
Phase I	Ia					
1025		3, 19	K9b-52, Phase IIa	Shipping note	—	To Ibrahim from Ahmad

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ia, contir					
1026a	7	148	K9b-52, Phase IIa	Business letter	_	To Quseir al- Qadim, to Sheikh Abu Mufarrij "the owner of the warehouse"; mentions Qus
1026Ь	8	151	K9b-52, Phase IIa	Business letter	Wheat, a sword	Recipient unnamed; message to Abu Mufarrij; Sheikh Najib; mentions pilgrim; balance sheet on reverse (paper reused)
1026d	—	2	K9b-52, Phase IIa	Letter or note	—	To Abu Mufarrij
1026e	_	81	K9b-52, Phase IIa	Hand- written amulet	—	Protects against a plague
1027a	31	212	K9b-52, Phase IIa	Business corresponde nce and shipping note	Embroidery, <i>batta</i> - container, wheat, flour, oil, corals, mirrors	To Sheikh Muhammad b. Ja'far; <i>ghalla</i> (in kind) payments for taxes, commissions discussed; on recto a letter from Muhammad b. Ja'far; troops preparing to battle the Franks mentioned
1027b	43	234	K9b-52, Phase IIa	Shipping note	Grain?, oil strainer	To Sheikh Abu Mufarrij; named boat delivering goods "from the south" and/or "from outside"
1027c		103 n. 8	K9b-52, Phase IIa	Business letter	_	Concerns the sending of a <i>bayan</i> certificate for goods

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ia, contir	nued				
1027d		29, 43	K9b-52, Phase IIa	Shipping note	Flour, pepper	Recipient missing; goods for Hasan b. Ja'bar
1027e	60	260	K9b-52, Phase IIa	Certificate of receipt	Pepper	Issued by Abu Mufarrij
1027g	32	218	K9b-52, Phase IIa	Business letter	Female slave	Address missing instructions regarding a female slave, other (damaged) goods
1029a	22	187	K9b-57, Phase IIa	Business letter	Pottery	To Sheikh Abu Ishaq Ibrahim; blessings on "the dear mother"; client 'Abd al- Muhsin (cf. 1017a)
1029b		83, 89	K9b-57, Phase Ila	Astrological dial, block- printed Qur'an quotations	_	_
1029c	—	83, 89	K9b-57, Phase IIa	Lunar and astrological dials	—	—
1029d	—	2	K9b-57, Phase IIa	Letter or note	—	To Abu Mufarrij
1031a	82	311	K9b-57, Phase IIa	Hand- written amulet	_	For a Muslim woman wishing to bear a son
1031b	—	81	K9b-57, Phase IIa	Magical text	—	—
1031d	—	2	K9b-57, Phase IIa	Shipping note	_	To the <i>shuna</i> of Abu Mufarrij
1031e	—	39	K9b-57, Phase IIa	Shipping note?	Beans, watermelon	—

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	la, contir	nued				
1032		103 n. 8	K9b-59, Phase IIa	Shipping note	_	Mentions sending a <i>bayan</i> certificate
1033a	—	2	K9b-59, Phase IIa	Letter or note	—	To Abu Mufarrij
1033b	—	3, 112	K9b-59, Phase IIa	Letter or note	_	To Ibrahim
1033c	—	2, 40	K9b-59, Phase IIa	Shipping note	Flax	To Abu Mufarrij
1033d	—	112	K9b-59, Phase IIa	Letter or note		
Possible	e Phase I	la				
1033e	—	41	K9b-59, Phase IIa	Shipping note?	Textiles	Discusses the colors of fabric
1034	_	2, 112	K9b-59, Phase IIa	Letter or note	_	To Abu Mufarrij
1035	—	83	K9b-59, Phase IIa	Drawing	_	_
1015c	70	287	K9b-48, Phase IIb	Witnessed document	_	Sworn in front of the <i>qadi</i> Zayn al- Din, who is also a <i>faqih</i> ; the <i>ulama</i> , a <i>hakam</i> , the suq, and the port mentioned; fee to be paid in <i>darahim waraq</i>
1017a	5	143	K9b-48, Phase IIb	Business letter	Grain?	To Sheikh Abu Mufarrij; client 'Abd al-Muhsin (cf. RN 1029a)
1017g	—	3	K9b-48, Phase IIb	Letter or note	—	Dated AD 626/1228
1020a	17	175	K9b-49, Phase IIb pit	Shipping note	Ropes	To Sheikh Abu Ishaq Ibrahim b. Abu Mufarrij; dated AD 1224– 31

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib					
966a	63	265	J9d-4, Phase IIb	Accounts of grain	Grain	Accounts on verso and recto: eleven clients
966b	64	269	J9d-4, Phase IIb	Accounts of grain	Grain	Accounts on verso and recto: nine clients
966c	47	240	J9d-4, Phase IIb	Shipping note	Nuts, baked goods, flour	To Brother Ahmad; goods sent to the <i>shuna</i> of Abu Mufarrij
966d	_	2, 112	J9d-4, Phase IIb	Letter or note	—	To Sheikh Abu Mufarrij
967a	59	258	J9d-4, Phase IIb	Shipping note	Flour, rice	To Abu'l-Hamd; goods meant for "the master"
967c		2, 112	J9d-4, Phase IIb	Letter or note		To Sheikh Abu Mufarrij
968a	48	242	J9d-4, Phase IIb	Shipping note	Flour	To Sheikh Najib b. Mabadi al- Sayyidi / al- Fayumi, to the <i>shuna</i> of Abu Mufarrij
968b	12	160	J9d-4, Phase IIb	Shipping note and business letter	Flour "sifted in a sieve for barley," <i>batta-</i> containers, clarified butter, oil	To Brother Najib, to the <i>shuna</i> of Abu Mufarrij
968c	84	314	J9d-4, Phase IIb	Prayer or poem	_	Expresses longing for a person who has gone on a journey

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase l	Ib, contir	nued				
969	24	192	J9d-4, Phase IIb	Business letter and shipping note	Clothing	Possibly to Husayn, location missing; Greetings to his father (Abu Mufarrij?), the jurist or notary (<i>faqih</i>), Muhammad, and others; disaster in an unnamed town; items paid for in "pure gold"
970a	1	135	J9d-4, Phase IIb	Shipping note and business letter	Wheat, crops	To Sheikh Abu Mufarrij; Egyptian <i>dananir</i> (sing. <i>dinar</i>) preferred over Meccan <i>dananir</i>
970b	38	229	J9d-4, Phase IIb	Shipping note	Wheat	To Abu Mufarrij
971	2	138	J9d-4, Phase IIb	Shipping note	Grain or flour?	To Sheikh Abu Mufarrij
973	—	2	J10c-8	Shipping note?	_	To the <i>shuna</i> of Abu Mufarrij
972a	3	140	J9d-4, Phase IIb	Shipping note	Fine flour, butter	To Sheikh Abu Mufarrij
972b		2, 18	J9d-4, Phase IIb	Shipping note	—	To Sheikh Abu Mufarrij
977	65	273	J10a-1, 6, 7, Phase IIb and Surface layer	Account	_	Head of Merchants underwrites a loan for Nile barges; Najib al- Fayumi named
981b		3, 18	J10c-5, Phase IIb	Shipping note	_	To Sheikh Ibrahim
982a	—	2, 18	J10c-6, 8, Phase IIb	Shipping note	_	To Abu Mufarrij

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase l	Ib, contir	nued			-	
983	52	247	J10c-8, Phase IIb	Shipping note	Flour	To Sheikh Ibrahim b. Abu Mufarrij; debts forgiven
984a	45	237	J10c-9, Phase IIb	Shipping note	Wheat, rice, crops	Recipient missing; goods delivered to the <i>shuna</i> of Abu Mufarrij care of Abu 'Ali Nu'man (cf. RN 1058c)
984b	_	2, 85, 110; Pl. 4	J10c-9, Phase IIb	Letter including prayer for safety of loved ones	_	To the <i>shuna</i> of Abu Mufarrij; originally tied with cord
985a	_	80, 88	J10c-9, Phase IIb	Block- printed amulet	—	_
986a	—	42	J10c-15, Phase IIb	Shipping note	Cloth for burial shrouds	
986b	—	23, 40	J10c-15, Phase IIb	Shipping note	Brass and copper objects	
987, 987a	—	13, 41	J10c-15, Phase IIb	Account	Clothing	Quantities sold on behalf of a certain person
987b	66	275	J10c-15, Phase IIb	Tax register	Wheat?	Amounts in waybas listed as paid in installments
988	46	238	J10c-11, Phase IIb	Shipping note and business letter	Wheat, oil, rope	Recipient missing; to the <i>shuna</i> of Abu Mufarrij; dated AH 533/AD 1235; another business letter on recto
988c	—	88	J10c-11, Phase IIb	Block- printed zodiac?	Contains a dial and a grid	_

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contir	nued				
996a	—	3, 10	K9b-27, 28, 30, 31, Phase IIb	Letter or note	_	To Sheikh Ibrahim
996b	_	80	K9b-27, 28, 30, 31, Phase IIb	Hand- written amulet	_	Protects against speech impediments, lustful thoughts, and disease
997	53	248	K9b-32, Phase IIb	Shipping note	Flax	To Sheikh Ibrahim b. Abu Mufarrij—"May God have mercy on him!" (Sheikh Abu Mufarrij has died)
998	20	179	K9b-32, Phase IIb	Shipping note and business letter	Mattocks, perfume	To Quseir al- Qadim, to Sheikh Abu Ishaq Ibrahim b. Abu Mufarrij; Greetings to (his brother) Husayn and "the father" (Abu Mufarrij?); chief merchant (<i>ra'is al-tujjar</i>) Yusuf mentioned
999a	—	64	K9b-36, Phase IIb	Business letter	_	A merchant of Syrian origin (<i>al-shami</i>)
999b	—	59	K9b-36, Phase IIb	Business letter	Slaves	"the slave boys from Qenaare coming in a boat"
1001a	39	230	K9b-38, Phase IIb	Shipping note and magical text	Chickpeas, flour	To Sheikh Abu Mufarrij; verso magic numbers
1003a	4	142	K9b-38, Phase IIb	Shipping note	Flour, wheat	To Sheikh Abu Mufarrij

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase II	b, contir	nued				
1003b	26	198	K9b-38, Phase IIb	Business letter	Women's wraps decorated with gold and gemstones	To the shore of Quseir, to Sheikh Abu 'Ali Husayn (brother of Abu Mufarrij)
1003c/ 1004d	13	163	K9b-38, 41, Phase IIb	Shipping note and business letter	Flour, foodstuffs, perfume	To Brother Najib to the shore of Quseir, to the <i>shuna</i> of Abu Mufarrij; Greetings to Abu Mufarrij; exchange rates in Qena and Qus; <i>darahim</i> (silver coins) preferred over <i>dananir</i> (gold coins)
1004a	40	231	K9b-41, Phase IIb	Shipping note	—	To Abu Mufarrij
1004b	41	232	K9b-41, Phase IIb	Shipping note	_	To Abu Mufarrij, address missing; Greetings to Brother Najib
1004c	27	201	K9b-41, Phase IIb	Shipping note and business letter	Wheat, soap, large sacks, ropes, rice, a fine silk robe, fine shawls, fine clothes, flax, flour, crops	Address missing; Greetings to Najib; instructions abou paying <i>zakat</i> tax; requests for flour to be sent (to the Nile Valley) on four riding animals
1008	58	256	K9b-45, 46, Phase IIb	Shipping note	Fine grain, butter, chickpeas, oil, soap, gifts of fine almonds and eggs	To Brother Ibrahim, the son of Abu Mufarrij; <i>ghalla</i> (in kind) payments for taxes

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contir	nued				
1009		76–79	K9b-48, Phase IIb	Block- printed amulet	_	_
1009a	_	76, 88	K9b-48, Phase IIb	Block- printed Qur'an quotations	_	_
1009b		76, 88	K9b-48, Phase IIb	Block- printed Qur'an quotations	_	_
1011	—	3	K9b-48, Phase IIb	Shipping note	_	To Sheikh Ibrahim
1012b	_	6	K9b-48, Phase IIb	Shipping note	_	To Abu 'Ali (brother of Abu Mufarrij)
1013b	—	59	K9b-48, Phase IIb	Shipping note		Outgoing letter to Qena
1015a	21	183	K9b-48, Phase IIb	Business corresponde nce	Fine wheat	To Sheikh Abu Ishaq Ibrahim "the son of" Abu Mufarrij from Hajj 'Asakir; Greetings to his parents; verso contains a letter to 'Asakir; fine wheat to feed "th youths" (soldiers or pilgrims)
1015b	14	167	K9b-48, Phase IIb	Business letter	Oil, grain	To Brother Najib Greetings to Abu Mufarrij
1016a	15	170	K9b-48, Phase IIb	Business letter	_	Recipient missing; Greetings to Abu Mufarrij and his sons

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contir		-			
1016b	81	309	K9b-48, Phase IIb	Hand- written amulet	_	Health and other benefits granted to the person who follows certain personal hygiene instructions
1017b	72	292	K9b-48, Phase IIb	Notice regarding legal procedures	_	_
1017c	_	12, 34	K9b-48, Phase IIb	Shipping note	Battat (containers)	To the shore of Quseir, the <i>shuna</i> of Abu Mufarrij, to the care of Najib
1018a	6	145	K9b-48, Phase IIb	Shipping note and business letter	Barley, wheat	To Sheikh Abu Mufarrij
1018b		12	K9b-48, Phase IIb	Shipping note or business letter	_	To Sheikh Najib at the <i>shuna</i> of Abu Mufarrij
1018c	28	204	K9b-48, Phase IIb	Business letter	Fabrics, flour, rice, waist- wrappers, cloaks	Address missing; pilgrim mentioned
1018d	29	207	K9b-48, Phase IIb	Business and personal letter	Rice, medicine	Address missing; a woman negotiates with the tax collector; a women sends her love and instructions to her son; request for medicine

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contir	nued	-			
1019d		1–2	K9b-49, Phase IIb pit	Shipping note or business letter	_	To the shore of Quseir, the <i>shuna</i> of Abu Mufarrij—"may God prolong his prosperity!"
1021a	61	262	K9b-49, Phase IIb pit	Business certificate	Flour	Signed by Abu Mufarrij; client is a woman
1054	—	42	K10a-9, Phase IIb	Shipping note	Waist- wrappers	_
1055a	57	253	K10a-9, Phase IIb	A witnessed shipping note	Flax	To Sheikh Abu Ishaq Ibrahim b. Abu Mufarrij
1056a	78	303	K10a-10, Phase IIb	Personal and business letter	_	To his mother from Nuh; greetings to his uncle Abu Ishaq
1056b		25, 62	K10a-10, Phase IIb	Business letter	_	Mentions the port of Aden in the Yemen; mentions goods sold to soldiers (<i>'askar</i>)
1057	74	295	K10a-10, Phase IIb	Petition to a high- ranking official	Wheat	To Abu Zakariya requesting wheat for youths (soldiers or pilgrims)
1058a	—	3, 10, 59	K10a-11, Phase IIb	Receipt	_	Issued by Ibrahim; mentions Qus
1058c		14, 112	K10a-11, Phase IIb	Shipping note	_	Recipient missing; goods delivered to the shore of Quseir care of Abu 'Ali Nu'man b. 'Atiya (cf. RN 984a)

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contir	nued	-			
1059	9	153	K10a-11, Phase IIb	Business/ personal letter		Recipient addressed "Oh my father" (Abu Mufarrij?); From Husayn, Muhammad, and 'Umar stuck in Qasr al-Yamani, requesting warm clothes, food, and water
1060a	_	3	K10a-11, Phase IIb	Shipping note or business letter	_	To Ibrahim
1060b	75	297	K10a-11, Phase IIb	Official petition from Mecca, accounts	_	_
1062a	23	189	K10a-11, Phase IIb	Business corresponde nce	Flax?	To Abu 'Uthman Mithqal and Muhammad, the son of Abu Mufarrij; second letter on the verso, to which that on the recto is probably a reply
1062b	—	70, 73 n. 4	K10a-11, Phase IIb	Sermon		
1063b	10	156	K10a-12, 13, Phase IIb	Shipping note and business letter	Wheat?	To Sheikh Abu Mufarrij al- 'Abawi at the shore of Quseir al-Qadim

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib, contii	nued				
1066a	16	172	K10a-15, Phase IIb	Shipping note and business letter	Dried dates	To Brother 'Arafat, to the shore of Quseir, to the <i>shuna</i> of Abu Mufarrij al- Qifti; flour
Phase I	Ib Pits					
1020Ь	18	176	K9b-49, Phase IIb pit	Shipping note	_	To the shore of Quseir, to Abu Ishaq Ibrahim, "master, dear brother, sermon giver, trade leader, son of the <i>Hajj</i> Abu Mufarrij"
1021b	30	211	K9b-49, Phase IIb pit	Business letter and shipping note	Clothes	Address missing
1022	54	249	K9b-49, Phase IIb pit	Shipping note	Wheat, stoneware cups, sugar container, juice presser, fine sprinkler bottles	To Ibrahim b. Abu Mufarrij, to the shore of Quseir
1023	67	277	K9b-49, Phase IIb pit	Accounts of at least fifty clients	Batta- container of grain, almonds, clothes, a necklace, "Ethiopian gowns," "Jewish cloaks"	Dirham amounts; Nile barges; the Yemen; wali (mayor/police chief) a client, as well as a qadi; the 'arif (superintendent) and ra'is (head of a profession, possibly of merchants) also mentioned

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	Ib Pits, c	ontinued				
964a	80	307	J9d-1, Surface layer	Prayer, calligraphy practice	_	Two texts written up-side-down to each other; longing for those who have departed; praise to God and blessings on Muhammad
Phase I	l, IIa, or I	Ib				
965	62	263	J9d-3, Surface layer	Account of groceries	Flour, chickpeas, onions, lemons, carrots, milk, butter, chicken eggs	For four households: Qirtas b. 'Imran, Yusuf al- Damanhuri, 'Ata and Thabit
975a		2, 18	J9d-13, Surface layer	Letter or note	_	To Abu Mufarrij
976	19	177	J9d-13, Surface layer	Shipping note	Mattocks, perfume	To Abu Ishaq Ibrahim from his uncle Abu 'Ali; Greetings to Ibrahim's brothers Muhammad and Husayn and his nephew Subayh, son of Husayn
976a	_		J9d-13, Surface layer	Unopened text folded and tied with string	_	_
978		81, 110, 115	J10a-2, Surface layer	Magical text		Formerly folded and tied with string
979	49	243	J10a-2, Surface layer	Shipping note	Flour, barley in <i>batta-</i> containers	Recipient missing; to the <i>shuna</i> of Abu Mufarrij

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	, IIa, or I	Ib, contin	ued			
979c	—	64	J10a-2, Surface layer	Shipping note	—	Items come from Damascus
980a	25	197	J10c-2, Surface layer	Letter to a judge	_	To the shore of Quseir, to Abu Hasan 'Ali al- Mu'awwal, a <i>qadu</i> (religious judge) and a <i>hakam</i> (municipal judge)
980b	—	64	J10c-2, Surface layer	Shipping note	_	Damascus mentioned
1005a	—	18	K9b-44, Surface layer	Shipping note	_	To the <i>shuna</i> of Abu Mufarrij, from Mubarak
1024	42	233	K9b-50, Surface layer	Shipping note	Wheat?	To Abu Mufarrij; ghalla (in kind) payments for taxes part of the shipment
1052	83	312	K9d-2, Surface layer	Hand- written amulet		For putting out fires; invokes the Christian and Muslim story of the "Seven Sleepers" or "Men of the Cave"
1053a	33	220	K10a-8, Surface layer	Business letter	Sweetened flour	Address missing; discusses sweetened flour for pilgrims
1064a	11	158	K10a-14, Surface layer	Shipping note and business letter	Flour, cloaks	To Sheikh Abu Mufarrij

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	, IIa, or I	Ib, continu	ied			
1064b	34	221	K10a-14, Surface layer	Chancery document (business letter) and shipping note or account	Wheat	To an unnamed judge (<i>qadi</i>) about wheat shipped to Qus; on verso a shipping note for goods delivered to Sa'd by 'Ammar (paper reused)
1069	76	300	K10a-16, Surface layer (also K10a-19, 20, 22)	Official letter to the highest ranked official in the court		To Amir Nasir al- Din
1077a	44	236	L8c-1 in Roman oven across the harbor from the Sheikh's House	Shipping note	Flax, barley	To Sheikh Abu Mufarrij
1083b	_	2, 26, 28	L8c-16 in Roman oven across the harbor from the Sheikh's House	Business letter		To Abu Mufarrij; instructs him to collect payments in dirhams and send them on; mentions the rental of riding animals
1090a		18, 39, 41, 47, 125	L8c-37, 50, 51 outside the Sheikh's House	Shipping note	Pickles, vegetables, lentils, dry crops, indigo dye	To the shore of Quseir, to the <i>shuna</i> of Abu Mufarrij; goods as ghalla payments
1090b	69	104, 286	L8c-37, 50, 51 outside the Sheikh's House	Business diary	Wwheat	—

Table 17. Details of All Documents by Phase, continued

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
Phase I	, IIa, or I	Ib, continu	ied			
1093	37	15, 18–19, 22, 34–35, 39, 119, 227	L8c-55 outside the Sheikh's House	Shipping note	Green grain, apples, watermelon	To the shore of Quseir

Table 17. Details of All Documents by Phase, continued

APPENDIX E

TEXTILE AND ARCHAEOBOTANICAL TABLES

Table 18. Resist-Dyed 7	Fextiles Found	in the Sheikh	's House
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RN	Locus	Color	Size (cm)	Description	Published
Phase	eI				
922	K9b-63 (N House, Rm. C)	Blue on natural ground	Ca. 25 × 12.5	Square pattern: Large stylized tree of life (with flanking animals) alternating with rosette	Vogelsang- Eastwood 1989: 112 No. 52
945	K9b-63 (N House, Rm. C)	Blue on natural ground	(part of No. 52)	Square pattern: Stylized tree of life (with flanking animals) alternating with elephant	Vogelsang- Eastwood 1989: 112 No. 53
939	K10a-20 (S House, Rm. D)	Red, blue (sewn together)	5 × 2.5	(a) Block printed pattern of row of dots, curved line, large dot, in natural on red ground; sewn to (b) woven dark blue and natural stripes	Vogelsang- Eastwood 1989: 115 No. 58
Phase	e IIb				
927	K10a-11 (Corridor D)	Blue on natural ground	5 × 13.5	Coarse cloth; Crude design of lines, dots, and blobs	Vogelsang- Eastwood 1989: 113 No. 55
937	K10a-15 (Corridor Of)	Natural on red ground	11 × 9.5	Stepped diamond pattern with rosettes	Vogelsang- Eastwood 1989: 114 No. 56

RN	Locus	Color	Size (cm)	Description	Published
Phase	e IIb, continued				
938	K10a-15 (Corridor Of)	Red on natural ground	4.5 × 11	Coarse cloth; foliate pattern of leaves and small rosette	Vogelsang- Eastwood 1989: 114, No. 57
Surfa	ice				
923	J10a-2 (Shuna B)	Blue on natural ground	18 × 8	Very fine cloth; square pattern with foliate or geometric form	Vogelsang- Eastwood 1989: 111, No. 51
931	K10a-8 (<i>Shuna</i> F)	Red on natural ground	2.5×2.8 1.5×1.5 5×5	Epigraphic?	Vogelsang- Eastwood 1989: 113, No. 54

Table 18. Resist-Dyed Textiles Found in the Sheikh's House, continued

Table 19. Nutshell Pieces by Locus (K9b Loci only)

Locus	Coconut	Hazelnut	Walnut	Almond	Pistachio	Unknown
K9b-24		1				
K9b-25		3		1	1	
K9b-27						
K9b-28		1				
K9b-30		1				1
K9b-31	1					
K9b-32	1					
K9b-35						
K9b-36		21			1	
K9b-38		15		3	3	
K9b-40						
K9b-41		2			2	
K9b-44						
K9b-46				1		
K9b-47		1				
K9b-48		2	1			
K9b-49		2	2			
K9b-51						
K9b-54		2				
K9b-55		7				
K9b-57		4			2	
K9b-62			1			
K9b-63	1	5		1	1	
K9b-64		8		1		
K9b-65	3	1				
K9b-66		2			1	
K9b-68						
Totals	6	78	4	7	11	1

Source: Wetterstrom n.d.: Table 2

Table 20. Nutshell Pieces by Phase (K9b Loci only)

Phase	Coconut	Hazelnut	Walnut	Almond	Pistachio	Unknown
Ι	4	21	1	2	1	
Ha	0	6	0	0	2	
IIb	2	46	1	5	8	
IIb (Pits)	0	2	2	0	0	
Surface/Unstr.	0	3	0	0	0	1

Source: Wetterstrom n.d.: Table 2

Locus	Date	mnJq	Olive	Nabaq (Christ's Thorn)	Peach	Dom Palm Fruit	Watermelon Seed	uwouyun,,	Carob pod	Other
K9b-24	207					2				
K9b-25	560				3	1	1	2		1 unk. A stem
K9b-27	366					1		5	1	3 citrus rind fags.
K9b-28	43		1					5		20 unk. A fruits
K9b-30	86									
K9b-31										1 unid. seed
K9b-32										
K9b-35	13		1	1				3		14 unk. A fruits
K9b-36	344									2 pomegranate rind, 8 unk. A fruits

Table 21. Fruit Stone Pieces by Locus (K9b Loci only)

Locus	Date	Plum	Olive	Nabaq (Christ's Thorn)	Peach	Dom Palm Fruit	Watermelon Seed	"Спкпомп	Carob pod	Other
K9b-48	226				1					13 unk. A fruits, 1 lupine seed, 3 citrus rind frags, 1 garlic bulb, 1 carob seed, 1 unid. plum stone
K9b-49	53									2 citrus rind frags
K9b-51	3					1				
K9b-54	2				3					
K9b-55										1 Jericho rose plant
K9b-57	82	1		1	1	2				1 cf. Juncus stem
K9b-62	43									l pomegra- nate fruit
K9b-63	132					2				

Table 21. Fruit Stone Pieces by Locus (K9b Loci only), continued

Locus	Date	Plum	Olive	Nabaq (Christ's Thorn)	Peach	Dom Palm Fruit	Watermelon Seed	"F umouyu _D "	Carob pod	Other
K9b-64										1 unk. A fruit
K9b-65										
K9b-66	38									l frag. Epiderma l tissue
K9b-68	7						2			
Totals	3,424	1	2.5 4	4	20	6	3	15	1	

Table 21. Fruit Stone Pieces by Locus (K9b Loci only), continued

Source: Wetterstrom n.d.: Table 2

Phase	Date	Plum	Olive	Nabaq (Christ's Thorn)	Peach	Dom Palm Fruit	Water- melon Seed	nwonk nwouk -nU	Carob pod	Other
Ι	175					2				1 Jericho rose plant, 1 pomegranate fruit, 1 unk. A fruit rind
IIa	94	1		1	4	3				1 cf. Juncus stem
qII	2,80 9		7	ε	16	7	-	15		1 unk. A stem, 58 unk. A fruits, 14 citrus rind frags., 1 unid. seed, 2 pomegranate rind, 4 pomegranate frags., 1 lupine seed, 1 garlic bulb, 1 carob seed, 1 unid. plum stone, 1 pc. gourd, 1 apricot stone, 2 frags. epidermal tissue, 1 unid. stem with persistent fruits
IIb (pits)	53									2 citrus rind frags.
Surface	293		0.5			2				

Table 22. Fruit Stone Pieces by Phase (K9b Loci only)

APPENDIX F

POTTERY PLATES BY LOCUS

The following pottery plates are in alphanumerical order by locus, rather than grouped by phase. For the phase of a locus, refer to Table 7. Captions do not usually contain descriptions of fabric for each sherd, but the fabric type is listed and can be cross-referenced with Tables 9–10. Fabrics of sherds that do not fall into fabric groups are described in detail, however. The sherds were all drawn at 1:1, but as with the illustrations in Chapter Two, have been sized differently in order to fit on the page. The size of each vessel is provided in the caption when possible, however, and each drawing is accompanied by a centimeter scale.

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J9d2_22–23/RN 30	Bodysherds of cooking pot	Diam. 30cm	None discernable	Aswan Utility	
b	J9d2_13/RN 264	Bodysherd of jar		Incised or molded; opaque shiny turquoise glaze on exterior	Marl 4	Avissar and Stern 2005: Pl. 9:2
c	J9d2_15/RN 30	Base of jar	Diam. 14 cm	Slipped 5YR 7/8 reddish yellow	Aswan Painted	—
d	J9d2_10&11/RN 264	Rim of two- handled vessel	Diam. 18 cm	10R 4/6 red slip out	Nile 4 Utility Ware 1	_
e	J9d2–3_1– 3/RNs 244, 264	Rim, neck, handle and shoulder of jar	Rim diam. 10 cm	Molded leaves/petals; two coats of opaque shiny turquoise glaze in and out	Marl 4	Previously published: Whitcomb and Johnson 1980: Pl. 42
f	J9d2_3/RN 82	Rim and body sherds of jar	Rim diam. 14.25 cm	Slipped 2.5YR 5/6 red; painted 10R 4/4 weak red and 10R 2.5/1 reddish black	Aswan Painted	Adams 1986 Fig. 224:C
g	J9d2_8/RN 88	Bodysherds of jar	Diam. 26 cm	Slipped 5YR 6/8 reddish yellow; painted 2.5YR 5/6 red and 2.5YR 2.5/2 very dusky red	Nile 7 Decorated	Scanlon 1974, Pl. 20:3

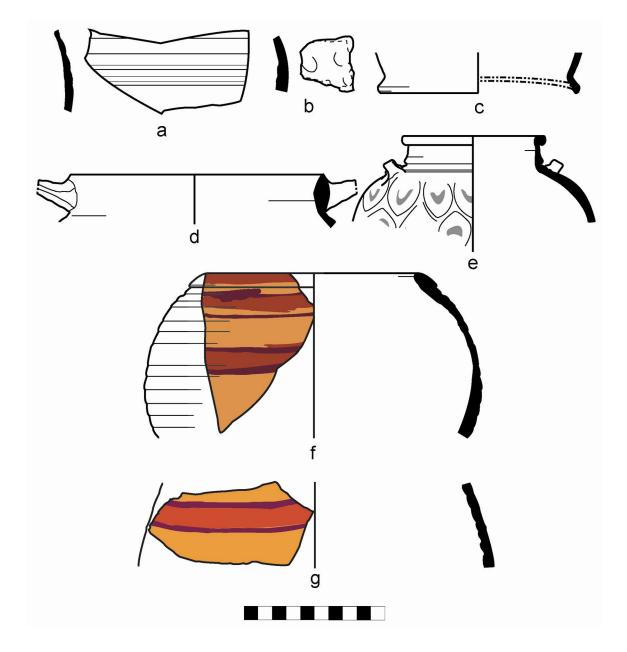
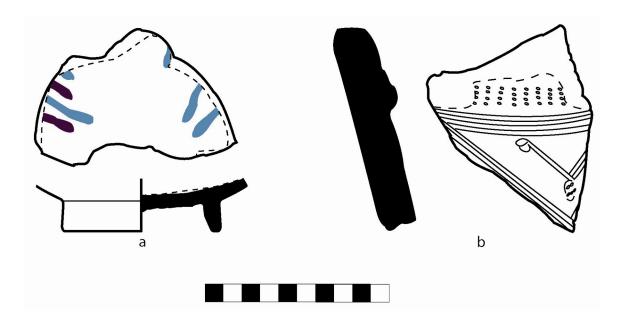


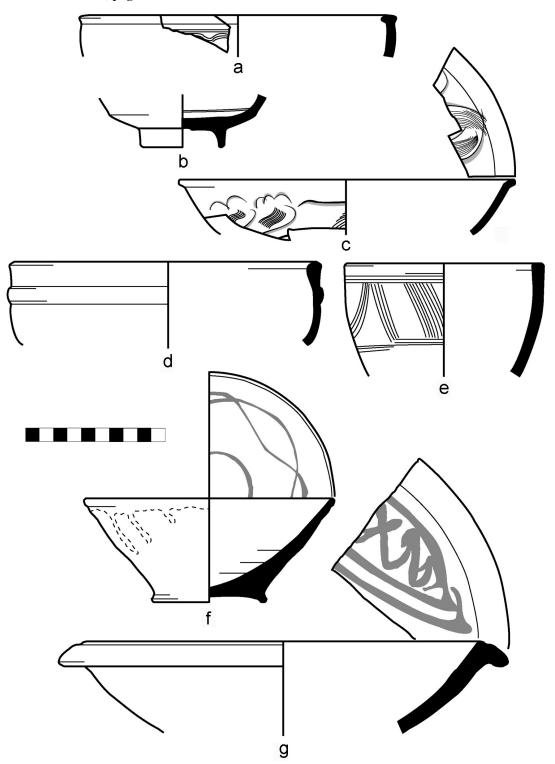
Plate 2. Locus J9d-3



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	J9d3_1/RN 240	Base of bowl	Diam. 9 cm	Opaque pale greenish-blue glaze in, with dark blue and purple drips; Greenish-clear translucent glaze out	Marl 4 Blue, Purple, White Drip	_
b	J9d3_2/RN 263	Bodysherd of <i>zir</i>		Incised and molded surface decoration	Yemen 5 Decorated Utility	Bridgman 2000: Pl. 12c

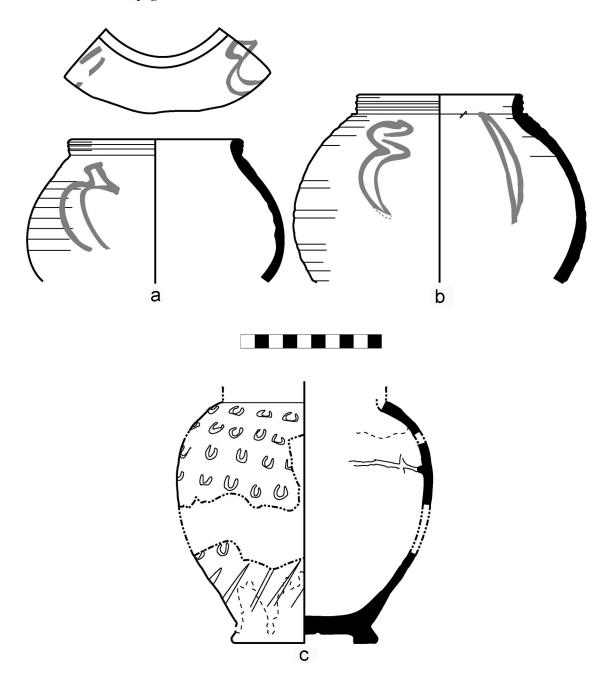
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J9d4_3/RN 44	Rim of bowl	Diam. 20 cm	Comb incised	Yemen 4 Trackware	Ciuk and Keall 1996: Pl. 95/41:k
b	J9d4_10/RN 233	Base of bowl	Diam. 6 cm	Greenish-clear glaze out, over base, pooling dark green in creases; Bluish white (5Y 8/2 white) glaze in, with dark blue crackle	Marl 4 Monochrome Glazed	_
c	J9d4_11– 13/RNs 225, 230, and 237	Rim of bowl; 4 sherds	Diam. 22 cm	Incised in and out; translucent glaze 5Y 5/3 olive, in and out	China 2: Celadon	Gray 1984: Pl. 26, color plate A; Gyllensvärd 1975: 97, Pl. 3:1–2, 4; Sakurai and Kawatoko 1992: Pl. IV- 4-4: 12
d	J9d4_2/RN 44	Rim of cooking pot	Diam. 23 cm	Blackened surfaces	Aswan Utility	—
e	J9d4_1/RN 44	Rim of cup	Diam. 13 cm	Traces of cream surfaces (10YR 7/3 very pale brown), possibly slip; comb incised	Yemen 2	Ciuk and Keall 1996: Pl. 95/43:d
f	J9d4_23/RN 339	Rim to base of bowl; 3 sherds, glued	Diam. 17 cm	Greenish- yellow glaze 5Y 8/8 yellow in and over rim, mat in places; brown overglaze paint, 10YR 4/2 dark grayish brown	Yemen 1 Black on Yellow	Hardy- Guilbert 2001: fig. 4; Ciuk and Keall 1996 Pl. 95/46:c
g	J9d4_24/RN 330	Rim of bowl	Diam. 29 cm	Greenish- yellow glaze, 5Y 7/8 yellow and darker in and on rim; overglaze paint in, blurred, 10YR 3/1 very dark gray	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Plate 95/45:g

Plate 3. Locus J9d-4, page 1

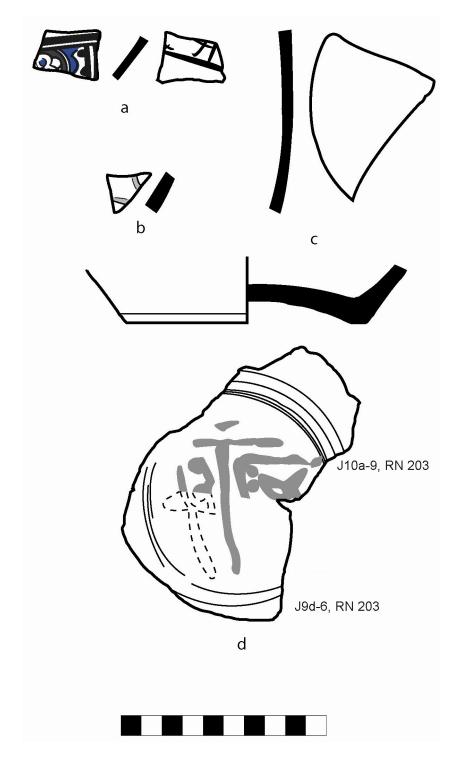


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J9d4_4/RN 95	Rim and body of globular jar	Diam. 12.5 cm	Mottled slip in and out, 5YR 6/6 reddish yellow to 10YR 7/6 yellow. Dark reddish brown paint, 2.5YR 3/2 dusky red	Nubia 3 Figural Painted	_
b	J9d4_8/RN 97	Rim and body of globular jar: 3 glued sherds	Diam. 12 cm	Slip on exterior and neck, 5YR 6/6 reddish yellow (with lighter areas) Burn mark out. Dark brown paint 5YR 2.5/1 black	Nubia 3 Figural Painted	_
c	J9d4_14– 21/RN 337	Shoulder, body, and base sherds (FN 2) of jar	Diam. of neck ca. 11 cm; extant ht. 16 cm	Well- preserved opaque turquoise- green glaze on, dripping down to foot	Marl 4 Incised Monochrome Glazed	_

Plate 4. Locus J9d-4, page 2



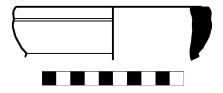
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J9d6_2/RN 322	Bodysherd of bowl		White glaze in and out, overglaze black paint and cobalt blue paint or glaze	Marl 4 polychrome	Avissar and Stern 2005: 28; Tonghini 1998: 47, Ware AH: fig. 70
b	J9d6_3/RN 322	Bodysherd of bowl	_	Incised. Translucent glaze, 2.5Y 4/4 olive brown	China 2: Celadon	_
с	J9d6_4/RN 322	Bodysherd of jar	—	10YR 3/6 yellowish brown glaze out	China 3: Stoneware jars	Mikami 1988: 12; Carswell 1979: fig. 12
d	J9d6_1/J10a9_1/ RN 203	Base of jar	Diam. 12 cm	Black paint out; one drip of dark yellow/light green glaze on interior indicating exterior glaze	China 3: Stoneware jars	Carswell 1979: fig. 12: 518; Bing 2004: Fig. 5:1





Locus J9d-7

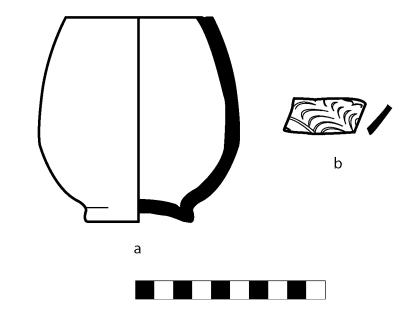
Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J9d7_1/RN 38	Base of cup	Diam. 4.2 cm	Slipped and polished 10R 4/8 red	Eastern sigillata A: 7.5Y 8/4 pink; sparse silt	Whitcomb and Johnson 1982: Pl. 29:s



Locus J9d-11/J10a-1

 Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J9d11_1/RN 14	Rim of jar	Diam. 14 cm	—	Nile 5	

Plate 7. Locus J9d-12

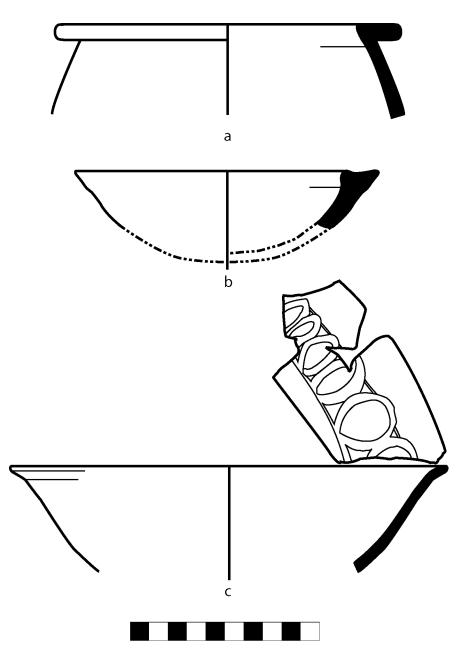


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	J9d12_1/RN 117	Nearly complete cup	Rim diam. 8 cm, base diam. 6 cm	Bright slip, 2.5YR 5/6 red	Nile 4 Utility Ware 3	
b	J9d12_2/RN 311	Bodysherd of bowl	—	Incised. Bluish-clear glaze	China 1: porcelain (Qingbai)	

4	0	7

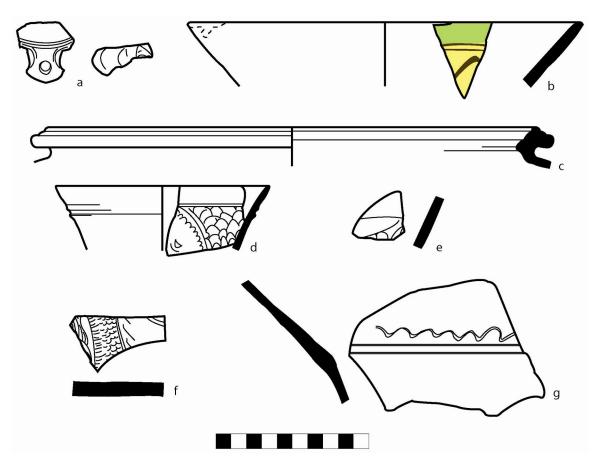
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J9d13_1/RN 260	Rim of jar	Diam. 18 cm	Yellow and green glaze in and out	Nile 6 Coarse Utility	Sasaki 1990: fig. 3:115; Sakurai and Kawatoko 1992: p. 227 (Pl. IV_1_18), nos. 17, 22 and p. 391 (Pl. IV- 3-19) no. 1; cf. Adams 1986: 559
b	J9d13_2/RN 260	Lid	Diam 16+ cm	_	Marl 2	_
c	J9d13_3/RN 260	Rim of bowl	Diam. 23 cm	Carved loop design in. Opaque greenish- white glaze in and out, 5Y 8/2 white	Marl 4 Incised Monochrome Glazed	Rougeulle 2002: fig. 5:7–

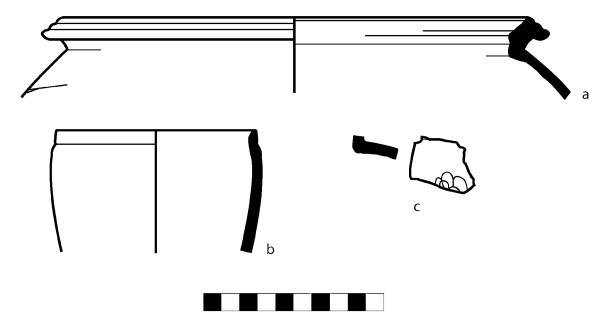
Plate 8. Locus J9d-13



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J10a2_1/RN 213	Nozzle of lamp	_	Slipped 2.5YR 3/4 dark reddish brown	Roman	_
b	J10a2_2/RN 278	Rim of bowl	Diam. 26 cm	Yellow glaze in and over rim. Green glaze over rim. Brown paint.	Yemen 1	Whitcomb 1988: fig. 12:c Zarins 1980: Pl. 24:11
c	J10a2_3/RN 278	Rim of cooking pot	Diam. 34 cm	Burnished	India 1	Rougeulle 2004: fig. 11:9 Mani 2000: fig. 7:1, 3, 13; Rao 2002: fig. 8:6–8; Kervran 1996: fig. 7: 1- 5
d	J10a2_4/RN 278	Rim of bowl or cup	Diam. 14 cm	Incised under cobalt blue glaze	Marl 4 Incised Monochrome Glazed	Rougeulle 1999: fig. 8:7; Bahgat and Massoul 1930 Pl. 2:d; Whitcomb, 1979: Pl. 39:c. 40:f
e	J10a2_5/RN 278	Bodysherd of bowl		Incised under cobalt blue glaze	Marl 4 Incised Monochrome Glazed	See sherd J10a2_4/RN 278
f	J10a2_7/RN 278	Base of large dish	_	Lightly incised under clear glaze	China 2: celadon (Yüe?)	Mikami 1988: fig. 7a
g	J10a2_6/RN 276	Bodysherd at shoulder of large jar		Burnished surface with incised wavy line above carination	India 1	Rougeulle 2004: fig. 11:4 5; Mani 2000: Fig. 7:1–3, 10

Plate 9. Locus J10a-2





	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
h	J10c2_1/RN 289	Rim of cooking pot	Diam. 28 cm	—	India 1	See sherd J10a2_3/RN 278
i	J10c2_2/RN 289	Rim of jar	Diam. 11 cm	—	Marl 1 Utility	Adams 1986: fig. 318:H5
j	J10c2_3/RN 289	Bodysherd from near rim of jar	Diam. ca. 8.5 cm	Glazed partly translucent greenish- white; blue in-glaze floral design	Marl 4 Underglaze Painted	Tonghini 1998: fig. 48c

41	2
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	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J10a9_1/RN 342	Rim of bowl	Diam. 20 cm	Glazed (approximately 2.5Y 8/8 yellow), painted 10YR 3/2 very dark grayish brown	Yemen 1	Ciuk and Keall 1996: Pl. 95/46:c, Hardy-Guilber 2001: fig. 4; Chittick 1984:fig. 39:b; Zarins et al. 1980: Pl. 24:11
b	J10a9_2/RN 320	Rim of bowl	Diam. 20 cm	Molded vertical ribs under flat horizontal margin, glazed clear in and out	China 1 (Qingbai porcelain)	Bing 2004
c	J10a9_3/RN 321	Rim of bowl	Diam. 12 cm	Incised. Glazed translucent 5Y 5/2 olive gray in and out	China 2 (celadon)	Bing 2004

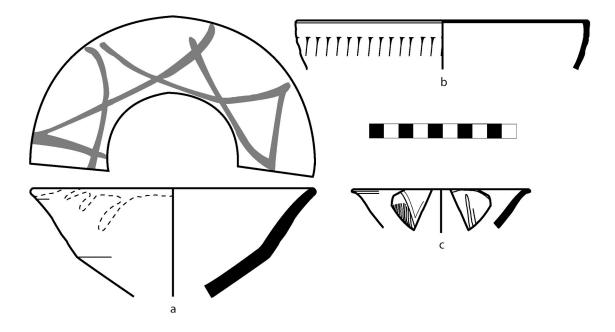
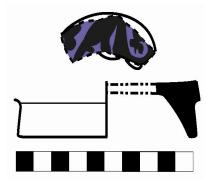


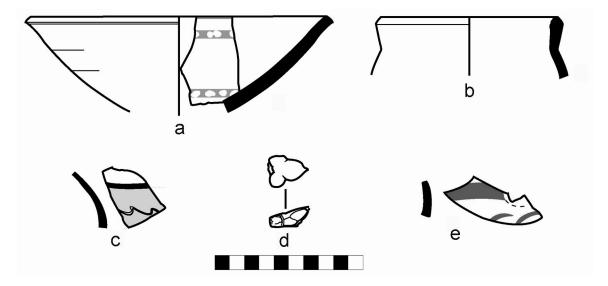
Plate 12. Locus J10c-6

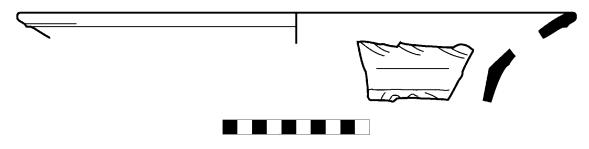


Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J10c6_1/RN 288	Base of bowl	Diam. 10 cm	Black underglaze paint in; Translucent cobalt blue glaze in and out	Marl 4 Silhouette	Scanlon 1971: Pl. 3:f–k

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J10c8_1/RN 284	Rim of bowl	Diam. 20+ cm	Dots of light slip in, 10YR 6/8 brownish yellow, glazed yellowish- clear in and out	Nile 3 Slip- painted	Hardy-Guilber and Rougeulle 1995: fig. 4:12
b	J10c8_2/RN 284	Rim of jar	Diam. 12 cm	—	Nile 6 Coarse Utility	_
c	J10c8_4/RN 284	Bodysherd of jar		Surface 2.5YR 3/6 dark red (slip?). Paint 5YR 3/2 dark reddish brown. Slipped 10YR 6/4 light yellowish brown, incised through to red surface	Nile 2 Decorated	Bahgat and Massoul 1930: Pl. LX:6?; Sakurai and Kawatoko 1992: p. 293, nos. 6–7; Scanlon 1974: Pl. 16:2, p. 68; Scanlon 1986: figs. 180, 184, 185; Whitcoml 1979: Pl. 43g
d	J10c8_3/RN 284	Finial or decorative piece	2.9 cm long, 2.2 cm wide	Glazed opaque light blue	Unidentified	_
e	J10c8_5/RN 284	Bodysherd of closed form		Slipped 10YR 8/4 very pale brown; painted 5YR 2.5/2 dark reddish brown. Clear glaze, now mat, makes the cream slip appear orange? (10YR 7/6 yellow)	Aswan Painted	Adams 1986: Fig. 225

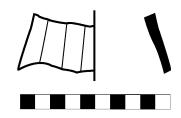
Plate 13. Locus J10c-8





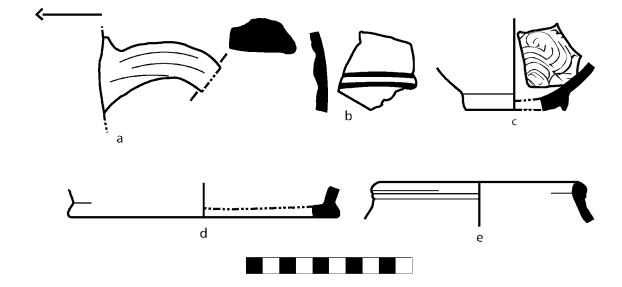
Locus	J10c-11

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J10c11_1/294	Rim and bodysherds of large dish or basin	Diam. 38 cm	Fine incised decoration under tight- fitting opaque bluish-green glaze	Marl 4 Incised Monochrome Glazed	_



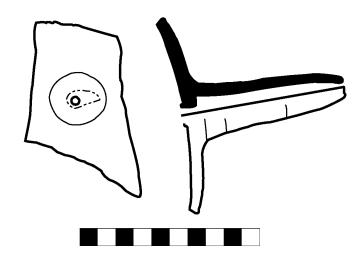
Locus J10c-14

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J10c14_1/RN 287	Bodysherds of ewer?	Diam. 8 cm	Molded, faceted. Glazed opaque turquoise	Marl 4 Monochrome Glazed	Sakurai and Kawatoko 1992: Pl. IV-3-7: 11 cup; Tonghini 1998: fig 47g; Avissar and Stern 2005: Pl. 9:2



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J10c16_1/RN 13	Handle of jar	_	Exterior surface 2.5Y 7/4 pale yellow	Aswan Painted	
b	J10c16_3/Rn 13	Bodysherd of closed vessel		Slipped 7.5YR 5/6 strong brown. Reddish- brown paint, 5YR 3/2 dark reddish brown	Yemen 3 Utility	Warburton 1998: fig. 3:k and 4:a-d
c	J10c16_5/RN 316	Base of bowl	Diam. 6 cm	Incised on interior. Glazed bluish-clear on interior and exterior	China 1: Qingbai porcelain	Rougeulle 1999: fig. 7:9
d	J10c16_4/RN 13	Base of jar	Diam. 16.5 cm	Glazed bright turquoise in and out	Marl 4 Monochrome Glazed	
e	J10c16_2/RN 13	Rim of jar	Diam. 13 cm	—	Nile 4 Utility Ware 2	

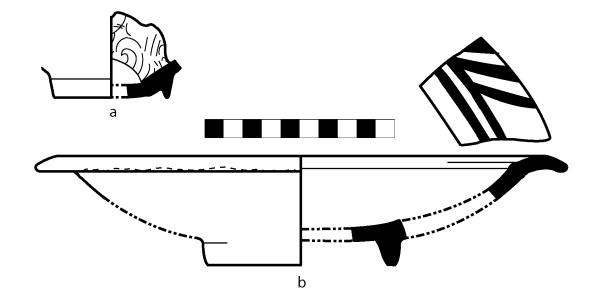
Plate 16. Locus J10c-17



Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J10c17_1/RN 71	Spout of <i>qulla</i>	_	—	Marl 1 Utility	—



Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
J10c18_1/RN 256	Bodysherd of bowl	_	Black underglaze paint in, translucent turquoise glaze in and out	Marl 4 Underglaze Painted	Avissar and Stern 2005: 26, fig. 9:5, type I.2.3.1; Tonghini 1998: Ware Y, fritware 2: 47, figs. 65a; 66d, g; 68a



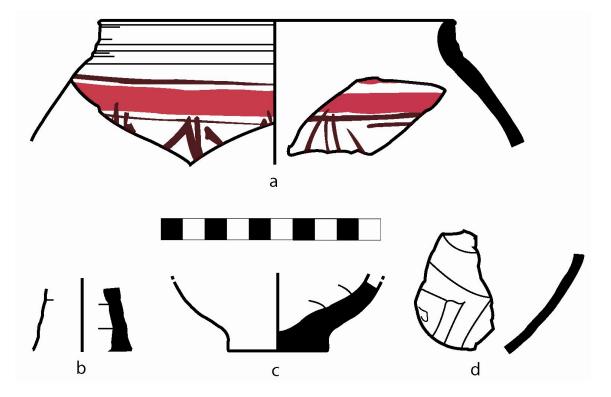
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	J10c19_1/RN 299	Base of bowl	Diam. 6 cm	Incised, glazed pale blue	China 1: Qingbai porcelain	Rougeulle 1999: fig. 7:9; King and Tonghini 1996: Pl. 29: bottom; Bing 2004; Emerson, Chen, and Gates, 2000: Pl. 4.1
b	J10c19_2 4/RN 247	Rim, body and base sherds of bowl (13 sherds)	Rim diam. 28 cm, base diam. 10 cm	Glazed 10YR 7/2 light gray. Overglaze brown paint, 10YR 3/2 very dark grayish brown	Yemen 2 Brown Painted	Mason and Keall 1988: 454, 57, Fig. 4:b

Plate 19. Locus K9b-1



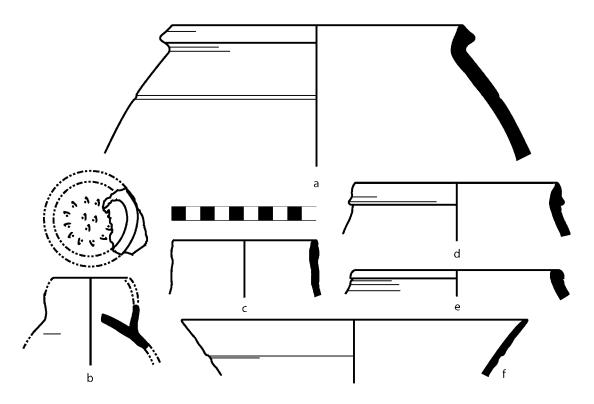
Sherd No.	RN	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b1_1	173	Spout of water jar		Exterior slipped and possibly polished orange- cream 7.5YR 7/6 reddish yellow, and 2.5Y 5/2 grayish brown. Red painted stripes 2.5YR 2.5/4 dark reddish brown	Aswan	Adams 1986: Fig. 299:J17; p. 537, ware W24

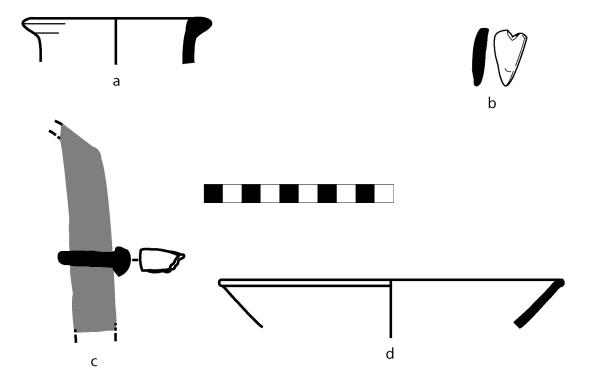
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published
b	K9b3_3 / RN 678	Neck of jar or lamp chimney	Diam. 4.5 cm	Iridescent decaying opaque turquoise glaze, in two coats on exterior and one on interior. Interior glaze is somewhat translucent	Marl 4 Monochrome Glazed	
с	K9b3_5 / RN 678	Base of jar	Diam. 5 cm	_	Nile 4 Coarse Utility	Whitcomb and Johnso 1980: Pl. 39r; Cf. Rose 1998 fig. 6:2, 3
d	K9b3_4 / RN 678	Bodysherd of bowl	_	Molded or incised design on interior. Thick opaque bluish-green glaze in and out	Marl 4 Incised Monochrome	Chittick 1984: 81, F 35c; Whitcomb and Johnso 1980: Pl. 3



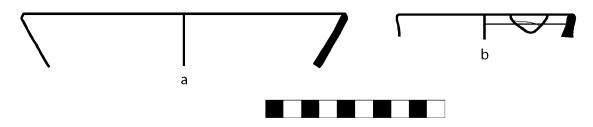
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Notes
a	K9b5_2 / RN 678	Rim of jar	Diam. 20 cm	_	Yemen 4	Whitcomb and Johnson 1980: Pl. 39g
b	K9b5_3/ RN 678	Neck and filter of <i>qulla</i>	Rim diam. ca. 5 cm	_	Marl 1 Utility	Cf. Sakurai and Kawatoko 1992: p. ix, no. 10
c	K9b5_1/ No RN	Rim of jar	Diam. 9 cm	—	Nile 6 Coarse Utility	Whitcomb and Johnson 1980: Pl. 39p
d	K9b5_4/ RN 678	Rim of jar	Diam. 13 cm	Remains of pale slip out and inside rim, 10YR 7/3 very pale brown	Nile 6 Coarse Utility	Whitcomb and Johnson 1980: Pl. 39i; cf. Whitcomb 1988: fig. 2h
e	K9b5_5/ RN 678	Rim of jar	Diam. 14 cm	_	Aswan Utility	Whitcomb and Johnson 1980: Pl. 39h
f	K9b5_6/ RN 678	Rim of bowl	Diam. 22 cm	Opaque white or clear glaze, now decayed	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 39d; cf. Avissar and Stern 2005; Scanlon 1974

Plate 21. Locus K9b-5



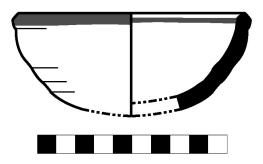


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Notes
a	K9b7_1/ RN 678	Rim of jar	Diam. 9.5 cm	Opaque turquoise glaze in and out	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 39q
b	K9b7_3/ RN 63	Net bobbin	—	—	Marl 1 Utility	_
c	K9b7_4/ RN 44	Sherd with staple through it	—	—	Unidentified	—
d	K9b7_2/ RN 678	Rim of bowl	Diam. 17.5 cm	Iridescent decaying lavender glaze, probably once white, in and out	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 39a; Rougeulle 2001: fig. 5:7– 9; Avissar and Stern 2005: 25

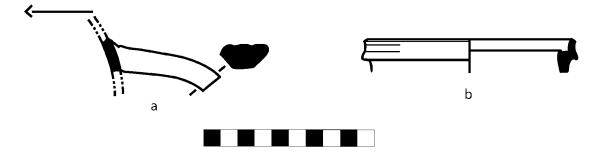


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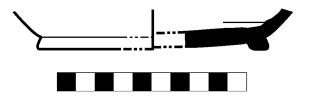
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b12_1/ RN 678	Rim of bowl	Diam. 17 cm	Pale greenish glaze in and out, 5Y 8/2 white	Marl 4 Monochrome Glazed	Rougeulle 2001: fig. 5:7– 9; Avissar and Stern 2005: 25
b	K9b12_2/ RN 678	Rim of bowl or small jar	Diam. 9 cm	Green glaze on exterior and inside rim	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pls. 44:a–b, 47:e–f



Sherd and Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b13_1/ RN 678	Rim of bowl	Diam. 10– 11 cm	Painted band around rim and traces of black paint on interior, 2.5Y 3/0 very dark gray. Glazed 2.5Y 6/4 light yellowish brown in and on rim, thick and opaque	Marl 1 Glazed	Bridgman 2000: Pl. 3a

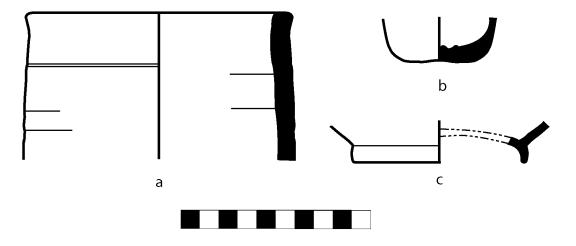


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Comparanda
a	K9b14_1 / RN 173	Handle of jar	_	Decayed slip, 7.5YR 6/6 reddish yellow, perhaps once 5YR 5/6 yellowish red	Marl 2 Utility	Whitcomb and Johnson 1980: Pl. 39n
b	K9b14_2 / RN 678	Rim of bowl	Diam. 11– 12 cm	_	Hard; Moderate fine- medium sand and voids; core 2.5YR 5/6 red; surfaces and margins 5YR 5/6 yellowish red	cf. Tomber 1999: Fig. 5- 2:10; Whitcomb and Johnson 1979: Pl. 32:b



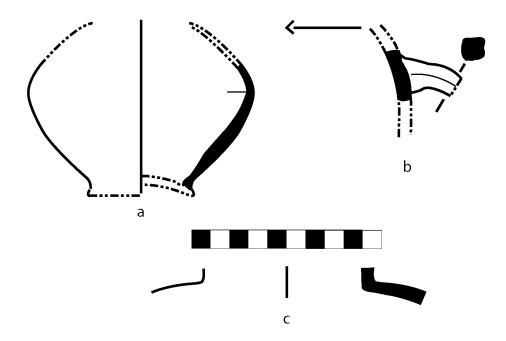
Locus K9b-16

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published
K9b16_1 / RN 173	Base of jar	Diam. 12 cm	None (interior covered with black bitumen)	Nile 2 Decorated	Whitcomb and Johnson 1980: Pl. 40v



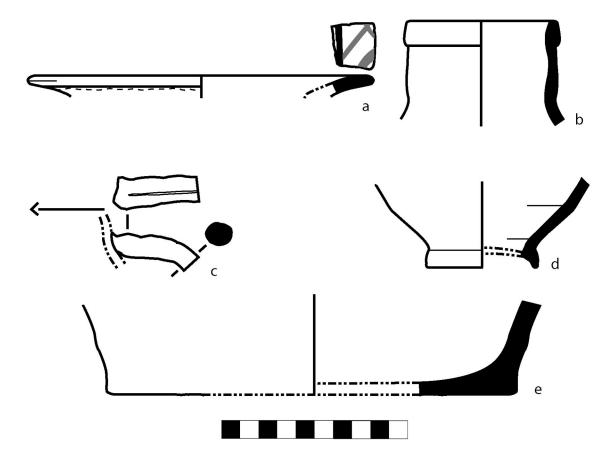
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published
a	K9b17_2 / RN 678	Rim of jar	Diam. 13 cm	Traces of brown underglaze paint our, 10YR 2/2 very dark brown. Glazed translucent 5Y 6/2 light olive gray in and out	Marl 1 Glazed	Published Whitcomb and Johnson 1980: Pl. 391
b	K9b17 or 18_1 / RN 678	Base of juglet	Diam. 5.5 cm	Smooth, slipped interior surface, traces of slip on exterior, 7.5YR 6/4 light brown	Mix 3	Whitcomb and Johnson 1980: Pl. 39c
c	K9b18_1 / RN 173	Base of jar	Diam. 8.5 cm	Slipped 5YR 6/8 reddish yellow on exterior surface	Aswan (Roman period)	Whitcomb and Johnson 1980: Pl. 40s

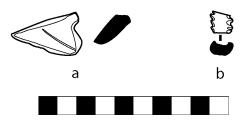
Plate 26. Locus K9b-19



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Comparanda
а	K9b19_1 / RN 173	Bodysherd near base of jar	_	_	Marl 1 Utility	Whitcomb and Johnson 1980: Pl. 40b; cf. Whitcomb and Johnson 1980: Pl. 48f
b	K9b19_2 / RN 173	Small handle	_	Dark red slip, 2.5YR 4/4 reddish brown-3/4 dark reddish brown	Marl 2 Utility Ware, or sub- ware	Whitcomb and Johnson 1980: Pl. 39d
c	K9b19_3 / RN 173	Bodysherd at shoulder, near rim of jar	Diam. of neck 9 cm	Thick glaze in and out, once white, now creamy greenish- yellow	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 40k

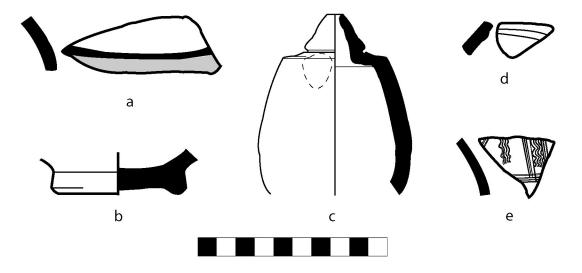
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Comparanda
a	K9b21_2 / RN 584	Rim of bowl	Diam 19 cm	Glazed over rim, 2.5Y 8/4 pale yellow (but brighter). Brown paint over glaze, 7.5YR 4/2 dark brown	Yemen 1 Black on Yellow	Whitcomb and Johnson 1980: Pl. 40g
b	K9b21_3 / RN 584	Rim of jar	Diam 8 cm	Cream slip out, on interior rim, 10YR 8/4 very pale brown	Nile 6 Coarse Utility	Whitcomb and Johnson 1980: Pl. 40j
с	K9b21_4 / RN 584	Handle of jar	_	Covered with a translucent bright green glaze	Marl 4 Incised Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 40m
d	K9b21_5 / RN 587	Base of jar	Diam. 6 cm		Marl 1 Utility	Whitcomb and Johnson 1980: Pl. 40t
e	K9b21_1 / RN 173	Base of basin	Diam. 22 cm	_	Yemen 4	Whitcomb and Johnson 1980: Pl. 40w; cf. Ciuk and Keall 1996: Pls. 95/30:c, 95/32:g; 95/42:

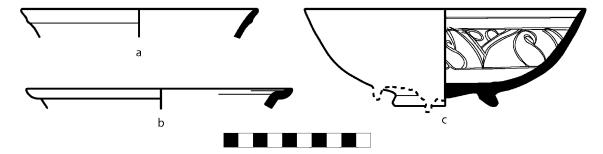




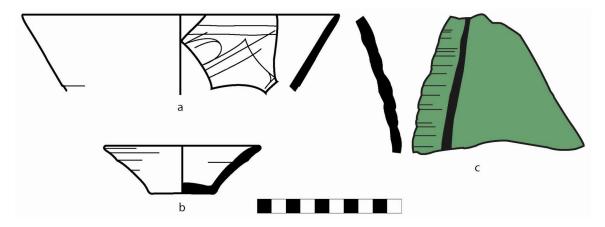
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published
a	K9b22_2 / RN 586	Bodysherd of bowl (at interior ledge), reused as a net spacer		Glazed light yellow-green glaze in, decayed	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 40y
b	K9b22_3 / RN 586	Finial or decorative piece	—	—	Terra sigillata	—

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Published; Comparanda
a	K9b23_3 / RN 578	Bodysherd of a jar	_	Painted 2.5YR 2.5/2 very dusky red, and 10YR 8/2 white	Nile 2 Decorated	Whitcomb and Johnson 1980: Pl. 40n; Cf. Cairo Ayyubid Wall, Old Cairo Wastewater, and Whitcomb, 1979: Pl. 43g
b	K9b23_5 / RN 678	Base of bowl	Diam. 7 cm	Decayed yellow glaze in, 2.5Y 8/4, but brighter	Yemen 1 Black on Yellow	Whitcomb and Johnson 1980: Pl. 40u; cf. Ciuk and Keall 1996: Pl. 95/45:g
c	K9b23_2 / RN 578	Rim, neck, shoulder and body of sphero- conical vessel	Diam. at shoulder 6 cm	Glazed translucent 5YR 4/4 reddish brown, with holes worn through	Stoneware	Whitcomb and Johnson 1980: Pl. 40q; cf. Sakurai and Kawatoko 1992 p. 229 (Pl. IV-1- 19?), no. 2 and p. 279 (Pl.IV-1- 11), no. 9
d	K9b23_1 / RN 173	Bodysherd of bowl, reused as a net spacer?	_	Opaque mat white glaze, now 10YR 8/2 white in and out	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 40o
e	K9b23_4 / RN 578	Bodysherd of jar	_	Slipped 10YR 7/2 light gray out, and comb incised	Yemen 4 Trackware	Whitcomb and Johnson 1980: Pl. 40p; cf. Ciuk and Keall 1996: Pl. 95/14:e, g





	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b25&27_2 / RN 341	Rim of bowl	Diam. 16 cm	Glazed 5Y 7/2 light gray in and out	Marl 4 Incised Monochrome Glazed	Mikami 1981: 78–79, figs. 28–29; Whitcomb and Johnson 1980: Pls. 43q, 44s
b	K9b25&27_17 RN 341	Rim of bowl	Diam. 18 cm	Pale bluish- green opaque glaze in and out, 5Y 7/3 pale yellow	Marl 4 Monochrome Glazed	Hardy- Guilbert and Rougeulle 1995: Fig. 4:1; Avissar and Stern 2005: 25
c	K9b25&27_3- 15 RN 341	Rim, body, and base sherds of bowl	Rim diam. 22 cm	Incised underglaze decoration in. Opaque glaze 5Y 7/3 pale yellow in and out, tinged with blue near rim, thick and translucent 5Y 4/4 olive on exterior near base, drips over base.	Marl 4 Monochrome Glazed	Chittick 1984: 81, Pl. 35c; Mason 2004: Fig. 4.8; Scanlon 1971: 228; Avissar and Stern 2005: 25

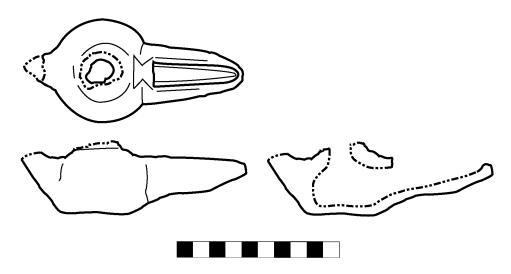


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b29_1 / RN 277	Rim of bowl	Diam. 22 cm	Incised design in, under glaze 5Y 8/2 white in and out	Marl 4 Incised Monochrome Glazed	_
b	K9b29_3 / RN 277	Almost complete small bowl (lamp)	Rim diam. 11 cm	Brown slip out, 10YR 4/2 dark grayish brown	Aswan Utility	Adams 1986: fig. 312, Ware U6; 2005: 151; Michałowski, 1965: Pl. 17:5– 7, 64, nos. 10– 12
с	K9b29_2 / RN 277	Bodysherd of large jar	_	Pale slip? Glazed dark translucent green on out, with black glaze stripe	Marl 3 Glazed	Bridgman 2000: Pl. 11c; Adams 1986: 591, Group G.I



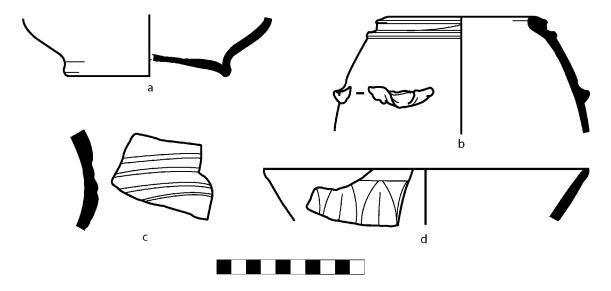
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Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b30_1 / RN 24	Rim of dish	Diam. 38 cm	Slipped and polished 2.5YR 4/6 red	Eastern Sigillata A hard; sparse silt; 5YR 6/4 light reddish brown	Ettlinger et al. 1990: T. 8:8.1.1; Tomber 1999: Fig. 5-2:3; Whitcomb and Johnson 1982: Pl. 30g

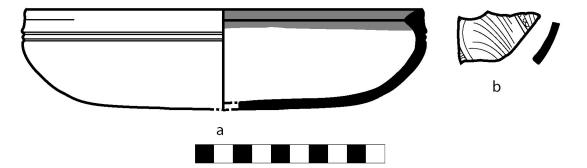


Locus K9b-33

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b33_1 / RN 227	Nearly whole lamp		Glazed bright green	Marl 4 Monochrome Glaze	Sakurai and Kawatoko 1992: Pls. IV-5-8: 1-5, 8- 9, IV-5-3: 2; Kubiak 1970: figs. 10–11, Type I

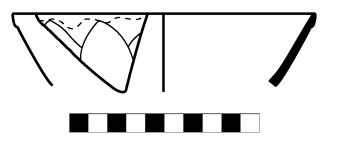


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b36_1– 4 / RN 86	Base of jar	Diam. 11.5 cm	Yellow- orange slip, polished, 7.5YR 7/6 reddish yellow and 10YR 8/6 yellow	Aswan Painted	_
b	K9b36_6– 8 / RN 107	Rim of cooking pot	Diam. 10 cm	—	Aswan Utility	W. Y. Adams 1996c: Pl. 15:c
c	K9b36_14 / RN 332	Bodysherd of pot	—	—	Unidentified	_
d	K9b36_10 / RN 332	Rim of bowl	Diam. 22 cm	Molded lotus leaves, thick light bluish-green glaze in and out	China 2: Kinuta celadon	Hardy-Guilbert 2001: fig. 7:2, 7; Bing 2004 fig 1:7; Sakurai and Kawatoko 1992: Pl. IV-4-10:2; Gompertz 1980: 148, 164; Scanlor 1971: 228



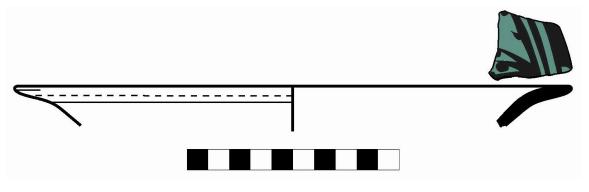
K9b-38

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	K9b38_1– 15 / RN 103	Rim to base of cooking bowl	Diam. 21 cm	Black painted rim stripe	Nile 7 Decorated	Adams 1986: fig. 283:4
b	K9b38_16 / RN 313	Bodysherd of bowl	_	Incised in, glazed greenish- clear in and out, which appears light olive	China 3: celadon	_



K9b-41

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b41_1 / RN 310	Rim of bowl	Diam. 16 cm	Incised lotus leaves out. Opaque greenish-blue glaze in and ou	China 1: Qingbai porcelain	Hardy-Guilbert 2001: fig. 7:2, 7; Bing 2004: fig. 1:7; Sakurai and Kawatoko 1992: Pl. IV-4-10:7; Gompertz 1980: 62, Pl. 17B



Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b42_1 / RN 329	Rim of bowl	Diam. 26 cm	Black underglaze paint on in and on rim. Green glaze in and out	Marl 4 Underglaze Painted (Silhouette Ware)	Bridgman, 2000: Pl. 8b; Scanlon 1971: Pl. 3g



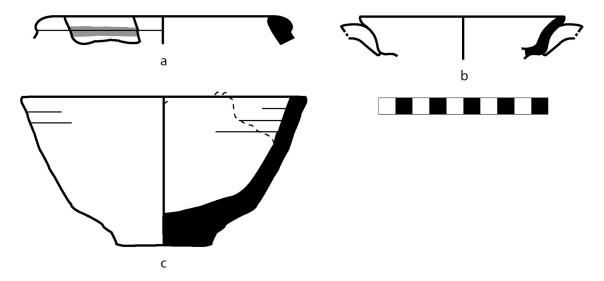
Locus K9b-43

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b43_1 / RN 309	Bodysherd of bowl		Incised in. Glazed bluish clear in and out	China 1: Qingbai porcelain	Rougeulle 1999: fig. 7:9; Bing 2004; Emerson, Chen, and Gates, 2000: Pl. 4.1

Plate 36. Locus K9b-45

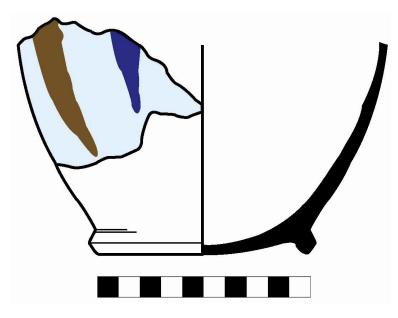


Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b45_1 / RN 314	Bodysherd of bowl		Incised in. Light blue glaze in and out	China 1: Qingbai porcelain	Rougeulle 1999: fig. 7:9; Bing 2004; Emerson, Chen, and Gates, 2000: Pl. 4.1



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b46_1 / RN 20	Rim of jar	Diam. 12.5 cm	Black paint, faded to 5Y 4/1 dark gray. Clear glaze in and out, which makes the surface appear 5Y 6/3 pale olive	Marl 1 Glazed	Bridgman 2000: Pl. 3a
b	K9b46_2 / RN 257	Rim of two- handled jug	Diam. 12 cm	Green glaze in and out	Marl 4 Monochrome Glazed	—
c	K9b46_3 / RN 257	Rim-to-base of a crucible	Rim diam. 17 cm, base diam. 5.5 cm, ht. 8 cm	Interior covered with thick bituminous substance	Nile 4 Utility Ware 2	Rose 1998: fig. 6:2

Plate 38. Locus K9b-47



Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b47_1– 7 / RN 331	Base and bodysherds of jar	Base diam. 11 cm	Clear glaze in and out. Opaque light blue glaze (over clear glaze) with brown and cobalt blue drips out	Marl 3 Glazed	Scanlon 1971: 229

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b48_1 / RN 315	Bodysherd of jar		Slipped 7.5YR 6/4 light brown, painted 2/5YR 5/4 reddish brown, and 2.5YR 3/2 dusky red	Aswan Painted	
b	K9b48_2 / RN 315	Rim of cup	Diam. 8 cm	Slipped in and out 2.5YR 4/4 reddish brown. Incised single line out	Imitation sigillata; hard; sparse silt-very fine sand; 10YR 7/6 yellow	_
c	K9b48_3 / RN 315	Rim of <i>qulla</i>	Diam. 8 cm		Marl 1 Utility	
d	K9b48_4 / RN 315	Bodysherd near rim of bowl	Diam. ca. 11 cm	Molded, incised, glazed bluish-clear	China 1: qingbai porcelain	—
e	K9b48_5 / RN 315	Rim of bowl	Diam. 12+ cm	Ribbed, glazed pale greenish blue	Marl 4 Monochrome Glazed	Mikami 198 Figs. 36–37
f	K9b48_6 / RN 315	Rim of dish	Diam. 20 cm	Incised, slipped 2.5YR 4/6 red, polished	Terra sigillata	Ettlinger et a 1990: T. 11:12.2.2; Whitcomb and Johnson 1982: Pls. 29a, 30p
g	K9b48_18 / RN 340	Rim of bowl	Diam. 22 cm	Opaque greenish-white glaze in and out	Marl 4 Monochrome Glazed	Hardy- Guilbert and Rougeulle 1995: fig. 4:14
h	K9b48_43 / No RN	Rim of bowl or jar	Diam. 12+ cm	Opaque bluish- white glaze inside and over rim	Marl 4 Monochrome Glazed	_
i	K9b48_44 / RN 340	Rim of bowl	Diam. 18 cm	Glazed opaque light blue in and out	Marl 4 Monochrome Glazed	—
j	K9b48_7– 17, 21 / RN 340	Rim to base of bowl	Rim diam. 24 cm; base diam. ca. 7.5 cm	Translucent glaze in and out 5Y 5/6 olive, under 5Y 8/1 white to light blue glaze in and out to top half	Marl 4 Monochrome Glazed	Hardy- Guilbert and Rougeulle 1995: fig. 4:14

Plate 39. Locus K9b-48

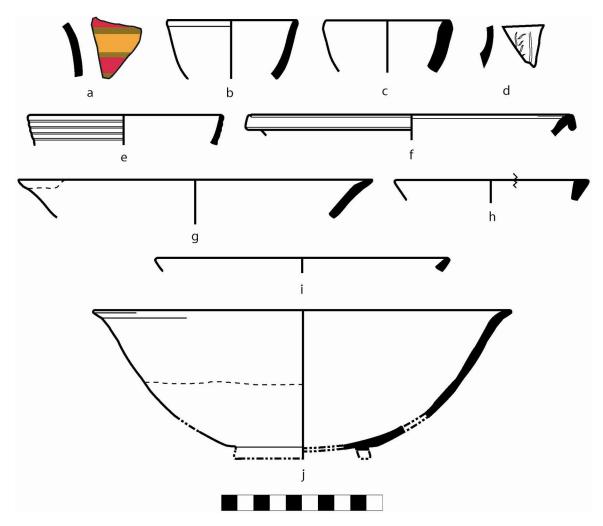


Plate 40. Loci K9b-49, K9b-50



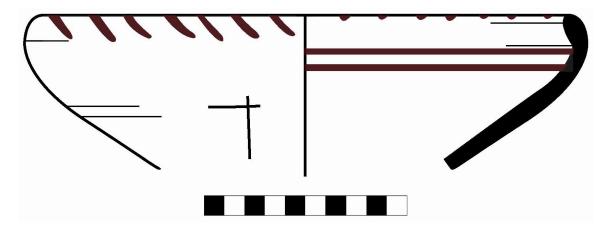
Locus K9b-49

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b49_1 / RN 49	Bodysherd of jar		Slipped 10YR 8/4 very pale brown. Paint 5YR 3/2 dark reddish brown	Aswan Painted	_

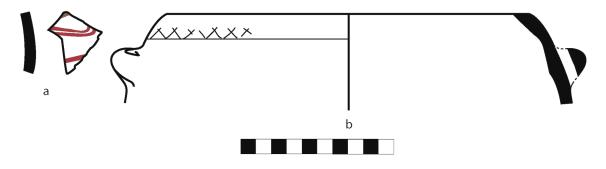


Locus K9b-50

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b50_1 / RN 282	Base of goblet	Diam. 6 cm	Greenish-clear glaze out, including base. Turquoise drips on stem exterior	Marl 4 Monochrome	_

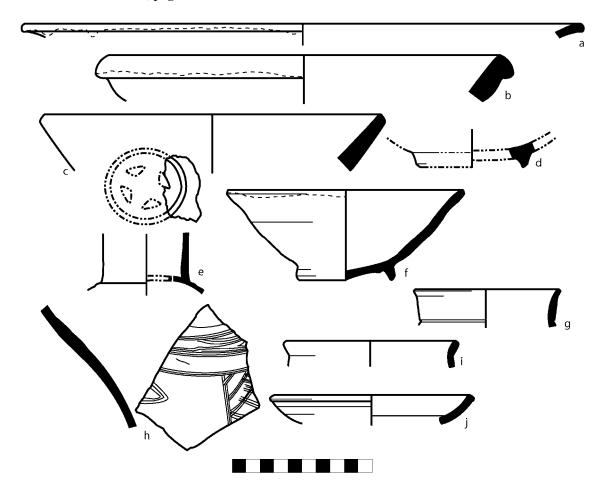


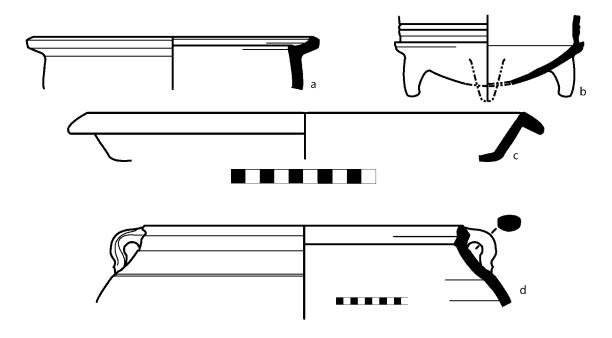
Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b51_2 / RN 94	Rim of bowl	Diam. 28 cm	Slipped 5YR 5/6 yellowish red, and polished. Stripes of paint, 10R 3/3 dusky red	Nubia 1 Decorated	Adams 1986: 497–98, Figs. 118, 282:C36; Rougeulle 1999: Fig. 8:15



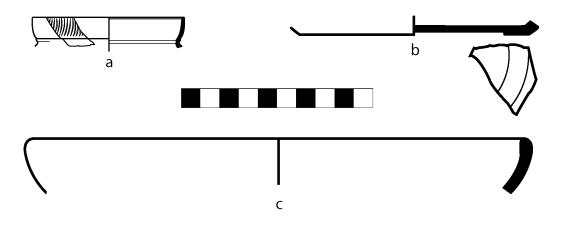
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b52_1 / RN 47	Bodysherd of water jar		Cream slip on exterior, incised through to red surface. Brown paint, 5YR 2.5/2 dark reddish brown	Nile 2 Decorated	Sakurai and Kawatoko 1992: p.vi, no. 13, no. 267 (Pl. IV-1-5?) no. 2
b	K9b52_2 / RN 47	Cooking pot with cut rim	Diam. 24 cm	Incised decoration on exterior	Yemen 2 Utility	Harden 1964: Pls. IV: 34, VI: 3–4

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda, Notes
a	K9b53_13 / RN 338	Rim of bowl	Diam. 40 cm	Mat yellow glaze in, over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:g; 95/46:i
b	K9b53_12 / RN 338	Rim of bowl	Diam. 28 cm	Mat yellow glaze in, over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/46:d
c	K9b53_4 / RN 269	Rim of bowl	Diam. 24 cm	Translucent glaze, 5Y 7/4 pale yellow	Marl 1 Glazed	Bridgman 2000: Pl. 3a
d	K9b53_20 / RN 338	Base of bowl	Diam. 8+ cm	Mat yellow glaze in, out	Yemen 1 Black on Yellow	—
e	K9b53_8 / RN 269	Neck and filter of <i>qulla</i>	Diam. 6 cm	Glaze in and out, 2.5Y 8/6 yellow	Yemen 1 Black on Yellow	Bahgat and Massoul 1930 88; Scanlon 1974b: Pl. 16:3; 1986: 5
f	K9b53_14- 19 / RN 338	Reconstructed bowl	Base diam. 7 cm; rim diam. 17 cm	Mat yellow glaze in, over rim	Yemen 1 Black on Yellow	Hardy- Guilbert 2001 fig. 4; Ciuk and Keall 1996: Pl. 95/46:d
g	K9b53_11 / RN 269	Rim of jar	Diam. 10 cm		Nile 4 Utility Ware 1	
h	K9b53_5 / RN 269	Bodysherd of jar	_	Slipped 2.5Y 6/4 light yellowish brown, incised	Yemen 4 Trackware	Ciuk and Keall 1996: 95/14:e, g; Hardy- Guilbert and Rougeulle 1995: fig. 5:1
i	K9b53_10 / RN 269	Rim of jar	Diam. 12– 14 cm	Powdery yellowish- white glaze	Nile 3 monochrome glazed	—
j	K9b53_9 / RN 269	Rim of bowl	Diam. 15 cm	Polished dark red slip, 2.5YR 4/4 reddish brown	sigillata? hard; common silt- very fine sand and voids, sparse fine voids; 10YR 8/4 very pale brown-7.5YR 6/4 light brown	





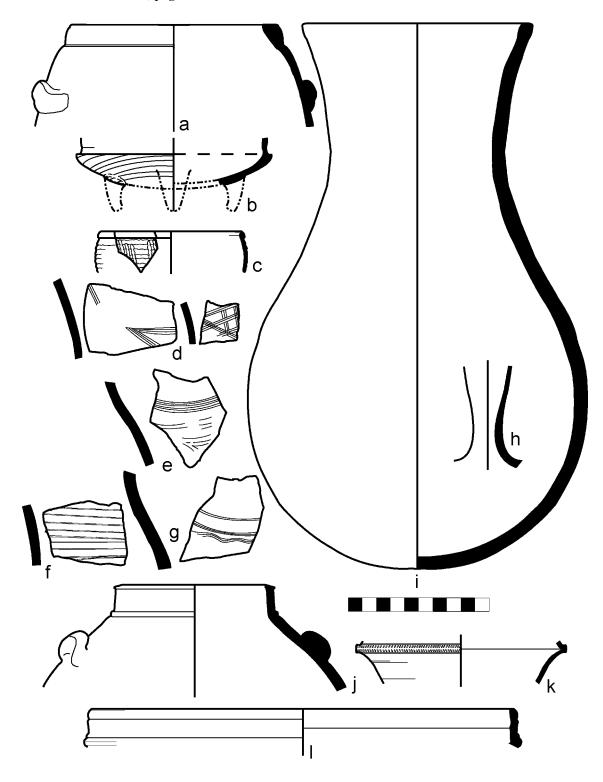
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda; Notes
a	K9b53_3 / RN 269	Rim of jar	Diam. 20 cm		India 2 Red Utility	Kervran 1996: fig. 7:6; Rougeulle 2004: fig. 11:22
b	K9b53_7 / RN 269	Base and foot of footed bowl (same vessel as K9b56_14)	Diam 13 cm at carination	Corrugated sides	Nubian Meroitic?	O'Connor 1993: 159, no. 159; Same vessel as K9b56_14, RN 262
с	K9b53_2 / RN 269	Rim of cooking pan	Diam. 30 cm	Polished and slipped surface, 2.5YR 3/4 dark reddish brown	Egyptian, Roman pd.	Hayes 1972: 397–99
d	K9b53_1 / RN 118	Rim and handle of storage jar	Diam. 44 cm	_	India 2 Red Utility	_



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b54_1 / RN 300	Rim of cup	Diam. 6–8 cm	Slipped 2.5YR 4/6 red, polished, rouletted	Terra sigillata: hard; 5YR 6/4 light reddish brown; sparse silt	Ettlinger et al. 1990: T.14:15; Whitcomb and Johnson 1980: Pl. 291
b	K9b54_2 / RN 3	Base of bowl	Diam. 12 cm	Red polished slip, 10R 5/8 red to 2.5YR 4/2 weak red	Terra sigillata or Eastern sigillata: Hard; 5YR 5/6 yellowish red ; Sparse silt and mica	Ettlinger et al. 1990: T. 43:48.1.1; Whitcomb and Johnson 1980: Pl. 29z
с	K9b54_3 / RN 96	Rim of hemispherical cup or bowl	Diam. 26 cm	Slipped 10R 4/6 red, polished	Terra sigillata: Hard; 5YR 5/6 yellowish red; sparse silt and mica	Ettlinger et al. 1990: T.32:36.1.1; Whitcomb and Johnson 1980: Pls. 21 d, 28d, 29y

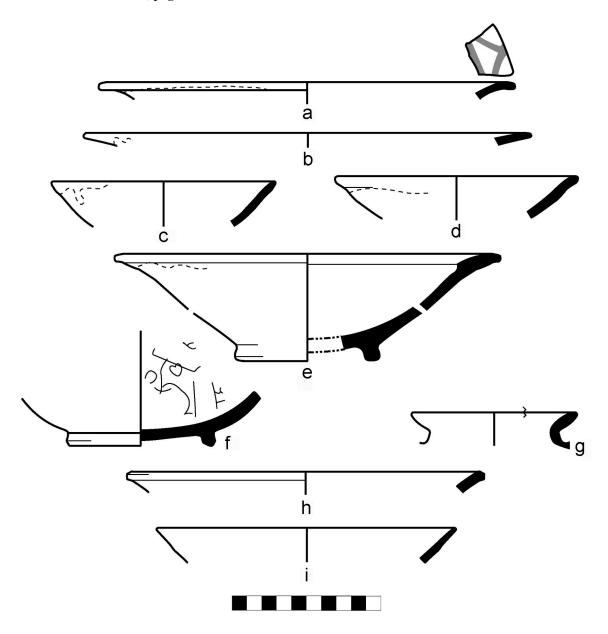
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	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b56_1 / RN 98	Cooking pot rim with handle	Diam. 15 cm		Aswan Utility	
b	K9b56_14 / RN 262	Base of footed bowl	Diam. 14 cm at widest		Nubian Meroitic?	O'Connor 1993: 159, no. 159
c	K9b56_10/ RN 262	Rim of bowl	Diam. 10.5 cm	Horizontal ridges, smoothed vertical lines	Marl 1 Utility	_
d	K9b56_7–8 / RN 262	Bodysherd of jar (same vessel as K9b53_5)	_	Exterior slipped 2.5Y 7/2 light gray, incised	Yemen 4 Trackware	Ciuk and Keall 1996: Pl. 95/14:e, g; Hardy-Guilbert and Rougeulle 1995: fig. 5:18
e	K9b56_9 / RN 262	Bodysherd of jar	_	Exterior slipped 10YR 5/3 brown, incised	Yemen 4 Trackware	Ciuk and Keall 1996: Pls. 95/14:e, g; 95/15:b; Hardy- Guilbert and Rougeulle 1997: fig. 3:10–12
f	K9b56_11 / RN 262	Bodysherd of large jar	_	Exterior 10YR 7/3 very pale brown, incised	Yemen 4 Trackware	Ciuk and Keall 1996: Pl. 95/46:d
g	K9b56_12 / RN 262	Bodysherd of jar	_	Exterior slipped 2.5Y 6/4 light yellowish brown, incised	Yemen 4 Trackware	Ciuk and Keall 1996: Pl. 95/14:e, g; Hardy-Guilbert and Rougeulle 1997: fig. 3:10–12
h	K9b56_15 / RN 262	Neck of jar or jug	Diam. 2.1 cm at narrowest	—	Marl 1 Utility	Adams 1986: 578–9, Ware U17
i	K9b56_44- 48 / RN 119	Rim, body, and base sherds of jar	Rim diam. 16.75 cm	_	Nubia 2 Utility	Adams 1986: 427
j	K9b56_17 / RN 262	Rim of cooking pot	Diam. 12 cm	_	Aswan Utility	Adams 1986: 559, Ware U6, fig. 312:16
k	K9b56_16/ RN 262	Bodysherd of cup, near rim	Diam. 15 cm at shoulder	Slipped 2.5YR 4/6 red, polished, rouletted	Terra sigillata	Ettlinger et al. 1990: T.15:17.2.1; Hayes 1996: Fig. 6-16:16
1	K9b56_18 / RN 262	Vertical rim of platter	Diam. 30 cm	2.5YR 5/6 red slip, polished, rouletted	Terra sigillata	Ettlinger et al. 1990: T. 19:21.6.1; Hayes 1996: Fig. 6-16:4, 18



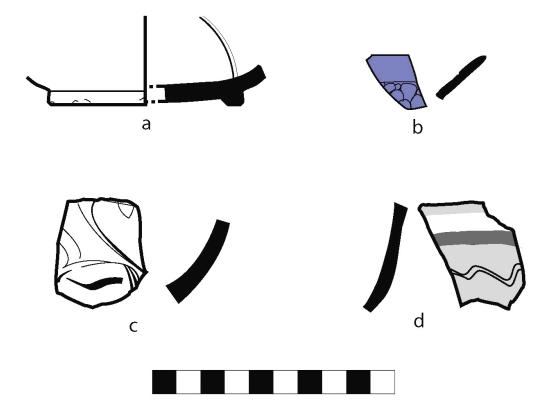
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b56_29 / RN 297	Rim of bowl	Diam. 28– 36 cm	Decayed yellow glaze in and over rim. Brown paint inside rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:h
b	K9b56_27 / RN 297	Rim of bowl	Diam. 30 cm	Yellow glaze in and over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:c, e
c	K9b56_31 / RN 297	Rim of bowl	Diam. 14 cm	Decayed yellow glaze in and over rim	Yemen 1 Black on Yellow	—
d	K9b56_30 / RN 297	Rim of bowl	Diam. 16 cm	Decayed yellow glaze in and over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/46:d (for form)
e	K9b56_25, 32 / RN 297	Rim and base of bowl	Rim diam. 26 cm, base diam. 10 cm	Decayed yellow glaze in and over rim, green and black drips in base	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:c, e (for form)
f	K9b56_2 / RN 262	Base of bowl	Diam. 10 cm	Incised, glazed yellowish-clear in, with reddish drips. Traces of clear glaze out	Marl 4 Incised Monochrome Glazed	_
g	K9b56_13 / RN 262	Rim of jar with everted lip	Diam. unknown	Light green opaque glaze	Marl 4 Monochrome Glazed	—
h	K9b56_24 / RN 280	Rim of bowl	Diam. 24– 30 cm	Trace of dark greenish glaze at top of rim	Nile 3 Monochrome Glazed	—
i	K9b56_19 / RN 280	Rim of bowl	Diam. 16– 20 cm	Opaque greenish-white glaze in and out	Marl 4 Monochrome Glazed	—

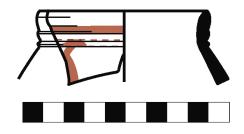
Plate 47. Locus K9b-56, page 2



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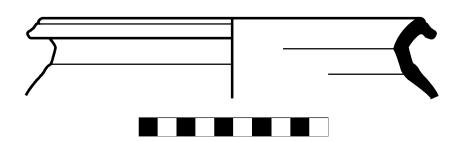
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b59_1 / RN 307	Base of porcelain bowl	Diam. 8.5 cm	Incised line around interior of base. Greenish- clear glaze in and out, excluding base	China 1: porcelain	
b	K9b59_2 / RN 307	Rim of bowl		Incised, then glazed cobalt-blue	Marl 4 Incised Monochrome Glazed	Bahgat and Massoul 1930: Color plate 2:d; Rougeulle 1999: fig. 8:7; Tonghini 1989: 39, Ware G, fritware 1; Whitcomb and Johnson 1979: Pl 39:c, 40:f
c	K9b59_4 / RN 307	Bodysherd of bowl		Incised, then glazed light blue	China 2: <i>Kinuta</i> Longquan celadon	_
d	K9b59_3 / RN 307	Bodysherd of spouted water jar		Slipped 10YR 7/4 very pale brown, then incised through to red, painted 2.5YR 3/2 dusky red	Nile 2 Decorated	Sakurai and Kawatoko 1992: p. 293 (Pl. IV-1- 18?), nos. 6–7; Scanlon 1974b: Pl. 16:2; Scanlon 1986: figs. 180, 184, 185; Whitcomb and Johnson 1979: Pl 43g ; 1980: Pl. 43g;





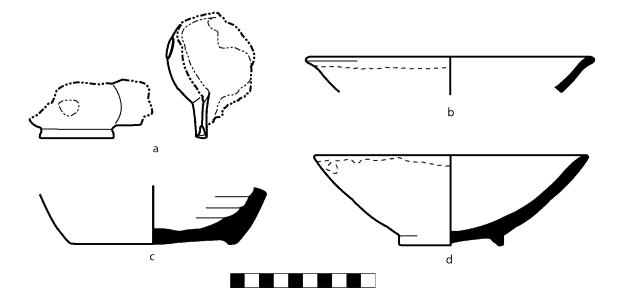
Locus K9b-63

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b63_1 / RN 48	Rim of jar	Diam. 9 cm	Slip 10YR 8/3 very pale brown. Traces of paint 2.5YR 2.5/4 dark reddish brown	Aswan Painted	_



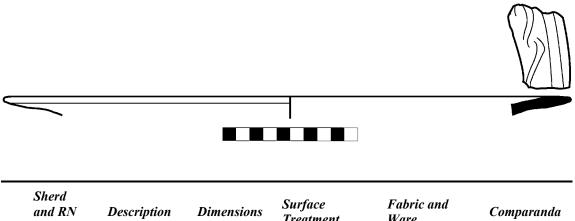
Locus K9b-64

Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
K9b64_1 / RN 116	Rim of cooking pot	Diam. 20 cm	_	India 2 Red Utility	Carswell 1977: 160, fig. 13; Hardy-Guilbert and Rougeulle 1995: fig. 6:24; 1997: fig. 5:1; Keall 2004: Fig. 40:K4288, K4289; Mani 2000: fig. 7:8, 10; Rao 2002: fig. 8:4; Rougeulle 2004: fig. 11:2, 21



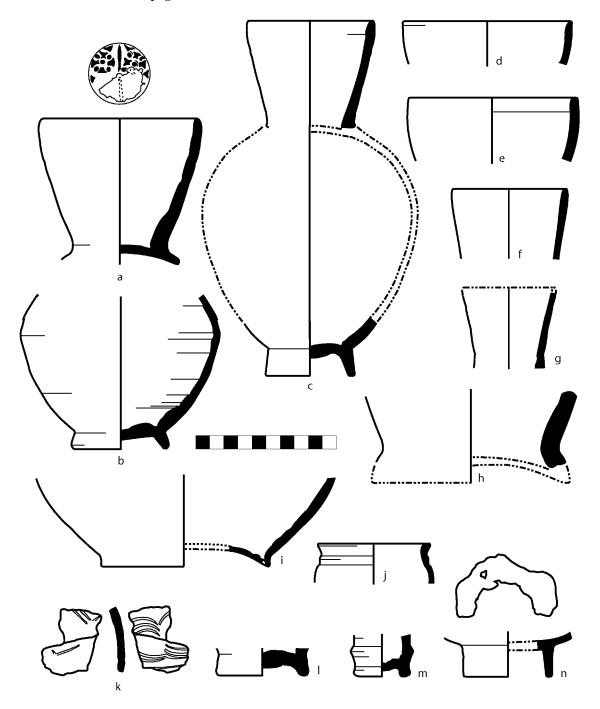
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b67_1 / RN 224	Base and body of lamp	Preserved length 8.5 cm, diam. of bowl approx. 7 cm	Opaque turquoise glaze in and out	Marl 4 Monochrome Glazed	Sakurai and Kawatoko 1992: Pls. IV-5-12: 7, IV-5-15: 6; Kubiak 1970: figs. 10–11
b	K9b67_2 / RN 261	Rim of bowl	Diam. 20 cm	Traces of decayed yellow glaze in and over rim (10YR 8/4 very pale brown)	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:d
c	K9b67_3 / RN 261	Base of jar	Diam. 12 cm	_	Marl 5 Ballas	_
d	K9b67_4 / RN 343	Rim to base of bowl	Rim diam. 19 cm, base diam. 7.5 cm	Decayed yellow glaze in and out, faint traces of brown painted X across center interior	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/46:a; Hardy- Guilbert 2001: fig. 4; Whitcomb and Johnson 1980: Pl. 43j

Plate 51. Locus K9b-68



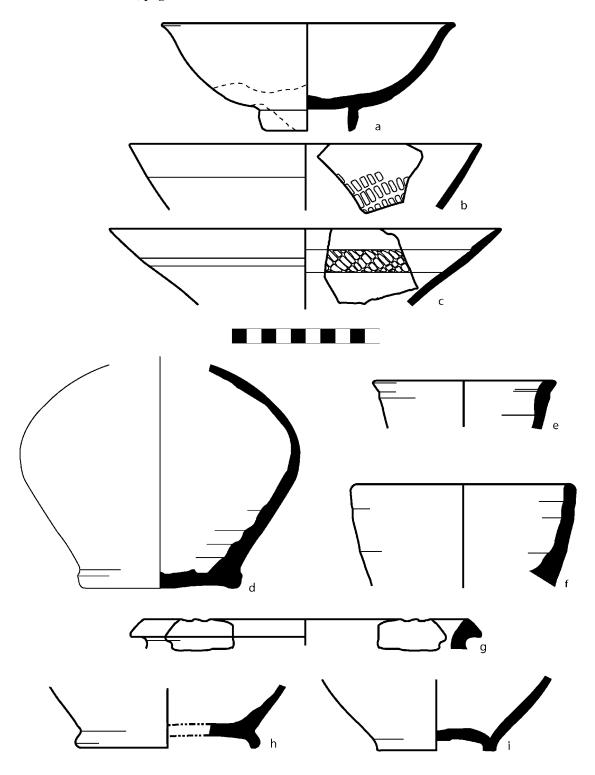
K9b68_1 Rim of Diam. 42 Incised design Marl 4 Incised — / RN 334 ledge- cm on rim, then Monochrome rimmed dish bluish green, severely decayed	nd RN fos.	Description	Dimensions	Treatment	Ware	Comparanda
	_	ledge-		on rim, then glazed dark bluish green, severely	Monochrome	_

	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b69_1 / RN 346	Rim and filter of <i>qulla</i>	Rim diam. 11 cm		Marl 1 Utility	Scanlon 1986: figs. 126–130, Pls. 5b, 20a; Sakurai and Kawatoko 1992: p. ix, nos. 1–6
b	K9b69_2 / RN 346	Base of <i>qulla</i>	Diam. 7 cm		Marl 1 Utility	Scanlon 1986: fig. 138
c	K9b69_62- 63 / RN 346	Rim and base of <i>qulla</i>	Rim diam. 9 cm; base diam. 6.5 cm; est. ht. 23 cm		Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:d,e,g
d	K9b69_110 / RN 346	Rim of <i>qulla</i>	Diam. 12 cm	_	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:e
e	K9b69_111 / RN 348	Rim of <i>qulla</i>	Diam. 12 cm	—	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:e
f	K9b69_108b / RN 348	Rim of <i>qulla</i>	Diam. 7–8 cm	—	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:e
g	K9b69_95 / RN 348	Bodysherd near rim of <i>qulla</i>	Diam. ca. 7 cm	—	Marl 1 Utility	—
h	K9b69_109 / RN 348	Sherd near base of jar or <i>qulla</i>	Base diam. ca. 14 cm	—	Marl 1 Utility	—
i	K9b69_71– 74 / RN 348	Base of jar or <i>qulla</i>	Diam. 12 cm		Marl 1 Utility	—
j	K9b69_56 / RN 346	Rim of small jar	Diam. 8 cm	—	Marl 1 Utility	—
k	K9b69_140 / RN 349	Bodysherds of bowl		Incised decoration, traces of greenish- clear or turquoise glaze	Marl 4 Incised Monochrome Glazed	
1	K9b69_113 / RN 348	Base of <i>qulla</i> or jar	Diam. 6 cm		Marl 1 Utility	
m	K9b69_57 / RN 346	Base of <i>qulla</i> or jar	Diam. 4 cm		Marl 2 Utility	—
n	K9b69_64 / RN 346	Base of a colander	Diam. 6.5 cm	—	Marl 1 Utility	—



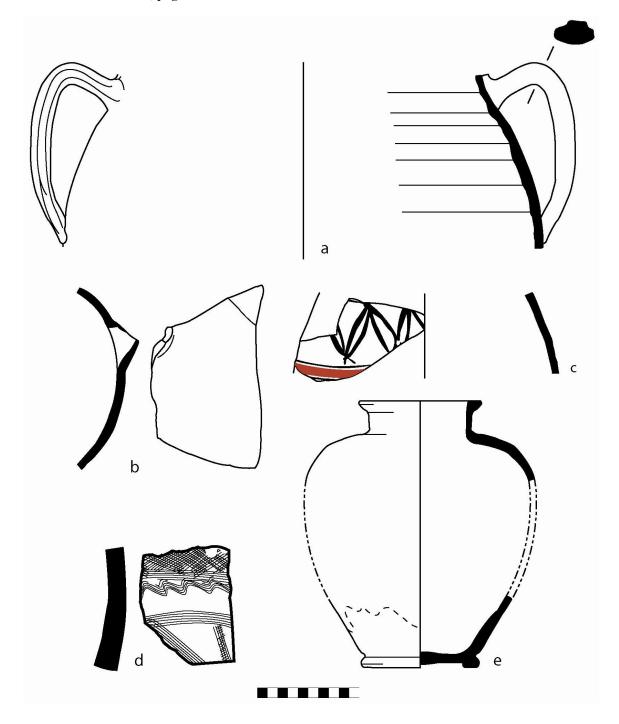
	Sherd and Locus Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b69_116 / RN 349	Rim to base of bowl	Rim diam. 20 cm, base diam. 6.5 cm	Turquoise- green glaze in and out to base, two coats.	Marl 4 Monochrome Glazed	_
b	K9b69_141 / RN 349	Rim of bowl	Diam. 24 cm	Molded "waffle" decoration. Decayed white glaze in and out	Marl 4 Incised Monochrome Glazed	Only plain: Rougeulle 2001: fig. 5:7- 9; Avissar and Stern 2005: Pl 8, fig. 9:1–3
c	K9b69_117 / RN 349	Rim of bowl	Diam. 26 cm	Molded "waffle" band in, incised lines out. Traces of white glaze in and out	Marl 4 Incised Monochrome Glazed	Only plain: Rougeulle 2001: fig. 5:7- 9; Avissar and Stern 2005: Pl 8, fig. 9:1–3
d	K9b69_51– 52 / RN 346	Base and bodysherds of jar	Base diam. 11 cm		Marl 6 Utility	
e	K9b69_55 / RN 346	Rim of jar	Diam. 12 cm	Bright red slip, smoothed	Nile 7 Decorated	
f	K9b69_69 / RN 348	Rim of large store jar	Diam. 15.5 cm	_	Nile 6 Coarse Utility	
g	K9b69_60 / RN 346	Rim of large jar	Diam. 22 cm	Finger impressions on rim	Yemen 4 Trackware	Ciuk and Keall 1996: P 95/37:d
h	K9b69_54 / RN 346	Base of jar	Diam. 12 cm	—	Marl 2 Utility	—
i	K9b69_65 / RN 346	Base of jar	Diam. 8 cm	—	Nile 6 Coarse Utility	—

Plate 53. Locus K9b69, page 2

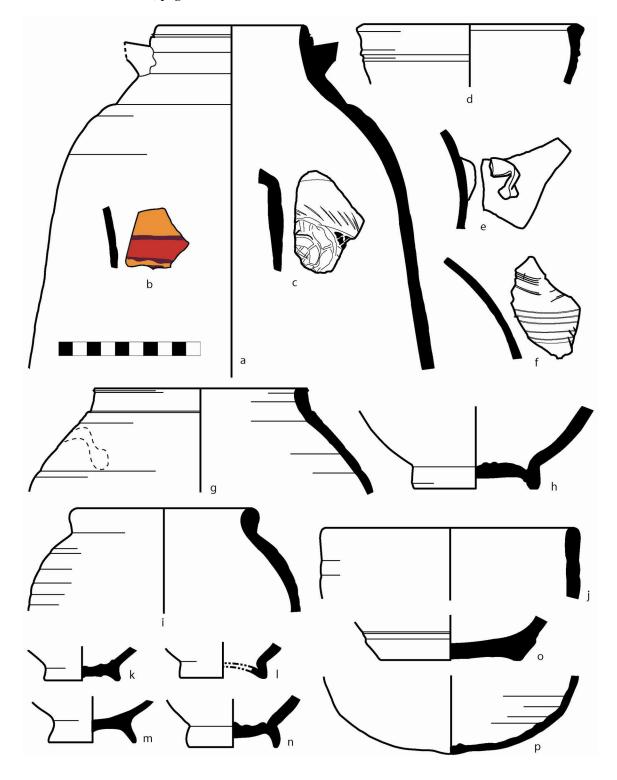


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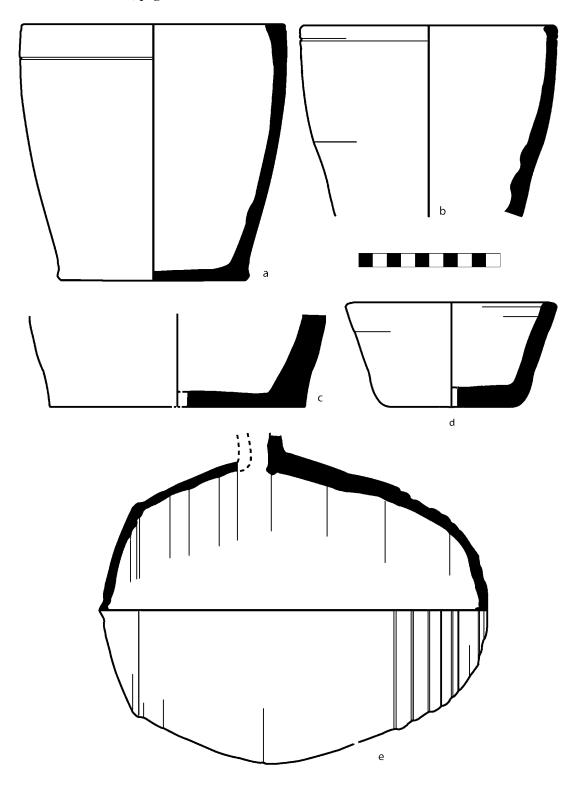
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b69_67 / RN 347	Bodysherd and handle of zir	Diam of body at largest point 47.5 cm		Aswan Painted	Cf. J10c16_1
b	K9b69_66 / RN 347	Bodysherds of spouted jug	—	_	Nile 1 Utility	Adams 1986: 571; cf. K9b70_11
с	K9b69_120 / RN 349	Bodysherds of jar		Slipped 2.5YR 5/4 reddish brown, and black paint in foliate design	Aswan Painted	Adams 1986: 558, fig. 311:f23; Sakurai and Kawatoko 1992: p. 291 (Pl. IV-1-17?) no. 14; Wolf 1997: Pl. XII; Whitcomb, 1979:Pl. 45:f
d	K9b69_68 / RN 347	Bodysherd of zir		Incised decoration out	Marl 6 Utility	Ciuk and Keal 1996: Pl. 95/37:b; Hardy- Guilbert and Rougeulle 1997: fig. 3:12
e	K9b69_122– 239 / RN 349	Rim, body, and base sherds of jar	Rim diam. 12 cm, base diam. 12 cm, est. ht. 25 cm	Decayed turquoise glaze out; Greenish- clear glaze in. On base: Greenish- clear glaze in and out; thick turquoise glaze out, running over clear glaze down to base (on one side)	Marl 4 Monochrome Glazed	Sakurai and Kawatoko 1992: Pl. IV- 3-7: 1; Avissa and Stern 2005: Pl. 9:2; Whitcomb and Johnson 1980: Pl. 44h, j



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b70_9 / RN 347	Rim, neck, and body of jar	Rim diam. 11 cm		Marl 6 Utility	
b	K9b70_84 / RN 349	Bodysherd of jar or <i>qulla</i>	_	Slipped 5YR 6/6 reddish yellow; painted 2.5YR 5/6 red and 7.5YR 3/0 very dark gray	Nile 7 Decorated	
c	K9b70_5 / RN 346	Bodysherd of a pilgrim flask	—	Incised and punched water wheel design	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/14:j
d	K9b70_1 / RN 346	Rim of jar	Diam. 16 cm	Horizontal groove	Marl 1 Utility	—
e	K9b70_4 / RN 346	Bodysherd and handle of cooking pot	_	_	Yemen 2 Utility	_
f	K9b70_72 / RN 348	Bodysherd of jar	_	Incised decoration. Interior finger marks	Marl 1 Utility	_
g	K9b70_6 / RN 346	Rim of cooking pot	Diam. 15 cm	Exterior surface 10YR 5/1 gray	Aswan Utility	—
h	K9b70_16– 20 / RN 348	Base of <i>qulla</i>	Diam. 9 cm		Marl 1 Utility	
i	K9b70_7 / RN 347	Rim of jar	Diam. 13.5 cm	_	Nile 6 Coarse Utility	—
j	K9b70_36 / RN 348	Rim of jar	Diam. 18 cm	_	Nile 6 Coarse Utility	—
k	K9b70_3 / RN 346	Base of <i>qulla</i>	Diam. 5 cm		Marl 2 Utility	—
1	K9b70_69 / RN 348	Base of <i>qulla</i>	Diam. 6 cm		Marl 1 Utility	
m	K9b70_2 / RN 346	Base of <i>qulla</i>	Diam. 6 cm		Marl 2 Utility	
n	K9b70_79 / RN 348	Base of <i>qulla</i>	Diam. 6 cm	_	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:1
0	K9b70_66 / RN 348	Base of <i>qulla</i>	Diam. 10 cm	Incised horizontal lines	Marl 2 Utility	
р	K9b70_71 / RN 348	Round, belly-button base of jar	—	_	Marl 2 Utility	—

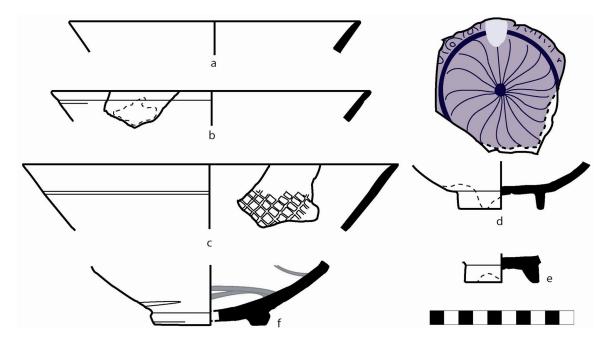


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b70_8 / RN 347, 348	Rim to base of basin	Rim diam. 19 cm, base diam. 13 cm	Incised decoration	Yemen 3 Utility	Ciuk and Keall 1996 Pls. 95/30:c- d; 95/32:g; 95/42:e; Hardy- Guilbert and Rougeulle 1997: fig. 5:14
b	K9b70_10 / RN 347	Rim of basin	Diam. 18 cm	Incised line just under exterior rim	Yemen 3 Utility	Ciuk and Keall 1996 Pls. 95/30:c- d; 95/32:g; 95/42:e; Hardy- Guilbert and Rougeulle 1997: fig. 5:14
c	K9b70_15 / RN 347	Base of basin	Diam. 18 cm		Yemen 3 Utility	Ciuk and Keall 1996 Pls. 95/30:c- d; 95/32:g; 95/42:e; Hardy- Guilbert and Rougeulle 1997: fig. 5:14
d	K9b70_14 / RN 347	Rim to base of bowl	Rim diam. 15 cm, base diam. ca. 10 cm	_	Nile 6 Coarse Utility	Rose 1998: fig. 6:1; Whitcomb and Johnson 1980: Pl. 46g
e	K9b70_12- 13, 92 / RN 347	Body and end sherds of keg	Length 27 cm, diam. ca. 22 cm		Marl 6 Utility	Adams 1986 574–5; Bahgat and Massoul 1930: Pl. LX:4; Rougeulle 1999: fig. 8:11; 2004: fig. 15: 8–12

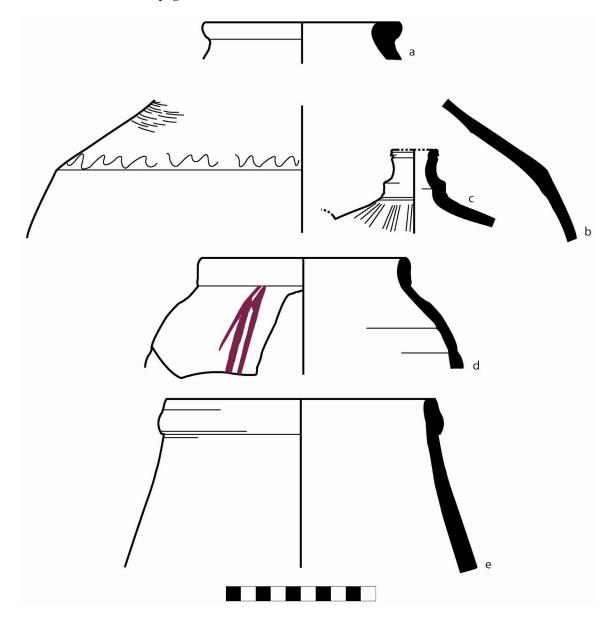


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b70_86 / RN 349	Rim of bowl	Diam. 20 cm	Decayed yellow glaze in and out, now appears 5Y 8/3 pale yellow	Marl 4 Monochrome Glazed	_
b	K9b70_81 / RN 349	Rim of bowl	Diam. 22 cm	Yellowish- clear glaze in and out, now appears 7.5YR 6/6 reddish yellow	Marl 4 Monochrome Glazed	_
c	K9b70_88– 91 / RN 349	Rim of bowl	Diam. 26 cm	Molded "waffle" band in, grooved out. Traces of white glaze in and out	Marl 4 Incised Monochrome Glazed	Rougeulle 2001: fig. 5:7–9
d	K9b70_80 / RN 349	Base of bowl	Diam. 3.7 cm	Incised radiating lines with band of curvilinear shapes under blue glaze in; dark blue glaze out	Marl 4 Incised Monochrome Glazed	Mikami 1988: fig.15a
e	K9b70_82 / RN 349	Base of bowl	Diam. 5 cm	Opaque bluish green glaze in, single layer of translucent glaze out to base	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 411
f	K9b70_83 / RN 349	Base of bowl	Diam. 8.5 cm	Powdery decayed glaze in, 2.5Y8/8 yellow. Faded brown paint, 7.5YR 5/2 brown	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45: a, g

Plate 57. Locus K9b-70, page 3

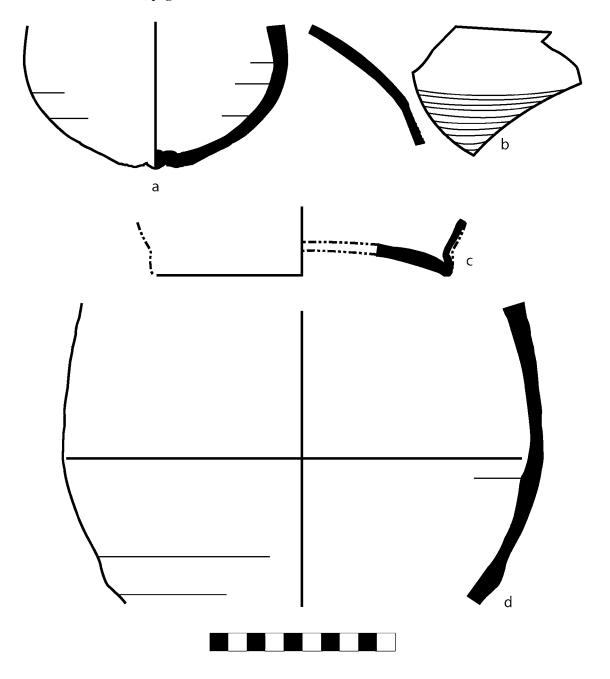


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b71_2 / RN 346	Rim of jar	Diam. 13 cm	_	India 1 Black Utility	Mani 2000: fig. 7:15; Rao 2002: fig. 8:1; Thapar 1978 Pl. XVB
b	K9b71_3 / RN 346	Shoulder of jar	Est. diam. at shoulder 33 cm	_	India 1 Black Utility	Kennet 2004: fig. 40; Kervran 1996: fig. 7:13; Mani 2000: Fig. 7:1–3; Rougeulle 2004: fig. 11:4, 5
с	K9b71_6 / RN 346	Neck and shoulder of bottle	Rim diam. ca. 3 cm	Incised	Unidentified	—
d	K9b71_32 / RN 349	Rim of jar	Diam. 14 cm	Painted 10R 2.5/2 very dusky red out	Nile 6 Coarse Utility	—
e	K9b71_10 / RN 347	Rim of wide- mouthed jar	Diam. 18 cm	_	Yemen 3 Utility	

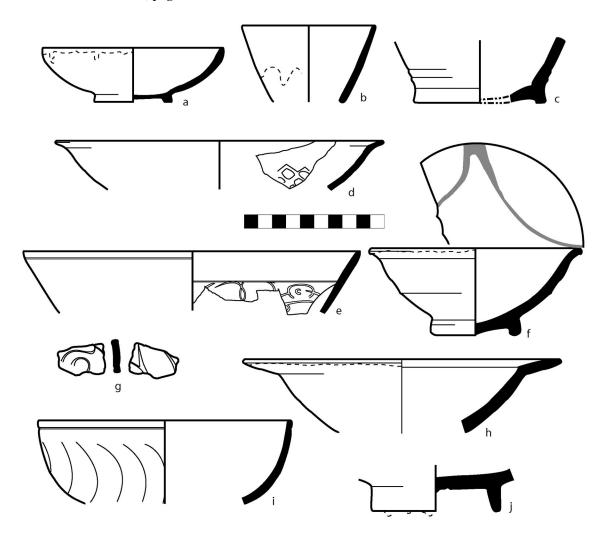


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	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	K9b71_8 / RN 346	Rounded, belly-button base of jar	Diam. at widest 18 cm	_	Marl 2 Utility	—
b	K9b71_9 / RN 347	Bodysherd of closed vessel	Diam. at carination 18 cm	Fine ribbing out	Marl 5 Ballas	_
с	K9b71_50 / RN 346	Base of jar	Diam. 8 cm	Slipped 7.5YR 7/8 reddish yellow out	Aswan Painted	_
d	K9b71_51 / RN 347	Bodysherds of jar or keg	Diam. 26 cm	_	Marl 6 Utility	—



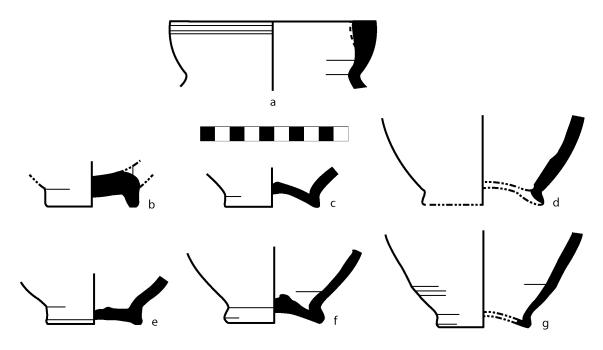
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b71_30 / RN 349	Rim to base of small bowl	Rim diam. 13 cm, base diam. 5.6 cm	Light slip in and partly out. Clear glaze in and over rim	Nile 5 Utility	
b	K9b71_25 / RN 349	Rim of cup	Diam. 12 cm	Turquoise glaze, two coats	Marl 4 Monochrome Glazed	—
c	K9b71_33 / RN 349	Base of bowl	Diam. 9 cm	Glazed in, 2.5Y 8/8 yellow, powdery	Yemen 1 Black on Yellow	—
d	K9b71_31 / RN 349	Rim of bowl	Diam. 24+ cm	Molded "waffle" pattern in, traces of white glaze in and out	Marl 4 Incised Monochrome Glazed	Plain: Rougeulle 2001: fig. 5:7–9
e	K9b71_39– 46 / RN 349	Rim of bowl	Diam. 24 cm	Incised decoration in, decayed clear glaze in and out	Marl 4 Incised Monochrome Glazed	Chittick 1984: 81, Pl. 35c
f	K9b71_34– 35 / RN 349	Rim, body, and base sherds of bowl	Rim diam. 15 cm, base diam. 7 cm	Decayed glaze, in and on rim, 2.5Y 8/8 yellow. Faded paint, 2.5Y 3/2 very dark grayish brown	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pls. 95/45:a, 95/46:c
g	K9b71_36 / RN 349	Bodysherd of bowl	_	Incised in and out. Decayed glaze in and out 5Y 8/3 pale yellow	Marl 4 Incised Monochrome Glazed	
h	K9b71_47 / RN 349	Rim of bowl	Diam. 21– 23 cm	Decayed glaze 2.5Y 8/6 yellow in and over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996: Pl. 95/45:g
i	K9b71_37– 38 / RN 349	Rim of bowl	Diam. 16– 18 cm	Molded decoration out, turquoise glaze in and out	Marl 4 Incised Monochrome Glazed	Bahgat and Massoul 1930: Pl. LIV:5; Chittick 1984: 81, Pl. 35c; Mikami 1981: Fig. 36–37
j	K9b71_49 / RN 349	Base of bowl	Diam. 9 cm	Glazed solid purple in, thick and clear(?) (indeterminate) out	Marl 4 Monochrome Glazed	

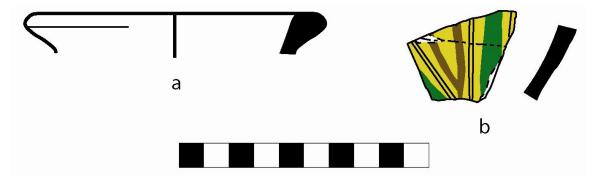


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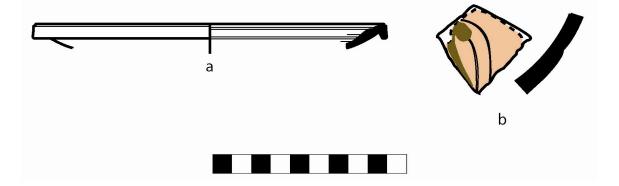
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b71_24 / RN 348	Rim of jar	Diam. 14 cm	—	Marl 1 Utility	_
b	K9b71_7 / RN 348	Base of water jar (<i>qulla</i>)	Diam. 6 cm	_	Marl 2 Utility	
с	K9b71_52 / RN 348	Base of water jar (<i>qulla</i>)	Diam. 6.25 cm	_	Marl 1 Utility	Scanlon 1974b: fig. 7; Whitcomb and Johnson 1980: Pl. 46a
d	K9b71_55 / RN 348	Bodysherd from near base of water jar (<i>qulla</i>)	Diam. ca. 8.5 cm	_	Marl 1 Utility	_
e	K9b71_23 / RN 348	Base of water jar (<i>qulla</i>)	Diam. 6.25 cm	—	Marl 1 Utility	
f	K9b71_13– 19 / RN 348	Base of water jar (<i>qulla</i>)	Diam. 6.25 cm	_	Marl 1 Utility	Scanlon 1974b: fig. 7
g	K9b71_22 / RN 348	Base of water jar (<i>qulla</i>)	Diam. 6 cm	_	Marl 1 Utility	Whitcomb and Johnson 1980: Pl. 46a

Plate 61. Locus K9b-71, page 4

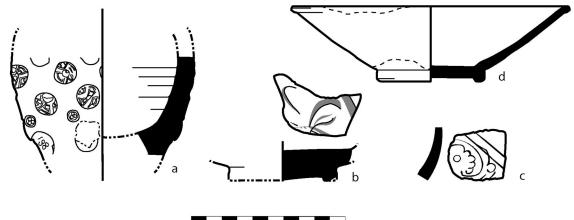




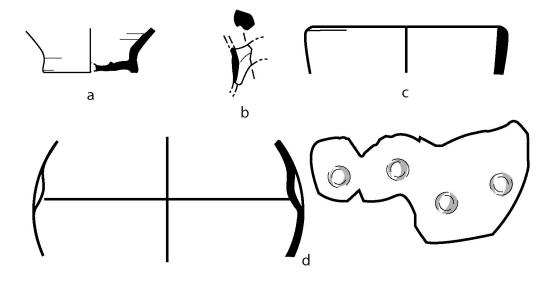
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9d2_1 / RN 300	Rim of jar	Diam. 12	Turquoise glaze in and out	Marl 4 Monochrome Glazed	Whitcomb and Johnson 1980: Pl. 44h
b	K9d2_2 / RN 300	Bodysherd of bowl		Slipped in and out 5YR 7/6 reddish yellow. Incised double lines in. Glazed yellowish clear in, with green in-glaze stripes and brown paint overglaze stripes, 10R 2.5/1 reddish black	Nile 3 Sgraffiato	Berman 1989: fig. 71: 25; Horton 1996:285–89; Kawatoko 1996 Pl. 32:5; Tonghini 1998: 58, Figs. 89:k, 91:e, i



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K10a10_1 / RN 308	Rim of bowl	Diam. 18 cm	Incised, slipped 2.5YR 5/6 red in and out, polished	moderate silt and mica, 5YR 6/6 reddish yellow	Ettlinger et al. 1990: T. 12:13.2.1; Roberta S. Tomber 1998: Fig. 6- 4:28; Whitcomb and Johnson 1982: Pls. 29a, 30p
b	K10a10_2 / RN 308	Bodysherd of bowl		Slipped 5YR 7/6 reddish yellow in and out; Incised, glopped with thick brown paint or slip, and glazed clear in, appearing 7.5YR 8/6 reddish yellow	Nile 3 Slip Painted and Glazed	_

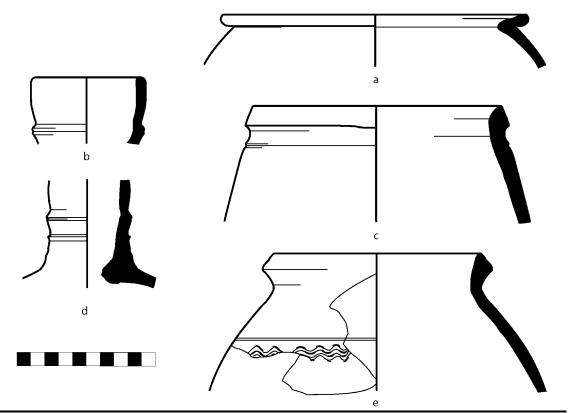


	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K10a11_1 / RN 248	Bodysherd of sphero- conical vessel	Diam. at widest point, 12 cm	Exterior stamped	Stoneware	Scanlon 1974: fig. 3; Avissar and Stern 2005: fig. 51:4
b	K10a11_5 / RN 312	Base of bowl	Diam. 7 cm	Glazed greenish clear, 5Y 6/2 light olive gray	China 2: celadon	Gray 1984: Pl. 31
c	K10a11_3 / RN 312	Bodysherd of jar	_	Incised out , glazed in and out, translucent 2.5Y 5/4 light olive brown	Marl 4 Incised Monochrome Glazed	Bahgat and Massoul 1930: Pls. 4d, XXXIII:6, 7; Avissar and Stern 2005: 37, fig. 14:1
d	K10a11_2, 4	Rim and base sherds of bowl	Rim diam. 18 cm, base diam. 7 cm	White glaze under a clear glaze, dripped over rim exterior	China 1: Qingbai or Ding- imitation porcelain	_

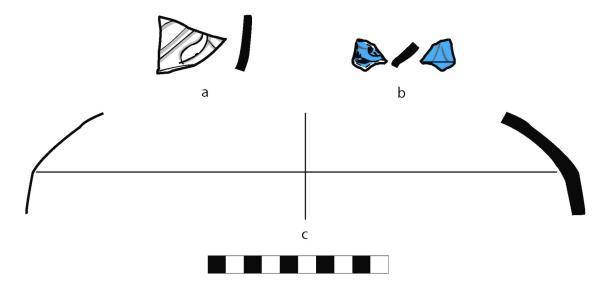




	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	K10a13_3 / RN 45	Base of jar or juglet	Diam. 5 cm	—	Marl 2 Utility	—
b	K10a13_2 / RN 45	Small piece of handle base	—	—	Aswan Painted	—
c	K10a13_1 / RN 45	Rim of water jar (<i>qulla</i>)	Diam. 10 cm	—	Marl 1 Utility	Ciuk and Keall 1996: Pl. 95/12:e
d	K10a13_7 / RN 87	Bodysherds of jar or ewer	Diam. 14 cm	Exterior surface 10YR 8/3 very pale brown	Aswan (Roman)	LACMA Inventory # M.2002.1.100; Adams 1986: Fig. 58



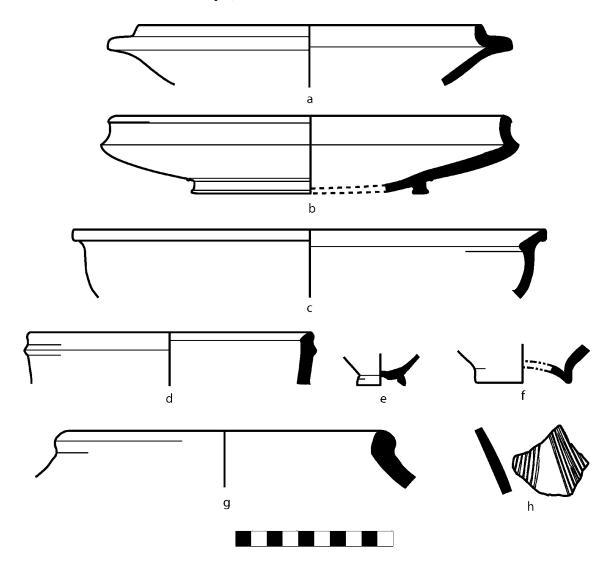
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
а	K10a15_3 / RN 66	Rim of jar	Diam. 22 cm	_	Nile 7 Decorated	Adams 1986: fig. 294: U18
b	K10a15_1 / RN 66	Rim of water jar	Diam. 8 cm	—	Nile 6 Coarse Utility	Old Cairo Shaft 4 vessels
с	K10a15_4 / RN 66	Rim of wide- mouthed jar	Diam. 18 cm	Exterior surface 2.5Y 7/2 light gray–7/4 pale yellow	Yemen 4 Trackware	Ciuk and Keall 1996: Pl. 95/23:f
d	K10a15_2 / RN 66	Neck of water jar	Diam. 7 cm	Slipped in and out 7.5YR 7/6 reddish yellow	Nile 6 Coarse Utility	Old Cairo Shaft 4 vessels
e	K10a15_5	Rim and shoulder of jar:	Diam. 15 cm	Exterior slipped 2.5YR 5/2 weak red, comb-incised with wavy lines	Yemen 4 Trackware	Bridgman 2000: 52; Ciuk and Keall 1996: Pls. 95/14:f, 95/32:d, k



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K10a20_2 / RN 239	Bodysherd of bowl		Incised foliate pattern in, glazed yellowish clear, appearing 5Y 5/1 gray	China 2: celadon	Gompertz 1980: Pls. 44–45
b	K10a20_3 / RN 239	Bodysherd of bowl	_	Black paint under turquoise glaze in and out	Marl 4 Underglaze painted	Avissar and Stern 2005: 26, fig. 9:5,; Tonghini 1998: figs. 65a; 66d, g; 68a
с	K10a20_1 / RN 239	Bodysherd of large jar with carinated shoulder	Diam. at shoulder 30 cm	Polished slip out, 5YR 6/8 reddish yellow and 10YR 8/4 very pale brown	Aswan Graeco- Roman	Adams 1986: p. 536–8, figs. 229: J17, 300: Z24

	Sherd No. (no RNs)	Description	Dimensions	Surf. Treat- ment	Fabric and Ware	Comparanda
a	K9b_3	Rim of dish	Diam. 22 cm		Indian Satavahana: hard, flaky; common medium-coarse sand and voids; core & ext. surf. 2.5Y 2/0 black; int. surf. 2.5YR 4/4 reddish brown	Begley and Tomber 1999: Fig 6-5:11; Ghosh 1980: fig. 3:20 r; Nath 2000: fig. 21:25, 26; Pal 1987: fig. 10:11; Tomber and Begley 2000: Fig. 3-5:14; Whitcomb and Johnson 1982 Pl. 11n
)	K9b_4	Rim of dish	Diam. 26 cm	Polished	Hard; Common very fine-fine sand, voids, and mica; surfaces and core 10YR 3/1 very dark gray with patch of red from firing on surf., 5YR 4/3	Hayes 1996: Fig. 6-14:2; Whitcomb and Johnson 1982 Pl. 11m
	K9b_2	Rim of dish	Diam. 30 cm	_	Hard; moderate fine-medium sand and voids; Core & ext. surf. 2.5YR 2.5/0 black; int. surf. 5YR 6/6 reddish yellow	Hayes 1972: 397– 99, fig. 88:a ; Tomber and Begley 2000: Fig. 3-5:13; Whitcomb and Johnson 1982 Pl. 11i
	K9b_1	Rim of jar	Diam. 18 cm		Nile 4 Utility Ware 2	_
1	K9b_5	Base of cup	Diam. 3 cm	_	Hard; sparse silt-very fine sand and voids; 2.5Y 2/0 black core and ext.; 2.5Y 5/0 gray int.	Whitcomb and Johnson 1982: Pl. 30w
	K9b_7	Base of water jar (<i>qulla</i>)	Diam. 6.25 cm	_	Marl 1 Utility	Scanlon 1974b: fig. 7; Whitcomb and Johnson 1980 Pl. 46a
g	K9b_6	Rim of jar	Diam. 25 cm	7.5YR 8/4 pink	Yemen 4 Trackware	_
1	K9b_9	Bodysherd of jar		Incised	Yemen 2 Utility	—

Plate 68. Trench K9b Surface Sample, 1978



	Sherd and RN Nos.	Descrip- tion	Dimen- sions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b_surf_10 / RN 336	Rim of bowl	Diam. 34 cm	Slipped 5YR 7/4 pink. Yellow glaze, overglaze paint 5YR 3/1 very dark gray	Yemen 1 Black on Yellow	Cairo Ayyubid wall
b	K9b_surf_16 / RN 367	Rim of bowl	Diam. 26 cm	Slip-painted with white or light slip, glazed dark greenish-blue	Yemen 2 Turquoise Slip- painted	Hardy- Guilbert and Rougeulle 1995: Fig. 4:10; Whitcomb 1988: fig. 10c- d
с	K9b_surf_24 / RN 335	Rim of jar	Diam. 12 cm	Slipped 10YR 3/3 dark brown out, burnished. Slipped 2.5YR 3/2 dusky red in and over exterior rim, under brown slip	China 3: stoneware jars	Carswell 1979 fig. 12; Hardy- Guilbert and Rougeulle 1995: fig. 1:6
d	K9b_surf_22 / RN 335	Bodysherd of bowl	_	Incised curvilinear design, glazed 5Y 8/4 pale yellow	Marl 4 Incised Monochr ome Glazed	Bahgat and Massoul 1930: Pls. 4d, XXXIII:7
e	RN 216	Whole lamp	Length: 6 cm	Molded	Roman	Johnson 1978: Pl. 35:h
f	J9d_surf / RN 31	Bodysherd of closed vessel		Slip painted decoration, 10YR 7/4 very pale brown, and traces of paint or barbotine, 5YR 3/1 very dark gray	Imitation barbotine ware, 1 st c. AD	Johnson 1978: 67, Pl. 22a [bottom]

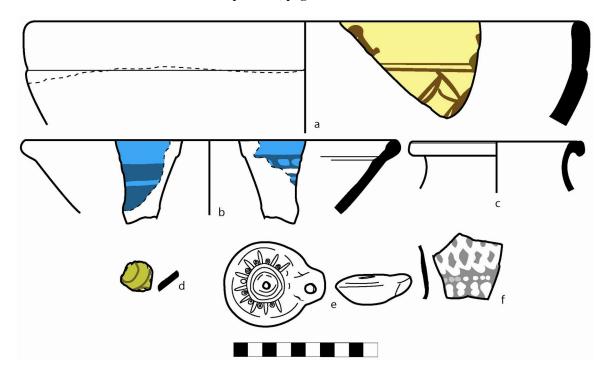
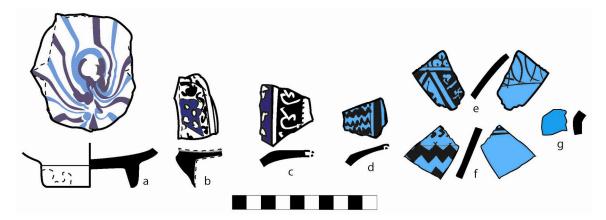


Plate 69. Sheikh's House Surface Sample 1982, page 1

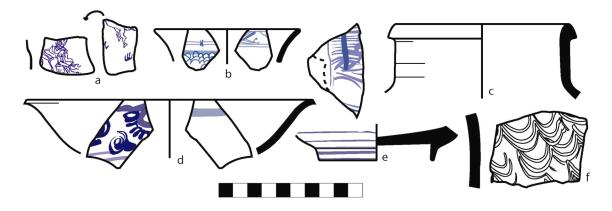
	Sherd and RN Nos.	Description	Dimen- sions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b_surf_11 / RN 336	Base of bowl	Diam. 6.25 cm	White glaze with manganese and cobalt in, traces of clear glaze under drips of white out	Marl 4 Blue, Purple, White Drip	Bridgman 2000: Pl. 11b
b	K9b_surf_9 / RN 336	Base of bowl	_	Thick white slip in and out. Black and blue underglaze paint in. Clear glaze in and out	Marl 4 Underglaze Painted	Redlak 2003: Fig. 1, Type 4
с	K9b_surf_19 / RN 336	Ledge of bowl	_	Thick white slip in and out. Black and blue paint under a clear glaze in and out	Marl 4 Underglaze Painted	Bridgman 2000: 50, Pl. 10a:IB7; Redlak 2003: Fig. 1, Type 4
d	K9b_surf_14 / RN 336	Ledge of bowl	—	Thick white slip in and out. Black paint in, under turquoise glaze	Marl 4 Underglaze Painted	François 1998: 326
e	K9b_surf_15 / RN 336	Cavetto of bowl	_	Thick white slip in and out. Thick black underglaze paint, under turquoise glaze in and out	Marl 4 Underglaze Painted	François 1998: 326
f	K9b_surf_21 / RN 611	Cavetto of bowl	—	Thick white slip in and out. Black paint in and out under turquoise glaze	Marl 4 Underglaze Painted	François 1998: 326
g	K9b_surf_18 / RN 336	Near rim of jar?	_	Thick turquoise glaze in and out	Marl 4 Mono- chrome Glazed	—

Plate 70. Sheikh's House Surface Sample 1982, page 2



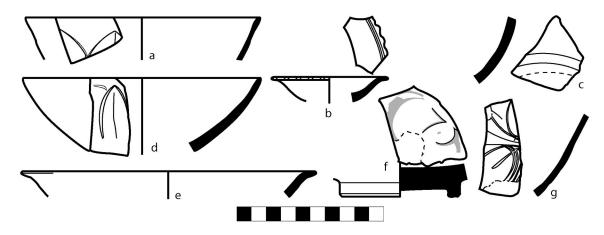
	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b_surf_17 / no RN	Bodysherd of cup or bowl	_	Cobalt paint under clear glaze	China 1: Blue and White, 15 th c?	Krahl 1984– 85: 51; Esten 1987: p. 42
b	K9b_surf_23 / RN 335	Rim of cup	Diam. 10.25 cm	Bluish-white glaze in and out, light blue paint in and out	China 1: Blue and White , 16 th c?	Carswell 1977 Pl. 64c, 286– 87
c	K9b_surf_13 / no RN	Rim of jar	Diam. 12 cm	Salt glazed? Blue glaze flecked with black, with embedded white quartz crystals	European stoneware ?	Carswell 1979 34; Rye 1981 46
d	K9b_surf_6 / RN 336	Rim of bowl	Diam. 16 cm	Bluish-white glaze, blue paint in and out	China 1: Blue and White , 15 th -17 th c?	Carswell 1977 157, Pl. 66a:382; Pl. 64b: 274, 279
e	K9b_surf_4 / RN 336	Base of bowl	Diam. 8 cm	Light surface. Cobalt blue paint in, and lines around base out	China 1: Blue and White , 15 th c Jingdezhe n?	Kawatoko 1998: Pls. 14:5, 17:2
f	K9b_surf_8 / RN 336	Bodysherd of jar	_	Incised exterior, translucent yellow-brown glaze in, close to 2.5Y 5/6 light olive brown	China 3: stoneware jars	Bing 2004: Fig. 5:4, 11 th – 14 th c

Plate 71. Sheikh's House Surface Sample 1982, page 3



	Sherd and RN Nos.	Description	Dimensions	Surface Treatment	Fabric and Ware	Comparanda
a	K9b_surf_7 / RN 336	Rim of bowl	Diam. 16 cm	Carved lotus leaves out. Clear glaze in and out	China 1: porcelain	Hardy-Guilbert, 2001: Fig. 6:4; Rougeulle 1999: fig. 7:10
b	K9b_surf_3 / RN 336	Rim of bowl	Diam. 8 cm	Incised and molded (scalloped rim). Bluish- gray glaze in and out	China 2 celadon	_
c	K9b_surf_12 / RN 336	Bodysherd near base of bowl	_	Clear glaze in and out to near base	China 2: celadon	—
d	K9b_surf_1 / RN 335	Rim of bowl	Diam. 16 cm	Molded leaves out, thick light green glaze in and out	China 2: Lung- ch'uan celadon (Kinuta type). Sung dynasty	Gompertz 1980 Pl. 86
e	K9b_surf_5 / RN 336	Rim of bowl	Diam. 20 cm	Translucent light green- gray glaze in and out	China 2 celadon	Hardy-Guilbert and Rougeulle 1995: fig. 4:14
f	K9b_surf_2 / RN 335	Base of bowl	Diam. 8 cm	Lightly incised out, clear glaze in and out, appears dark olive	China 2 celadon	_
g	K9b_surf_20 / RN 336	Bodysherd near rim of bowl	_	Incised out, clear glaze in and out	China 2 celadon	_





APPENDIX G

POSTSCRIPT: THE LATER HISTORY OF QUSEIR AL-QADIM AND EARLY MODERN QUSEIR

Vibrant trading activity continued at Quseir al-Qadim in the fourteenth century, which now includes direct evidence of African connections in the ceramic and numismatic material (Whitcomb 1995b: Table 1). The presence in the Eastern Area of Chinese celadons and blue and white porcelains; Indian, East African, and Yemeni earthenwares; and quantities of Indian resist-dyed textiles indicates that this community was still participating actively in the Indian Ocean trade. Botanical data suggests that Quseir al-Qadim was no longer importing Mediterranean nuts, but Mediterranean pottery indicates no severance of connections with this region (Whitcomb 1983b: 103; 1995b: 27). Nevertheless the importance of Quseir al-Qadim was declining. At-Tur in the Sinai peninsula was renovated in 780/1378-9 to replace the port of Suez at Qulzum (Meloy 1998: 65), which had always been an important overland stop between Egypt and Arabia. This led to Tur's eclipsing of Quseir al-Qadim and 'Aydhab on the Egyptian coast, and coincided with the rise of Jedda on the Arabian coast. The Indian Ocean-oriented trade nevertheless continued at Quseir at least until the turn of the sixteenth century, when European textual sources indicate pepper and other goods were still coming through Quseir's port (Marino Sanuto, cited in Bellorini, Hoade, and Bagatti 1948; von Heyd 1967: vol. 2, 444, n. 2).

Quseir al-Qadim also continued to be a port of pilgrimage, as is noted by Sakhawi in the mid-fourteenth century, and as the Holy Cities continued to hold *iqta* ' lands in

Upper Egypt, it is likely that the port continued to supply wheat to the Hijaz (Garcin 1976: 418). Indeed, evidence of continued direct communications with Arabia is given by the traveler Ibn Battuta, who in the mid-fourteenth century recounts that after making the pilgrimage he nearly took an ill-fated boat from Jeddah to Quseir in an effort to journey to Yemen and India, but luckily took a ship bound for 'Aydhab instead and avoided shipwreck (Battuta 1929: 123).

By 1541 Quseir and its port had moved about 8 km south, where the Portuguese sailor Don João de Castro claims to have destroyed a fort (Kennedy Cooke 1933: 151), despite a *firman* of Sultan Selim II to his vizier in Egypt, which orders the construction of Quseir fort on September 19, 1571. Nevertheless de Castro clearly noted the existence of an old Quseir (which he took to be the remains of the Roman port Leukos Limen) and a new Quseir (Le Quesne 2004: 147). There is some evidence from a necropolis excavated by the University of Southampton on the beach of Quseir al-Qadim that a catastrophe befell the residents of old Quseir, perhaps an outbreak of disease, in the fifteenth century (Macklin 2006), which may have signaled the end of the Ayyubid-Mamluk town and been a factor in its movement down the coast. Another factor may well have been the silting up of the harbor, which was already much smaller than that used in the Roman period.

Excavations by the American Research Center in Egypt and the Supreme Council of Antiquities at the fort indicate it was built in the sixteenth century, and, as noted in Chapter Four, two texts found at its sister fort of Qasr Ibrim mention the Quseir fort and its garrison (Hinds and Ménage 1991: 82, 95, 108, 10). The archaeological evidence at the fort shows five phases of use, including occupation by Napoleon's troops and reoccupation by Egyptian forces under Muhammad 'Ali. Fifty letters dating to the eighteenth century found in the excavations indicate that at this time the town continued

to be an important transit node for wheat shipped to the Hijaz (Le Quesne 2004: 150– 54). A traveler's account from this century indicates that the fort was used to collect the wheat for transport to Mecca in times of famine, but there was also a large mud-walled enclosure in the town in which each merchant had a storehouse not only for wheat but also other merchandise, which mostly consisted of cloth from India destined for the markets of Upper Egypt (J. Bruce, traveling in 1769, see Bernand 1972: 61–62).²⁶⁴ As previously, Quseir continued to be known as a *hajj* station for pilgrims coming from Darfur and beyond into the early nineteenth century (Peters 1994: 97, 214).

²⁶⁴ Bruce also notes the town is enclosed by a mud wall, which must be to help prevent pillaging of the town by the local Bedouin, who are otherwise deterred by the four small decrepit canons on the walls of the fort (Bernand 1972: 61). This is a change from the security of the Ayyubid and early Mamluk periods, when the local tribes were used to protect the routes to Quseir al-Qadim.

BIBLIOGRAPHY

A. ARABIC SOURCES

- Abu'l-Fida, Ismā'īl ibn 'Alī
- 1840 *Tawqim al-buldan (Géographie d'Abulféda)*, Paris.
- Africanus, Leo
- 1979 *Wa Ifriqiya / allafahu bi–al-I'aliyah Jan Liyun al-Ifriqi (wa–huwa al-Hasan ibn Muhammad al-Wazzan al-Zayyati)*. al-Mamlakah al-'Arabiyah al-Sa'udiyah, Riyadh.
- Ibn Battuta, Abū'l-Hasan 'Alī ibn Khalaf ibn 'Abd al-Malik
- 1929 *Ibn Battuta Travels in Asia and Africa, 1325–1354.* Translated by H. A. R. Gibb. The Broadway Travellers. Routledge & Kegan Paul, London.
- al-Hamawī, Yaqut ibn 'Abd Allāh
- 1955 *Mu'djam al-buldan*, Beirut.

Jazm, Muhammad 'Abd al-Rahim, ed.

- 2003–2005 Nur al-ma'arif, Lumière de la Connaissance: règles, lois et coutumes du Yemen sous le règne du sultan rassoulide al-Muzaffar. 2 vols. Centre Français d'Archéologie et de Sciences Sociales de Sana'a, Sana'a.
- al-Kutubi, Muhammad ibn Ibrahim ibn Yahyá
- 1981 *Mabahij al-fikar wa–manahij al-'ibar. Selections.* Silsilah al-turāthīyah. al-Majlis al-Wahani lil-Thaqafah wa-al-Funun wa-al-Adab, Kuwait.

al-Maqrizi, Ahmad b. 'Ali

- 1911 *el-mawã 'iz wal-i 'tibâr fi dhikr el-khitat wal-âthâr*. Mémoires publiés par les membres de l'Institut français d'archéologie orientale du Caire 30, 33, 46, 49, 58. Institut français d'archéologie orientale, Cairo.
- 1980 *A History of the Ayyubid Sultans of Egypt.* Translated by R. J. C. Broadhurst. Library of Classical Arabic Literature 5. Twayne, Boston.
- al-Nuwayri, Shihab al-Din Ahmad ibn 'Abd al-Wahhab 1964 Nihayat al-arab fi funun al-adab, Cairo.

al-Qalqashandi, Abi Abbas Ahmad ibn 'Ali

1964 *Kitab subh al-a`sha fi sina'at al-insha', edited by 'Abd al-Sattār Ahmad Farrāj.* Turāth al-'Arabī 11. 14 vols. Wizārat al-Irshād wa-al-Anbā', Kuwait.

Udfuwi, Ja'far ibn Tha'lab

1914 *Al-Tali' al-Sa'id al-jami' li asma al-fudala' wa 'l-ruwat bi a'la al-Sa'id*. al-Matba'ah al-Jamaliyah, Cairo.

B. SECONDARY SOURCES

- Abdel Rahman, Ibrahim
- 2000 Deed of lease from Fustat, Rajab the 11th 567 AH / Feb. the 16th 1172 AD. *Annales Islamologiques* 34: 1–7.
- Adams, Nettie K.
- 1981 Textile finds at Qasr Ibrim. *Nyame Akuma* 18: 6–8.
- 1986a Textiles from Qasr Ibrim: An Introductory Quantitative Study. Wissenschaftliche Zeitschrift der Humboldt-Universitat zu Berlin 35 (1): 21–26.
- 1996a Textile materials and weaves. In *Qasr Ibrim: The Late Mediaeval Period*, edited by W. Y. Adams, pp. 160–70. Excavation Memoirs 59. Egypt Exploration Society, London.
- 1999 Part II: The Grave Goods. In *Kulubnarti III: The Cemeteries*, edited by W. Y. Adams et al., pp. 51–71. Sudan Archaeological Research Society Publication 4. Sudan Archaeological Research Society, London.
- Adams, William Y.
- 1977 *Nubia: Corridor to Africa*. Allen Lane, London.
- 1979 On the Argument from Ceramics to History: A Challenge Based on Evidence from Medieval Nubia. *Current Anthropology* 20: 727–44.
- 1986b *Ceramic Industries of Medieval Nubia. Parts. I & II.* 2 vols, Lexington, Kentucky.
- 1996b Dress and Ornamentation. In *Qasr Ibrim: The Late Mediaeval Period*, edited by W. Y. Adams, pp. 171–85. Excavation Memoirs 59. Egypt Exploration Society, London.
- 1996c *Qasr Ibrim: The Late Mediaeval Period*. Excavation Memoirs 59. Egypt Exploration Society, London.
- 2002 *Meinarti III. The Late and Terminal Christian Phases.* Sudan Archaeological Research Society Publication 9. Sudan Archaeological Research Society, London.

2005 *The West Bank Survey from Faras to Gemai: 3. Sites of the Christian Age.* Sudan Archaeological Research Society Publication 14. BAR International Series 1421. Archaeopress, Oxford.

Adams, William Y. and Nettie K. Adams

1997 *Kulubnarti II: The Artifactual Remains*. Sudan Archaeological Research Society Publication 2. Sudan Archaeological Research Society, London.

Agius, Dionisius A.

2005 'Leave Your Homeland in Search of Prosperity': The Ostrich Egg in a Burial Site at Quseir al-Qadim in the Mamluk Period. In *Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras IV*, edited by U. Vermeulen and J. Van Steenbergen, pp. 355–80. Orientalia Lovaniensia Analecta 140. Peeters, Leuven.

Agius, Dionisius A. and Paul Masser

- 2006 Trench 13. In *Myos Hormos Quseir al-Qadim: Roman and Islamic Ports* on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 172–73. Oxbow Books, Oxford.
- Album, Stephen

1998 *A Checklist of Islamic Coins*. 2nd ed. Stephen Album, Santa Rosa, CA.

Amar, Zahar

2002 The History of the Paper Industry in al-Sham in the Middle Ages. In *Towns and Material Culture in the Medieval Middle East*, edited by Y. Lev, pp. 119–34. Medieval Mediterranean 39. E. J. Brill, Leiden.

Andrén, Anders

1998 Between Artifacts and Texts: Historical Archaeology in Global Perspective. Translated by A. Crozier. Contributions to Global Historical Archaeology. Plenum Press, New York.

Arnold, Christopher J.

1986 Archaeology and History: The Shades of Confrontation and Cooperation. In Archaeology at the Interface: Studies in Archaeology's Relationships with History, Geography, Biology and Physical Science, edited by J. L. Bintliff and C. F. Gaffney, pp. 32–39. British Archaeological Reports, International Series 300. British Archaeological Reports, Oxford.

Ashtor, Eliyahu

1983 *Levant Trade in the Later Middle Ages.* Princeton University Press, Princeton.

Avissar, Miriam and Edna J. Stern

2005 *Pottery of the Crusader, Ayyubid, and Mamluk Periods in Israel.* Israel Antiquities Authority Reports 26. Israel Antiquities Authority, Tel Aviv.

Bagatti, Bellarmino, editor

1948 Visit to the Holy Places of Egypt, Sinai, Palestine and Syria in 1384 by Frescobaldi, Gucci, and Sigoli. Translated by Theophilus Bellorini and Eugene Hoade. Studium Biblicum Franciscanum 6. Franciscan Press, Jerusalem.

Baginski, Alisa

- Later Islamic and Medieval Textiles from Excavations of the Israel Antiquities Authority. *Textile History* 32 (1): 81–92.
- Baginski, Alisa and Orit Shamir
- 1998 Textiles, Basketry, and Cordage from Jasirat Fara'un (Coral Island). *Atiqot* 36: 39–122.
- 2002 Medieval Mediterranean Textiles, Basketry, and Cordage Newly Excavated in Israel. In *Towns and Material Culture in the Medieval Middle East*, edited by Y. Lev, pp. 135–57. The Medieval Mediterranean: Peoples, Economies and Cultures, 400–1453, vol. 39. E. J. Brill, Leiden.
- Bagnall, Roger S.
- 1986 Papyri and Ostraka from Quseir al-Qadim. *Bulletin of the American* Society of Papyrologists 23: 1–60.
- 1988 Archaeology and Papyrology. *Journal of Roman Archaeology* 1: 197–202.
- 1995 *Reading Papyri, Writing Ancient History*. Routledge.
- 2003 *Later Roman Egypt: Society, Religion, Economy and Administration.* Varorium Collected Studies Series CS758. Ashgate, Burlington, VT.
- Bagnall, Roger S. and Bruce W. Frier
- 1994 *The demography of Roman Egypt.* Cambridge studies in population, economy, and society in past time 23. Cambridge University Press, Cambridge.

Bagnall, Roger S., Christina C. Helms and Arthur M. F. W. Verhoogt

- 1999 The Ostraka. In *Berenike 1997. Report of the excavations at Berenike (Egyptian Red Sea coast) and the survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 201–05. E. J. Brill, Leiden.
- 2000 Documents from Berenike, Volume I: Greek Ostraca from the 1996–1998 Seasons. Papyrologica Bruxellensia 31. Fondation Egyptologique Reine Élisabeth, Brussels.
- 2005 *Documents from Berenike, Volume II: Texts from the 1999–2001 Seasons.* Papyrologica Bruxellensia 33. Fondation Égyptologique Reine Élisabeth, Brussels.

Bahgat, Aly 1914	Les Fouilles d'al Foustât: Découverte d'un four de potier arabe datant du XIV siècle. <i>Bulletin de l'Institut Egyptien</i> 8: 233–42.
1922	Mosquée al-'Omari à Qoûs. Bulletin du Comité de conservation des monuments de l'art arabe 32: 72–73, 179–81.
Bahgat, Aly an 1921	nd Albert Gabriel <i>Fouilles d'al Foustât</i> . E. de Boccard; Comité de conservation des monuments de l'art arabe, Paris.
Bahgat, Aly an 1930	nd Félix Massoul <i>Le céramique musulmane de l'Égypte.</i> l'Institut français d'archéologie orientale, Cairo.
Balog, Paul 1952	Études Numismatiques de l'Égypte Musulmane II. La Trouvaille du Fayoum: Dirhems Ayoubites, du Premier Roi Mamelouk Aybek et d'Imitation Arabe des Croisés. <i>Bulletin de l'Institut d'Égypte</i> 34.
1966	The Ayyubid Glass Jetons and their Use. <i>Journal of the Economic and Social History of the Orient</i> 9: 242–61.
1970	Islamic Bronze Weights from Egypt. <i>Journal of the Economic and Social History of the Orient</i> 13: 233–60.
1980	<i>The Coinage of the Ayyubids.</i> Royal Numismatic Society Special Publication 12. Royal Numismatic Society, London.
1981	Fãtimid Glass Jetons: Token Currency or Coin-weights? Journal of the Economic and Social History of the Orient 24: 93–110.
Barakat, Hala 1992	Nayel and Nathalie Baum Douch 2. La végétation antique: une approche macrobotanique. Documents de fouilles de l'Ifao 27. Institut français d'archéologie orientale, Cairo.
Barron, Thom 1902	as and William F. Hume <i>Topography and Geography of the Eastern Desert of Egypt</i> . National Printing Department, Cairo.
Bates, Michae 1979	 I L. Islamic Coins. In <i>Quseir al-Qadim 1978: Preliminary Report</i>, edited by D. S. Whitcomb and J. H. Johnson, pp. 227–33. American Research Center in Egypt, Cairo.
1981	The Function of Fatimid and Ayyubid Glass Weights. <i>Journal of the Economic and Social History of the Orient</i> 24: 63–93.

Beadnell, Hugh John Llewellyn

1924 Report on the geology of the Red Sea coast between Qoseir and Wadi Ranga. *Petroleum Research Bulletin* 13.

Beadsmoore, Emma and Michael Walsh

- 2006 Trench 5. In *Myos Hormos Quseir al-Qadim: Roman and Islamic Ports* on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 168–72. Oxbow Books, Oxford.
- Beck, Curt W. and Larry Moray
- 1979 Organic Residues. In *Quseir al-Qadim 1978: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 253–56. American Research Center in Egypt, Cairo.
- Begley, V. and Roberta S. Tomber

1999 Indian pottery sherds from Berenike. In *Berenike 1997. Report of the excavations at Berenike (Egyptian Red Sea coast) and the survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich. E. J. Brill, Leiden.

- Bent, Theodore
- 1896 'Aidhab. *Royal Geographic Society Journal* 8: 336.
- Berman, Elizabeth Kessin

1989 Glazed Pottery. In *Excavations at Capernaum, Volume 1: 1978–1982*, edited by V. Tsaferis, pp. 115–30. Eisenbrauns, Winona Lake.

Bernand, André

1972 *De Koptos à Kosseir*. E. J. Brill, Leiden.

- Binford, Lewis R.
- 1987 Researching Ambiguity: Frames of Reference and Site Structure. In Method and Theory for Activity Area Research: An Ethnoarchaeological Approach, edited by S. Kent. Columbia University Press, New York.

Bing, Zhao

2004 L'importation de la céramique chinoise à Sharma (Hadramaout) au Yémen. *Annales Islamologiques* 38 (1): 255–84.

Bingen, Jean

- 1992–2000 *Mons Claudianus: ostraca graeca et latina*. Documents de fouilles de l'Ifao 29, 32, 38. Institut francais d'archéologie orientale, Cairo.
- 1996 Dumping and the ostraca at Mons Claudianus. Journal of Roman Archaeology Supplementary Series 19: 30–8.

Bloss, John F. E.

- 1936a The Story of Suakin. *Sudan Notes and Records* 19 (2): 271–300.
- 1936b The Story of Suakin. *Sudan Notes and Records* 20 (2): 247–80.

Blue, Lucy 2002	Myos Hormos/Quseir al-Qadim: A Roman and Islamic Port on the Red Sea Coast of Egypt—A Maritime Perspective. <i>Proceedings of the Seminar for Arabian Studies</i> 32: 139–50.
2006	Trench 4. In <i>Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports</i> on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 98–100. Oxbow Books, Oxford.
forthcoming	Recent sewn boat timbers from Islamic Quseir al-Qadim. In <i>Early Trade</i> and Navigation in the Indian Ocean, edited by M. Tosi and T. Vosmer, Ravenna.
Blue, Lucy, E 2006	mma Beadsmoore, and James E. Phillips Trench 9. In <i>Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports</i> <i>on the Red Sea. Volume 1: Survey and Excavations 1999–2003</i> , edited by D. P. S. Peacock and L. Blue, pp. 100–04. Oxbow Books, Oxford.
Bolland, Rita 1991	<i>Tellem Textiles: Archeological Finds from Burial Caves in Mali's Bandiagara Cliff.</i> Bulletin of the Royal Tropical Institute 324. Rijksmuseum voor volkenkunde, Amsterdam.
Bridgman, Re 2000	becca Islamic Ceramics: Pervasive Style in the Muslim World. Master of Arts, University of Southampton.
2002	<i>Report 2001 – The Islamic Pottery: some preliminary findings.</i> University of Southampton – Department of Archaeology.
2006	Trench 3. In <i>Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports</i> on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 95–98. Oxbow Books, Oxford.
Brosh, Na'am 1980	a A Reexamination of Islamic 'grenades'. ' <i>Atiqot</i> 14: 114–15.
Browne, Gera 1981	ld M. New Texts in Old Nubian from Qasr Ibrim, II. Sudan Texts Bulletin 3: 9– 19.
1989	<i>Old Nubian texts from Qasr Ibrim II.</i> Texts from Excavations 10. Egypt Exploration Society, London.
1991	Old Nubian texts from Qasr Ibrim, III. Texts from Excavations 12. Egypt Exploration Society, London.

Bucking, Scott

2006

Recovery and loss: archaeological perspectives on the papyri from Hellenistic, Roman, and Byzantine Egypt. *Public Archaeology* 5 (3): 151–66.

Büdel, Julius

1952 Berich uber klimä–morphologische und Eiszeitforschungen in Niederafrika. *Erkunde* 6: 104–32.

Bülow-Jacobsen, Adam, Hélène Cuvigny, and Jean-Luc Fournet

- 1994 The Identification of Myos Hormos: New Papyrological Evidence. Bulletin de l'Institut Français d'Archéologie Orientale du Caire 94: 27– 42.
- Burke, Katherine Strange
- A Note on Archaeological Evidence for Sugar Production in the Middle Islamic Periods in Bilad al-Sham. *Mamluk Studies Review* 8 (2): 109–18.
- 2006 Quseir al-Qadim. In *The Mamluk Studies Online Encyclopedia*, edited by B. Craig. BETA version posted Feb. 2006. The Middle East Documentation Center (MEDOC) The University of Chicago, Chicago.
- Burke, Katherine Strange and Donald Whitcomb
- In press Quseir al-Qadim in the Thirteenth Century: A Community and Its Textiles. *Ars Orientalis* 34.
- Butzer, Karl W.
- 1974 Modern Egyptian Clays and Pre-Dynastic Buff Ware. *Journal of Near Eastern Studies* 33 (4): 377–82.
- Cahen, Claude and Robert Bertram Serjeant
- 1957 A Fiscal Survey of the Mediaeval Yemen: Notes Preparatory to a Critical Edition of the Mulahhas al-Fitan of al-Hasan b. 'Ali al-Sharif al-Husayni. *Arabica: Revue d'Études Arabes* 4 (i): 23–33.

Canaan, Tewfik

2004 The Decipherment of Arabic Talismans. In *Magic and Divination in Early Islam*, edited by E. Savage-Smith, pp. 125–78. The Formation of the Classical Islamic World 42. Varorium, Ashgate.

Capasso, Mario

2003 *Il ritorno di Cornelio Gallo: il papiro di Qasr Ibrîm venticinque anni dopo.* Gli album del Centro di studi papirologici dell'Università degli studi di Lecce 5. Graus, Naples.

Carroll, Diane Lee

1988 Looms and Textiles of the Copts: First Millennium Egyptian Textiles in the Carl Austin Rietz Collection of the California Academy of Sciences. Memoirs of the California Academy of Sciences 11. University of Washington Press, Seattle.

Carswell, John S.

- 1977 China and Islam in the Maldive Islands. *Transactions of the Oriental Ceramic Society* 41: 121–98.
- 1979 China and Islam: A Survey of the Coasts of India and Ceylon. *Transactions of the Oriental Ceramic Society* 42: 24–58.
- 1982 Imported Far Eastern Wares. In *Quseir al-Qadim 1980. Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 193–99. Udena, Malibu.

Carver, Martin

- 2002 Marriages of true minds: Archaeology with texts. In *Archaeology: the widening debate*, edited by B. W. Cunliffe, pp. 465–96. Published for the British Academy by Oxford University Press, Oxford; New York.
- Chakravarti, Ranabir
- 2002 Seafarings, Ships and Ship Owners: India and the Indian Ocean (AD 700– 1500). In *Ships and the Development of Maritime Technology in the Indian Ocean*, edited by D. Parkin and R. Barnes, pp. 28–61. Curzon Indian Ocean series. Routledge, London.
- Chamberlain, Michael
- 1998 The Crusader Era and the Ayyubid Dynasty. In *Islamic Egypt, 640–1517*, edited by C. F. Petry, pp. 211–41. The Cambridge History of Egypt 1. Cambridge University Press, Cambridge.
- Charlton, Thomas H.
- 1981 Archaeology, Ethnohistory, and Ethnology: Interpretive Interfaces. In *Advances in Archaeological Method and Theory*, vol. 4, edited by M. B. Schiffer, pp. 129–76. Academic Press, New York.
- Chaudhuri, Kirti N.
- 1986 Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750. Cambridge University Press, Cambridge.

Chittick, H. Neville

- 1970 East African Trade with the Orient. In *Islam and the Trade of Asia: A Colloquium*, edited by D. S. Richards, pp. 97–104. Papers on Islamic History 2. Bruno Cassirer; University of Pennsylvania Press, Oxford.
- 1974a *Kilwa: An Islamic Trading City on the East African Coast II: The Finds.* Memoir of the British Institute in Eastern Africa 5. British Institute in East Africa, Nairobi.
- 1974b *Kilwa: An Islamic Trading City on the East African Coast, Vol. 1.* Memoirs of the British Institute of Eastern Africa 5. British Institute in East Africa, Nairobi.

- 1981 A cistern at Suakin, and some remarks on burnt bricks. *Azania* 16: 181–83.
- 1984 *Manda: excavations at an island port on the Kenyan coast.* Memoirs of the British Institute of Eastern Africa 6. British Institute in East Africa, Nairobi.
- Ciuk, Christopher and Edward J. Keall
- 1996 Zabid Project Pottery Manual 1995. Pre-Islamic and Islamic Ceramics from the Zabid area, North Yemen. BAR International Series 655. British Archaeological Reports, Oxford.
- Cohen, Getzel M.
- 2006 *The Hellenistic Settlements in Syria, the Red Sea Basin, and North Africa.* University of California, Berkeley.
- Conrad, Lawrence I.
- 1990 Historical Evidence and the Archaeology of Early Islam. In *Quest for Understanding: Arabic and Islamic Studies in honour of Malcolm H. Kerr*, edited by S. Seikaly and P. Dodd, pp. 263–82, Beirut.
- Copeland, Penny
- 2006 Trench 2B. In Myos Hormos Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 116–27. Oxbow Books, Oxford.
- Costa, Paolo M.
- 2002 The Palm-frond House of the Batinah. In *Patterns of Everyday Life*, edited by D. Waines, pp. 67–78. The Formation of the Classical Islamic World 10. Ashgate, Aldershot.
- Couyat-Barthoux, J.
- 1910 Ports gréco-romaine de la mer rouge, et grandes routes du desert arabique. Comptes Rendus Académie des inscriptions et belles-lettres (France) 1910: 525-42.
- Crowfoot, Elisabeth G.
- 1977 The Clothing of a Fourteenth Century Nubian Bishop. In *Studies in Textile History in Memory of H. B. Burnham*, edited by V. Gervers, pp. 43–51. Royal Ontario Museum, Toronto.
- 1979 Qasr Ibrim Textiles. *Journal of Egyptian Archaeology* 65: 39–40.

Cuno, Kenneth

- A Tale of Two Villages: Family, Property, and Economic Activity in Rural Egypt in the 1840s. In *Agriculture in Egypt: from pharaonic to modern times*, edited by A. K. Bowman and E. L. Rogan, pp. 301–29. Proceedings of the British Academy 96. Published for the British Academy by Oxford University Press, Oxford.
- De Meulemeester, Johnny, Sawsan al-Fakhri, Denys Pringle, Jacques De Bie, Didier Dehon, Guy Focant, Katriina Heikkila, Andrew D. Petersen and Laura Ratcliffe
- 2002 Aqaba Castle Project, 2001 Preliminary Report. Cardiff University.
- De Meulemeester, Johnny and Denys Pringle

2000 Aqaba Castle Project. Report 2000. Cardiff University.

- 2001 The archaeological investigation of 'Aqaba Castle. *Newsletter of the Council for British Research in the Levant* 2001: 19–20.
- Deagan, Kathleen
- 1982 Avenues of Inquiry in Historical Archaeology. In *Advances in Archaeological Method and Theory*, vol. 5, edited by M. B. Schiffer, pp. 151–77. Academic Press, New York.
- Derda, Tomasz
- 1991 Deir el-Naqlun 1990: The Greek Papyri. *Polish Archaeology in the Mediterranean* 2: 54–56.
- 1993 Deir el-Naqlun 1992: Greek Papyri and Inscriptions on Vessels. *Polish Archaeology in the Mediterranean* 4: 49–52.
- 1997 Papirusy z Deir el-Naqlun a Codex Alexandrinus. In *Chrzescijanstwo u* schylku starozytnosci. Studia zrodloznawcze, vol. 26, edited by T. Derda and E. Wipszycka, pp. 11–62. Warsaw.
- Derda, Tomasz and K. Urbaniak-Walczak
- 1996 Naqlun inv. 10/95: Greek Excerpts from a Liturgy with their Coptic Translation. *Journal of Juristic Papyrology* 26: 7–21.

Doe, D. Brian

- 1962 Notes on Pottery found in the Vicinity of Aden. In *Department of Antiquities Annual Report*, pp. 4–20, Aden.
- 1963 Pottery Sites near Aden. *Journal of the Royal Asiatic Society* 1963: 150– 56.
- 1971 *Eastern Arabia*. Thames and Hudson, London.

Dols, Michael

1979 Arabic Inscriptions. In *Quseir al-Qadim 1978: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 247–9, Cairo.

Driscoll, Stephen T.

- 1988 The Relationship between History and Archaeology: Artefacts, Documents and Power. In *Power and Politics in Early Medieval Britain and Ireland*, edited by S. T. Driscoll and M. R. Nieke, pp. 162–87. Edinburgh University Press, Edinburgh.
- du Bourguet, Pierre
- 1964 *Musée National du Louvre Catalogue des Étoffes Coptes I.* Éditions des Musées Nationaux. 2 vols. Ministère d'état-affaires culturelles, Paris.
- du Bourguet, Pierre and Pascale Grémont
- 1977 *Tissus coptes: 3ème festival d'Anjou, Musée d'Angers* Musée d'Angers, Angers.

Ducatez, Guy

- Aden et l'océan Indien au XIIIe siècle: navigation et commerce d'après Ibn-al-Muğâwir. *Annales Islamologiques* 37: 137–56.
- Dumarçay, Jacques
- 1965 Éolipiles? *Syria* 42: 75–79.
- Dunand, François
- 1992 Douch 1. La Nécropole: exploration archéologique: structures sociales, économiques, religieuses de l'Égypte romaine. Vol. 1: Monographie des tombes 1 à 72. Documents de fouilles 26. Institut français d'archéologie orientale du Caire, Cairo.
- 2005 Douch 5. La Nécropole: exploration archéologique: structures sociales, économiques, religieuses de l'Égypte romaine. Vol. 2: Monographie des tombes 73 à 92. Documents de fouilles 45. Institut français d'archéologie orientale du Caire, Cairo.
- Dymond, David Percy
- 1974 *Archaeology and History: A Plea for Reconciliation.* Thames & Hudson, London.

Dyson, Stephen L.

1995 Is There a Text in Site? In *Methods in the Mediterranean. Historical and Archaeological Views on Texts and Archaeology*, edited by D. B. Small, pp. 25–44. Memnosyne, Supplement 135. E. J. Brill, Leiden.

Eastwood, Gillian

1982 Textiles. In *Quseir al-Qadim 1980. Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 284–326. Udena, Malibu.

el-Emary, Amal A.

- 1967 Studies in Some Islamic Objects Newly Discovered at Qus. Annales Islamologiques 7: 121–38.
- Emerson, Julie, Jennifer Chen, and Mimi Gardner Gates
- 2000 *Porcelain Stories: From China to Europe.* University of Washington, Seattle.

Erikson, Marianne

- 1997 *Textiles in Egypt, 200–1500 A.D. in Swedish Museum Collections.* Röhsska Museet, University of Gothenburg, Göteborg, Sweden.
- Ettinghausen, Richard
- 1965 The Uses of Spero-Donical Vessels in the Muslim Near East. *Journal of Near Eastern Studies* 24: 218–29.
- Ettlinger, Elisabeth, Bettina Hedinger, Bettina Hoffman, Philip M. Kenrick, Giuseppe Pucci, Katrin Roth-Rubi, Gerwulf Schneider, Siegmar von Schnurbein, Colin M. Wells, and Susanne Zabehlicky-Scheffenegger
- 1990 *Conspectus formarum terrae sigillatae italico modo confectae.* Materialen zur römische-germanischen Keramik 10. Habelt, Bonn.
- al-Fakhri, Sawsan
- 2001 Tarikh qal'at al-'Aqaba fi diwa' al-hafriyat al-jadida (History of Aqaba Fort in light of new excavations). *Annual of the Department of Antiquities of Jordan* 45: 59–62.
- Fischel, Walter J.
- 1958 The Spice Trade in Mamluk Egypt: A Contribution to the Economic History of Medieval Islam. *Journal of the Economic and Social History of the Orient* 1: 157–74.
- Flatman, Joe and Ross Thomas
- 2006 Trench 2A. In Myos Hormos Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 160–63. Oxbow Books, Oxford.

François, Véronique

- La céramique médiévale d'Alexandrie: Kom el-Dikka et Kom el-Nadoura, deux dépotoirs de la période islamique. In Colloque International D'Archéologie Islamique. IFAO, Le Caire, 3–7 février 1993, edited by R.-P. Gayroud, pp. 319–34. Institut Français d'Archéologie Orientale 36. Institut Français d'Archéologie Orientale, Cairo.
- 1999 *Céramiques médiévales à Alexandrie: Contribution à l'histoire économique de la ville.* Études alexandrines 2. Institut Français d'Archéologie Orientale, Cairo.

Frantz-Murphy, Gillian

- 1981 A new interpretation of the Economic History of Medieval Egypt. The Role of the Textile Industry 254–567/868–1171. *Journal of the Economic and Social History of the Orient* 24: 274–98.
- 1982 The Red Sea Port of Qusayr: Arabic Documents and Narrative Sources. In *Quseir al-Qadim 1980: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 267–83. ARCE Reports 7. Udena, Malibu.

Frend, William H. C.

- 1972 Coptic, Greek, and Old Nubian at Q'asr Ibrim. *Byzantinoslavica* 33: 224–29.
- 1974 The Podium Site at Qasr Ibrim. *Journal of Egyptian Archaeology* 60: 30–59.
- 1978 The Greek Liturgical Papyri from the Cathedral at Q'asr Ibrim. In *Études Nubiennes: Colloque de Chantilly 2–6 Juillet 1975*, p. 95. Bibliothèque d'étude 77. Institut français d'archéologie orientale, Cairo.
- 1986 A Eucharistic Sequence from Q'asr Ibrim. *Jahrbuch für Antike und Christentum* 29: 90–98.
- Frenkel, Yehoshu'a
- Is There an Islamic Space? Urban and Social Issues, as Reflected in the Qadi (Cadi) Courts of Egypt and Syria (13th–16th Centuries). In *Towns and Material Culture in the Medieval Middle East*, edited by Y. Lev, pp. 103–18. Medieval Mediterranean 39. E. J. Brill, Leiden.
- Friedman, Mordechai Akiva and Shelomo Dov Goitein
- In press India Traders of the Middle Ages: Documents from the Cairo Geniza, "India Book," Part One. Études sur le Judaïsme Médiéval 31. E. J. Brill, Leiden.
- Funari, Pedro Paolo A.
- 1999 Historical Archaeology from a World Perspective. In *Historical Archaeology: Back from the edge*, edited by P. A. Funari, M. Hall and S. Jones, pp. 37–66. One World Archaelogy 31. Routledge, London.
- Gagos, Trianos
- A multicultural community on the fringes of the desert: a review of the Greek papyri from Kellis. *Journal of Roman Archaeology* 12: 752–62.

Galloway, Patricia

2006

Material Culture and Text: Exploring the Spaces Within and Between. In *Historical archaeology*, edited by M. Hall and S. W. Silliman, pp. 42–64. Blackwell Publishers, Malden, MA.

	517
Garcin, Jean-C 1969	Claude Le Caire et la province: Constructions au Caire et à Qus sous les mamelouks bahrides. <i>Annales Islamologiques</i> 8: 47–62.
1970	Remarques sur un plan topographique de la grande mosquée de Qûs. <i>Annales Islamologiques</i> 9: 97–108.
1974	La 'Mediterraneisation' de l'empire mamelouk sous les sultans Bahrides. <i>Rivista degli studi orientali</i> 48.
1976	<i>Un centre musulman de la Haute–Egypte médiévale, Qus.</i> Textes arabes et études islamiques 6. Institut français d'archéologie orientale du Caire, Cairo.
1978	Transport des épices et espace égyptien entre le XIe et le XVe siècle. <i>Annales de Bretagne et des pays de l'Ouest</i> 85 (2): 305–14.
1980	Pour un recours a l'histoire de l'espace vecu dans l'étude de l'Egypte arabe. <i>Annales: Economies, sociétés, civilisations</i> 35: 436–51.
1986a	Kus. In <i>The Encyclopedia of Islam</i> , vol. 5, pp. 514–15. 2nd ed. E. J. Brill, Leiden.
1986b	Kusayr. In <i>The Encyclopedia of Islam</i> , vol. 5, pp. 518–19. 2nd ed. E. J. Brill, Leiden.
1991	Qus. In <i>The Coptic Encyclopedia</i> , vol. 7, pp. 2043–46. Macmillan, New York.
1997	Du rab' à la masrîya: Réflexion sur les évolutions et les emprunts des formules d'habitat dans le monde musulman de Méditerranée à l'époque médiévale. <i>Annales Islamologiques</i> 31: 61–80.
Garcin, Jean-C 2000	Claude, Jean-Luc Arnaud, and Sylvie Denoix Grandes villes méditerranéennes du monde musulman médieval. Collection de l'Ecole française de Rome 269. École française de Rome, Rome.
Gaubert, Chris 1998	stian Naqlun: Remarques préliminaires sur les archives d'époque Fatimide d'une famille Copte. <i>Polish Archaeology in the Mediterranean</i> 9: 87–89.
Gayraud, Rola 1984	nd-Pierre Note sur les céramiques médiévales des fouilles de Kôm al-Dikka (Alexandrie). Annales du Service des antiquités de l'Égypte 70: 243–45.

1983	Medieval Garments in the Mediterranean World: Essays in Memory of Professor E.M. Carus-Wilson In <i>Cloth and Clothing in Medieval Europe</i> , edited by N. B. Harte and K. G. Pointing, pp. 279–315. Pasold Studies in Textile History 2. Heinemann Educational Books, London.
Ghosh, Shri N 1980	I. C. Excavation at Satanikota, District Kurnool. <i>Indian Archaeology: A Review</i> 1977–78: 3–11.
Ghouchani, 'A 1992a	Abd Allah and Chahryar Adle Grenades from Rayy. <i>Muqarnas</i> 9.
1992b	A Sphero–conical vessel as fuqqa'a, or a gourd for 'beer'. <i>Muqarnas</i> 9: 72–92.
Gil, Moshe 2004	The flax trade in the Mediterranean in the eleventh century AD as seen in merchants' letters from the Cairo Geniza. <i>Journal of Near Eastern Studies</i> 63 (2): 81–96.
Gilmore, Micl 1985	hael, Mohammed Ibrahim, Gamal Mursi, and Dhaifullah al-Talhi A Preliminary Report on the First Season of Excavations at al-Mabiyat, an Early Islamic Site in the Northern Hijaz. <i>ATLAL</i> 9: 109–25.
Godlewski, W 1990	Addzimierz Polish Excavations at Naqlun (1988–1989). Polish Archaeology in the Mediterranean 1: 29–35.
1991	Deir el-Naqlun 1990. Polish Archaeology in the Mediterranean 2: 48-53.
1992	Archaeological Research in Naqlun in 1991. Polish Archaeology in the Mediterranean 3.
1993	Deir el-Naqlun, 1992. Polish Archaeology in the Mediterranean 4: 43-48.
1996	Naqlun: Excavations 1995. Polish Archaeology in the Mediterranean 7: 82–88.
1998	Naqlun: Excavations 1997. Polish Archaeology in the Mediterranean 9: 77–86.
2000	Naqlun: Excavations 1999. <i>Polish Archaeology in the Mediterranean</i> 11: 125–32.
2003	Naqlun: Excavations, 2002. <i>Polish Archaeology in the Mediterranean</i> 14: 163–71.
2004	Naqlun (Nekloni): Season 2003. <i>Polish Archaeology in the Mediterranean</i> 15: 141–51.

Gervers, Veronika

Godlewski, W 1994	łodzimierz and Ewa Parandowska Naqlun 1993. <i>Polish Archaeology in the Mediterranean</i> 5: 55–62.
1997	Naqlun: Excavations 1996. Polish Archaeology in the Mediterranean 8: 88–97.
Goitein, Shelo 1954	mo Dov From the Mediterranean to India: documents on trade to India, South Arabia from the eleventh and the twelfth centuries. <i>Speculum</i> 29 (2): 181– 97.
1958	New Light on the Beginnings of the Karim Merchants. Journal of the Economic and Social History of the Orient 1: 174–84.
1963	Letters and Documents on the India Trade in Medieval Times. <i>Islamic Culture</i> 37 (3): 188–205.
1966	The Beginnings of the Karim Merchants and the Nature of Their Origins. In Studies in Islamic History and Institutions, edited by S. D. Goitein, pp. 351–60. E. J. Brill, Leiden.
1967	<i>Economic Foundations</i> . A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza 1. University of California Press, Berkeley.
1971	<i>The Community</i> . A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza 2. University of California Press, Berkeley.
1973	Letters of Medieval Jewish Traders, Translated from the Arabic. Princeton University Press, Princeton.
1977	A Mansion in Fustat: A Twelfth–Century Description of a Domestic Compound in the Ancient Capital of Egypt. In <i>The Medieval City</i> , edited by H. A. Miskimin, D. Herlihy and A. L. Udovitch, London.
1978a	<i>The Family</i> . A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza 3. University of California Press, Berkeley.
1978b	Urban Housing in Fatimid and Ayyubid Times (As Illustrated by the Cairo Geniza Documents). <i>Studia Islamica</i> 47: 5–23.
1980	From Aden to India. Specimens of the Correspondence of India Traders of the 12th c. <i>Journal of the Economic and Social History of the Orient</i> 23 (April): 43–66.

- 1983 *Daily Life.* A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza 4. University of California Press, Berkeley.
- 1988 The Individual: Portrait of a Mediterranean Personality of the High Middle Ages as Reflected in the Cairo Geniza. A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza 5. University of California Press, Berkeley.
- Golb, Norman
- 1974 Ad Memoriam D. H. Baneth magistri linguae arabicae. The Topography of the Jews of Medieval Egypt. VI. Places of Settlement of the Jews of Medieval Egypt. *Journal of Near Eastern Studies* 33 (1): 116–49.
- Goldberg, Jessica
- 2005 Geographies of trade and traders in the eleventh-century Mediterranean: A study based on documents from the Cairo Geniza. Ph.D., Columbia University.
- Gompertz, Godfrey St. George Montague
- 1980 *Chinese Celadon Wares.* Faber Monographs on Pottery and Porcelain. Faber & Faber, London.
- Górecki, Tomasz
- 1994 The Pottery from Naqlun, 1993. *Polish Archaeology in the Mediterranean* 5: 63–78.
- Gragg, Gene B.
- 1996 "South Arabian/Axumite" Depinto. In Berenike '95. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 209–11. CNWS Publications, special series 2. Centre of Non-Western Studies, Leiden.
- Granger, Hero
- 1983 The Construction of Tunics. In *Early Islamic Textiles*, edited by C. Rogers. Rogers & Podmore, Brighton.
- Gray, Basil
- 1977 The Export of Chinese Porcelain to the Islamic World: Some Reflections on Its Significance for Islamic Art before 1400. *Transactions of the Oriental Ceramic Society* 41: 231–62.
- 1984 *Sung Porcelain and Stoneware*. Faber Monographs on Pottery and Porcelain. Faber and Faber, London.

Greenlaw, Jean-Pierre

1995 *The Coral Buildings of Suakin.* Kegan Paul International, London.

Grohmann, Adolf 1949–1950 New Discoveries in Arabic Papyri. An Arabic Tax-Account Book (inv.no. 1400) Found in Umm elBureig (Tebtynis) in 1916. *Bulletin de l'Institut d'Égypte* 32: 159–70.

1963 *Arabic Papyri from Hirbet el-Mird*. Publications universitaires, Leuven.

Guo, Li

- 1999a Arabic Documents from the Red Sea Port of Quseir in the Seventh/Thirteenth Century, Part 1: Business Letters. *Journal of Near Eastern Studies* 58 (3): 161–90.
- 1999b The Red Sea Trade Revisited: The Quseir Arabic Documents as New Sources. *American Research Center in Egypt Newsletter* 178: 9–10.
- 2001 Arabic Documents from the Red Sea Port of Quseir in the Seventh/Thirteenth Century, Part 2: Shipping Notes and Account Records. *Journal of Near Eastern Studies* 60 (2): 81–116.
- 2004 Commerce, Culture, and Community in a Red Sea Port in the Thirteenth Century: The Arabic Documents of Quseir. Islamic History and Civilization: Studies and Texts 52. E. J. Brill, Leiden.

Gyllensvärd, Bo

- 1973 Recent Finds of Chinese Ceramics at Fostat, I. *Bulletin of the Museum of Far Eastern Antiquities, Stockholm* 45: 91–119.
- 1975 Recent Finds of Chinese Ceramics at Fostat, II. *Bulletin of the Museum of Far Eastern Antiquities, Stockholm* 47: 93–117.

Haldane, Cheryl Ward

1996 Sadana Island Shipwreck, Egypt: Preliminary Report. International Journal of Nautical Archaeology 25 (2): 83–94.

Hallaq, Wael B.

1998 The "qādī's dīwān (sijill)" before the Ottomans. *Bulletin of the School of Oriental and African Studies* 61 (3): 415–36.

Harden, Donald B.

1961 The Glass found at Soba. In *Excavations at Soba*, edited by P. L. Shinnie, pp. 60–76. Sudan Antiquities Services Occasional Papers 3. Sudan Antiquities Service, Khartoum.

Harding, Gerald Lankester

1964 *Archaeology in the Aden Protectorates*. Her Majesty's Stationery Office, London.

Hardy-Guilbert, Claire

- 2001 Archaeological Research at al-Shihr, the Islamic port of Hadrawmawt, Yemen (1996–1999). *Proceedings of the Seminar for Arabian Studies* 31: 69–80.
- Al-Shihr, Porte du Hadramaut sur l'océan Indien. *Annales Islamologiques* 38 (1): 95–157.
- 2005 The Harbour of al-Shihr, Hadramawt, Yemen: Sources and Archaeological Data on Trade. *Proceedings of the Seminar for Arabian Studies* 35: 71–85.
- Hardy-Guilbert, Claire and Axelle Rougeulle
- 1995 Archaeological Research into the Islamic Period in Yemen: Preliminary Notes on the French Expedition, 1993. *Proceedings of the Seminar for Arabian Studies* 25: 29–44.
- 1997a Ports islamiques du Yémen. Prospections archéologiques sur les côtes yéménites (1993–1995). *Archéologie Islamique* 7: 147–96.
- 1997b al-Shihr and the Southern Coast of the Yemen: Preliminary Notes on the French Archaeological Expedition, 1995. *Proceedings of the Seminar for Arabian Studies* 27: 129–40.
- Hasan, Yusuf Fadl
- 1967 *The Arabs and the Sudan: from the seventh to the early sixteenth century.* Edinburgh University Press, Edinburgh.
- Hayes, John W.
- 1972 *Late Roman Pottery*. British School at Rome, London.
- 1996 The Pottery. In *Berenike '95. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 147–79. CNWS Publications, special series 2. Centre of Non-Western Studies, Leiden.
- Henein, Nessim Henry
- 1992 *Poteries et proverbes d'Egypte*. Institut Français d'Archéologie Orientale, Cairo.

Hiebert, Frederik T.

- 1991 Commercial Organization of the Egyptian Port of Quseir al-Qadim: Evidence from the Analysis of the Wooden Objects. *Archéologie Islamique* 2: 127–59.
- Hildburgh, Walter Leo

¹⁹⁵¹ Aeolipiles as fire–blowers. *Archaeologia* 94: 27–55.

Hinds, Martin and Victor Ménage

1991 *Qasr Ibrīm in the Ottoman period: Turkish and further Arabic documents.* Texts from Excavations 11. Egypt Exploration Society, London.

Hinds, Martin and Hamdi Sakkout

- 1981 A Letter from the Governor of Egypt to the King of Nubia and Muqurra Concerning Egyptian-Nubian Relations in 141/758. In *Dirāsāt 'Arabīyah wa-Islāmīyah: muhdāh ilá Ihsān 'Abbās, bi-munāsabah bulūghihi alsittīn*, edited by W. al-Qadi, pp. 290–16. American University in Beirut, Beirut.
- 1986 *Arabic documents from the Ottoman Period from Qasr Ibrīm*. Texts from Excavations 8. Egypt Exploration Society, London.

Hobson, Robert Lockhart

- 1928 Chinese porcelain fragments from Aidhab, and some Bashpa inscriptions. *Transactions of the Oriental Ceramic Society* 1926–1927: 19–22.
- 1932 Chinese Porcelain from Fostat. *Burlington Magazine* 1932 (September): 109–13.
- Hodder, Ian, editor
- 1987 Archaeology as long-term history. Cambridge University Press, Cambridge.
- Holt, Peter Malcolm
- 2004 The Crusader States and Their Neighbours, 1098–1291. Pearson/Longman, Harlow, England; New York.

Horton, Mark C.

- 1991 Primitive Islam and architecture in East Africa. *Muqarnas* 8: 103–16.
- 1996 Shanga: the archaeology of a Muslim trading community on the coast of east Africa. Memoirs of the British Institute of Eastern Africa 14. Oxbow, London.

Hourani, Albert H.

1976 History. In *The Study of the Middle East: Research and Scholarship in the Humanities and Social Sciences*, edited by L. Binder, pp. 97–136. John Wiley & Sons, New York.

Humphreys, R. Stephen

- 1991 *Islamic History: A Framework for Inquiry*. Revised ed. Princeton University Press, Princeton, N. J.
- 1998 Egypt in the World System of the Later Middle Ages. In *Islamic Egypt*, 640–1517, edited by Carl F. Petry, pp. 445–61. The Cambridge History of Egypt 1. Cambridge University Press, Cambridge.

Husson, Geneviève

1990 Houses in Syene in the Patermouthis Archive. *Bulletin of the American* Society of Papyrologists 27: 123–37.

Insoll, Timothy 1999 7

The Archaeology of Islam. Social Archaeology. Blackwell Publishers, Oxford; Malden, Massachusetts.

Issawi, Charles

1970 The Decline of the Middle Eastern Trade, 1100–1850. In *Islam and the Trade of Asia: A Colloquium*, edited by D. S. Richards. Papers on Islamic History 2. Bruno Cassirer, Oxford.

Jazm, Muhammad 'Abd al-Rahim

1997 Nur al-Din al-Muzaffar: la construction de l'Etat rasoulide au Yémen. *Chroniques Yéménites*: 68–91.

Jefferson, Rebecca J. W. and Erica C. D. Hunter

2004 Published Material from the Cambridge Genizah Collection: A Bibliography 1980–1997. Cambridge University Press, Cambridge.

Johns, Jeremy

Archaeology and the History of Early Islam: The First Seventy Years. Journal of the Economic and Social History of the Orient 46 (4): 411–36.

Johnson, Matthew H.

1999 Rethinking Historical Archaeology. In *Historical Archaeology: Back from the Edge*, edited by P. A. Funari, M. Hall, and S. Jones, pp. 23–36. One World Archaelogy 31. Routledge, London.

Kantor, Helene J.

- 1992 The Relative Chronology of Egypt and its Foreign Correlations before the Late Bronze Age. In *Chronologies in Old World Archaeology*, edited by R. W. Ehrich, pp. 1–46. 3rd ed. University of Chicago Press, Chicago.
- Kaper, Olaf E.
- 1991 Arabic Papyri and Inscriptions from Naqlun, Hermitage No, 89. *Polish Archaeology in the Mediterranean* 2: 57–59.

Kawatoko, Mutsuo

- 1988 Archaeological Finds from Egypt and East Africa Relating to International Trade. In *Cultural and Economic Relations between East and West: Sea Routes*, edited by T. Mikasa, pp. 45–61. Bulletin of the Middle Eastern Culture Center in Japan 2. Otto Harrasowitz, Wiesbaden.
- 1989 Some Documents of the Early Othman Period Found at the al-Tur Site. Journal of East-West Maritime Relations 1: 199–220.

- 1992 On the Use of Coptic Numerals in Egypt in the 16th Century. *Orient* 28: 58–74.
- 1993a On the Use of Coptic Numerals in Egypt in the 16th Century: Addenda et Corrigenda. *Orient* 29: 147–57.
- 1993b Preliminary Survey of 'Aydhab and Badi' Sites. *Kush* 16: 203–24.
- 1995 *A Port City Site on the Sinai Peninsula, al-Tur: The 11th Expedition in 1994 (A Summary Report).* The Middle Eastern Culture Center in Japan, Tokyo.
- 1996 A Port City Site on the Sinai Peninsula, al-Tur: The 12th Expedition in 1995 (A Summary Report). The Middle Eastern Culture Center in Japan, Tokyo.
- 1998 A Port City Site on the Sinai Peninsula, al-Tur: The 13th Expedition in 1996 (A Summary Report). The Middle Eastern Culture Center in Japan, Tokyo.
- 2001a Archaeological research of the Raya site on the Sinai Peninsula, Egypt. In *Proceedings of the Seventh Annual Meeting of the Excavations in West Asia, Tokyo*, pp. 60–63, Tokyo.
- 2001b Coffee Trade in the al-Tur port, South Sinai. In *Le commerce du café avant l'ère des plantations coloniales: Espaces, réseaux, sociétés (XVe-XIXe siècle)*, edited by M. Tuchscherer. Cahier des Annales Islamologiques 20. Annales Islamologiques, Cairo.
- 2003 Archaeological survey of the Raya/al-Tur area on the Sinai Peninsula, Egypt, 2002. Committee for Islamic Archaeology in Egypt, Middle Eastern Culture Center in Japan, Tokyo.
- Archaeological Survey in the Raya/al-Tur Area, South Sinai. *al-'Usur al-Wusta: The Bulletin of Middle East Medievalists* 16 (2): 25–30.
- 2004b Archaeological survey of the Raya/al-Tur area on the Sinai Peninsula, Egypt, 2003. Committee for Islamic Archaeology in Egypt, Middle Eastern Culture Center in Japan, Tokyo.
- 2005a Archaeological survey of the Raya/al-Tur area on the Sinai Peninsula, Egypt, 2004. Committee for Islamic Archaeology in Egypt, Middle Eastern Culture Center in Japan, Tokyo.
- 2005b Multi-disciplinary approaches to the Islamic period in Egypt and the Red Sea Coast. *Antiquity* 79 (306): 844–57.

Keall, Edward J.

1981 Some Observations on the Islamic Remains of the Dakhleh Oasis. *The Society for the Study of Egyptian Antiquities Journal* 11: 213–23.

- 1992a Smokers' Pipes and the Fine Pottery Tradition of Hays. *Proceedings of the Seminar for Arabian Studies* 22: 29–46.
- 1992b A Smoking Coconut. Archaeologists may have discovered the identity of mystery objects in a puff of smoke. *Rotunda* 12 (Spring): 12–17.
- 1993 One Man's Mede is Another Man's Persian; one Man's Coconut is Another Man's Grenade. *Muqarnas* 10: 275–85.

Keenan, James G.

1999 Fayum Agriculture at the End of the Ayyubid Era: Nabulsi's Survey. In Agriculture in Egypt: from Pharaonic to Modern Times, edited by A. K. Bowman and E. L. Rogan, pp. 287–300. Proceedings of the British Academy 96. Published for the British Academy by Oxford University Press, Oxford.

Kennedy Cooke, B.

Kennet, Derek

2004

Sasanian and Islamic Pottery from Ras al-Khaimah: Classification, Chronology, and Analysis of Trade in the Western Indian Ocean. Society for Arabian Studies Monographs 1, British Archaeological Reports, International Series 1248. Archaeopress, Oxford.

- Kervran, Monik
- 1996 Indian ceramics in southern Iran and eastern Arabia: repertory, classification and chronology. In *Tradition and archaeology. Early maritime contacts in the Indian Ocean*, edited by H. P. Ray and J.-F. Salles, pp. 37–58. Manohar Publishers and Distributors, New Delhi.
- King, Geoffrey R. D.
- 2001 The Coming of Islam and the Islamic Period in the UAE. In *The United Arab Emirates: A New Perspective*, edited by I. al-Abed and P. Hellyer, pp. 70–97. Trident Press, UK.

King, Geoffrey R. D. and Christina Tonghini

1996 *A Survey of the Islamic Sites near Aden and in the Abyan District of Yemen.* School of Oriental and African Studies, University of London, London.

Kiribamune, Sirima

- 1987 Trade Patterns in the Indian Ocean and Their Impact on the Politics of Medieval Sri Lanka. *Modern Sri Lanka Studies* 2 (1–2): 67–78.
- Kletter, Raz and Edna J. Stern
- A Mamluk-Period Site at Khirbat Burin in the Eastern Sharon. 'Atiqot 51: 173–214.

¹⁹³³ The Red Sea Coast in 1540 AD. Sudan Notes and Records 16 (2): 151–60.

Klunzinger, Karl Benjamin

1878 Die Vegetation der egyptisch–arabischen Wüste bei Kosseir. Zeitschrift der Gesellschaft für Erdkunde zu Berlin 13: 432–62.

Kohl, Philip L.

- 2006 The Materiality of History: Reflections on the Strengths of the Archaeological Record. In *Excavating Asian History: Interdisciplinary Studies in Archaeology and History*, edited by N. Yoffee and B. Crowell, pp. 327–38. University of Arizona Press, Tucson.
- Kolb, Charles C.
- 1985 Demographic Estimates in Archaeology: Contributions from Ethnoarchaeology on Mesoamerican Peasants. *Current Anthropology* 26: 581–99.
- Kolbas, Judith G.
- 1983 A Color Chronology of Islamic Glass. *Journal of Glass Studies* 25: 95–100.
- Kraemer, Casper John, Jr., editor
- 1958 *Excavations at Nessana, Volume 3: Non–literary Papyri.* Princeton University Press, Princeton.
- Kubiak, Władysław
- 1970 Medieval Ceramic Oil Lamps from Fustat. *Ars Orientalis* 8: 1–18.
- 1998 Pottery from the North-Eastern Mediterranean Countries found at Fustat. In *Colloque International D'Archéologie Islamique. IFAO, Le Caire, 3–7 février 1993*, edited by R.-P. Gayroud, pp. 335–46. Institut Français d'Archéologie Orientale, Cairo 36. Institut Français d'Archéologie Orientale, Cairo.
- Kubiak, Władysław and George T. Scanlon
- 1989 *Fustat Expedition Final Report. Volume 2: Fustat-C.* American Research Center in Egypt Reports 11. Eisenbrauns, Winona Lake, IN.

Kühnel, Ernst

1927 Islamische Stoffe aus ägyptischen Gräbern in der islamischen Kunstabteilung und in der Stoffsammlung des Schlossmuseums. E. Wasmuth for the Generaldirektors der Staatlichen Museen, Berlin.

Kybalová, Ludmila

1967 *Coptic textiles*. Translated by T. Gottheiner. Hamlyn, London.

Labib, Subhi Y.

1952 al-Tijara al-karimiyya wa tijara Misr fi'l-'usur al-Wusta (al-Jam'iyya al-Misriyya li'l-dirasat al-tarikhiyya), Cairo.

- 1970 Les marchands karimi en Orient et sur l'océan Indien. In Sociétés et compagnies de commerce en Orient et dans l'océan Indien: Actes du huitième colloque international d'histoire maritime, Beirut, 5–10 September 1966, edited by M. Mollat. S.E.V.P.E.N./Bibliothèque générale de l'École pratique des hautes études, VIe section, Paris.
- 1965 Handelsgeschichte Ägyptens im Spätmittelalter (1171–1517). Franz Steiner, Wiesbaden.
- 1974 Medieval Islamic Maritime Policy in the Indian Ocean Area. *Recuils de la Société Jean Bodin* 32: 225–41.
- LaGro, H. Eduard
- 2002 An Insight into Ayyubid-Mamluk Pottery: Description and Analysis of a Corpus of Mediaeval Pottery from the Cane Sugar Production and Village Occupation at Tell Abu Sarbut in Jordan. Ph.D., University of Leiden.
- Lane-Poole, Stanley
- 1891 *Catalogue of Arabic Glass Weights in the British Museum*. Trustees of the British Museum, London.
- Lane, Arthur and Robert Bertram Serjeant
- 1948 Pottery and Glass Fragments from the Aden Littoral, with Historical Notes. *Journal of the Royal Asiatic Society* 1948: 108–33.
- Lane, Edward William
- 1985 *An Arabic–English lexicon*. Asian Educational Services, New Delhi.
- Le Quesne, Charles
- 2004 Quseir Fort and the Archaeology of the Hajj. In *Trade and Travel in the Red Sea Region Proceedings of Red Sea Project I held in the British Museum October 2002*, edited by P. Lunde and A. Porter, pp. 145–56. Society for Arabian Studies Monographs 2. British Archaeological Reports, London.
- Leemhuis, Fred
- 2003 Report on restoration and research activities of the Qasr Dakhleh Project (QDP) during the 2003 season. In *The Field Activities of the Dakhleh Oasis Project during the 2002–2003 Field Season*, edited by A. J. Mills, pp. 18–32. Monash University, Melbourne, Australia.
- 2004 Report on Restoration and Research Activities of the Qasr Dakhelh Project during the 2004 Season. In *The Field Activities of the Dakhleh Oasis Project during the 2003–2004 Field Season*, edited by A. J. Mills, pp. 49– 72. Monash University, Melbourne, Australia.

Leone, Mark P. and Constance A. Crosby

1987 Middle-Range Theory in Historical Archaeology. In *Consumer Choice in Historical Archaeology*, edited by M. Spencer-Wood, pp. 397–410. Plenum Press, New York.

Lev, Efraim

2002

- Trade of Medical Substances in the Medieval and Ottoman Levant. In *Towns and Material Culture in the Medieval Middle East*, edited by Y. Lev, pp. 159–84. Medieval Mediterranean 39. E. J. Brill, Leiden.
- Lewis, Archibald R.
- 1976 Les marchands dans l'Océan Indien. *Revue d'histoire économique et sociale* 56 (4): 441–75.
- Linscheid, Petra
- Late Antique to Early Textiles from Egypt. *Textile History* 32: 75–80.
- Little, Barbara J., editor
- 1992 *Text–Aided Archaeology*. CRC Press, Boca Raton.
- Lloyd, John A.
- 1986 Why Should Historians Take Archaeology Seriously? In Archaeology at the Interface: Studies in Archaeology's Relationships with History, Geography, Biology and Physical Science, edited by J. L. Bintliff and C. F. Gaffney, pp. 40–51. British Archaeological Reports, International Series 300. British Archaeological Reports, Oxford.
- Łyżwa, Anetta
- 2002 Naqlun 2001: Glazed Pottery. *Polish Archaeology in the Mediterranean* 13: 185–89.
- Mackenzie, Neil D.
- 1992 *Ayyubid Cairo: A Topographical Study*. American University in Cairo Press, Cairo.

Macklin, Anne

2006 Trench 1A. In *Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003*, edited by D. P. S. Peacock and L. Blue, pp. 157–58. Oxbow Books, Oxford.

Maehler, Herwig

1983 Häuser und ihre Bewohner im Fayûm in der Kaiserzeit. In *Das römischbyzantinische Ägypten. Akten des internationalen Symposions 26–30 September 1978 in Trier*, edited by G. Grimm, H. Heinen and E. Winter, pp. 119–37. Aegyptiaca Treverensia 2, Mainz am Rhein.

Maguire, Eunice Dauterman

1999 *Weavings from Roman, Byzantine and Islamic Egypt: the rich life and the dance.* Krannert Art Museum and Kinkead Pavilion, University of Illinois at Urbana-Champaign, Champaign, Ill.

Mahadevan, Iravatham

- 1996 Tamil-Brahmi Graffito. In *Berenike '95. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 206– 08. CNWS Publications, special series 2. Centre of Non-Western Studies, Leiden.
- Mani, Buddha Rashmi
- 1997 Excavation at Lalkot and Anangtal, District South, New Delhi. *Indian Archaeology: A Review* 1992–93: 6–13.
- 2000 Excavation at Lalkot and Anangtal, District South, New Delhi. *Indian Archaeology: A Review* 1993–94: 13–25.
- Margariti, Roxani Eleni
- 2002 Like the place of congregation on judgment day: Maritime trade and urban organization in medieval Aden (ca. 1083–1229). Ph.D., Princeton University.
- Mason, Robert B.
- 1996 The Stimulus: Chinese Porcelain Production and Trade with Iran. In *Tamerlane's Tableware: a new approach to chinoiserie ceramics of fifteenth and sixteenth–century Iran*, edited by L. Golombek, R. B. Mason, and G. Bailey. Islamic art and architecture 6. Mazda Publishers in association with Royal Ontario Museum, Costa Mesa, CA.
- 2004 Shine Like the Sun: Lustre-painted and Associated Pottery from the Medieval Middle East. Mazda Press and Royal Ontario Museum, Toronto, Costa Mesa, California.
- Mason, Robert B. and Edward J. Keall
- 1988 Provenance of Local Ceramic Industry and the Characterization of Imports: Petrography of Pottery from Medieval Yemen. *Antiquity* 62: 452–63.
- 1990 Petrography of Islamic pottery from Fustat. *Journal of the American Research Center in Egypt* 27: 165–84.

Mason, Robert B. and Michael S. Tite

1994 The Beginnings of Islamic Stonepaste Technology. *Archaeometry* 36 (1): 77–91.

Mason, Robert B., Michael S. Tite, Sarah Paynter, and C. J. Salter

Advances in polychrome ceramics in the Islamic world of the 12th century AD. *Archaeometry* 43: 191–209.

Maspero, Jean and Gaston Wiet

1919 *Matériaux pour servir à la géographie de l'Egypte*. Mémoires publiés par les membres de l'Institut français d'archéologie orientale du Caire 36. Institut français d'archéologie orientale, Cairo.

Matson, Frederick R.

- 1974 Technological Studies of Egyptian Pottery Modern and Ancient. In Recent Advances in Science and Technology of Materials III. Proceedings of the Second Cairo Solid State Conference 1973, edited by A. Bishay, pp. 129–39 3. Plenum Press, New York.
- Matthews, D. H.
- 1953 The Red Sea Style. *Kush* 1: 60–87.

Maxfield, Valerie A. and David P. S. Peacock

- 1997 *Mons Claudianus: survey and excavation, 1987–1993, vol. 1: Topography & quarries.* Fouilles de l'Institut français d'archéologie orientale du Caire 37. Institut français d'archéologie orientale, Cairo.
- 2001 *Mons Claudianus: survey and excavation, 1987–1993, vol. 2: Excavations, Part 1.* Fouilles de l'Institut français d'archéologie orientale du Caire 43. Institut français d'archéologie orientale, Cairo.
- Mazumdar, B. P.
- 2000 Industries and Internal Trade in early mediaeval North India (c. A.D. 600– 1200). In *Peeping through the Past: Prof. G. R. Sharma Memorial Volume*, edited by S. C. Bhattacharya, V. D. Misra, J. N. Pandey et al., pp. 253–69. Department of Ancient Indian History, Culture and Archaeology, University of Allahabad, Allahabad.
- McKee, Larry, Victor P. Hood, and Sharon Macpherson
- 1992 Reinterpreting the Construction History of the Service Area of the Hermitage Mansion. In *Text–Aided Archaeology*, edited by B. J. Little, pp. 161–78. CRC Press, Boca Raton.
- Meloy, John Lash
- 1998 Mamluk Authority, Meccan Autonomy, and Red Sea Trade, 797– 859/1395–1455. Ph.D., University of Chicago.

Meyer, Carol

- 1992 *Glass from Quseir al-Qadim and the Indian Ocean Trade*. Studies in Ancient Oriental Civilization 53. The Oriental Institute of the University of Chicago, Chicago.
- 1995 Gold, Granite, and Water: The Bir Umm Fawakhir Survey Project 1992. In *Preliminary Excavation Reports Sardis, Bir Umm Fawakhir, Tell el-'Umeiri, The Combined Caesarea Expeditions and Dell Dothan*, edited by W. G. Dever, pp. 37–92. The Annual of the American Schools of Oriental Research 52. American Schools of Oriental Research, Cambridge, MA.

Meyer, Carol, Lisa Heidorn, Walter Kaegi, and Terry Wilfong

2000 The Bir Umm Fawahkir Survey Project 1993: A Byzantine Gold–Mining Town in Egypt. Oriental Institute Communications. The Oriental Institute of the University of Chicago, Chicago.

Meyers, Eric M., James F. Strange, and Carol L. Meyers

- 1981 *Excavations at Ancient Meiron, Upper Galilee, Israel 1971–72, 1974–75, 1977.* American Schools of Oriental Research, Cambridge, MA.
- Michałowski, Kazimierz
- 1965 *Faras, fouilles polonaises 1961–1962.* 2 vols. Państwowe Wydawn, Warsaw.
- 1974 Faras-Wall Paintings in the Collection of the National Museum in Warsaw, Warsaw.
- Michot, Yahya J.
- 2000 Ibn Taymiyya on Astrology: Annotated Translation of Three Fatwas. *Journal of Islamic Studies* 11: 147–208.
- Mikami, Tsugio
- 1980–1981 China and Egypt: Fustat. *Transactions of the Oriental Ceramic Society* 45: 67–89.
- 1988 Chinese Ceramics from Medieval Sites in Egypt. In *Cultural and Economic Relations between East and West: Sea Routes*, edited by T. Mikasa. Bulletin of the Middle Eastern Culture Center in Japan 2. Otto Harrasowitz, Wiesbaden.
- Milwright, Marcus
- 1999 Pottery in Written Sources of the Ayyubid-Mamluk Period (ca. 1171– 1517). Bulletin of the School of Oriental and African Studies 62 (2): 504– 18.
- 2001 Balsam in the Mediaeval Mediterranean: A Case Study of Information and Commodity Exchange. *Journal of Mediterranean Archaeology* 14 (1).
- 2003 The Balsam of Matariyya: An Exploration of a Medieval Panacea. *Bulletin of the School of Oriental and African Studies* 66 (2): 193–209.
- van Minnen, Peter
- 1994 House–to–House Enquiries: An Interdisciplinary Approach to Roman Karanis. *Zeitschrift für Papyrologie und Epigraphik* 100: 227–51.
- Monod, Théodore
- 1978 Sur un site à bracelets de verre des environs d'Aden. *Raydan* 1: 111–24.

Montasir, 'Abd al-Halim and M. Hassib

1956 Illustrated Manual Flora of Egypt. Part I: Dicotyledons. A'in Shams University Faculty of Science, Cairo.

Morgan, Davi 1988	d <i>Medieval Persia 1040–1797.</i> 1st ed. A History of the Near East 7. Longman, London
Morgan, Peter 1991	New Thoughts on Old Hormuz: Chinese Ceramics in the Hormuz Region in the Thirteenth and Fourteenth Centuries. <i>Iran</i> 29: 67–84.
Morony, Mich 1995	Material Culture and Urban Identities: The Evidence of Pottery from the Early Islamic Period. In <i>Identity and Material Culture in the Early Islamic World</i> , edited by I. A. Bierman, pp. 1–45. University of California at Los Angeles, Los Angeles.
Morrison, Kat 1997	hleen and Mark T. Lycett Inscriptions as artifacts: Precolonial south india and the analysis of texts. <i>Journal of Archaeological Method and Theory</i> 4: 215–37.
Mortel, Richa 1989	rd T. Prices in Mecca during the Mamluk Period. <i>Journal of the Economic and</i> <i>Social History of the Orient</i> 32: 279–334.
1990	Weights and Measures in Mecca during the Late Ayyubid and Mamluk Periods. <i>Arabian Studies</i> 1990: 177–85.
1994	The Mercantile Community of Mecca during the Late Mamluk Period. <i>Journal of the Royal Asiatic Society (3rd ser.)</i> 4 (1): 15–35.
1995	Aspects of Mamluk Relations with Jedda during the Fifteenth Century: The Case of Timra al-Mu'ayyadi. <i>Journal of Islamic Studies</i> 6 (1): 1–13.
Mossakowska 2001	-Gaubert, Maria Remarques préliminaires (saison 2000): Récipients en verre provenant des tombeaux datés du XIe au XIIIe siècle. <i>Polish Archaeology in the</i> <i>Mediterranean</i> 12: 168–72.
Murray, Georg 1925	ge William The Roman Roads and Stations in the Eastern Desert of Egypt. <i>Journal of</i> <i>Egyptian Archaeology</i> 11: 138–50.
1926	Aidhab. Geographical Journal 68: 235–44.
Naroll, Raoul 1962	Floor Area and Settlement Population. American Antiquity 27: 587-89.
Nath, Amaren 2000	dra Excavation at Pauni, District Bhandara. <i>Indian Archaeology: A Review</i> 1993–94: 73–77.

Nicholson, Paul T. and H. L. Patterson

1989 Ceramic technology in Upper Egypt: a study of pottery firing. *World Archaeology* 21: 71–86.

Norris, Harry Thirlwall and F. W. Penhey

1955 The Historical Development of Aden's Defences. *The Geographical Journal* 121 (March): 11–20.

Norström, Hans-Åke and Janine Bourriau

1993 Ceramic Technology: Clays and Fabrics. In *An Introduction to Ancient Egyptian Pottery*, edited by D. Arnold and J. Bourviau. Deutsches Archäologisches Institut, Abteilung Kairo 17. Phillipp von Zabern, Mainz am Rhein.

Northedge, Alastair

- 1992 Studies on Roman and Islamic Amman, Volume 1: History, Site and Architecture. British Academy Monographs in Archaeology 3. Oxford University Press, Oxford.
- 1999 Archaeology and Islam. In *Companion Encyclopedia of Archaeology*, edited by G. Barker, pp. 1077–1107, London.

Pal, Anil Chandra

1987 Excavation at Dihar, District Bankura. *Indian Archaeology: A Review* 1984–85: 92–95.

Paul, Andrew

1955 Aidhab: A Medieval Red Sea Port. *Sudan Notes and Records* 36: 63–8.

Peacock, David P. S.

- 1992 *Rome in the desert: a symbol of power.* University of Southampton, Southampton.
- 1993 The site of Myos Hormos: a view from space. *Journal of Roman Archaeology* 6: 226–32.
- 2006 Regional Survey. In *Myos Hormos Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–* 2003, edited by D. P. S. Peacock and L. Blue, pp. 1–33. Oxbow Books, Oxford.

Peacock, David P. S. and Lucy Blue, editors

2006 Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003. Oxbow Books, Oxford.

Pentz, Peter

1988 A Medieval workship for producing 'Greek fire' grenades. *Antiquity* 62: 89–93.

Peters, Frank E. 1994 7

- *The Hajj: the Muslim Pilgrimage to Mecca and the Holy Places.* Princeton University Press, Princeton, N.J.
- Petry, Carl F. and Stanley Mendenhall
- 1978 Geographic Origins of the Civil Judiciary of Cairo in the Fifteenth Century. Journal of the Economic and Social History of the Orient 21 (1): 52–74.

Phillips, Jill

2006 Trench 1. In *Myos Hormos – Quseir al-Qadim: Roman and Islamic Ports* on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 155–57. Oxbow Books, Oxford.

Pirazzoli-t'Serstevens, Michelle

- 1982 Les ceramiques Chinoises. In *Fouilles a Qal'at al-Bahrein, lêre partie* (1977–1979), edited by M. Kervran, A. Negre and M. Pirazzolit'Sertsevens, pp. 41–52. Ministère de l'information, Direction de l'archéologie et des musées, État de Bahrain, Bahrain.
- 1988 La céramique chinoise de Qal'at al-Suhar. *Arts Asiatiques* 43: 87–105.

Plessner, Martin

1927 Kusair. In *Encyclopedia of Islam*, pp. 1157–58. 1st ed. E. J. Brill, Leiden.

Plumley, J. Martin

- 1975 *The Scrolls of Bishop Timotheos.* Texts from Excavations 1. Egypt Exploration Society, London.
- 1978 New Light on the Kingdom of Dotawo. In *Études Nubiennes: Colloque de Chantilly 2–6 Juillet 1975*, pp. 231–41. Bibliothèque d'étude 77. Institut Français d'Archéologie Orientale, Cairo.
- 1979 Texts from Qasr Ibrim. Sudan Texts Group Circular 2.
- 1980 A Medieval Nubian Literary Text. *Sudan Texts Bulletin* 2: 34–41.

Plumley, J. Martin and Gerald M. Browne

1988 *Old Nubian texts from Qasr Ibrim I.* Texts from Excavations 9. Egypt Exploration Society, London.

Pollard, A. Mark and Helen Hatcher

1986 The chemical analysis of oriental ceramic body compositions, part 2– greenwares. *Journal of Archaeological Science* 13: 261–87.

Poppy, Sarah 2006

- Trench 2D. In Myos Hormos Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 166–68. Oxbow Books, Oxford.
- Poppy, Sarah and Joe Flatman
- 2006 Trench 2C. In *Myos Hormos Quseir al-Qadim: Roman and Islamic Ports on the Red Sea. Volume 1: Survey and Excavations 1999–2003*, edited by D. P. S. Peacock and L. Blue, pp. 163–66. Oxbow Books, Oxford.
- Porter, Venetia and Oliver Watson
- 1987 'Tell Minis' Wares. In *Syria and Iran: Three Studies in Medieval Ceramics*, edited by J. Allan and C. Roberts, pp. 175–221. Oxford Studies in Islamic Art IV. Oxford University Press, Oxford.
- Poulsen, Vaughn
- 1957 Grenades ou flacons a parfum? In *Les verreries poteries médiévales*, pp. 275–78, figs. 1047–58. Hama: Fouilles et recherches de la Fondation Carlsberg 1931–1938 IV/2, Copenhagen.
- Prados, E. F.
- 1994 An Archaeological Investigation of Sira Bay, Aden, Republic of Yemen. International Journal of Nautical Archaeology 23: 297–307.
- Prickett, Martha
- 1979 Quseir Regional Survey. In *Quseir al-Qadim 1978: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 257–352. American Research Center in Egypt, Cairo.

Pringle, Denys

- 1986 Pottery as Evidence of Trade in the Crusader States. In *I comuni Italiani nel Regno Crociato di Gerusalemme*, edited by G. Airaldi and B. Z. Kedar, pp. 451–96, Genoa.
- Raban, Avner
- 1971 The Shipwreck off Sharm–el-Sheikh. *Archaeology* 24 (2): 146–55.

Raghib, Yusuf

- 1992 L'inventiare des documents exhumés à Naqlun 1991. Polish Archaeology in the Mediterranean 3: 57–58.
- Rao, K. Veerabhadra
- 2002 Excavation at Barabati Fort, District Cuttack. *Indian Archaeology: A Review* 1995–95: 61–64.
- Raphael, Oscar
- 1923–24 Fragments from Fustat. *Transactions of the Oriental Ceramic Society*: 17–25.

Rautman, Marcus L.

1990 Archaeology and Byzantine Studies. *Byzantinische Forschungen* 15: 137–65.

Ray, J. D.

2005 *Demotic papyri and ostraca from Qasr Ibrim*. Texts from Excavations 13. Egypt Exploration Society, London.

Reddé, Michel

- 1992 *Douch 4. Le trésor: inventaire des objets et essai d'interprétation.* Documents de fouilles de l'Ifao 28. Institut français d'archéologie orientale du Caire, Cairo.
- 2004 *Douch 3. Kysis: fouilles de l'Ifao à Douch, Oasis de Kharga, 1985–1990.* Documents de fouilles de l'Ifao 42. Institut français d'archéologie orientale, Cairo.

Redlak, Małgorzata

2003 Syro-Egyptian Underglaze Painted Ceramics from Kom el-Dikka: 13th– 15th Century Study Report (2002/2003). *Polish Archaeology in the Mediterranean* 15: 46–52.

Redman, Charles L.

1980 Archaeology in a Medieval City of Islam. *Middle Eastern Studies* Association Bulletin 14 (2): 1–22.

Reese, David

n.d. *Avian Remains*. University of Chicago. Quseir al-Qadim Unpublished Report.

Regourd, Anne

- 2004 Trade on the Red Sea during the Ayyubid and Mamluk periods. The Quseir paper manuscript collection 1999–2003, first data. *Proceedings of the Seminar for Arabian Studies* 34: 277–92.
- forthcoming A Late Ayyubid Report of Death Found at Quseir al-Qadîm (Egypt). In Documents and the History of the Early Islamic World: Proceedings of a Workshop and Colloquium 23–26 March 2006, edited by P. M. Sijpesteijn. International Society for Arabic Papyrology.

Richards, Donald Sidney

1989 Written Documents. In *Fustat Expedition Final Report. Volume 2: Fustat-C*, edited by W. Kubiak and G. T. Scanlon. American Research Center in Egypt Reports 11. Eisenbrauns, Winona Lake, IN. 1991 Fragments of a Slave Dealer's Day-Book from Fustat. In Documents de l'Islam Medieval: nouvelles perspectives de recherche: Équipe de recherche documents, histoire et pensée en Islam médeéval, Groupement de recherche territoires et sociétés des mondes romain et post-romain: actes de la Table Ronde (Paris, 3–5 mar 1988) / organisée par le Centre national de la recherche scientifique, edited by Y. Raghib, pp. 89–96. Textes arabes et études islamiques 29. Institut Français d'Archéologie Orientale, Cairo.

Ridho, Abu

1988 The Chinese Ceramics from Muara Jambi, Sumatra. In *Cultural and Economic Relations between East and West: Sea Routes*, edited by T. Mikasa, pp. 111–60. Bulletin of the Middle Eastern Culture Center in Japan 2. Otto Harrasowitz, Wiesbaden.

Robinson, Chase F., editor

2001 *A Medieval Islamic City Reconsidered. An Interdisciplinary Approach to Samarra.* Oxford Studies in Islamic Art. 14, Oxford.

Rogers, J. Michael

- 1969 Aleopiles again. In *Forschungen zur Kunst asien: in memoriam Kurt Erdmann, 9 September 1901–30 September 1964*, edited by O. Aslanapa and R. Naumann. Istanbul Üniversitesi Edebiyat Fakültesi, Türk ve Islâm Sanati Kürsüsü, Istanbul.
- Rossabi, Morris
- 1990 The "decline" of the central Asian caravan trade. In *The Rise of Merchant Empires: Long-distance Trade in the Early Modern World 1350–1750*, edited by J. D. Tracy, pp. 351–70. Cambridge University Press, Cambridge.

Roth, Ann Macy

- 1979 Glass. In *Quseir al-Qadim 1978: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 144–82. American Research Center in Egypt, Cairo.
- Rougeulle, Axelle
- 1991 Les importations de céramiques chinoises dans le Golfe arabo-persique (VIIIe-XIe siècles). *Archéologie Islamique* 2: 5–46.
- 1996 Medieval Trade Networks in the Western Indian Ocean (8th–14th centuries). Some Reflections from the Distribution Pattern of Chinese Imports In Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean: Proceedings of the International Seminar on Techno-Archaeological Perspectives of Seafaring in the Indian Ocean, 4th century B.C. 15th century A.D., edited by H. Prabha Ray and J. F. Salles. Manohar Publishers, New Delhi.

- 1999 Coastal Settlements in Southern Yemen: The 1996–1997 Survey Expeditions on the Hadramawt and Mahra Coasts. *Proceedings of the Seminar for Arabian Studies* 29: 123–36.
- 2001 Notes on pre- and early Islamic harbours of Hadhramawt (Yemen). *Proceedings of the Seminar for Arabian Studies* 31: 203–14.
- 2004 Le Yémen entre Orient et Afrique: Sharma, un entrepôt du commerce médiéval sur la côte sud de l'Arabie. *Annales Islamologiques* 38 (1): 201–53.
- 2005 The Sharma Horizon: Sgraffiato Wares and other Glazed Ceramics of the Indian Ocean Trade (c. AD 980–1140). *Proceedings of the Seminar for Arabian Studies* 35: 223–46.
- Rowland, Robert J., Jr.
- 1992 Documentary Archaeology in Sardinia. In *Text–Aided Archaeology*, edited by B. J. Little, pp. 149–60. CRC Press, Boca Raton.

Rye, Owen S.

- 1981 *Pottery Technology: Principles and Reconstruction.* Manuals on Archaeology 4. Taraxacum, Washington, D. C.
- Said, Rushdi, editor
- 1962 *The Geology of Egypt*. Elsevier Publishing Company, Amsterdam.
- Sakurai, K. and Mutsuo Kawatoko eds.
- 1992 *Excavations of al-Fustat, 1978–1985.* 2 vols, Tokyo.

Saliba, George

1993 The role of the astrologer in medieval Islamic society. *Bulletin d'Études Orientales (Sciences occultes et Islam)* 44: 45–69.

Sandford, Kenneth Stuart and William Joscelyn Arkell

1939 Palaeolithic Man and the Nile Valley in Lower Egypt, with some notes upon a part of the Red sea littoral; a study of the regions during Pliocene and Pleistocene times. Oriental Institute Publications 46. Oriental Institute, Chicago.

Sartain, Elizabeth

- 1996a Administrative Texts. In *Qasr Ibrim: The Late Mediaeval Period*, edited by W. Y. Adams, pp. 225–30. Excavation Memoirs 59. Egypt Exploration Society, London.
- 1996b Commercial Texts. In *Qasr Ibrim: The Late Mediaeval Period*, edited by W. Y. Adams, pp. 237. Excavation Memoirs 59. Egypt Exploration Society, London.

Sasaki, Tatsuo

1986 Chinese ceramics excavated at Fustat-1985. *Trade Ceramics Studies* 6: 99–103.

Savage-Smith, Emilie

- 1997 Sphero-conical vessels: A Typology of forms and functions. In *Mundane worlds: Science, tools and magic 2*, edited by S. Savage, E. and F. Maddison, pp. 324–37. The Nasser D. Khalili Collection of Islamic Art 12. The Nour Foundation, London.
- Scanlon, George T.
- 1966 Fustat Expedition: Preliminary Report 1965: Part I. Journal of the American Research Center in Egypt 5: 83–112.
- 1967 Fustat Expedition: Preliminary Report 1965: Part II. Journal of the American Research Center in Egypt 6: 65–84.
- 1970 Egypt and China: Trade and Imitation. In *Islam and the Trade of Asia: A Colloquium*, edited by D. S. Richards, pp. 81–95, 271–91. Papers on Islamic History 2. Bruno Cassirer, Oxford.
- 1971 The Fustat Mounds: A Shard Count 1968. *Archaeology* 24: 220–33.
- 1974a Fustat Expedition: Preliminary Report 1968. Journal of the American Research Center in Egypt 11: 81–91.
- 1974b The Pits of Fustat: Problems of Chronology. *Journal of Egyptian Archaeology* 60: 60–78.
- 1976 Fustat Expedition: Preliminary Report 1968. Part II. Journal of the American Research Center in Egypt 13: 69–89.
- 1980 Some Mamluk Ceramic Shapes from Fustat: 'Sgraff' and 'Slip'. *Dirasat Athariyah Islamiyah* 2: 59–145.
- 1981 Fustat Excavation Preliminary Report: Back to Fustat-A 1973. *Annales Islamologiques* 17: 407–36.
- 1984 Fustat Expedition: Preliminary Report, 1978. Journal of the American Research Center in Egypt 21: 1–38.
- 1986 *Fustat Expedition Final Report. Volume 1: Catalogue of Filters.* American Research Center in Egypt Reports 8. Eisenbrauns, Winona Lake, IN.

Schijns, Wolf H. M., Joris D. Kila, and James Anthony Harrell

1999 Some Architectural Observations. In *Berenike 1997. Report of the excavations at Berenike (Egyptian Red Sea coast) and the survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 95– 105. E. J. Brill, Leiden.

- Schultz, Warren C.
- 1998 The Monetary History of Egypt, 642–1517. In *Islamic Egypt, 640–1517*, edited by C. F. Petry, pp. 318–38. The Cambridge History of Egypt 1. Cambridge University Press, Cambridge.

Serjeant, Robert Bertram

- 1972 Islamic Textiles: Materials for a history up to the Mongol conquest, Beirut.
- 1974 The Ports of Aden and Shihr (Mediaeval Period). *Recueils de la Société Jean Bodin* 32: 207–24.
- 1988a Early Islamic and Mediaeval Trade and Commerce in the Yemen. In *Yemen: 3000 Years of Art and Civilisation in Arabia Felix*, edited by W. Daum, pp. 163–6, Innsbruck.
- 1988b Yemeni Merchants and Trade in Yemen 13th–16th Centuries. In Marchands et hommes d'affaires asiatiques, edited by D. Lombard and J. Aubin, pp. 61–82. Éditions de l'École des Hautes Études en Science Sociales, Paris.

Seyrig, Henri

1959 Antiquités syriennes, 75 – Flacons? grenades? éolipiles? *Syria* 36: 81–89.

- Shamir, Orit and Alisa Baginski
- 2002 Medieval Mediterranean Textiles, Basketry, and Cordage Newly Excavated in Israel. In *Towns and Material Culture in the Medieval Middle East*, edited by Y. Lev, pp. 135–58. Medieval Mediterranean 39. E. J. Brill, Leiden.
- al-Shamrookh, Nayef Abdullah
- 1993 *The Commerce and Trade of the Rasulids in the Yemen, 630–858/1231–1454.* Ph.D., University of Manchester.
- Shihāb, Sa'd 'Abd al-Karīm
- 2001 Baldat al-Qasr wa-āthāruhā al-Islāmīyah. Mudun turāthīyah 7. Dār al-Āfāq al-'Arabīyah, Cairo.
- Shindo, Yoko
- 2001 The Classification and Chronology of the Islamic Glass Bracelets from al-Tur, Sinai. In *Cultural Change in the Arab World*, edited by T. Nishio, pp. 73–100. Senri Ethnological Studies 55.
- Sijpesteijn, Petra M., Lennart Sundelin, Sofía Torallas Tovar, and Amalia Zomeño, editors
- 2006 From Andalusia to Khurasan: Documents from the Medieval Muslim World. Islamic History and Civilization. 66. E. J. Brill, Leiden.

Singleton, Theresa A.

Using Written Records in the Archaeological Study of Slavery, an Example from the Butler Island Plantation. In *Text–Aided Archaeology*, edited by B. J. Little, pp. 55–66. CRC Press, Boca Raton.

Small, David B.

1992

1999 They tyranny of the text: lost social strategies in current historical period archaeology in the classical Mediterranean. In *Historical Archaeology: Back from the Edge*, edited by P. A. Funari, M. Hall and S. Jones, pp. 122–36. One World Archaeology 31. Routledge, London.

Smith, G. Rex

- 1988 Ibn al-Mujawir's 7th/13th-century Arabia: the wondrous and the humorous. In *A Miscellany of Middle Eastern articles: in memoriam Thomas Muir Johnstone 1924–1983, professor of Arabic in the University of London 1970–82,* edited by A. K. Irvine, R. B. Serjeant, and G. R. Smith, pp. 111–24. Longman, Harlow and London.
- 1995 Have you anything to declare? Maritime trade and commerce in Ayyubid Aden – practices and taxes. *Proceedings of the Seminar for Arabian Studies* 25: 127–41.
- 1996 More on the port practices and taxes of medieval Aden. *New Arabian Studies* 3: 208–18.

South, Kristin H., Marvin C. Kuchar, and C. Wilfrid Griggs

1998 Preliminary Report of the Textile Finds, 1998 Season, at Fag el-Gamus. Archaeological Textile Newsletter 27: 9–11.

Spaer, Maud

1992 Islamic Glass Bracelets of Palestine: Preliminary Findings. *Journal of Glass Studies* 34: 44–62.

Stacey, David

2004 *Excavations at Tiberias, 1973–1974: The Early Islamic Periods.* Israel Antiquities Authority Reports 21. Israel Antiquities Authority, Jerusalem.

Stern, Edna J.

2007 Trade and Redistribution of Ceramics in the Mediterranean in the Twelfth and Thirteenth Centuries as Reflected in the Excavations of Crusader Acre. Ph.D., Haifa University.

Stern, Samuel Miklos

- 1964 Petitions from the Ayyubid Period. *Bulletin of the School of Oriental and African Studies* 27: 1–32.
- 1965 Two Ayyubid Decrees from Sinai. In *Documents from Islamic Chanceries*, edited by S. M. Stern, pp. 9–38, 207–16. Oriental Studies 3. Bruno Cassirer, Oxford.

1966 Petitions from the Mamluk Period (Notes on the Mamluk Documents from Sinai). *Bulletin of the School of Oriental and African Studies* 29: 233–76.

Stillman, Norma A.

- 1973 The eleventh century Merchant House of Ibn 'Awkal (a Geniza study) *Journal of the Economic and Social History of the Orient* 16: 15–91.
- Stone, Elizabeth
- 1979 *The Social and Economic Organization of Old Babylonian Nippur.* Ph.D., The University of Chicago.
- 1981 Texts, Architecture, and Ethnographic Analogy: Patterns of Residence in Old Babylonian Nippur. *Iraq* 43: 19–33.
- 1987 *Nippur Neighborhoods*. Studies in Ancient Oriental Civilizations (SAOC) 44. The Oriental Institute, Chicago.

Tawadros, Ezzat Edward

2001 *Geology of Egypt and Libya*. A.A. Balkema, Rotterdam.

Thayer, Jennifer

- 1993 *Land Politics and Power Networks in Mamluk Egypt.* Ph.D., New York University.
- 1995 In Testimony to a Market Economy in Mamluk Egypt: The Qusayr Documents. *al-Masaq: Studia Arabo–Islamica Mediterranea* 8: 45–55.

Thomas, Ross and Paul Masser

- 2006 Trench 8. In *Myos Hormos Quseir al-Qadim: Roman and Islamic Ports* on the Red Sea. Volume 1: Survey and Excavations 1999–2003, edited by D. P. S. Peacock and L. Blue, pp. 127–40. Oxbow Books, Oxford.
- Thompson, Deborah

1971 *Coptic Textiles in the Brooklyn Museum*. Brooklyn Museum, New York.

Thurman, Christa C. Mayer and Bruce Williams

1979 Ancient Textiles from Nubia: Meroitic, X-group, and Christian Fabrics from Ballana and Qustul. An Exhibition Organized by the Art Institute of Chicago. Art Institute of Chicago, Chicago.

Tomber, Roberta S.

1998 The Pottery. In *Berenike '96. Report of the 1996 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 163–80. CNWS Publications, special series 3. Centre of Non-Western Studies, Leiden.

1999 The Pottery. In *Berenike '97. Report of the 1997 Excavations at Berenike and the Survey of the Egyptian Eastern Desert, including Excavations at Shenshef*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 123–60. CNWS Publications, special series 4. Centre of Non-Western Studies, Leiden.

Tomber, Roberta S. and V. Begley

2000 Indian Pottery Sherds. In *Berenike '98. Report of the 1998 Excavations at Berenike and the Survey of the Egyptian Eastern Desert, including Excavations in Wadi Kalalat*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 149–68. CNWS Publications, special series 5. Centre of Non-Western Studies, Leiden.

Tonghini, Christina

1998 *Qal'at Ja' bar Pottery: A Study of a Syrian Fortified Site of the Late 11th– 14th Centuries.* British Academy Monographs in Archaeology 11. Oxford University Press, Oxford.

Touier, Kassem

1973–1974 Céramiques Mameloukes à Damas. *Bulletin d'Études Orientales* 26–27: 209–17.

Toussaint, Auguste

1966 *History of the Indian Ocean.* Translated by J. Guicharnard. Aldine, Chicago.

Trigger, Bruce G.

- 1978 *Time and Traditions: Essays in Archaeological Interpretation.* Columbia University Press, New York.
- 1985 Archaeology as Historical Science. Monographs of the Department of Ancient Indian History, Culture and Archaeology 14. Department of Ancient Indian History, Culture and Archaeology, Banaras Hindu University, Varanasi, India.
- 1995 *A History of Archaeological Thought*. 7th ed. Cambridge University Press, Cambridge.

Udovitch, Abraham L.

1999 International Trade and the Medieval Egyptian Countryside. In *Agriculture in Egypt: from Pharaonic to Modern Times*, edited by A. K. Bowman and E. L. Rogan, pp. 267–86. Proceedings of the British Academy 96. Published for the British Academy by Oxford University Press, Oxford.

Vallet, Eric

2005 Yemeni 'oceanic policy' at the end of the thirteenth century. *Proceedings* of the Seminar for Arabian Studies 35: 289–96.

Varisco, Daniel Martin

2002

Commodities and Uncommon Oddities: The Circulation of Trade Goods through the Port of Aden at the End of the Thirteenth Century. Unpublished paper given at MESA, Washington, D.C.

van der Veen, Marijke

2004 The Merchants' Diet: Food Remains from Roman and Medieval Quseir al-Qadim. In *Trade and Travel in the Red Sea Region Proceedings of Red Sea Project I held in the British Museum October 2002*, edited by Paul Lunde and Alexandra Porter, pp. 123–30. Society for Arabian Studies Monographs 2. British Archaeological Reports, London.

Verhoogt, Arthur M. F. W.

1995 Textual Finds. In *Berenike '94. Preliminary Report of the 1994 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 59– 62. CNWS Publications, special series 1. Centre of Non-Western Studies, Leiden.

- 1996 Greek and Latin Texts. In *Berenike '95. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 193– 98. CNWS Publications, special series 2. Centre of Non-Western Studies, Leiden.
- 1998 Greek and Latin Texts. In *Berenike '96. Report of the 1996 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 193–98. CNWS Publications, special series 3. Centre of Non-Western Studies, Leiden.

van der Vliet, Jacques

2000 Naqlun: Preliminary Remarks on the Coptic Texts from Seasons 1998 and 1999. *Polish Archaeology in the Mediterranean* 11: 143–44.

2003 The Naqlun John: Preliminary Report. *Polish Archaeology in the Mediterranean* 14: 172–76.

Vogelsang-Eastwood, Gillian M.

- 1983a A Dirty Piece of Rag. *Popular Archaeology* 1983: 33–38.
- 1983b Medieval embroideries from Quseir al-Qadim, Egypt. *Embroidery* 34: 80–81.
- 1983c Textiles from Quseir al-Qadim, Egypt. In *Early Islamic Textiles*, edited by C. Rogers, pp. 41–45. Rogers & Podmore, Brighton.
- 1983d A Medieval Face-Veil from Egypt. *Costume* 17: 33–38.

- 1984 Spinning-rings from Qoseir al-Qadim. Journal of Egyptian Archaeology 70: 140–41.
- 1987 Two Children's Galabiyehs from Quseir al-Qadim, Egypt. *Textile History* 18: 133–42.
- 1989 *Resist Dyed Textiles from Quseir al-Qadim, Egypt.* AEDTA, Paris.
- von Heyd, Wilhelm
- 1967 *Histoire du commerce du Levant au Moyen Âge*. Translated by F. Raynaud. 2 vols. Adolf M. Hakkert, Amsterdam.

Vorderstrasse, Tasha

- forthcoming Arabic and Coptic Terms for Vessels in Islamic Period Papyri and their Archaeological, Ethnographic, and Art Historical Correlates. In Documents and the History of the Early Islamic World: Proceedings of a Workshop and Colloquium 23–26 March 2006, edited by P. M. Sijpesteijn. International Society for Arabic Papyrology.
- Waines, David ed.
- 2002 *Patterns of Everyday Life*. The Formation of the Classical Islamic World. 10. Ashgate, Aldershot.
- Walmsley, Alan G.
- 1988 Pella/Fihl after the Islamic Conquest (AD 635–c.900): A Convergence of Literary and Archaeological Evidence. *Mediterranean Archaeology* 1: 142–59.
- 2004 Archaeology and Islamic Studies: The Development of a Relationship. In From Handaxe to Khan: Essays Presented to Peder Mortensen on the Occasion of His 70th Birthday, edited by Kjeld Von Folsach et al., pp. 319–29. Aarhus University Press.
- Wansborough, John
- 1965 Venice and Florence in the Mamluk Commercial Priveleges. *Bulletin of the School of Oriental and African Studies* 28: 483–523.
- Warburton, David A.
- 1998 A Stratigraphic Section in the Old City of San'a'. *Proceedings of the* Seminar for Arabian Studies 28: 271–85.

van Waveren, Isabel Maria and Willemina Z. Wendrich

1995 Textiles. In *Berenike '94. Preliminary Report of the 1994 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert,* edited by S. E. Sidebotham and W. Z. Wendrich, pp. 63–68. CNWS Publications, special series 1. Centre of Non-Western Studies, Leiden.

Weill, Raymond

1910 Koptos: Relation sommaire des travaux exécutés...en 1910. Annales du Service des Antiquités de l'Égypte 11: 97–141.

Wendrich, Willemina Z.

- 1999 The world according to basketry: an ethno-archaeological interpretation of basketry production in Egypt. Research School of Asian, African and Amerindian Studies (CNWS), Universiteit Leiden, The Netherlands, Leiden.
- Wendrich, Willemina Z., Roberta S. Tomber, Steven E. Sidebotham, J. A. Harrell, René T. J. Cappers, and Roger S. Bagnall
- 2003 Berenike Crossroads: The Integration of Information. *Journal of the Economic and Social History of the Orient* 46 (1): 46–87.

Wentworth, Chester Keeler

1922 The geology and coal resources of Russell county, Virginia, by Chester K. Wentworth. Prepared in cooperation with the United States Geological survey. With a chapter on The forests of Russell county, Virginia, by J. W. O'Byrne. Prepared in co-operation with the office of State forester. Bulletin (Virginia Geological Survey) 22. University of Virginia, Charlottesville.

Wetterstrom, Wilma

- 1982 Plant Remains. In *Quseir al-Qadim 1980: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 355–77. ARCE Reports 7. Udena, Malibu.
- n.d. *Plant Remains from Quseir al-Qadim 1982 Campaign*. University of Chicago. Quseir al-Qadim Unpublished Report.

Wheatley, Paul

1959 Geographical Notes in some Commodities involved in Sung Maritime Trade. *Journal of the Malayan Branch of the Royal Asiatic Society* 32 (2): 5–140.

Whitcomb, Donald

- 1978 The Archaeology of al-Hasa Oasis in the Islamic Period. *ATLAL* 2: 95–113, 09–31.
- 1979 *Trade and Tradition in Medieval Southern Iran.* Ph.D., University of Chicago.
- 1983a Islamic Glass from Quseir al-Qadim, Egypt. *Journal of Glass Studies* 25: 101–08.
- 1983b Quseir al-Qadim: A Port on the Egyptian Coast of the Red Sea. Proceedings of the Seminar for Arabian Studies 13: 103–05.

- 1988 Islamic Archaeology in Aden and the Hadhramaut. In *Araby the Blest: Studies in Arabian Archaeology*, edited by D. Potts, pp. 176–263 CNI Publications 7. Carsten Niehbuhr Institute, Copenhagen.
- 1994a Ayla in the Balance: Glass and Bronze Weights from the Aqaba Excavations. *Yarmouk Numismatics* 6: 34–54.
- 1994b The Misr of Ayla: Settlement at Aqaba in the Early Islamic Period. In *The Byzantine and Early Islamic Near East: Land Use and Settlement Patterns*, edited by G. R. D. King and A. Cameron, pp. 155–70. Studies in Late Antiquity and Early Islam 2. Darwin, Princeton, NJ.
- 1995a The Misr of Ayla: New Evidence for the Early Islamic City. In *Art and Technology throughout the Ages*, edited by Gazi Bisheh, pp. 277–88. Studies in the History and Archaeology of Jordan 5. Hashemite Kingdom of Jordan, Department of Antiquities, Amman.
- 1995b Quseir al-Qadim, Egypt: Text and Context in the Indian Ocean Spice Trade. *al-'Usur al-Wusta: The Bulletin of Middle East Medievalists* 7: 25–27.
- 1995c Toward a Common Denominator: An Archaeological Response to M. Morony on Pottery and Urban Identities. In *Identity and Material Culture in the Early Islamic World*, edited by I. A. Bierman, pp. 47–68. University of California at Los Angeles, Los Angeles.
- 1996 Quseir al-Qadim and the Location of Myos Hormos. *Topoi* 6: 747–72.
- 1997 Mamluk Archaeological Studies: A Review. *Mamluk Studies Review* 1: 97–106.

Whitcomb, Donald and Janet H. Johnson

- 1979 *Quseir al-Qadim 1978: Preliminary Report*. American Research Center in Egypt, Cairo.
- 1981 Egypt and the Spice Trade. *Archaeology* 34 (6): 16–23.
- 1982a 1982 Season of Excavations at Quseir al-Qadim. *The Oriental Institute Annual Report* 1981–1982: 30–40.
- 1982b 1982 Season of Excavations at Quseir al-Qadim. *The American Research Center in Egypt Newsletter* 120: 24–30.
- 1982c *Quseir al-Qadim 1980: Preliminary Report.* ARCE Reports 7. Udena, Malibu.

Whitehouse, David

The Decline of Siraf. In *Proceedings of the 3rd Annual Symposium on Archaeological Research in Iran*, pp. 263–70. Center for Research in Iranian Art and Archaeology, Teheran.

Wiet, Gaston

1975

1955 Les marchands d'épices sous les sultans mamlouks. *Cahiers d'histoire égyptienne* 7 (2): 81–147.

Wild, John Peter and Felicity C. Wild

- 1996 The Textiles. In *Berenike '95. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 245–56. CNWS Publications, special series 2. Centre of Non-Western Studies, Leiden.
- 1998 The Textiles. In *Berenike '96. Report of the 1996 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 221–36. CNWS Publications, special series 3. Centre of Non-Western Studies, Leiden.
- 2000 Textiles. In *Berenike '98. Report of the 1998 Excavations at Berenike and the Survey of the Egyptian Eastern Desert, including Excavations in Wadi Kalalat*, edited by S. E. Sidebotham and W. Z. Wendrich, pp. 251–74. CNWS Publications, special series 5. Centre of Non-Western Studies, Leiden.

Wilfong, Terry G.

- 1989 The Western Theban Area in the Seventh and Eighth Centuries. *Bulletin of the American Society of Papyrologists* 26: 89–147.
- 1990 The Archive of a Family of Moneylenders from Jeme. Bulletin of the American Society of Papyrologists 27: 169–81.
- Yoffee, Norman and Bradley Crowell, editors
- 2006 *Excavating Asian History: Interdisciplinary Studies in Archaeology and History*. University of Arizona Press, Tucson.

Youssef, M. I.

- 1949 *Stratigraphical studies in Kosseir area.* Ph.D., Alexandria University.
- 1957 Upper Cretaceous rocks in Kosseir area. Bulletin de l'Institut du désert d'Égypte 7 (2): 35–54.

Zagórska, K.

1990 La céramique musulmane ancienne avec la glaçure de Kôm el Dikka, Alexandrie. In *Coptic and Nubian Pottery, part 1*, edited by W. Godlewski, pp. 83–95. National Museum Occasional paper 1, Warsaw.

Zarins,	Juris	

- 1980 Comprehensive Archaeological Survey Program: Preliminary Report on the Central and Southwestern Provinces Survey, 1979. *ATLAL* 4: 27–8.
- 1989 Arab Southern Red Sea Ports and the Early Chinese Porcelain Trade as reflected principally from Aththar, Saudi Arabia. *Annali dell'Istituto universitario orientale di Napoli, Seminario di studi del mondo classico* 49: 231–69.
- Zarins, Juris and H. al-Badr
- 1986 Archaeological Investigation in the Southern Tihama Plain II. *ATLAL* 10: 36–57.
- Zarins, Juris, A. Murad, and K. al-Yaish
- 1981 The Second Preliminary Report on the Southwestern Province. *ATLAL* 5: 9–42.
- Zarins, Juris, Norman Whalen, Mohamad Ibrahim, Abd al-Jawad Mursi, and Majid Khan Preliminary Report on the Central and Southwestern Provinces Survey: 1979. ATLAL 4 (1): 9–36.
- Zarins, Juris and A. Zahrani
- 1985 Recent Archaeological Investigations in the Southern Tihamah Plain (The Sites of Athar and Sihi, 1404/1984). *ATLAL* 9: 65–107.
- el-Zeini, Haini
- 1982 Notes on Some of the Old Mosques in Quseir. In *Quseir al-Qadim 1980: Preliminary Report*, edited by D. S. Whitcomb and J. H. Johnson, pp. 397–406. ARCE Reports 7. Udena, Malibu.
- Zimansky, Paul
- 2005 Archaeology and Texts. In *Archaeologies of the Middle East: Critical Perspectives*, edited by S. Pollock and R. Bernbeck, pp. 308–26. Blackwell Studies in Global Archaeology 4. Blackwell, Oxford.
- Zitterkopf, Ronald E. and Steven E. Sidebotham
- 1989 Stations and Towers on the Quseir–Nile Road. *Journal of Egyptian Archaeology* 75: 155–89.