

THE SHEIKH'S HOUSE AT
QUSEIR AL-QADIM



View south over the Sheikh's House compound in January 2006.

THE SHEIKH'S HOUSE AT
QUSEIR AL-QADIM
DOCUMENTING A THIRTEENTH-CENTURY
RED SEA PORT

by

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with contributions by

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ISBN (hardcover): 978-1-61491-056-5
ISBN (eBook): 978-1-61491-058-9
Library of Congress Control Number: 2021931336
ISSN: 0069-3367

The Oriental Institute, Chicago

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Printed in the United States of America.
Oriental Institute Publications 144

Series Editors

Charissa Johnson, Leslie Schramer,
Steven Townshend, and Thomas G. Urban

with the assistance of

Rebecca Cain and Alexandra Cornacchia

Cover Design

Steven Townshend

Printed by ENPOINTE
Brooklyn Park, MN, USA

This paper meets the requirements of
ANSI/NISO Z39.48-1992 (Permanence of Paper)

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ABBREVIATIONS

AH	Anno Hegira (date according to the Hijrī calendar)
c.	century
ca.	circa
CE	Common Era
cm	centimeter
diam.	diameter
fig.	figure
frag.	fragment
kg	kilograms
m	meter
MNI	minimum number of individuals
n.d.	not dated
pers. obv.	personal observation
pl.	plate
RN	Registration Number
sing.	singular
str.	street
unid.	unidentified
unk.	unknown
unpub.	unpublished
unstr.	unstratified

A NOTE ON TRANSLITERATION

I have followed Brill's simple Arabic transliteration system, for the most part. However, I have maintained Li Guo's transliterations of persons and items mentioned in the site documents, for ease of cross reference with his work. (For example, Sheikh Abū Mufarrij rather than "Shayḥ Abū Mufarriḡ.") I also did not transliterate a place-name if it would render that place too unfamiliar to English-speaking readers.

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FOREWORD

When Jan Johnson and I first drove out to see Quseir al-Qadim, I was instantly taken by this site.

“Isn’t it beautiful?” I exclaimed.

She answered, “But there is NOTHING green!”

I was familiar with barren coastlines along the Persian Gulf, very similar to this Red Sea landscape, while Jan was most familiar with lush Nilotic scenery, the true “black land” of Egypt. With some patience, she helped me pick up sherds—masses of them lying on the surface, including lovely glazed pieces. Also visible on the surface were wall lines. This was an extraordinary site, an amazing port on the Red Sea coast. This was in 1977 and looked so promising that we returned the next year for a first season of excavations (though only a month).

The “Sheikh’s house” was introduced in the 1981–82 Annual Report as the “complete excavation of the ‘Islamic knoll,’” based on the numerous letters found in the house and storerooms (OI Annual Report 1981–82, 34–35). It was a house, later divided into two households, across an alley from two storerooms. Beneath the threshold of one were two wooden keys, one labelled the “key of Sheikh Abu Mufarrij.” A trove of letters written on paper belonging to this sheikh were found and now published by Li Guo (1999, 2001); they date between 1200 and 1240 CE. In the late thirteenth century the Sheikh’s house was abandoned and a new settlement shifted to the seashore, where less formal dwellings were constructed.

Thus the Sheikh’s house represented the earlier settlement, a community from the Luxor region (and perhaps Fustat) brought to this seacoast, perhaps for only a few months each year, to organize the trade going out to Yemen, south Arabia, and farther reaches of the Indian Ocean. These traders settled on this little bay to send out ships and receive the arriving cargoes, which could then be stored before transport to Luxor and onward to Cairo and other cities of medieval Egypt. Occupation in this port was temporary and simple, perhaps only a few weeks each year. It was truly a liminal settlement, a seasonal occupation by a mercantile community. An archaeological chance has revealed details of this important element of medieval Egyptian civilization.

Donald Whitcomb
October 2019

ACKNOWLEDGMENTS

This publication is based on my doctoral dissertation, completed at the University of Chicago in the spring of 2007. Thus my list of thanks is rather long, reflecting the numerous people without whose help both the dissertation and the book would have been impossible.

I am grateful to the US Department of State for a Bureau of Educational and Cultural Affairs Fellowship at the American Research Center in Egypt, which allowed me to conduct my dissertation research from November 2005 to May 2006. My research in Egypt was facilitated by a host of people and institutions, particularly the excellent staff of the American Research Center in Egypt (especially Mme. Amira Khattab). I also must thank the Supreme Council of Antiquities and its general director at the time, Dr. Zahi Hawass, for permission to research. Mr. Ibrahim ‘Abd ar-Rahman, inspector for the Supreme Council of Antiquities and Fustāṭ site supervisor, was extremely generous with Fustāṭ sherds and publications. I am grateful to Dr. Wafaa al-Sadik and Deputy Director Mme Nariman Hanim ‘Abd el-Fattah ‘Azab of the Egyptian Museum; Mr. ‘Abd al-Mohsen al-Qadi, director of the Beni Suf Museum; Dr. Muhammad Abbas, director of the Museum of Islamic Arts; and Dr. Rabia Hamdan in Qenā.

I benefited from the generosity of several colleagues working in Egypt at the time, with whom I compared notes on ceramics and from whom I learned techniques of analysis and about current treatments of archaeological texts. Many thanks are due to Alison Gascoigne, Gillian Pyke, Peter Sheehan, Pamela Rose, George C. Scanlon, Julie Monchamp, Sylvie Marchand, Stéphane Pradines, Tony Mills, Anetta Łyżwa-Piber, Fred Leemhuis, and Ruud Peters.

Several other colleagues have been generous with their time, data, and advice. I am especially grateful to Yael Arnon, Katia Cytryn-Silverman, and Edna J. Stern. Also Professor David Peacock, director of the University of Southampton’s excavations at Quseir al-Qadim (Qūṣayr al-Qadīm), was always most gracious and helpful to me regarding his team’s work, as was his entire staff, and I greatly benefited from e-mail correspondence with him. Rebecca Bridgman, who did the initial work on their Islamic ceramics, was generous with her publications and pre-published materials. Ann Regourd was in frequent correspondence regarding the Quseir texts from the Southampton excavations, and sent me drafts of her publications. On the issue of archaeological texts and their treatments, Jacob Lauinger advised me on the field of Assyriology, and Kara Cooney on the field of Egyptology.

This volume would be severely lacking without the contributions of Steven Goodman and Wilma Wetterstrom. I am exceedingly grateful to them for resurrecting their Quseir research after all these years and contributing such important works to the manuscript.

I am thankful to the Department of Near Eastern Languages and Civilizations at the University of Chicago for an excellent education in Islamic archaeology, as well as funding travels to conduct research. I am enormously grateful for the support and advice provided by my dissertation committee, Fred Donner, Li Guo, and David Schloen, from whose learning, wisdom, and generosity I benefited during and after my time at the University of Chicago. I am exceedingly grateful to Li Guo, upon whose editions, translations, and analysis of the Sheikh’s House texts I have so heavily relied. 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.

I am thankful for the support and encouragement of my family. Innumerable thanks are due especially to my parents, Dr. James F. Strange and Carolyn Midkiff Strange, who provided my training in archaeology and have always encouraged curiosity, creativity, and excellence. They also provided a summer of free childcare, which was critical in allowing me time to devote almost exclusively to the book manuscript. I regret that my father did not live to see this book in print; I know he would have been proud. My husband, Aaron Burke, has been enormously supportive in numerous ways, including with his own expertise in Near Eastern archaeology, throughout the very long process of researching, writing, editing, updating, and re-editing this work, and I am grateful.

Katherine Strange Burke
Thousand Oaks, CA
October 1, 2013

PREFACE

Except in the cases of wills, deeds of sale, *waqfiyāt*, and other 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 who once inhabited that context. The same can be said of the documents from the Sheikh's House at Quseir al-Qadim on the Red Sea, which provide profound insight into the social and commercial activities at Ayyubid Quseir while never referring directly to the structures in which they were found, even though the business letters are often addressed "to the storeroom of Sheikh Abū 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 thirteenth-century Egyptian 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 *Ḥāḡḡ* 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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INTRODUCTION

The site of Quseir al-Qadim (*Qūṣayr al-Qadīm* “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 and mercantile area of the site known as the Sheikh’s House, a complex of two houses, a row of storerooms, and the connecting corridor, promises to address these concerns. Over 1,445 fragments of letters and documents written in Arabic on paper were recovered during excavations by the University of Chicago in the early 1980s. 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 many 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 order of deposition provides a more nuanced understanding of events at the Sheikh’s House than is possible when the texts are read out of order. 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 a shipping node located at Quseir al-Qadim on the Red Sea.

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, as with most Islamic lands, come from archive collections,¹ or from the primarily Fatimid-period Cairo Geniza, which were preserved in a synagogue storeroom rather than their original contexts.² Most of the documents published from the important archaeological site of Fustāṭ made their way into collections early, having been retrieved in either illegal *sebāḥ* excavations or the early twentieth-century excavations of Aly Bahgat, and the context has been lost.³ The Islamic periods that are best represented by archaeological texts in Egypt are arguably the Ottoman and modern eras, for which we have documents from al-Tūr and from al-Qaṣr in the Dakhleh Oasis.⁴

The study of archaeological texts should have numerous good methodological examples in Egyptian archaeology, as there are several examples of sites from which texts have been excavated. 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 the contexts in which they were found. This has been changing 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.⁵ Likewise the broader field of Near Eastern archaeology, with excavations

¹ See, e.g., the publications of Diem 1996a; 1996b; Grohmann 1949–1950; 1963; Raghīb 1992; Sijpesteijn et al. 2005; Stern 1964; 1965; 1966, to cite only a few. The Arabic Papyrology Database is also a useful source, at <http://www.apd.gwi.uni-muenchen.de:8080/apd/project.jsp>.

² See especially Goitein 1967–1988; Goitein and Friedman 2008; for a recent bibliography, see Jefferson and Hunter 2004; and Reif 2002. For online publications of the documents, see the following websites: accessed February 11, 2020, <https://geniza.princeton.edu/pgp/>; accessed June 19, 2019, <http://www.genizah.org/>; accessed March 14, 2017, <http://www.lib.cam.ac.uk/Taylor-Schechter/index.html>; accessed March 14, 2017, <http://sceti.library.upenn.edu/genizah/index.cfm>; accessed March 14, 2017, <http://rylands-genizah.wordpress.com/>; accessed June 19, 2019, <http://www.library.manchester.ac.uk/search-resources/special-collections/guide-to-special-collections/genizah-collection/>.

³ See, e.g., Abdel Rahman 2000.

⁴ See, e.g., Kawatoko 1989; 1992; 1993a; 1995; 1996; 1998a; 1998b; 1999; 2001a; 2005a and 2005b; R. Peters 2008; 2010; 2011; 2014.

⁵ E.g., Bagnall 1988; 1995; 2003; Bagnall et al. 2016. Bingen 1996; also see Bucking 2006; Dunand 1992; 2005; Gagos 1999; Maehler 1983; Reddé 2004; Wendrich et al. 2003.

of thousands of tablets on numerous sites from Mesopotamia to the Levant, has only occasionally produced scholarship that fully exploited the relationship between texts and their archaeological contexts to the benefit of both. While C. Leonard Woolley used both texts and their findspots to illuminate each other at the site of Ur,⁶ the convention to publish texts separately from other categories of artifact persisted such that the archaeologist Elizabeth Stone's work in the 1970s and 1980s on Old Babylonian Nippur was regarded as pioneering.⁷ For several subsequent years, it remained relatively rare for excavated tablets or stelae to be analyzed according to findspot or context, or used to shed light on those immediate contexts.⁸ This approach not only impoverishes archaeological interpretations, but as Paul Delnero and Jacob Lauinger note, the separation of texts from their immediate contexts has also led to their content becoming "a static, unchanging abstraction, which can be studied as a fixed and self-contained system of meaning, removed from the dynamics of the social world in which it was produced and circulated."⁹

ARCHAEOLOGY VS. "HISTORY" IN HISTORICAL ARCHAEOLOGIES

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.¹⁰

Because of the rarity of textual preservation outside Egypt, little discussion has been generated in many historical archaeologies 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, and how to use them in an integrated fashion, yet be aware of the limitations of both lines of evidence.¹¹ Archaeologists argue against privileging the kind of 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.¹² 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.¹³

Within the field of Islamic studies, there has been a growing recognition among historians 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.¹⁴ 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.¹⁵ 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,¹⁶ and others use both types of data to explore a question.¹⁷

⁶ E.g., Lauinger 2014, 190–91; Woolley 1954, 185.

⁷ Stone 1979; 1981; 1987; Zimansky 2005.

⁸ Zimansky 2005, 316; for exceptions that prove the rule, see publications of a stela found in situ at the site of Zincirli, ancient Sam'al, in Turkey (Schloen and Fink 2009; Struble and Herrmann 2009).

⁹ Delnero and Lauinger 2015, 2.

¹⁰ E.g., Arnold 1986; Carver 2002; Charlton 1981; Deagan 1982; Driscoll 1988; Dymond 1974; Dyson 1995; Funari 1999; Galloway 2006; Hodder 1987; Isayev 2006; Johnson 1999; Leone and Crosby 1987; Little 1992; Lloyd 1986; Rautman 1990; Rowland 1992; Small 1999; Trigger 1978; 1985; 1995; Yoffee and Crowell 2006a.

¹¹ E.g., Bartoy et al. 2006, see esp. 202–3; Deagan 1982, 160, 71; Hills 2007; McKee et al. 1992; Singleton 1992; Yoffee and Crowell 2006b, 11.

¹² E.g., Kohl 2006; Rautman 1990.

¹³ E.g., see Deagan's critique of Rahz and South using Deetz in Deagan 1982.

¹⁴ Hourani 1976, 104; Humphreys 1991, 59–65; Morony 1995; Northedge 1999, 1081; Redman 1980, 1.

¹⁵ Walker 2008; 2010; also see Whitcomb 1979, 199–204, fig. 33; Whitcomb 1995b, 63.

¹⁶ E.g., Tonghini 1998; Walker 2003a; 2003b; Walmsley 1988.

¹⁷ 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.¹⁸

METHODOLOGICAL APPROACHES

In Egypt and Nubia, excavation projects have experienced varying levels of success in their efforts to analyze archaeological texts from Roman, Coptic, and Islamic sites. Some sites, well known for textual finds, such as Nessana, Fuṣṭāṭ, Naqlun, and al-Qaṣr, have not yet benefited from a full integration of the archaeological and textual data.¹⁹ Others, such as al-Tūr, Jême, Berenike, Syene (now ʿAswān), Karanis, and Qaṣr Ibrīm (in Nubia) have made use of the textual and archaeological evidence to provide a richer history of the site. These few projects have attempted some kind of integration of texts and archaeology, or creative approaches to using texts.²⁰ They have nevertheless 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 al-Tūr.

There is a third approach to archaeological texts, which is not only to create an integrated narrative but to undertake a stratigraphic reading of the texts. Study of the texts is usually (and by necessity) 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 or contexts 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 their order of deposition. Most of the sites mentioned above have the potential for this kind of study.

A MODEL APPROACH

The attempt to make use of both textual and archaeological 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 these two types of data may not necessarily correlate but may in fact contrast.²¹ This is a point noted by several scholars as an opportunity to produce new information or to re-examine the most useful approaches to each kind of evidence.²² This tack is adopted by the excavators of Roman Berenike, for example, 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.²³

Wendrich and her colleagues have made efforts to integrate the textual data from the site of Berenike 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.²⁴ Because most of the early Roman textual material was found in dumps, it cannot be read stratigraphically. Nevertheless, the approach taken is to compare the textual evidence for goods shipped to Berenike, which comes from within and outside of the site, against finds at Berenike, recognizing that both types of data have their inherent biases, and thus attempting to correct

¹⁸ See especially studies on Amman by Northedge 1992; and Samarra by Robinson 2001; Walker 2008.

¹⁹ See, e.g., Derda 1993; 1997; Derda and Urbaniak-Walczak 1996; Gaubert 1998; Kaper 1991; Kraemer 1958; Leemhuis 2003; 2004; R. Peters 2008; Richards 1989; 1991; van der Vliet 2000.

²⁰ See, e.g., W. Y. Adams 1996b, 1–8, 22–29, 253–55, 43–47, 49–50, 53, 61, 44–52; Frensd 1974, 41–42; Hinds and Ménage 1991, 1; Hinds and Sakkout 1986, 3; Husson 1990; Kawatoko 1995, 11–21, pls. 25–26; 1998a, 55–66; Maehler 1983; van Minnen 1994, 240–49; Wilfong 1989, see esp. 97–98; 1990, see esp. 170–71; 2002.

²¹ Charlton 1981, 155; Gaimster 2005.

²² W. Y. Adams 1979; Andrén 1998; Binford 1987; Charlton 1981; Galloway 2006; Leone and Crosby 1987, 409.

²³ Wendrich et al. 2003.

²⁴ Wendrich et al. 2003.

these biases.²⁵ 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.²⁶ 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.”²⁷

METHODOLOGY: TEXTS AS ARTIFACTS AND TEXTS AS TEXTS

Anders Andrén identified five methodological approaches to examining the encounter of texts and artifacts that are employed by various historical archaeologies, which apply to excavated texts as well as extra-site texts.²⁸ 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.²⁹ The encounter of texts and material culture creates a new discursive context, which must itself be interpreted.³⁰

New contexts are created by the methodologies of correspondence (three different types), association, and contrast.³¹ *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.³² 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.”³³ 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.³⁴ *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.³⁵ *Association* is “trying to open an object of study to as many connections as possible”³⁶ 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.”³⁷ *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.”³⁸ This methodology requires sensitivity to discern whether perceived discrepancies between texts and material culture

²⁵ Wendrich et al. 2003, 2, 83.

²⁶ Wendrich et al. 2003, 69.

²⁷ Wendrich et al. 2003, 70

²⁸ Andrén 1998, 157–75.

²⁹ Andrén 1998, 147–48.

³⁰ Andrén 1998, 155.

³¹ Andrén 1998, 155.

³² Andrén 1998, 160–61.

³³ Andrén 1998, 161.

³⁴ Andrén 1998, 162–63.

³⁵ Andrén 1998, 164–68.

³⁶ Andrén 1998, 168.

³⁷ Andrén 1998, 170.

³⁸ Andrén 1998, 171.

are due to a lack of information, incompatibility of data, or “‘actual’ differences in the past.”³⁹

Andrén’s approach is descriptive of methodological strategies already employed in many historical archaeologies, yet prescriptive in assembling them together to counteract the tautological conception of historical archaeology discussed above, which 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.”⁴⁰

In the field of Islamic archaeology, Donald Whitcomb preempts Andrén’s plea in his study of commerce in the Fars province of Medieval Iran. He outlines a tripartite system for the integration and cooperation of artifactual and documentary lines of evidence that is more specifically applicable to archaeological texts.⁴¹ 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.⁴² This secondary degree of relationship would encompass all of 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.⁴³

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. At Quseir al-Qadim, as will be shown in the following chapters, once the Sheikh’s House 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 help to re-order the remainder vis-à-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.

³⁹ Andrén 1998, 174–75; and see the example of Berenike above.

⁴⁰ Andrén 1998, 181.

⁴¹ Whitcomb 1979, 199–204, fig. 33.

⁴² Whitcomb 1979, 200.

⁴³ Whitcomb 1979, 203.

THE SETTING OF QUSEIR AL-QADIM: LONG-DISTANCE TRADE

Trade and cultural exchange within the Red Sea are only part of a vast network of trading relationships that make up the Indian Ocean trade and include ports in the Persian Gulf, the Gulf of Oman, the Arabian Sea, and the Bay of Bengal, and continues eastward through the Straits of Malacca to the South China Sea (fig. 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 with sites in the greater Indian Ocean littoral, especially its western half. For example, ceramic and glass types present at Quseir al-Qadim have been found 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, several small sites in the vicinity of 'Aden (Kawdam-Saila, at-Tariya, al-Qaraw, al-Quraya, Jebelain, Khanfar), 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 ceramics⁴⁴ and Chinese porcelains and stonewares of this period,⁴⁵ 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 (1171–1250 CE) held Egypt, much of Syria, and parts of Arabia, Yemen, and North Africa, if only for a short stretch. While Ṣalāḥ al-Dīn Yūsuf ibn

Ayyūb 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 eleventh century had encouraged an increase of trade across the Mediterranean with European city-states such as Venice and Genoa by the twelfth century.⁴⁶ The Muslim world had become the conduit between the Far East and Europe under the later Fatimids (979–1171 CE), 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.⁴⁷ The Egyptian merchants were aided in this by the Fatimid and the early Ayyubid governments' 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 culminated in the flourish of Indian Ocean trade via the Red Sea that took place under the Mamluks (1250–1516 CE).⁴⁸

The trading pattern of Egyptian merchants under the Ayyubids therefore reflects a new twelfth-century emphasis on commerce via Yemen across the Indian Ocean to ports in western India. These ports 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 Ḥijāz and Yemen in order to control the Red Sea ports, although they were not entirely successful in this. Nevertheless their

⁴⁴ Kervran 1996.

⁴⁵ Rougeulle 1996.

⁴⁶ E.g., Goitein 1970, 53.

⁴⁷ Goldberg 2005, 394.

⁴⁸ See, e.g., Fischel 1958; Garcin 1973–74; Labib 1970a; Meloy 1998; Mortel 1995; Wansborough 1965; Wiet 1955. But see Power (2009) for an argument placing the expansion of Muslim commerce in the Red Sea slightly earlier, in the ninth and tenth centuries, and reaching its zenith in the tenth and eleventh centuries CE.

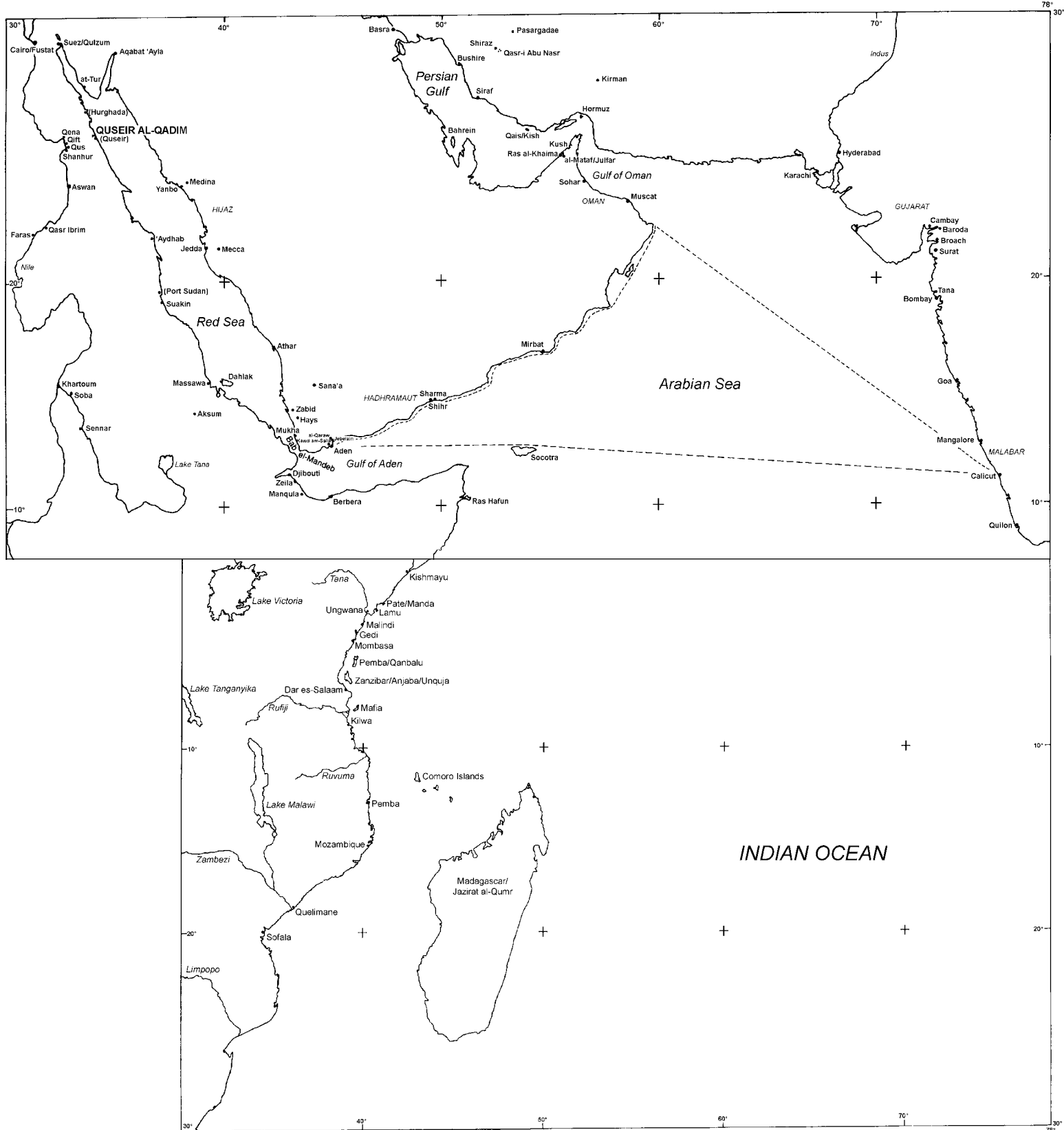


FIGURE 1. The Indian Ocean Littoral in the Ayyubid and Mamluk Periods (after Meyer 1992, fig. 5)

interest in the Eastern trade coincided with the beginning of Chinese orientation toward the Indian Ocean under the Southern Song empire (1127–1279 CE), leading to the height of Chinese maritime activity, which continued under their Mongol successors, the Yuan (1279–1368 CE).⁴⁹ 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.⁵⁰ 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 east–west overland routes commenced, along with a decline in Persian Gulf trade due to Seljuk failure to maintain stability during the latter part of their rule.⁵¹

The excavations at Quseir al-Qadim provide new information on this important era of Red Sea trade 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,⁵² only Quseir al-Qadim on the Egyptian coast, ḤAyla on the Gulf of ḤAqaba,⁵³ al-Tūr in the Sinai,⁵⁴ and Athar on the southern Arabian coast⁵⁵ have been excavated, while ḤAyḏāb has been the subject of some reconnaissance and a test trench.⁵⁶ Of the four excavated, only Quseir al-Qadim has produced remains from the Ayyubid period; closest to this in date is al-Tūr, 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 ḤAyla indicate occupation of the town was confined to the Roman and early Islamic through the Fatimid period, and again from the late Mamluk period.⁵⁷ 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.⁵⁸ The port of Athar is said to have been abandoned by AH 453 / 1061 CE due to the silting of the harbor and lack of freshwater, and although a village should have remained, no Ayyubid-era occupation was encountered.⁵⁹

ḤAden at the entrance of the Red Sea on the Yemeni coast was the thriving entrepôt of trade under the Ayyubids and then the Rasulids. ḤAden has not been investigated apart from the harbor, but a few satellite sites have been the subject of surface survey. Ceramics and glass from these collections 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, the latter of 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 and trading practices for this important transitional period that will not otherwise be remedied until ḤAyḏāb is excavated.

In the following chapter, I introduce the site and provide a history of the archaeological work to date (chapter 1). 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 2 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. The ceramics are used both as a tool for understanding the date of the settlement and for exploring the trading contacts

⁴⁹ Hudson 1970, 163–65; Lo 1969; Toussaint 1966, 74–77.

⁵⁰ Chaudhuri 1986, 53; also see Wheatley 1959.

⁵¹ Labib 1974, 231–32; Martinez 2009, see esp. 100–108; Morgan 1988, 56; Rossabi 1990; Rougeulle 1996, 160. See also Shatzmiller 2009 for a contextualization of sea trade within the larger economy.

⁵² E.g., see Zarins 1989; Zarins, Murad, and al-Yaish 1981.

⁵³ Whitcomb 1994b; 1995a.

⁵⁴ Kawatoko 1995; 1998a; 2003; 2004.

⁵⁵ Zarins 1989.

⁵⁶ Hobson 1928; Kawatoko 1993b; Paul 1955.

⁵⁷ Al-Fakhri 2001; Damgaard 2009; De Meulemeester et al. 2000; 2001; 2002; Whitcomb 1987; 1988a; 1988b; 1989; 1991; 1993; 1994a; 1994b; 1995a.

⁵⁸ Baginski and Shamir 1998; 2002.

⁵⁹ Zarins and Zahrani 1985, 70.

the residents enjoyed. Chapters three, four, and five treat 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 6 entails a detailed examination of the Sheikh's House texts, describing their contexts and what information each small assemblage

contains. Comparison is made between what was known about the Sheikh's House before and after integrating the archaeology and texts. Chapter 7 seeks to contextualize the Sheikh's House and Quseir al-Qadim within Egypt and the Red Sea trade. A common culture can be identified that is traceable in the Red Sea littoral, and which endured far longer than the ephemeral occupation at the Sheikh's House or Quseir al-Qadim.

CHAPTER 1

QUSEIR AL-QADIM AND THE SHEIKH'S HOUSE

Quseir al-Qadim (*Qūṣayr al-Qadīm*) 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 Qenā, Qift, Qūs, and Luxor (fig. 2). 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.⁶⁰ 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, on a Late Pleistocene coral reef that extends southward into extensive mud flats, or *sebāḥ*.⁶¹ The *sebāḥ* indicates the presence of a former lagoon that was used as the Roman and Islamic harbors.⁶² 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.⁶³ The area is extremely arid, having a mean annual rainfall of 3.4 mm.⁶⁴

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 is underscored by the presence of numerous way stations, mines, and graffiti from Ptolemaic and Roman times in the Wadi Hammamat.⁶⁵ This wadi system continued as the major route between this part of the Nile and the Red Sea in the Islamic periods when Quseir al-Qadim became a station on the *Ḥāǧǧ* 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.⁶⁶ 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, and sending the goods to the entrepôts of Egypt, where they could be purchased by customers from as far away as Europe.⁶⁷

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. 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. . . ."⁶⁸ The water carrier (*saqqā*), 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.⁶⁹ A few brackish springs and several wells were identified in the Quseir Regional Survey.⁷⁰ Water from the farthest of these would have been sweetest, and thus have been more expensive to purchase from the *saqqā*. Nile water must have been a rare luxury.

Jules Couyat-Barthoux⁷¹ was perhaps the first scholar to note the existence of medieval ruins at

⁶⁰ 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 (Kantor 1992, 16–17).

⁶¹ Barron and Hume 1902, 61.

⁶² Blue 2006a; Plaziat et al. 1995, 14; Sandford and Arkell 1939, 67.

⁶³ Klunzinger 1878a; Prickett 1979, 274; Wetterstrom 1982.

⁶⁴ Prickett 1979, 270–73.

⁶⁵ Bernand 1972; Prickett 1979, 320–24, pl. 84.

⁶⁶ G. W. Murray 1925; Zitterkopf and Sidebotham 1989.

⁶⁷ Garcin 1986b; 1991, 2044; Whitcomb and Johnson 1982a, 1.

⁶⁸ Guo 2004, Text 251.

⁶⁹ Guo 2004, Text 67; cf. Goitein 1983, 232.

⁷⁰ Prickett 1979, 270–72.

⁷¹ Couyat-Barthoux 1910.

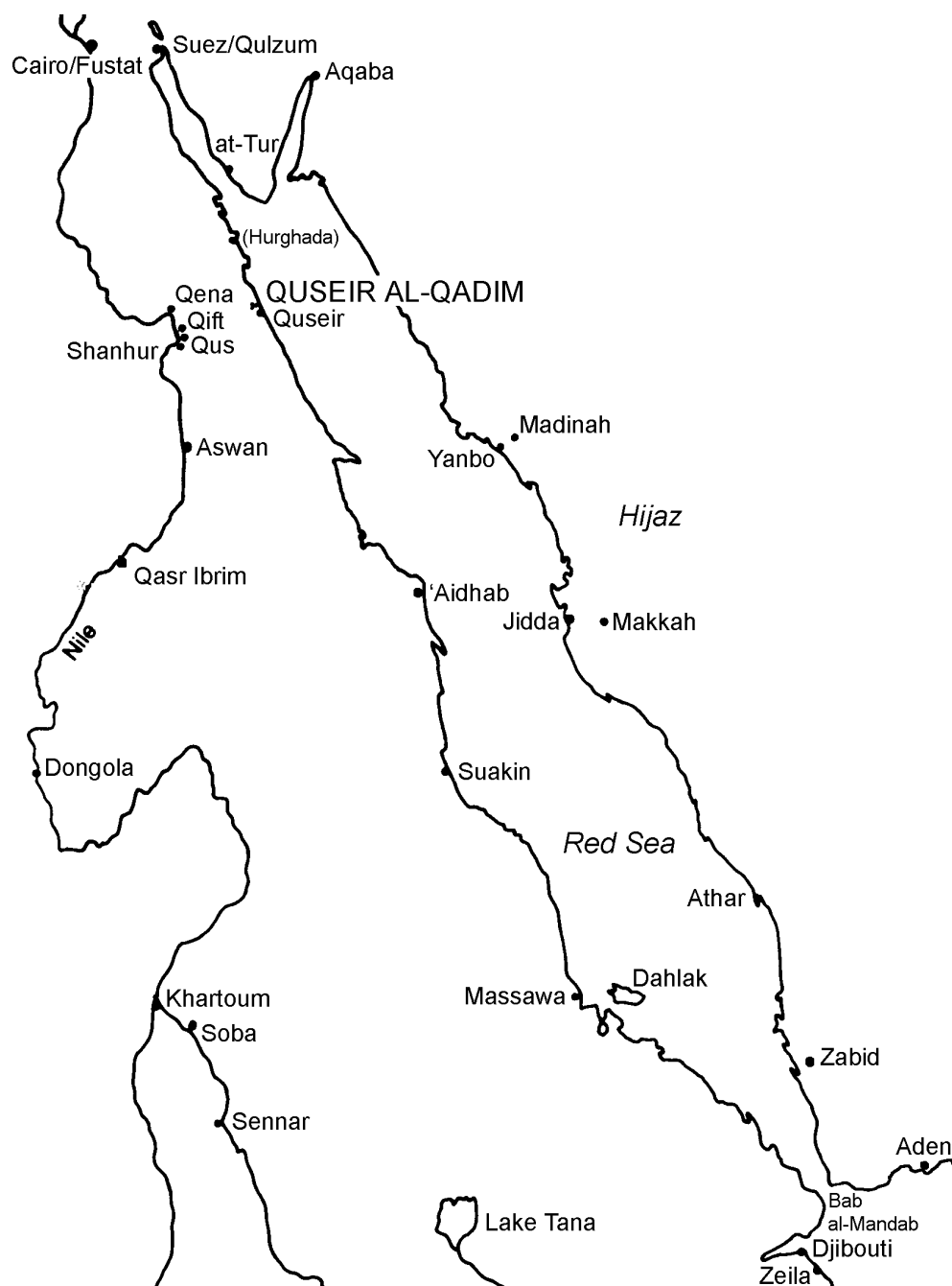


FIGURE 2. Map of Egypt and Western Arabia (after Meyer 1992, fig. 5).

Quseir al-Qadim, corroborated a few years later by George W. Murray,⁷² who reported Islamic pottery along with matting and date pits “of very recent appearance” on the surface.⁷³ James Burton had also noted “Arab tombs” on his map of the region in 1822–1823; these were excavated by Abdel Monem Sayed of the University of Alexandria in the 1970s, Janet Johnson and Donald Whitcomb of the

University of Chicago in the late 1970s and early 1980s, and David Peacock of the University of Southampton from 1999 to 2003.⁷⁴ The work of the Chicago and Southampton expeditions on the site as a whole indicates 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) and the Ayyubid to Mamluk

⁷² Murray 1925, 142.

⁷³ Whitcomb 1996, 747 n. 1.

⁷⁴ Sayed’s work has not been published, but see Peacock 2002; Whitcomb and Johnson 1979, 57, 59.

periods.⁷⁵ These latter periods are the subject of the current investigation.⁷⁶

PREVIOUS SCHOLARSHIP ON QUSEIR AL-QADIM

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.⁷⁷ Evidence for its possible existence as early as the eighth century CE is recorded in Yāḳūt ca. 1225 CE, 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 Maqrīzī in the fifteenth century, the second Quseir may be the Egyptian Red Sea site.⁷⁸ Nevertheless, no traces of an early Islamic town have been detected, and there is no 'Abbasid-era textual evidence to date.⁷⁹ 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 Qūs, the Nile port. Also, al-Musabbihī's eleventh-century history of Egypt mentions a town by that name.⁸⁰ 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 Qūs date from the late twelfth or early thirteenth century, after Qūs had become the capital of Upper Egypt at the end of the eleventh century⁸¹. These sources provide fairly minimal data—several Arabic geographers simply refer to Quseir as *furda* Qūs, “the port of Qūs,” providing variable figures on its distance from that city on the Nile, and its location between the ports of Qulzum and 'Aydāb on the Red Sea.⁸² Yāḳūt provides the most tantalizing clue to activity there in his observation that it is frequented by Yemeni vessels.⁸³ This point becomes even more important when examining the results of the excavations. A recently published Rasulid court archival text that is dated ca. AH 693/1293 CE lists Quseir and al-Tūr as optional Egyptian ports to 'Aydāb.⁸⁴ The Mamluk historian al-Qalqašandī (d. 821/1418) provides additional evidence that 'Aydāb and Quseir were operating at the same time, including Quseir among four Egyptian ports in the Red Sea (moving south to north: 'Aydāb, Quseir, al-Tūr, and

⁷⁵ 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 et al. 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, 57–62, 747–49) 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).

⁷⁶ For more information on Roman Quseir, 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), as well as the University of Southampton's reports and other publications (Blue 2002; 2006b; Peacock 1993; Peacock and Blue 2006a; 2011).

⁷⁷ E.g., Garcin 1978, 311; Labib 1965, 237–38, 376, 81; 1974, 225.

⁷⁸ Frantz-Murphy 1982, 266 n. 1.

⁷⁹ Contra Plessner 1927, 1157.

⁸⁰ Frantz-Murphy 1982, 266.

⁸¹ Garcin 1976, 6 n. 1.

⁸² E.g., Abū'l-Fidā' 1840, 111; al-Kutubī 1981, 98; al-Maqrīzī 1911–1927, 61; al-Nūwayrī 1964, vol. 1, 243. See Margariti (2011, 107) for a discussion of the translation of *furda* as “clearing house” or “entrepôt.”

⁸³ Al-Ḥamawī 1955, vol. 4, 367; and see Guo 2004, 29.

⁸⁴ Jazm 2003–2005, 492. This manuscript, entitled *al-Ḍaftar al-Ḥalīfī al-Sultānī al-Muzaffarī*, is in a private collection in San'a'. It contains one of the few known references to the port of Quseir, discussed in chapter 1. I am grateful to Daniel Varisco for providing me the reference to the *daftar* and allowing me to cite his unpublished paper on it (2002).

Suez) and noting that it does not get as much traffic as ʿAyḏāb.⁸⁵ He adds that the rise of al-Tūr in the Sinai (in the last decades of the fourteenth century) precipitated the decline of both ʿAyḏāb and Quseir al-Qadim.⁸⁶ Qalqašandī also firmly places Quseir on the Red Sea to Nile Valley trade route; he details that from Quseir goods are taken to Qūs and from Qūs to the funduq of the Kārim in Fuṣṭāṭ.⁸⁷

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. As part of Napoleon's Expedition, François-Michel de Rozière made a detailed study in 1812 that included descriptions of the soil and the formation of the harbor.⁸⁸ The first comprehensive geological study was undertaken by Thomas Barron and William F. Hume,⁸⁹ and has since been updated by numerous geologists.⁹⁰ The most recent summary description of the Quseir area's geology can be found in the University of Southampton preliminary report.⁹¹

ARCHAEOLOGICAL TREATMENTS

Quseir al-Qadim was first visited by the University of Chicago in 1977, and studied between 1978 and 1982 (fig. 3). 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.

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 surrounding landscape and the modern town. They investigated both the Roman and the Ayyubid-Mamluk towns and harbors.

Initial mapping and survey of undisturbed areas of the 10 hectare site suggested 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.⁹²

⁸⁵ Garcin 1976, 399. Jean Maspero and Gaston Wiet gathered many of these Arabic references to Quseir as the port (*furda*) of Qūs in their *Matériaux pour servir à la géographie de l'Égypte* (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.

⁸⁶ al-Qalqašandī 1964, vol. 3, 464–66.

⁸⁷ al-Qalqašandī 1964, vol. 3, 464–66. The Kārim, or Kārimī, 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 Maqrīzī. Medieval almanacs list them among the many merchant groups (e.g., Mogadishans, Egyptians, Hadramis, Hurmuzis, Qalhatis, Ceylonese, Somalis, etc.) arriving at or departing from the Yemeni port of ʿAden 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 long-distance trade (see references in Meloy 1998, 71), new evidence from the aforementioned daftar of the Rasulid sultan al-Mālik al-Muẓaffar suggests his policy of preventing Kārimiya owning ships should 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 describe individuals or their ships, al-Kārim, Kārimī, Kārimiya is unknown, likely not Arabic, and has prompted much discussion, as has the origin of the group itself (e.g., Ashtor 1983; Fischel 1958; Garcin 1978; Goitein 1958; 1968; Issawi 1970; Labib 1952; 1970b; Mortel 1994; Wiet 1955). For a thorough review of scholarship on the Kārimī 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).

⁸⁸ de Rozière 2004.

⁸⁹ Barron and Hume 1902.

⁹⁰ Beadnell 1924; Büdel 1952; see discussion in Prickett 1979; Said 1962; Sandford and Arkell 1939; Youssef 1949; 1957.

⁹¹ Peacock and Blue 2006a.

⁹² Whitcomb and Johnson 1982b, 5.

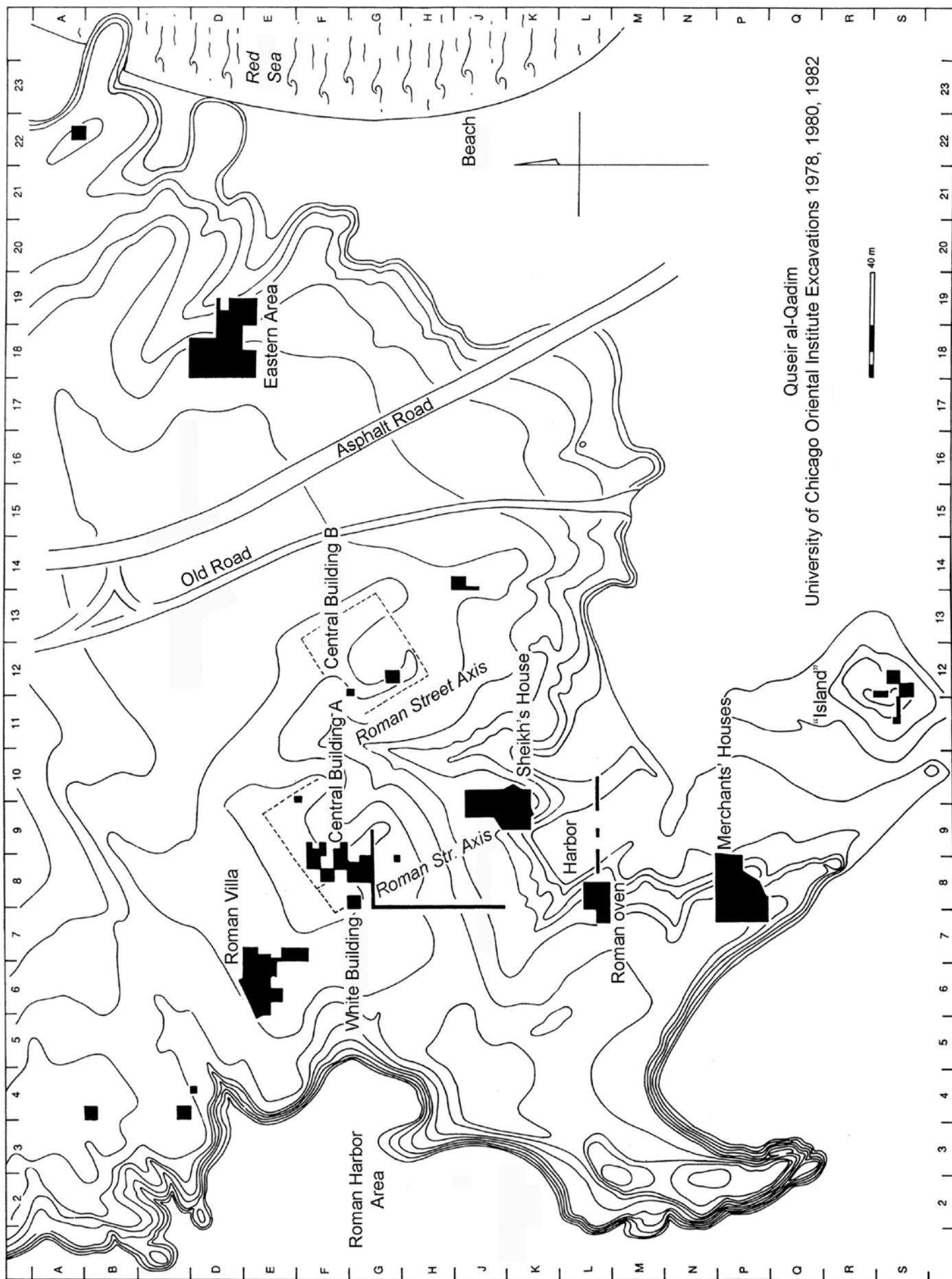


FIGURE 3. The University of Chicago's Excavations at Quseir al-Qadim in 1978, 1980, and 1982 (after Meyer 1992, fig. 2).

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.⁹³

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 (pl. 71:b). 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 (pl. 72:a). 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 mudbrick built-in furniture, known as *mastabas*. Wooden doorsills and door sockets were also preserved in situ.⁹⁴ One hundred fragments of Arabic documents and letters written on paper were found in this complex. Although most of these await publication, three of them 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 AH 615/1218 CE.⁹⁵

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,⁹⁶ and over another

part of it an Islamic room was excavated (trench G8b). The latter was likely part of a house and contained several hearths made of pots, inserted into the floor and containing ashes;⁹⁷ 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.⁹⁸ South of this Islamic trash and ephemeral occupation debris lay over Roman remains in squares H8a, J8a, and J8c crossing the center of the site.⁹⁹ About 70 m east of Central Building A, Central Building B also proved to have thin Islamic remains overtop, perhaps domestic occupation.¹⁰⁰ South of this trench J14a contained Islamic dumps over a series of Roman rooms.¹⁰¹

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 mudbricks 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.¹⁰² The large oven appears to have been simply built over in the Islamic period.¹⁰³ The finds in this area were rather rich in textiles and included eight fragments of resist-dyed cottons imported from India,¹⁰⁴ 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 grounds and additional domestic structures were found on the periphery of the site, and represent a later occupation than that in the central

⁹³ Whitcomb and Johnson 1982b, 7.

⁹⁴ Whitcomb and Johnson 1979, 49–56.

⁹⁵ Dols 1979, 248; Frantz-Murphy 1982.

⁹⁶ Trench F10a, Whitcomb and Johnson 1979, 32.

⁹⁷ Whitcomb and Johnson 1982b, 39.

⁹⁸ Vogelsang-Eastwood 1989, nos. 50, 56, 64.

⁹⁹ Whitcomb and Johnson 1982b, 43.

¹⁰⁰ Whitcomb and Johnson 1982b, 44.

¹⁰¹ Whitcomb and Johnson 1982b, 45–46.

¹⁰² Whitcomb 1996, 754–55; Whitcomb and Johnson 1982a, 35.

¹⁰³ Whitcomb, personal communication, December 2006.

¹⁰⁴ RNs 921, 924, 926, 928–29, 932–34, Vogelsang-Eastwood 1989, nos. 59–63, 65–67.

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."¹⁰⁵ 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) seems to have been a *bārāstī* or *arīsh* hut, built of low mud-brick walls over which superstructures of timber and matting were raised.¹⁰⁶

A large neighborhood on the beach about 360 m northeast of the Sheikh's House was referred to as the "Eastern Area," and represents 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 rectangular courtyards and rooms, built of stone with mudbrick alterations (pl. 72:b).¹⁰⁷ Surface remains to the north and south suggest two additional neighborhoods, separate from but connected to the one excavated.¹⁰⁸ The rich finds included Chinese porcelains and celadons dating from the fourteenth century and later,¹⁰⁹ Indian batik-printed textiles in greater quantities than anywhere else on the site,¹¹⁰ Indian and Yemeni ceramics, and East African paddle-stamped pottery.¹¹¹

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.¹¹²

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, wooden objects, 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 previously published, however, and there is no preliminary report. Carol Meyer and Donald Whitcomb did publish the 1982 glass, and specialist reports were prepared on numismatic, faunal (avian only), and macrobotanical finds.¹¹³ The numismatic report has been incorporated into the current publication, and new specialist reports have been prepared on the macrobotanical and avian faunal remains. This current work aims to synthesize the specialists' work with new analyses of the ceramics, the stratigraphic sequence, the excavated texts, and architectural remains.

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.¹¹⁴

Several areas of Islamic-era 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,

¹⁰⁵ Whitcomb and Johnson 1979, 57, 61.

¹⁰⁶ Also see King 2001, 85–86, 90; Whitcomb and Johnson 1979, 39, 43–44.

¹⁰⁷ Whitcomb 2004.

¹⁰⁸ Whitcomb and Johnson 1982b, 117–31.

¹⁰⁹ Carswell 1982.

¹¹⁰ Vogelsang-Eastwood 1989, 34–51, 86–111, 16–21, 23, Nos. 2–44, 47–50.

¹¹¹ Whitcomb and Johnson 1982b, pls. 37, 41:e–f, 45, 46:j–k.

¹¹² Whitcomb and Johnson 1979, 57–59.

¹¹³ Meyer 1992; Whitcomb 1983a.

¹¹⁴ Blue et al. 2006, 115.

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 *sebāḥ* adjacent to the western corner, a hoard of over 500 coins and coin fragments were unearthed that date between 1180 and 1238 CE, falling squarely in the Ayyubid period. Other finds within the *sebāḥ* 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, a 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."¹¹⁵ 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 Abū Mufarrij.¹¹⁶

Traces of domestic activity are also seen in Trench 3,¹¹⁷ and possibly in Trench 4,¹¹⁸ Trench 2B,¹¹⁹ and Trench 13.¹²⁰ An animal pen containing tethering pegs and quantities of dung, camel skulls, and goat hair was excavated in part of Trench 2B.¹²¹ About 15 m north of Trench 2B, Trenches 2A and 2D contained a poorly preserved house, in which several pieces of paper with Arabic script were

found.¹²² Domestic activity is confirmed by cooking pots and hearths, while small-scale leatherworks is indicated by over 200 fragments of leather and leather patches in one locus of Trench 2D, some of which were worked. Leather finds were also frequent in Trench 2A.¹²³

Along with the leather works, other local industries were possibly matting and basketry production, and textile dyeing and fulling.¹²⁴ Evidence of the latter has been uncovered in Trench 2C, in its last phase of use.¹²⁵ Industrial activity of an unclear nature was detected in Trench 16A¹²⁶ containing an oven or kiln, pits filled with ash, mudbrick basins, pieces of furnace lining, and burnt artifacts.¹²⁷

A possible caravanserai or *wikāla*, 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 made up of a series of sixteen small rooms of identical size was excavated in Trench 9.¹²⁸

Trench 5, northwest of the Sheikh's House may contain a government institution of the town, and if so the only one excavated to date. The building is relatively large and well-built of stone and mudbrick, with stone or brick floors, painted plaster, and a carved limestone screen. Some undisclosed quantity of paper documents were recovered, including one dated 1300 CE.¹²⁹ Ceramics include many glazed and imported wares like those found in domestic Structure 15.¹³⁰

The University of Southampton also replicated the University of Chicago's findings in the eastern

¹¹⁵ Thomas and Masser 2006, 138–39. The ceramics are not likely to be early Islamic, as the ceramic reports give no indication of early Islamic pottery found in these excavations, so perhaps the authors mean "early" as in Ayyubid, rather than Mamluk (see, e.g., Bridgman 2002; 2009; 2011).

¹¹⁶ Regourd 2014.

¹¹⁷ Bridgman 2006.

¹¹⁸ Blue 2006c.

¹¹⁹ Copeland 2006, 124.

¹²⁰ Agius and Masser 2006.

¹²¹ Copeland 2006, 124.

¹²² Poppy and Flatman 2006, 168.

¹²³ Flatman and Thomas 2006, 162–63; for a catalog of finds, see Phillips 2011; Poppy 2006.

¹²⁴ Handley 2011b, 319.

¹²⁵ Poppy and Flatman 2006, 166.

¹²⁶ Blue, et al. 2006.

¹²⁷ Blue et al. 2006, 111.

¹²⁸ Blue et al. 2006.

¹²⁹ Beadsmoore and Walsh 2006.

¹³⁰ Thomas and Masser 2006.

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.¹³¹ The plan is more rectilinear than that of the University of Chicago's Eastern Area, however, and there is only one phase of occupation in contrast to the successive reuses of the area uncovered in trenches E18–F19. Northeast of this Trench 1A expanded the University of Chicago's trench A22d to complete excavation of the possible shrine and a Muslim necropolis of over eighty-five individuals. There is reason to suspect that the burials were made in the aftermath of a natural disaster or an outbreak of disease.¹³² 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.¹³³

The University of Southampton published preliminary reports of each season on the Department of Archaeology's website, and both volumes of the excavation reports are available in print. The first volume contains overviews of the regional survey and excavations of the Roman and Islamic towns and harbors,¹³⁴ while the second volume treats small finds, epigraphy, burial grounds, ship remains, and includes a discussion of the trade and economy of Quseir al-Qadim in both the Roman and Islamic periods.¹³⁵

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. Andreas Kaplony has also taken up the work of publishing texts from these excavations, and has provided editions of twenty-five documents.¹³⁶ Dionysius Agius

and Anne Regourd are working on the Arabic texts from the University of Southampton excavations.¹³⁷ Most of the letters excavated by the University of Southampton were found in trash pits and dumps and therefore cannot be connected with a specific occupational area at the site.¹³⁸

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 A 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 and mercantile complex sitting atop a low rise which overlooks an area of mud flats adjacent to the shore of Quseir bay (pl. 70:a). The complex consists of two adjoining houses, their associated storerooms, and a passageway or narrow courtyard that provides access to both the houses and warehouse (pl. 73:a). 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 (possibly 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 also in their own words.

¹³¹ Phillips 2006.

¹³² Macklin 2006; 2011.

¹³³ Bridgman 2002.

¹³⁴ Peacock and Blue 2006a.

¹³⁵ Peacock and Blue 2011.

¹³⁶ Kaplony 2010; 2014.

¹³⁷ Agius 2005; Regourd 2003; 2011; 2014; Forthcoming.

¹³⁸ Regourd, personal communication, April 2006.

LOCATION AND LAYOUT

Excavations have revealed that the Ayyubid-Mamluk town was rather large, extending not only over the former coral reef but down into the silted-up Roman harbor.¹³⁹ 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 area known as the Merchants' Houses excavated by the University of Chicago.¹⁴⁰ 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, and occasional reuse of Roman walls as well.¹⁴¹ 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.¹⁴² David Peacock surmises entry to the settlement must have been from the north, over the high ground (pl. 70:a) rather than in the *sebāḥ*-filled Roman harbor at the south and west (pl. 71:a).¹⁴³ Martha Prickett identified a footpath in this direction that eventually leads to the Wadi al-^cAnz or the Wadi Nakheil, the main routes to the Nile Valley.¹⁴⁴ Few streets or lanes have been uncovered, however, and the formal layout or grid of the town is not known. Information in some of the excavated documents indicate that institutions existed in the town which 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.¹⁴⁵ 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 mudbrick upper courses, although some have upper courses of limestone and coral block, and are preserved to a maximum height of about 1.5 m. Houses of similar plan although earlier in date have been excavated in the Mahra quarter in Fustāṭ by K. Sakurai and Mutsuo Kawatoko.¹⁴⁶ Fustāṭ-C houses also have some similarities to the Quseir al-Qadim houses in their use of varied construction materials and number of rooms—two or three, laid out in a linear fashion—but they differ largely in their linear plans and the presence of latrines in the front room, as well as plumbing systems even in the second stories.¹⁴⁷ Some similarity of plan can also be seen in buildings inside the Raya/al-Tūr 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 among units are clear.¹⁴⁸

The houses in the Sheikh's House compound do not connect directly, but each is entered from the same corridor (D) that also provides access to a row of storerooms across from the houses. This row of storerooms comprises a warehouse (Ar. *šūna*), often referred to in the Arabic texts found at the site.¹⁴⁹ 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, indicates the stored goods sent to the port of Quseir were indeed kept "in a safe place" as requested by at least two of the senders of goods in the shipping notes.¹⁵⁰

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 (fig. 4). An addition room, E, lies west of Room C and appears to have

¹³⁹ Peacock and Blue 2006a, 60.

¹⁴⁰ Peacock and Blue 2006a, 6; Whitcomb and Johnson 1979, 49–56.

¹⁴¹ Whitcomb and Johnson 1979, 37.

¹⁴² Pl. 73:b; Blue 2007, fig. 13; Peacock and Blue 2006a, figs. 1.2, 4.14.

¹⁴³ Peacock 2006, 9, fig. 2.1.

¹⁴⁴ Prickett 1979, pls. 77, 84.

¹⁴⁵ Cf. Goitein 1983, 63–70.

¹⁴⁶ Kawatoko 2005c, fig. 2; Sakurai and Kawatoko 1992, pl. II-3-1.

¹⁴⁷ Kubiak and Scanlon 1989, 11–31, plan I.

¹⁴⁸ Kawatoko 2003, 2–3, pls. 8–9.

¹⁴⁹ Kaplony 2010, 101, n. 25; cf., by contrast, Goitein 1983, 74–75.

¹⁵⁰ Guo 2004, Texts 4, 12; Hiebert 1991, 157.

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.¹⁵¹ This vestibule gives entrance to living Room C to the west, to Storeroom F to the east, and to the roof via a staircase straight ahead. Behind the stairs is another small room, D, which held a hearth, but the location of the entrance to this room is unclear.

Wooden thresholds are found in other domestic structures of the Ayyubid period found on the site.¹⁵² They are also found in Fuṣṭāṭ-C, occupation of which is dated eighth to eleventh centuries,¹⁵³ and inside the fort at Raya/al-Tūr, which was built in the sixth century and used until the tenth century CE.¹⁵⁴

Storerooms E and F lie opposite the North House and are entered off Corridor D. Storeroom F is immediately adjacent to and communicates with Corridor F, which extends eastward from the vestibule of the South House. In its second phase of use, Storeroom F extended southeast 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.

Storeroom C lies directly north of Storeroom E, and Storeroom B is adjacent to the east. As no trace of a western wall was discovered for this room (Storeroom C), it is interpreted as an open courtyard. Excavations of the eastern extent of Storeroom 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 Storeroom B was built after Storeroom C.

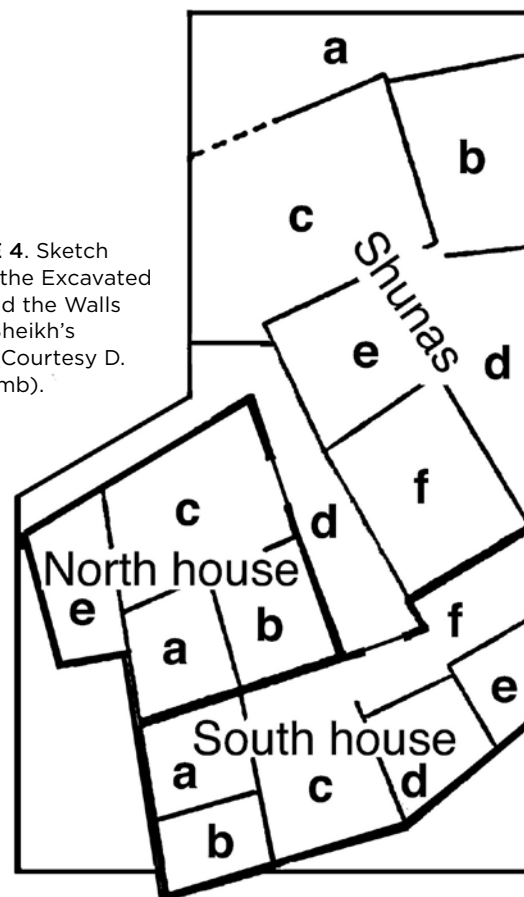


FIGURE 4. Sketch Plan of the Excavated Area and the Walls of the Sheikh's House (Courtesy D. Whitcomb).

The full extent of Storeroom D, directly east of Storerooms E and F, is not known because the eastern extent of it was never excavated. The high 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.

EXCAVATION OF THE COMPLEX

In 1978, the first season of excavations, the site of Quseir al-Qadim was gridded in 20 × 20 m squares, numbered 1–23 from west to east and lettered A–S from north to south. Each 20 × 20 m grid square was further subdivided into four 5 × 5 m trenches, designated by lower case letters a–d clockwise beginning with the northwestern square. Within each 5 × 5 m trench, for example K9b (the northeastern square in the 20 × 20 grid K9), the excavated units, or loci, were

¹⁵¹ Cf. Goitein 1983, 62–63.

¹⁵² Copeland 2006, 124; Whitcomb and Johnson 1979, 51, 53.

¹⁵³ Kubiak and Scanlon 1989, figs. 13, 34.

¹⁵⁴ Kawatoko 2003, pl. 23:3.

numbered from 1 to infinity: K9b-1, K9b-2, K9b-3, etc.;¹⁵⁵ the walls were 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 × 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 the winter of 1978 (pl. 65). Ann Roth supervised the excavations of the K9b trench, on occasion aided by Janet Johnson, co-director of the expedition, or Richard Jasnow, staff member. Roth's team usually consisted of four hired workers and three crew members, the latter of whom rotated among the trenches. The crew members were Richard Jaeschke (conservator), Hanna Boulos Tadros (assistant draftsman), and Samir Ghobashi Omar (representative of the Egyptian Organization of Antiquities). The remainder of the complex was excavated in the winter of 1982 over a period of about three weeks (pls. 66–69). 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. Trench supervisors included Gillian Eastwood (textiles specialist), Fred Hiebert (specialist on wood and wooden artifacts), Janet Johnson (co-director), and Lisa Heidorn (staff member), working with twelve hired laborers.

Each staff member kept a notebook recording the daily activities in the trench, the names of the crew working that day, measurements, elevations, drawings (plans, sections, and object drawings), and polaroid photographs (p. 74a). The director kept a notebook as well, recording his observations, questions, and interpretations of the data as they arose, along with topographic plans of the entire site. In the 1982 season, locus sheets were kept for each trench, recording for each locus its description, stratigraphic location, and material contents, with references to all related documentation such as notebook pages and photographs. Also in the 1982 season, separate daily record sheets

were kept for each trench for various types of small finds including pottery, cloth, glass, metal, wood, rope, paper, leather, vegetal matter, and even insects, in which the objects were described, measured, and often sketched. For both seasons, a separate registration book recorded all small finds from the entire site, organized by the date on which they were recorded.

In 1978, when twenty-three loci were identified and excavated, sieving of every bucket of dirt was attempted, in order to maximize object collection. According to the field notebooks, this strategy was only occasionally abandoned when the dirt appeared to be sterile. In 1982, the decision to screen was made by locus, of which 116 were excavated (table 6). At least 70 percent were screened in some measure. Of the 116 loci, forty-one (35 percent) were completely sieved (that is, 100 percent of buckets), ten (8 percent) were not sieved at all, and three (2.5 percent) were sieved at a rate of 40 percent or 50 percent. For the remaining thirty-seven (32 percent) that were sieved, it was not recorded by what percent of buckets. On twenty-five locus sheets (22 percent of loci), there was no indication as to whether any buckets were sieved. It seems that loci under floors were almost always 100 percent screened.

In addition to the specialists mentioned above who were involved in excavating the Sheikh's House, Wilma Wetterstrom was on staff in 1982 to collect and analyze macrobotanical remains from the entire site of Quseir al-Qadim (see chapter 3). Steven Goodman, a specialist on avian faunal remains, was on hand to analyze those (chapter 4). There was no specialist available for the remainder of the faunal objects. Carol Meyer participated in the 1982 season and later produced the final report on the Roman and Islamic glass from all seasons of excavations at Quseir al-Qadim.¹⁵⁶

Excavations were conducted in the mornings and some afternoons, with assessing, cleaning, photographing, and registering of finds conducted in the afternoons and on weekends (pl. 74a). At the end of each season the finds were sorted, with a representative sample of each object type kept for publication and the remainder discarded on site. All of the paper and wooden objects, however, were kept. As much as possible, preparations for publication were conducted during the excavation season, since not all objects

¹⁵⁵ Whitcomb and Johnson 1979, 11.

¹⁵⁶ Meyer 1992.

Quseir al-Qadim, 1982
The Sheikh's house

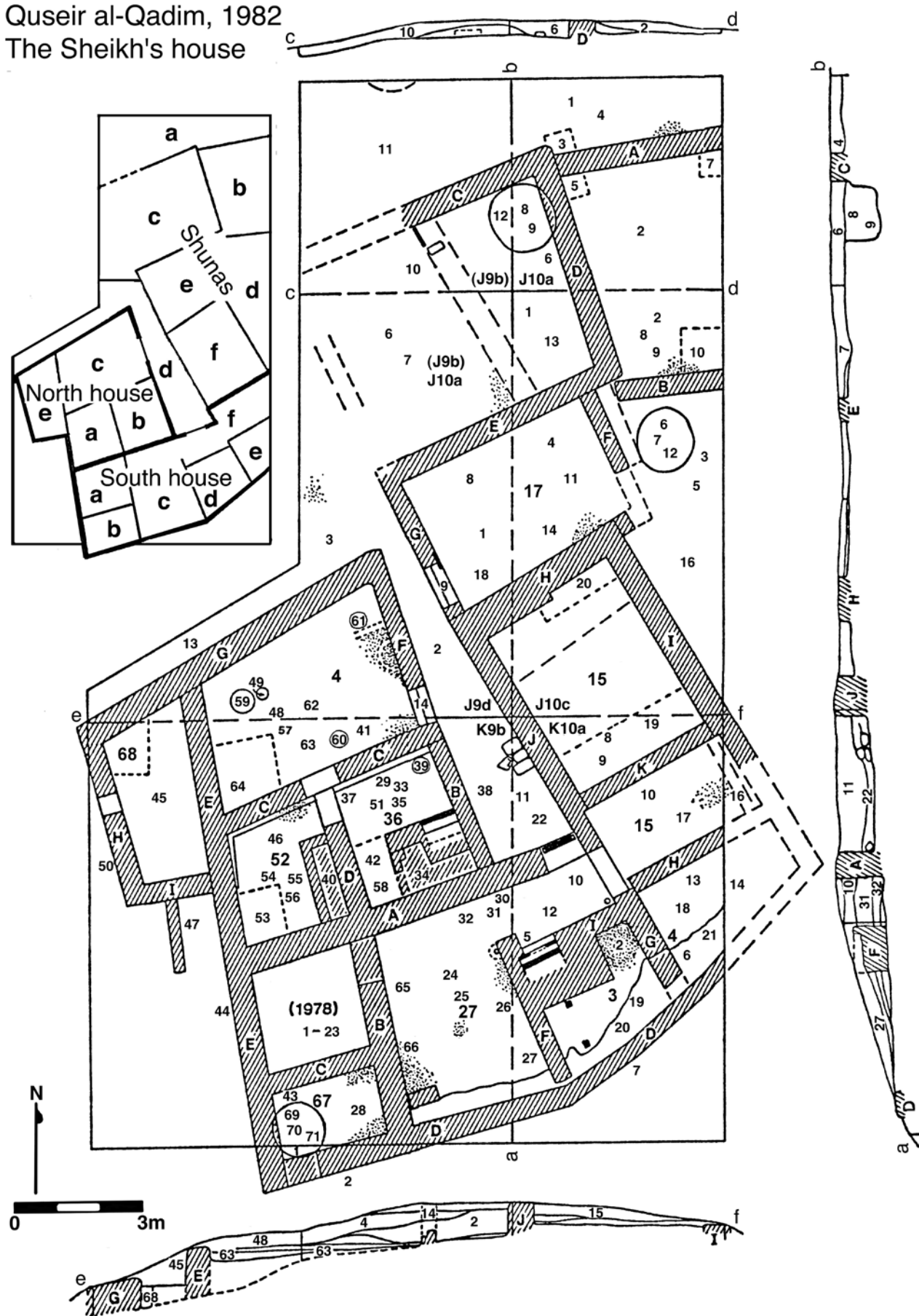


FIGURE 5. Block Plan of the Sheikh's House Showing Trench and Locus Numbers (Courtesy D. Whitcomb).

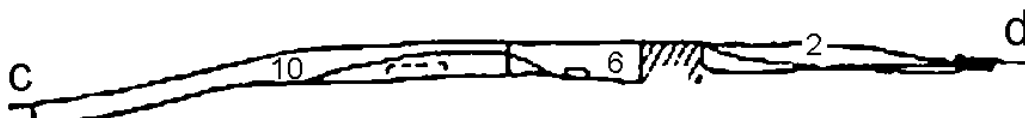


FIGURE 6. North Section of J10a, through Storerooms B and C (Courtesy D. Whitcomb).

could be removed from Egypt for study. For example, measurements were taken, drawings were done, and photographs were made of all objects. At the end of the season, divisions were made between the excavators and the representative of the Egyptian Organization of Antiquities. Those objects set to remain in Egypt were boxed up and stored at a facility in Qenā on the Nile. Some years later, these were moved to Cairo for storage at the Museum of Islamic Arts (coins, beads, glass, paper, and wood) and the Egyptian Museum (coins, pottery, textiles, netting, matting, rope, bone, and metal objects). The remainder, mostly pottery, wooden objects, glass, and coins, were taken to the Oriental Institute of the University of Chicago and stored either in the archaeology laboratory or the storerooms of the Oriental Institute Museum, without being accessioned to the museum.

For the sake of clarity, the account of the excavations of the Sheikh's House that follows is by room rather than by trench. 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 from the 1978 and 1982 seasons. The accompanying site plan (fig. 5), provided by Whitcomb, is a block drawing showing outlines of walls, mudbrick 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 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 and excavation photographs are dispersed throughout the text according to the area discussed.

THE WAREHOUSE / STOREROOMS

Area A lies outside the Sheikh's House proper, to the north. Although its boundaries were not excavated, the density of finds was similar to that of other storerooms, with an average of 1.2 pottery sherds per cubic m, so it is likely to be a storeroom (pl. 75a). (Compare an average of 2.1 sherds per cubic m of

excavated soil in Storeroom B and 1.5 sherds per cubic m in Storeroom C.) Area A 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. Removal of locus J9d-11 in the western trench, 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.

Storeroom 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 Storeroom B abuts Wall D of Storeroom 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 conclusion that this storeroom was built after Storeroom 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, and was 15–20 cm deep in the north and 10 cm deep in the south (fig. 6). 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.

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 floor matting and sand and contained a small scrap of paper amulet and a document tied with string (RNs 985a and 984b¹⁵⁷). The debris was excavated as Loci J10c-8, J10c-9, 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 informal structure built over matting, never had a deliberately built floor, but mats were spread out over the ground to use as flooring.¹⁵⁸

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.

Storeroom C is an open area directly west of Storeroom 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 unwallled 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, and 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 × 15 × 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 cement-like salt-hardened dirt (caliche) 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 discernible, 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.

A large round pit was discovered under Locus J10a-6 in the northeast corner of the room. 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, see chapter 4), 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 reconstructible glass jar, a glass cup with gold-leaf prunts, and a wooden lock that would have been used with a metal key (RN 504).¹⁵⁹ Locus J9d-12 also contained eight fragments of papyrus with Greek inscriptions (RN 1161).

Finds in the upper stratum of the room contain 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.

Storeroom D is south of Storeroom B and east of Storerooms 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

¹⁵⁷ See Guo 2004, 2, 80, pl. 4.

¹⁵⁸ Cf. floor mats in twentieth-century Fujaira, Ziolkowski and Al-Sharqi 2005, 193, figs. 21–22.

¹⁵⁹ See Hiebert 1991, 57, fig. 10, 135.

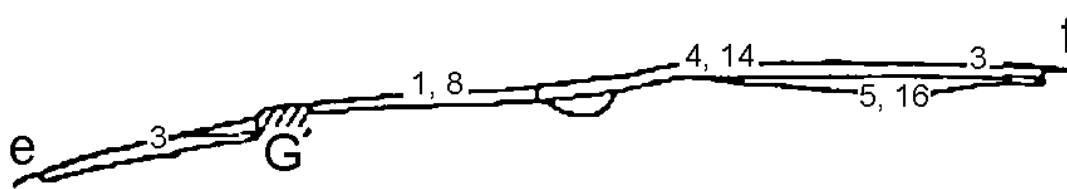


FIGURE 7. North Section of J9d, through Storeroom E and the North End of Corridor D (Courtesy D. Whitcomb).

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 mudbrick 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 Storeroom 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 Storeroom 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 Storeroom 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-P8.¹⁶⁰

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

The density of finds in this area was on the low end of the scale, 0.1 sherds per cubic m compared to 1.2 sherds per cubic m in Area A, 1.5 in Storeroom C, and 2.1 in Storeroom B; therefore, Storeroom D may not have been a formal storage area.

Storeroom E is directly south of Storeroom C, the storeroom at the northernmost end of Corridor D,

across the corridor from Room C of the North House. Storeroom 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, along with its placement, suggest the storeroom was once a three-walled room. Its western wall, G, abuts Wall H of Storeroom F; Storeroom F was built before Storeroom E. The depth of accumulation to bedrock in this room was 20–25 cm (fig. 7).

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 (fig. 7). A small patch of baked brick was found under Locus J10c-14, near the center of the room. Under Locus J10c-4, north of Locus J10c-14, another layer of sand and matting, designated 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 AH 633/1235 CE.

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. It contained a half dirham (RN 696) dating 1242–49 CE (pl. 81b), 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 patch containing carbonized grain. A 1.5 × 1.5 m test trench, Locus J10c-18, was dug through this floor in the southwest corner. A large sack made of matting found under the floor was removed; underneath it was a thin layer of sand resting on bedrock, containing a fairly high density of small finds and date pits, the only evidence of another

¹⁶⁰ Whitcomb and Johnson 1979, 53, pl. 17.

phase of use in this room. 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 *miftāh al-ḥāḡḡ baraka*, “key of Ḥājj Baraka.”¹⁶¹ 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.

Storeroom F, south of Storeroom E, is a long hall that runs north–south, extending to and connecting with the eastern end of the South House (fig. 5). 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.

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 × 17 × 6, 23 × 11 × 5, and 22 × 8.5 × 8 cm). 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 × 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 (pl. 84b), 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 centimeters of which had been revealed by Locus K10a-9. The trench produced 30 cm of sand, Locus J10c-19, down to bedrock, which contained three decipherable documents,¹⁶² pottery, glass, nails, textiles, matting, and rope. The removal of this locus revealed more of Wall K, parallel to Wall H, but this portion was covered by the plaster floor. The two wall stubs represent an earlier partitioning of this space, later dismantled and plastered over in order to enlarge the room.

AREAS OUTSIDE THE NORTH HOUSE

This section describes the area southwest of Storeroom 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 Storerooms 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 0.5 m wide and 7 m 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

¹⁶¹ Hiebert 1991, 157, fig. 10.

¹⁶² Guo 2004, 3, 43, 112, 306–7.

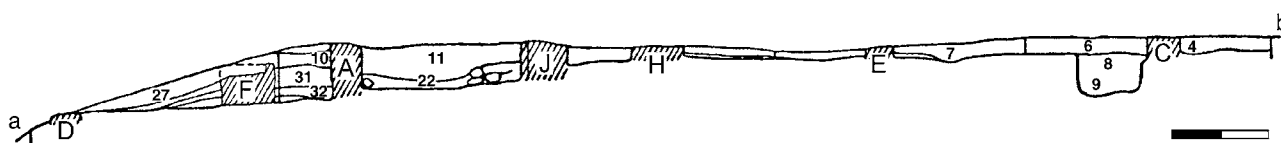


FIGURE 8. West Section of J10c, through Storerooms C, E, and F, Corridor D, South House Vestibule F, and South House Room C (Courtesy D. Whitcomb).

cubic m 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 × 100 × 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.

THE CORRIDOR (D)

This area is a long north–south passageway between the two building complexes, the houses lying to its west and south, and the storerooms on its east. It is bounded by walls F and B to the west, A to the south, and both J and G to the east, and is open at the north end (pls. 76:a–b, 77a). 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 (pl. 2). 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 × 12 × 5 cm to 21 × 11 × 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 mudbrick wall (pl. 77:b).

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, matting (pl. 82a), 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 lying atop chicken bones and other 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 (pl. 75:b). 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 (fig. 8). This floor, although badly deteriorated, is a continuation of the floor of Locus K9b-36 in Room B to the west.

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 mudbrick 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 from the east down to the west and was 35–105 cm deep, was composed of caliche in the top 15–20 cm and deteriorated mudbrick mixed with large pieces of ceiling matting and loose bundles of reeds. The latter were especially prevalent in Loci K9b-41 and 48. Food remains in these loci included four chicken bones (3, 5–6), twenty-one hazelnuts, and much smaller quantities of walnuts, pistachios, pomegranates, apricots, citrus, and a piece of gourd (see tables 17, 19).¹⁶³ Two dated letters were also unearthed here: RN 967b from Locus J9d-4 dated AH 612/1215 CE, and RN 1017g from Locus K9b-48 dated AH 626/1228 CE.¹⁶⁴ 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. It was 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 water skin or a *baṭṭa*-container (mentioned in the texts and discussed in chapter 5), were found. To the east, in front of the threshold, a mat was found with several fragments of celadon stone-ware 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: 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. Among the thirty-six paper fragments was an Arabic letter on paper dated between 1224 and 1231 CE, and a drawing or a map. Below the floor of K9b-48, 10 cm of plaster and mudbrick detritus was excavated as Locus K9b-57. Excavation of this locus 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). Other objects were of a variety of materials such as ceramic, glass, metal, leather, tortoise shell, matting, and rope. Organic remains consisted of bones and date pits. 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.

Below the surface of the upper floor (K9b-48) and adjacent to pit K9b-49, another pit, 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), as well as organic matter (leaves and seaweed), but almost no dirt. The worked wood included an incised acacia bowl and a carved lid of unidentified wood (RNs 511–512).¹⁶⁵ 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. It seems to have been intended as a storage pit, comparable to those found in contemporaneous late Christian Qaṣr Ibrīm, 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 in diameter and 1–1.5 m in depth located outside houses were usually lined with several pieces of basketry or matting.¹⁶⁶ Those excavated in the Qaṣr Ibrīm 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

¹⁶³ See also Wetterstrom n.d., table 2.

¹⁶⁴ Guo 2004, 3, 245–46, Text 51.

¹⁶⁵ See Hiebert 1991, 143, 145, 147.

¹⁶⁶ W. Y. Adams 1996b, 63–64.

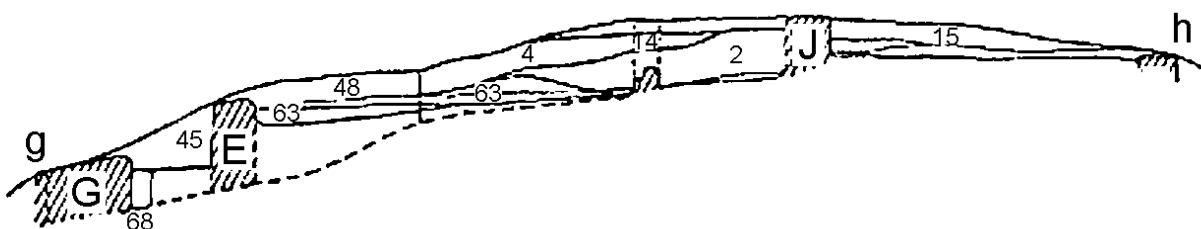


FIGURE 9. North Section of K10a, through North House Rooms E and C, Corridor D, and Storeroom F (Courtesy D. Whitcomb).

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.”¹⁶⁷

The lower plaster floor, at the bottom of 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 (fig. 9), contained a square-cut silver coin with a date range of 1246–1248 CE (RN 694; pl. 81a). 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 Qurʾān. 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 mudbrick wall founded on stones laid on dirt, as it is in the eastern extent of this wall in Room B. Wall D is a mudbrick 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 mudbricks measuring 26 × 12 × 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, 23¹⁶⁸) 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 (fig. 10). 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

¹⁶⁷ W. Y. Adams 1996b, 45.

¹⁶⁸ See also Wetterstrom n.d., table 2.

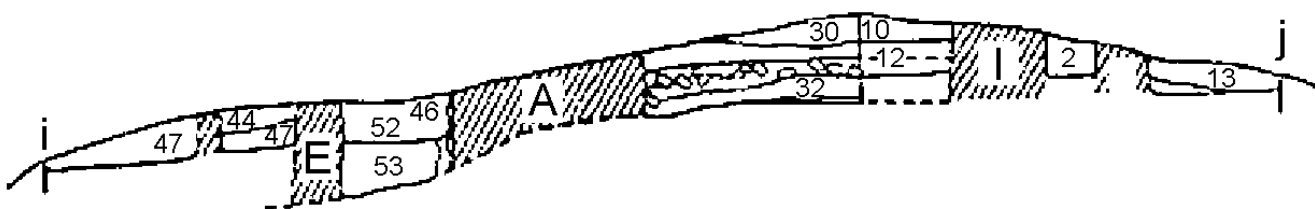


FIGURE 10. North Section of K9b, Right to Left through the North House Exterior, North House Room A, South House Room C, South House Vestibule F, and South House Rooms D and E (Courtesy D. Whitcomb).

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.

A 1×1.2 m test trench was laid to probe beneath the plaster floor in the southwest corner of the room. Locus K9b-53, a layer of fine compacted brown dirt, contained an extremely dense concentration of sherds (23.8 sherds per cubic m) 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 (fig. 10).

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 m (including numerous Roman amphorae as well as Black on Yellow glazed ware and turquoise glazed Marl 4 ware, see chapter 2), was excavated as Locus K9b-55. The remains of a medicinal plant, the Jericho rose, were found in this locus, along with seven hazelnuts (table 17¹⁶⁹). Excavation of Locus K9b-55 revealed that the mastaba was founded below the lowest floor level. A tall, round-bottomed, handmade Nubia 2 jar was found buried upright in front of the mastaba, its rim broken off just under the plaster floor (pl. 78:a). 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 Qaṣr Ibrīm in Nubia, used for storage.¹⁷⁰ 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 Qaṣr Ibrīm, although no contents were reported for this jar.¹⁷¹

Below Locus K9b-55, a loose brown layer of debris 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 m (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 identification of the deposit as refuse was emphasized by the presence of two whole fish.

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 (fig. 10). Below the lowest floor the extremely high density of finds suggests a refuse dump against the northern wall of the South House, which was eventually leveled to build the earliest floor.

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 mudbrick and founded just below the floor; Wall C, the upper courses of which are mudbrick, has a large stone foundation that sits

¹⁶⁹ See also Wetterstrom n.d., 3, table 2.

¹⁷⁰ E.g., Houses 177, 849; W. Y. Adams 1996b, 49, 57.

¹⁷¹ W. Y. Adams 1996b, 49.

on dirt just above bedrock; and mudbrick Wall B is founded on the floor of this room, 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 among the brick fall and matting, along with a leather pouch possibly containing carob pods. Locus K9b-33 contained food refuse in the form of four chicken bones and one bone of a Sand Partridge (see chapter 4). Excavation of this locus 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, one stone, and fourteen whole fruits of *Terminalia*, a medicinal fruit that is found in several other rooms of the Sheikh's house (see Wetterstrom's discussion in chapter 3). Removal of Locus K9b-33 also revealed Locus K9b-36, 50–55 cm of fine, compacted light brown soil down to the compacted earthen floor, which like K9b-33 contained matting and blocks of mudbricks along with faunal remains of nearly a whole chicken, six bones from a Crowned Sandgrouse, twenty-one hazelnuts, eight *Terminalia* fruits, and two fragments of pomegranate rind.¹⁷² A shallow pit (33 × 42 × 12 cm) was dug through the floor in the northeast corner of the room and was excavated as Locus K9b-39. It contained a globular half dirham of al-Kāmil Muḥammad (RN 683) dating 1218–1238 CE, 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 (70 × 50 × 2–3 cm), and was excavated as Locus K9b-37. 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 m. 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 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 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, which was very difficult 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 (>0.1 sherds per cubic m). Below it a 1.2 × 1.2 m test trench in the northwest corner of the room revealed 40 more cm of caliche and mudbrick debris to bedrock. Finds in this lower stratum, Locus K9b-68, yielded a greater concentration of small finds (0.6 sherds per cubic m), including a stone mano or 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.

THE SOUTH HOUSE

Corridor/Entryway F refers both to the vestibule inside the entrance to the South House and to the area

¹⁷² Chapters three and four; tables 19, 21, 23; Wetterstrom n.d., table 2.

east of it extending into Storeroom 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 Storeroom 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 Storeroom 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 (pls. 78:b, 79:a). 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, probably a small storeroom in the first phase of use of the house. Locus K10a-10, a layer of coarse sand and brick detritus, although predominantly in Vestibule F, extended east into Storeroom 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 Storeroom 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 Storeroom 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 AH 612/1215 CE.

Room C is the largest room of the South House and is 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, likely imported to Egypt (chapter 3). 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. It 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 Terminalia fruits (table 21; chapter 3; Wetterstrom n.d., table 2). Loci K9b-25–27 are interpreted as wall, ceiling, and roof fall lying about 105 cm deep on the floor of the room, which was compact and composed of earth mixed with plaster.

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 (fig. 10). 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 were 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 hearth detectable as a burnt ashy area 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 A, 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 (mudbrick 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 mudbrick 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 *Terminalia*: table 21, chapter 3¹⁷³) 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. K9d-1, however, while 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-Šāliḥ ʿIsmāʿīl and the caliph al-Mustaʿṣim (RN 698), thus dating 1242–1245 CE (pl. 81c). 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 CE, 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 (pl. 79:b). 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 must 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

¹⁷³ See also Wetterstrom n.d., table 2.

and first used for water storage, but the masses of dark organic material and chicken bones (6–7) indicate its subsequent use as 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.¹⁷⁴ 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 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 mudbrick 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.¹⁷⁵

Under floor K9b-9 in the southern half of the room, layers of sand and brick wall collapse 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 (fig. 10). 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.¹⁷⁶ 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 than those in earlier walls.¹⁷⁷ 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 mudbrick 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 mudbrick debris and matting with few artifacts, Locus K10a-3. Locus K10a-3 is identical to Locus K10a-4 excavated in the room to the north, Vestibule/Corridor F. 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. 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

¹⁷⁴ Whitcomb and Johnson 1979, 47–49, pl. 16.

¹⁷⁵ Whitcomb and Johnson 1979, 47–48.

¹⁷⁶ Whitcomb and Johnson 1979, 47.

¹⁷⁷ Whitcomb and Johnson 1979, 49.

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 × 11 × 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 m), containing some fibrous material just below the surface and one of the few resist-dyed textiles found in the Sheikh's House (RN 939).¹⁷⁸ Entrance to this room is unclear and may have been from Storeroom 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. All of the walls are 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 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 plaster 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, Wall H had likely been dismantled to lengthen Storeroom 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.

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, an area measuring 100 × 500 × 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 (0.4 sherds per cubic m). 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 (>0.1 sherds per cubic m). 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 slightly more frequently here than in the other areas external to the compound (0.9 sherds per cubic m), because the southeastern downslope of the site here causes accumulation of artifacts eroding from the upper levels of the Sheikh's House site.

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 *sebāḥ* 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

¹⁷⁸ Burke and Whitcomb 2007; Vogelsang-Eastwood 1989, 115, no. 58.

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 wall foundation trenches dug to bedrock 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 compact mixtures of earth and plaster. The presence of a threshold is often signalled 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 Storeroom B indicate these spaces were used for domestic purposes—perhaps temporary accommodations for visiting traders—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; this technique and variations have been used at least since Roman times in the Eastern Desert, medieval and modern Nubia, and medieval and twentieth-century Sinai and the Gulf coast.¹⁷⁹ 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. This hypothesis would accord well with huts called *akhṣaṣ* (sing. *khuṣṣ*) made of mats or reeds built on the roofs of Fatimid and Ayyubid houses in Fustāṭ described in the Cairo Geniza documents.¹⁸⁰ Use of roof space for sleeping during hot weather is common in modern rural Egypt.¹⁸¹

ARCHAEOLOGICAL PHASING

ROMAN PERIOD

The Roman period is represented in the Sheikh's House by a row of three large pits in Area A, Storeroom C, and Storeroom D, perhaps dug for trees or shrubs (fig. 11). All three pits are aligned with a brick wall across Storeroom 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 pl. 66), especially in Room A of the North House (which

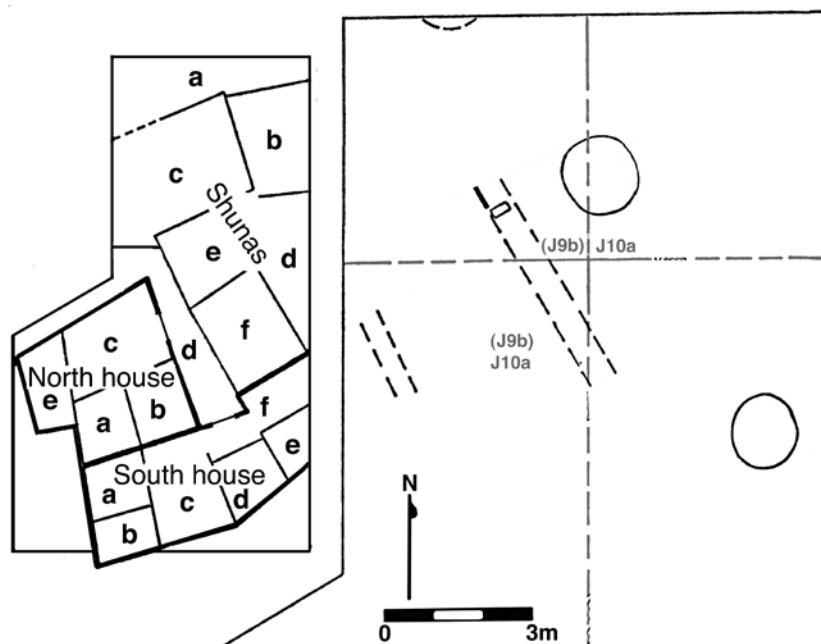


FIGURE 11. Roman Remains under the Sheikh's House.

¹⁷⁹ E.g., see W. Y. Adams 1996b; Kawatoko 1996, 29; 2003, 3, pl. 26:3, 5; Schijns et al. 1999, 101; Ziolkowski and Al-Sharqi 2005, 191–92, 196–97, 201, 203, figs. 20, 26, 31; 2009, 95–97, fig. 8.

¹⁸⁰ Goitein 1983, 72.

¹⁸¹ E.g., Maghoub 2001. Another ethnographic parallel for roof huts may be found in mid-twentieth century Suhar, Oman, where they are called *badjir* (Costa 2002, pl. 10).

also contained two Greek ostraca) and Room C of the South House, no purely Roman stratum remains.

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 re-use, there are no undisturbed contexts for the earliest occupation. The best-preserved rooms, where nearly complete reconstructible ceramic vessels and other objects were found in perhaps reconstructible original assemblages, are on the upper or rebuilt floors of the main living rooms of the two houses. Reconstructible 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.

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

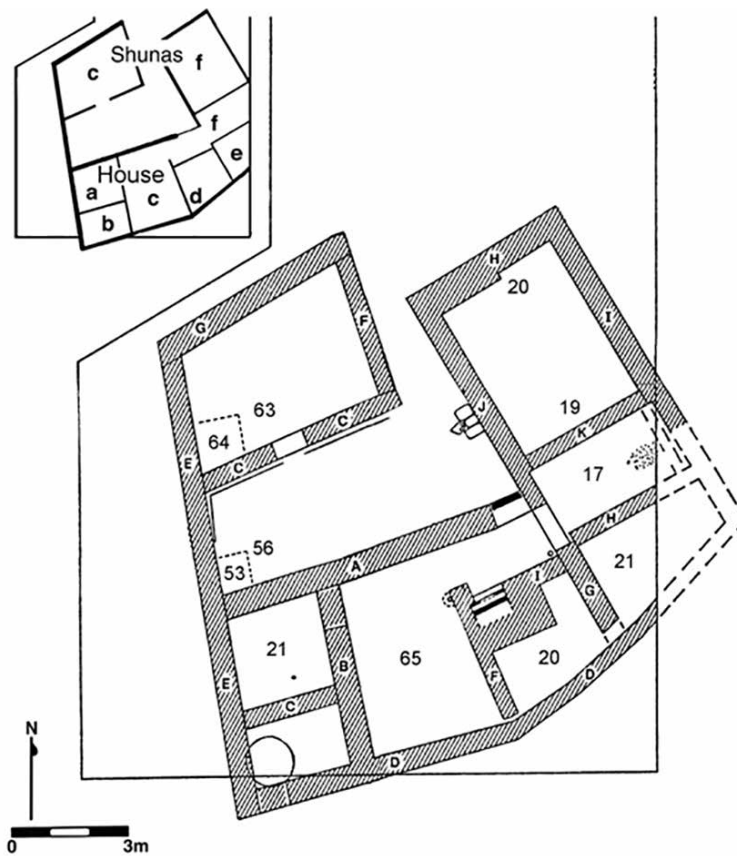


FIGURE 12. Islamic Phase I: South House, Courtyard, and First Storerooms.

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 mudbricks 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 Storeroom F. At this time Storeroom F was a long building along the eastern edge of the complex divided into three rooms by walls K and H (fig. 12), with hard, pebbly flooring.

In the area of the eventual North House, Room C existed as a storeroom. 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 evidenced by the extremely dense collection of artifacts in Locus K9b-53.¹⁸² 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.

ISLAMIC PHASE IIA

In Phase IIA, the courtyard just north of the South House was walled and 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 (fig. 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 storeroom 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 Storeroom F, crosswalls K and H were dismantled and the floor was replastered over their foundations 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 Storeroom F were likely built at this time, to make up for the loss of Room C. Storeroom E was built immediately north of Storeroom 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 Storeroom C may have been built concurrently, with the latter remaining a three-walled room. The low elevation of the pebble floor in Storeroom 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.

ISLAMIC PHASE IIB

This phase comprises further modifications and repairs of the living spaces, 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 the latter into the floor, and patching the plaster on the walls (fig. 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

¹⁸² Modern correlates to using part of inhabited space as a trash dump are seen in the excavations of houses in al-Tūr 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 1998a, 5).

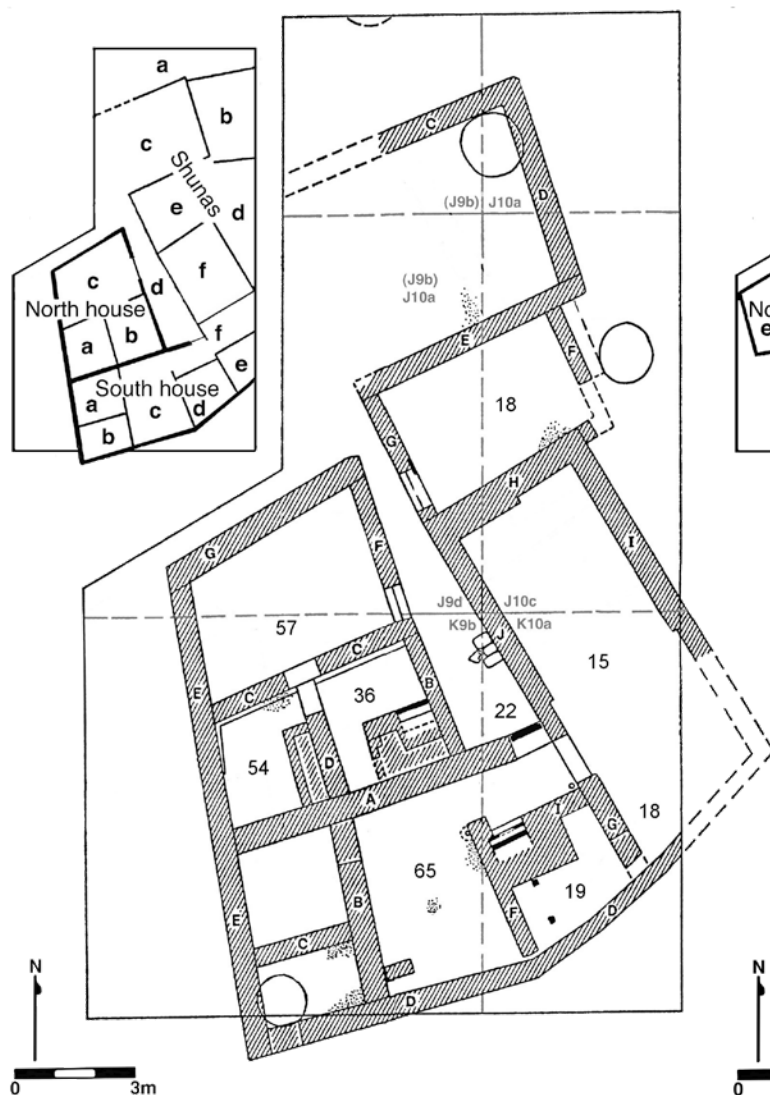


FIGURE 13. Islamic Phase IIa: North House Rooms A and B, Storerooms C and E Added; Storeroom F Partitions Removed; South House Room D Floor Plastered.

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.¹⁸³ 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

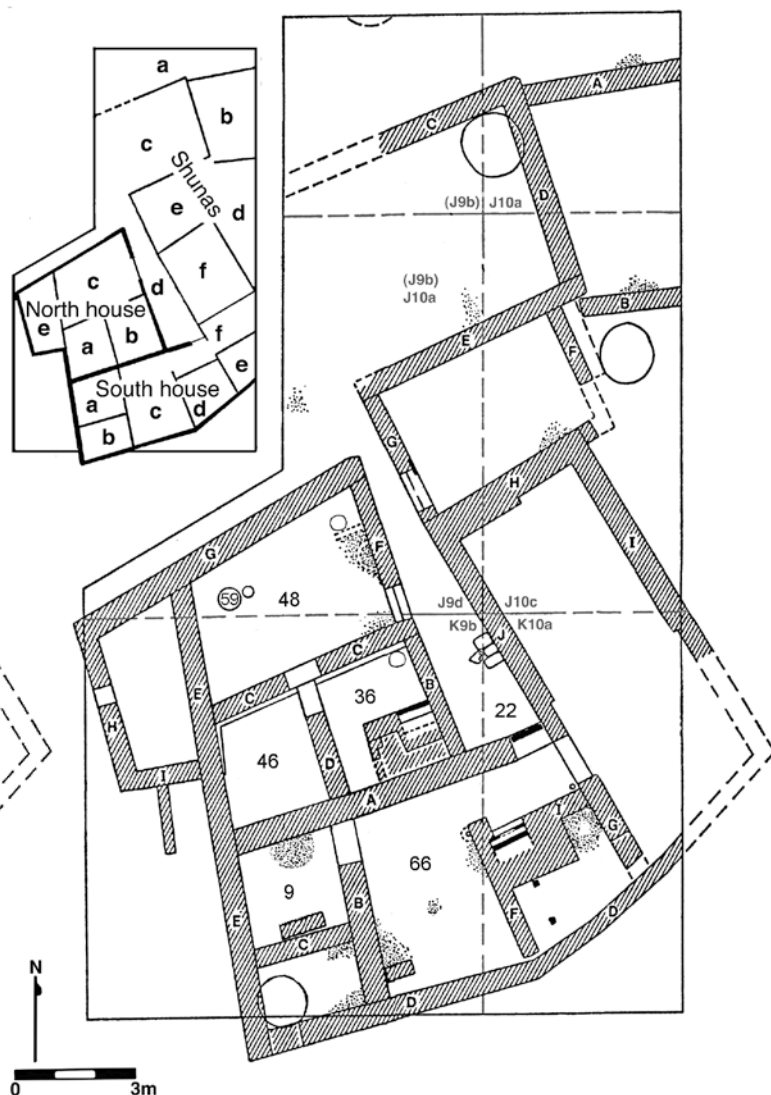


FIGURE 14. Islamic Phase IIb: Floors rebuilt, Room E added, Storerooms A, B, and D added.

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 Storerooms B and D were built over matting, abutting the walls of Storeroom C. This created Storeroom B and Storeroom D, although it is not conclusive that the latter was enclosed space.

¹⁸³ This was the practice for the mat-lined storage pits of Late Christian Qaşr Ibrīm, mentioned above. 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 1996b, 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 mudbrick walls followed. Wind-blown 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 2

CERAMICS

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. Terms found are *ḥazaf*, earthenware,¹⁷⁸ from Text 68 outside the Sheikh's House; *fuḥār*, pottery, from Text 22; *ḥaḡar kizān*, stone cups, from Text 54;¹⁷⁹ *ḡarra*, jar;¹⁸⁰ and *barniya*, a container for lighting oil.¹⁸¹ By contrast, several earthenwares are described in the Cairo Geniza documents as containers for various types of goods.¹⁸² Several liquid commodities are mentioned in the site documents that would likely have been shipped in these containers, such as water, milk, oil, clarified butter, sugar syrup, liquor, lighting oil, rose water, perfume, and medicine; many of the dried food goods and other solids (such as soap, which is shipped in jars in Text 27) may have been carried in ceramic vessels as well.¹⁸³

There is no easy way to correlate ceramics mentioned in the texts with the finds, other than the *ḡirār* (sing. *ḡarra*), usually translated “jars,” which are of course numerous and of varied forms and fabrics in the ceramic corpus.¹⁸⁴ *Ḥaḡar kizān*, or “stone cups,” are mentioned in Text 54 as part of a shipment that also included wheat, a *baṭṭa*-container of sugar, a juice presser, and eleven fine sprinkler bottles (*qumqum mumtaz*, presumably of glass).¹⁸⁵ It is not known whether *ḥaḡar kizān* 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.¹⁸⁶ 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. *Barānī* (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.¹⁸⁷

POTTERY PROFILE

Nearly 14,000 sherds were collected and recorded from the Sheikh's House, attempting total collection from the excavations. The sherds were recorded in pottery sheets by color of fabric (five categories), fineness and type of temper (four categories), and color of glaze (eleven categories). Further details of surface treatments such as slips, paint, and incising were noted as well, so that a sketch of the entire assemblage can be reconstructed, and about 25 percent of the ceramics described in the sheets can be correlated with the types that were kept after the excavations, which was about 5 percent of total. Estimates of quantities and proportions of various types are found in table 11. The typology that follows is based on the approximately 850 sherds that were kept. They were visually inspected using a 10× hand lens and sorted into groups by fabric, and within them wares, according to surface treatment and

¹⁷⁸ Lane 1985, vol. 2.

¹⁷⁹ Guo 2004, 84, 187, 250.

¹⁸⁰ Guo 2004, 34, 202–3, Text RN 1004c.

¹⁸¹ Guo 2004, 68, table 1.

¹⁸² Goitein 1967, 334, n. 8.

¹⁸³ Guo 2004, 67, table 1.

¹⁸⁴ Cf. Vorderstrasse 2014.

¹⁸⁵ Guo 2004, 39, 68, 249–50, table 1.

¹⁸⁶ Rye 1981, 35.

¹⁸⁷ Guo 2004, 238–40.

form.¹⁸⁸ 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.¹⁸⁹

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 Fustāṭ, 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. Fustāṭ 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 ʿAswān, Ballas, or Qenā, all of which have well-known pottery traditions. Qenā was also a trading partner with Quseir al-Qadim, as we know from the business letters found at the site.¹⁹⁰ It is not likely that any ceramics would have been made in Quseir al-Qadim 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.¹⁹¹

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 Ṣalāḥ al-Dīn, particularly at Bāb al-Maḥrūq, 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 Fustāṭ, see Nile 2 Decorated Ware below), marl clay water jars that fire a greenish-white (Marl 1 Utility Ware below), and monochrome glazed incised marl fabric (perhaps stonepaste) bowls (Incised Monochrome Glazed Ware below).¹⁹² 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 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.¹⁹³

Similarly dated contexts at Kom al-Dikka in Alexandria contain Yemen 1 or possibly a local Nile silt version of the Black on Yellow glazed redware bowls discussed below, and monochrome glazed stonepaste ceramics.¹⁹⁴ 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, but Black on Yellow bowls are not mentioned.¹⁹⁵ 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.¹⁹⁶ Alexandria in the thirteenth and fourteenth centuries also received imports from Greece, Cyprus, Turkey, Italy, Spain,

¹⁸⁸ 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, 104–7, pls. 39–40). Of these, I was unable to locate twelve sherds in order 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).

¹⁸⁹ Wentworth 1922.

¹⁹⁰ Guo 2004, 59; Henein 1992.

¹⁹¹ Prickett 1979, 274.

¹⁹² Julie Monchamp, meetings and discussions February–May 2006. We may have been able to identify more similarities in the corpus had a comparison of the coarse wares been possible.

¹⁹³ Cf. Kletter and Stern 2006, see esp. 197–200.

¹⁹⁴ Gayraud 1984, 244.

¹⁹⁵ Keall 1981, 217.

¹⁹⁶ François 1999, 29.

and North Africa, which it continued to do into the fifteenth century.¹⁹⁷ Numerous northern and western Mediterranean imports were also found at Fuṣṭāṭ into the thirteenth century, but these northern and western Mediterranean wares do not occur at Quseir al-Qadim because its overseas trading contacts are oriented toward the Red Sea and Indian Ocean rather than the Mediterranean.¹⁹⁸ Although a merchant of Alexandria is known to have supplied Quseir al-Qadim with flax, he clearly was not sending Mediterranean ceramics.¹⁹⁹

Glazed wares represent nearly 13 percent of all recorded pottery from the Sheikh's House by sherd count. This relatively high percentage can be explained by pottery being among the commodities shipped through the port, as the shipping notes reveal.²⁰⁰ It is possible that a count of all ceramics excavated at the site might yield a slightly lower percentage, however, as the Sheikh's warehouse was 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. 980–1140 CE, glazed wares make up only 6.61 percent of the assemblage.²⁰¹ They are 26 percent of the assemblage at the port town of Athar, which had its heyday from the early ninth century to the mid- to late eleventh.²⁰² By contrast in the same periods at Qaṣr Ibrīm above the Nile in Christian Nubia, a site not known as a shipping node, the glazed wares constitute only 3 percent of total ceramics.²⁰³

Throughout the discussion that follows, I have also made comparison by ware with other parts of the site of Quseir al-Qadim (see fig. 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.²⁰⁴ 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.²⁰⁵ The comparison is apt because for all three areas the available data are from a selection of sherds, rather than from all sherds excavated. In the case of the Merchants' Houses and the Eastern Area these have already been published, while for the Sheikh's House the selection treated here is the group that was 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.

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 'Aswān, marl clays from the deserts, alluvial clays from the Nile or wadis, and naturally mixed clays of alluvium and marl or other fine clays.²⁰⁶ The difficulty in these assignments, 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, and distinctions between clay types may be blurred by the use of similar temper.²⁰⁷ Therefore the Sheikh's House Egyptian fabrics types have been grouped into marl-dominant and

¹⁹⁷ François 1998; 1999; Zagórska 1990, 85.

¹⁹⁸ Kubiak 1998.

¹⁹⁹ Guo 2004, 248–49.

²⁰⁰ Guo 2004, table 1.

²⁰¹ Rougeulle 2005, 225–26.

²⁰² Zarins 1989, 248.

²⁰³ W. Y. Adams 1986b, 585.

²⁰⁴ Whitcomb and Johnson 1979, 247–49; 1982b, 10.

²⁰⁵ Whitcomb and Johnson 1982b, 148; 1983a, 104.

²⁰⁶ Norström and Bourriau 1993, 160–61.

²⁰⁷ Butzer 1974, 381; Norström and Bourriau 1993, 66.

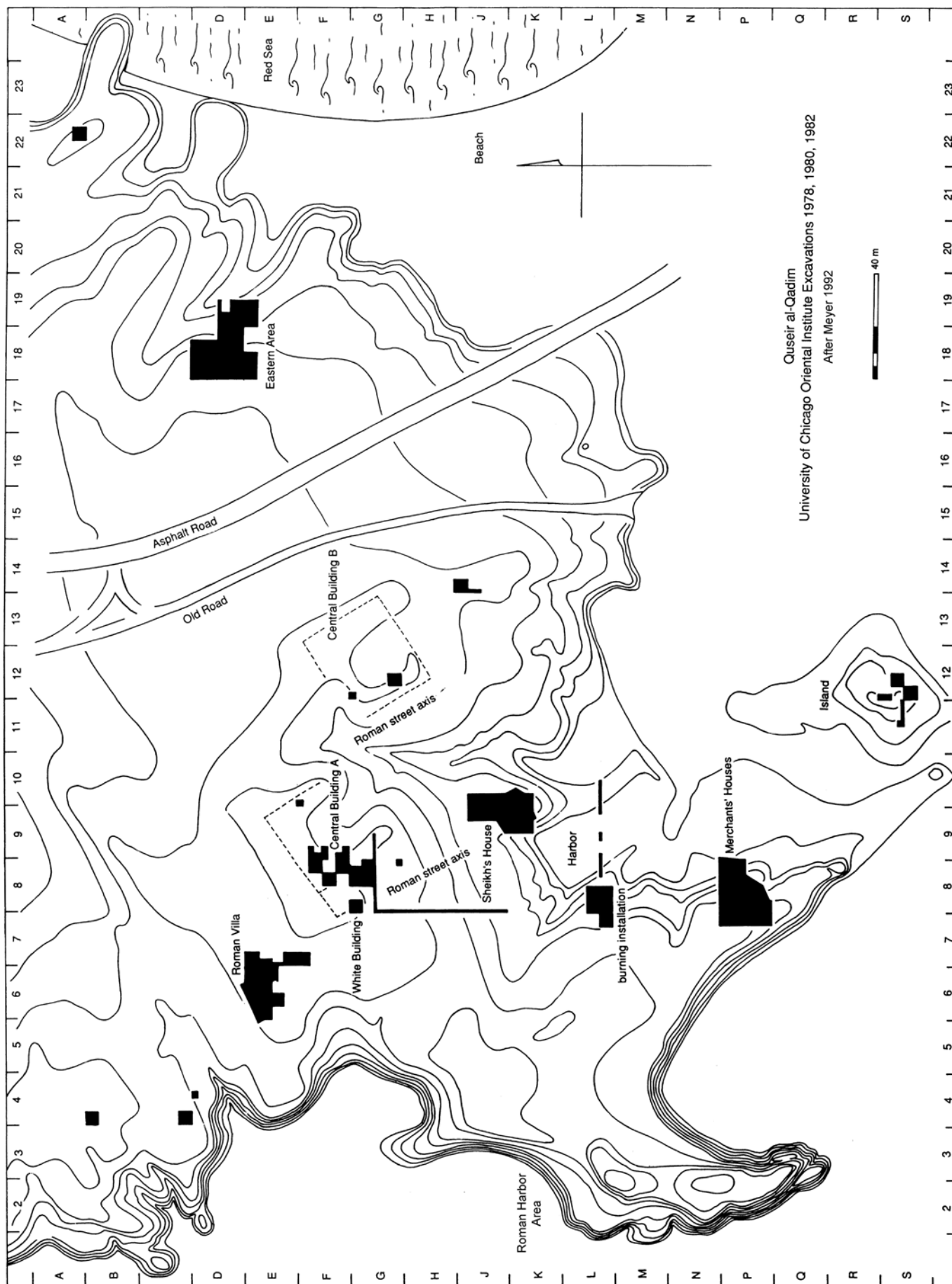


FIGURE 15. Location of the Merchants' Houses and Eastern Area in relation to the Sheikh's House (after Meyer 1992, fig. 2).

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's 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.²⁰⁸ Although Adams's 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.²⁰⁹ 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 surface treatment, decorative techniques, and vessel forms, but sometimes also by additives to the clay and firing. Tables 8–9 provide summaries of the fabric groups and wares described below.²¹⁰

ʿASWĀN FABRIC

Pottery of the distinctive kaolinite ʿAswān 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, ʿAswān. It is characterized by being fine, fairly dense, and well-kneaded, containing fine sand in abundance as well as numerous 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's Group A.IV, manufactured in the vicinity of ʿAswān and imported into Nubia between the years 950 and 1500 CE.²¹¹ 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.

ʿAswān Painted Ware

The ʿAswān Painted Ware vessels (fig. 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 (fig. 36:b–c). They seem related to Adams's Ware W12, "ʿAswān Medieval White Wares," which were imported to Nubia between 950 and 1300 CE. 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.²¹²

The decorated rim and bodysherds of ʿAswān Painted Ware conform to their "cousins" found in

²⁰⁸ 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.

²⁰⁹ I have partly followed Alison Gascoigne in adopting Adams's system. She is using it as a classification aide and starting point for the ʿAswān 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.

²¹⁰ 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 found it necessary to adopt his terminology for rim or base forms, however.

²¹¹ W. Y. Adams 1986, 556–60.

²¹² W. Y. Adams 1986, 559.

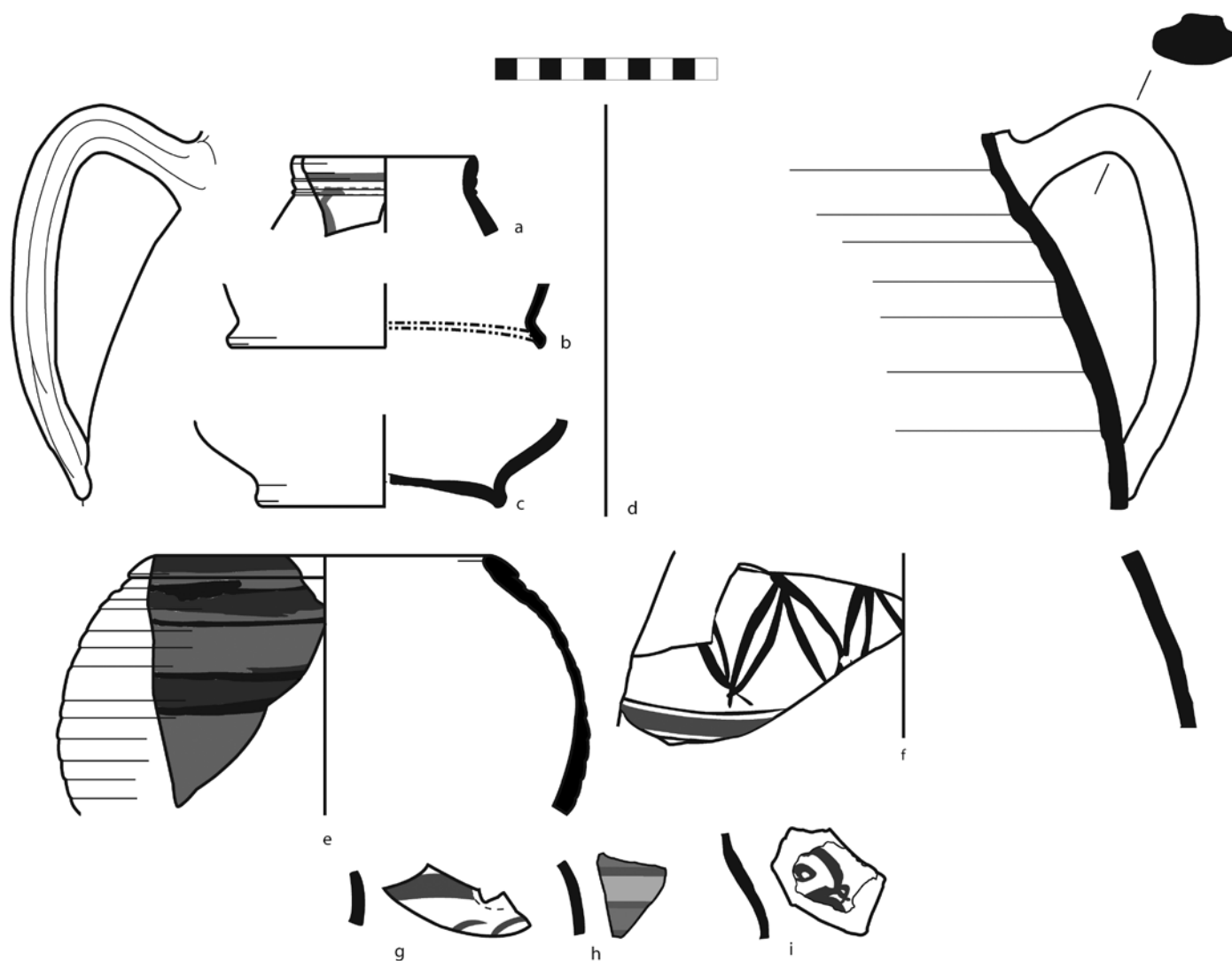


FIGURE 16. 'Aswān Painted Ware, Phase I (a), Phase IIa (d–e), and Phase IIb (b–c, f–j):
 a) K9b63_1/RN 48, b) J9d2_15/RN 30, c) K9b36_1–4/RN 86, d) K9b69_67/RN 347, e) J9d2_3–7/RN 82,
 f) K9b69_120/RN 349, g) J10c8_5/RN 284, h) K9b48_1/RN 315, i) K9b49_1/RN 49.

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 36: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 36:f are painted in black and red with a simpler but well-executed version of leaf motif A.IV 14-1.²¹³ 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.²¹⁴ Bodysherd figure 36: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, “'Aswān Early Islamic White Ware.”²¹⁵ Figure 36:g is too small to identify its decorative motif, but may bear a simple black-painted frieze.²¹⁶ It appears to have a decayed and now mat colorless glaze applied over the slip and paint, which never occurs on Nubian vessels of ware W12.

The final decorated sherds of 'Aswān 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

²¹³ W. Y. Adams 1986, fig. 226.

²¹⁴ Whitcomb 1982, no. 639; 1979, pl. 45:g.

²¹⁵ W. Y. Adams 1986, 552–53, fig. 219: HM.

²¹⁶ W. Y. Adams 1986, fig. 225.

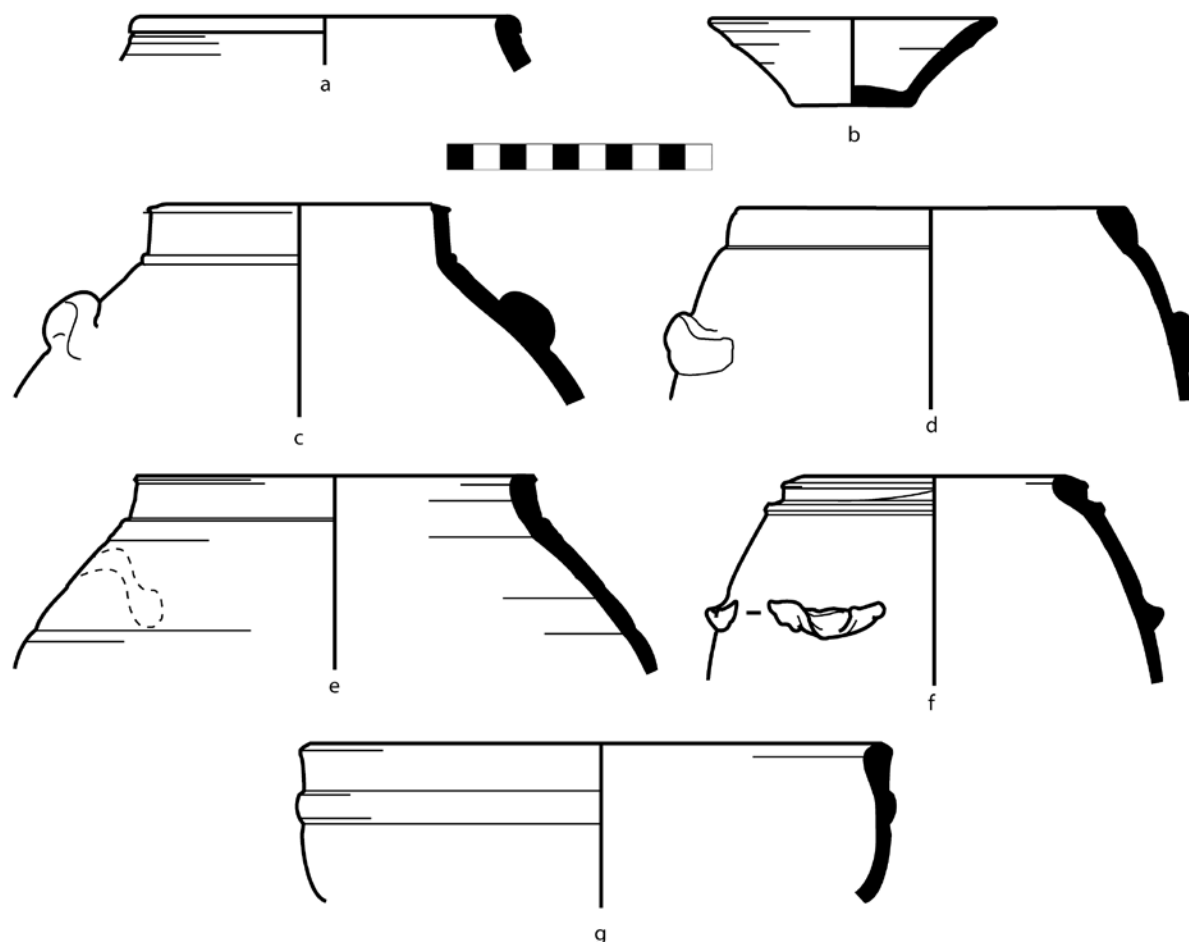


FIGURE 17. ³Aswān Utility Ware, Phase I (c-d), Phase IIa (e), Phase IIb (a, f-g), and surface layers (b): a) K9b5_5/RN 678, b) K9b29_3/RN 277, c) K9b56_17/RN262, d) K9b56_1/RN 98, e) K9b70_6/RN 346, f) K9b36_6-8/RN 197, g) J9d4_2/RN 44.

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 (fig. 36: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 36: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 ³Aswān Medieval White Ware.²¹⁷

³Aswān Utility Ware

The second major ware represented in the ³Aswān fabric group is distinguished from the preceding

ware by surface treatment and vessel form. The ³Aswān Utility Ware vessels (fig. 17) seem to be related to Adams's Ware U6, "³Aswān 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.²¹⁸ Forms present at the Sheikh's House are cooking pots, lamps, and jars, but the cooking pots do not entirely conform to the shape of those found in Nubia.

Figure 37:b of ³Aswān 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's form P28. Two identical vessels were recovered from the Merchants' Houses at Quseir al-Qadim, and possibly one in the Eastern Area.²¹⁹ The

²¹⁷ W. Y. Adams 1986, fig. 224:C.

²¹⁸ W. Y. Adams 1986, 559.

²¹⁹ Whitcomb and Johnson 1979, pls. 43:l, 47:d; 1982b, pl. 49:c.

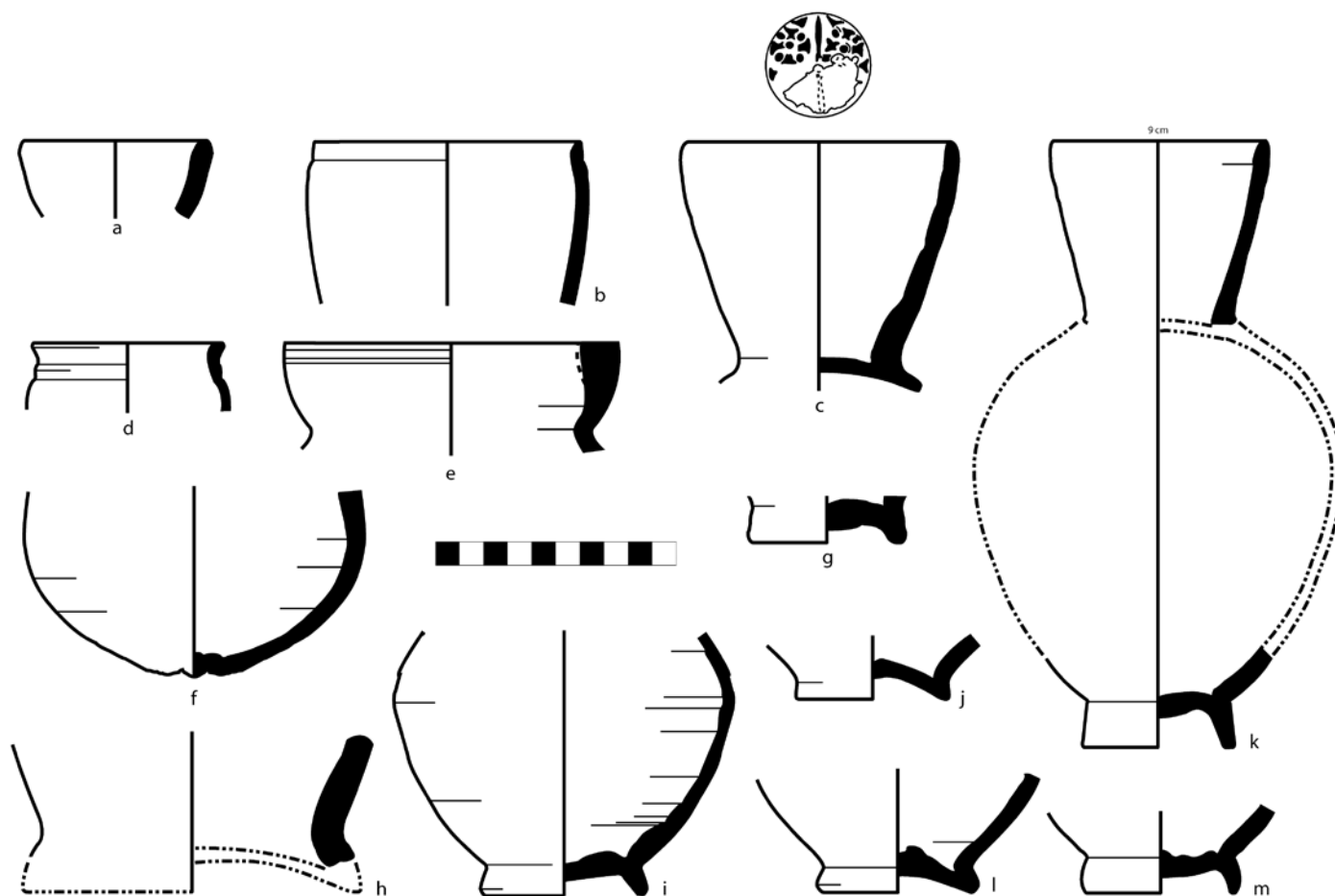


FIGURE 18. Sample of Marl 1 Utility Ware Qullas and Other Forms: a) K9b48_3/RN 315, b) J10c2_2/RN289, c) K9b69_1/RN 346, d) K9b69_56/RN 346, e) K9b71_24/RN 348, f) K9b71_8/RN 346, g) K9b69_113/RN 348, h) K9b69_109/RN 348, i) K9b69_2/RN 346, j) K9b71_52/RN 348, k) K9b69_62-63/RN 346, l) K9b71_13-19/RN 348, m) K9b70_79/RN 348.

same wash appears on cooking pots figure 37:c, and figure 37:e, but the surface of figure 37: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 U16.²²⁰ 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.²²¹ Figure 37: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.²²² 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, shallow ledge about 2 cm below the rim

exterior has no parallels in the Nubian assemblage and, like figure 37:c, is too blackened to detect the brown slip (fig. 37:g), but the fabric clearly belongs in this group. Also included in this ware is figure 33:a, the rim of a neckless jar from the Sheikh's House that was previously published.²²³

MARL-DOMINANT FABRICS

There are several marl-dominant fabrics in the Sheikh's House assemblage, most of which are only represented by one ware, Marl 1 Utility Ware.

MARL 1 FABRIC

The largest fabric group is Marl 1 (fig. 18), composing 10 percent of total sherds excavated. It is

²²⁰ W. Y. Adams 1986, fig. 312: U16.

²²¹ Whitcomb and Johnson 1979, pls. 42:m, 45:a; 1982b, pl. 50:c.

²²² Cf. Levantine Fatimid-era vessels in Stacey 2004, fig. 5.32:13.

²²³ Fig. 13:a; Whitcomb and Johnson 1979, pl. 39h.

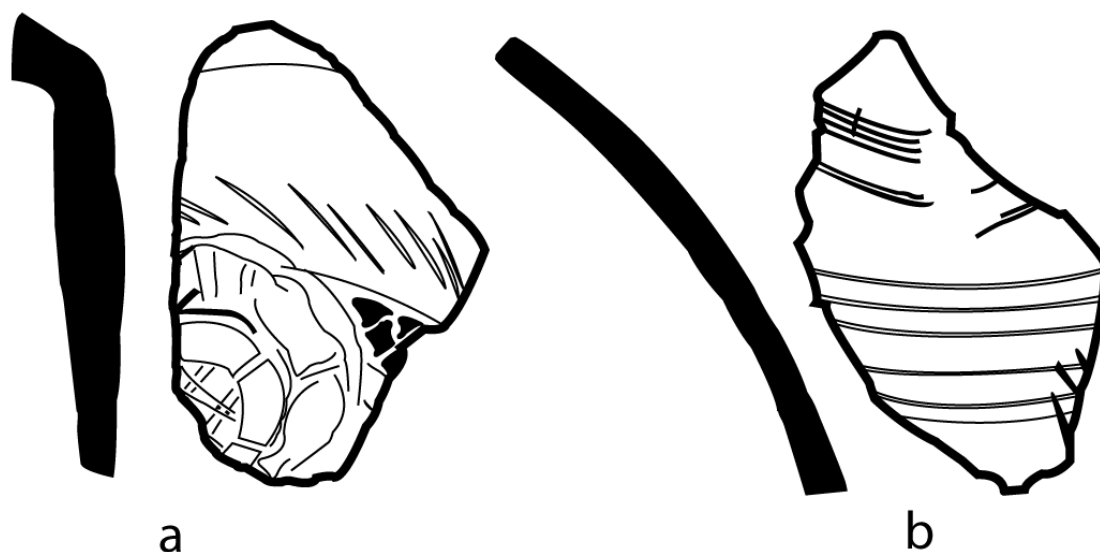


FIGURE 19. Marl 1 Utility Vessels, Incised:
(a) K9b70_5/RN 346, (b) K9b70_72/RN 348.

characterized by a coarse, lightweight calcitic clay body with a variety of inclusions, 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., fig. 40:b).

Marl 1 Utility Ware

At the Sheikh's House, the Marl 1 fabric occurs almost exclusively in water jars (known as qullas or perhaps *mashrabiyyas*²²⁴), sometimes with a filter in the neck; few filters have been found, however. At the Sheikh's House only one sherd of those kept represents an open form: K9b56_10/RN 262 (pl. 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 Fustāṭ.²²⁵ According to Julie Monchamp something very like this occurs with a clear glaze in the Fatimid levels at the Ayyubid wall.²²⁶ A ware

much like it is well known from the excavations at Fustāṭ 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.²²⁷ 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.²²⁸

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 1300 and 1400 CE. The body is so lightweight and porous that Adams suggests ash has been mixed in with the clay.²²⁹ In Nubia water jars and pilgrim flasks are very often decorated with incising or barbotine, or with paint on the neck and sometimes shoulder, but very few incised sherds and no painted sherds were found at the Sheikh's House: one from a pilgrim flask bears an elaborate drawing of a water wheel (fig. 19:a), and one probably from a qulla (fig. 19:b) has a more random pattern of incisions.²³⁰

²²⁴ Cf. Henein 1992

²²⁵ Scanlon 1986, 4, figs. 4–5.

²²⁶ Personal communication, November 2005.

²²⁷ Gascoigne, personal communication; Mason and Keall 1990, 175.

²²⁸ Personal observation; Alison Gascoigne, personal communications December 2005–November 2006; personal observation and discussion with Julie Monchamp, February 2006.

²²⁹ W. Y. Adams 1986, 576.

²³⁰ W. Y. Adams 1986, fig. 318:H4; Michałowski 1965, pl. 16:4–5, but also see pl. 17:1–3.

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,²³¹ the majority of which come from the Merchants' Houses, which are identical with those from the Sheikh's House (fig. 39). 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.²³² Seemingly identical marl ware pedestal bases came from the Mamluk levels at the Cairo Ayyubid wall excavations.²³³ 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.²³⁴ The latest manifestation of this type of vessel in a very similar clay body can be seen in twentieth-century qullas excavated by the Japanese team at al-Tūr in the Sinai.²³⁵ They can have a pedestal base and an applied crimped decoration around the body.²³⁶ Another type has a spout and handle, but the base is not preserved.²³⁷ The pedestal base form thus seems to signify a later stage of production of these vessels that can be dated beginning in the late Mamluk period, and continuing into the Ottoman and early modern periods. This is also borne out by the assemblage from the Old Cairo Groundwater Lowering Project.²³⁸ Similarly, simple rims and short necks, are found in vessels from the central, earlier part

of Quseir al-Qadim, while complex rim forms and long, narrow necks are evident in the Eastern Area assemblage.²³⁹

The utility of calcitic marls for water jugs was recognized in many parts of the medieval Muslim world from early on, as the porosity of the finished vessels promotes evaporation, and therefore cooling of the contents. Examples dating from the Early and Middle Islamic periods abound, from sites in Palestine, Iran, and Iraq.²⁴⁰ Contemporaneous with and similar to those from Quseir al-Qadim are water jars made from a cream-firing kaolinite clay found in the Zabid area of Yemen, dated 1150–1350 CE.²⁴¹ 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.²⁴² Qullas of fine calcitic marl, often relief-decorated, have also been found at Ras al-Khaima in Oman, Qal'at al-Bahrayn, and numerous other sites in the Gulf region, where it is quite common from the ninth to the sixteenth centuries.²⁴³

Marl 1 Glazed Ware

A second ware in the Marl 1 fabric group, Marl 1 Glazed Ware, is covered with colorless glaze (fig. 20), making the vessel surfaces appear light green or light greenish-yellow.²⁴⁴ "Marl monochromes" of various clay bodies were also found by the University

²³¹ 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.

²³² See discussion in Whitcomb and Johnson 1979, 105; Whitcomb and Johnson 1982b, 139–40, pl. 40:k–l, p–r.

²³³ Julie Monchamp, personal communication and personal observation, February 2006.

²³⁴ Haldane 1996, figs. 7–10; Raban 1971, 152–54; Ward 2004, 168–70, fig. 75.

²³⁵ Kawatoko 1998a, pl. 16:1–9.

²³⁶ Kawatoko 1998a, pls. 13:8, 16:1.

²³⁷ Kawatoko 1998a, pls. 13:9, 16:2.

²³⁸ Alison Gascoigne, personal communication, November 28, 2006.

²³⁹ Whitcomb and Johnson 1982b, pl. 40:e–i, m–n.

²⁴⁰ Arnon 1999, figs. 3:b,e, n–o; 2006, fig. 123:6; 2007, figs. 7:1, 7:8, fig. 8; Avissar 1996, 157, figs. XIII.29:4, 9, XIII.32:1–2, XIII.58:1; Cytryn-Silverman 2010, pls. 1:8, 4:4, 4:6, 9, 11:6, 24:5, color pl. 16:2; Kletter 2005, fig. 16:1–2; Rosen-Ayalon 2006, pl. 5; Rosen-Ayalon and Eitan 1969, pl. 5; Sarre 1925, Abb. 1–7; Stacey 2004, figs. 5.41:4, 9, 5.49:4, 5.61:13; de Vaux and Steve 1950, pl. C:23; Whitcomb 1988a, figs. 1: 3E,4C.

²⁴¹ Ciuk and Keall 1996, 42, pl. 95/12.

²⁴² Ciuk and Keall 1996, 4–5.

²⁴³ Faucherre et al. 2005, fig. 172:3; Kennet 2004, 57; Vogt 2005, fig. 132.

²⁴⁴ Cf. Whitcomb and Johnson 1979, pl. 47:h.

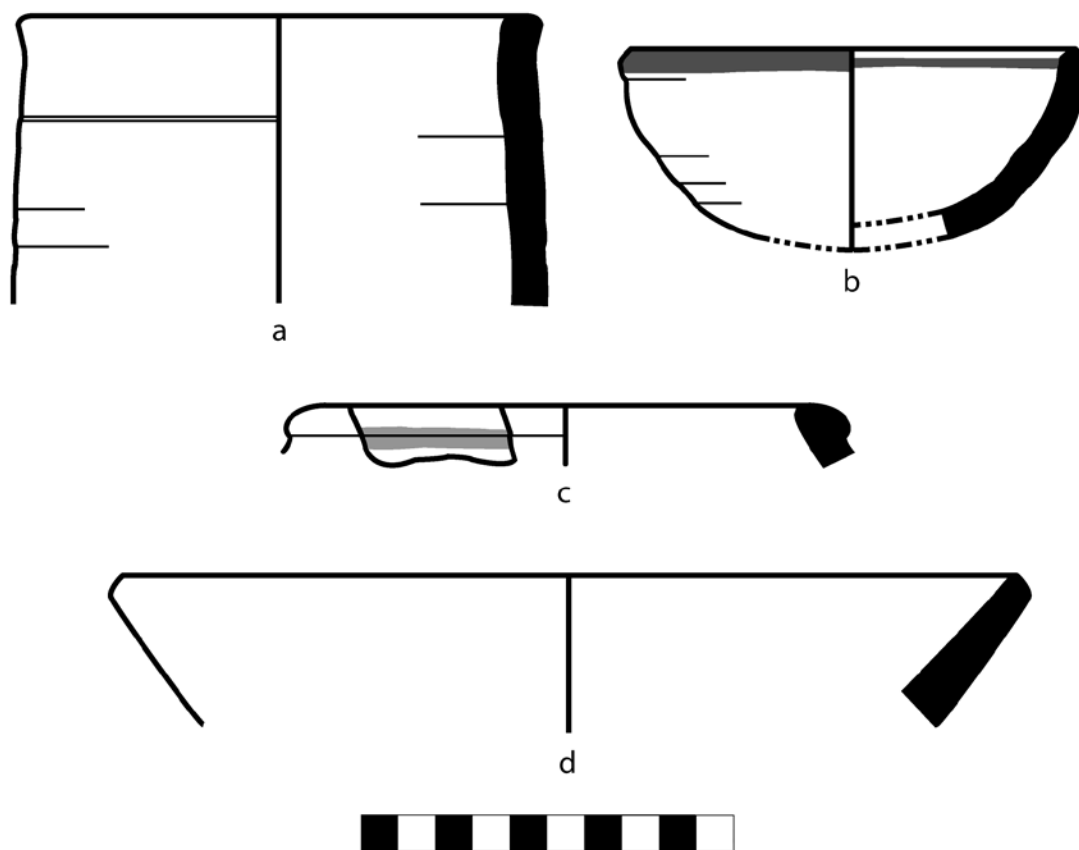


FIGURE 20. Marl 1 Glazed Wares: a) K9b17_2/RN 173, b) K9b13_1/RN 678, c) K9b46_1/RN 20, d) K9b53_4/RN 269.

of Southampton's excavations, with group IIIa corresponding to the glazed Marl 1 sherds described here.²⁴⁵ By clay body these appear to fit into the category Adams terms Group G.III "Dull glazed wares" imported into Nubia 1100–1500 CE, but made earlier at Fustāt, although colorless glazes do not seem to occur in the Nubian samples.²⁴⁶ Adams includes glazed wares of other fabrics in this group, but none of the Marl 2 vessels at Quseir al-Qadim are 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.

The Marl 2 fabric (fig. 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 like those of Marl 1 Utility Ware. Two samples, both small handles, are slipped, either bright orange (fig. 41:a), or dark red (pl. 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 (pl. 61:b). Examples from Fustāt 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.²⁴⁷ Similar qullas of various sizes, with or without handles, and always with crude filternecks have been found in Deir al-Naqlun, the bases of which are especially comparable to figure 41: e–f. They have been dated by association with splash glazed bowls ("Fayyūmī ware") to the ninth through eleventh centuries CE.²⁴⁸ It is not demonstrable at Quseir al-Qadim that the Marl 2 fabric is earlier than Marl 1 fabric, however (see table 10), and as is discussed below, the numismatic and

²⁴⁵ Bridgman 2000, pl. 3.

²⁴⁶ W. Y. Adams 1986, 94, 578–79; Kubiak and Scanlon 1989, 42–46, figs. 59–60, 62–65.

²⁴⁷ Scanlon 1974b, 68, fig. 7; 1986, 2, figs. 1–2.

²⁴⁸ Górecki 1994, 75, figs. 3–4.

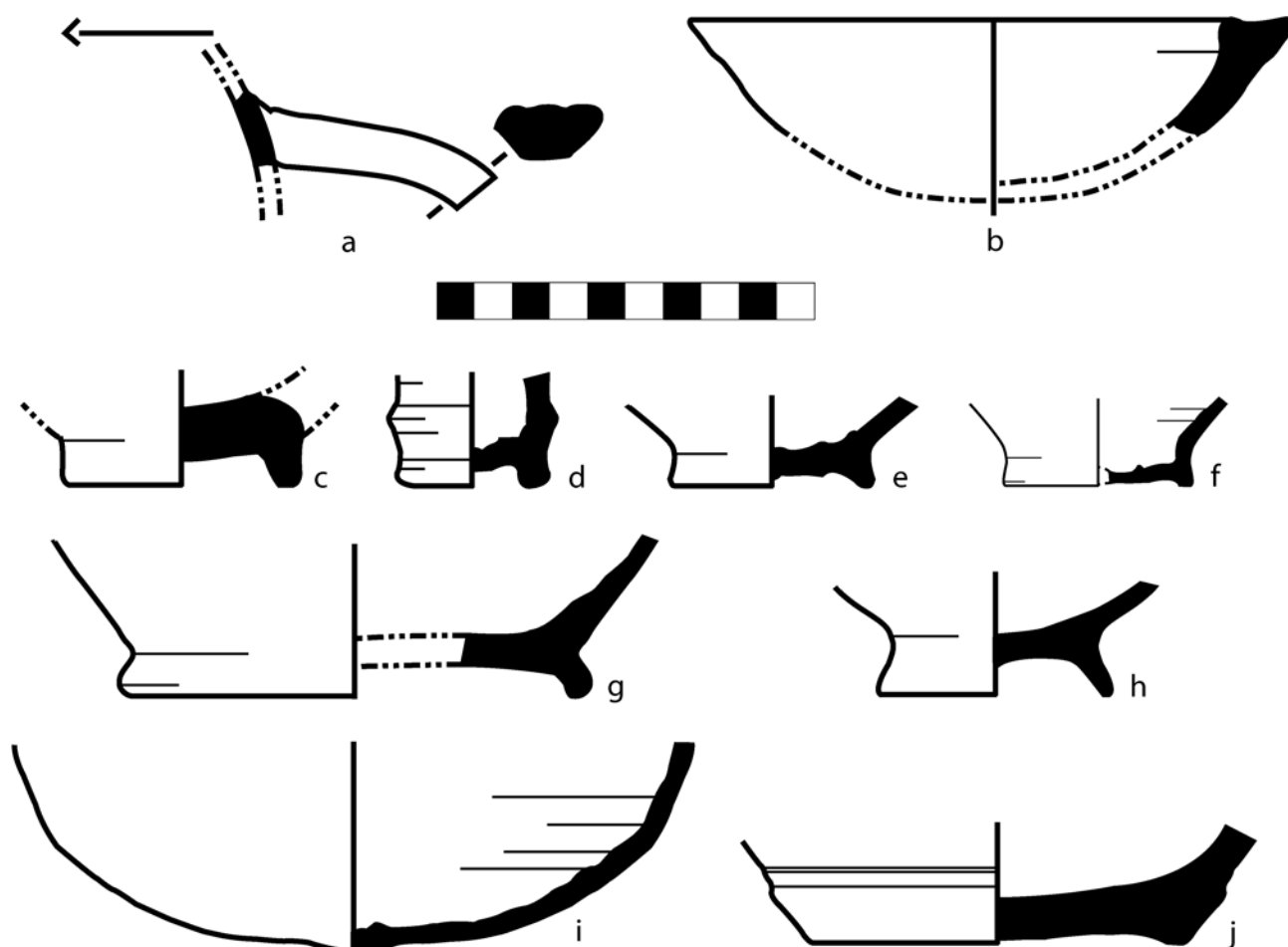


FIGURE 21. Marl 2 Utility Ware Qullas and Other Forms: a) K9b14_1/RN 173, b) J9d13_2/RN 260, c) K9b71_11/RN 346, d) K9b69_57/RN 346, e) K9b70_3/RN 346, f) K10a13_3/RN 45, g) K9b69_54/RN 346, h) K9b70_2/RN 376, i) K9b70_71/RN 348, j) K9b70_66/RN 348.

epigraphic evidence dates the ceramics to the thirteenth century. This ware may also be distantly related to Adams's Ware U17, "Buff Utility Ware with a Drab Surface," a fairly heterogeneous group imported to Nubia probably from Fuṣṭāṭ between 1050 and 1300 CE, 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.²⁴⁹

MARL 3 FABRIC

Marl 3 Glazed Ware

Marl 3 (fig. 22) is another fabric only represented by one ware (Marl 3 Glazed Ware), appearing in two glazed closed 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 would have taken them from the Sheikh's House. The Marl 3 fabric falls between Marl 4 (discussed below), having almost the same stonepaste-like density and fineness, 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, fig. 42: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 colorless at the bottom of the vessel, fig. 42:a). This would fit fairly well into Adams's Group G.III "Dull glazed wares" category, imported to Nubia from 1000 to 1500 CE. However, his is a rather broad group used to refer to more than one fabric: a marl

²⁴⁹ W. Y. Adams 1986, 578–79.

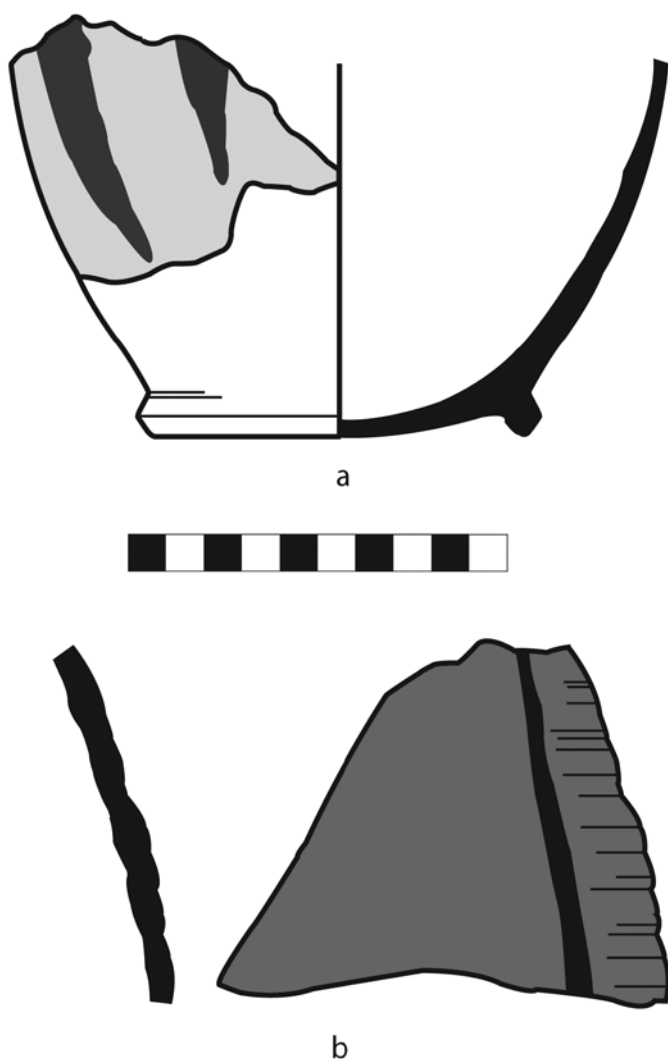


FIGURE 22. Marl 3 Glazed Ware: a) K9b47_1-7/RN 331, b) K9b29_2/RN 277, both found in surface debris.

that is similar to his U13 and U19 wares, and a possible Nile silt of a similar fabric to ware U17.²⁵⁰ In the Nubian glazed vessels, black on green is a common color combination, but dark blue and brown on light blue is not found.²⁵¹ The form of figure 42:b is that of a large ribbed jar, and it is glazed clear on the interior. No comparanda have been published from Fuṣṭāṭ or Alexandria, but a sherd from a nearly identical vessel was excavated by the University of Southampton at Quseir al-Qadim.²⁵²

²⁵⁰ W. Y. Adams 1986, 578.

²⁵¹ W. Y. Adams 1986, 594–95.

²⁵² Bridgman 2000, 50, pl. 11c.

²⁵³ Mason and Tite 1994, 83–90; also see Tonghini 1998, 38, 40–42.

²⁵⁴ Tonghini 1998, 40.

²⁵⁵ Mason and Keall 1990, 177–78.

MARL 4 FABRIC

The body of the Marl 4 group (fig. 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 percent) with additions of roughly equal parts clay and glass.²⁵³ 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.²⁵⁴ Because I examined the Sheikh's House sherds using a 10× hand lens, I cannot determine whether the clay does indeed contain the minimum 50 percent quartz grains Mason would require to identify it as "true" stonepaste. It seems likely that makers of the vessels found at Quseir al-Qadim 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.²⁵⁵ Marl 4 is a well-kneaded fabric 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 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.

Marl 4 Monochrome Glazed Ware

The largest ware in terms of sherd quantity having the Marl 4 fabric is glazed monochrome

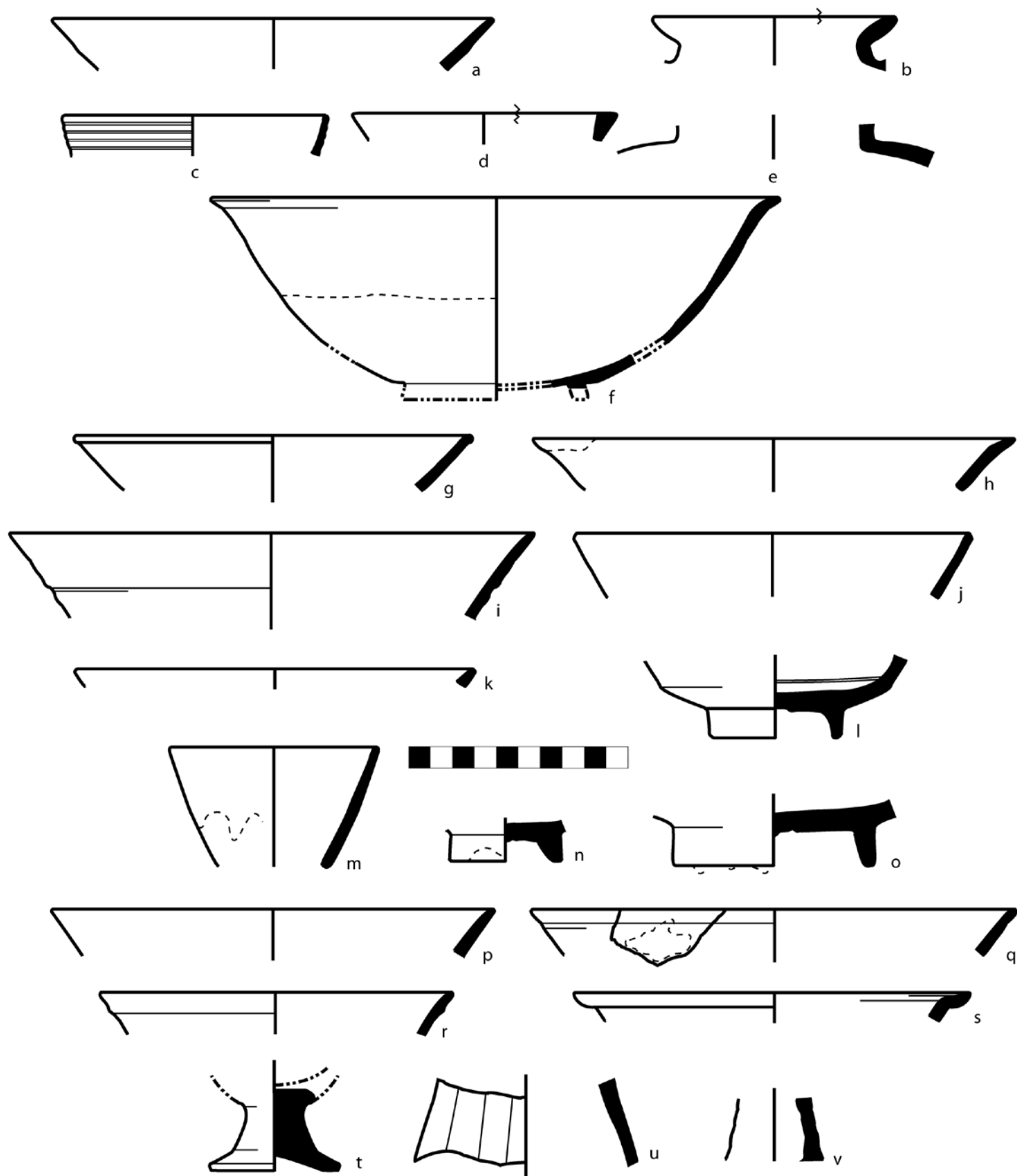


FIGURE 23. Marl 4 Glazed Monochrome Ware:

- 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.

(Monochrome Glazed Ware). Turquoise followed by greenish-white and white are the most popular glaze colors, and many of the vessels seem to be made in imitation of Chinese celadons and porcelains in form and sometimes glaze color. 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 colorless. This ware was also found in Nubia. The Sheikh's House wares are related to Adams's category Group G.II, "Later Gloss Glazed Wares," imported to Nubia from Egypt in 1100–1500 CE. 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."

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 footings or segmental bowls with everted lip on a low footing are most common, but other forms are represented. Jars are less variable, having wide shoulders tapering to narrower bodies sitting on a low footing; necks are of medium height with everted rims. Tiny horizontal strap handles are found on one jar.

The Marl 4 Monochrome Glazed bowls and jars at the Sheikh's House (fig. 23) are the most common decorated ware in the assemblage, and make up 6–10 percent (by phase) of all sherds excavated in all phases, being slightly more abundant in Phase IIa than in Phase I (tables 10–12). They make up the vast majority of all Marl 4 sherds at 90 percent. 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. Rim sherds indicate forms are usually conical bowls with straight rims (fig. 23:a, i–k, p–q),²⁵⁶ but one has a rolled rim (fig. 23:g) similar to a shape found in white Jingdezhen porcelain of the early eleventh century,²⁵⁷ and two are segmental with slightly everted rims (fig. 23: f, h). Few bases survive. Figure 23:l, 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.²⁵⁸ The second high ring base (fig. 23:o) 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.

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.²⁵⁹ Also, numerous white-glazed stonepaste bowls were found at Tinnis in Egypt, although they are possibly imports from Iran.²⁶⁰ 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.²⁶¹ 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 800–1000 CE. 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.²⁶² 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

²⁵⁶ Cf. Scanlon 1974b, pl. 18:2-3

²⁵⁷ Bing 2004, fig. 1:5.

²⁵⁸ The examples he cites are incised monochrome glazed, see Mason 2004, 68–69.

²⁵⁹ Zarins and Zahrani 1985, 77.

²⁶⁰ Alison Gascoigne, personal communication, December 2006.

²⁶¹ Rougeulle 2005, 227.

²⁶² Horton 1996, 276–77, fig. 199.

century based on comparisons with Iranian material.²⁶³ 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.²⁶⁴ Thus while plain white-glazed bowls are generally taken to be evidence of ninth- and tenth-century occupation,²⁶⁵ the Sheikh's House examples indicate carved successors to these bowls were in use well beyond this date in Egypt.

Two unusual rim shapes from Phase IIB seem to be made in imitation of celadon bowl forms (fig. 23:r-s); compare the latter with a celadon bowl imported from China at al-Qaraw, Yemen²⁶⁶ and another at Akko²⁶⁷ and numerous Longquan celadon bowls of various sizes dating between the early thirteenth and early fourteenth centuries found in surface survey at Hormuz in the Persian Gulf.²⁶⁸ Identical vessels were found in the Merchants' Houses.²⁶⁹ 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.²⁷⁰

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 (fig. 23:e from Phase IIA) and rim (fig. 23:b, from Phase I) of two white-glazed jars of similar shape. Another example with in-glaze painting (fig. 28:b, from surface debris) indicates some of these jars were decorated. Other rare forms are a stemmed goblet (fig. 23:t) and a faceted bodysherd that may have come from a ewer (fig. 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 (fig. 23:c, Phase IIB) may be an imitation of a steatite vessel, such as the one found at early Islamic al-Mabiyat.²⁷¹

Only two Islamic lamps from the Sheikh's House (fig. 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 Fustāt are represented at the Sheikh's House. Type I can occur with either a flat foot (fig. 24:b), or on a ring foot with an incised ring inside (fig. 24:a). Half of those at Fustāt are glazed turquoise (fig. 24:a), and half transparent green (fig. 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.²⁷²

Marl 4 Incised Monochrome Glazed Ware

Marl 4 Incised Monochrome Glazed Ware at the Sheikh's House (fig. 25) make up 11 percent of all Marl 4 Monochrome Glazed Ware in Phase I, 9 percent in Phase IIA, 6 percent in Phase IIB, and 3 percent 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, colorless, or white monochrome glazes. The incised design tends to occur in a band on the interior of conical (fig. 25:a, j-k, n), hemispherical (fig. 25:e, l-m), or segmental bowls with a slightly everted rim (fig. 26:e), and which sit on a low ring foot that is also sometimes out-turned (fig. 25:l).²⁷³ Two ledge-rimmed bowls are also present, with simple curved lines in pairs on or just inside the ledge (fig. 25:c-d, g).

Designs are not limited to casually executed arabesques (fig. 25:h, j, l) but include more

²⁶³ Horton 1996, 296, fig. 18:c.

²⁶⁴ Horton 1996, 293.

²⁶⁵ E.g., Horton 1996, 277.

²⁶⁶ Hardy-Guilbert and Rougeulle 1995, fig. 4:16.

²⁶⁷ Personal observation.

²⁶⁸ Morgan 1991, figs. 8:40-41, 44-48, 9:68-69.

²⁶⁹ Whitcomb and Johnson 1979, pls. 43q, 44s.

²⁷⁰ Whitcomb and Johnson 1982b, pl. 33:aa, bb.

²⁷¹ Gilmore et al. 1985, pl. 105:2.

²⁷² Kubiak 1970, 13-15, figs. 12-14.

²⁷³ Cf. Mason 2004, 69, fig. 4.8.

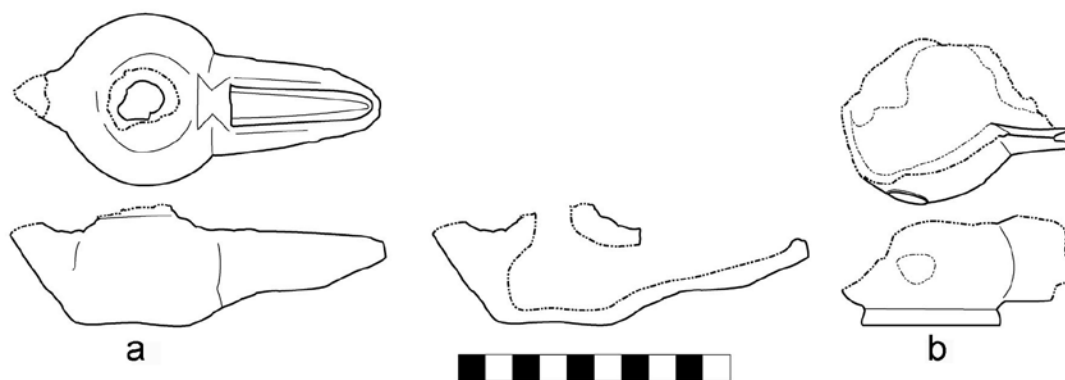


FIGURE 24. Marl 4 Monochrome Glazed Lamps: a) K9b67_1/RN 224, b) K9b33_1/RN 227.

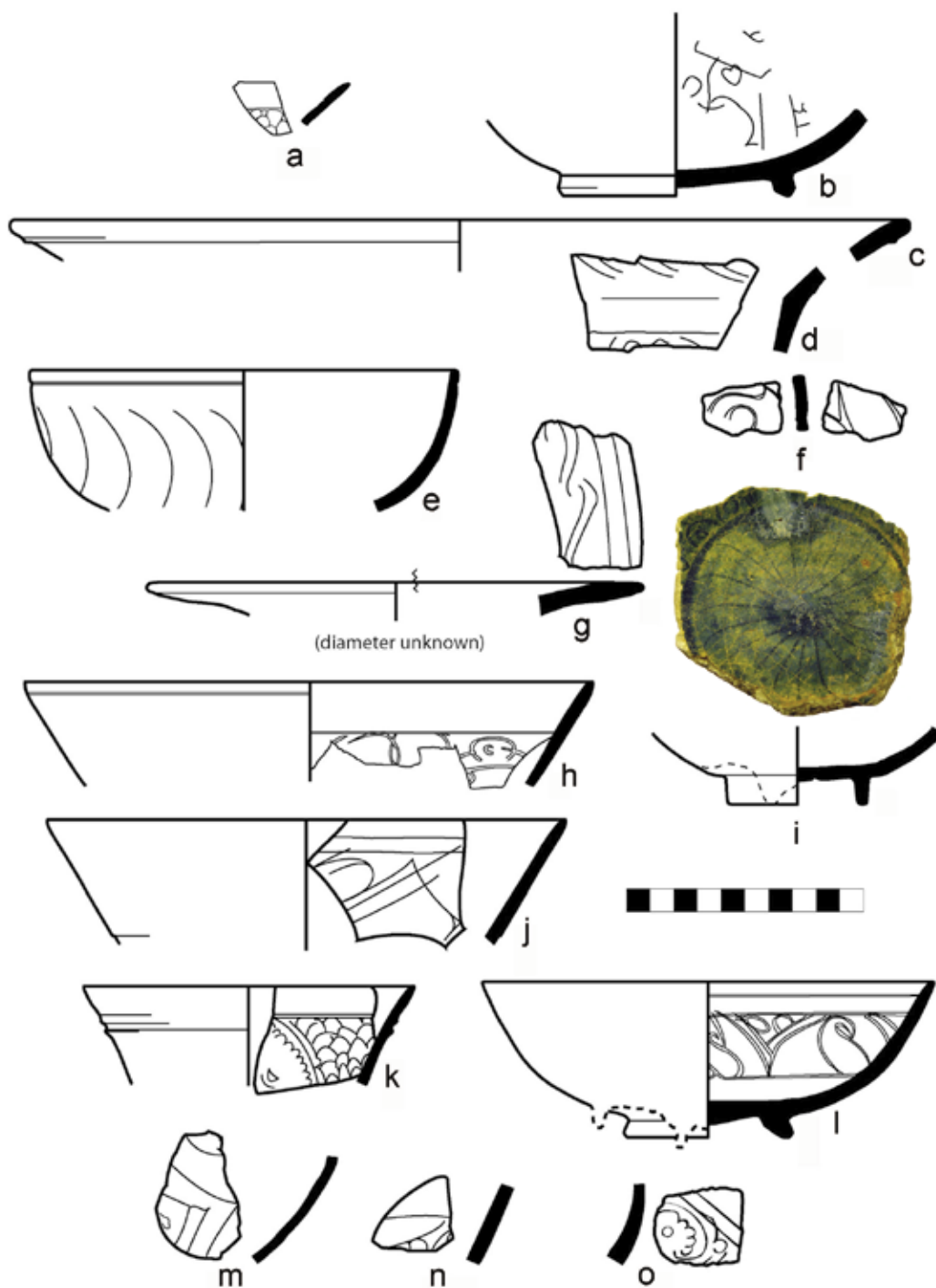


FIGURE 25. Marl 4 Incised Monochrome Glazed Ware: a) K9b59_2/RN 307, b) K9b56_2/RN 262, c-d) J10c11_1-2/ RN 294 e) K9b71_37-38/RN 349, f) K9b71_36/RN 349, g) K9b68_1/RN 334, h) K9b71_39-46/RN 349, i) K9b70_80/RN 349, j) K9b29_1/RN 277, k) J10a2_4/RN 278, l) K9b25&27_3-15/RN 341, m) K9b3_4/RN 678, n)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

carefully executed designs dense with filler in the form of scale- or feather-like motifs (fig. 25:a, k), reminiscent of dragon and phoenix motifs on Chinese stonewares,²⁷⁴ one of which was found at the Sheikh's House, discussed below in the section on Chinese imports (fig. 51:d). Other dragon and phoenix motifs in similar fabric under a turquoise glaze are known from Fustāt,²⁷⁵ where they were probably produced, and Yemen, where they were imported from Fustāt beginning in the twelfth century CE.²⁷⁶ They are also known in Syria, probably of local production, and dated to the eleventh century.²⁷⁷

Only two sherds from the Sheikh's House bear an incised design on the interior of a bowl base. The base of one bowl (fig. 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 (fig. 25:i). The incising is rather deep so that the design appears dark blue in the translucent glaze. Bowls with identical design but under a yellow or green glaze were found at Fustāt, dated to the tenth to eleventh centuries.²⁷⁸ The design used on these bowls seems to be derived from celadon dishes; Basil Gray notes that radial stripes occur frequently on qingbai bowls and dishes of the Northern Song period.²⁷⁹ Also in imitation of celadon is figure 25:o,

the bodysherd of a jar that has a rosette which Mason notes is in imitation of those on Song vessels.²⁸⁰ Figure 25:e is the rim of a bowl with incised lines on the exterior, which most likely represents vertical fluting like that on the exteriors of some celadon bowls such as the Longquan piece found in a fourteenth century context at Kilwa.²⁸¹

Marl 4 Incised Monochrome Glazed Ware has been found elsewhere in Quseir al-Qadim, at the Merchants' Houses (area P7-P8),²⁸² Trench S12c,²⁸³ in Central Building A,²⁸⁴ in the Eastern Area,²⁸⁵ and from the surface.²⁸⁶ The University of Southampton also recovered some sherds of this ware, referred to as "Tell Minis" ware and attributed to Syrian production.²⁸⁷ Venetia Porter and Oliver Watson²⁸⁸ attribute the production of glazed wares in Syria at this time to Egyptian potters.

Incised monochrome glazed wares, also known as Fustāt Fatimid Sgraffiato, were produced at Fustāt beginning in the ninth century, with production petering out between 1150 and 1250 CE.²⁸⁹ Examples from Kom al-Dikka in Alexandria are said to date probably from the eleventh century to the decline of the Fustāt ateliers.²⁹⁰ 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

²⁷⁴ Mikami 1980–1981, fig. 1; Scanlon 1970, pl. 12a.

²⁷⁵ Bahgat and Massoul 1930, color pl. 2:d.

²⁷⁶ Rougeulle 1999, fig. 8:7.

²⁷⁷ Tonghini 1998, 39.

²⁷⁸ Mikami 1980–1981, fig. 28; 1988, fig. 15a.

²⁷⁹ Gray 1977.

²⁸⁰ Mason 2004, 68, fig. 4.3.

²⁸¹ Chittick 1974a, pl. 130:d.

²⁸² Whitcomb and Johnson 1979, pl. 41:h, 42:e.

²⁸³ Whitcomb and Johnson 1979, pl. 38:e.

²⁸⁴ Whitcomb and Johnson 1982b, pl. 51:j.

²⁸⁵ Whitcomb and Johnson 1982b, pl. 33:n, o, q.

²⁸⁶ Whitcomb and Johnson 1979, pl. 50:d, e.

²⁸⁷ Bridgman 2000, 20, pl. 2. 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 Fayyūm, which were found in Fatimid and Ayyubid period graves (Łyżwa 2002).

²⁸⁸ Porter and Watson 1987, 189–91.

²⁸⁹ Scanlon 1967, 75; 1971, 228.

²⁹⁰ François 1998, 327; Zagórska 1990, 84, pl. III.

to have been produced in Raqqa in the twelfth and early thirteenth centuries.²⁹¹ Examples from Sistan in Iran are visually distinguishable from the Syrian and Egyptian styles and are dated ca. 1400 CE.²⁹²

Occupation at the Sheikh's House (discussed more fully in chapter 6) probably began around 1200 CE and lasted until around 1250 CE, 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 *Fuṣṭāṭ* Fatimid Sgraffiato continued in the vicinity of *Fuṣṭāṭ* 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,²⁹³ providing another clue to continued production of *Fuṣṭāṭ* Fatimid Sgraffiato or a related type in Egypt. 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. (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.)

A subgroup of the monochrome incised wares contains designs that are seemingly unique to Quseir al-Qadim, perhaps unique to the Sheikh's House (fig. 26). This is a group of four bowls, three of which are conical with a plain rim (fig. 26:a-c) and one of which is segmental with an everted rim (fig. 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 comparably 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 (fig. 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.²⁹⁴ 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.²⁹⁵

Monochrome-glazed jars, plain or decorated in relief (fig. 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 *Fuṣṭāṭ*,²⁹⁶ Siraf, eleventh-century Athar,²⁹⁷ and numerous sites in Bilād al-Šām, beginning in the ninth century.²⁹⁸ But whereas this tradition describes large and small jars with transparent turquoise or green 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,²⁹⁹ 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.

²⁹¹ Mason and Keall 1988, 461; Porter and Watson 1987; Tonghini 1998, 40, 44, 46–51.

²⁹² Mason 1996, 18, pl. 13:SS.8, SS.15.

²⁹³ Julie Monchamp, personal communications, February and August 2006.

²⁹⁴ Bridgman 2000, 44–45, pl. 5.

²⁹⁵ Rougeulle 2001, fig. 5:7–9; Zarins 1989, 251.

²⁹⁶ Sakurai and Kawatoko 1992, 1, pl. IV-3-7.

²⁹⁷ Zarins 1989, 250.

²⁹⁸ E.g., Avissar and Stern 2005, pl. 9:2, dated twelfth and thirteenth centuries.

²⁹⁹ E.g., Chittick 1984, 71, pl. 26; Horton 1996, fig. 196, 274–77; Zarins 1989, 249–50, fig. 6.

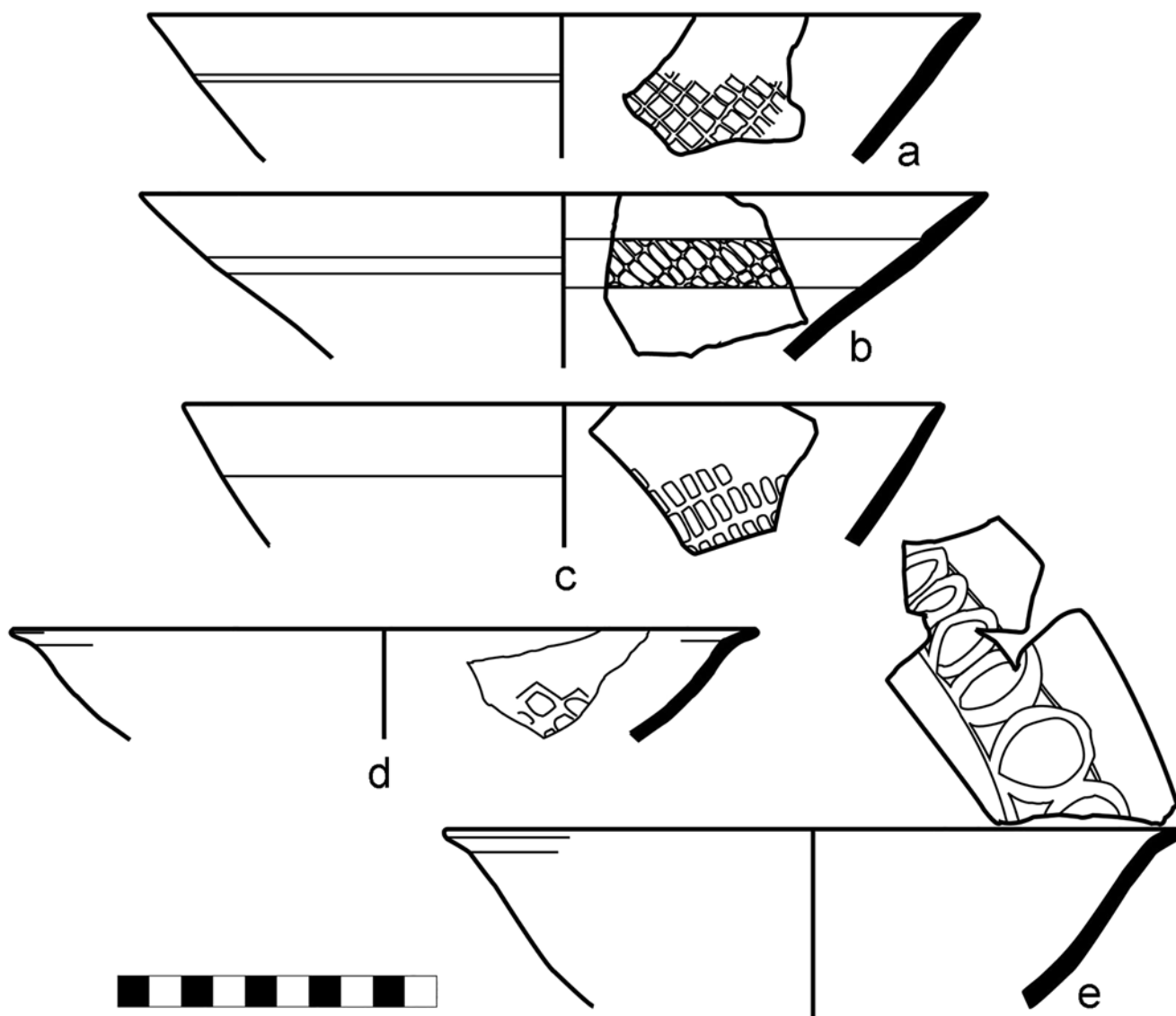


FIGURE 26. Marl 4 Incised Monochrome Glazed Ware, “Waffle” (a-d) and Carved (e) Types: a) K9b70_88-91/RN 349, b) K9b69_117/RN 349, c) K9b69_141/RN 349, d) K9b71_31/RN 349, e) J9d13_3/RN 260.

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. 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, connecting 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 other parts of the site, two plain turquoise-glazed jars like figure 27:e were excavated from the Merchants’ Houses (Area P7–P8) in 1978,³⁰⁰ along with one dark blue-green glazed jar

³⁰⁰ Whitcomb and Johnson 1979, pl. 44: h, j.

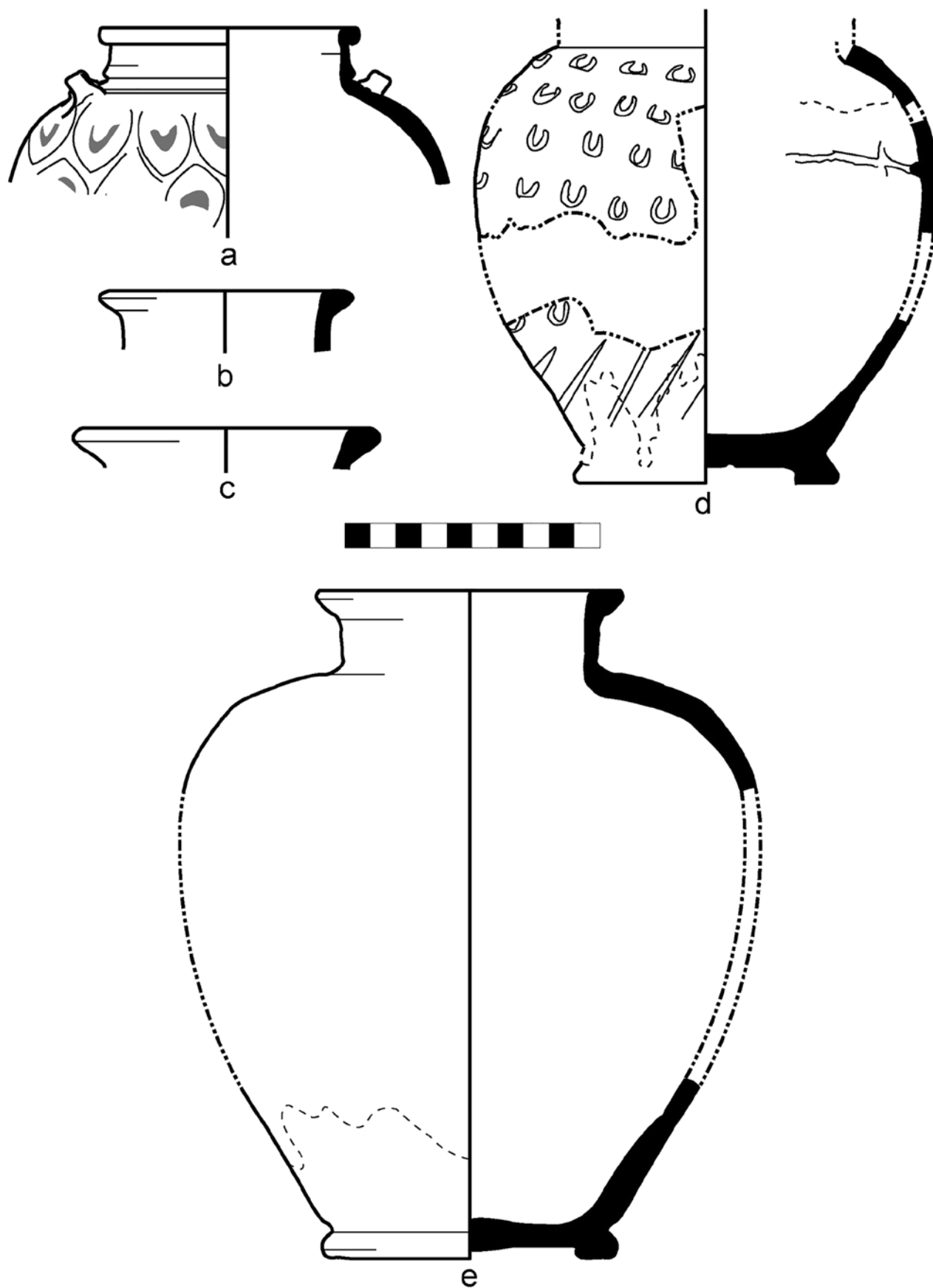


FIGURE 27. Marl 4 Monochrome Glazed and Incised Monochrome Glazed Jars:
 a) J9d2-3_1-3/RN 30 (Phase IIb), b) K9b7_1/RN 678 (Phase IIb), c) K9d2_1/RN 300 (surface layer),
 d) J9d4_14-21/RN 337 (Phase IIb), e) K9b69_122-139/RN 349 (Phase IIa).

with a very round and wide body having wide vertical grooves and tiny strap handles identical to those on figure 27:a.³⁰¹ Excavations in Central Building A yielded a green-glazed creamware jar with incised geometric and arabesque-type designs in an Islamic domestic context.³⁰² Surface finds from the 1978 season included a turquoise-glazed Marl 4 jar with molded pseudo-calligraphy.³⁰³ 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.³⁰⁴ Additionally, a bodysherd that looks as if it could have come from the jar of figure 27:a was unearthed in the Eastern Area.³⁰⁵

Sherds from the University of Southampton's excavations at 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 fabrics from Syria.³⁰⁶

Marl 4 Blue, Purple, White Drip Ware

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 "Blue, Purple, White Drip Ware" as it was dubbed by the University of Chicago team, 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. 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., pl. 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 percent of all Marl 4 wares (tables 11–12). Several sherds of bowls and jars were excavated from an Islamic context in trench S12c and from the Merchants' Houses.³⁰⁷ When rims are found elsewhere on the site they are usually notched or scalloped, although none is known from the Sheikh's House.³⁰⁸ One related piece with more deliberate painting came from the Eastern Area.³⁰⁹ Samples of the ware were also recovered in the University of Southampton's excavations.³¹⁰

This Blue, Purple, White Drip Ware can be categorized as "Fayyūmī," wasters of which have been found at Fustāṭ,³¹¹ but which are a widely distributed ceramic type. While the term "Fayyūmī" tends to be a catch-all for polychrome glazed wares of any color scheme in which the glazed decoration either has been allowed to drip down the vessel ("splash") or was painted in simple geometric designs (but not made in the Fayyūm), there are vessels at Fustāṭ 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 Fustāṭ in a pit that dates pre-eleventh century and may represent precursors to the type found in the Sheikh's House.³¹² The dripped decorative style of the Sheikh's House sherds is also known very early at Fustāṭ, and the Quseir al-Qadim evidence indicates the rather long life of this decorative style,

³⁰¹ Whitcomb and Johnson 1979, pl. 42:k.

³⁰² Whitcomb and Johnson 1982b, 39, pl. 51:j.

³⁰³ Whitcomb and Johnson 1982b, pl. 50:h.

³⁰⁴ Whitcomb and Johnson 1982b, pl. 33:l.

³⁰⁵ Whitcomb and Johnson 1982b, pl. 33:s.

³⁰⁶ Bridgman 2000, 46.

³⁰⁷ Whitcomb and Johnson 1979, 107, pls. 38:n, 41:a, 46:c, 47k, fig. 7.

³⁰⁸ Whitcomb and Johnson 1982b, pls. 33:m–n, 44c.

³⁰⁹ Whitcomb and Johnson 1982b, pl. 38:o.

³¹⁰ Bridgman 2000, pl. 11b.

³¹¹ George T. Scanlon, personal communication, March 2006.

³¹² Scanlon 1974b, 73, pl. 18:6.

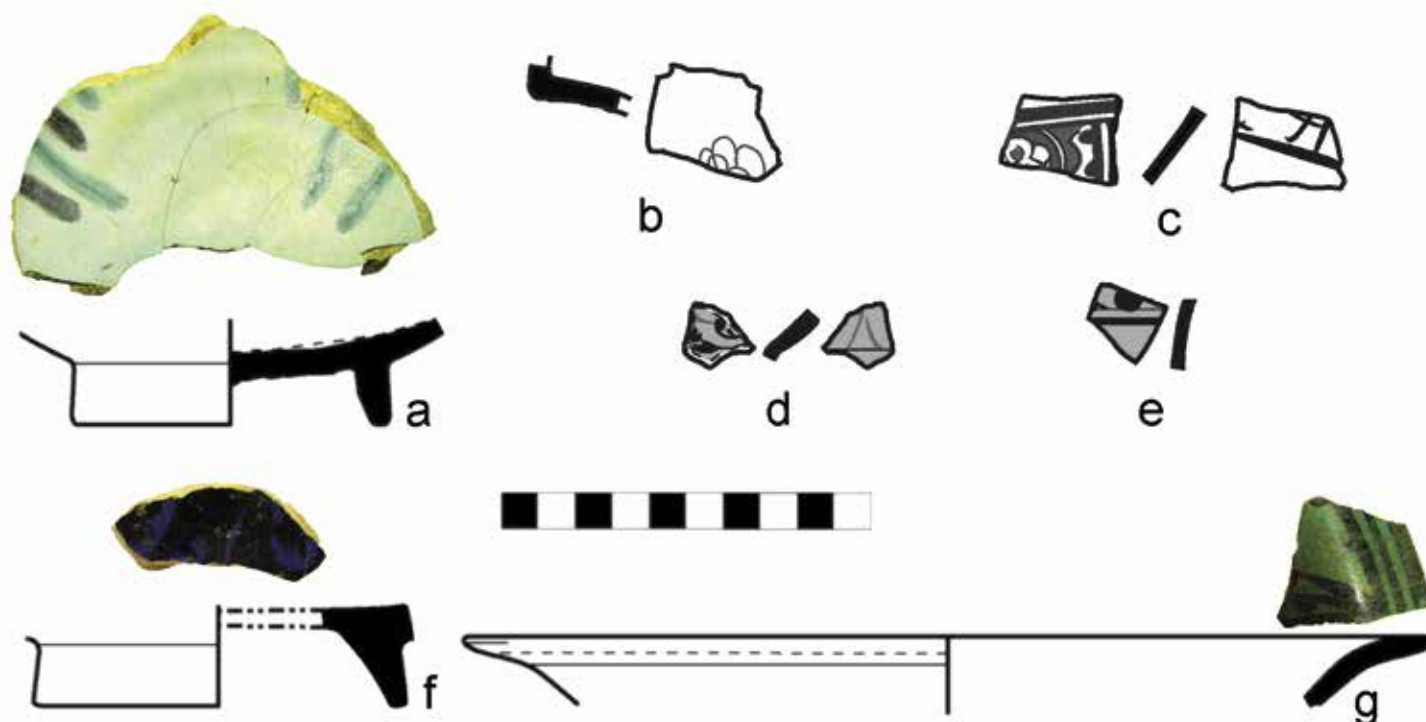


FIGURE 28. Marl 4 Bichrome and Polychrome Glazed Wares: a) J9d3_1/RN 249, b) J10c2_3/RN 289, c) J9d6_2/RN 322, d) K10a20_3/RN 239, e) J10c18_1/RN 256, f) J10c6_1/RN 288, g) K9b42_1/RN 329.

from at least 975 CE to sometime after 1300 CE.³¹³ 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.³¹⁴ Earlier similar vessels from Athar are bowls on ring bases of buff clay with white glaze and cobalt blue paint dripping down to the center from the rim.³¹⁵

Marl 4 Bichrome Ware

In-glaze or underglaze painting in a transparent glaze is found on only 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 colorless glaze. Blue in-glaze design occurs on early stonepaste ceramics in Egypt and Syria.³¹⁶ A few jars with carinated bases at Athar (ninth to eleventh century)

in the Yemen are decorated with floral patterns in black under a colorless glaze and are related to bowls decorated with geometric patterns.³¹⁷

Marl 4 Underglaze-Painted Wares

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 before being finely painted using black pigment, after which they are either glazed turquoise (fig. 28:d–e, from Phases I and IIa; and pl. 67:d–f, surface finds), or if blue pigment has been added as a filler, they are glazed clear (fig. 28:c), and surface collections (pl. 67:b–c). 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 possibly of Fuṣṭāṭ manufacture, as Aly Bahgat excavated a kiln of

³¹³ See also Mason 2004, 67–68.

³¹⁴ Zagórska 1990, 84, photo 1.

³¹⁵ Zarins and Zahrani 1985, 78, pl. 74:13–14.

³¹⁶ Tonghini 1998, fig. 48:c, ware H, fritware 1, dated eleventh–twelfth century.

³¹⁷ Zarins and Zahrani 1985, 78.

supposed fourteenth-century date in Fuṣṭāṭ,³¹⁸ and as the fabric contains the large amounts of sand that Mason attributes to Fuṣṭāṭ 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.³¹⁹ Bridgman tested similar sherds from the Southampton excavations and found them of likely Syrian origin.³²⁰ François attributes similar black under turquoise glazed sherds found at Alexandria to northern Syria production.³²¹ A group with black and blue paint under colorless glaze is dated to the fourteenth century and is attributed to “Syrro-Egyptian” production.³²² The Quseir al-Qadim sherds compare reasonably well with twelfth- to thirteenth-century and later sherds from Palestine and some from Damascus, but not those from Qal‘at Ja‘bar.³²³

A subgroup of underglaze-painted ware is represented by two sherds of “silhouette” ware from Phase IIb, 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 (fig. 28:f) or dark green glaze (fig. 28:g).³²⁴ Scanlon notes that while Egyptian potters preferred green glazes, the Syrian and Persian potters 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.³²⁵ Scanlon gives this ware a date similar to that of the Fuṣṭāṭ mounds in which it was found, that is to say 1200–1400 CE or possibly after, which broadly fits with the date of the Sheikh’s House assemblage.³²⁶

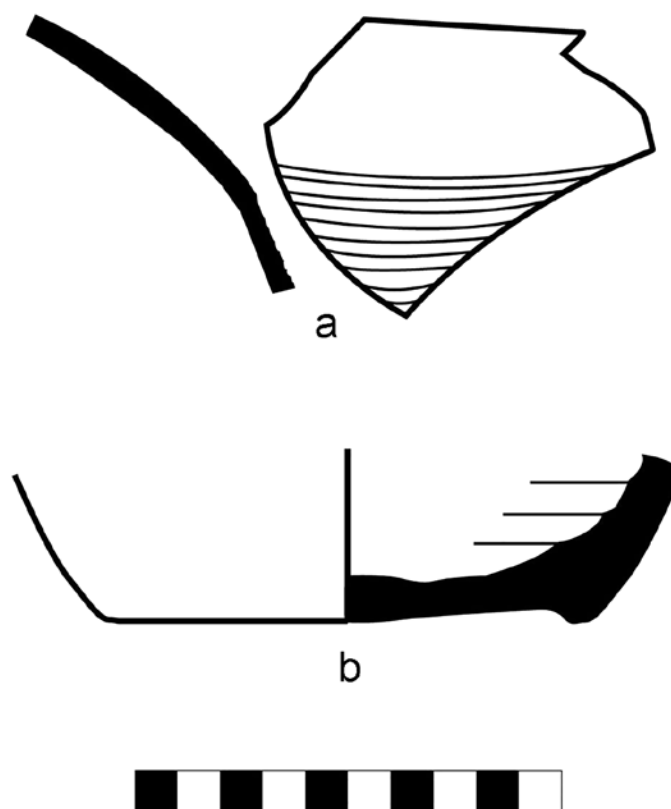


FIGURE 29. Marl 5 Ballas Ware:
a) K9b71_9/RN 347, b) K9b67_3/RN 261.

MARL 5 FABRIC

Ballas Ware

The Marl 5 fabric (fig. 29) is a product of the nearby town of Ballas just north of Qūs 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 percent of Nile silt.³²⁷ 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 they

³¹⁸ Bahgat 1914.

³¹⁹ Mason and Keall 1990, 181; also see Milwright 2008.

³²⁰ Bridgman 2000, 50, pl. 10a:IB7.

³²¹ François 1999, 25, pl. 16:24.

³²² Redlak 2003, fig. 1, Type 4.

³²³ 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] and 51–54, figs. 71–75; Touier 1973–1974, 213–14, pls. pls. IIB, IIIA.

³²⁴ Cf. Bridgman 2000, pl. 8b.

³²⁵ Julie Monchamp, personal communication.

³²⁶ Scanlon 1971, 231, pl. 3: f–j.

³²⁷ Matson 1974, 134, 138.

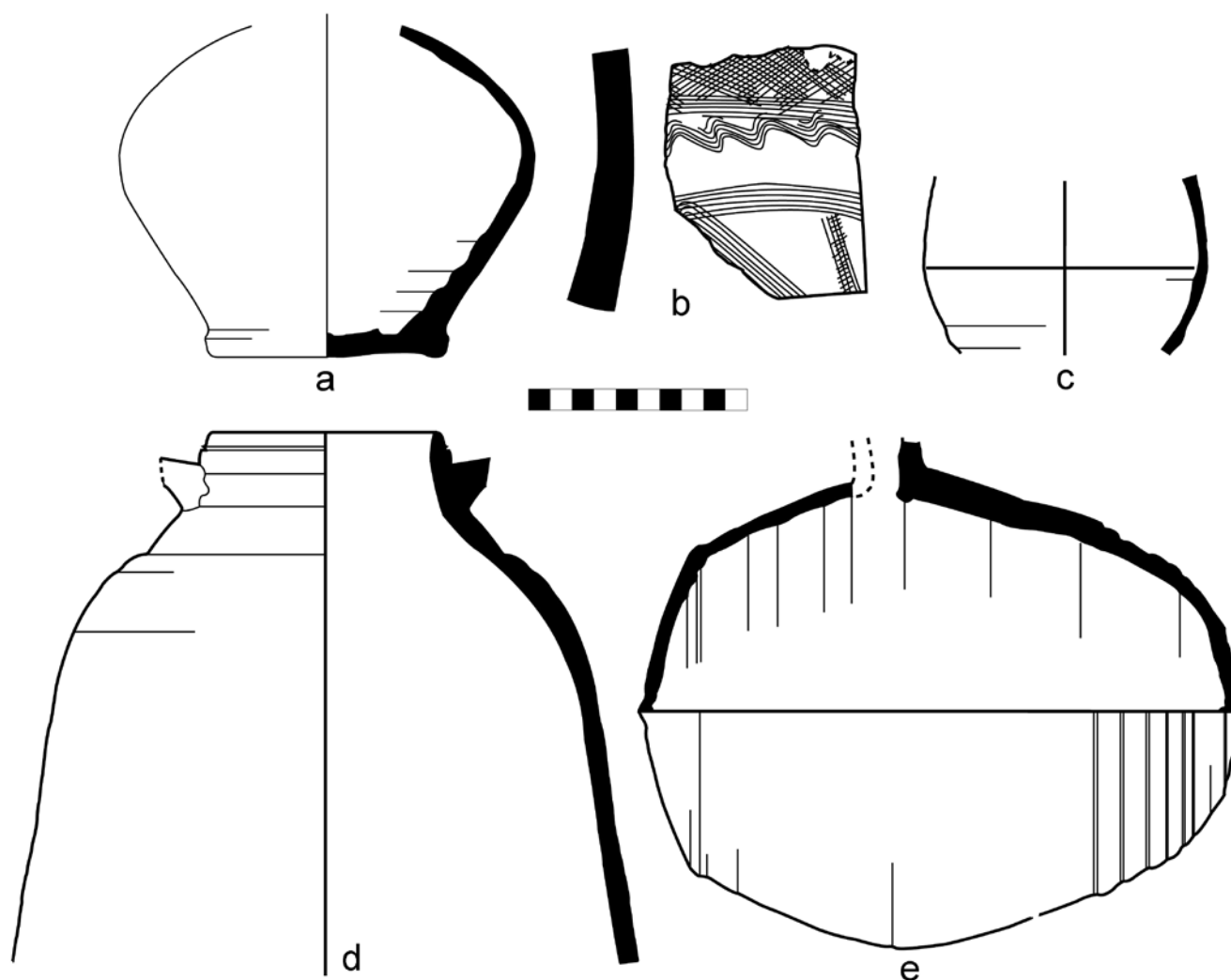


FIGURE 30. Marl 6 Utility Ware: a) K9b69_51-52/RN 346, b) K9b69_68/RN 347, c) K9b71_51/RN 347, d) K9b70_9/RN 347, e) K9b70_12-13, 92/RN 347.

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 film of soluble salts that travel to and remain on the surface during firing.³²⁸ (This phenomenon is noticeable on other wares at the Sheikh's House as well, due to the salinity of the soil.) 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 soft yellow limestone which tends to burn away, leaving yellow-rimmed voids. The sherds at the Sheikh's

House are very similar to Adams's Ware U12, "Ballas Drab Utility Ware," imported to Nubia from Ballas between 1100 CE and 1500 CE.³²⁹ Forms represented are store jars (fig. 29:b) or kegs (fig. 29:a).

MARL 6 FABRIC

Marl 6 (fig. 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).

³²⁸ Matson 1974, 137-38; Nicholson and Patterson 1989, 75.

³²⁹ W. Y. Adams 1986, 571-75.

Marl 6 Utility Ware

Only one utility ware was manufactured of the Marl 6 fabric, at least among those present at Quseir al-Qadim. Forms are medium (fig. 30:a, c) to very large storage jars (fig. 30:b), amphorae (fig. 30:d), and kegs or butter churns (fig. 30:e). A very thick-walled vessel has incised decoration on the exterior (fig. 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.

NILE-DOMINANT FABRICS

Fabrics predominantly composed of Nile silt combined with other clays 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.

NILE 1 FABRIC

The Nile 1 fabric is of medium density with common silt to 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 reddish-gray to 2.5YR 5/2 weak red on the interior.

Nile 1 Utility Ware

The few sherds of the Nile 1 fabric are from the same large spouted jug, found in the pit in Room B of the South House (fig. 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's Ware U21, "Mameluke Heavy Utility Ware," which made its appearance in Nubia (at Qaṣr Ibrīm and Meinarti) around 1350 CE, but was primarily imported from Egypt in the years 1400–1500 CE. Adams reports seeing it on the surface at Fustāṭ as well.³³⁰

NILE 2 FABRIC

Nile 2 Decorated Ware

Nile 2, like Nile 1, is 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 Fustāṭ, the Ayyubid wall, and Old Cairo, referred to at the Sheikh's House as Nile 2 Decorated Ware (fig. 32). The body is compact and hard, 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 (fig. 32:b–c, e).³³¹ Examples from the Ayyubid wall and Fustāṭ fit this description, the former dated to the eleventh and twelfth centuries and the latter not later than Mamluk.³³² Other varieties have a much wider band of white slip that may or may

³³⁰ W. Y. Adams 1986, 571.

³³¹ Cf. Whitcomb 1979, pl. 43g.

³³² Julie Monchamp, personal communication April 2006; Bahgat and Massoul 1930, pl. LX:6; Sakurai and Kawatoko 1992, vi, no. 13, 267, no. 2, 93, nos. 6–7; Scanlon 1974b, pl. 16:2; 1986, figs. 180, 84, 85. For further investigations of these objects, see Brosh 1980; Dumarçay 1965; Ghouchani and Adle 1992; Poulsen 1957; and Savage-Smith 1997.

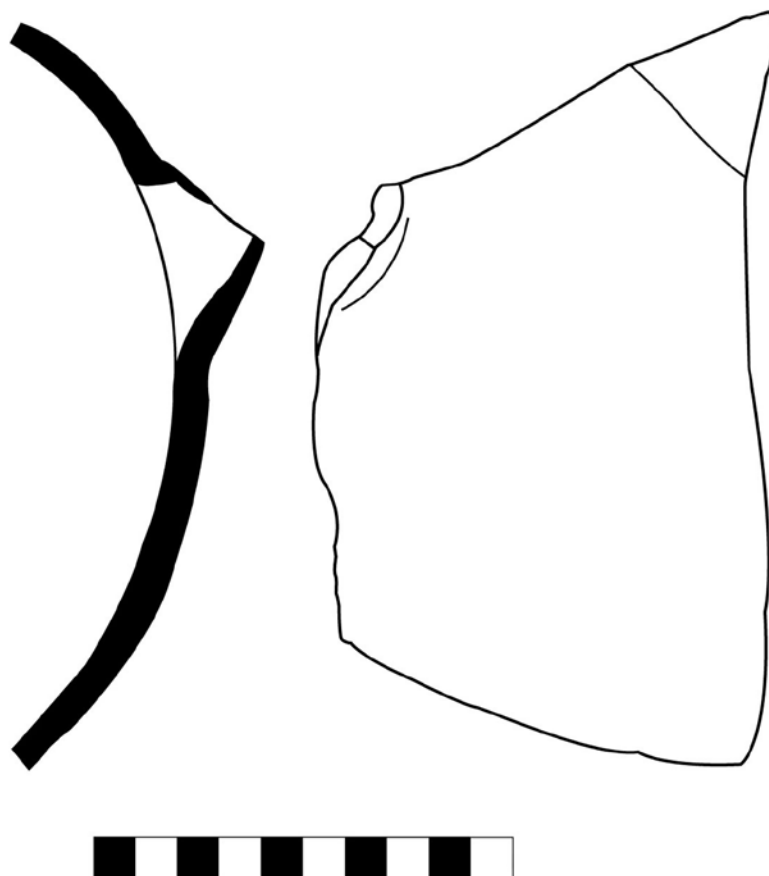


FIGURE 31. Nile 1 Utility Ware: K9b69_66/RN 347

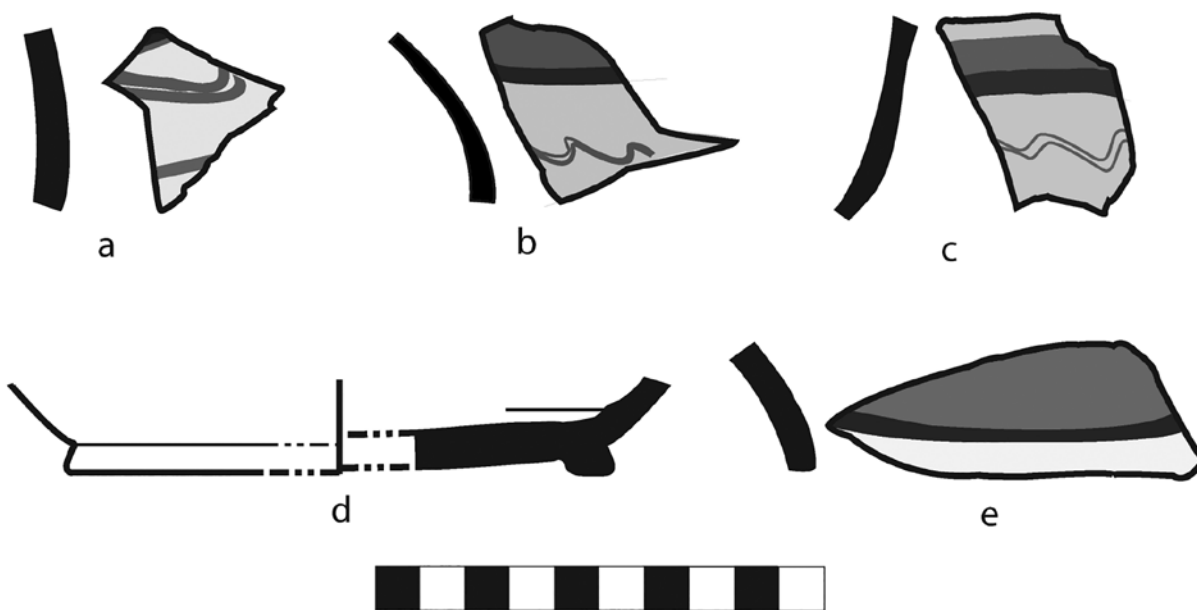


FIGURE 32. Nile 2 Decorated Ware: a) K9b52_1/RN 47, b) J10c8_4/RN 284, c) K9b59_3/RN 307, d) K9b16_1/RN 173, e) K9b23_3/RN 578.

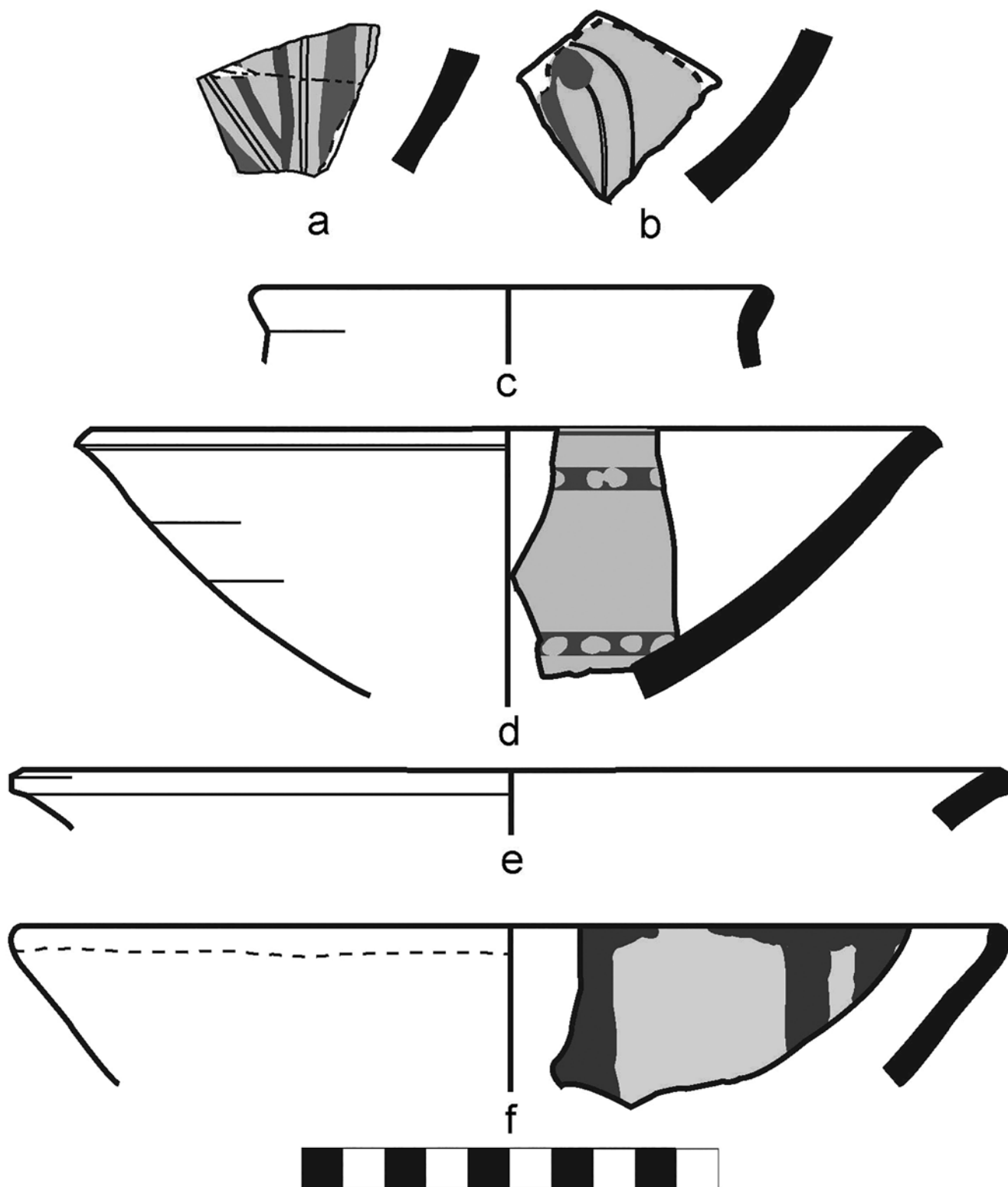


FIGURE 33. Nile 3 Glazed Table Wares:

- 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.

not be incised with a much wider wavy line.³³³ This second type also seems to have been found in ‘Aden, and rims from these bottles appear in the Eastern Area assemblage at Quseir al-Qadim.³³⁴ Various types of red ware jars or jugs, some with filternecks, and some painted, were found in the Merchants’ Houses and may represent variations of this ware.³³⁵ 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 11).

NILE 3 FABRIC

Nile 3 is a rather loose fabric group of which several fine glazed table wares were made (fig. 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 fig. 33:e; or white glazed as in fig. 33:c), Blue and Yellow Glazed Ware (fig. 33:f), and Slip-painted Glazed Ware (fig. 33:d; another sample is simply slipped and glazed, K9b69_118/RN 349, not illustrated³³⁶), as well as an unusual sgraffiato piece with light incising under the light-colored slip, a colorless glaze, and application of a secondary color (dark brown) in a very thick glaze (fig. 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. However, it 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 colorless, green, yellow, turquoise, green-yellow, dark brown, white, light green, and blue. This ware may be related to Adams’s Group G.IV. Mameluke Glazed Wares, imported to Nubia beginning in 1200 CE, but being especially prevalent between 1300 and 1500 CE. Green, but not white glaze, is present in that assemblage.³³⁷

Nile 3 Polychrome Sgraffiato Ware

Figure 33:a, found in two surface layers, shows 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). The overall design of the bowl would have been lines radiating from the center to the rim, accomplished with sets of incised double lines and brown painted lines under a yellowish glaze and green in-glaze stripes. Red ware vessels with white slip, incised decoration, and polychrome glazes were produced as early as the tenth and early eleventh centuries CE. For example, they appear at Sharma in the Yemen in the late tenth century,³³⁸ at Shanga in East Africa in post-1000 contexts,³³⁹ and eleventh-century Siraf.³⁴⁰ This sherd fits well with the group of “Late sgraffiato pottery” at Shanga, particularly the “Champlevé

³³³ I.e., fig. 32:a; Julie Monchamp, personal communication February 2006; Alison Gascoigne, personal communication April 2006. 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 1250 CE and continued in circulation until the mid-fourteenth 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.

³³⁴ Harding 1964, pls. IV: 34, VI: 3–4; Whitcomb and Johnson 1982b, pl. 50:d–e.

³³⁵ Whitcomb and Johnson 1979, pls. 41:a–b, 43:b, d, 44:e.

³³⁶ But cf. Hardy-Guilbert and Rougeulle 1995, fig. 4:12.

³³⁷ W. Y. Adams 1986, 596–97.

³³⁸ Hardy-Guilbert 2005.

³³⁹ Horton 1996, 15.

³⁴⁰ Whitehouse 1975, 265–67.

decorated" type with radiating lines, dating between 1000 and 1300 CE.³⁴¹ Vessels with similar decorative schemes were found at Qal'at Ja'bar in Syria dated to the first half of the fourteenth century³⁴² and at Capernaum in the Galilee, where it was found in a stratum that is dated to 1033 CE at the latest.³⁴³ An example nearly identical to the one from the Sheikh's House found at al-Tūr in the Sinai peninsula was recovered from mixed modern layers.³⁴⁴

Various types of polychrome sgraffiato wares were made in Fustāṭ, and also at numerous sites in Greater Syria, Cyprus, and the northern Mediterranean in the thirteenth and fourteenth centuries, and circulated widely in these regions and the Persian Gulf.³⁴⁵ It is significant that this most popular type of pottery produced in the Mamluk period is only present in one sherd from a surface layer at the Sheikh's House (fig. 33:a), and otherwise comes from the Eastern Area at Quseir al-Qadim. 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 and IIb, and four from surface layers (table 11). These are all of the simple type with no slip and a monochrome glaze, similar to the one incised redware at the Merchants' Houses.³⁴⁶ Monochrome sgraffiato was also found at Quseir al-Qadim by the University of Southampton.³⁴⁷ The Eastern Area contains examples of both simple and complex sgraffiato, the latter more like the sgraffiato that is known from Fustāṭ and around the Mamluk world, similar to figure 33:a (table 10). 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;³⁴⁸ thirteen additional sherds are of the simpler type with no slip

and incised decoration consisting of straight lines, or occasional curvilinear motifs.³⁴⁹

Nile 3 Blue and Yellow Glazed Ware

The bichrome Blue and Yellow Glazed Ware sherd of group Nile 3 (fig. 33:f) is a ware that occurs only in Phase IIb at the Sheikh's House; twenty-eight sherds were collected representing 20 percent of all Nile 3 sherds (thirty-three sherds were found in surface levels; see table 11). Very little was recovered from the remainder of the site; only seven sherds came from mostly upper levels in the Eastern Area.³⁵⁰ This Nile 3 bichrome sherd is from a shallow segmental bowl, lightly ribbed in the interior, with an incurving rim. The fabric 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 into the interior of the bowl; this glaze also remains thick and shiny. Similar sherds have been recovered at Fustāṭ by the Japanese team and dated to the tenth century.³⁵¹ If this is the same ware, it is curious that if it had been 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, extends its production into the fourteenth century.

NILE 4 FABRIC

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,

³⁴¹ Horton 1996, 285–89.

³⁴² Tonghini 1998, 58, figs. 89:k, 91:e, i.

³⁴³ Berman 1989, fig. 71:25.

³⁴⁴ Kawatoko 1996, pl. 32:5.

³⁴⁵ Avissar and Stern 2005, 38, 42–43, 46–47, 54–56, 60–62, 72–73; Hardy-Guilbert 2005; Keall 1981, fig. 1:1, 3–4; Kennet 2004, 34–37; Kubiak 1998; Mason and Keall 1990, 180; Scanlon 1980; Tonghini 1998, 57–62.

³⁴⁶ Whitcomb and Johnson 1979, 107, pl. 44:o.

³⁴⁷ Bridgman 2000, pl. 1a.

³⁴⁸ Whitcomb and Johnson 1982b, pl. 35:a–b, d, f, h, j, p–r, t, x.

³⁴⁹ Whitcomb and Johnson 1982b, pl. 35:c, g, i, k–o, s, u–w.

³⁵⁰ Whitcomb and Johnson 1982b, 138, pl. 38: v–aa.

³⁵¹ Sakurai and Kawatoko 1992, x, no. 8, 359 [pl. IV-3-3], nos. 5, 7, and pl. 407 [pl. IV-3-3], nos. 1, 3.

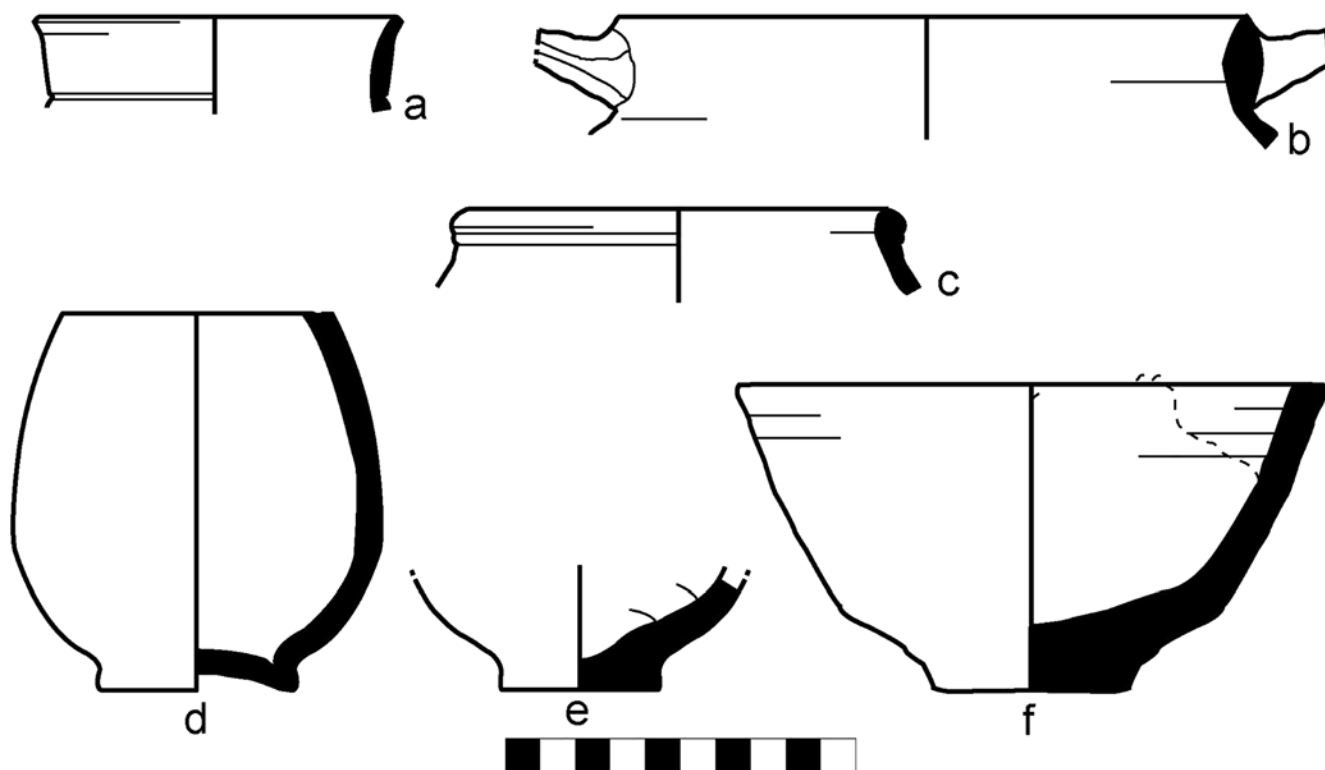


FIGURE 34. Nile 4 Utility Wares 1, 2, and 3: a) K9b53_11/RN 269, b) J9d2_10&11/RN 264, c) J10c16_2/RN 13, d) J9d12_1/RN 117, e) K9b3_5/RN 678, f) K9b46_3/RN 257.

possibly grog (fig. 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.

Nile 4 Utility Ware 1

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

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

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 Storeroom 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.

NILE 5 FABRIC

The Nile 5 fabric can be characterized as being of medium density, tempered with moderate to common amounts of very fine to medium sand (fig. 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.

Nile 5 Utility Ware

One utility ware is present in the Nile 5 fabric: 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 (fig. 55:c–d, f) and a base sherd (fig. 35:g). Rim and neck sherds (fig. 35:e, h), perhaps from the same qulla in Phase IIb, have parallels in the Old Cairo, Shaft 4 Mamluk assemblage.³⁵² Large and small storage jars (fig. 35:i–j) and small red slipped or painted globular jars with rounded rims and short necks (fig. 35:a–b), as well as a small clear-glazed bowl (fig. 35:k) are also present. Finally the jar shown in figure 35:l has a distinct ledge rim and is glazed yellow-green, although most of this has worn off.

NILE 6 FABRIC

Nile 6 Coarse Utility Ware

Nile 6 is of similar clay body to Nile 5 but with a less dense paste and is generally coarser (fig. 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. All are from Phase IIb. The rim sherd in figure 36:c has a parallel in Jebelain, dated 800–1150 CE.³⁵³

NILE 7 FABRIC

Nile 7 Decorated Ware

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 surface layers. The forms include 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 ʿAswān and Nubian styles. They are probably related to several painted vessels excavated from the Eastern Area at Quseir al-Qadim.³⁵⁴

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.³⁵⁵ 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 (fig. 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 ʿAswān specimen seen above (fig. 16:f), but the fabric of the vessel does not match the ʿAswān 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.

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 from the Sheikh's House 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

³⁵² Alison Gascoigne, personal communication, April 2006.

³⁵³ Whitcomb 1988b, fig. 2h.

³⁵⁴ Whitcomb and Johnson 1982, pl. 41: h–y.

³⁵⁵ W. Y. Adams 1986, 494, 500, fig. 163:1–5.

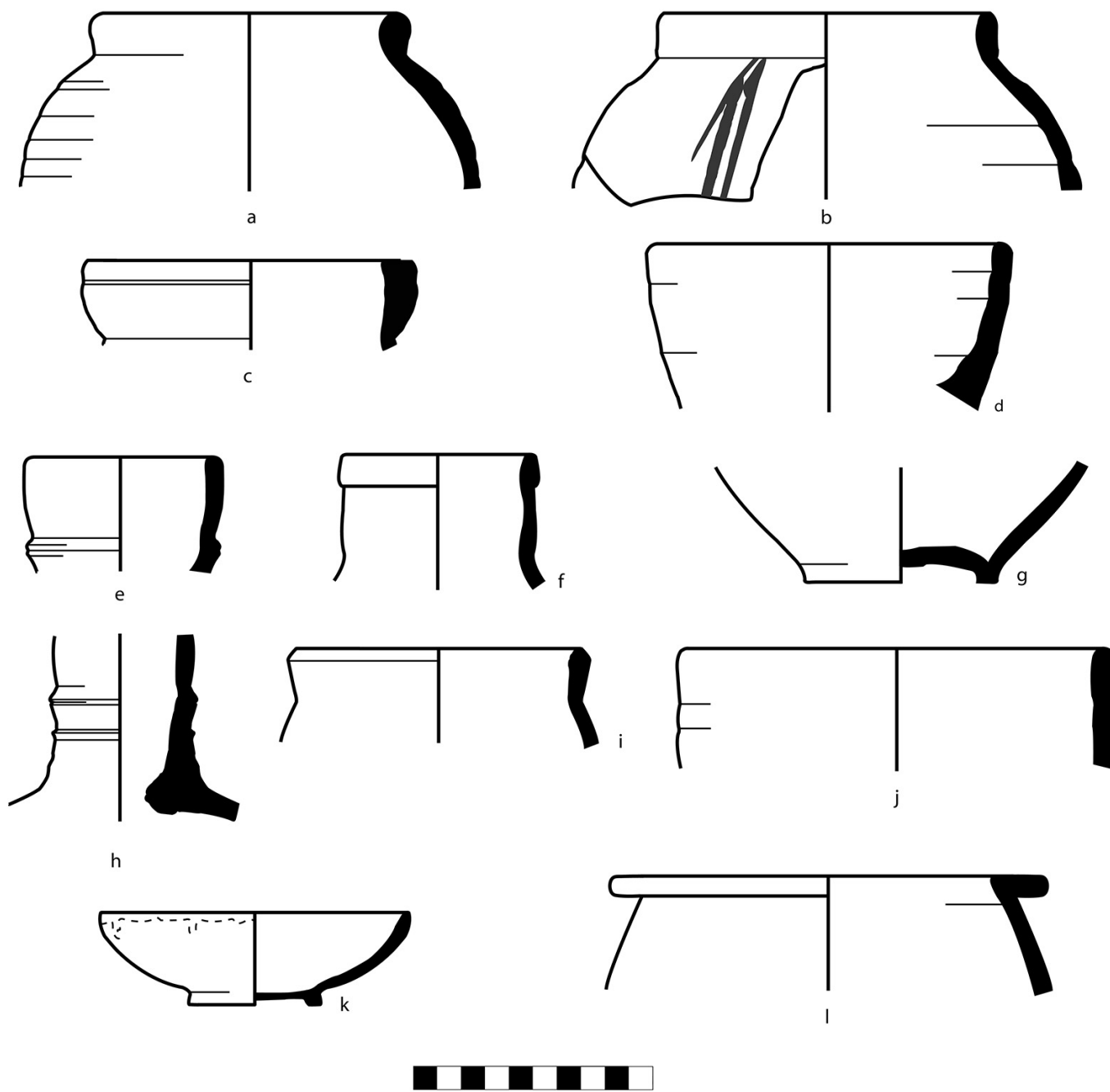


FIGURE 35. Nile 5 Utility Ware:

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) J9d13_1/RN 260.

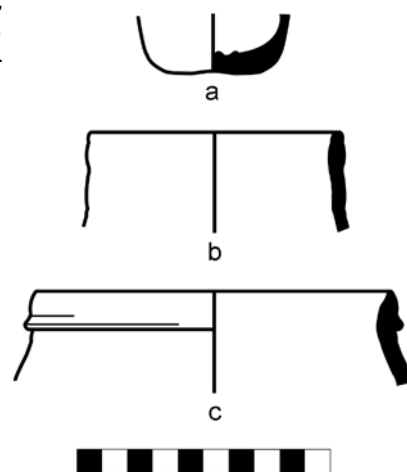


FIGURE 36. Nile 6 Coarse Utility Ware a) K9b17or18_1/RN 678, b) K9b5_1/FN 11b.1, c) K9b5_4/RN 678/FN 115.2.

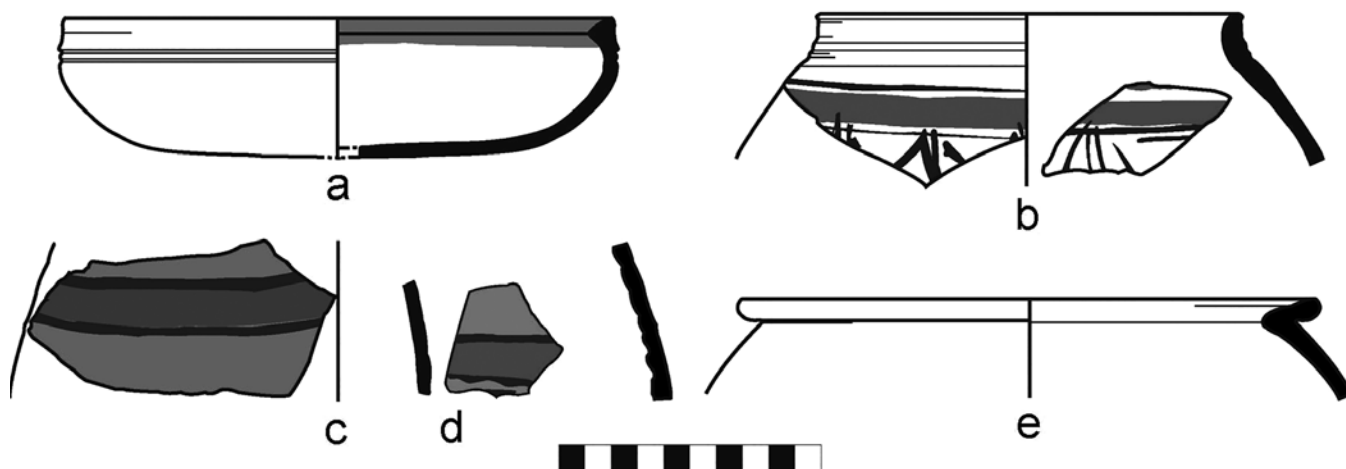


FIGURE 37. Nile 7 Decorated Ware a) K9b38_1-15, b) K9b3_1-2, c) J9d2_8, d) K9b70_84, e) K10a15_3.

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. The sherd shown in 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 to 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 in a very hot kiln, or a slightly worn translucent glaze. 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,³⁵⁶ and vessels identical in form and surface treatment were found in the Merchants’ Houses.³⁵⁷ Also compare the form of finds at Fustāṭ.³⁵⁸

The second sphero-conical vessel (fig. 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 Fustāṭ, dated to the eleventh century.³⁵⁹ 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.³⁶⁰

The identification and purpose of these types of vessels are 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.³⁶¹ They have been suggested to be grenades or fire-blowers,³⁶² although this is not convincing due to their thickness, hardness, and durability.³⁶³ Other suggestions include their use as alchemical vessels, as containers for precious liquids

³⁵⁶ Whitcomb and Johnson 1979, pl. 40:q.

³⁵⁷ Whitcomb and Johnson 1979, pls. 41:g, 47:q.

³⁵⁸ Sakurai and Kawatoko 1992, 229, no. 2, 79, no. 9.

³⁵⁹ Scanlon 1974a, fig. 3.

³⁶⁰ Whitcomb and Johnson 1982b, pl. 49:k, l.

³⁶¹ W. Y. Adams 2002, pl. 16:e3; Ghouchani and Adle 1992, 72; Keall 1992b, 12.

³⁶² E.g., Hildburgh 1951; Pentz 1988.

³⁶³ E.g., see the arguments of Ettinghausen 1965; and Seyrig 1959.

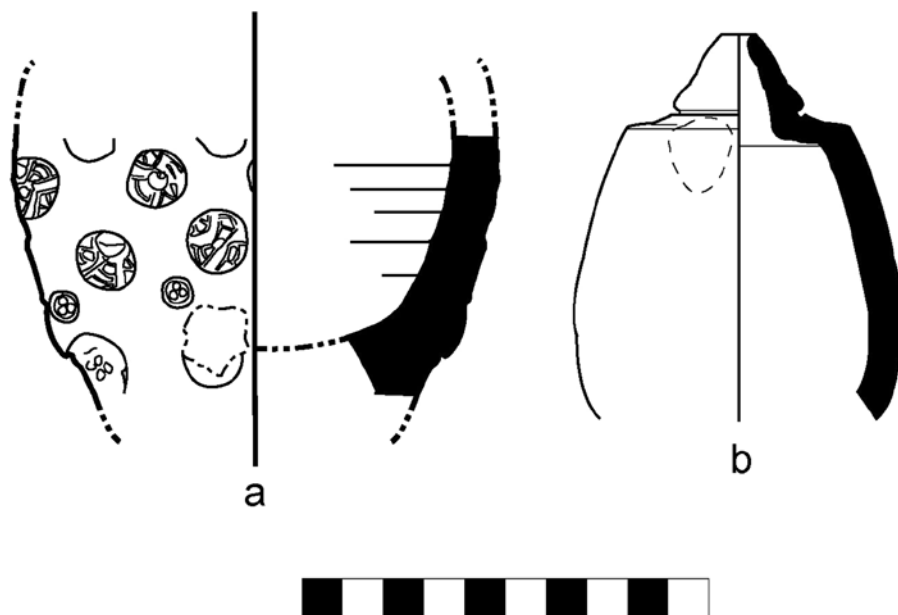


FIGURE 38. Stoneware Sphero-Conical Vessels:
a) K10a11_1/RN 248, b) K9b23_2/RN 578&173.

such as wine, perfume, or mercury, or as parts of water pipes.³⁶⁴ 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.³⁶⁵ 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.³⁶⁶

IMPORTED WARES

NUBIA

A very few of the vessels found at the Sheikh's House either seem to have been made in Nubia, or are Egyptian and have affinities with Nubian pottery. It is unknown how far Nubian pottery extended into Egypt in this period, as it has not been identified at Nile Valley sites.³⁶⁷ 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.³⁶⁸ 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,³⁶⁹ which correlates with few Nubian sherds being found in Quseir al-Qadim in Upper Egypt.

Nubia 1 Fabric: Nubia 1 Decorated Ware

Nubia 1 (fig. 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 House this only appears in the sherds of one bowl, assigned to its own ware, Nubia 1 Decorated Ware. Figure 39:a depicts the conical bowl with incurving

³⁶⁴ Ghouchani and Adle 1992; Keall 1992a; 1992b; 1993. According to George Scanlon, at Fustāṭ it always came from post-1200 contexts and was referred to as "Aswān ware" after W. Y. Adams. Wladyslaw Kubiak had always intended to publish it (George T. Scanlon, personal communication, March 14, 2006).

³⁶⁵ Ghouchani and Adle 1992, 72, 74, 86–87; Rogers 1969.

³⁶⁶ Ghouchani and Adle 1992, 74–86.

³⁶⁷ Pamela Rose, personal communication; W. Y. Adams 1977, 520.

³⁶⁸ W. Y. Adams 1977, 456, 525–31; Garcin 1976, 92, 126–27, 211–16; 1978, 305.

³⁶⁹ W. Y. Adams 2002, 93–94.

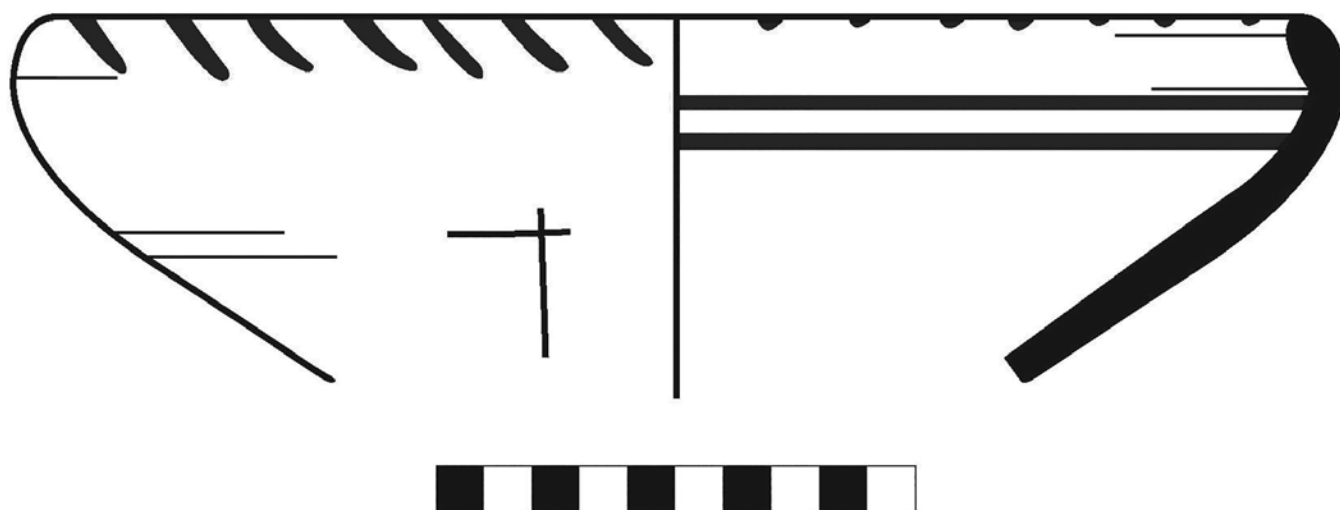


FIGURE 39. Nubia 1 Decorated Ware: K9b51_2/RN 94.

rounded rim, which may be related to ware R21, “Post-Classic Christian Polished Orange Ware,” dated 1000–1300 CE.³⁷⁰ The form corresponds well to Adams’s bowl form C36, which has a rounded base, but may actually belong to a footed bowl form such as D23³⁷¹. 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’s decorative style A.II, sometimes seen on this ware.³⁷² 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.

Nubia 2 Fabric: Nubia 2 Utility Ware

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 (fig. 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. 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.

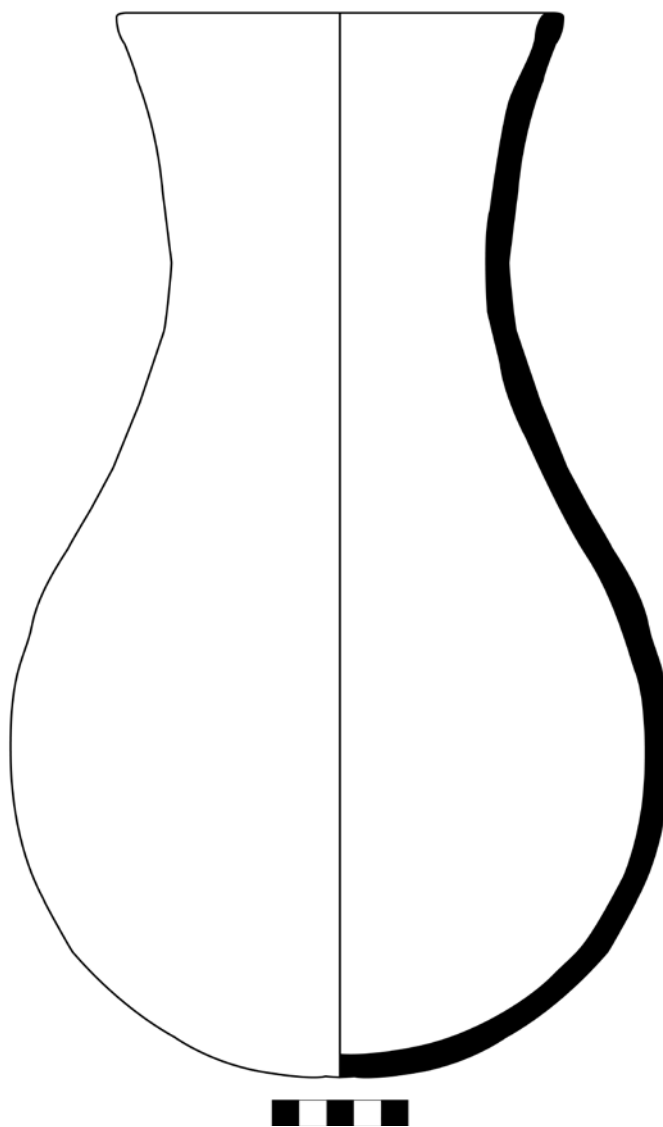


FIGURE 40. Nubia 2 Utility Ware: K9b56_44–48/RN 119.

³⁷⁰ W. Y. Adams 1986, 497–98; also cf. an East African basin found in the Hadhramaut in Rougeulle 1999, fig. 8:15.

³⁷¹ W. Y. Adams 1986, figs. 118, 282.

³⁷² W. Y. Adams 1986, fig. 215:8-1, 1-1.

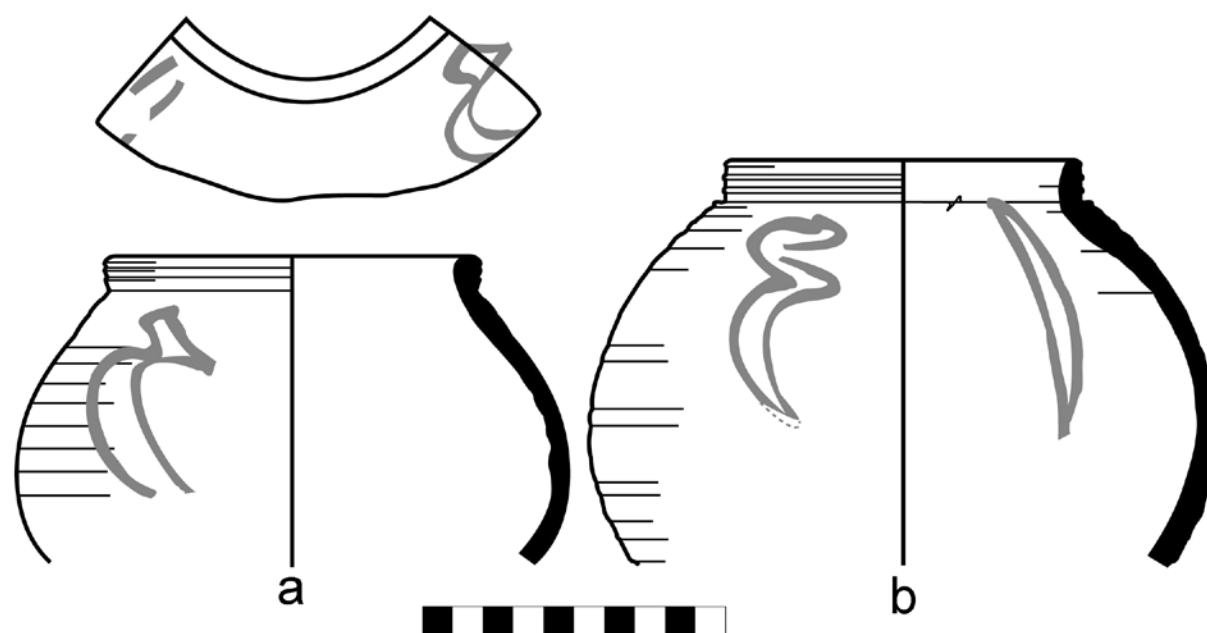


FIGURE 41. Nubia 3 Figural Painted Ware Jars: a) J9d4_4/RN 95, b) J9d4_8/RN 97.

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.³⁷³ Quseir al-Qadim's Nubia 2 Utility Ware rather seems related to Ware H4, "Later Domestic Plain Utility Ware," a very coarse and heavy plain handmade ware manufactured, as with most of the D.III group, between 1000 and 1600 CE. The form is not in Adams's typology, but he does mention that not all the forms are known, due to insufficient samples of whole specimens.³⁷⁴ For example, sherds of this ware were particularly abundant at Meinarti in the Late Christian period (1200–1365 CE), but only five vessels forms could be distinguished.³⁷⁵ Photographs of the few whole vessels found illustrate the similarity of crude manufacture technique with the jar found at the Sheikh's House.³⁷⁶

Nubia 3 Fabric: Nubia 3 Figural Painted Ware

Nubia 3 is a fabric group containing two vessels of the same type, 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, corrugated necks and noticeable but not exaggerated rotation marks in and out (fig. 41:a–b). They were 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 includes 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. Both pots bear the same decorative scheme, which is the use of two motifs on the exterior 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. The decorative scheme could possibly fit into Adams's 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

³⁷³ Chittick 1984, 108, fig. 86.

³⁷⁴ W. Y. Adams 1986, 427.

³⁷⁵ W. Y. Adams 2002, 61.

³⁷⁶ W. Y. Adams 2002, pl. 15:a1, a2 ,a9, d, e4.

Red Sea Hills from 850 to 1100 CE.³⁷⁷ 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, however, and neither do the form and clay conform to any combination that is known in Nubian pottery. The clay body and surface treatment are nevertheless familiar. 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 CE, and sherds persist until 1250 CE.³⁷⁸ These Nubia 3 Figural Painted Ware vessels may represent a rare or unknown ware in the Nubian group, related to W6.

YEMEN

Yemen appears in the Quseir al-Qadim documents only a few times. Text 67 explicitly names “Yemen” and RN 1056b, a fragmentary text, makes reference to the important port of ‘Aden; the writers of Text 9 are stuck in Qaṣr al-Yamānī, which must be a reference either to a Yemeni town or to a town outside of Yemen that has a Yemeni founder or inhabitants.³⁷⁹ Nevertheless, several types of ceramics substantiate Quseir al-Qadim’s participation in the trading contacts between Egypt and Yemen first well-attested in the Fatimid period,³⁸⁰ 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 FABRIC

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. 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.

Yemen 1 Black on Yellow Ware

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 (fig. 43) or simple everted rim (fig. 42). Some bear the marks of having been pared on the exterior (e.g., fig. 62:e–g). One filterneck jug is in the assemblage (fig. 62: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. The yellow glaze has decayed to a powdery coating on most of the sherds, and often the brown painted design has nearly entirely faded; few vessels retain their original gloss.

“Black on Yellow Ware,” or “Mustardware,” as Whitcomb and Johnson first termed it, was found in noticeable quantities at Quseir al-Qadim and also at the Sheikh’s House, in all phases and sub phases: at least 164 sherds came from the Sheikh’s House alone (1.19 percent of total sherds; table 10), in addition to thirty-six from the remainder of the University of Chicago excavations.³⁸¹ Numerous more were found in the University of Southampton excavations, composing 12 percent of all decorated ceramics found by that team, or 1.56 percent of all ceramics.³⁸² This type has been found in numerous locations in Egypt, Nubia, East Africa, the Yemen, Oman, and Northwest Arabia, usually appearing in the thirteenth century

³⁷⁷ W. Y. Adams 1986, 245–47.

³⁷⁸ W. Y. Adams 1986, 490, 493–94.

³⁷⁹ Guo 2004, 62, 155, 281.

³⁸⁰ Al-Shamrookh 1993; Goitein 1980; 1988.

³⁸¹ Whitcomb and Johnson 1979, pls. 36:d, f, 37: e–g, 38: g–h, 41:c, f, 42:b, 43:k, 44:g, 46:b, 48:d–e, k; 1982b, pls. 37, 51:d, e.

³⁸² Bridgman 2009, 136–37, figs. 14:2:11–13, 14:3.

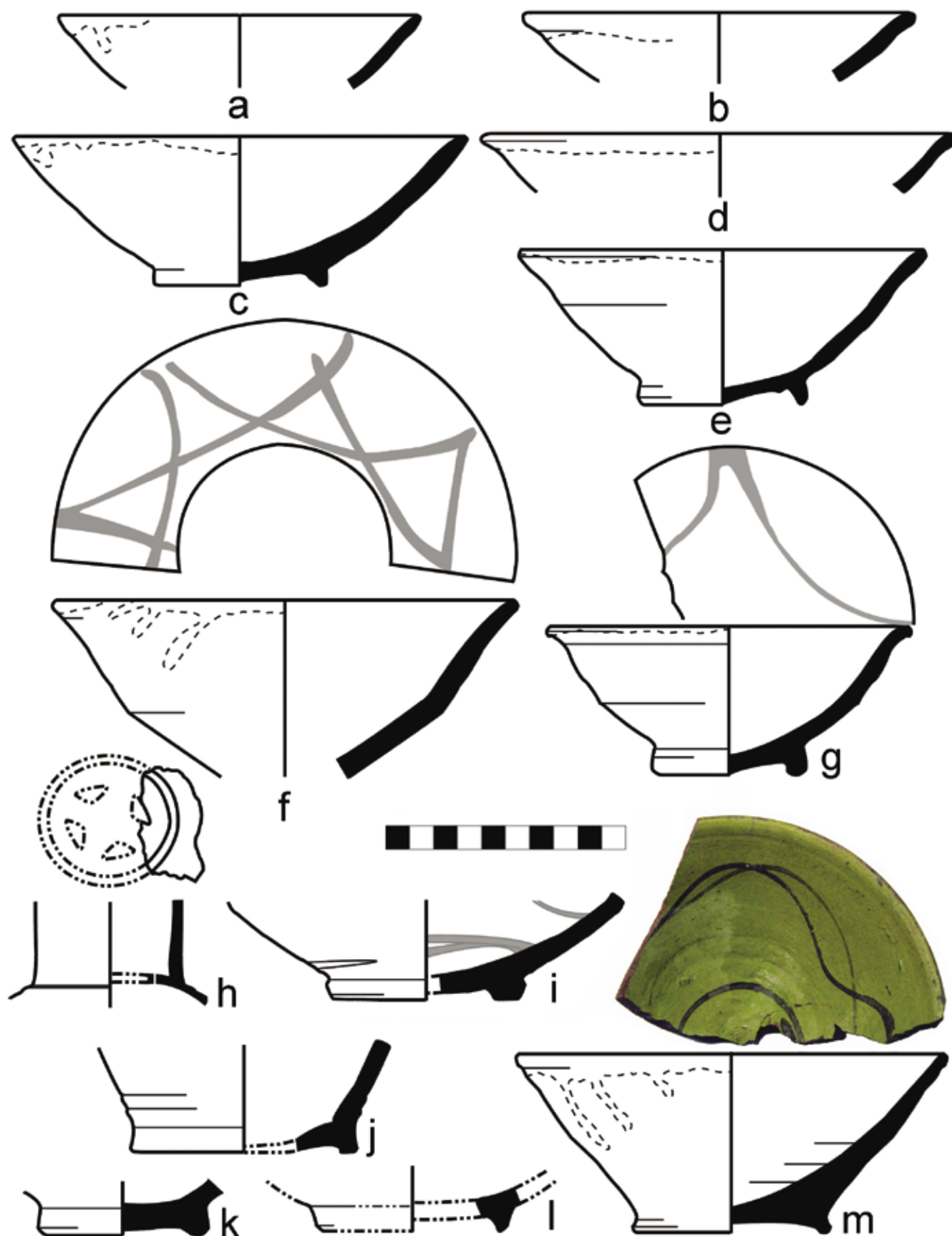


FIGURE 42. Yemen 1 “Black on Yellow Ware” Small Bowls, Phase I (a-b, e, h, k-l), IIa (g, i-j), and IIb (c-d, f): a) K9b56_31/RN 297, b) K9b56_30/RN 297, c) K9b67_4/RN 343, d) K9b67_2/RN 261, e) K9b53_14-19/RN 338, f) J10a9_1/RN 342, g) K9b71_34-35/RN 349, h) K9b53_8/RN 269, i) K9b70_83/RN 349, j) K9b71_33/RN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

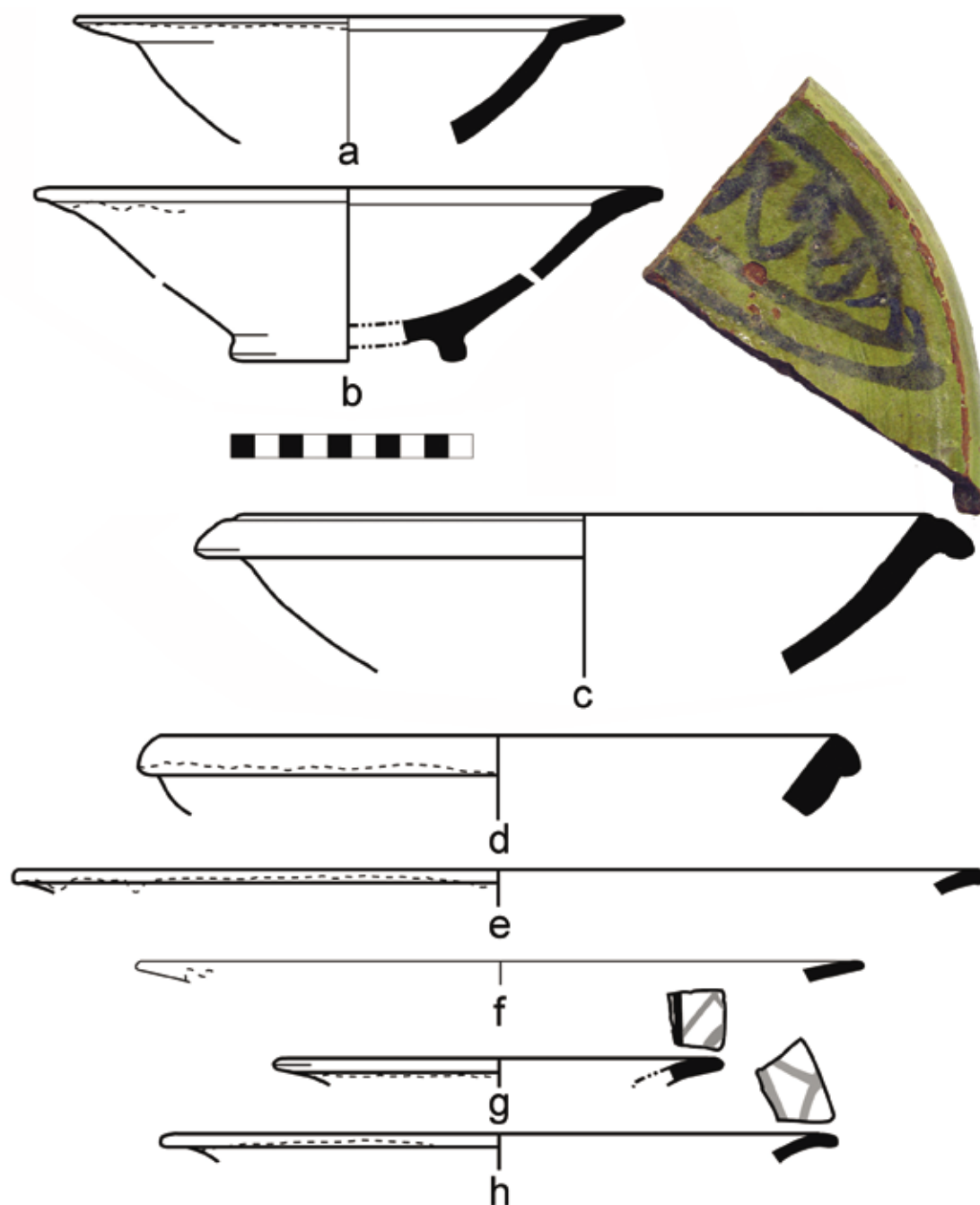


FIGURE 43. Yemen 1 “Black on Yellow Ware” Large, Ledge-rimmed Bowls, Phase I (b, d-h), Phase IIa (a), and Phase IIb (c):
 a) K9b71_47/RN 349,
 b) K9b56_25and32/RN 297,
 c) J9d4_24/RN 330,
 d) K9b53_12/RN 338,
 e) K9b53_13/RN 338,
 f) K9b56_27/RN 297,
 g) K9b21_2/RN 584,
 h) K9b56_27/RN 297.

and lasting into the fourteenth.³⁸³ 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 Fuṣṭāṭ in post-1200 contexts by the American excavations, although never published. They assumed it to have

been made in ḤAswān.³⁸⁴ Mutsuo Kawatoko dates its appearance at Fuṣṭāṭ to the Fatimid period through the first half of the fourteenth century. He suggests Fuṣṭāṭ was the point of manufacture, whence the ware made its way to Quseir al-Qadim, ḤAyḏāb, and

³⁸³ W. Y. Adams 1986, 597; Chittick 1974b, fig. 91:b-c, pl.112:b, 304; 1984, 12, 81-82, 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; Hardy-Guilbert et al. 2002, 45; Horton 1996, 291, figs. 15, 16:a-f; Kawatoko 1988; 1993b; 1995; Kennet 2004, 41-42; Rougeulle 2005, 229-44; Whitcomb and Johnson 1979, 105-6; 1982b, 137-38; Zarins 1980, pl. 24:10-12; Zarins and al-Badr 1986, 56.

³⁸⁴ According to George Scanlon, at Fuṣṭāṭ it always came from post-1200 contexts and was referred to as “ḤAswān ware” after W. Y. Adams. Wladyslaw Kubiak had always intended to publish it (George T. Scanlon, personal communication, March 14, 2006).

across the Red Sea to Yemen.³⁸⁵ Also, Gascoigne and Monchamp both have quantities of yellow glazed Nile silt bowls, the surfaces of which decay to a powdery finish at their respective sites in Cairo, some of which are decorated in brown or black paint, which both assert is a locally made variant of Black on Yellow.³⁸⁶ 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.³⁸⁷ At Ras al-Khaima on the Gulf coast of Oman, it seems to occur in more than one clay body, adding to the complication.³⁸⁸

Rebecca Bridgman undertook petrographic analysis of some sherds from Shanga on the East African coast, Qaşr Ibrīm in Nubia, and Quseir al-Qadim for her master's dissertation at the University of Southampton.³⁸⁹ She found that the sherds from Shanga and from Quseir al-Qadim contained basalt and other volcanic elements, and suggests a possible origin on the Tihamah plain, where volcanic deposits are common. An Egyptian source cannot be ruled out, however, because there are several sources of basalt in Egypt, most notably in the Fayyūm.³⁹⁰ The sherds from Qaşr Ibrīm, on the other hand, have a lead glaze and a body that seems to be of ḲAswān clay.³⁹¹ This accords with Adams's original assessment that the samples of this ware found in Nubia were made at ḲAswān,³⁹² and affirms the hypothesis of multiple points of manufacture. The small proportion of Yemen 1 (Black on Yellow) wares at Quseir al-Qadim, as well as the distribution pattern in the Sheikh's House, may support this point; although the bowls occur in the warehouse, they are in far lesser quantities than in the houses, which have equivalent high concentrations. It is thus possible that these table wares were bought from Yemeni merchants who anchored at Quseir al-Qadim, and were 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 ḲAswān and Fustāṭ.

A clue to the change of this ware over time may 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,³⁹³ once on the surface at the Sheikh's House (pl. 66:a), and at least twice in the Eastern Area.³⁹⁴ 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.³⁹⁵

YEMEN 2 FABRIC

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 (fig. 44); the remainder of the sherds are not readily identifiable, and thus their assignation to a "Yemen" group can only be considered provisional (fig. 45). Examples were found in all phases and sub-phases, and in surface debris.

Yemen 2 Brown Painted Ware

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 (fig. 44:a). The vessel has been slipped white and

³⁸⁵ Kawatoko 1993b, 206.

³⁸⁶ Personal communications, 2006.

³⁸⁷ François 1999, 139, pl. 15:340–42, 44–47.

³⁸⁸ Kennet 2004, 41.

³⁸⁹ Bridgman 2000, pl. 7.

³⁹⁰ Said 1962.

³⁹¹ Bridgman 2000, 47–48.

³⁹² W. Y. Adams 1986, 597.

³⁹³ Whitcomb and Johnson 1979, pl. 48:k.

³⁹⁴ Whitcomb and Johnson 1982b, pl. 37:i, j.

³⁹⁵ Personal observation; Julie Monchamp, personal communication.

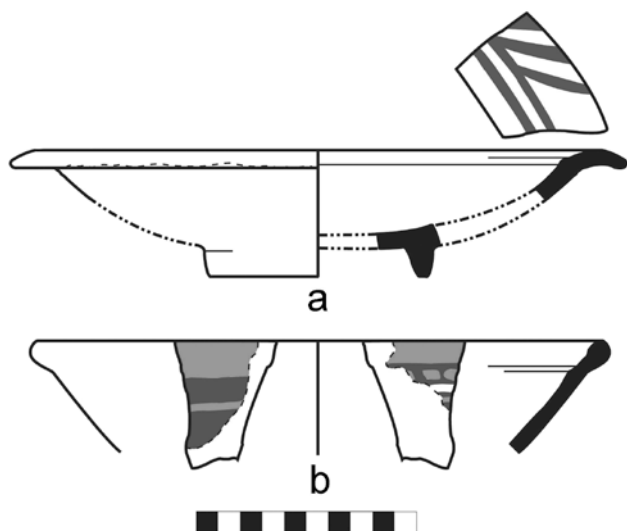


FIGURE 44. Yemen 2 Wares, Brown Painted (a) and Turquoise Slip-painted (b): a) J10c19_2-4/RN247, b) K9b_surf_16/RN 367.

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.³⁹⁶ “Brown-painted ware” bowls with white slip, brown paint, and colorless 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.³⁹⁷

Yemen 2 Turquoise Slip-painted Ware

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 (fig. 44:b). Wasters of this ware have been found in the vicinity of Zabid, and it also may have been manufactured at Hays.³⁹⁸ It has also been found at

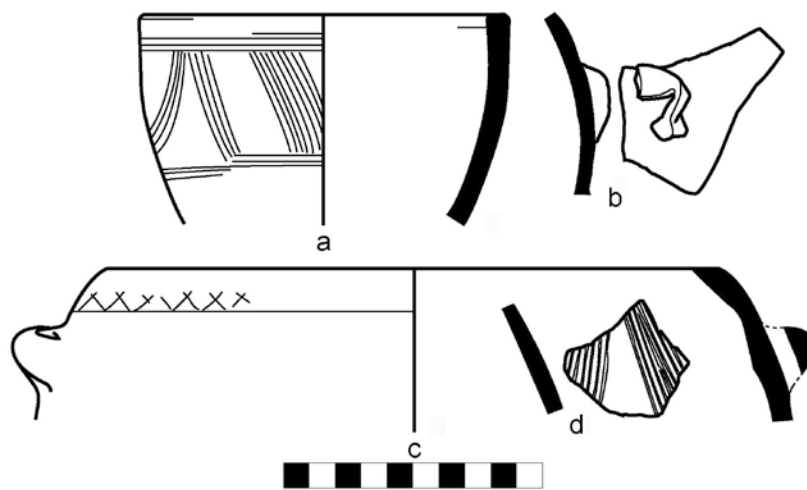


FIGURE 45. Yemen 2 Utility Ware, Phase IIa (b-c), and Phase IIb (a): a) J9d4_1/RN 44, b) K9b70_4/RN 346, c) K9b52_2/RN 47, (d) K9b9/RN 678.

sites in the vicinity of ‘Aden at Khanfar and Kawd am-Saila.³⁹⁹ Mason and Keall suggest a thirteenth to fifteenth century range corresponding with Rasulid rule, but Whitcomb suggests that due to its presence at Mokha, it may date into the sixteenth century.⁴⁰⁰ 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.⁴⁰¹

Yemen 2 Utility Ware

The remainder of the sherds in the Yemen 2 group (fig. 45) are in the Yemen 2 Utility Ware group and include a lightly comb-incised cup (possibly with traces of slip, fig. 65: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.⁴⁰² The cooking pot in figure 45:b shows some affinities to cooking pots from San‘a’.⁴⁰³ The cooking pot with cut rim (fig. 45:c) is coarser than the other sherds of this group, with

³⁹⁶ Hardy-Guilbert 2004, fig. 17:8.

³⁹⁷ Mason and Keall 1988, 57, fig. 4:b, 454.

³⁹⁸ Keall 1983, 383; Mason and Keall 1988.

³⁹⁹ Hardy-Guilbert and Rougeulle 1995, figs. 4:10, 5:3 from Mawza^c and Hays; Mason and Keall 1988, 462; Whitcomb 1988b, 189, fig. 10c-d.

⁴⁰⁰ Mason and Keall 1988, 462; Whitcomb 1988b, 189.

⁴⁰¹ Whitcomb 1983b, 104; 1988b, 189; Whitcomb and Johnson 1982b, pl. 36:a, d.

⁴⁰² Ciuk and Keall 1996, pl. 95/43:d-e.

⁴⁰³ Warburton 1998, figs. 3:k, 4:a-d.

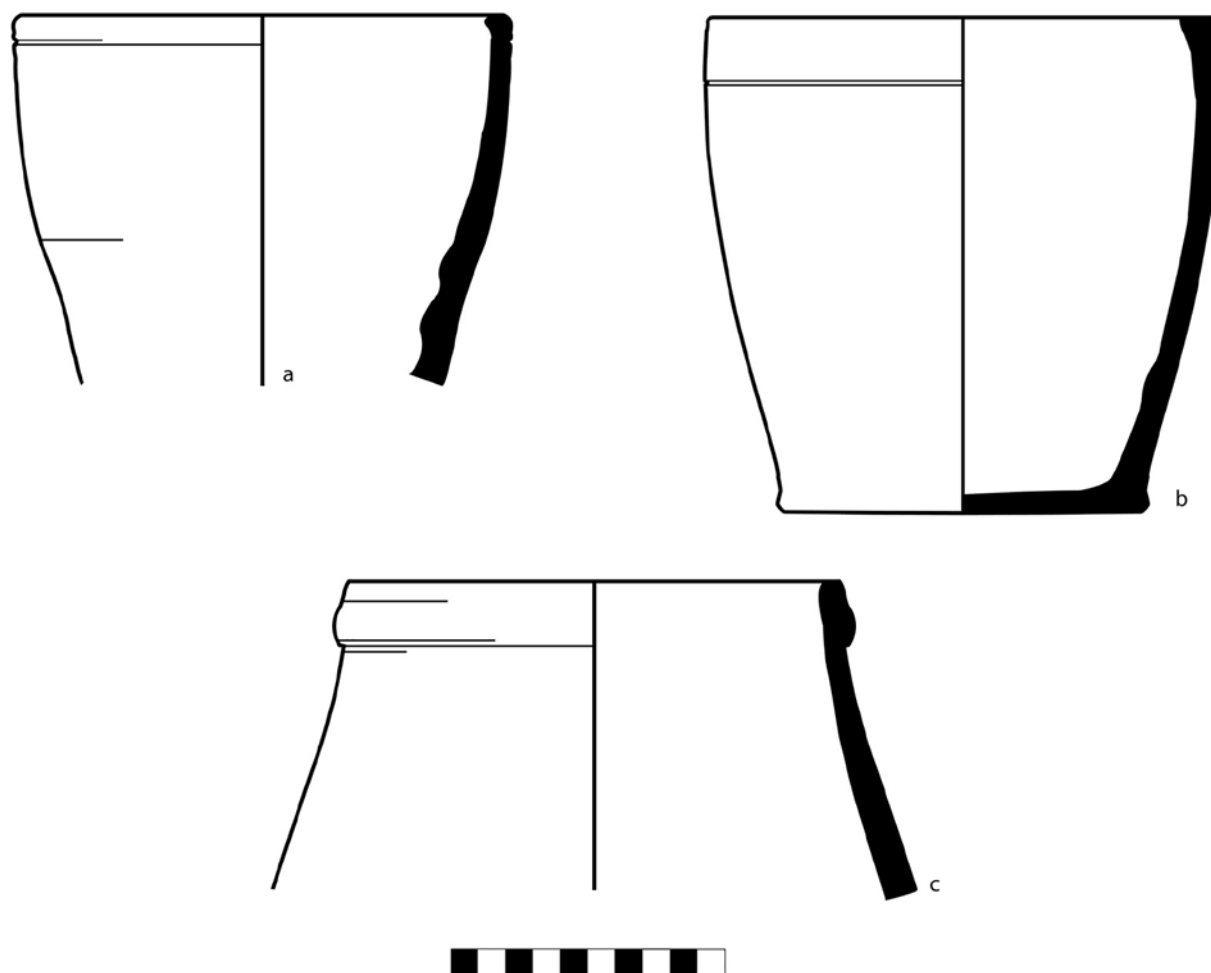


FIGURE 46. Yemen 3 Utility Ware, Phase IIa:
a) K9b70_10/RN 347, b) K9b70_8/RNs 347–8, c) K9b71_10/RN 347.

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.⁴⁰⁴

YEMEN 3 FABRIC

Yemen 3 Utility Ware

The Yemen 3 fabric (fig. 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 (not illustrated), but

the remainder are undecorated utility forms: wide-mouthed jars (fig. 46:c) and basins. The latter include two basins found in a deep pit in the South House, Room B (fig. 46:a–b). They have a distinctive cylindrical shape, with the mouth wider than the base and the proportions being similar to modern terra-cotta flower pots, which is what Whitcomb and Johnson originally dubbed them. Their walls curve in slightly to a rim that is thicker than the wall, but flat across the top. Basins of a similar shape and clay body were found in the Eastern Area in great quantities.⁴⁰⁵ 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 950–1150 CE.⁴⁰⁶

⁴⁰⁴ Harding 1964, pls. IV: 34, VI: 3–4.

⁴⁰⁵ Whitcomb and Johnson 1982b, pl. 42:l–m; Whitcomb personal communication.

⁴⁰⁶ Ciuk and Keall 1996, pl. 95/32: c, d.

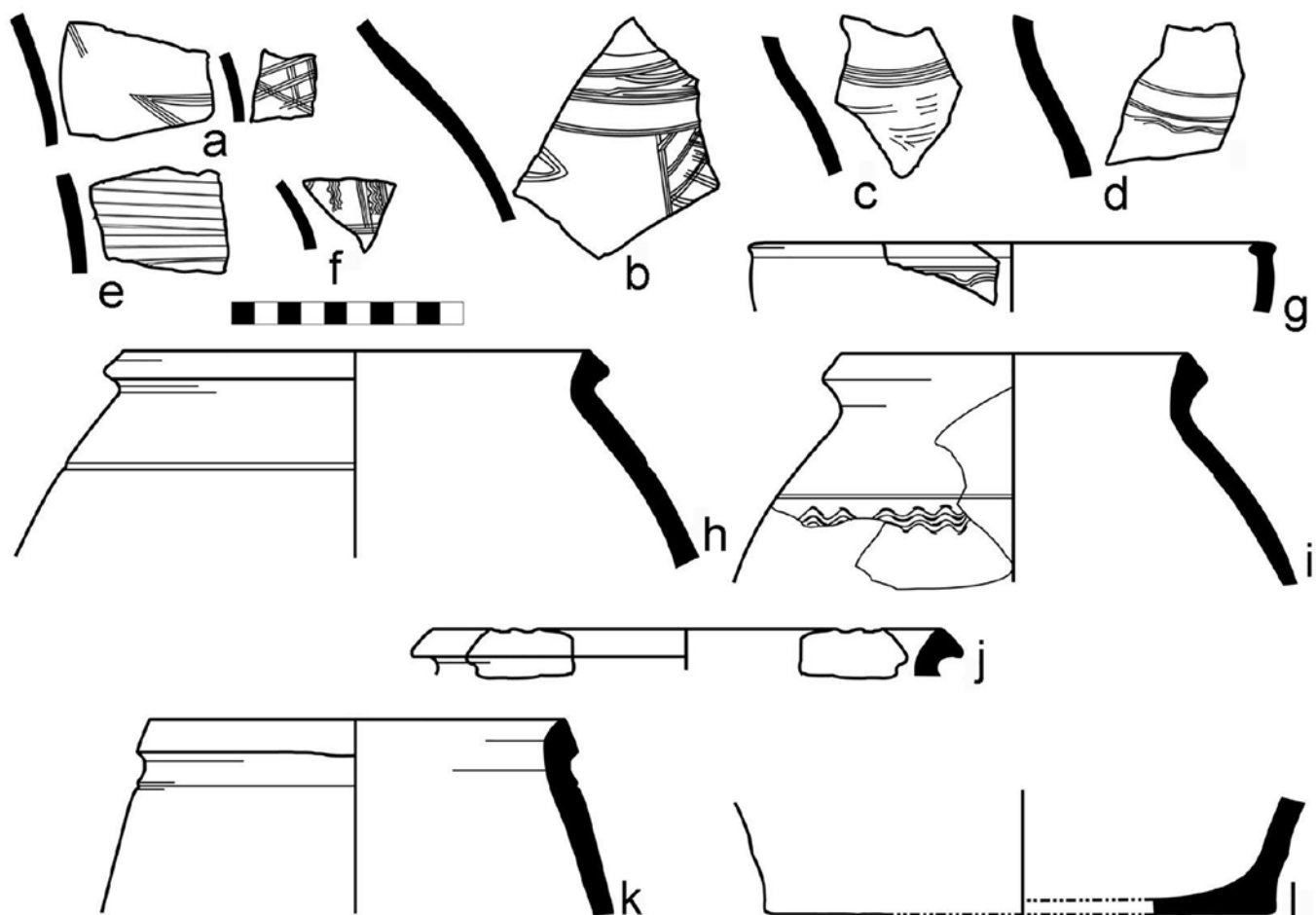


FIGURE 47. Yemen 4 Trackware, Phase I (a–f, m), Phase IIa (j, l), Phase IIb (g–i), and the surface (k): a) K9b56_7and8/RN 262, b) K9b53_5/RN 269, c) K9b56_9/RN 262, d) K9b56_12/RN 262, e) K9b56_11/RN 262, f) K9b23_4/RN 578, g) J9d4_3/RN 44, h) K9b5_2/RN 678, i) K10a15_5/RN 100, j) K9b69_60/RN 346, k)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

YEMEN 4 FABRIC

The Yemen 4 fabric (fig. 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.

Yemen 4 Track Ware

As with the 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.⁴⁰⁷ It has been identified in the University of Southampton excavations at Quseir al-Qadim, and also seen at Sharma, Shihr, al-Quraya, and other sites in the Hadhramaut and Abyan district.⁴⁰⁸ The exterior surfaces of the vessels are usually slipped greenish-cream or light brown and are often incised with parallel wavy lines or various patterns of straight lines, which often cross (fig. 67:a–g, l).⁴⁰⁹ The vessels, which are mostly medium to large basins or gourd-shaped jars, are

⁴⁰⁷ Ciuk and Keall 1996, pls. 95/14:f, h, 95/32:d, k, pl. 95/42:e, h, k.

⁴⁰⁸ Bridgman 2009, 137, fig. 14:2:7–9; Hardy-Guilbert and Rougeulle 1995; 1997b, fig. 2:8; Rougeulle 2004, fig. 12:9–16.

⁴⁰⁹ Cf. Ciuk and Keall 1996, pls. 95/14:a, e–g, 95/15:b; Hardy-Guilbert and Rougeulle 1995, fig. 5:18; Hardy-Guilbert 2004, fig. 12:10–18; Hardy-Guilbert and Rougeulle 1997a, fig. 2:14–15.

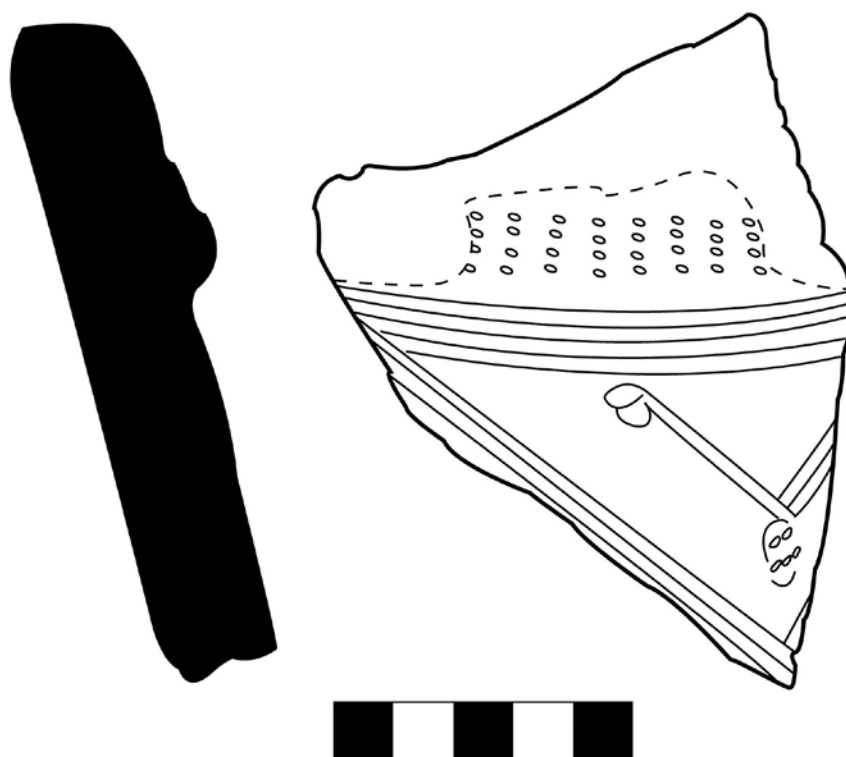


FIGURE 48. Yemen 5 Decorated Utility Ware: J9d3_2/RN 263.

handmade. Most of the Quseir al-Qadim sherds bear cloth imprints on the interior; the vessels were likely 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, which is given an arbitrary date of 1150–1350 CE, but this fits the Sheikh’s House dating well.

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 (fig. 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 800–1150 CE by Whitcomb⁴¹⁰ and quite similar to one surface find from Athar.⁴¹¹ A sherd identical to the one depicted in figure 47:i and excavated elsewhere in Quseir al-Qadim 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.⁴¹² Four similar jars were also excavated from the Eastern Area at Quseir al-Qadim,⁴¹³ and one from the Merchants’ Houses.⁴¹⁴

YEMEN 5 FABRIC

Yemen 5 Decorated Utility Ware

Finally one sherd makes up its own Yemen 5 fabric group (fig. 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, with sparse coarse basalt grains, and firing to 7.5YR 6/4 light brown, slightly darker at the core. A nearly identical sherd to this was tested by

⁴¹⁰ Whitcomb 1988b, 181, fig. 2:e.

⁴¹¹ Zarins and Zahrani 1985, pl. 76:14.

⁴¹² Bridgman 2000, 52, pl. 13b.

⁴¹³ Whitcomb and Johnson 1982b, pl. 46:h–k.

⁴¹⁴ Whitcomb and Johnson 1979, pl. 45:h.

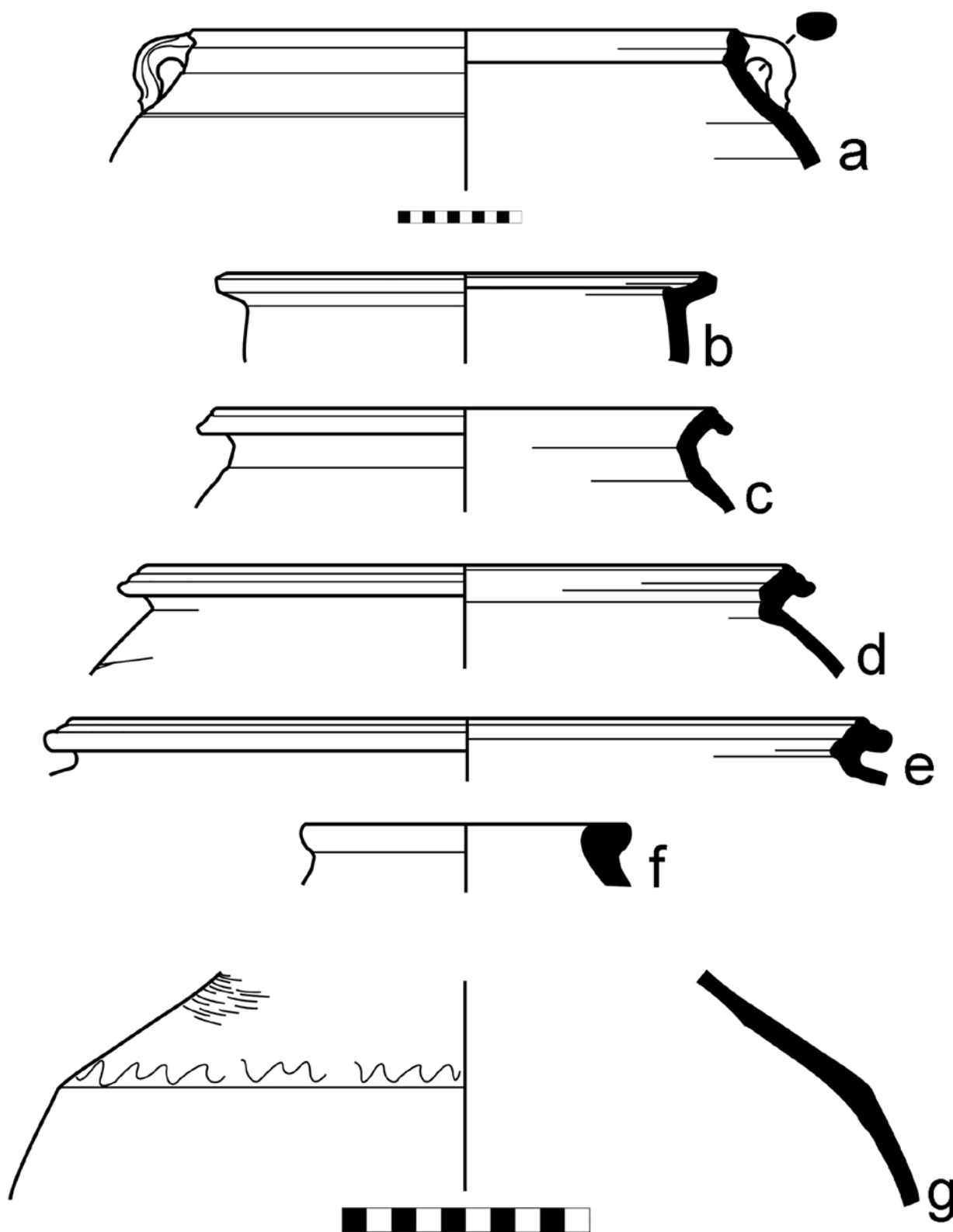


FIGURE 49. India 1 Black Utility Ware (d-g) and India 2 Red Utility Ware (a-c):

- 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.

Bridgman and found to be of likely Yemeni origin, due to volcanic inclusions.⁴¹⁵

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 (fig. 49). Indian cooking pots seem to have been widely traded and occur at sites in the Yemen and the Gulf.⁴¹⁶ Other Indian products that were known in Egypt⁴¹⁷ are pepper, coconuts, and carnelian beads,⁴¹⁸ all of which are found in the Sheikh's House, and textiles, of which resist-dyed cotton samples were found in the Sheikh's House and elsewhere at Quseir al-Qadim, as discussed in chapter 5. 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 nevertheless may have passed through the port.⁴¹⁹ 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 FABRIC

India 1 Black Utility 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 (fig. 49:d–g). 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 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 belonging to the same cooking pot were found in the uppermost stratum (surface debris) of Storeroom B (fig. 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 Storeroom 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 fig. 49:g, identical to the sherd in pl. 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.⁴²⁰ 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.⁴²¹ The main period of occupation at that site is dated 980–1140 CE, 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.⁴²² 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.⁴²³ 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 discernible change in morphology from the tenth to the fifteenth

⁴¹⁵ Bridgman 2000, pl. 12c.

⁴¹⁶ Kervran 1996.

⁴¹⁷ And in East Africa, cf. Chittick 1970, 103.

⁴¹⁸ Although carnelian was also a product of the Yemen, see al-Shamrookh 1993, 142–44.

⁴¹⁹ Goitein 1954, 193; 1973, 188; Serjeant 1988a, 1988b.

⁴²⁰ Kennet 2004, 66.

⁴²¹ Rougeulle 2004, fig. 11:1–13.

⁴²² Rougeulle 2004, 21, 205.

⁴²³ Zarins 1989, 238, fig. 5, top right; 1985, 70, 91–92, pl. 75:2.

century CE.⁴²⁴ 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.⁴²⁵ Qal'at al-Bahrayn has examples from the thirteenth and fourteenth centuries, and Sohar from the fifteenth and sixteenth centuries and later.⁴²⁶

Parallels in form have been excavated at the pre-Mughal site (dating late twelfth to mid-fourteenth centuries) of Lal Kot in New Delhi⁴²⁷ 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.⁴²⁸ 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,⁴²⁹ 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;⁴³⁰ a detailed study of vessels imported in the later Islamic periods might detect more precise trading patterns with manufacturing sites in India.

INDIA 2 FABRIC

India 2 Red Utility Ware

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 (fig. 49:a-c). 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 and pitted. 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 CE.⁴³¹ 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 (fig. 49:c) came from under the earliest floor of the North House, Room C.⁴³² 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.⁴³³

One rim of a jar or cooking pot is of an unusual shape (fig. 49:b).⁴³⁴ It has straight sides and an everted rim with a ridge in the interior and a triangular end. Identical in firing color and texture is a large storage jar from the same locus (fig. 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,⁴³⁵ the Merchants' Houses,⁴³⁶

⁴²⁴ Kervran 1996, 38.

⁴²⁵ Carswell 1977, 160, figs. 13-14; Chittick 1974a, 318, fig. 141:a-b; 1984, 101, fig. 54; Hansman 1985, 48, fig. 11:a-b; Hardy-Guilbert and Rougeulle 1995, fig. 6:24; 1997a, fig. 5:1; Kennet 2004, fig. 40:K4288, K89 [Type 78]; Kervran 1996; Zarins and Zahrani 1985, pl. 75:2.

⁴²⁶ Kervran 1996, 43, figs. 8-9; Vogt 2005, fig. 135:3-8.

⁴²⁷ Mani 1997, 8; 2000, fig. 7: 1-3, 10, 13, 15.

⁴²⁸ Serjeant 1988a, 165.

⁴²⁹ Rao 2002, fig. 8: 1, 6-8.

⁴³⁰ Kervran 1996, 43.

⁴³¹ Kennet 2004, 66.

⁴³² Cf. Hardy-Guilbert and Rougeulle 1997a, fig. 5:1, dated pre-eleventh century.

⁴³³ Rougeulle 2004, fig. 11:2, 8-13, 21.

⁴³⁴ And cf. Rougeulle 2004, no. 22.

⁴³⁵ Whitcomb and Johnson 1979, pl. 36:m, p.

⁴³⁶ Whitcomb and Johnson 1979, pls. 41:e, 44:j, 45:d, 48n.

and Central Building A.⁴³⁷ 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.⁴³⁸

CHINA

During the Ayyubid period (1171–1250 CE), which overlaps with the Southern Song Dynasty (1127–1279 CE), Egypt imported ceramics produced in several southern kilns near the Chinese coast.⁴³⁹ 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, and Kinuta celadons with a milky blue or green glaze and pale gray body were popular as well.⁴⁴⁰ In the early (Bahri) Mamluk period (1250–1382 CE), concurrent with the end of the Southern Song and the Yuan dynasties (1279–1368 CE), qingbai wares were losing popularity, but celadons from the Longquan region and other white wares from Jingdezhen were in high demand.⁴⁴¹ Sometime 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 gradually became popular, so that they were rather abundant by the fifteenth century.⁴⁴²

This profile was established by the Fustāt excavations, which produced an abundance of Chinese ceramics dating from the ninth through the fifteenth centuries.⁴⁴³ Several other sites in the Red Sea, Persian Gulf, and Indian Ocean have produced similar ceramics or have illuminated part of this

sequence, and it appears several types of porcelains and celadon were made specifically for the Middle Eastern market.⁴⁴⁴ The entrance points to Egypt for the Chinese ceramics found at Fustāt were most likely the port towns on the Red Sea.

The percentage of the Sheikh's House assemblage represented by Chinese imports is rather small, only 0.25 percent, and is also low from other areas of the site excavated by the University of Chicago. In addition, only 0.21 percent of the ceramics recovered by the University of Southampton team were of Chinese origin.⁴⁴⁵ By contrast the figure of 0.5–0.9 percent might be expected for a port site of this period.⁴⁴⁶ Eighteen sherds from sixteen or fewer imported 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; 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).

QINGBAI WARE

There are approximately equal proportions of white porcelain and gray stoneware bowls from the Sheikh's House; of the porcelains, most, if not all, are qingbai wares (fig. 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

⁴³⁷ Whitcomb and Johnson 1982b, pl. 51:q.

⁴³⁸ Whitcomb and Johnson 1982b, 143–44, pl. 45.

⁴³⁹ On the Muslim West's trade with China, the early work of Wilhelm von Heyd is still a good place to start (1967). Also see Hudson (1970) and Lombard (2000).

⁴⁴⁰ Bing 2004, 258–61; Mikami 1980–1981; 1988, 11.

⁴⁴¹ Mikami 1980–1981, 81; 1988, 11.

⁴⁴² Kawatoko 2001a, 55, see table; Mikami 1988, 11; Scanlon 1971, 231–32.

⁴⁴³ Gyllensvärd 1973, 92; 1975; Hobson 1932; Raphael 1923–24; Sasaki 1986; Scanlon 1970.

⁴⁴⁴ François 1998, 325–26; Gray 1977; 1984, 191–94; Kawatoko 2001b, table.

⁴⁴⁵ Bridgman 2009, 136.

⁴⁴⁶ Rougeulle 2005, 227.

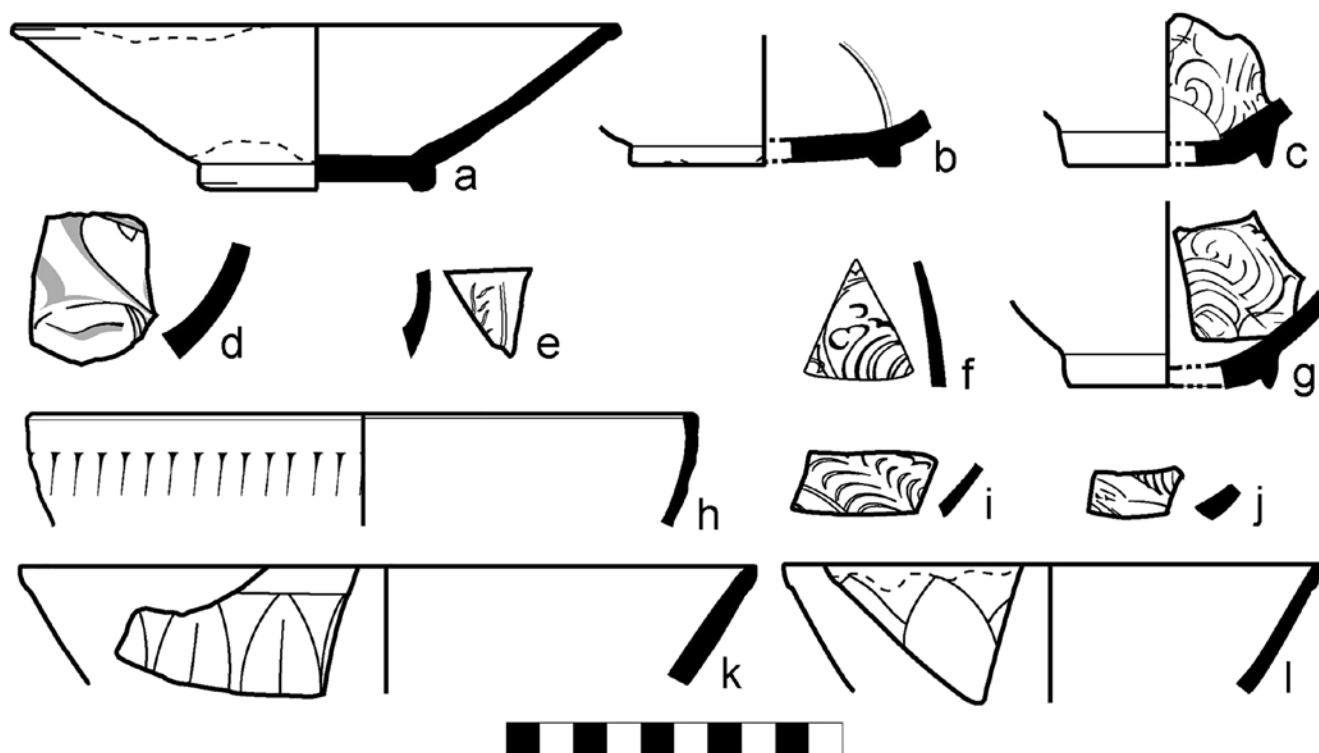


FIGURE 50. China 1 Qingbai Porcelains (a–c, e–j, l) and China 2 Kinuta Longquan Celadons (d, k); f and g are from the surface: a) K10a11_2and4/RN 302, b) K9b59_1/RN 307, c) J10c19_1/RN 299, d) K9b59_4/RN307, e) K9b48_4/RN 315, f) K9b45_1/RN 314, g) J10c16_5/RN 316, h) J10a9_2/RN 320, i) J9d12_2/RN 311,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

thirteenth century, when production seems to have ended. The existence of 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 colorless 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,⁴⁴⁷ 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 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, and all but one are quite fine, of a pure white body with sparse silt-sized 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 century⁴⁴⁸ and a museum piece in Emerson, Chen, and Gates.⁴⁴⁹ One small sherd from a bowl with pale blue glaze (fig. 50:i) is incised with a series of small curved lines; the overall pattern is difficult to guess. The pattern incised on the sherd shown 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. 1120–1150

⁴⁴⁷ Bing 2004, 257–59.

⁴⁴⁸ Rougeulle 1999, fig. 7:9.

⁴⁴⁹ Emerson, Chen, and Gates 2000, pl. 4.1.

CE: “Bols ou plats à fine incision dans une composition plus aérée sur la paroi intérieure.”⁴⁵⁰

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. 1050–1120 CE: “Bols à large ouverture, bord éversé avec ou sans encoches, petit pied annulaire faiblement creusé, fours de Jingdezhen ou de Nanfeng au Jiangxi.”⁴⁵¹ 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 a bowl base from the Southampton Quseir excavations⁴⁵² dated to the twelfth or thirteenth century, bowl bases found in survey in the Hadhramaut⁴⁵³ dated to the eleventh century, and bowls of similar date at Kawd am-Saila in the Abyan district of Yemen.⁴⁵⁴ 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 colorless glaze, has narrow vertical ribs molded around the exterior (fig. 50:h).

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 (fig. 50:a). This is seen on the unglazed foot, which has been discolored pink, probably while air-drying before firing.⁴⁵⁵ The vessel has been covered with two glazes: the first one pure white, and over it a colorless 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.⁴⁵⁶ This group has a grayish paste and glazes varying from bluish cream to light or dark blue-gray to pale gray.⁴⁵⁷ The bowl rim at the Sheikh’s House (fig. 50:l) 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 to the mid-eleventh century.⁴⁵⁸ This type is also present at Qal‘at al-Bahrayn.⁴⁵⁹

CELADONS

Kinuta Celadon

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 moderate counts of very fine to fine voids. The thick glaze is a semi-opaque light green-blue or green-gray, with variations in thickness and an occasional tendency to crackle. These are kinuta celadons (fig. 70:d, k), produced at the Longquan kilns beginning in the Southern Song period and imported into Egypt through the fourteenth century.⁴⁶⁰ The sherd shown in 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

⁴⁵⁰ Bing 2004.

⁴⁵¹ Bing 2004, 258.

⁴⁵² Bridgman 2009, fig. 14:2:3.

⁴⁵³ Rougeulle 1999, fig. 7:9.

⁴⁵⁴ King and Tonghini 1996, pl. 29: bottom; Mathew 1956, 51.

⁴⁵⁵ Gompertz 1980.

⁴⁵⁶ Cf. K9b_surf_7/RN 336 from the Sheikh’s House surface collection, along with Hardy-Guilbert 2001, fig. 6:4; Rougeulle 1999, fig. 7:10.

⁴⁵⁷ Bing 2004, 259.

⁴⁵⁸ Bing 2004, fig. 1:7.

⁴⁵⁹ Pirazzoli t’Sertsevens 2005, 303–4.

⁴⁶⁰ Gompertz 1980, 64, 148; on Longquan production see Pollard and Hatcher 1986; Scanlon 1971, 228.

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.⁴⁶¹ It has close parallels in one of the sherds found on the surface of the Sheikh's House (see pl. 69:d), in a sherd from the Eastern Area excavations,⁴⁶² and in finds from Fustāṭ,⁴⁶³ al-Shihr,⁴⁶⁴ Hormuz, and Qal'at al-Bahrain,⁴⁶⁵ all dated to the Southern Song.⁴⁶⁶ 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 (fig. 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.⁴⁶⁷

Yüe Celadon

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 stonewares 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 from the end of the tenth century. The kilns of Yaouzhou at Shaanxi in the northwest began producing celadon in the tenth century and in the second half of the eleventh century 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.⁴⁶⁸

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 (fig. 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 suggest 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 (fig. 71: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 comb-incised cloud scrolls suggest it was made in the Yaouzhou kilns or possibly those of Jingdezhen in the eleventh or twelfth century.⁴⁶⁹ 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 (fig. 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 7.5YR 6/1 and the glaze is a bluer 5Y 5/2 olive gray, also indicating a different provenance.

Figure 71:e shows 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.⁴⁷⁰ The bodysherd of segmental bowl (fig. 51:g) has deeply incised vegetal forms on an unevenly fired body of 7.5YR 6/1 gray with dark blotches that also has a large air bubble.⁴⁷¹ 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 Storeroom C

⁴⁶¹ Gompertz 1980, pl. 86A–B.

⁴⁶² Whitcomb and Johnson 1982b, pl. 52:i.

⁴⁶³ Sakurai and Kawatoko 1992, pl. IV-4-10:2.

⁴⁶⁴ Hardy-Guilbert 2001, fig. 7:2.

⁴⁶⁵ Pirazzoli t'Sertsevens 2005, 303.

⁴⁶⁶ Morgan 1991, fig. 7:22–23.

⁴⁶⁷ Morgan 1991, fig. 9:63–71, cf. esp. 66.

⁴⁶⁸ Bing 2004, 261.

⁴⁶⁹ Previously identified in Burke and Whitcomb 2007; cf. Gray 1984, pl. 26 and color pl. A; Gyllensvärd 1975, 97, pl. 3:1–2, 4; Sakurai and Kawatoko 1992, pl. IV-4-4: 12.

⁴⁷⁰ Cf. surface find K9b_surf_2/RN 335; and see Gray 1984, pl. 31.

⁴⁷¹ Cf. Gompertz 1980, pls. 44–45.

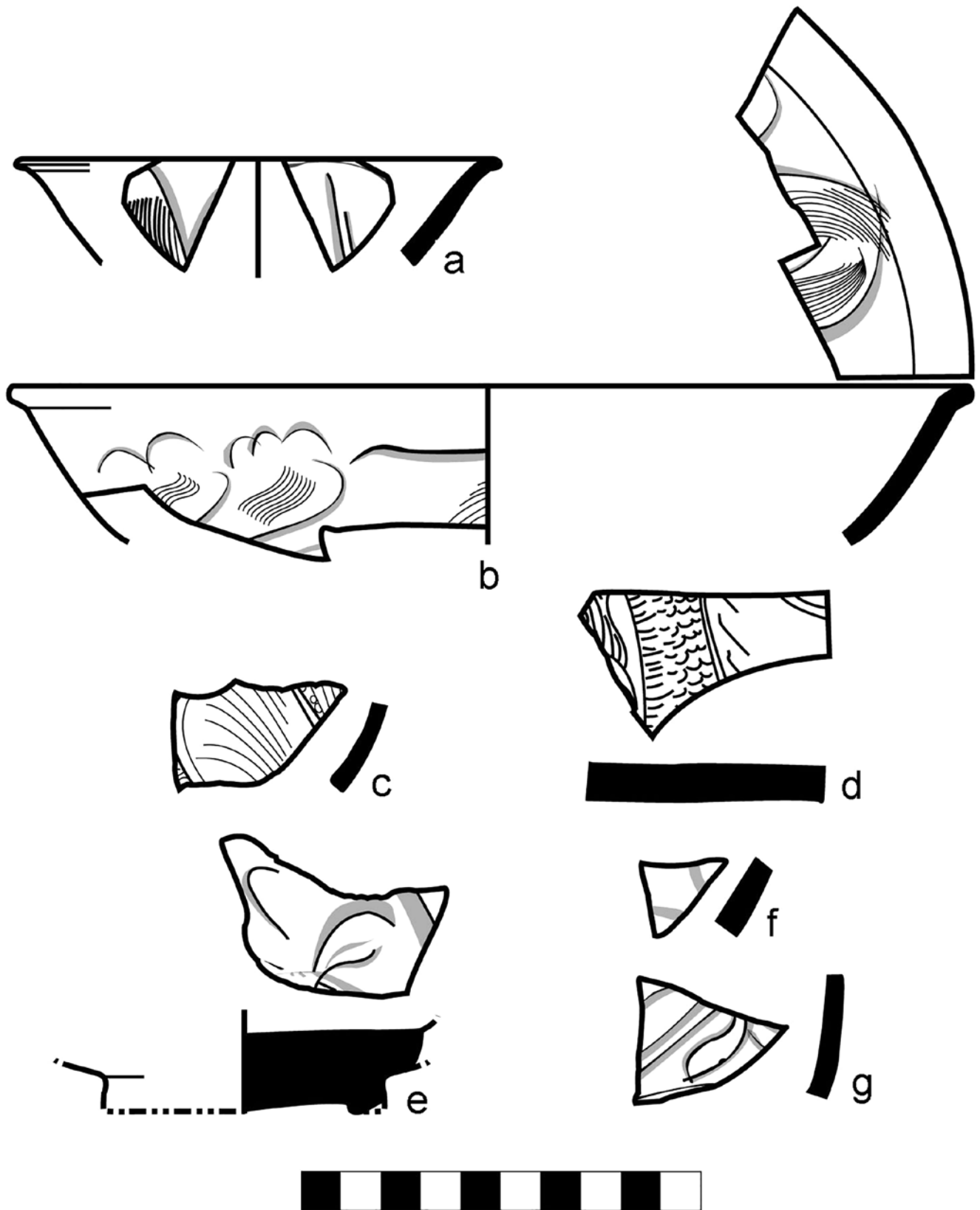


FIGURE 51. China 2 Celadons (d and f are from surface layers):
 a) J10a9_3/RN 321, b) J9d4_11-13/RN 237, c) K9b38_16/RN 313,
 d) J10a2_7/RN 278, e) K10a11_5/RN 312, f) J9d6_3/RN 322,
 g) K10a20_2/RN 239.

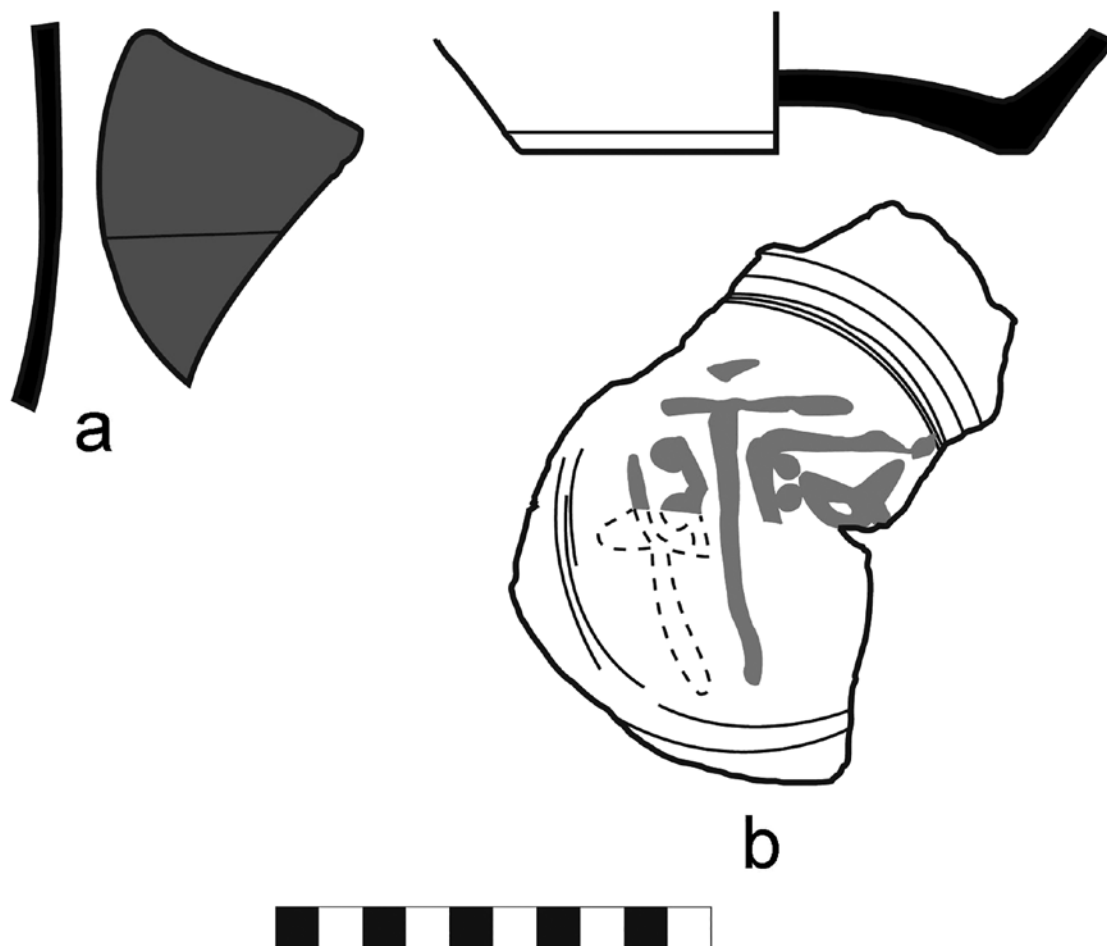


FIGURE 52. China 3 Stoneware Jars:
a) J9d6_4-6/RN 322, b) J9d6_1 and J10a/RN 203.

(fig. 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 a dark color, 2.5Y 4/4 olive brown. In the surface layer of Storeroom B, immediately east of Storeroom C, a bodysherd from the base of a large stoneware dish (fig. 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. The decoration includes lightly and finely incised scales that must be part of a dragon, as this was a common motif on Yüe celadon (tenth–eleventh centuries⁴⁷²) and is reported at Fustāṭ,⁴⁷³ al-Tūr,⁴⁷⁴ and Athar (tenth–eleventh centuries).⁴⁷⁵ 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 Storeroom B (fig. 25:k).

STONEWARE JARS

Two stoneware jars intended for storage or shipping rather than decoration were found in the Sheikh's House, both in the surface layer of Storeroom C (fig. 52). Three bodysherds of a thin-walled jar of gray stoneware are covered with a dark yellowish brown glaze (fig. 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

⁴⁷² Mikami 1988, 10, fig. 7a.

⁴⁷³ Mikami 1980–1981, fig. 1.

⁴⁷⁴ Kawatoko 1995, 54, pl. 35:7.

⁴⁷⁵ Zarins and Zahrani 1985, 78–79, pl. 95C.

this were also found in context in the Eastern Area.⁴⁷⁶ 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 Fustāt.⁴⁷⁷ 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. 1100,⁴⁷⁸ 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.⁴⁷⁹

Of the second jar only the base is preserved (fig. 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 Storeroom 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.⁴⁸⁰ 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.⁴⁸¹ In form, particularly the concave base, it is like one of the above mentioned jars excavated in India.⁴⁸² 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,⁴⁸³ and the latest from Shiwan, dating eleventh to fourteenth centuries.⁴⁸⁴ 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.⁴⁸⁵

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 no imports from China; one base sherd of China 1 white porcelain with colorless glaze and one sherd of China 2 celadon with gray paste, colorless glaze, and incised decoration were found in different strata in the same trench.⁴⁸⁶ The only other Chinese import pottery found in context in the first season is the bodysherd of a blue and white painted bowl; it was 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.⁴⁸⁷ The remaining thirteen sherds of blue and white porcelain, stoneware jars, qingbai wares, and celadons of various types, the last of which predominate, all came from surface collections. Together they tend toward 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.⁴⁸⁸ 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

⁴⁷⁶ Whitcomb and Johnson 1982b, pl. 52:s.

⁴⁷⁷ Mikami 1988, 12.

⁴⁷⁸ Carswell 1979, fig. 12.

⁴⁷⁹ Pirazzoli-t'Sertsevens 1982, fig. 15:1218.1.

⁴⁸⁰ I am grateful to Tasha Vorderstrasse, who provided this reading from photographs on March 28, 2006.

⁴⁸¹ Whitcomb and Johnson 1979, pl. 51:u.

⁴⁸² Carswell 1979, fig. 12:518.

⁴⁸³ Bing 2004, fig. 5:1.

⁴⁸⁴ Bing 2004, fig. 5:7.

⁴⁸⁵ Pirazzoli-t'Serstevens 1988, fig. 15:1247.1.

⁴⁸⁶ Whitcomb and Johnson 1979, pl. 42:g, p.

⁴⁸⁷ Whitcomb and Johnson 1979, 58–59, 108, pl. 49:d.

⁴⁸⁸ Whitcomb and Johnson 1979, 109, pls. 50:i, 51.



FIGURE 53. Distribution of ceramic types over different areas of Quseir al-Qadim, showing changes in the ceramic assemblage through time.

and Yuan date,⁴⁸⁹ 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,⁴⁹⁰ and fragments of a blue and white bowl are Ming.⁴⁹¹ The scarcity of the Chinese sherds on the site overall most likely suggests one of two possibilities. The first is that Chinese porcelain, as such a high-value commodity, was not for local consumption; rather, vessels, perhaps only in small amounts, were unloaded from ships and re-packed at Quseir al-Qadim for transshipment to the Nile during the thirteenth-century occupation in the central part of the site. The second possibility is that Quseir al-Qadim was not an entry point for such an expensive commodity after all, and instead the porcelain and stoneware finds represent gifts from the merchants to their associates and families.⁴⁹²

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, as well as in a comparison between the Sheikh's House and either the Merchants' Houses, which tend to mirror the Sheikh's House assemblage, or the Eastern Area, which differs from it in a few key wares (tables 10–12). First, some continuities are notable. Decorated and undecorated wares from 'Aswān 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. 'Aswān wares are especially notable among the cooking pots in all three areas. (Smaller groups of cooking pots in the Sheikh's House assemblage belong to the India, Yemen 2, and Nubia fabric groups.) 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 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

⁴⁸⁹ Carswell 1982.

⁴⁹⁰ Whitcomb and Johnson 1982b, pl. 52:m–o.

⁴⁹¹ Whitcomb and Johnson 1982b, pl. 52: b–d.

⁴⁹² Cf. Goitein and Friedman 2008, 17, 383, 663, 722.

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.

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 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 colorless 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. Table wares 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 made in either 'Aswān or India. The earlier "local" type, from the Merchants' Houses, 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).⁴⁹³ The later samples from the Eastern Area,

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.⁴⁹⁴ 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.⁴⁹⁵ 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 colorless (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 table wares, 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, and 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 (table 9). Discussion of sgraffiatos leads us to Yemen 1 Black on Yellow (or "mustardware") bowls, which, because of

⁴⁹³ Whitcomb and Johnson 1979, pl. 42:f.

⁴⁹⁴ Whitcomb and Johnson 1982a, pl. 44:j, l-r.

⁴⁹⁵ Whitcomb and Johnson 1982a, pl. 44:a.

their occurrence in the thirteenth and fourteenth centuries, are sometimes found in context with Mamluk sgraffiatos.⁴⁹⁶ 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 of the Sheikh's House, and are not in association with sgraffiatos. Incised wares occur very infrequently on the site, but when they do occur they are most common in the Eastern Area, and thus after the introduction of the Yemeni vessels. At Kush in the Persian Gulf, by contrast, Yemen 1 appeared only after the introduction of monochrome incised redwares and even stonepaste ceramics.⁴⁹⁷ 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,⁴⁹⁸ and once on the surface at the Sheikh's House, but more frequently in the Eastern Area.⁴⁹⁹ 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.

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 as reflective of the limited nature of the total sample size from the Sheikh's House.⁵⁰⁰

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. (The Merchants' Houses offer no real point of comparison, as only one of each type is present there.) 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.⁵⁰¹ At al-Tūr in the Sinai peninsula, the successor port to Quseir al-Qadim and ʿAyḏāb in the Red Sea, thirteenth- to fourteenth-century 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

⁴⁹⁶ E.g., at Alexandria in Egypt, Gayraud 1984, 244; and al-Shihr in Yemen, Hardy-Guilbert 2005, 71.

⁴⁹⁷ Kennet 2004, 42.

⁴⁹⁸ Only one is published: Whitcomb and Johnson 1979, pl. 48:k.

⁴⁹⁹ Whitcomb and Johnson 1982b, pl. 37:i, j.

⁵⁰⁰ Whitcomb and Johnson 1982b, 143–44, pl. 45.

⁵⁰¹ Chittick 1970, 98; Gayraud 1984, 245.

pure fourteenth-century contexts, and are abundant by the fifteenth century.⁵⁰²

To see the sherds grouped by locus rather than by type, see plates 1–65.

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. 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 be considered fourteenth-century type fossils in Egypt.⁵⁰³ Yemen 2 turquoise slip-painted wares are also introduced to Quseir al-Qadim at this time, although they were probably manufactured in Zabid beginning a bit earlier, in the thirteenth century.⁵⁰⁴

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 on the beach, which would have taken place a few years after 1300 CE 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 common 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 undergo a change in form), Marl 4 monochrome glazed and incised monochrome glazed bowls and jars, Nile 3 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 6.

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. 1150 CE.⁵⁰⁵ Yemen 4 "Trackware" from Zabid, which appears in Phase I, was probably first manufactured ca. 1150 CE and perhaps exported to Egypt soon after.⁵⁰⁶ Yemen 1 Black on Yellow ware is always said to appear in the thirteenth century, that is, no earlier than 1200 CE. 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 Fustāṭ until ca. 1200 CE.⁵⁰⁷ The few sherds at the Sheikh's House are found in Phase IIa, meaning it could not have begun before 1200 CE, if the sherds were made at Fustāṭ. Nile 3 monochrome glazed bowls did not arrive in Nubia from Egypt until

⁵⁰² Kawatoko 2001b, table.

⁵⁰³ And cf. Tonghini 1998, 58, figs. 89:k, 91:e, I.

⁵⁰⁴ Mason and Keall 1988, 462.

⁵⁰⁵ Whitcomb 1988b, fig. 2h.

⁵⁰⁶ Ciuk and Keall 1996, pls. 95/14:f, h, 95/32:d, k, pl. 95/42:e, h, k.

⁵⁰⁷ Scanlon 1971, 231.

ca. 1200 CE;⁵⁰⁸ we have no dating from Fustāṭ, but it seems reasonable to assume manufacture was not begun much before this date. These several clues, however tenuous individually, together suggest the beginning of occupation at the Sheikh's House may have been around 1200 CE. 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 one hundred years.

COOKING AND DINING

Some remarks may be made about food preparation and consumption, based on vessel forms, while discussion of food and diet can be found in chapter 3 on the botanical remains. It seems that some prepared foods were brought in to the site from the markets of Qūs or other Nile Valley towns, as a shipping note and list of accounts found near the Sheikh's House (RN 1077b) mentions a dish commonly bought in the market called *harīssa*, made of wheat and meat.⁵⁰⁹ The presence of hearths and cooking pots indicates that food preparation was also done on site and served in bowls either in individual or shared portions. Investigations of dining customs among medieval Egyptians, while of necessity focusing on elites, and mostly pertaining to the Mamluk period, have emphasized communal dining with the use of shared dishes into which diners dip their fingers or morsels of bread.⁵¹⁰

The cooking pots identified in the assemblage are few. The largest proportions seem to have come from ḤAswān and India, and a few may have come from Nubia. The Indian imports are the largest in size, with rims of up to 26 cm. The common form is of a wide mouth with pronounced everted rim that acts as a handle, wide carinated, shallow body, and wide rounded base. Ethnographic parallels from late twentieth-century south India show that pots of this form are particularly suitable for cooking

flatbreads on a charcoal fire.⁵¹¹ As discussed above, Indian cooking pots are widely distributed at coastal sites from the Maldives to the Gulf, Yemen, and East Africa. The pots may have been items of trade in themselves,⁵¹² but also may indicate the presence of traders from India, and thus most likely Indian customs of cooking and food consumption. Local traditions may be represented by the vessels from ḤAswān and perhaps also the Yemen. Of these only one cooking bowl is in evidence (fig. 17:6, J9d4_2/RN 44), while the remainder of the cooking vessels are of the deep, closed type, albeit in varying sizes. We can propose that the deeper pots were suitable for liquid preparations such as boiled meat and barley, boiled beans, and other stews or soups discussed by Wilma Wetterstrom in chapter 3.

Dishes for serving and eating food include bowls of Yemen 1 Black on Yellow, Marl 4 Monochrome, Marl 4 Incised, Nile 3 Monochrome, and Yemen 2 Turquoise slip-painted wares. These types were glazed on the interior to make the surface non-porous and suitable for cooked foods.⁵¹³ Rim diameter estimates could be made for forty-six of them. While the range of rim diameters is rather large, 13–42 cm, the majority (63 percent) of the bowls fall in the range of 18–26 cm. There is little notable difference when the diameter ranges of the different ware types are compared with one another. Diameters of the celadon and porcelain bowls, the finest table wares at Quseir al-Qadim, are similar, ranging from 10–22 cm, with the majority falling in the range of 19–22 cm. Comparisons with seventy-nine published glazed bowls from the Eastern Area, which as discussed above is of slightly later date than the central part of Quseir al-Qadim, indicated no major difference in average rim diameter, thus no detectable difference in dining habits over this short time span.⁵¹⁴

These bowls are of the type referred to as *zabādi* (sing. *zubdiyya*) in the extra-site texts of the period, often referring to bowls used for individual

⁵⁰⁸ W. Y. Adams 1986, 596–97.

⁵⁰⁹ Guo 2004, 285, text 68.

⁵¹⁰ Levanoni 2005, 219; Lewicka 2011; Walker 1998.

⁵¹¹ Hansman 1985, 48.

⁵¹² Carswell 1977.

⁵¹³ Lewicka 2011, 429.

⁵¹⁴ These are Glazed Cream ware, Glazed Red ware, Sgraffiato ware, “Mustard” ware (Black on Yellow), Underglaze Painted Ware, and Yellow-blue Glazed ware from the 1980 season (Whitcomb and Johnson 1982b, pls. 33–38). Estimates of rim diameters produces a range of 10–35cm, with just over half (53 percent) falling in the 17–26 cm range.

portions of prepared foods bought in the market.⁵¹⁵ The smallest of the glazed ceramic and porcelain bowls, those with rim diameters of 10–14 cm, may have been used for drinking soups or other liquid preparations, and could have been referred to either as *zabādior kizān*, cups.⁵¹⁶ Unglazed bowls were appropriate for serving nuts and dried or fresh fruits. The few unglazed bowls kept from the excavations at the Sheikh's House were suitable for this use owing to their smaller size.⁵¹⁷ There are far fewer of these than glazed bowls in the assemblage, however, and only five for which diameters can be estimated. The types include Marl 1 Utility, Nile 4 Utility, Yemen 2 Utility, and Yemen 4 Trackware. The diameter of the rims range from 8 to 20 cm, with an average of 12 cm, much smaller than the glazed serving bowls.

Regarding drinking, there is one goblet in evidence (K9b_50-1), perhaps used for wine or medicinal drinks (see chapter 3). Water would have been drunk from spouted jugs made of Nile 2 decorated ware and the Marl 1 filterneck jugs or qullas discussed above. Some of the latter may also have been spouted, although no spouts were recovered. Spouted jugs would have aided in satisfying the requirements of the table manners of the period, which dictated that the drinker should not touch his lips to the drinking vessel.⁵¹⁸

The following two chapters further elucidate the dining customs of the Quseiris, especially with regards to fowl, cereals, legumes, vegetables, fruits, and spices.

⁵¹⁵ For fuller discussions of this term, see Walker (1998, 287–90) and Lewicka (2011, 428–29).

⁵¹⁶ Sing. *kuz*; see discussion in Walker 1998, 291–92.

⁵¹⁷ Unglazed basins and large bowls, while they must have been present in the assemblage, do not appear to have been kept and cannot be discerned from the records of the coarsewares counted at the site (Walker 1998, 288).

⁵¹⁸ Levanoni 2005, 219.

CHAPTER 3

PLANT REMAINS 1982

WILMA WETTERSTROM

Since the University of Chicago excavations at Quseir al-Qadim in 1982⁴⁸⁶ a remarkable picture of the Ayyubid period component of this Red Sea port has emerged. Frantz-Murphy's,⁴⁸⁷ Thayer's,⁴⁸⁸ and Guo's⁴⁸⁹ studies of the paper fragments from the site—mainly personal and business correspondence—have opened a window unto the household of local merchant “Sheikh” Abū Mufarrij and his family trading business. Study of the ceramics and fabrics has revealed vibrant trade with the Indian Ocean region.⁴⁹⁰ In addition, a University of Southampton excavation at Quseir between 1999 and 2003 has shed additional light on the Islamic occupation.⁴⁹¹

Among the artifacts that the University of Chicago expedition recovered in 1982 was a small collection of about 7,000 plant remains, all desiccated and many remarkably well preserved thanks to the hyper-arid climate. About 90 percent of these came from Ayyubid deposits, primarily from the compound referred to as the “Sheikh’s House.” Another 5 percent were from Roman period deposits, and the remainder from mixed contexts that could not be reliably dated. We consider here only the plant materials from the Islamic deposits, approximately 5,700 specimens (tables 23, 24, and 25).

What can these discarded fruit stones, rinds, nutshells, seeds, and other botanical detritus add to the picture of life in this trading community? The total assemblage is not large enough for statistical analyses. Nor is it a representative sample of the botanical materials preserved at Quseir because of the recovery methods. No flotation or fine-sieving

was used to collect the plant remains; excavators simply bagged plant materials as they encountered them during excavation, or picked them from the screen when they sieved fill. The resulting sample consequently favors large specimens or items occurring in clumps and caches. Small, scattered seeds would have had little chance of being noticed and retrieved. Indeed, the smallest specimens measure no less than 1 cm wide or long. Date pits, large and easily recognized, account for nearly 90 percent of the assemblage. The skewing in the sample particularly stands out when we compare it with the 1980 assemblage of plant remains, which I collected in the field using fine-sieving and flotation,⁴⁹² or with the samples retrieved by the University of Southampton. Among the remains the Southampton team recovered through flotation, fine-sieving, and hand-picking, dates accounted for only about 18 percent of the identifications.⁴⁹³ But considering only the hand-picked remains, dates accounted for over 72 percent of their total. Although this figure is lower than in the Chicago sample, dates still overwhelm the assemblage. The Southampton figure for dates might have been higher had it not been for the trained specialists working in the field helping to recover plant remains. They probably spotted specimens that others might have missed, assuring that the hand-picked sample had a higher proportion of other types besides date pits. In my 1980 collection of plant remains, dates account for 85 percent of the hand-picked material and a little over 4 percent of the fine-sieved and floated specimens. Among the total identifications, they represented about 36 percent, a much higher figure

⁴⁸⁶ Whitcomb and Johnson 1982a; 1982b.

⁴⁸⁷ Frantz-Murphy 1982.

⁴⁸⁸ Thayer 1995.

⁴⁸⁹ Guo 1999a; 1999b; 2001; 2004a; 2004b.

⁴⁹⁰ Burke and Whitcomb 2006; Burke 2007.

⁴⁹¹ Peacock and Blue 2006; Regourd 2004; van der Veen 2011.

⁴⁹² Wetterstrom 1982.

⁴⁹³ Based on data in van der Veen 2011, tables 1.7, 4.4.

than Southampton's percentage, probably because I had a smaller proportion of fine sieved and floated samples.

Even though the 1982 Quseir al-Qadim plant remains are not a representative sample, they nonetheless offer an opportunity to fill in lacunae in our understanding of the Ayyubid settlement at Quseir al-Qadim. Each of the plant specimens was used, handled, discarded, spilled, or forgotten by residents or visitors to the town. The archaeological specimens provide physical evidence of the plants mentioned in the documents Guo⁴⁹⁴ and Thayer⁴⁹⁵ studied, and they also testify to other plants that are not named in any texts, helping to flesh out life at Quseir in the thirteenth century. In addition, the well preserved specimens offer more information about the plants than the economic texts can convey with generic terms such as "nuts" and even "wheat" and "barley." The archaeological plant specimens can be pegged to genus (e.g., *Terminalia*) and, in nearly all cases, to species (e.g., *Triticum durum*); in some, it is even possible to identify the variety (e.g., *Vicia faba var. minor*). In addition, the plant specimens sometimes provide clues to the ways in which they were processed and used. For example, a number of lime rinds were neatly sliced across the long axis of the fruit, possibly so that the juice could be extracted with a juice presser, an item that is listed in the Quseir documents.⁴⁹⁶

PLANTS

The Quseir Islamic assemblage, totaling nearly 5,700 specimens, comprised mainly dates, as noted above, with small quantities of fruit, fruit stones, nutshells, cereal grains, and pulses, as well as a number of as yet unidentified materials (table 1). Most, if not all of these, would have been hauled to the town since almost nothing could have been grown along the

hyper-arid Red Sea coast. The mean annual rainfall at Quseir is a meager 3.44 mm.⁴⁹⁷

CEREALS

Wheat

Wheat and barley, Egyptian staples, would have come from the Nile Valley. Wheat undoubtedly supplied a good share of the diet, mainly in the form of bread, as it did elsewhere in Egypt at this time. The supreme role of wheat in the Egyptian diet of the Middle Ages can be inferred from documents in the Cairo Geniza, a collection of thousands of Jewish manuscripts (court records, legal documents, letters, notes, receipts, invoices, etc.), dating mainly from the tenth to the twelfth centuries.⁴⁹⁸ Although the Geniza trove comes from the Jewish community, scholars believe that it reflects many aspects of the broader Mediterranean community.⁴⁹⁹ Thus, the amount of wheat documented in receipts, letters, invoices, etc. of the Geniza probably gives us a good idea of how much wheat other Egyptians ate as well—an enormous quantity. Goitein⁵⁰⁰ estimated that an average middle-class family in the Geniza population required about 70 kg of wheat per month (2.3 kg per day, 840 kg per year).

Wheat would have been mainly prepared as bread. In Cairo, according to Geniza documents, grain was stored at home, ground at a mill, and then back at home mixed into a dough, which was baked in a commercial baker's oven.⁵⁰¹ This division of labor between home and commercial establishments may have been an urban phenomenon; it is likely that cooks in the hinterland carried out all the bread-making steps at home. The excavations at Quseir have not located any commercial mills or bakeries dating from the Islamic period, although the Southampton team found a bakery in the Roman levels.⁵⁰² However, we cannot be sure that there were none during Islamic times since much of the

⁴⁹⁴ Guo 1999a; 1999b; 2001; 2004a; 2004b.

⁴⁹⁵ Thayer 1995.

⁴⁹⁶ Guo 2004b, 39.

⁴⁹⁷ Zahran and Willis 2009, 103.

⁴⁹⁸ Goitein 1967, 1–28.

⁴⁹⁹ Goitein and Lassner 1999, 24–27; N. A. Stillman 2006, 498.

⁵⁰⁰ Goitein 1983, 235.

⁵⁰¹ Goitein 1983, 142.

⁵⁰² Thomas and Masser 2006, 132–33.

site has not yet been excavated. On the other hand, grindstones were found in several of the storerooms in the Sheikh's compound, suggesting that people milled their grain here.⁵⁰³

In addition to bread, wheat may have been used in a variety of other dishes, such as pastries. In Medieval Egypt the sweet called *harissa* was made of flour, sugar, and butter.⁵⁰⁴ A great variety of pastry recipes appear in medieval cookbooks,⁵⁰⁵ discussed in more detail below, but we do not know if such dishes were prepared in Quseir. The Sheikh's family may have satisfied their sweet teeth with pastries brought in from the Nile Valley rather than cooking any themselves. One of the Quseir documents reports delivery of "good quality cake" and baked goods along with other foods.⁵⁰⁶ Wheat might have been prepared as pasta, described in cookbooks of the era. Fresh dough was shaped by hand and cut into strips or small pieces and either dried for later use or cooked immediately.⁵⁰⁷ Whether such dishes were prepared in the thirteenth century in Egypt, let alone a remote Red Sea port, we cannot say. However, a word for noodles, *ša'riyya*, appears in the Cairo Geniza documents.⁵⁰⁸

For the Sheikh's family wheat was not only their staff of life, but also their lifeblood. Their main occupation was collecting, distributing, and reselling grain,⁵⁰⁹ "mostly wheat, and to a lesser extent, barley, flour, and rice" on a large scale.⁵¹⁰ One document alone "records amounts totaling forty-three *irdabbs*, that is, approximately three thousand kilograms, of wheat,"⁵¹¹ which is more than the town's population would have consumed in a year.⁵¹² Most of the grain was probably used in "long-distance trade, especially

with the lucrative business" of provisioning pilgrims traveling to Mecca.⁵¹³ In addition, the Sheikh may have been "a government agent in charge of the grain distribution on the Red Sea and Indian Ocean trade."⁵¹⁴

Given the importance of wheat for the Sheikh's household and family business, we would expect to see ample evidence of it in the plant assemblage from his house. However, cereal grains would be easy to miss without fine-sieving, and indeed, only three wheat grains were recovered during the 1982 Chicago excavations. These were found in several Ayyubid period deposits south of the Sheikh's House in Trench L8c, where barley, the other major Egyptian cereal, was also recovered. No cereals were retrieved from loci in the Sheikh's House, at least none came back to the United States for analysis. (I should note that the samples collected in the warehouse component of the Sheikh's compound, where one would expect to find abundant spilled grains, were retained in Egypt during the division of finds conducted by the antiquities authority.)

The dominant wheat in Egypt through Pharaonic times was emmer (*Triticum dicoccum* Schübl.), a hulled wheat. A free-threshing wheat, durum, or hard wheat (*T. durum* Desf.), supplanted it in the Graeco-Roman era.⁵¹⁵ Two of the Quseir Ayyubid wheat grains have durum characteristics, while the third one appears to be emmer.⁵¹⁶ Only durum was recovered during the 1980 excavations in the later Mamluk period deposits.⁵¹⁷ Van der Veen, Cox, and Morales⁵¹⁸ identified durum as the predominant wheat in the main Islamic levels (eleventh–thirteenth century) from the Southampton concession,

⁵⁰³ Burke 2007, 62.

⁵⁰⁴ Lev and Amar 2008b, 571.

⁵⁰⁵ Zaouali 2007, 131.

⁵⁰⁶ Guo 2001, 87.

⁵⁰⁷ Perry 2001a, 467–73.

⁵⁰⁸ Lev and Amar 2008b, 572.

⁵⁰⁹ Guo 2004b, 45.

⁵¹⁰ Guo 2001, 88.

⁵¹¹ Guo 2001, 88.

⁵¹² Guo 2001, 89.

⁵¹³ Guo 2001, 89.

⁵¹⁴ Guo 2004b, 25.

⁵¹⁵ Crawford 1979, 140.

⁵¹⁶ See Appendix F, table 25, for a description of this and the other specimens.

⁵¹⁷ Wetterstrom 1982, 364.

⁵¹⁸ Van der Veen, Cox, and Morales 2011a, 142.

with emmer grains accounting for less than 7 percent of the total. They found no emmer in their Mamluk levels.

Emmer was an unusual find in Islamic Quseir as the cereal had long fallen out of favor in Egypt. During the Ptolemaic period, durum had rapidly replaced emmer in the economy, supplanting it almost entirely within 150 years.⁵¹⁹ However, emmer could have popped up in a wheat field as a contaminant, growing like a weed. This could account for very small quantities, but van der Veen and colleagues identified 254 emmer grains,⁵²⁰ still in their husks within a single context—far too many to be a mere contaminant.⁵²¹ They suggested that emmer may have been imported from Nubia, where it was still grown, or from Yemen, and then transported on. In addition, they found no evidence of emmer chaff, which one would expect if the cereal had been consumed there. The Chicago sample is too small for any speculation about the status of the emmer grain.

The 1982 Quseir wheat grains may have spilled from lots intended for trade, or they might have come from bags or baskets of grain bound for the Sheikh's household or other families in town. In either case, the cereal was most likely destined to become bread, at least the grains that were not exported. It is also possible that some wheat might have been used as fodder (discussed below).

Barley

The other grain recovered during the 1982 excavations, barley, has been a major cereal of Egypt since Neolithic times. Prior to the Islamic period, it was used mainly to brew beer and to a lesser extent, make bread, as well as feed livestock. After the Muslim conquest, barley production declined and the grain became exclusively an animal fodder except under certain conditions.⁵²² "In various Arabic sources we read that bread made of barley, *dura*, or other cereals was consumed at times of great

distress, when warfare or insufficient production cut off the supply (of wheat), and at all other times only by ascetics."⁵²³ According to the Cairo Geniza documents, barley "served as bread for the very poor, but was normally needed to feed riding beasts."⁵²⁴

A total of 109 barley grains were recovered, 75 percent of which were from a single locus, with the remainder from only two other loci. Although barley grains far outnumber the wheat finds, the numbers do not reflect relative importance, since these are only chance finds with most of the grains coming from a single "pocket" of cereal. All three finds were in Trench L8c in an outdoor area south of the Sheikh's House. The "pocket" of barley grains came from locus L8c-1, which may have been a dump of household trash. It included remains of ten other plant foods and a shipping note addressed to Sheikh Abū Mufarrij that mentioned two commodities: flax and barley.⁵²⁵

The 1982 barley specimens are hulled and probably the 6-row variety (*Hordeum vulgare* L. subsp. *vulgare*), which was the major barley during Pharaonic times.⁵²⁶ A number of grains show a lateral twist characteristic of this species of barley, which is seen on a barley cereal head in roughly two-thirds of the grains (description in table 21). Six-row barley was also the species recovered in the 1980 Roman and Mamluk excavations.⁵²⁷

At Quseir al-Qadim, barley was undoubtedly used as fodder, perhaps exclusively. With very limited forage in the Eastern Desert and along the Red Sea coast, camel and donkey trains traveling back and forth between Quseir and the Nile Valley would have required feed. Colin Adams⁵²⁸ noted that caravans traveling to Mons Claudianus, the Roman quarry town in the Eastern Desert near Quseir, would have carried large quantities of fodder for the animals making the five-day trek from the Nile Valley and for those working in the quarry operation. He estimated that a camel would need more than 1,500 liters of

⁵¹⁹ Crawford 1979, 140.

⁵²⁰ Van der Veen 2011, 266.

⁵²¹ Van der Veen, Cox, and Morales 2011a, 143–45.

⁵²² Ashtor 1970, 2.

⁵²³ Ashtor 1970, 3.

⁵²⁴ Goitein 1967, 118.

⁵²⁵ Burke 2007, 386.

⁵²⁶ M. A. Murray 2000a, 512.

⁵²⁷ Wetterstrom 1982, 363–64.

⁵²⁸ C. Adams 2007, 210.

barley a year (or 468 kg, based on figures for grams of barley per unit volume).⁵²⁹

In addition to the camel trains trekking between Quseir and the Nile Valley, more camels may have resided in town. In nineteenth-century Quseir, some camels were kept to haul water, according to Karl Klunzinger, a German who served at Quseir in the 1860s and 1870s as a “sanitary or quarantine doctor” appointed by the government.⁵³⁰ Klunzinger noted that, in addition to Bedouin water carriers, resident dealers brought water in on camel caravans to the town water market, while some large households also kept their own dedicated water-hauling camels.⁵³¹ We do not know if Quseir al-Qadim had any resident camels for carrying water, but we do know that the Sheikh traded in camels, or at least took delivery of some. According to one of the shipping notes, he was to receive three “adult she-camels” and a fowl⁵³²—animals that would have required fodder while at Quseir.

We know that barley was consumed as fodder at Quseir, based on a discovery in 1980. A pot hearth stuffed with burnt dung full of barley grains, along with some wheat grains, turned up in the excavations of a Mamluk house.⁵³³ More recently, Van der Veen, Cox, and Morales⁵³⁴ found barley grains in camel dung from the Southampton Islamic period levels.

The quantities of barley required to feed animals residing in Quseir and passing through must have been enormous. Colin Adams’s⁵³⁵ estimate of 470 kg of barley per year for one camel is more than half the wheat that Goitein’s⁵³⁶ urban middle class family ate. But the shipping notes thus far studied document only four instances of barley deliveries,⁵³⁷ in striking contrast to the frequent mention of wheat. Three of the barley deliveries total about 2,480 kg, only enough to feed five camels for a year (if one

of the loads mentioned in the document is indeed recorded in *irdabbs*, as Guo⁵³⁸ suggests). The other shipment is listed as “two full [loads?] of flour and barley . . . which weigh eleven *irdabbs*,”⁵³⁹ but without specifying how much of each commodity is included. The total weight of this shipment would have been 770 kg. In contrast, one shipment alone of wheat listed in the Quseir shipping notes was approximately 3,000 kg,⁵⁴⁰ as noted above.

There are several possible explanations for the great discrepancy between wheat and barley trading in the Sheikh’s business. One may be that the enormous volumes of wheat he traded, especially abroad, simply dwarfed what might have been a respectable amount of barley passing through his warehouses for use in town. Yet another explanation is that most of the camel trains coming through Quseir carried their own provisions. It is also possible that the Sheikh was not the main dealer in barley or that the small sample of documents published thus far do not accurately reflect all aspects of his business. Even the total corpus of paper fragments that have been recovered may not adequately portray the family trading business since they are a chance collection rather than an archive. We can imagine that a vast number of letters, receipts, invoices, etc., concerning the Sheikh’s business were lost, damaged, destroyed, or carried away.

Whether or not the Sheikh did much business in barley, van der Veen, Cox, and Morales⁵⁴¹ concluded that barley was part of the long distance trade at Quseir al-Qadim. They found abundant remains of both wheat and barley, well beyond what would have been expected if the grains were only consumed locally.

Although barley was probably used primarily as fodder at Islamic Quseir al-Qadim, it might have

⁵²⁹ Kooistra 1996, 98.

⁵³⁰ Klunzinger 1878b, iv.

⁵³¹ Klunzinger 1878b, 281.

⁵³² Guo 2004, 253.

⁵³³ Wetterstrom 1982, 375.

⁵³⁴ Van der Veen, Cox, and Morales 2011a, 176.

⁵³⁵ C. Adams 2007, 210.

⁵³⁶ Goitein 1983, 235.

⁵³⁷ Guo 2004, 147, 237, 244.

⁵³⁸ Guo 2004, 237.

⁵³⁹ Guo 2004, 244.

⁵⁴⁰ Guo 2001, 88.

⁵⁴¹ Van der Veen, Cox, and Morales 2011a, 190.

played a small role in the human diet. It could have been baked as bread, most likely for poor residents, perhaps during times of food shortages. Barley might have appeared in a soup of boiled meat, as described in a fifteenth-century cookbook, *Kitāb al-ṭibāḥa*.⁵⁴² This compilation of recipes, “the closest thing we have to a book of everyday dishes,”⁵⁴³ depicts a modest style of medieval cooking. Perry⁵⁴⁴ believes these simple dishes coexisted in the thirteenth century with the elaborate haute cuisine, which is the focus of nearly all cookbooks of that period and through most of the medieval period.

At Quseir al-Qadim, barley may have been brewed into beer, one of its main roles in Pharaonic Egypt. Although explicitly forbidden, “intoxicating beverages were consumed at every level of society” during the Islamic Medieval period, “although never by those who strictly observed the *sharīʿa* code.”⁵⁴⁵ Indeed, one of the shipping notes included a popular liquor made from grapes.⁵⁴⁶ Moreover, wine was acceptable as a medication.⁵⁴⁷ However, I could find no mention of barley beer in any sources based on period documents, although a white beer made from wheat appears in the Cairo Geniza papers.⁵⁴⁸

Pulses

Legumes have been grown in Egypt since Neolithic times⁵⁴⁹ and have been a staple in the diet up to the present. The Quseir texts mention chickpeas, beans (*fūl*), and lentils.⁵⁵⁰ Neither chickpeas nor lentils were found among the 1982 plant remains, but they were recovered during the 1980 field season from Mamluk deposits.⁵⁵¹ The Southampton excavations also yielded lentils and chickpeas in the Islamic

deposits.⁵⁵² It is likely that with more intensive recovery methods the Chicago team would also have recovered these pulses, which have been Egyptian staples since Pharaonic times.

Two pulses were recovered during the 1982 excavations: fava bean (*Vicia faba* L.) and white lupine or termis (*Lupinus alba* L.). Fava beans date back to Old Kingdom times in Egypt, but are scarce in the archaeological record until the Graeco-Roman period.⁵⁵³ Today the fava bean is a staple food in Egypt, consumed in the national dishes fowl *medammes* (cooked dried beans) and *taʿmīyya* (deep-fried dough), as well as in *biṣāra* (puree of fresh beans) and *nābet* soup (boiled germinated beans).⁵⁵⁴ The green pods can also be eaten as a vegetable. Klunzinger, the “sanitary” doctor in Quseir, described a dish of fresh beans, *fūl aḥḍar*, served at a feast in a Nile valley village as “green horsebeans (both pod and kernels) boiled with flesh.”⁵⁵⁵ Fava beans were featured in a dish in the mid-thirteenth century *Kanz al-fawāʾid fī tanwīʿ al-mawāʾid* (“The Treasure of Useful Advice for the Composition of a Varied Table”) compiled in Egypt and including Egyptian, regional, and foreign recipes. The beans were cooked and seasoned with a sauce of vinegar, herbs, and roasted crushed hazelnuts.⁵⁵⁶ The recipe was an unusual dish for a cookbook of this time as beans were an everyday food.

The Quseir fava bean specimens include one whole bean, which falls within the size range of small-seeded *V. faba* var. *minor*, and fragments of the thick seed coat. Fava beans were common in the Islamic deposits that the Southampton team excavated⁵⁵⁷ and in the Mamluk period materials from

⁵⁴² Perry 2001a, 473.

⁵⁴³ Perry 2007, xv–xvi.

⁵⁴⁴ Perry 2001a, 469.

⁵⁴⁵ Waines 2011, 168.

⁵⁴⁶ Guo 2001, 90.

⁵⁴⁷ Goitein 1983, 253–61.

⁵⁴⁸ Goitein 1983, 261.

⁵⁴⁹ Zohary and Hopf 1994, 93, 101.

⁵⁵⁰ Guo 2004, 67.

⁵⁵¹ Wetterstrom 1982, 366.

⁵⁵² Van der Veen, Morales, and Cox 2011a, 146.

⁵⁵³ De Vartavan and Amorós 1997, 274.

⁵⁵⁴ Bakr 1996, 83.

⁵⁵⁵ Klunzinger 1878b, 60.

⁵⁵⁶ Zaouali 2007, 66.

⁵⁵⁷ Van der Veen, Morales, and Cox 2011a, 146.

1980.⁵⁵⁸ The *fūl* in the Quseir documents, which Guo⁵⁵⁹ translated as “beans,” were probably fava beans. These would have shipped as dried beans, since fresh pods and seeds of fava beans have a very short shelf-life. Dried beans, however, can be kept for long periods, particularly if they are not exposed to high temperatures.⁵⁶⁰ It is also possible that fava beans were grown in small kitchen gardens at Quseir on a very limited scale. Quseir residents probably could have hauled water for gardening from the well at Bīr al-ʿAmbaḡi about 6 miles away. The water is not potable for humans, but flows abundantly from a perpetual spring.⁵⁶¹ Even closer, Bīr Wadi al-Quseir al-Qadim, now dry,⁵⁶² might have been another source of water for gardening. During years with winter rains, the Wadis al-ʿAnz and Quseir al-Qadim, which almost converge at the town, may have occasionally carried water. Residents might also have drawn water, perhaps brackish, from town wells. The Southampton team found evidence of a well in the Islamic town in their excavations.⁵⁶³ Although gardening seems improbable in a place with so little water, Klunzinger⁵⁶⁴ reported that modern Quseir in the 1860s had a garden, but said that it “cannot be called luxuriant.” A traveler in 1823 also observed a garden: “some forty yards square, two trees, and a few wells of brackish water.”⁵⁶⁵ In the 1830s another British traveler noted, “One small garden on the seashore is the only speck of vegetation within sight of the town.”⁵⁶⁶

The other legume recovered in 1982 is a single complete white lupine bean, a food not mentioned in any of the Quseir documents. Introduced to Egypt by the Greeks,⁵⁶⁷ lupines contain bitter alkaloids that must be removed by boiling or steeping in water

before they can be eaten.⁵⁶⁸ Edward Lane⁵⁶⁹ in his unpublished “Description of Egypt,” reported that lupines are a “common article of food in Egypt. The seeds, which are rather bitter, are boiled in salt and water; and so eaten by the lower order of people.”

Today lupine seeds are sold as a snack on the street. Apparently they have been used this way for at least two millennia. Cappers⁵⁷⁰ found lupine remains at Roman-era Berenike, south of Quseir, that were eaten in the same way as the beans today: “the soft content is sucked out and the leathery seed coats are discarded.” Most of the Berenike finds were damaged seeds with seed-coat fragments still intact. In addition to street food, other lupine preparations have been reported.

The Quseir lupine seed was found in Locus Kb-38 in Corridor D of the Sheikh’s House with other food discards, including fruit stones, nutshells, and a garlic bulb. The Sheikh’s family may have eaten lupines, or traders staying in the warehouse may have snacked on them. They were probably not traded as a commodity. Van der Veen, Cox, and Morales⁵⁷¹ also identified lupine in the Southampton Islamic excavations—six seeds and one seed coat—but they were much more abundant in the Roman deposits.

FRUITS

According to Goitein,⁵⁷² “The contrast between Egypt and the neighboring countries was particularly marked in the supply of fruits. The mass and variety of imported fruits recorded in the Cairo Geniza are indeed astounding.” These included highly perishable fruits such as apricots, peaches, and plums, which “must have been transported in a dried or

⁵⁵⁸ Wetterstrom 1982, 366.

⁵⁵⁹ Guo 2001, 90.

⁵⁶⁰ Nasar-Abbas, Plummer, and Siddique 2008.

⁵⁶¹ Peacock 2006a, 12.

⁵⁶² Peacock 2006a, 12.

⁵⁶³ Blue 2006a, 107–9.

⁵⁶⁴ Klunzinger 1878b, 277.

⁵⁶⁵ Sherer 1825, 62.

⁵⁶⁶ Scott 1837, 47.

⁵⁶⁷ Täckholm 1961, 21.

⁵⁶⁸ Zohary and Hopf 1994, 117.

⁵⁶⁹ Lane 2001, 37.

⁵⁷⁰ Cappers 2006, 98.

⁵⁷¹ Van der Veen, Cox, and Morales 2011a, 146.

⁵⁷² Gotlein 1983, 246.

half-dried state” and sold in a bizarre just for sellers of dried fruits. In addition, a “great variety of nuts, such as shelled almonds, walnuts, pistachios, and hazelnuts, were brought to Egypt from both the East and the West.”⁵⁷³

Although the Sheikh and his family lived in a remote outpost, they nonetheless partook of Egypt’s wealth of fruits and nuts—both local and imported—and also traded in nuts. In the 1982 assemblage, we find evidence of apricots, plums, peaches, and tamarind, probably all imported, as well as pomegranate, lime, possibly citron, and carob, all introduced species most likely cultivated in Egypt. We also find remains of fruits known in Egypt from the Pharaonic period and earlier: *nabakh*, or Christ’s thorn, the dom palm, watermelon, sebesten (Egyptian plum), and the date. Of these, the Quseir documents only list lemon, watermelon, and date.⁵⁷⁴ The texts also mention apples, but none have been found at Quseir by either the University of Chicago or Southampton teams. One fragmentary document lists *Prunus mahaleb*,⁵⁷⁵ which is used as a spice;⁵⁷⁶ but no fruit stones of this cherry were recovered, probably because the stone would have been ground, leaving no identifiable traces. Guo⁵⁷⁷ notes that lemons, apples, and watermelon, along with vegetables, cooked foods, and dairy products were most likely for local consumption rather than long distance trade.

Apricot, Plum, and Peach

Apricot (*Prunus armeniaca* L.), plum (*Prunus domestica* L.), and peach (*Prunus persica* [L.] Batsch) were cultivated in orchards in the Fayyūm, according to the Zenon archive papyri.⁵⁷⁸ It is often stated that they were introduced in Ptolemaic times, but archaeobotanical specimens of peach and apricots have been

found dating from possibly as early as the Persian period.⁵⁷⁹ Plum first appears in the archaeological record at Roman-era Berenike,⁵⁸⁰ but no other archaeological specimens have been reported except for the ones found at Quseir in the Southampton Roman period loci⁵⁸¹ and the University of Chicago 1982 excavations.

Although peaches, plums, and apricots were cultivated in Egypt in the Ptolemaic period and, according to travelers’ reports, also the nineteenth century,⁵⁸² imports may have supplied the bulk of these fruits eaten in Egypt. Ashtor⁵⁸³ concluded from medieval period sources that aside from dates, bananas, and sycamores, Egypt “always had to import fruits from neighboring countries.” The Baedeker travel guide⁵⁸⁴ noted that the peaches, apricots, and plums grown in Egypt were tasteless. In addition, the peach crops must have been very small, as the fruit is ill-suited to Egypt’s climate and today grows only in Bahriya Oasis and the northern Sinai.⁵⁸⁵ It is likely that the specimens found at Quseir were imported, like the fruits mentioned in the Geniza documents.

Peaches, plums, and apricots can be used in cooking, eaten fresh, dried, or preserved in syrup. They can also be pickled, a preparation that is not so familiar today, except perhaps as an old Southern recipe. Prior to the advent of modern canning, pickling offered the only way to preserve the fruit with its texture and color somewhat intact.

In the medieval Islamic world, the chief method of preservation was by means of antiseptic agents, particularly salt and vinegar, often used together and with the addition of many condiments. In addition to vinegar and salt (steeping in salted water, impregnating with salt), a great deal of honey, or its substitutes sugar and treacle (dibs), was used in these preparations, also lemon juice,

⁵⁷³ Goitein 1983, 246.

⁵⁷⁴ Guo 2004b, 67.

⁵⁷⁵ Guo 2004b, 43.

⁵⁷⁶ Sayre 2001, 65.

⁵⁷⁷ Guo 2004b, 39.

⁵⁷⁸ Crawford 1979, 140.

⁵⁷⁹ de Vartavan and Amorós 1997, 215–16.

⁵⁸⁰ Cappers 2006, 120.

⁵⁸¹ Van der Veen, Morales, and Cox 2011a, 150.

⁵⁸² Baedeker 1878, 77; Bromfield 1856, 214–15.

⁵⁸³ Ashtor 1970, 6.

⁵⁸⁴ Baedeker 1878, 77.

⁵⁸⁵ Cappers 2006, 122.

oil, mustard, walnuts or hazel nuts roasted and crushed, and all kinds of herbs and spices, etc.⁵⁸⁶

Whether from Lower Egypt or abroad, peaches, apricots, and plums may have been transported to Quseir pickled or dried. Even locally grown fruits from Lower Egypt would not have withstood the long journey to the remote Red Sea town. The trip across the Eastern Desert alone took days: six to seven, according to Strabo.⁵⁸⁷ In medieval times it was “three day’s journey” from Qūs to Quseir,⁵⁸⁸ but a traveler in 1839⁵⁸⁹ said it took five to six days. Whether traveling for three or six days across the Eastern Desert, these perishable fruits would have rotted before they reached Quseir. The fruits that did reach Quseir must have been preserved. The “high quality fine pickles”⁵⁹⁰ mentioned in one Quseir shipping note might have been pickled fruits, perhaps packed in skins. On the other hand, dried fruits would have been a lighter, more compact, and presumably cheaper, commodity to ship. One of the three Quseir plum stone specimens retains bits of dried fruit, suggesting that it was shipped as a prune. The fruits may have been eaten at Quseir as dried fruits or cooked in sweets and in meat dishes. A common practice in medieval Islamic cooking was to add sweeteners, such as fruits, to meat dishes,⁵⁹¹ discussed in more detail below. The Sheikh might also have shipped fruits on across the Red Sea. Guo⁵⁹² notes that according to the thirteenth-century traveler Ibn al-Muğāwir, dried fruits and nuts were among the main exports from Egypt to Yemen.

By far the most abundant of the three fruits was the peach; its stones were scattered both inside and outside the Sheikh’s House. But more than a third

(twelve stones) came from one locus, a deposit of trash with many food remains in Corridor D in the house. The other two fruits were represented by only a few specimens: three plum stones and a single apricot stone. We cannot be sure, however, that peaches were preferred over the other stone fruits at Quseir. The others may have been delivered dried without stones, leaving no traces.

Carob

The carob (*Ceratonia siliqua* L.) tree, cultivated primarily for its sweet edible pods, is indigenous to the eastern Mediterranean.⁵⁹³ In Egypt, archaeological finds of carob pods date back to the Twelfth Dynasty, but the majority are from Graeco-Roman times.⁵⁹⁴ Carob pulp is 48–56 percent sugar, but it also has a high fiber content: 18 percent cellulose and hemicellulose.⁵⁹⁵ Today in Egypt the fruit pulp is prepared as a sweet drink.⁵⁹⁶ In the Mediterranean region, whole pods are fed to livestock.⁵⁹⁷

Goitein⁵⁹⁸ notes a record in the Cairo Geniza for carob pods sold “in considerable, but not commercial, quantities to a merchant in Alexandria.” He comments that they remain edible for months and were “perhaps an important part of the diet of seafarers.” The Geniza documents suggest that in Egypt they were “food for the poor,” although during famines they were “an avidly sought-after substitute for more valuable carbohydrates,”⁵⁹⁹ mainly bread. Coit⁶⁰⁰ also reported that carob pods were mainly used as food “in times of famine or other scarcity. In southern Greece, during World War II, after the German army had stripped the country of livestock and almost all other foods, the rural inhabitants subsisted largely on carob pods.” But he notes, “Straight

⁵⁸⁶ Rodinson 2011, 1057.

⁵⁸⁷ Peacock 2006a, 8.

⁵⁸⁸ Garcin 2011b.

⁵⁸⁹ Anonymous 1841, 61.

⁵⁹⁰ Guo 2004, 39.

⁵⁹¹ Ashtor 1970, 8; van Gelder 2006, 204.

⁵⁹² Guo 2001, 90.

⁵⁹³ Ramón-Laca and Maberley 2004.

⁵⁹⁴ de Vartavan and Amorós 1997, 70–71; Täckholm 1961, 21–22.

⁵⁹⁵ Batlle and Tous 1997, 23.

⁵⁹⁶ Batlle and Tous 1997, 27; Orwa et al. 2009.

⁵⁹⁷ National Research Council 2002, 110.

⁵⁹⁸ Goitein 1983, 121.

⁵⁹⁹ Goitein 1983, 121.

⁶⁰⁰ Coit 1951, 91.

carob is too high in fiber for most stomachs.”⁶⁰¹ On the other hand, Abū-l-Ḥayr, writing in the eleventh-twelfth century in Seville, says that the carob tree grew in al-Andalus and Syria, and “produced abundant and thick honey, and was therefore used, as it was in Egypt, to make confectionery.”⁶⁰² Today in Egypt, carob syrup is a popular drink made of finely ground carob pods and water.⁶⁰³

Carob pods have been recognized for their medicinal properties since Pharaonic times. Ancient Egyptians used them to treat digestive disorders and as a vermifuge.⁶⁰⁴ During the medieval period, Ibn Sīnā, a Muslim physician regarded as the father of Islamic medicine, “especially recommended the use of the ‘Shami’ carob (*Ceratonia siliqua*),” carob from Bilād al-Šām (the Levant) for a “wide range of medical uses.”⁶⁰⁵ Carob figured in the *materia medica* of the Cairo Geniza,⁶⁰⁶ but was not among the top ten medicinal ingredients. It appears in a recipe for an emmenagogue and an abortifacient, and was also said to stop bleeding and relieve swelling and stomach problems.⁶⁰⁷ Today the pharmaceutical industry uses extracts and meals of carob in the treatment of diarrhea in infants.⁶⁰⁸ Laboratory studies have shown carob pod fiber can inhibit the growth of colon cancer cells and help maintain healthy blood chemistry values that reduce the risk of heart disease.⁶⁰⁹

The distribution of carob trees in Egypt today is limited to some Sinai wadis and the Mediterranean coast west of the Delta,⁶¹⁰ although the Baedeker guide⁶¹¹ reported seeing it elsewhere in Egypt in the nineteenth century. We do not know how widely the

tree was grown in the past, but in light of the present distribution, it seems likely that the pod fragments from Quseir were imports from the eastern Mediterranean region, perhaps Syria or Cyprus.

The Quseir specimens include a seed and pod fragments, one of which was found in the Sheikh’s house, the other in a midden to the south. The Quseir documents do not list carob, probably because it was not a trade commodity. Or perhaps it was encompassed in the term “medicine,” which does appear in the documents.⁶¹² The pods might have been used to prepare a sweet drink or were perhaps used as fodder, although if imported, carob may have been too costly for animal feed. The accounts of its use as a famine food bring up another possibility: the Sheik and his sons, as shrewd businessmen, might have held carob pods to sell when wheat was in short supply. The dry pods store well and could last some time.

Christ’s Thorn

The Christ’s thorn, or *nabakh*, tree (*Ziziphus spinachristi* [L.] Willd.), indigenous to Egypt, produces a small fruit consisting of a hard stone surrounded by a sweet, edible pulp.⁶¹³ Egyptians have been eating *nabakh* fruits since at least Predynastic times, when the first archaeological specimens appear.⁶¹⁴ The fruits are consumed either fresh or dried⁶¹⁵ and can be collected from wild or cultivated trees. Cappers⁶¹⁶ found the fruit to be “nothing special,” but citing Drar⁶¹⁷ says the cultivated fruits taste better than

⁶⁰¹ Coit 1951, 93.

⁶⁰² Ramón-Laca and Mabblerley 2004, 433.

⁶⁰³ Batlle and Tous 1997, 27.

⁶⁰⁴ Manniche 1989, 86.

⁶⁰⁵ Lev 2002b, 165.

⁶⁰⁶ Lev and Amar 2008b, 373–74.

⁶⁰⁷ Lev and Amar 2008b, 35.

⁶⁰⁸ Russo and D’Andrea 2002, 368.

⁶⁰⁹ Khatib and Vaya 2010, 257–58.

⁶¹⁰ Cappers 2006, 68.

⁶¹¹ Baedeker 1878, 70.

⁶¹² Guo 2004b, 68.

⁶¹³ Saied et al 2008, 931.

⁶¹⁴ De Vartavan and Amorós 1997, 281–83.

⁶¹⁵ Saied et al 2008, 933.

⁶¹⁶ Cappers 2006, 135.

⁶¹⁷ Drar 1936, 95.

the wild ones. ‘Abd al-Laṭīf al-Baġdādī⁶¹⁸ reported in 1204 that the fruit is “extremely sweet.”

In addition to eating them out of hand, Egyptian peasants used to make a bread from *nabakh* fruits. Manniche⁶¹⁹ detailed the preparation: after the flesh of the fruits was reduced to a powder in a mortar, it was mixed with water, formed into a dough, poured into dried gourds, then placed in the ground. A fire was lit over the gourd and the loaf left overnight to cook.

The genus *Ziziphus* is known for its medicinal properties.⁶²⁰ In Pharaonic Egypt, according to the Ebers Papyrus, *nabakh* fruits were combined with a number of ingredients, including emmer grains, to form an unguent to treat “any swollen member.”⁶²¹ In central Sudan, *nabakh* fruits are taken for diarrhea and malaria and used as an antispasmodic, while in Egypt a beverage made from the fruits is used as a sedative.⁶²²

The Quseir *nabakh* stones were mostly found scattered through the Sheikh’s House. They might have come from wild trees growing locally in the nearby Wadi Quseir al-Qadim, as the tree grows in the Red Sea coastal region.⁶²³ Or perhaps a few *nabakh* trees were even cultivated in the settlement. But the fruits most likely came from the Nile Valley.

The Southampton team also recovered *nabakh* stones.⁶²⁴

Citrus

Citrus fruits, unknown in Pharaonic Egypt, were introduced starting with the citron (*Citrus medica* L.),

in the Graeco-Roman period.⁶²⁵ Beginning around the tenth century, other citrus fruits made their way to Egypt. By the twelfth century, the lemon (*C. limon* L.), sour orange (*Citrus aurantium* L.), and lime (*C. aurantifolia* Swing.) had diffused throughout the Islamic world.⁶²⁶ Citrus plants were a valued source of many products in the early Islamic world: the fruits were enjoyed fresh, after sweetening, preserved in syrup or brine, or in candies and marmalades; the juices were used in drinks and as a flavoring in cooking; and the peels were soaked in brine or preserved in sugar.⁶²⁷ In the Cairo Geniza, lemon juice was a particularly popular beverage⁶²⁸ and was traded in “considerable quantities.”⁶²⁹ Lemons also appear in the Geniza documents in a shopping list⁶³⁰ and in a shopkeeper’s order.⁶³¹ Al-Tilmid’s dispensatory includes a recipe for a lemon beverage.⁶³² A common medieval practice was to flavor stews with a sour fruit juice,⁶³³ and citrus juice was probably one of these. ‘Abd al-Laṭīf al-Baġdādī, the great Iraqi scientist, physician, and philosopher, described Egyptian citrus fruits in the book he wrote in 1204 while living in Cairo, *Book of Instruction and Admonition on the Things Seen and Events Recorded in the Land of Egypt*: “There are also acid fruits of which one finds in Egypt a large number of different species, which I have never seen in Iraq.”⁶³⁴ These included a couple types of citrons and some unusual lemons.

In the Cairo Geniza medical documents, lemons were one of the most frequently mentioned substances, ranking nineteen in a list of twenty and occurring in twenty recipes.⁶³⁵ It was used for an invalid diet,

⁶¹⁸ Zand, Videan, and Videan 1965, 79.

⁶¹⁹ Manniche 1989, 158.

⁶²⁰ Saied et al 2008, 933.

⁶²¹ Manniche 1989, 158.

⁶²² Saied et al. 2008, 933.

⁶²³ Täckholm 1974, 345.

⁶²⁴ Van der Veen, Cox, and Morales 2011a, 150, 154.

⁶²⁵ Ramon-Laca 2003, 506; Spiegel-Roy and Goldschmidt 1996, 7.

⁶²⁶ Watson 1983, 45-46.

⁶²⁷ Watson 1983, 42.

⁶²⁸ Goitein 1983, 261.

⁶²⁹ Goitein 1967, vol. 1, 121.

⁶³⁰ Goitein 1983, 230.

⁶³¹ Goitein 1967, 1-151.

⁶³² Kahl 2007, 237.

⁶³³ Perry 2007, xix.

⁶³⁴ Zand, Videan, and Videan 1965, 65.

⁶³⁵ Lev and Amor 2008b, 71.

in a medical plaster, and to treat fever.⁶³⁶ Citron was also listed in the Geniza pharmacopoeia.⁶³⁷ However, lemon does not appear in Šābūr ibn Sahl's ninth-century dispensatory,⁶³⁸ nor in Ibn al-Tilmidh's later dispensatory⁶³⁹ except in a syrup and as a beverage, noted above. But citron is used in formulations in both.⁶⁴⁰ 'Abd al-Laṭīf al-Baġdādī noted that Egyptians made a variety of "pastilles," including ones of lemon, which were used medicinally.⁶⁴¹ In recent times in Oman, whole lemon fruit or diluted juice was taken for colds and fever; the juice was squeezed into the ear to exude pus; crushed dried fruit heated with salt and water was made into a paste applied to remove thorns; and the rind and bark were used to treat a wide range of other ills.⁶⁴²

During the 1982 field season at Quseir, excavators recovered more than twenty fragments of dried citrus fruit. Most of these appear to be limes; they are small with thin rinds and a small nipple at the apex. Some specimens, as noted above, were cut with a perpendicular slice across the long axis of the fruit. Some fruits are flattened and appear to have been squeezed in the hand. The rinds were apparently not used, at least not in these instances. The citrus specimens were widely scattered in loci within the Sheikh's House and in deposits to the north and south, suggesting frequent use of limes, probably for food and drink, but possibly also for medicinal purposes. But in Guo's⁶⁴³ translation of the Quseir documents, only lemon is mentioned. And in all of the medieval sources noted above, only the term lemon is used. Van der Veen and Morales⁶⁴⁴ point out that historical names, as well as local names used today, may not match up with botanical

nomenclature, in this case, "lemon" used for *Citrus aurantifolia*. They note that fruits they bought in a Quseir market under the name "lemon" were in fact limes. In my experience, a popular Egyptian fruit drink called "leemone" is made with limes. We see yet another example of lemon possibly standing for lime in Klunzinger's account of a feast he attended: the host squeezed "the juice of some green lemons or citrons the size of walnuts"⁶⁴⁵ into a bowl of soup. The size suggests *Citrus aurantifolia* as walnuts are much smaller than lemons or citrons. Watson⁶⁴⁶ points out that medieval Arabic names for lime and lemons were spelled variously and it is not clear which fruit was actually meant.

A few of the Quseir citrus fruit fragments have a thicker rind than most of the specimens, suggesting another type of citrus, possibly the citron (*Citrus medica* L.), a large, oblong fruit with a "very thick, rough, bumpy peel."⁶⁴⁷ Citrons are used primarily as candied peel for confections, but also for the essential oils in the peel.⁶⁴⁸ The thirteenth-century cookbook *Kanz al-fawā'id fī tanwī' al-mawā'id*, mentioned above, offered a recipe for candied citron peels.⁶⁴⁹

Coconut

A native of tropical Southeast Asia, the coconut palm (*Cocos nucifera* L.) is cultivated in tropical areas throughout the world. As it grows best where mean temperatures range from 75° to 85°, ⁶⁵⁰ Egypt's climate is not suitable for the coconut palm,⁶⁵¹ and thus it would have been imported. The fruit, a drupe, is a source of several valuable products. The white kernel, or endosperm, is used in cooking and sweets. Coconut oil is extracted from the dried flesh of the

⁶³⁶ Lev and Amor 2008b, 535.

⁶³⁷ Issacs and Baker 1994, 12.

⁶³⁸ Kahl 2003.

⁶³⁹ Kahl 2007, 234, 237–38.

⁶⁴⁰ Kahl 2007, 199, 214, 216, 218; Kahl 2003, 35, 223, 149.

⁶⁴¹ Zand, Videan, and Videan 1965, 65.

⁶⁴² Ghazanfar and al-Sabahi 1993, 95.

⁶⁴³ Guo 2004b, 38–39.

⁶⁴⁴ Van der Veen and Morales 2011, 85–86.

⁶⁴⁵ Klunzinger 1878b, 56.

⁶⁴⁶ Watson 1983, 46.

⁶⁴⁷ Ladaniya 2008, 28.

⁶⁴⁸ Khan 2007, 61.

⁶⁴⁹ Zaouali 2007, 134.

⁶⁵⁰ Belfort and Hoyer 1914, 24.

⁶⁵¹ Täckholm and Drar 1950, 319.

kernel (copra); the leftover residue can be used as fodder. The coir or fiber of the husk is used to make ropes, cordage, mats, and brushes.⁶⁵² The immature fruit yields a sweet liquid. Islanders in the Indian and Pacific Oceans took young fruit on inter-island sea voyages with them as “self-contained, individual servings of uncontaminated drinking water.”⁶⁵³ The fibers are resistant to salt water and are therefore useful in the cable and rigging of sea-going vessels.⁶⁵⁴ The hard shell, the endocarp, is used to make a wide range of objects, including cups, bowls, beads, ladles, water dippers, combs, fish hooks, spoons, and dagger handles.⁶⁵⁵ Today, Ababda Bedouin along the Red Sea Coast occasionally make containers out of whole coconut shells to store meat, animal fat, milk, and rancid butter used for hair gel.⁶⁵⁶

Coconut rarely appears in thirteenth-century cookbooks or in medical treatments. A manual for pharmacists prepared in Cairo in 1260 by a Jewish druggist lists coconut as an ingredient in a treatment for “squinting” and coconut oil in another treatment to assure conception.⁶⁵⁷ In the tenth-century recipe collection *Kitāb al-Ṭabīḥ*, mentioned above, coconuts are used interchangeably with dried fruits and nuts in several pastry recipes, even mixed into a meat stuffing.⁶⁵⁸ While the compiler, Ibn Sayyār al-Warrāq, celebrated Abbasid cuisine of the upper classes, he also attempted to demystify it for simpler kitchens;⁶⁵⁹ thus, coconuts may have been used in pastries in more modest homes. Perhaps a few centuries later in Quseir coconuts were combined with fruits and nuts in dishes, or simply eaten straight as coconut meat or milk.

The coconut appears to have first arrived in Egypt in Roman times. The earliest archaeological

records of coconut are from Berenike and Shemshef.⁶⁶⁰ Van der Veen, Cox, and Morales⁶⁶¹ found moderate quantities of coconut shells in both Roman and Islamic deposits at Quseir. The University of Chicago excavations found one coconut shell fragment in the Roman settlement and a fair number in Islamic loci.

The 1982 Quseir specimens include fragments of the nutshell (endocarp) and husk. The shell fragments are small, suggesting that they were broken to extract the meat. But two fragments also have neatly drilled holes, which were probably used to drain the liquid. The whole fruits with the husks were apparently imported to Quseir, probably for the kernel, but also possibly for the coir. The fruit would have come from Southeast Asia via ship.

Dates

Cultivated throughout Egypt, the date palm (*Phoenix dactylifera* L.) is one of the country’s most valuable trees with virtually every part of it put to use. The fruit is eaten fresh or dried and used to prepare a syrup, a fermented beverage, alcohol, and vinegar.⁶⁶² Poor quality fruits are fed to livestock. Date tree trunks are used in construction, while the fronds/leaves/petioles are made into crates, baskets, nets, and rope,⁶⁶³ as well as furniture, fences, thread, needles, pins and punches, firewood, cordage, and mattresses.⁶⁶⁴ Date seeds are ground and fed to camels and other livestock.⁶⁶⁵

Finds of date wood, flowers, and leaves go back to Predynastic times, but date fruits do not appear in the archaeological record in Egypt until the Middle Kingdom and do not become common until New Kingdom times.⁶⁶⁶

⁶⁵² Belfort and Hoyer 1914, 16–17.

⁶⁵³ Harries 2006, 394.

⁶⁵⁴ Child 1964, 179.

⁶⁵⁵ Belfort and Hoyer 1914, 17.

⁶⁵⁶ Cappers 2006, 73.

⁶⁵⁷ Chipman 2010, 236, 263.

⁶⁵⁸ Nasrallah 2007, 191, 410, 428.

⁶⁵⁹ Nasrallah 2007, 12.

⁶⁶⁰ Cappers 2006, 79.

⁶⁶¹ Van der Veen, Cox, and Morales 2011b, 49.

⁶⁶² Nixon 1951, 277.

⁶⁶³ El-Hadidi and Boulos 1979, 83.

⁶⁶⁴ Nixon 1951, 277.

⁶⁶⁵ Nixon 1951, 277.

⁶⁶⁶ Täckholm 1961, 8; de Vartavan and Amorós 1997, 193–99.

Although dates are often eaten simply as dried or fresh fruit, they are also used in cooking. In the *Kitāb al-wuṣṣla ilā al-habīb*, the late thirteenth-century cookbook mentioned above, a recipe for cooked meat calls for adding dates, “however many . . . you desire,” after boiling the meat in water, browning it in fat, and adding salt and spices.⁶⁶⁷ In the fifteenth-century cookbook of modest dishes, *Kitāb al-ṭibāḥa*, date molasses was used in making sweets.

Dates were among the *materia medica* in the various Cairo Geniza documents, such as pharmacopoeias, medical books, and recipes, and were used in treatments for abdominal cholic and phlegm, and as a purgative and aphrodisiac.⁶⁶⁸

Dates appear only once in the Quseir business documents, a “half load of dried dates.”⁶⁶⁹ Thus it may be surprising to find that date seeds were the most abundant plant remains recovered from the excavations, accounting for about 90 percent of the specimens. In addition, excavators retrieved several perianths (sepals and petals), and a few whole fruits. However, such large quantities are not remarkable, considering the superb preservation at the site, the composition of the seed, and the way dates are consumed, all of which would favor the recovery of date seeds. The pits are readily caught in excavators’ coarse sieves, easily recognized, and remain more or less intact in the dry climate. In addition, the hard seeds can survive trampling feet and other potentially destructive forces. Moreover, date seeds are generally not processed, but simply discarded.

We might also expect that dates were an especially good fruit for a community entirely dependent on imports hauled in from the Nile Valley. Dates travel well compressed into cakes. “Because they are so sweet, bacterial decay is inhibited, enabling cakes of dates to last for decades in an edible

condition.”⁶⁷⁰ Also, they were one of the most important Egyptian fruits, and probably one of its cheapest. During medieval times, people cultivated vast groves of date palms along the Nile.⁶⁷¹ Until sugar cane was introduced during the Muslim conquest and became a major crop some centuries later, dates, consisting of 70–80 percent sugar at harvest,⁶⁷² were one of the few sources of sugar, along with honey. Indeed, they were even used as a honey substitute. The Cairo Geniza documents mention a recipe for making “honey” by mixing “good, fresh dates” with water.⁶⁷³ During Ramadan nowadays, Muslims break their fast with dates. Dates in the form of syrup were among the sweets added to meat dishes in the medieval period.⁶⁷⁴

The many date seeds scattered through the Sheikh’s house indicate that the residents ate the fruits. But they were also a commodity in the Sheikh’s business. Excavators recorded innumerable date pits in the storerooms (samples that were not shipped to the United States). Burke⁶⁷⁵ found that the ratio of date pits in the storerooms to the house was roughly 2:1. She points out that the single mention in the texts, an entire half camel load to be delivered, “indicated they were probably for trans-shipment as well as local consumption.”⁶⁷⁶ The Sheikh may have sold dates to pilgrims; they were an ideal food for travelers and apparently a common food for anyone traveling at sea. Ibn Baṭūṭa said that he ate fish with dates while journeying on a small ship near Oman.⁶⁷⁷ Dates were also exported to China and India.⁶⁷⁸ They probably served as one of the “low-value” cargo items that provided ballast for ships.⁶⁷⁹

In addition to possibly shipping dates abroad or selling them to pilgrims, the Sheikh may have sold them locally, perhaps during periods of food

⁶⁶⁷ Zaouali 2007, 84.

⁶⁶⁸ Lev and Amar 2008b, 397–98.

⁶⁶⁹ Guo 2004b, 172–74.

⁶⁷⁰ Hepper 1990, 62.

⁶⁷¹ Lindsey 2005, 128.

⁶⁷² Samarawira 1983, 181.

⁶⁷³ Goitein 1983, 247.

⁶⁷⁴ Van Gelder 2006, 204.

⁶⁷⁵ Burke 2007, 182.

⁶⁷⁶ Burke 2007, 182.

⁶⁷⁷ Pearson 2003, 56.

⁶⁷⁸ Wheatley 1959, 53, cited in Burke 2007, 182.

⁶⁷⁹ Chaudhuri 1985, 53.

shortages. Goitein⁶⁸⁰ reports that in Cairo during famines—that is, when wheat was scarce—the Geniza letters “become replete with orders for dates of all descriptions.”

Although most if not all of the dates came from the Nile Valley, we should note that some date palms may have grown around Quseir al-Qadim. A British traveler coming from India in 1839 observed at modern Quseir, “A few date-plants, enclosed by a mud wall, form the sole exception to a universal blank in vegetable nature here.”⁶⁸¹

The Quseir date pits varied from short, squat seeds with rounded ends to long, narrow ones. Apparently this is typical of dates in earlier periods. Cappers⁶⁸² reports that the size of date seeds from Berenike were “quite variable,” an indication that they came from groves that were at least partly propagated by seeds, rather than exclusively from basal suckers. The latter practice guarantees that the fruits will be like those of the parent tree and results in uniform crops.⁶⁸³ The Quseir dates undoubtedly came from the Nile Valley, except perhaps for small quantities from the very few palms that may have grown in town.

Dom Palm

Hyphaene thebaica (L.) Mart., a native palm of Egypt,⁶⁸⁴ produces large globular fruits that are collected for the thin, sweet, fibrous layer surrounding the hard seed,⁶⁸⁵ which may be pounded into a meal or prepared as syrup.⁶⁸⁶ A nineteenth-century traveler described the fibrous layer as tasting like gingerbread when chewed but “dry and husky.”⁶⁸⁷

On the other hand, Osborn⁶⁸⁸ observed that although “the fruits are fibrous and tough to chew, the flavor is pleasant, similar, I thought, to that of carob pods.”

The fruits have been used since at least Paleolithic times in Egypt,⁶⁸⁹ probably for the edible mesocarp and the hard seed, which is valued as a vegetable ivory for making buttons and other objects.⁶⁹⁰ Although there are no records of ancient Egyptians using the dom palm fruit medicinally, Theophrastus noted that Egyptians used a bread made of the fruits to cure stomach ailments.⁶⁹¹ In the twentieth century, residents of Kharga used a drink made from the pulverized fruits for gastrointestinal disturbances and for strengthening the heart.⁶⁹² Laboratory research has demonstrated that *Hyphaene thebaica*'s fruit is a source of potent antioxidants.⁶⁹³

It appears that the 1982 Quseir fruits were used for both food and ivory, but each specimen served only one purpose. The mesocarp of some specimens has been scraped, presumably for consumption, but the hard stone is untouched. In others the fruit has been cut, probably to extract the ivory, but the mesocarp is still intact. This is true for the specimens found both inside the Sheikh's House and outside. In contrast, the specimens the Southampton team recovered included complete seeds, indicating that none were used for the ivory.⁶⁹⁴

Today the dom palm grows in southern Egypt, including in the wadis of the Eastern Desert and Sinai Peninsula, as well as in 'Aswān and Qenā Provinces, where it is especially common.⁶⁹⁵ Thus, the dom palm fruits may have been gathered in wadis near Quseir or come from Kus.

⁶⁸⁰ Goitein 1983, 247.

⁶⁸¹ Anonymous 1841, 56.

⁶⁸² Cappers 2006, 107.

⁶⁸³ Klee 1883, 10.

⁶⁸⁴ Täckholm 1961, 9.

⁶⁸⁵ Hepper 1990, 59–60.

⁶⁸⁶ Cappers 2006, 92.

⁶⁸⁷ Bromfield 1856, 85–86.

⁶⁸⁸ Osborn 1968, 176.

⁶⁸⁹ Hillman, Madeyska, and Hathor 1989, 198–202; de Vartavan and Amorós 1997, 134–38.

⁶⁹⁰ Täckholm 1961, 9.

⁶⁹¹ Manniche 1989, 109.

⁶⁹² Osborn 1968, 176.

⁶⁹³ Hsu, Coupar, and Ng 2006.

⁶⁹⁴ Van der Veen, Cox, and Morales 2011a, 151.

⁶⁹⁵ Täckholm 1974, 763; Zahran and Willis 2009, 371.

Egyptian Plum or Sebesten

Sometimes called Egyptian plum, although it is native to India,⁶⁹⁶ *Cordia myxa* L. produces a sweet, somewhat astringent fruit. The archaeobotanical record of the sebesten tree in Egypt goes back to the Middle Kingdom.⁶⁹⁷ The fruits are eaten fresh and pickled, while the mucilaginous pulp is used medicinally for a range of ills: sore throat, cough, chest complaints, abscesses, rheumatic pain, and helminths.⁶⁹⁸ The sticky fruit pulp is also used as bird lime,⁶⁹⁹ a sticky substance spread on surfaces in order to trap birds. Theophrastus reported that in Upper Egypt, people made cakes of the dried fruit.⁷⁰⁰ Sebesten appears in the Cairo Geniza as a food for a medical diet; it was believed to strengthen the stomach and the liver, serve as a purgative, and treat malaria.⁷⁰¹

Laboratory tests have shown that sebesten fruit has strong antioxidant activity,⁷⁰² while experimental work with rats has determined that the fruit also has anti-inflammatory properties.⁷⁰³

A single specimen of a sebesten stone was found in a deposit in the Sheikh's house in 1982. The only sebesten stones found in 1980 were in the Roman settlement. Van der Veen, Cox, and Morales⁷⁰⁴ found that the fruits were common in Roman deposits, but scant in the Islamic period. The fruit stones were also abundant at Roman Berenike and Shenshef.⁷⁰⁵ Perhaps sebesten had fallen out of favor as a food

by Islamic times. The Geniza documents do not list Egyptian plum as a food of urban people during the medieval period, although it may have been eaten in the countryside. Primary Arabic texts document that the fruits were imported to Egypt from the eleventh to the eighteenth century for medicinal purposes from Ascalon and Jerusalem.⁷⁰⁶

Olive

One of the most important fruit trees of the Mediterranean, the olive (*Olea europaea* L.) was well established as a crop in the Eastern Mediterranean by the Bronze Age.⁷⁰⁷ In Egypt, however, olive fruits do not appear in the archaeological record until the Thirteenth Dynasty,⁷⁰⁸ and they are not common finds until Graeco-Roman times.⁷⁰⁹ Olive trees have been grown in the Fayyūm, along the Mediterranean west of Alexandria,⁷¹⁰ and in the oases of the Western Desert as well as the Sinai.⁷¹¹

The olive fruit is grown for table use and for oil.⁷¹² Table olives are usually pickled in brine, but they may also be prepared as a dried, salted fruit.⁷¹³ In Egypt, olives became important in the diet of Egyptian Greeks during the Ptolemaic period and were more extensively used in Roman times,⁷¹⁴ judging from the numerous archaeological finds of olive stones from this period.⁷¹⁵ However, olives apparently were not quite so popular in the medieval period. I could find almost no mention of olives in medieval Islamic cookbooks, although olive oil occurs

⁶⁹⁶ Täckholm 1961, 29.

⁶⁹⁷ De Vartavan and Amorós 1997, 84–85.

⁶⁹⁸ Oudhia 2007.

⁶⁹⁹ Täckholm 1961, 29.

⁷⁰⁰ Manniche 1989, 93.

⁷⁰¹ Lev and Amar 2008a, 31.

⁷⁰² Afzal et al. 2007, 2116.

⁷⁰³ Al-Awadi et. al 2001, 391.

⁷⁰⁴ Van der Veen, Cox, and Morales 2011a, 150.

⁷⁰⁵ Cappers 2006, 83.

⁷⁰⁶ Lev 2002b, 170.

⁷⁰⁷ Zohary and Spiegel-Roy 1975.

⁷⁰⁸ M. A. Murray 2000b, 610.

⁷⁰⁹ De Vartavan and Amorós 1997, 184–85.

⁷¹⁰ Täckholm 1961, 28.

⁷¹¹ Cappers 2006, 102.

⁷¹² Fernández, Díez, and Adams 1997, 13.

⁷¹³ Hartmann and Bougas 1970, 454–56.

⁷¹⁴ Cappers 2006, 103.

⁷¹⁵ De Vartavan and Amorós 1997, 185.

in numerous recipes.⁷¹⁶ Perhaps olives were eaten as a condiment/appetizer, but not used as a cooking ingredient. At Quseir, the Southampton team recovered far more olive stones in Roman than in Islamic levels; the Roman olive specimens represented a little more than 1 percent of all the identifications, while the Islamic ones were only 0.04 percent of the identified materials, none of which came from Mamluk deposits. I also found olive stones among the Roman plant remains in both the 1980 (5 percent)⁷¹⁷ and 1982 samples (6 percent), but none in the Mamluk houses and only a few in the Ayyubid settlement (0.1 percent). Most of these stones were in the Sheikh's House and were probably discarded when the Sheikh and his family ate olives as appetizers or condiments.

Pomegranate

A shrub or small tree, the pomegranate (*Punica granatum* L.) was domesticated in the eastern Mediterranean area.⁷¹⁸ Finds of pomegranate in Egypt date from New Kingdom times and possibly earlier.⁷¹⁹ The fruit was probably introduced to Egypt via Syria.⁷²⁰

The arils (seed and fleshy seed coat) can be eaten fresh, prepared as juice,⁷²¹ or dried for use out of season.⁷²² In medieval times, drinks made of fruit juices, including pomegranates, were popular and valued both as beverage and medicine; there was no clear boundary between the two.⁷²³ Several recipes for pomegranate drinks are listed in the dispensatory of Ibn al-Talimid, discussed below. The Geniza documents also indicate that pomegranate juice was very popular in Cairo.⁷²⁴

The *Kitāb al-wuṣṣā ilā al-habīb*, a late thirteenth-century cookbook written by an Egyptian,⁷²⁵ gives four recipes for a sweet cooked dish made with pomegranate juice (a sour type), sugar, almonds, and mint.⁷²⁶ A fourteenth-century volume includes a similar recipe for thickened, sweetened pomegranate juice, but adds cooked chicken.⁷²⁷ We might question whether cooks in Quseir prepared such dishes given that these recipe collections concentrated mostly on the sophisticated cuisine of "refined, luxurious, special-occasion dishes."⁷²⁸ But we can imagine that at least the more affluent families ate simple versions of stews with meat, fruit, and other sweeteners.

Pomegranate was also an important medieval *materia medica*. Pomegranate flowers, seeds, and fruit rind appear in the Cairo Geniza medical documents in prescriptions for medicinal soap, a medical diet, and a treatment for urinary complaints.⁷²⁹ In addition, pomegranate is mentioned in texts as being useful for "eye diseases, inflammatory conditions of the tongue and gums, hectic and septic fevers, cancer, erysipelas, soft and hard inflammatory swellings and elephantiasis."⁷³⁰ In the twelfth-century dispensatory written by Ibn al-Talimid, the standard in Arab medicine for at least 200 years, pomegranate was one of the most frequently used ingredients in the recipes,⁷³¹ one of the top thirty-four substances.

Laboratory research has confirmed that pomegranate fruits have genuine medicinal properties, including an antimicrobial effect.⁷³² A comprehensive review of research on pomegranate and its products concluded there is "ample evidence that routine

⁷¹⁶ Nasrallah 2007, 164, 214, 216, 231, 239, 240, 274, 278, 289, 296, 298, 322, 439.

⁷¹⁷ Wetterstrom 1982, 357–59, 361.

⁷¹⁸ Cappers 2006, 123.

⁷¹⁹ De Vartavan and Amorós 1997, 218–19.

⁷²⁰ Ward 2003, 536.

⁷²¹ Hodgson 1917, 187.

⁷²² Perry 2001b, 494.

⁷²³ Van Gelder 2006, 106.

⁷²⁴ Goitein 1983, 261.

⁷²⁵ Nasralla 2007, 7–8.

⁷²⁶ Perry 2001b, 494.

⁷²⁷ Perry 2001b, 491, 494.

⁷²⁸ Perry 2007, xv.

⁷²⁹ Lev and Amar 2006, 437.

⁷³⁰ Lev and Amar 2008a, 29.

⁷³¹ Kahl 2007, 28.

⁷³² Duman et al. 2009.

supplementation with pomegranate juice . . . may protect against and even improve several diseases, including diabetes and cardiovascular disease” and “may even help to prevent and arrest the development of certain cancers, in addition to protecting the health of the mouth and skin.”⁷³³

Today pomegranates are mainly raised along the western Mediterranean strip of Egypt.⁷³⁴ But Edward Lane, during his trip to Egypt during the 1820s, noted that the Delta town of “Foo’weh” was “famous for its pomegranates; which are both plentiful and excellent in flavor.”⁷³⁵ Whether pomegranates were shipped to Quseir from the Delta or farther west, the fruit would have endured a long journey. But enclosed in the thick, leathery rind, the fruit holds up well.⁷³⁶ Dried pomegranates may also have been shipped to Quseir.

The Quseir specimens include fragments of the hard fruit wall and two specimens of the distinctive calyx tubes, which were probably discarded after the seeds were extracted. It is also possible that some rinds, high in tannin,⁷³⁷ were set aside for tanning and/or dyeing.⁷³⁸ No evidence of tanning or dyeing works have turned up in the Ayyubid deposits at Quseir, but large quantities of leather in one locus might suggest a small leather-working industry,⁷³⁹ such as seen later at Quseir. In Mamluk period deposits, the University of Southampton team found evidence of a leatherworking industry⁷⁴⁰ as well as dyeing and fulling.⁷⁴¹ In the Sheikh’s House compound, spindle whorls and spun yarn were recovered, suggesting a small cottage industry for cloth

production.⁷⁴² Perhaps pomegranate rinds were used for dyeing the cloth.

Tamarind

Despite the species name, tamarind (*Tamarindus indica* L.) is not native to India, but probably Madagascar, according to the African Plant Database.⁷⁴³ When the fruit—a long pod with two to ten seeds—is mature, the fruit skin becomes brittle and can be readily broken open to reveal the seeds, embedded in a sticky pulp that is both sweet and acidic.⁷⁴⁴ The fruit keeps exceptionally well, and even when the pod is cracked open, the pulp remains good for several months.⁷⁴⁵ The sweet pulp can be pressed into cakes, used in sweet beverages and in cooking.⁷⁴⁶ The Geniza documents indicate that *Tamar hindi* was a very popular drink.⁷⁴⁷ Lane⁷⁴⁸ reported that in the 1820s “tamarind in cakes” was shipped to Egypt from Abyssinia and Sennár (part of Sudan). A late eighteenth-century traveler, W. G. Browne, described tamarind he saw in Dafur and its uses:

This fruit, mixed with water, constitutes an agreeable and refreshing drink. When dried by beating in a mortar, it is formed into cakes, each of 2 or 300 drams in weight. The decoction of it is a mild cathartic, and also operates as a diaphoretic; and the natives attribute to it superior virtue as an antidotes against certain poisons.⁷⁴⁹

Tamarind seed has been used to treat diarrhea and dysentery, but the seed coat must be removed before it can be consumed.⁷⁵⁰ The fruit pulp is used in traditional Indian medicine to treat a variety of ills,

⁷³³ Viuda-Martos, Fernández-López, and Pérez-Álvarez 2010, 649.

⁷³⁴ Cappers 2006, 123.

⁷³⁵ Lane 2001, 55.

⁷³⁶ Popenoe 1920, 381.

⁷³⁷ Hodgson 1917, 168.

⁷³⁸ Cappers 2006, 123.

⁷³⁹ Burke 2007, 247.

⁷⁴⁰ Peacock and Blue 2006, 166–68.

⁷⁴¹ Poppy and Flatman 2006, 166.

⁷⁴² Burke 2007, 193.

⁷⁴³ Conservatoire et Jardin botaniques and South African National Biodiversity Institute 2012b.

⁷⁴⁴ National Research Council 2008, 153.

⁷⁴⁵ National Research Council 2008, 156.

⁷⁴⁶ National Research Council 2008, 149.

⁷⁴⁷ Goitein 1983, 261.

⁷⁴⁸ Lane 1860, 311.

⁷⁴⁹ Browne 1799, 343–44.

⁷⁵⁰ Bhattacharya et al. 1994, 1.

including fevers, liver disorders, and in Ayurvedic medicine for fatigue,⁷⁵¹ in a poultice for inflammation, for purging bile, and to adjust “humors.”⁷⁵² In Africa, tamarind is most commonly used to treat wounds, constipation, and abdominal pains, followed by diarrhea, helminth infections, fever, malaria, respiratory problems, dysentery, and respiratory problems. It is also used as an aphrodisiac. In some treatments, the leaves and bark are used; in others, the fruits.⁷⁵³ In the Cairo Geniza medical manuscripts tamarind is mentioned as an ingredient in many recipes. One recipe, for example, for dry, brittle, splitting hair calls for four ingredients including tamarind.⁷⁵⁴ Tamarind also figured in the Islamic medieval *materia medica* for liver problems and respiratory problems.⁷⁵⁵ In laboratory research, tamarind fruit pulp has demonstrated some real medicinal value, such as antibacterial properties⁷⁵⁶ and antispasmodic effects on the digestive tract.⁷⁵⁷ Tamarind is also used for tanning leather and dyeing.⁷⁵⁸

Quseir is the second archaeological site in Egypt to yield evidence of tamarind. The first was Berenike, where Cappers notes that the presence of the seeds indicates the fruits were traded without having been stripped of seeds.⁷⁵⁹ The five Quseir seed specimens from the 1982 Chicago excavation were recovered in Trench L8c, perhaps discarded after having been separated from the fruit pulp, which might have been used medicinally, or as a sweet, or in a beverage. Another possibility is that tamarind seeds were used for tanning at Quseir. Although no evidence of tanning has appeared in the Ayyubid deposits at Quseir, the Southampton team found a

Mamluk period dyeing and fulling complex,⁷⁶⁰ as noted above. However, they recovered scant remains of tamarind in their Islamic and Roman levels.⁷⁶¹

Watermelon

Indigenous to Africa, the first reliable identification of watermelon seeds (*Citrullus lanatus* [Thunb.] Matsum & Nakai) comes from Tutakhmun's tomb.⁷⁶² Van der Veen and Morales⁷⁶³ concluded that a new large-seeded variety of watermelon was introduced in the early Islamic period after finding that the watermelon seeds from Quseir fell into two groups based on period: small seeds in the Roman levels and larger seeds in the Islamic levels. They noted that their findings agreed with Watson's⁷⁶⁴ proposal that a larger, sweeter melon from India was dispersed to Africa early in the Islamic era. Today Egyptians eat both the fruit and seeds. The latter usually come from a variety grown specifically for their seeds, which are roasted and sold in the market as *libb*.⁷⁶⁵

Watermelon does not seem to appear in any recipes in medieval cookbooks, perhaps because it was simply enjoyed as a humble fruit or seed and never figured in any prepared dishes. However, the fruit, peel, and seeds appear in prescriptions in the Cairo Geniza as a treatment for the face and eye, and for urinary complaints, as well as an ingredient of a medical diet.⁷⁶⁶

The Southampton excavations at Quseir⁷⁶⁷ yielded watermelon skin fragments in addition to seeds, suggesting that the watermelon was brought to the settlement as whole fruits and probably eaten fresh. In addition, they discovered evidence that people

⁷⁵¹ Khare 2007, 644.

⁷⁵² Kapoor 1990, 315.

⁷⁵³ Havinga et al. 2010.

⁷⁵⁴ Isaacs and Baker 1994, 22.

⁷⁵⁵ Kahl 2007, 207, 234, 256.

⁷⁵⁶ Nwodo et al. 2011.

⁷⁵⁷ Ali and Shah 2010.

⁷⁵⁸ Jansen and Cardon 2005, 10.

⁷⁵⁹ Cappers 2006, 128.

⁷⁶⁰ Poppy and Flatman 2006, 166.

⁷⁶¹ Van der Veen, Cox, and Morales 2011a, 168.

⁷⁶² Hepper 1990, 56; Wasylikowa and van der Veen 2004, 14.

⁷⁶³ Van der Veen and Morales 2011, 108.

⁷⁶⁴ Watson 1983, 59.

⁷⁶⁵ Täckholm 1961, 31; Cox and van der Veen 2008, 187.

⁷⁶⁶ Lev and Amar 2006, 438.

⁷⁶⁷ Cox and van der Veen 2008, S185.

at Quseir ate the seeds as well as the fruit.⁷⁶⁸ Many of the specimens showed distinctive breakage patterns that are characteristic of the way Egyptians today crack open the seed coat in order to extract the cotyledon.

Among the 1982 watermelon seeds, I found little evidence of breakage. The seeds were for the most part whole, suggesting that they were discarded from fresh fruits. They came from loci in the Sheikh's house and outside, both to the north and south. One loci from the area to the south produced 45 seeds, perhaps the yield from a single watermelon.

Watermelons would have been carried in from the Nile Valley. Given that the trip took several days, according to Garcin,⁷⁶⁹ one might expect that the fruits would have spoiled while in transit, particularly since they would have crossed the Eastern Desert during the hot summer months. The solution may have been to ship the fruits green. Guo⁷⁷⁰ found "recorded instances in which crops and fruits were sometimes harvested, and then shipped, before ripe, perhaps for the sake of preservation." One document lists "three *wasn*-units of green watermelons."⁷⁷¹ Guo notes that these were most likely for local consumption.

NUTS

Nuts, along with cooking oil and baked goods, were mentioned frequently in the Quseir documents. Guo noted that the "relatively large quantities of these products suggest their potential commercial purpose."⁷⁷² One document, for example, "informs Abū Mufarrij's warehouse about the delivery of 'a total of five hundred *raṭls* of fine nuts (*zakiyat lawz*), good quality cake (*zakiyat kack*), and pure flour

(*zakiyat duqaq*)' . . . more than five hundred pounds of nuts and baked goods."⁷⁷³

The nuts found at Quseir—hazelnut, walnut, and almond—were all imports from the Mediterranean, except pistachios, which probably came from Turkey or Iran.

Almonds

Closely related to the peach, plum, and apricot, the almond (*Prunus dulcis* (Mill.) D. A. Webb [formerly *P. amygdalus*]) tree is cultivated in the Mediterranean region. A drupe, the fruit consists of a thick woody endocarp, the shell, and the edible seed, or kernel, found inside. A bitter-seeded variety is grown for its oil, while the seeds of the sweet types are eaten as a snack and used extensively in confections and baked goods.⁷⁷⁴ As noted above, nuts were included in recipes in medieval Islamic cookbooks for complex stews along with herbs, spices, fruits, and other flavorings.⁷⁷⁵ In recipes from some medieval cookbooks almonds or pistachios are specifically added to chicken).⁷⁷⁶

Almonds were used in remedies for a range of ills during the medieval period. In Ibn al-Tilmid's dispensatory almonds, mainly as sweet almond oil, were used in preparations for cough and hoarseness, asthma,⁷⁷⁷ and "phlegmatic fevers, pains in the liver and spleen."⁷⁷⁸ Almonds were one the most frequently mentioned substances in the *materia medica* of the Cairo Geniza.⁷⁷⁹ They were used in treating "(w)eakness of the eye sight" migraines, fever, and cough, and as "an eye treatment, aphrodisiac, laxative," and "face and eye treatment," and to dress bites.⁷⁸⁰ Modern laboratory research has not verified that almonds have these curative powers, but it has shown that eating almonds has several health benefits. The fibers in almond skins have a beneficial

⁷⁶⁸ Cox and van der Veen 2008, S188.

⁷⁶⁹ Garcin 2011b.

⁷⁷⁰ Guo 2004b, 39.

⁷⁷¹ Guo 2004b, 39.

⁷⁷² Guo 2001, 89.

⁷⁷³ Guo 2001, 87.

⁷⁷⁴ Rosengarten 1984, 7.

⁷⁷⁵ Perry 2007, xv.

⁷⁷⁶ Ashtor 1970, 8.

⁷⁷⁷ Kahl 2007, 193, 194, 186, 228, 235, 249.

⁷⁷⁸ Kahl 2007, 255.

⁷⁷⁹ Lev and Amar 2008b, 71.

⁷⁸⁰ Lev and Amar 2006, 433.

effect on bowel function. Polyphenols in the skins may reduce the risk of chronic inflammatory diseases.⁷⁸¹ The phenolic compounds have beneficial effects on blood cholesterol levels and lipoprotein profiles, which reduces the risk of heart disease.⁷⁸²

Almonds first appear in the archaeological record in Egypt during the eighteenth Dynasty and do not occur again until the Roman era.⁷⁸³ Almond shell fragments were found at Quseir in a few loci within the Sheikh's House and outside in Trench L8c to the south and in Trenches G8a and G8b to the north. In the Quseir documents a delivery note lists "high quality almonds" along with "high-quality butter" and other perishables, suggesting that these were "most likely for local consumption."⁷⁸⁴

Hazelnuts

Indigenous to Europe, the hazel tree (*Coryllus avellana* L.), grows in temperate regions of Europe and Asia. The nuts were imported to Egypt via the Mediterranean, apparently starting in Graeco-Roman times, as that is when they begin to appear in the archaeological record.⁷⁸⁵ Hazelnut shell fragments were recovered from Berenike and Shenshef⁷⁸⁶ and from the Southampton excavations of Roman and Islamic deposits at Quseir.⁷⁸⁷ They were also found in both the Roman and Islamic deposits excavated by the University of Chicago team.

Hazelnuts are eaten out of hand and used in savory and sweet dishes. 'Abd al-Laṭīf al-Baġdādī, in his chapter on "Foods Peculiar to Egypt," reported that the Egyptian "sweet stews" were of a "singular kind, for they cook a chicken with all sorts of sweet substances."⁷⁸⁸ "They boil a fowl, then put in a julep, place under it crushed hazelnuts or pistachio nuts,

poppy seed or purslane seeds, or rose hips and cook the whole until coagulated. Then they add spices and take from the fire."⁷⁸⁹ Each variation of the stew had a different name; e.g., "*fistakiyyèh* (pistachio), *bondokiyyèh* (hazelnut)."⁷⁹⁰ The thirteenth-century *Kitāb al-wuṣṣā ilā al-habīb*, mentioned above, gives a recipe for a "preparation of mustard, of hazelnuts and of walnuts for use in preserves."⁷⁹¹ The mid-thirteenth-century *Kanz al-fawā'id fī tanwī' al-mawā'id* ("The Treasure of Useful Advice for the Composition of a Varied Table") included hazelnuts in the recipe for fava beans in sour sauce mentioned above.⁷⁹² Hazelnuts could also be used to break the fast during Ramadan. According to Lane, the middle and upper classes would take a "slight refreshment" from a tray with a variety of "dry fruits," "such as hazelnuts (generally toasted), raisins, shelled walnuts, dried dates, dried figs, shelled almonds, sugared nuts. . . ."⁷⁹³

Hazelnuts were also valued for their purported medicinal properties. In the Cairo Geniza documents, hazelnuts appeared in prescriptions to dress bites, treat coughs, prepare a plaster, and to make emmenagogues and abortifacients.⁷⁹⁴ In reviewing other medieval texts, such as the writings of Maimonides and Ibn al-Bayṭār, Lev and Amar⁷⁹⁵ found hazelnuts credited with a wide range of therapeutic benefits, such as "cleaning the intestines, improving memory, curing hemorrhages in the chest and lungs, treating scorpion bites, and reducing gases." However, hazelnuts do not appear in Ibn al-Tilmīḍ's dispensatory or the earlier one by Šābūr ibn Sahl, so they may not have been used medicinally by Muslims or perhaps were used only in folk medicine. Today hazelnuts are not used as a therapeutic in any folk traditions, nor has much laboratory research

⁷⁸¹ Mandalari et al. 2010, 1083.

⁷⁸² Esfahlan, Jamei, and Esfahlan 2010, 349–50.

⁷⁸³ De Vartavan and Amorós 1997, 216.

⁷⁸⁴ Guo 2001, 90.

⁷⁸⁵ De Vartavan and Amorós 1997, 86–87.

⁷⁸⁶ Cappers 2006, 85.

⁷⁸⁷ Van der Veen, Cox, and Morales 2011a, 156.

⁷⁸⁸ Zand, Videan, and Videan 1965, 191.

⁷⁸⁹ Zand, Videan, and Videan 1965, 191.

⁷⁹⁰ Zand, Videan, and Videan 1965, 193.

⁷⁹¹ Rodinson, Arberry, and Perry 2001, 143.

⁷⁹² Zaouali 2007, 66.

⁷⁹³ Lane 1860, 474–75.

⁷⁹⁴ Lev and Amar 2008b, 416.

⁷⁹⁵ Lev and Amar 2008b, 417.

explored possible medicinal properties, with a few exceptions focusing on phenolic content and antioxidant activity of the hazelnut.⁷⁹⁶ Shahidi, Alasalvar, and Liyana-Pathirana showed that hazelnut skins and shells have greater antioxidative effects than the kernels and could potentially be an excellent source of natural antioxidants.

The 1982 Quseir hazelnut shells proved to be the most abundant and ubiquitous macro-botanical remains after dates. Nearly 200 fragments of hazelnut shells were recovered from both within and outside the Sheikh's house, and 70 percent of the Islamic loci in this study produced hazelnut shells. They vastly outnumbered the other nuts, accounting for about 74 percent of all the nutshell pieces. The others, including coconuts, each represented only 6–8 percent of the total and occurred in only 15–21 percent of the loci. Because the specimens were not collected with fine-sieving and systematic sampling, one might hesitate to place much emphasis on the relative proportions. However, in the Southampton plant assemblage, which was collected using flotation, fine sieving, and hand-picking, hazelnuts accounted for over 66 percent of all nutshell fragments and occurred in 60 percent of the Islamic samples, based on the totals in their table 4.5.⁷⁹⁷

It appears that hazelnut were the most popular nut at Quseir. But differences in the nutshells of different species might account for some differences in the quantities found. Many of the hazelnut specimens are almost whole nutshells, broken just enough to extract the meat. It is possible that some of the other nuts break into smaller pieces when cracked open, pieces that might go unnoticed or slip through an excavator's coarse sieve. But it seems unlikely that such a difference could account for the very large discrepancy between hazels and the other nuts. Nor would small nutshell fragments have evaded the Southampton team's recovery techniques. In

the literature on this period there is little that would suggest a preference for the hazelnut. In recipes for medieval period meat dishes, hazelnuts appear to be interchangeable with other nuts, as in the one above described by 'Abd al-Laṭīf al-Baġdādī. But one document from the Cairo Geniza stands out. An inventory from a store for fruit and sugar, the ingredients for homemade candy, lists "a large amount of regular sugar and a small one of rock sugar, a hundred pounds of hazelnuts and smaller quantities of pomegranate seeds, sumac, pistachios and two types of raisins."⁷⁹⁸ If this inventory reflects typical stock in a medieval candy supply shop in Cairo, it would appear that at least in the Jewish community hazelnuts were the choice for home-made sweets. Perhaps the women in the Sheikh's family and other households at Quseir made candy with hazelnuts.

Pine Nuts

The stone pine (*Pinus pinea* L.), a native of the northern Mediterranean shore from Portugal to Syria, bears a nut that was a popular Roman food.⁷⁹⁹ In Egypt, the nuts and bracts do not become common in the archaeological record until Graeco-Roman times, although pine cones were recovered from two Twelfth Dynasty sites.⁸⁰⁰ Nuts and bracts have been found in the Roman-era deposits at Quseir excavated by both the Southampton⁸⁰¹ and University of Chicago teams,⁸⁰² and at Berenike and Shenshef.⁸⁰³

At the end of the Roman era, pine nuts seem to have disappeared from Egyptian tables, although they appear in many recipes in the tenth-century Bagdad cookbook *Kitāb al-Ṭabīḥ* (Book of Dishes).⁸⁰⁴ The Southampton expedition found so few pine nuts in the Islamic deposits at Quseir that van der Veen, Morales, and Cox suggested they might be "residual Roman material."⁸⁰⁵ No pine nuts were found in the University of Chicago 1980 excavation in the Mamluk settlement. The Geniza documents make no mention

⁷⁹⁶ Shahidi, Alasalvar, and Liyana-Pathirana 2007; Wu et al. 2004, 4031.

⁷⁹⁷ Van der Veen, Cox, and Morales 2011a, 156.

⁷⁹⁸ Goitein 1983, 246.

⁷⁹⁹ Meyer 1980, 419, 421.

⁸⁰⁰ De Vartavan and Amorós 1997, 204–5.

⁸⁰¹ Van der Veen, Morales, and Cox 2011a, 157.

⁸⁰² Wetterstrom 1982, 372.

⁸⁰³ Cappers 2006, 110.

⁸⁰⁴ Nasrallah 2007, 76, 151, 191, 406, 409, 410, 422, 428.

⁸⁰⁵ Van der Veen, Morales, and Cox 2011a, 156.

of pine nuts as food either.⁸⁰⁶ Cappers⁸⁰⁷ proposed that pine nuts disappeared with the fall of the Roman Empire as a result of changing tastes. Romans had used pine nuts to “stretch” or substitute for an expensive condiment, asafetida (derived from *Ferula asa-foetida* L.).

But pine nuts never entirely disappeared from Egypt. They were used medicinally through the medieval period. The Cairo Geniza documents include a variety of prescriptions that use pine nuts, including recipes to darken white hair⁸⁰⁸ as well as formulations for cough syrup and for stomach ailments and colic.⁸⁰⁹ Pine nuts were also mentioned in lists of *materia medica*, pharmacopoeias, and quasi medical writings in the Geniza.⁸¹⁰ Other original sources indicate that *Pinus pinea* nuts and bracts (i.e., whole cones) were exported from Bilād al-Šām (the Levant) to Egypt in the tenth century for medicinal purposes.⁸¹¹ Al-Kindī, a ninth-century scholar/mathematician/philosopher, offered a prescription for an electuary “for a cough caused by catarrh” made of equal parts pine seed, flaxseed, sweet raisins (sans seeds), and licorice root mixed with honey “after pounding and sieving.”⁸¹² In his dispensatory, Ibn al-Tilmid̄ uses pine nuts in a pastille for bloody urine, a treatment for asthma, and a cough syrup.⁸¹³ Modern laboratory studies on the properties of pine nuts are scarce.

The Quseir specimens include two nutshell pieces. It is possible that they were churned up from Roman deposits. The excavators do not mention mixing in these loci, although it does occur in some others. Both nutshell finds are in trenches that include Roman material. However, if these were in fact Islamic, they were most likely intended for medicinal purposes rather than food.

Pistachio

A native of western Asia and Asia Minor, the pistachio tree (*Pistacia vera* L.) is common throughout the Middle East wherever the winters are cold, particularly in the mountainous regions. The major commercial pistachio growing regions in the twentieth century have been in Italy, Greece, Spain, Syria, Tunisia, Iran, and Turkey.⁸¹⁴ In the Near East, no archaeological remains of pistachio nuts have been found dating before Classical times,⁸¹⁵ and in Egypt the nut appears to be an Islamic introduction. At Quseir, no pistachios were recovered from Roman period deposits by either the Southampton or Chicago teams.

The nuts are popular in the Middle East as a snack, in baked goods and confections, and as a flavoring in a wide range of dishes.⁸¹⁶ In his thirteenth-century account, ‘Abd al-Laṭīf al-Baġdādī reported that the:

. . . best known ingredients in Egypt of the stews and sweetmeats are pistachio in the place of almond. It is one of the things which resolves obstructions of the liver. They make a *hērisèh* which they call pistachio *hērisèh* which is very delicious to the taste, and greasy. It is made with one part of the flesh of chicken boiled and chopped and two parts of rose julep with approximately one-eighth or one-ninth of the whole in pistachio nuts peeled and crushed. The operation consists of greasing the chopped meat with sesame oil and putting it in the stove just to smell the fire, after which they put on it the julep, and beat until it is firm, then add the pistachios and beat till well mixed, then remove from the fire.⁸¹⁷

The Cairo Geniza documents and other contemporary writings list a wide range of medical uses for pistachio nuts: in recipes for a general tonic, emmenagogues, and abortifacients; in medications to treat diarrhea, regulate bowel activity, strengthen the

⁸⁰⁶ Goitein 1983.

⁸⁰⁷ Cappers 2006, 110.

⁸⁰⁸ Isaacs and Baker 1994, 22.

⁸⁰⁹ Lev and Amar 2008b, 466.

⁸¹⁰ Lev and Amar 2008b, 466.

⁸¹¹ Lev 2002a, 171.

⁸¹² Levey 1973, 83.

⁸¹³ Kahl 2007, 183, 230, 234.

⁸¹⁴ Rosengarten 1984, 199.

⁸¹⁵ Zohary and Hopf 1994, 180.

⁸¹⁶ Rosengarten 1984, 207.

⁸¹⁷ Zand, Videan, and Videan 1965, 194–95.

heart, “the sense and virility and against aging.”⁸¹⁸ Pistachios also appear in Ibn al-Tilmid̄’s Dispensatory in nine recipes, including a cold remedy, a stomach remedy, a potion for asthma, and a beverage.⁸¹⁹ Some of these call for the shell or outer skin of the nut rather than the kernel, and most were complex formulations that would have been prepared by a trained pharmacist.

Laboratory research on pistachios has determined that eating the nuts has a number of health benefits, like those of almonds, mainly due to the polyphenol content.⁸²⁰ The nuts may reduce risk of cardiovascular disease, and they may also prevent cancer.⁸²¹

The shell fragments from Quseir consist of more or less complete endocarp halves, which separate as the nut matures. The shells were scattered in deposits in the Sheikh’s house and outside to the north and south. Contrary to ‘Abd al-Laṭīf al-Baġdādī’s observations in Cairo, they did not appear to have been the preferred nut at Quseir, as they were far outnumbered by hazelnuts. However, their numbers roughly equaled almonds and walnuts.

Walnuts

A native of the deciduous forests of the Balkans, north Turkey, south Caspian region, the Caucasus, and central Asia, the walnut (*Juglans regia* L.) thrives in the Mediterranean basin in cool, hilly areas.⁸²² The first archaeological remains of walnuts appear in Egypt during the Roman period.⁸²³ The nuts are used as snacks, in baking and cooking, and in deserts and confections.⁸²⁴ A paste of pounded walnuts was used in Iran in antiquity and in Europe in the Middle Ages to thicken soups.⁸²⁵ Lane,⁸²⁶ as previously mentioned, states that shelled walnuts were sometimes

included in the “dried fruits” used to break the fast during Ramadan. As noted above, walnuts appear in a preparation with mustard and hazelnuts for use in preserves in the thirteenth-century *Kitāb al-wuṣṣā ilā al-habīb*.⁸²⁷

Walnuts were not frequently mentioned in the Cairo Geniza medical documents, but they appeared in five prescriptions and were used in “cleaning or treating the teeth, dressing bites,” and as an aphrodisiac.⁸²⁸ Nowadays, walnuts are recommended for heart health. They are rich in polyphenols, which are powerful antioxidants,⁸²⁹ and also high in polyunsaturated fatty acids that help lower cholesterol levels.⁸³⁰

The Quseir walnut specimens were all broken pieces of the nutshell, presumably cracked to remove the nutmeat. They represented only a fraction of the nutshell pieces (5.6 percent) found in the 1982 excavations.

VEGETABLES

Vegetables rarely leave an archaeobotanical record. After processing there is little debris, unlike the hard seeds of stone fruits or rinds of the pomegranate, and what might be left, such as thin peelings, decomposes readily. Even at Quseir, despite the exceptional conditions for preservation, we find few traces of vegetables, as at other archaeological sites. The recovery methods partially account for the failure to find such remains. But the fact that many vegetables are fully consumed or leave little waste is probably another factor. In addition, the discards from vegetable preparation could have been used as fodder. The vegetables mentioned in the Quseir documents—Jew’s mallow (*mulūḥiyya*) (*Cochorus*

⁸¹⁸ Lev and Amar 2008b, 469.

⁸¹⁹ Kahl 2007, 185, 213, 214, 216, 220, 230, 234, 238, 305.

⁸²⁰ Tomaino et al. 2010, 1115.

⁸²¹ Khatib and Vaya 2010, 260.

⁸²² Zohary and Hopf 1994, 177.

⁸²³ De Vartavan and Amorós 1997, 139.

⁸²⁴ Malhotra 2008, 74.

⁸²⁵ Malhotra 2008, 27.

⁸²⁶ Lane 1860, 474–75.

⁸²⁷ Rodinson, Arberry, and Perry 2001, 143.

⁸²⁸ Lev and Amar 2006, 438.

⁸²⁹ Fukuda, Ito, and Yoshida 2003.

⁸³⁰ McNamee 1993, 687; Murphy 2011, 97.

olitorius), onions, eggplant, and carrots⁸³¹—produce little waste when they are prepared and eaten. Jew's mallow leaves are cooked; the onion is used up save for the thin outer leaves of the bulb; and carrots may be entirely consumed except possibly for the leaves at the top. Nonetheless, the Southampton team found some of the vegetables mentioned in the Quseir texts, including onion bulb leaves and eggplant calyces, the tough hard stem sepals at the end of the fruit, as well as garlic bulbs.⁸³²

Garlic

The one vegetable recovered from the 1982 Chicago excavations is garlic (*Allium sativum* L.), which was not mentioned in the Quseir documents. An essential seasoning in Egyptian dishes today, garlic dates back to Pharaonic times. The oldest archaeological finds are from the Eighteenth Dynasty.⁸³³ Pharaonic-era Egyptians used garlic as a food and medicine. They mixed garlic with a variety of other ingredients to treat dog and scorpion bites, wounds, hoarseness, toothache, and other ailments.⁸³⁴ In the medieval period, garlic does not appear to have been an important medicinal, but it is mentioned in the Geniza documents as being useful in treating a wide array of maladies, such as intestinal worms, chronic cough, toothaches, and skin and eye diseases.⁸³⁵ According to Karl Klunzinger,⁸³⁶ the sanitary doctor in Quseir in the 1860s, the residents cured scorpion stings by rubbing garlic on the site of the sting. In medieval times, as in the present, garlic was an important garden vegetable and is mentioned in a couple kitchen shopping lists in the Cairo Geniza.⁸³⁷

A single desiccated bulb was found in Corridor D in the Sheikh's House in Locus Kb9-38, a trash-filled deposit with many other food items. Fragments of the papery tunic of the bulb were found in a room north of the Sheikh's house and in the South House of the Sheikh's compound in a plaster surface of Room C. (But it should be noted that these might be onion bulb skins as well; the fragments are small and lack the roots which would be more diagnostic.) Two additional garlic bulbs were recovered from the later Mamluk village.⁸³⁸ At Berenike, Cappers⁸³⁹ found so many garlic bulb bases and scales he suggested that the plant was cultivated locally. Perhaps this was the case at Quseir as well.

Bottle Gourd

Believed to be of African origin, the bottle gourd (*Lagenaria siceraria* [Mol.] Standley) now has a pantropical distribution.⁸⁴⁰ The fruits show "unparalleled variation in size, shape and utility"⁸⁴¹ and occur in bitter forms, grown for their dry fruit, as well as nonbitter forms.⁸⁴² The nonbitter young fruits may be eaten as a vegetable.⁸⁴³ The dry gourds serve as cups, ladles, bowls, musical instruments, and containers for powders, water, oils, and other substances.⁸⁴⁴ In Egypt, fishermen use the gourds as net floats.⁸⁴⁵

The oldest archaeological gourd specimen in Egypt dates from the Twelfth Dynasty, followed by a few finds from Graeco-Roman and Coptic periods.⁸⁴⁶ Seeds of the bottle gourd were found at Berenike.⁸⁴⁷

The Quseir gourd specimen is the basal end of the fruit with the peduncle still attached. Approximately

⁸³¹ Guo 2004b, 67.

⁸³² Van der Veen, Cox, and Morales 2011a, 162.

⁸³³ De Vartavan and Amorós 1997, 36.

⁸³⁴ Manniche 1989, 71.

⁸³⁵ Lev and Amar 2008b, 32.

⁸³⁶ Klunzinger 1878b, 399.

⁸³⁷ Goitein 1983, 230, 232.

⁸³⁸ Wetterstrom 1982, 372.

⁸³⁹ Cappers 2006, 59.

⁸⁴⁰ Decker-Walters et al. 2004, 501.

⁸⁴¹ Okoli 1984, 355.

⁸⁴² Cappers 2006, 94–95.

⁸⁴³ Täckholm 1961, 32.

⁸⁴⁴ Okoli 1984, 356.

⁸⁴⁵ Täckholm 1961, 32.

⁸⁴⁶ De Vartavan and Amorós 1997, 147.

⁸⁴⁷ Cappers 2006, 95.

8 cm long, the specimen appears to be the “neck” of a long-necked type of gourd. Like Täckholm’s specimen from the Coptic monastery of Phoebammon, this end would have been removed to clean out the gourd and then discarded.⁸⁴⁸ It was recovered in a locus with much debris in Room C of the North House within the Sheikh’s House compound. Most likely the gourd fragment was discarded from a fruit prepared as a container, perhaps a float for a fish net. A fish net was found in another locus of the same room.

The Southampton team found a couple seeds and a few fruit wall fragments, suggesting the use of the bottle gourd both as a food and container.⁸⁴⁹

MEDICINAL PLANTS

Terminalia

One of the most interesting finds among the 1982 plant remains was myrobalans. This common name encompasses *Phyllanthus emblica* L. and several species of the genus *Terminalia*. The Quseir specimens, dried fruits and stones of *Terminalia* sp., were abundant in the 1982 samples, nearly all from the Sheikh’s House. The Southampton team also recovered specimens of seventeen *Terminalia* fruits and stones, twelve *T. chebula* and five *T. bellirica*, all from Islamic levels except for one *T. chebula* stone from the Roman occupation.⁸⁵⁰ Cappers⁸⁵¹ found the other myrobalans, *Phyllanthus emblica*, at Berenike.

The genus *Terminalia* comprises a large group of tropical and subtropical trees native primarily to Southeast Asia, Africa, and the Americas.⁸⁵² The bark, leaves, and fruits of many species are used in folk and

Ayurvedic medicine and in laboratory research have proven to indeed have pharmaceutical properties.

The fruits of *Terminalia bellirica*, *citrina*, and *chebula*, have been used in a wide range of therapeutic applications:⁸⁵³ Chebulic and citrina myrobalans are used in prescriptions for treating flatulence, constipation, diarrhea, dysentery, cysts, digestive disorders, vomiting, enlarged liver and spleen, and cough and bronchial asthma, as well as for metabolic harmony.⁸⁵⁴ Belleric is used in prescriptions for diarrhea, dyspepsia, biliousness, cough, bronchitis and upper respiratory tract infections, tropical pulmonary eosinophilia, and allergic eruptions.⁸⁵⁵ The fruits of *T. chebula* and *T. bellirica* are used in combination with *Embllica officinalis* in the Ayurvedic formula called *triphala* to treat liver and kidney dysfunctions.⁸⁵⁶

Laboratory studies have shown that a number of *Terminalia* species have pharmacological properties. For example, compounds from *T. chebula* fruits exhibit antioxidant activity⁸⁵⁷ and inhibit the growth of some intestinal bacteria⁸⁵⁸ and lines of cancer cells.⁸⁵⁹ Extracts from *T. bellirica* fruit have shown anti-HIV-1, antimalarial, and antifungal activity in vitro,⁸⁶⁰ antidepressant-like effects on mice,⁸⁶¹ and high antioxidant activity.⁸⁶² Extracts of *T. bellirica* fruit can also lower blood pressure.⁸⁶³ Fruits of *Terminalia bellirica*, *T. chebula*, and *Embllica officinalis* used together exhibited significant antimutagenic activity in laboratory studies.⁸⁶⁴ Given their potent medicinal properties, it is not surprising that myrobalans were important materia medica in the medieval Arab pharmacopoeia. In the earliest extant Arabic dispensatory, written by Sābūr

⁸⁴⁸ Cappers 2006, 94–95.

⁸⁴⁹ Van der Veen, Cox, and Morales 2011a, 165.

⁸⁵⁰ Van der Veen, Cox, and Morales 2011b, 41, 50–53.

⁸⁵¹ Cappers 2006, 108–9.

⁸⁵² Wickens 1973, 1; Wu, Raven, and Hong 2007, 310.

⁸⁵³ Khare 2004, 421, 451; Warriar, Nambiar, and Ramankutty 1996, 258, 263.

⁸⁵⁴ Khare 2004, 654.

⁸⁵⁵ Khare 2004, 652.

⁸⁵⁶ Khare 2004, 654.

⁸⁵⁷ Cheng et al. 2003.

⁸⁵⁸ Kim et al. 2006.

⁸⁵⁹ Saleem et al. 2002.

⁸⁶⁰ Valsaraj et al. 1997.

⁸⁶¹ Dhingra and Valecha 2007.

⁸⁶² Bajpai et al. 2005.

⁸⁶³ Khan and Gilani 2008.

⁸⁶⁴ Arora, Kaur, and Kaur 2003.

ibn Sahl in the ninth century, myrobalans were one of twenty-three substances that were used repeatedly in recipes.⁸⁶⁵ Nearly three centuries later, myrobalans were among the most frequently used ingredients in Ibn at-Talimid's dispensatory.⁸⁶⁶ The species in the pharmacopoeia included black, yellow, and belleric myrobalans.⁸⁶⁷ The medieval Arab pharmacopoeia included several formulations for a medication that appears to be a version of Ayurvedic *triphalaa*.⁸⁶⁸ One was a confection made with chebulic, belleric, and emblic myrobalans, and sometimes yellow and Indian (?) myrobalans, powdered, and mixed with cow's milk butter, or sweet almond oil, and honey.⁸⁶⁹ The confection had many beneficial effects, according to Arab pharmacologists: it improved digestion, increased "intelligence and the acuity of understanding," strengthened the nerves, was "efficacious against amnesia and torpor," and stopped the "whitening of the hair," as well as making one well "with humid and cold cerebral illness because of its strengthening and astringent effects on the functioning brain."⁸⁷⁰ Myrobalans (*Terminalia* sp.) were the most frequently mentioned substance in the Cairo Geniza documents (fifty-five times in prescriptions).⁸⁷¹ It was used in various formularies to treat hallucinations, stomach and digestive problems, weak eyesight, eye disease, and migraine; and was used in invalid diets, aphrodisiacs, eye washes, and ointments.⁸⁷² Myrobalans are also mentioned in several of the Geniza letters written by Jewish traders shipping goods from India to Egypt.⁸⁷³

I identified the Quseir specimens as *Terminalia chebula* Retz. (black or chebulic myrobalans) except for one *Terminalia bellerica* (Gaertn.) Roxb. stone,

based on comparisons with reference specimens at the Harvard University Herbaria.

The Quseir myrobalans were among the more numerous plant types in the 1982 assemblage, third behind hazelnuts and barley grains, accounting for about 14 percent of the total, excluding dates. The specimens include whole drupes (a fleshy fruit surrounding a hard stone), drupes with only a portion of the dried flesh (the rest probably having fallen off in handling), and stones. Nearly all of these were found in the Sheikh's House—in the North and South Houses and Corridor D—in deposits of mudbrick collapse,⁸⁷⁴ like much of the plant material from the house. Four of the loci produced clusters of fourteen to twenty-five specimens, suggesting that these were more than scattered trash, but perhaps were stored in bags or baskets hung on the walls or ceiling. The large numbers of specimens suggest that the Sheikh's family used myrobalans for medicinal purposes. The fruits would have come from India; chebulic myrobalans grow in the forests,⁸⁷⁵ while belleric myrobalans are found throughout much of country.⁸⁷⁶ Myrobalans are not specifically listed in any of the Quseir documents, but was perhaps subsumed under "medicine," which is mentioned in several documents.⁸⁷⁷

In passing, we should also note that *Terminalia* fruits might have been used at Quseir in a cottage industry for dyeing and perhaps for leatherworking. The fruits of *T. chebula* are used to make a brownish-yellow to brown dye for cotton and wool, and the tannins in the fruit are used as a mordant to set dyes.⁸⁷⁸ The dried fruit pulp, which averages a tannin content of 30 percent, is used in tanning hides, usually with another tanning agent.⁸⁷⁹ The

⁸⁶⁵ Kahl 2003, 16.

⁸⁶⁶ Kahn 2007, 5.

⁸⁶⁷ Kahn 2007, 195–96.

⁸⁶⁸ Levey 1973, 83.

⁸⁶⁹ Levey 1973, 86.

⁸⁷⁰ Levey 1973, 86.

⁸⁷¹ Lev and Amar 2006, 442; 2008b, 532; 2008a, 39.

⁸⁷² Levey 1973, 538.

⁸⁷³ Goitein and Friedman 2008, 420, 440, 445, 447, 448.

⁸⁷⁴ Burke 2007, 331–32.

⁸⁷⁵ Khare 2007, 652–53.

⁸⁷⁶ Kapoor 1990, 321, 322.

⁸⁷⁷ Guo 2004b, 39, 209–10, 251–52.

⁸⁷⁸ Jansen and Cardon 2005, 161.

⁸⁷⁹ Jansen and Cardon 2005, 162.

large quantities of leather in one locus at Quseir, mentioned earlier, suggest the possibility of a small leather-working industry.⁸⁸⁰

Rose of Jericho

A six-inch-high annual, rose of Jericho, *Anastatica hierochuntica* L., thrives in dry areas in Red Sea coastal area and deserts of Egypt,⁸⁸¹ across North Africa,⁸⁸² and through Arabia and southwest Asia.⁸⁸³ The dried plants, with branches curled inward like a fist, can be found in herbal markets in Cairo,⁸⁸⁴ Israel,⁸⁸⁵ and Iraq.⁸⁸⁶ When the dried plant is immersed in water, it expands and opens out,⁸⁸⁷ a habit that has figured in its role in folk medicine, and is considered symbolic of the womb opening up during childbirth.

Throughout the Middle East, Jericho rose is believed to ease or prevent the pain of childbirth. Most references indicate that the patient drinks the water in which the dry plant has unfurled,⁸⁸⁸ but other treatments have been reported. For example, Jericho rose is “believed to ease childbirth when burnt as incense in the birth chamber.⁸⁸⁹ In Egyptian folk medicine, Jericho rose is used as an amulet during childbirth and prescribed for fatigue and uterine hemorrhage as well.⁸⁹⁰ In North Africa, the dried plants, leaves and seeds, are prepared as an infusion or macerated in water and taken internally.⁸⁹¹

Laboratory research has established that the rose of Jericho has a variety of therapeutic properties. Flavonoids isolated from *Anastatica hierochuntica*

showed a potent hepatoprotective effect.⁸⁹² An herbal tea made from the seeds contained a variety of compounds that exhibited antioxidant activity.⁸⁹³ Duke⁸⁹⁴ reports analgesic and emmanagogue properties as well.

Despite the widespread use of Jericho rose in recent times, there seem to be no references to *Anastatica* in the medieval Arab pharmacopoeia (on the basis of a search limited to the secondary sources and the few translations available). Lev and Amar⁸⁹⁵ do not list the plants among those in their inventory of *materia medica* used by the Cairo Geniza Jewish community. Nor do Isaacs and Baker⁸⁹⁶ list it in their study of Geniza medical manuscripts. However, Kahl⁸⁹⁷ suggests that the “yellow fingers” mentioned in one prescription in the Šābūr ibn Sahl’s *Small Dispensatory* refer to the Jericho rose. The one definitive mention of Jericho rose in medieval Arab texts appears in Ibn al-Bayṭār’s famous compilation of medicinal plants *Kitāb al-Ġāmi‘ li-mufradāt al-adwiya wa-al-aḡḏiya* (*The Dictionary of Simple Medicines and Foods*), written in the thirteenth century. Al-Bayṭār indicated that the plant was used to treat birth infections.⁸⁹⁸ An herbalist/botanist, al-Bayṭār was born in Malaga, traveled widely to study plants, and became chief herbalist to the Sultans in Cairo.⁸⁹⁹ His *Kitāb al-Ġāmi‘ li-mufradāt al-adwiya wa-al-aḡḏiya* drew information from 150 sources and included the knowledge of past traditions as well as his own research done in the field in North Africa, Greece,

⁸⁸⁰ Burke 2007, 247.

⁸⁸¹ Täckholm 1974, 183.

⁸⁸² ICUN 2005, 32.

⁸⁸³ Ghazanfar 1994, 58.

⁸⁸⁴ González-Tejero, et al. 2008, 346.

⁸⁸⁵ Amar and Lev 2000, 194.

⁸⁸⁶ Mati and de Boer 2011, 493.

⁸⁸⁷ Dymock, Warden, and Hooper 1890, 117–18; Lev 2002a, 20.

⁸⁸⁸ Duke 2008, 37; Ghazanfar 1994, 58; Lev 2002a, 19.

⁸⁸⁹ Mahmoud 2010, 36.

⁸⁹⁰ Nakashima et al. 2010, 2337.

⁸⁹¹ IUCN 2005, 32.

⁸⁹² Yoshikawa et al. 2003.

⁸⁹³ AlGamdia, Mullena, and Crozier 2011.

⁸⁹⁴ Duke 2008, 37.

⁸⁹⁵ Lev and Amar 2006; 2008b.

⁸⁹⁶ Isaacs and Baker 1994.

⁸⁹⁷ Kahl 2003, 62.

⁸⁹⁸ Lev 2002a, 17.

⁸⁹⁹ Glassé 2008, 220.

Turkey, the Middle East, Arabia, and Egypt.⁹⁰⁰ The volume includes more than 2,000 items with names in all the written languages that al-Bayṭār knew. It was the most comprehensive treatise of applied botany created during the medieval period.⁹⁰¹ The rose of Jericho might appear in this collection, while not in the dispensaries, for a couple reasons: al-Bayṭār's research was extensive, including fieldwork, and his plant list of 2,000 far exceeds the *materia medica*. Ibn al-Tilmid included 328 plants⁹⁰² and the Cairo Geniza studied thus far, 310.⁹⁰³ The Jericho rose may have been strictly a folk remedy and not used in any formulations.

The specimen found at Quseir was most likely intended for medicinal use, perhaps to help a woman in childbirth as an amulet or a drug. Another possibility is that it literally blew into the settlement. Jericho rose would have grown in the Quseir area, based on its present-day distribution,⁹⁰⁴ and could have been picked up by the wind. After flowering, the plant dries up and, if caught by a breeze, will roll away and travel as a tumble weed.⁹⁰⁵ However, the Quseir specimen was found within a room in the Sheikh's House in a trash deposit under one of the floor surfaces. It seems likely that it was swept up with other household trash and used to fill in a depression when workers laid the floor. But, since this area was an open courtyard before the floor was created, it is possible that the Jericho rose plant did indeed blow in.

A MULTI-USE PLANT

Nile Acacia

A common tree throughout much of Egypt—including the Nile Valley, oases, Western Desert, the Nile, and the Sinai—the acacia (*Acacia nilotica* [L.] Willd. ex Del).⁹⁰⁶ serves many functions. It is valued as a shade tree and a source of fuel, charcoal, and wood. The pods and bark are used for tanning⁹⁰⁷ and the pods for dyeing leather.⁹⁰⁸ They yield a black, red, or yellow dye.⁹⁰⁹ The foliage and pods are eaten by camels, sheep, and goat.⁹¹⁰ In addition, the pods are used in traditional medicine for a wide range of ills; they are used to treat diarrhea and prevent hemorrhaging, as a sedative for women in labor, and for sore gums and loose teeth.⁹¹¹ On the Arabian Peninsula the pods are burnt and the smoke inhaled for colds.⁹¹² At Kharga and Dakhla Oases, powdered pods were placed on embers; the smoke relieved nasal congestion.⁹¹³

In medical writings in the Cairo Geniza documents, acacia fruits, juice, and resin were said to be good for eye diseases, umbilical hernia, incessant crying, and septic conditions near the ear.⁹¹⁴ Although gum arabic made from the resin of Nile acacia was widely used in Egypt for various ills, the seed pods do not figure much in the Geniza *materia medica*.⁹¹⁵ A Nile acacia seed was recovered from the South House in Room C amidst wall tumble, while an acacia pod specimen turned up in the trenches to the north of the Sheikh's House. These might represent fodder for livestock or perhaps an ingredient used in tanning or for treating illness.

⁹⁰⁰ Dallal 1999, 211–12.

⁹⁰¹ Dallal 1999, 211–12.

⁹⁰² Kahl 2007, 342–45.

⁹⁰³ Lev and Amar 2008b, 71.

⁹⁰⁴ Täckholm 1974, 183.

⁹⁰⁵ Duke 2008, 36.

⁹⁰⁶ Täckholm 1974, 290.

⁹⁰⁷ Wickens et al. 1995, table 3.5.

⁹⁰⁸ Wickens et al. 1995, table 2.2.3.

⁹⁰⁹ Wickens et al. 1995, table 2.2.7.

⁹¹⁰ Wickens et al. 1995, table 2.2.1.

⁹¹¹ IUCN 2005, 10.

⁹¹² Ghazanfar 1994, 145.

⁹¹³ Osborn 1968, 173.

⁹¹⁴ Lev and Amar 2008a, 36.

⁹¹⁵ Lev and Amar 2008b, 325–26.

DISCUSSION

FOOD AND DIET

Over 40 percent the plant remains (not counting date pits) came from loci in the Sheikh's House. We would expect these foods to reflect the family's wealth and high status in the community, which they do indeed. The Sheikh's family enjoyed imported nuts (hazelnuts, walnuts, almonds, and pistachios), and fruits (peaches, plums, apricots, and olives), and even coconuts. While some of these foods may have been well within the means of a middle class family in Cairo, at Quseir they must have been particularly dear because of the transport costs. Some of the imports found in the Sheikh's House may also have been sold to his clients since the living rooms in the compound were used to store goods for the business.⁹¹⁶ Among the Sheikh's more than eighty clients were prominent members of the community who presumably could also have afforded these foods, such as a local judge, the mayor, and the superintendent of the port(?).⁹¹⁷

The bulk of the diet in the Sheikh's home—and Quseir—would have come from the Nile Valley: wheat, pulses, and local fruits and vegetables. Some of these are documented among the plant remains, most prominently dates. Nearly 2,900 dates pits were incorporated in floors and in household trash in the Sheikh's House, accounting for nearly 92 percent of the identified material here. Lime rinds, vastly outnumbered by dates, were scattered through the house deposits. But only one vegetable specimen was recovered, a garlic bulb. Vegetables rarely leave much of an archaeological record, even when preservation is excellent. Using intensive recovery methods, van der Veen, Cox, and Morales⁹¹⁸ retrieved only scant traces of vegetables—a few garlic cloves and roots, some onion skins, artichoke bracts, and seeds of greens (e.g., lettuce, cress, endive). On the other hand, they recovered good evidence of herbs: a bay leaf fragment and quantities of herb seeds, such as anise, cumin, and caraway.⁹¹⁹ All of these small herb seeds would have been picked up with flotation and

fine sieving, but in the University of Chicago excavations, the recovery methods would have missed any that might have been in the deposits. However, we can imagine that the Sheikh's family also used these herbs, so common in Egyptian cuisine. Pulses were also poorly represented at the Sheikh's House; one lupine seed, probably intended as a snack, was found in a midden in Corridor D. A few fava bean fragments turned up in the midden to the south. On the other hand, van der Veen and colleagues⁹²⁰ recovered chickpeas, fava beans, peas, lentils, and a few other pulses. Chickpeas were the most abundant, while lentils were surprisingly rare. The Sheikh's family undoubtedly cooked these pulses as well.

We do not know how the Sheikh's family prepared their foods, but it seems likely that they enjoyed simple versions of the food depicted in thirteenth-century cookbooks: a "rich" cuisine with a wide range of breads, preserves, and condiments; a repertoire of sweets that were almost identical throughout the Arab world; and above all, complex stews, fragrant with herbs, spices, nuts, fruits, and other flavorings.⁹²¹

We can imagine the Sheikh's family eating meat stews with fruits and nuts, scooping up the thickened concoctions with pieces of wheat bread, a food that probably accounted for a goodly portion of their diet. They may have prepared their own sweets with wheat flour, nuts, honey, dates, etc., or perhaps enjoyed pastries carried in from the Nile Valley.

Although we cannot really know how the Sheikh's family ate, we can see how different their diet must have been from that of poor households in Quseir. The plant remains recovered in 1980 from the Eastern Area of Quseir in a complex of the reed-hut structures⁹²² seem to reflect a simpler, poorer diet. Almost no imports from the Mediterranean turned up, despite the more intensive recovery methods used during 1980. Only a couple possible almond fragments and a single peach stone were the few traces of imports. On the other hand, remains of the inexpensive Nile Valley fruits were abundant,

⁹¹⁶ Burke 2007, 193.

⁹¹⁷ Guo 2001, 83.

⁹¹⁸ Van der Veen, Cox, and Morales 2011a, 162.

⁹¹⁹ Van der Veen, Cox, and Morales 2011a, 166.

⁹²⁰ Van der Veen, Cox, and Morales 2011a, 166; 2011a, 146.

⁹²¹ Perry 2007, xv.

⁹²² Wetterstrom 1982, 360–61.

including date pits, dom palm fruits, watermelon seeds, and grape pips. We might wonder if trade patterns changed in the Mamluk period, resulting in fewer imports. But that seems unlikely given that ceramics and textiles document a lively trade with the Indian Ocean area,⁹²³ and the fact that the 1980 plant remains also reflect ongoing trade with the East in the form of coconut shell fragments and pepper corns. Most likely the material in the eastern huts reflect what the poor could afford.

TRADE COMMODITIES

The plant remains provide material evidence of commodities listed in the Quseir documents. These include wheat and barley—the main focus of the Sheikh’s family business—dried dates, lemons/limes, nuts, and beans. Since the plant specimens can be identified to genus and species, they help pin down the “nuts” (hazelnuts, pistachios, walnuts, and almonds) and “beans” (faba beans) recorded in the texts. On the other hand, a number of items mentioned in the documents were not recovered during excavation, including small seeds/fruits such as pepper, rice, chickpeas, and lentils. These were probably missed as a result of the recovery methods, particularly since the Southampton team found them in their Islamic trenches.⁹²⁴ Conversely, a number of plants not mentioned in the Quseir documents were recovered: garlic, lupine, coconut, tamarind, carob, gourd, Christ’s thorn, sebesten, dom palm, and others. Some of these plants may have been subsumed under general categories in the documents, such as “pickles,” or “medicine,” or designated with inscrutable terms. Others may not have been items that the Sheikh traded, such as the inexpensive Egyptian fruits dom palm, sebesten, and Christ’s thorn. Some of the plants may even have been grown locally on a very small scale, such as garlic, lupine, and perhaps Christ’s thorn tree. Finally, some plant foods that

were traded may not be recorded in the corpus of documents recovered since these undoubtedly represent a very small sample of the paperwork flowing into the Sheikh’s House—and of that sample only a small portion has been published.⁹²⁵

SPICE TRADE

Guo⁹²⁶ points out that the Quseir documents rarely mention spices, despite the fact that spices were a major commodity in the Indian Ocean trade. Pepper and saffron occur in only a few documents. In 1980 we retrieved pepper from Mamluk period deposits,⁹²⁷ but none were found in 1982, nor any other spices, probably because of recovery methods. On the other hand, the University of Southampton team found solid evidence of the spice trade in their excavations, including remains of cardamom, ginger, turmeric, and fagara.⁹²⁸ The spicy berries of fagara, used like pepper, appear as faghira in a list of foods on one of the Quseir documents.⁹²⁹ But Guo⁹³⁰ translated it as “Indian prickly ash.” Nonetheless, his assessment that the Sheikh’s family played a limited role in the spice trade may well be correct, but we have to keep in mind the small sample of documents preserved and published.

MEDICAL CARE

The remains of *Terminalia* fruits and a Jericho rose plant offer support for Guo’s assertion that the Sheikh’s family operation expanded to include medical care for the sick.⁹³¹ Medical treatment must have been in great demand at Quseir with travelers, pilgrims, and traders passing through. Pilgrims returning from the Ḥāǧǧ especially would have had a good chance of being sick after having mingled with people from the entire Islamic world. Indeed, pilgrims “often made of the holy towns of Islam a dangerous centre from which epidemics of pestilential diseases spread all over world.”⁹³² The pilgrimage

⁹²³ Burke 2007, 1.

⁹²⁴ Van der Veen 2011, 242.

⁹²⁵ Guo 2004b, 101.

⁹²⁶ Guo 2004b, 43.

⁹²⁷ Wetterstrom 1982, 360.

⁹²⁸ Van der Veen, Cox, and Morales 2011b, 41.

⁹²⁹ Van der Veen, Cox, and Morales 2011b, 57–58.

⁹³⁰ Guo 2004b, 43.

⁹³¹ Guo 2004b, 84.

⁹³² Omar 1952, 270.

of 1863 set off a major cholera pandemic, while pilgrimages in the nineteenth and twentieth centuries spread malaria, dysentery, smallpox, and plague in the Islamic world and beyond.⁹³³ In recent times, with vaccinations, strict sanitation measures, and quarantines, epidemics no longer threaten the Ḥāǧǧ pilgrimage as they once did. But infections, particularly respiratory diseases, like influenza, still plague pilgrims.⁹³⁴ In medieval Quseir, pilgrims en route to Mecca must have feared illness and, on returning, probably carried infections. They apparently sought protection with amulets. Among the Quseir documents were amulets bearing “healing texts” that Sheikh Abū Mufarrij’s son Sheikh Ibrāhīm apparently prepared and sold. In addition, there were block-printed amulets also intended to heal and safeguard. One example protected the bearer from a plague,⁹³⁵ another against a variety of threats, including diseases.⁹³⁶

The *Terminalia* remains in the Sheikh’s House suggest that the household offered more than amulets; they hint at a resident healer who might have provided rudimentary medical assistance. Based on information about medical practice in the medieval Islamic world, we can imagine that a member of the Sheikh’s family might have dispensed remedies, treated common diseases, and perhaps set bone, let blood, and so on. This person would not have been a formally trained physician, but a second tier medical practitioner; someone who had acquired knowledge and training from elders or through experience and observation.⁹³⁷ It is also conceivable that someone in the Sheikh’s household even had some apothecary training, perhaps acquired through apprenticing at a shop in Qūs, the family’s home town and Egypt’s “third city” in the medieval period.⁹³⁸ An apothecary in medieval times had knowledge of drugs and could make preparations such as syrups and electuaries, although they would not have been formally trained as a pharmacist.⁹³⁹ A healer in the

Sheikh’s household could have acquired medical knowledge in yet another way. Some cookbooks of the time, although not written for home cooks and focused primarily on food of the upper classes, offered home remedies, including vegetable potions (*šarāb*), electuaries (*ma’ǧūn*), stomachics (*ǧawāriš*), medicinal powders (*sufiuf*), and fruit juices (*rubuib*). All “were relatively simple both in terms of their ingredients and preparation; if desired, most could be prepared and stored for future use; they were intended for specific restorative purposes,”⁹⁴⁰ such as to “remedy blockages in the kidneys, clean the stomach of excess phlegm, alleviate fever, dissolve fats in all parts of the body, and bring joy to the heart . . . alleviate an excess of yellow bile in the stomach and act as a diuretic or emmenagogue.”⁹⁴¹ Whether knowledge of any of these home remedies reached Quseir we cannot say. Indeed, a healer in Quseir may simply have had knowledge of folk medicine and nothing more than the medieval equivalent of a first aid kit.

In any case, the large number of *Terminalia* fruits and stones (seventy-two) found in the Sheikh’s House suggests more than treatments kept on hand for family use. The three loci with quantities of the fruits—seventeen, twenty-two, and eight specimens, respectively—might each have been a cache, a collection that was stored away to treat illnesses, while the bare stones scattered here and there throughout the house loci may have been discarded after use or simply lost their dried flesh long after the site was abandoned—perhaps during recovery. If we count the stones with the fruits, it pushes the totals for the “caches” up to twenty-three, twenty-five, and fifteen. Whoever dispensed or used *Terminalia* in the Sheikh’s House probably did not prepare complex formulations like those found in Ibn at-Talimid’s dispensatory, which generally required many ingredients and special equipment.⁹⁴² More likely, they administered the fruit pulp without

⁹³³ Omar 1952, 270.

⁹³⁴ Razavi et al. 2007.

⁹³⁵ Guo 2004b, 81.

⁹³⁶ Guo 2004b, 80–81.

⁹³⁷ Hamarneh 1983–84, 191–92.

⁹³⁸ Garcin 2011a.

⁹³⁹ Hamarneh 1983, 193.

⁹⁴⁰ Waines 1999, 239.

⁹⁴¹ Waines 1999, 240.

⁹⁴² Kahl 2007.

further preparation, except perhaps to remove it from the stone, or perhaps to grind it as a powder. *T. chebula* fruit when chewed promotes digestion; taken as a paste it cleanses the bowels.⁹⁴³ It is known traditionally as a laxative, stomachic, and a tonic, and can be used to treat both constipation and diarrhea.⁹⁴⁴

In addition to *Terminalia*, the rose of Jericho plant, if not a mere incidental caught up in a rubbish pile, was probably used medicinally, specifically to treat women in childbirth as it has no known uses except as an amulet/medicine. Other plants found at Quseir might have been administered in treatments as well, since many of these were used medicinally in medieval time, as noted above. These include pomegranate, carob, limes/lemons, sebesten, *nabakh*, hazelnuts, pistachios, walnuts, almonds, pine nuts, tamarind, and garlic. The list could be extended even further as food was central for health in the medieval period and foods were believed to have humoral qualities that affected one's health.⁹⁴⁵ A brief note was added to main dish recipes indicating its health benefit, such as "stimulate the appetite and strengthen the stomach," or cool the body.⁹⁴⁶

CONCLUSIONS

The plant remains collected from Islamic Quseir al-Qadim during the 1982 University of Chicago field season total about 5,700 specimens, a minute sample of the plant materials that must have come to Quseir as foods, trade items, fodder, medicines, etc. Retrieved without benefit of rigorous sampling or careful recovery techniques, and picked by hand as they were encountered during excavation or sieving, the plant remains are mostly large items (such as the 5,000+ date pits) or caches/clusters of material. Small seeds, stems, and fragments, etc., are almost entirely absent. The limited quantities of fruits/seeds/etc., (aside from date pits) total only a little over 600, far too few to offer many insights into the relative importance of various foods—some

are represented by a single specimen—or offer many clues as to how they were processed. Nonetheless, this collection is a unique record of life in Quseir al-Qadim and opens a window unto the Ayyubid settlement and Sheikh Abū Mufarrij's family and business. Through the plant remains, we see a glimmer of a prosperous family who enjoyed costly imported fruits and nuts from the Mediterranean region—foods that were probably beyond the means of poorer residents—as well as expensive foods hauled from the Delta. But much of their everyday food was local Egyptian fare from the Nile Valley, an amalgam of ancient Pharaonic plant foods, Graeco-Roman introductions, and Islamic era arrivals. Ayyubid Quseir must have been somewhat like the Quseir a traveler described in March 1823: "its market is well and plentifully supplied. You drink the sweet water of the Nile, and eat of the vegetables from the valley through which it flows."⁹⁴⁷

With the plant remains we also catch a glimpse of the commodities that the Sheikh and his family traded. They offer physical evidence of some of the items recorded in shipping notices, and letters, etc., and in some cases they define them more precisely. "Wheat" was durum wheat (*Triticum durum*); "Barley" was hulled six-row barley, *Hordeum vulgare*; "fūl," which Guo⁹⁴⁸ translated as "beans," was most likely fava beans (*Vicia faba*); "lemons" were probably limes (*Citrus aurantifolia*). "Nuts" could have encompassed either hazelnuts, walnuts, almonds, or pistachios, or a combination of these. "Medicine" may have been one or a number of the plants that were used medicinally in the medieval Islamic period. One stands out: myrobalans (*Terminalia* cf. *chebula* and *bellirica*); seventy-two shriveled fruits and hard stones were recovered, most from deposits in the Sheikh's House—a remarkably large number for this very small corpus of plant remains. Imported from India, the fruits were used extensively in the medieval period to treat a wide range of ills. They may have been a cure that someone in the Sheikh's household dispensed to sick residents and pilgrims passing through Quseir.

⁹⁴³ Khare 2004, 451.

⁹⁴⁴ Premila 2006, 49.

⁹⁴⁵ Lev and Amar 2008b, 570.

⁹⁴⁶ Waines 2011, 167.

⁹⁴⁷ Sherer 1825, 62.

⁹⁴⁸ Guo 2001, 90.

The small collection of plant remains from the 1982 Quseir excavations may not open the window unto Ayyubid Quseir as far as we would like. But these plant remains offer hints, innuendos, clues, and some concrete data about life in Quseir. Considered along with the Quseir texts, other archaeological evidence from the site, and a wide range of other sources, they challenge us to come up with probable scenarios for the dietary habits, cooking practices, medical care, and trade at this remote outpost. May additional data some day help us to verify or renounce our reconstructions and come to a fuller understanding of life at Quseir al-Qadim during Ayyubid times.

ACKNOWLEDGMENTS

I thank Professor Jan Johnson and Don Whitcomb, PhD, for my first opportunity to study the 1982 season plant remains, not long after the excavations. I am most grateful to Katherine Strange Burke for prompting me to conduct a second study of the remains. While working on her dissertation, Katherine had dug my short 1982 report out of a filing cabinet and later asked if it could be included as an appendix to the version of her dissertation she planned to publish. I was thrilled at the opportunity to finally see in print my manuscript, which had languished for nearly thirty years. But when I read the text, which I probably had not looked at since 1984, I realized it was not fit for print after so much subsequent work on Quseir as well as progress in archaeobotany. Accordingly, I launched into a new study aimed at considering the plants—not in a vacuum, as I had in 1984, but in the context of the Sheik's family, long-distance trade, and the period. This new effort took me on a winding, at times unexpected, but always fascinating, path into the Islamic Medieval world and Ayyubid Egypt. It has been a great adventure!

CHAPTER 4

AVIAN FAUNAL REMAINS

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SAMPLE LIST

The following is a list of bird feather and identifiable bone material recovered at Quseir al-Qadim predominantly during the 1982 field season; a few bones are from the 1980 field season. Materials are listed by provenience. Osteological terminology generally follows Howard.⁹⁴¹

Locus E18a-4

Unidentified: miscellaneous feathers.

Locus F7a-7

Gallus gallus: one complete left humerus.

Locus F8d-16

Gallus gallus MNI-3: one right and three left tibiotarsi missing proximal heads; one right femur missing distal head; and one pelvic fragment.

Locus F8d-34

Gallus gallus MNI-2: two ulnae, one left missing distal half and one right missing proximal head (note: two different individuals based on size).

Locus F8d-36

Gallus gallus MNI-1: one left tibiotarsus missing proximal head and one sternal fragment.

Locus F9a-2

Corvus cf. rhipidurus: one wing (excluding humerus) with bones and attached feathers.

Locus F10a-6

Burhinus oedicnemus MNI-1: one left humerus; one right femur; one left ulna; and one right distal half of tibiotarsus.

Locus F19a-2

Gallus gallus: one complete right humerus.

Locus G8a-10

Gallus gallus MNI-1: one complete left tibiotarsus and one proximal head of left ulna.

Locus G8b-3

Gallus gallus: one distal head of left corocoid.
Unidentified: two feather fragments.

Locus G8b-31 1982

Gallus gallus MNI-1: one complete right humerus; one pelvis fragment; and one proximal head of left femur.
Unidentified: one small feather fragment.

Locus G8b-32

Gallus gallus MNI-1: one complete right tarsometatarsus; one complete right ulna, one complete right radius; and one partial left corocoid.
Corvus cf. ruficollis: one black flight feather.
Unidentified: three flight feather fragments.

Locus G8b-33

Gallus gallus MNI-1: one left tibiotarsus missing proximal head and one complete left tarsometatarsus with toe phalanges, scales, and no spur.
Pterocles coronatus: one complete left ulna.
Unidentified: miscellaneous feather fragments.

Locus G8b-34

Gallus gallus MNI-2: one right tibiotarsus missing proximal head; one complete right femur; one proximal half of left femur (from young bird); and one pelvic fragment.

Locus G8b-35

cf. Gallus gallus: one mid-shaft of right ulna.

Locus G8b-43

Gallus gallus MNI-1: one proximal head of right femur and miscellaneous bone fragments.

Locus G8c-1

Gallus gallus MNI-1: one complete right corocoid and one left mid-shaft of tibiotarsus.

Locus J9d-2 1982

Gallus gallus: one complete right ulna.

⁹⁴¹ Howard 1929. We would like to acknowledge the late Robert W. Storer, PhD, for allowing us access to the bird skeleton collection at the University of Michigan Museum of Zoology and for his help in numerous ways.

Locus J9d-4

Gallus gallus MNI-1: one complete left foot with toe phalanges, scales, one-half tarsometatarsus without spur; and one distal head of right humerus.

Locus J9d-12 1982

Gallus gallus MNI-1: one complete right humerus; one complete right tarsometatarsus (no spur); and one complete right tibiotarsus.
cf. *Gallus gallus* miscellaneous eggshell fragments.

Locus J10a-2 1982

Gallus gallus MNI-1: one right tarsometatarsus with scales, portion of the first row of toe phalanges and no spur; one complete right tibiotarsus; and one complete left ulna.

Locus J10a-9

Gallus gallus MNI-1: miscellaneous ribs; three toe phalanges; one clavicle; miscellaneous pieces of sterna; two synsacra; two right and two left coracoids; two right and two left femora; one right and one left complete tibiotarsi; two left and two right ulnae; two left and one right humeri; two left and one right complete carpometacarpi; one right and one left radii; one proximal head and one distal head of right tarsometatarsus; one complete right scapula and two left proximal heads; one cranium; miscellaneous vertebrae; five fragments of pelvis (two left and three right); two notaria; and two sternal fragments with different manubrial spines and miscellaneous fragments.

Locus J10c-2

Gallus gallus: one notarium.

Locus J10c-8

Gallus gallus MNI-1: one complete right tarsometatarsus with toe phalanges, scutes and no spur.
Pterocles coronatus: one left half of pelvis.

Locus J10c-9

cf. *Gallus gallus*: miscellaneous eggshell fragments.

Locus J10c-10

Gallus gallus: one left coracoid (immature bird).

Locus J10c-17

Gallus gallus MNI-1: one left carpometacarpus; two complete femora (one right and one left);

one complete right coracoid; one pelvis with matching synsacrum; and one notarium.
Unidentified: three small flight feathers.

Locus K9b-33

Gallus gallus MNI-1: one left and one right complete humeri; one complete right femur; and one synsacrum.
Ammoperdix heyi: one proximal half of right tibiotarsus.

Locus K9b-36

Gallus gallus MNI-1: one complete right tibiotarsus; one complete left humerus; one complete left femur: one complete right scapula; one right and one left complete carpometacarpi; one proximal two-thirds of right tarsometatarsus (immature); one right and one left coracoids; right and left halves of pelvis; and one synsacrum.
Pterocles coronatus: MNI-1: one anterior fragment of sternum; one right femur; one right and one left tibiotarsi; one left ulna missing distal head; and one left radius missing proximal head.

Locus K9b-38

Gallus gallus MNI-1: one synsacrum; one complete left humerus; one sternal fragment; and one mid-shaft of tibiotarsus.

Locus K9b-40

Gallus gallus MNI-1: one pelvis fragment with matching synsacrum; one notarium; one coracoid (broken); one distal half of right tibiotarsus; one right radius; and one mid-shaft of right humerus.

Locus K9b-41

Gallus gallus: one mid-shaft of right tibiotarsus.

Locus K9b-46

Gallus gallus MNI-2: one complete sternum and one xiphial spine of sternum.

Locus K9b-48

Gallus gallus: one complete left femur.

Locus K9b-53

Gallus gallus MNI-1: one complete left ulna and one mid-shaft of right tarsometatarsus.
Pterocles coronatus MNI-1: one complete left humerus; one distal head of left tibiotarsus; and one complete left radius.

Locus K9b-56

Gallus gallus: one synsacrum.
Pterocles coronatus: one right coracoid.

Locus K9b-57

Gallus gallus MNI-1: one sternal fragment and one complete left humerus.

Burhinus oediconemus: one almost complete left humerus.

Locus K9b-63

Pterocles coronatus: one proximal head with shaft of right humerus.

Locus K9b-64

Gallus gallus MNI-1: one complete left femur; one complete left corocoid; and one left tibiotarsus.

Locus K9b-67

Gallus gallus: one proximal head of right ulna.

Locus K9b-69

Gallus gallus: one complete right tarsometatarsus.

Locus K9b-70

Gallus gallus MNI-2: one right and one left complete humeri (distinctly different sizes); one sternal fragment; one complete right corocoid; one complete right tarsometatarsus; and one distal portion of left tibiotarsus.

Locus K9b-71

Gallus gallus MNI-2: two complete right humeri; two left tibiotarsi (one complete); one complete left femur; one complete right and proximal half of left tarsometatarsi (distinctly different sizes); two left and one right ulnae; and one sternal fragment.

Locus K10a-11

Gallus gallus MNI-1: one synsacrum; one proximal end of left tibiotarsus; and one left femur (lacking proximal head).

Locus L8c, RN 792

Gallus gallus MNI-1: one complete left tarsometatarsus, attached toe phalanges, some skin and no spur.

Locus L8c-1, RN 790

Gallus gallus MNI-1: one distal two-thirds of right tarsometatarsus; and two thoracic vertebrae.

Locus L9c-5

Gallus gallus: one complete left carpometacarpus.

Locus L8c-16

Gallus gallus: one worn right corocoid.

Locus L8c-23

Unidentified: portion of feather.

Locus L8c-37

Gallus gallus: one complete right corocoid.

Locus P8a-4, RN 255

Corvus ruficollis: one complete right ulna.

Locus P8b-15, RN 255

Corvus ruficollis MNI-1: one cranium and one almost complete right ulna.

REMARKS ON THE MODERN LOCAL DISTRIBUTION OF BIRDS IDENTIFIED FROM QUSEIR AL-QADIM SAMPLES

Ammoperdix heyi—Sand Partridge

The Sand Partridge is a breeding resident in the mountains and wadis of the central Red Sea area.⁹⁴² It often visits water pools in small flocks. The meat of this species is highly regarded as food by local Bedouins.⁹⁴³

Gallus gallus—Red Jungle Fowl (Domestic Fowl)

This species is not native to the area. It was introduced into Egypt during the second half of the dynastic period.⁹⁴⁴

Burhinus oediconemus—Stone Curlew (Common Thick-knee)

The Stone Curlew winters along the southern Egyptian Red Sea coastal plain⁹⁴⁵ and has been recorded on migration at several localities along the coast.⁹⁴⁶

⁹⁴² Goodman 1984; Goodman and Meininger 1989.

⁹⁴³ Personal observation.

⁹⁴⁴ Coltherd 1966; Keimer 1956.

⁹⁴⁵ Goodman 1984; Goodman and Meininger 1989.

⁹⁴⁶ Marchant 1941.

***Pterocles coronatus*—Crowned Sandgrouse**

A specimen collected on May 16, 1968, in Wadi Umm Taghir, 35 km west of Safaga, was the first known from the Egyptian Eastern Desert.⁹⁴⁷ In early February 1983, flocks of over 250 individuals were observed at the pool of Bīr Bayḍā', just west of Quseir.⁹⁴⁸ The Crowned Sandgrouse is a breeding resident in the area. The presence of bone remains of this species in the Quseir al-Qadim material suggests that this species has not colonized the area in recent times; it probably was just overlooked, until modern naturalists located it in the region. This species visits water pools in great numbers in the early morning and presumably with a little human ingenuity, it would be relatively easy to trap. The flesh of this animal is consumed by Bedouins living in the area.⁹⁴⁹ The Crowned Sandgrouse is the most common native bird in the Quseir al-Qadim samples.

***Corvus ruficollis*—Brown-necked Raven**

This species is a common breeding resident along the Red Sea coast and inland mountains near Quseir. It is often seen in association with human settlements.⁹⁵⁰

***Corvus cf. rhipidurus*—Fan-tailed Raven**

We have been unable to compare the material recovered at Quseir al-Qadim to modern skeletal specimens of *C. rhipidurus*. However, the wing bones from Locus F9a-2 are distinctly corvid and different from *C. corone* and *C. ruficollis*, the only other species of crow/raven likely to occur in the area. Thus, these remains are tentatively assigned to *C. rhipidurus*. The Fan-tailed Raven is common in the vicinity of Gebel Elba, approximately 520 km to the south and on the Sinai Peninsula.⁹⁵¹

AVIAN FAUNAL REMAINS FROM THE SHEIKH'S HOUSE, IN CONTEXT

KATHERINE STRANGE BURKE

The avian material both confirms the difference in the use of space between the houses and the warehouse, as was discussed in chapter one, and provides a window into the dietary habits of the occupants of the Sheikh's House and the residents of Quseir al-Qadim.⁹⁵² It reveals, not unexpectedly, that the most common fowl eaten at Quseir al-Qadim was *Gallus gallus*, the domesticated chicken, supplemented by a few local wild species.⁹⁵³ The Sheikh's House documents, by contrast, do not mention chicken or

any other type of fowl or meat, although eggs do appear on a grocery list, and chicken eggs were found in various collections of refuse.⁹⁵⁴

Most of the avian faunal remains in the Sheikh's House, like most of the other small finds, were found in secondary deposits, but nevertheless were most commonly found in the domestic spaces. Apart from the pit in Storeroom C (which yielded over 53 faunal fragments), very few bones were found in the warehouse (only a few on the Phase IIb floor of

⁹⁴⁷ Goodman and Watson 1983.

⁹⁴⁸ Goodman and Mowla Atta 1987; Goodman and Meininger 1989.

⁹⁴⁹ Personal observation.

⁹⁵⁰ Goodman and Mowla Atta 1987; Goodman and Meininger 1989.

⁹⁵¹ Goodman and Meininger 1989.

⁹⁵² There is no report on the remainder of the faunal finds, which according to observations recorded in the field notebooks included camel bones. However, the University of Southampton's faunal assemblage was dominated by sheep and goats, with cattle, camel, equid, and dorcas gazelle also present among the mammal remains (Hamilton-Dyer 2011, 253–56). Birds comprised 3.2 percent of Southampton's faunal assemblage (Hamilton-Dyer 2011, 256).

⁹⁵³ Cf. Hamilton-Dyer 2011, 256.

⁹⁵⁴ Guo 2004, Text 62.

Storeroom E, Locus J10c-17), indicating that aside from some milling (represented by the grindstones found in several storerooms), these storage areas generally were not used for domestic purposes. The main exception is Storeroom B, in which chicken bones and eggshells were found in five loci of Phase IIb and the surface layer. The chicken bones were found in association with grindstones. 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. This fits with the excavators' impression that the floor of Room C had been cleaned of any refuse.

In the North House, Room C, bones of chickens, the Crowned Sandgrouse, and the Stone Curlew 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, among a concentration of small finds that appears to be a trash accumulation (discussed in the next chapter). Locus K9b-57, the debris on the Phase IIa floor, contained few remains of a Stone Curlew and chicken as well, perhaps indicating that the Stone Curlew was occasionally trapped and eaten. 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. 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. 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. A few remains of a Crowned Sandgrouse were excavated from the probe beneath the Phase I floor, Locus K9b-53.

Because there were two phases of use (with an additional sub phase), as noted in chapter 1, 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 produced just as many Crowned Sandgrouse bones as chicken; 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 warehouse.

CHAPTER 5

TEXTILES, BASKETRY, GLASS, AND COINS

The small objects of daily life found in the remains of the Sheikh's House make up a rich assemblage of the mundane and the luxurious, the human made and the natural. Perhaps their most fundamental usefulness is that taken in the aggregate, they provide data for dating occupation at the Sheikh's House, as we have seen with the ceramics. And, as we have seen with the avian faunal and botanical remains, they speak eloquently to habits of consumption of the people of Quseir. The textiles, basketry, glass, and coins discussed in this chapter further elaborate habits of dress and patterns of consumption of household goods, as well as inform of trading contacts within Egypt and abroad. And, with regards to the Sheikh's House itself, when the distribution of small finds is examined, patterns in the use of the space can be revealed. While some categories of small finds from the Sheikh's House excavations have been published (i.e., the glass, resist-dyed textiles, and wooden objects), others were examined by specialists and written up in unpublished reports (i.e., the coins and remainder of the textiles). In this chapter even previously published categories are re-examined in light of the Quseir documents and their distribution throughout the warehouse and living areas of the compound.

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 farther afield.⁹⁵⁴ Gillian Vogelsang-Eastwood prepared an extensive but still unpublished catalogue of all textiles unearthed from all seasons of excavations.⁹⁵⁵ Using the catalogue, 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 remarks can be made.⁹⁵⁶

As with those excavated in the 1978 season,⁹⁵⁷ 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 percent 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.⁹⁵⁸ 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 Ġazīrat Fara'ūn near 'Ayla in the port of 'Aqaba, and Qarantal cave 38 in the Judean Desert east of Jericho in Palestine.⁹⁵⁹ A similar corpus of the same date has been unearthed at Qaṣr Ibrīm in Christian Nubia, where it is presumed to have been imported from

⁹⁵⁴ See Handley (2009) for a thoughtful study of the epigraphic textiles found by the University of Southampton team.

⁹⁵⁵ Vogelsang-Eastwood 1989, 3, n. 2.

⁹⁵⁶ 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.

⁹⁵⁷ Eastwood 1982, 286.

⁹⁵⁸ 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 6, and see fig. 79), none from the Merchants' Houses, and forty-seven from the Eastern Area (Vogelsang-Eastwood 1989, nos. 2–44, 47–50). Over seventy were found in the University of Southampton's excavations of Islamic Quseir (Handley 2011b, 323). Those from the Sheikh's House have been published separately and contextualized among the Sheikh's House finds (Burke and Whitcomb 2007).

⁹⁵⁹ Shamir and Baginski 2002, 136, 143, 154.

Egypt.⁹⁶⁰ Striped and checked fabrics also appear much more commonly in the Fatimid and Ayyubid era Geniza documents than do fabrics with other patterns, such as dots, for example.⁹⁶¹

Several kinds of textiles, clothing, and raw materials like flax (*kattān*) and cotton (*quṭun*) figure prominently in the Sheikh's House shipping notes as items of sale.⁹⁶² 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, *ḍayl*, perhaps a long coat, and *ṭawb*, an item of dress or simply meaning cloth. Aside from cotton and flax fabric, the most readily identifiable terms are *ḡalālīb* (sing. *ḡalābīyah*), precursors to modern *ḡalābīyahs*, fragments of which have been found in the excavations.⁹⁶³ *Ṭirāz*, or embroidered cloth, is also mentioned in a Phase IIa shipping note as having arrived safely at Quseir al-Qadim;⁹⁶⁴ two fragments of silk on linen embroidery were found in Corridor D, Phase IIb.⁹⁶⁵

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 *ḡalālīb* (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 1983b, p. 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 above mentioned unsewn garments, or are so fragmentary that the original object is not discernible.

Importantly, the sewn clothing finds at the Sheikh's House, notably the *ḡalābīyah* 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 cut-to-shape garments superseded clothes woven either from three pieces on a narrow, single warp (a common technique by the mid-fifth century CE⁹⁶⁶), or of one piece on a wide warp. These woven-to-shape methods of construction 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 Egypt and Syria, 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 CE,⁹⁶⁷ cut tunics are known from sixth century CE Halabiyeh in Syria, and shirts and jackets cut and sewn to shape, probably Persian, are known from the sixth century CE Antinoë, Egypt, but these are the exceptions rather than the rule.⁹⁶⁸ This technique may be attributable to Persian influence and may ultimately originate farther east.⁹⁶⁹

After the Muslim conquest of Egypt, samples of cut-to-shape clothing become much more common,⁹⁷⁰ but 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.⁹⁷¹ A contemporaneous

⁹⁶⁰ N. K. Adams 1981, 7; 1986, 25; and cf. the assemblage from Kulubnarti in northern Sudan, in W. Y. Adams and N.K. Adams 1997, 69–80; e.g., Crowfoot 1979.

⁹⁶¹ Y. K. Stillman 2000, 59–60.

⁹⁶² 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.

⁹⁶³ Guo 2004, table 1.

⁹⁶⁴ RN 1027a, Guo 2004, p. 215.

⁹⁶⁵ Vogelsang-Eastwood 1983a.

⁹⁶⁶ See Carroll 1988, 34–44.

⁹⁶⁷ Linscheid 2001, 75; referencing South, Kuchar, and Griggs 1998.

⁹⁶⁸ Gervers 1983, 310; Granger 1983, 12.

⁹⁶⁹ Gervers 1983, 310 and n. 43.

⁹⁷⁰ Granger 1983, 10–12.

⁹⁷¹ 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, 34, 72–73, 527, 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,

assemblage from Ġazirat Fara‘ūn in the Gulf of ‘Aqaba also contains fragments of gores from *ġalābīyahs*.⁹⁷² Fourteenth-century examples come from the Eastern Area in Quseir al-Qadim, in the form of two nearly complete children’s garments. One (Galabiyeh A) has side panels and triangular underarm gussets and is thus “a typical product of the period.”⁹⁷³

A similar pattern is discernible from textiles in Nubia, which as noted above, were largely imported from Egypt,⁹⁷⁴ although clothing styles may have changed at a slightly slower pace than Egypt. Excavations of early Christian (600–850 CE) 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 *galabiyeh*: “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.”⁹⁷⁵ Seven additional samples were of seamed garments of unidentifiable form.⁹⁷⁶ The Qaşr Ibrīm 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 Qaşr Ibrīm. These textiles are fairly rare in the Late Christian 1 period (ca. 1150–1250 CE), but increase greatly over time so that they are 29 percent of all cloth dating from the Terminal Christian period (ca. 1400–1500 CE) at Qaşr

Ibrīm.⁹⁷⁷ Several types of linens and fustians (almost certainly Egyptian imports) were also recognized as having been used for *ġalābīyahs* or tunics, depending on the period.⁹⁷⁸ 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 *ġalābīyahs*.⁹⁷⁹ 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.⁹⁸⁰ Flax and textiles woven from it were widely exported to Africa, Spain, and elsewhere in Europe.⁹⁸¹ 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 5) indicates its continued importance in Ayyubid Upper Egypt, despite its apparent decline in the thirteenth-century Fayyūm.⁹⁸² Additionally, according to textual evidence, the entrepôt of Qūs on the Nile 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 lists six different items produced at Qūs, among them simple unsewn pieces like those mentioned in the Sheikh’s House documents: turbans, linen cloth, women’s wraps, shawls, and napkins.⁹⁸³ 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,

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.

⁹⁷² Baginski and Shamir 1998.

⁹⁷³ Vogelsang-Eastwood 1987, 142.

⁹⁷⁴ Also see W. Y. Adams 1996a, 250.

⁹⁷⁵ N. K. Adams 1999, 55.

⁹⁷⁶ N. K. Adams 1999, 55, tables 8–9.

⁹⁷⁷ N. K. Adams 1996, 161; also see Crowfoot 1977.

⁹⁷⁸ N. K. Adams 1996, 163.

⁹⁷⁹ W. Y. Adams 1996a, 171–75; cf. W. Y. Adams and Adams 1997, 59–62.

⁹⁸⁰ Frantz-Murphy 1981; Gil 2004; Shatzmiller 2009; Udovitch 1999.

⁹⁸¹ Udovitch 1999, 269.

⁹⁸² Also see Issawi 1970, 257; Udovitch 1999, 283.

⁹⁸³ Cahen and Serjeant 1957; Garcin 1976, 228, n. 5.

Table 1. Distribution of Textiles

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

Aḥmīm, and Bahnasa.⁹⁸⁴ As noted above, woolens are not prominent in the Sheikh's House textiles corpus, but are present; several leather fragments discussed in chapter 5 have wool attached.

The distribution of textiles throughout the Sheikh's House (table 1) indicates that the bulk of them were intended for resale rather than household use. Despite the shallow depth of accumulation in the warehouse, 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 storerooms, the largest number were found in Storerooms B and D. As is expected, Room C of the North House, the storage area-cum-living room, 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 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 Fuṣṭāṭ.⁹⁸⁵ 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 Storeroom F, and Locus J10c-2, one of the uppermost layers of Storeroom 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.⁹⁸⁶ 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. The University of Southampton unearthed over 200 textile scraps interpreted as byproducts of clothing production, indicating a tailor's workshop existed in Quseir al-Qadim.⁹⁸⁷

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. 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.⁹⁸⁸ They are mentioned frequently in the Cairo Geniza documents dating to

⁹⁸⁴ Serjeant 1972, 155–56.

⁹⁸⁵ Goitein 1967, 100.

⁹⁸⁶ Hiebert 1991, 150–52.

⁹⁸⁷ Handley 2011b, 323; Handley and Regourd 2009.

⁹⁸⁸ Goitein 1967, 334, n. 9; Guo 2004, Texts 37, 55.

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.⁹⁸⁹ The distribution of basketry remains at the Sheikh's House seems to reflect more of a domestic than mercantile function, however.⁹⁹⁰ 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-4 and two fragments were found in Room B.⁹⁹¹ 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. Storerooms E and F both produced basketry remains, however, from both sub phases of Phase II. In Storeroom E a woven sack or basket was recovered from under the floor of Locus J10c-17 (pl. 80:a). In Storeroom F 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).

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,⁹⁹² which includes sherds from Room A of the South House, and Donald Whitcomb published glass from the 1982 season in the *Journal of Glass Studies*.⁹⁹³ 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 Beirut, Siraf, Manda, Kilwa, Gedi, 'Aqaba, 'Aydāb, and Kawd am-Saila (near 'Aden), with dates all together ranging from the eighth to the sixteenth century CE. Each readable sherd (only thirty-seven pieces, see table 14) has either a very wide range of possible dates, or is dated earlier than the Islamic settlement at Quseir al-Qadim.⁹⁹⁴ The dating of the glass corpus does not, however, contradict a general thirteenth-century date for the Sheikh's House.

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 Storeroom 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 warehouse an equal quantity came from the surface strata. The distribution of the glass finds in the Sheikh's House suggests their primary domestic function over mercantile, and is in step with their limited appearance in the documents. The majority of glass finds came from the South House, followed by the North House and distantly by the warehouse. The quantity of glass sherds in the warehouse was half that of the glass finds in the North House, and a third that of the South House. Another discernible difference between the houses and the warehouse is in the greater quantity of decorated pieces in the houses. Thus one 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.⁹⁹⁵

⁹⁸⁹ Goitein 1967, 334.

⁹⁹⁰ The basketry, matting, and cordage assemblage excavated by the University of Southampton at Quseir al-Qadim seems also to be primarily domestic in nature, given the preponderance of pot covers, brooms, and decorative cordage over storage baskets and grass sacks (Handley 2011a, 306).

⁹⁹¹ K9b-33/RN 648, cf. Wendrich 1999, pls. 11–16.

⁹⁹² Roth 1979.

⁹⁹³ Whitcomb 1983a.

⁹⁹⁴ Meyer 1992, 77–88, 184, 86–87, pls. 15–19. 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, 415–16, 419, 429, 431, 435, 437, 446, 464, 472–73, 476, 495, 511, 514, 519, 522.

⁹⁹⁵ For the latter, cf. Goitein 1973, 117; on the former, see Meyer 1992, 97–131.

Only one of the glass pieces can be linked 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 House⁹⁹⁶ 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 *baṭṭa* of sugar,⁹⁹⁷ a juice presser, and eleven fine sprinkler bottles.⁹⁹⁸ Sprinkler bottles were used for perfume, which is another commodity found in the shipping notes.⁹⁹⁹

The significance for dating 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 mentioned also contains distinctive ceramic categories such as Mamluk slipware and sgraffiato, and Blue and White porcelain that 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, and no marvered or enameled pieces, whereas all of these categories occur in relative abundance in the Eastern Area.¹⁰⁰⁰ 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 CE.¹⁰⁰¹ The University of Southampton found them in relative abundance in Trench 1, in the eastern part of the site on the shore, and in smaller quantities in the trenches immediately east of the central part of the site.¹⁰⁰²

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 Storeroom 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-Qadim and in test excavations at 'Aydāb, but almost never occurring in the later assemblage at al-Tūr, which begins in the late fourteenth century.¹⁰⁰³ Simple triangular bracelets of solid dark colors are common in Egypt and 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 late twelfth or early thirteenth century.¹⁰⁰⁴ Two similar examples were found in survey at al-Qaraw, which has a thirteenth to fourteenth-century Chinese porcelain assemblage.¹⁰⁰⁵ These may all 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.¹⁰⁰⁶ 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 possible connection to the Yemen.

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.¹⁰⁰⁷ The Islamic coins from the 1978 season of excavations at Quseir al-Qadim were published by Michael Bates in that preliminary report, based on his examination of plaster casts and drawings.¹⁰⁰⁸ Only one numismatic object came from the Sheikh's House in that season, however. It is a stamped green glass weight found in the South House, Room A. RN 27 is from Locus

⁹⁹⁶ Meyer 1992, 78–79, pl. 15:397.

⁹⁹⁷ Probably produced at Qūs, see Goitein 1967, 126; LaGro 2002, 10–14.

⁹⁹⁸ Guo 2004, 249–50, Text 54.

⁹⁹⁹ Guo 2004, Text 13.

¹⁰⁰⁰ Whitcomb 1983a, 104; Whitcomb and Johnson 1982a; 1982b; 1982c, 148.

¹⁰⁰¹ Meyer 1992, 90–94; Spaer 1992, 56.

¹⁰⁰² Peacock 2011, 72, 75.

¹⁰⁰³ E.g., Meyer 1992, pl. 20: 554–61; Shindo 2001, 81, 93.

¹⁰⁰⁴ Shindo 2001, 77; Spaer 1992, 57, table 1; Whitcomb 1988c, table D, fig. 21:a–d.

¹⁰⁰⁵ Whitcomb 1988a, 100, fig. 21:o, q.

¹⁰⁰⁶ Doe 1963; Lane and Serjeant 1948, 29–31, 109; Monod 1978, 113–14.

¹⁰⁰⁷ Guo 2004, 51–58; for a discussion of Egyptian taxes collected on trade, see Labib 1970a, 74–75.

¹⁰⁰⁸ Bates 1979.

K9b-10, in the accumulation on top of the floor in Phase IIa. It is about 3 cm in diameter and 0.75 cm high. It was not weighed. According to Bates, although it is anepigraphic, weights of similar design and shape, used to check the weights of coins, have traditionally been broadly dated to the Mamluk period.¹⁰⁰⁹ Judith Kolbas's statistical study of the colors of glass weights over time suggests it could also be Ayyubid,¹⁰¹⁰ 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 weighs 15.13 g, which is slightly over five times the dirham standard of 2.97 g, and measures 1.5 (diameter) × 1.1 cm (height). It is anepigraphic, but its top is incised with concentric circles and has a lathe point at the center. This is known as a barrel weight, in the shape of a "truncated double cone" with a distinct edge where the cones meet at its equator.¹⁰¹¹ Bronze barrel weights of 1, 2, 3, 5, 10, 15, 20, and 50-dirham denominations for weighing silver and silver coins are present 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.¹⁰¹²

Twenty-one coins were excavated from the Sheikh's House in the 1982 season, six of them from the surface (table 15). They were cleaned, weighed, and measured in the field; photographs and casts were taken as well. Depending on the amount of corrosion, the cleaning employed either Rochelle salts or a 10 percent solution of formic acid, or both. A few of them were simply rinsed in distilled water. Michael Bates made the preliminary identifications in 1982, as he had for the earlier two seasons. Additional information on three of them is provided here.¹⁰¹³ See table 15 for a list of the coins and their

contexts. The six coins from the surface 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 is only identifiable as Islamic (RN 687), and one is Fatimid. The Fatimid coin, RN 699 from Locus K9b-57, is a black dirham (dirham ḥaswad or dirham waraq) minted between 1100 and 1169 CE. The same type was minted in the Ayyubid period up to AH 622/1225 CE, but the name 'Alī in the central field leaves no doubt it is a product of the *shī'a* Fatimid 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 half dirhams, which are known to have been issued by al-Mālik al-Kāmil Nāṣir al-Dīn Muḥammad I in AH 622/1225 CE.¹⁰¹⁴ Also from his reign (AH 615-35/1218-38 CE) is a *fals* (plural *fulūs*), 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 (pl. 81:a) from Locus K9b-63 (in Room C of the North House) is an issue of Sultan al-Ṣāliḥ Naḡm al-Dīn Ayyūb, (regnal dates AH 636-57/1239-49 CE) with Caliph al-Musta'ṣim, (reigned AH 639-55/1242-58 CE in Baghdad). This type of coin with the dodecalobe-in-circle design is known to have been struck in Damascus during AH 644-46/1246-48 CE.¹⁰¹⁵ RN 696 (pl. 81:b) is a square-in-circle half dirham, reading "al-Mālik al-Ṣāliḥ" on the obverse and "al-Imām Musta'ṣim" on the reverse. It is impossible to distinguish the Damascene issues of Sultan al-Ṣāliḥ Naḡm al-Dīn Ayyūb from those of al-Ṣāliḥ

¹⁰⁰⁹ Also see Balog 1966; 1980, 65; 1981; Bates 1979, 231, pl. 74:j; 1981; e.g., Lane-Poole 1891, xx-xxi, 101-4; and cf. Peacock 2011, fig. 7.14, a broken green glass weight from the Southampton excavations.

¹⁰¹⁰ Kolbas 1983, 96.

¹⁰¹¹ Balog 1970, 235, cf. nos. 14, 15, and 21, Ayyubid, and 24, Ottoman; Copeland 2011.

¹⁰¹² Balog 1970, 244-54; 1981, 107; Whitcomb 1994a.

¹⁰¹³ 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.

¹⁰¹⁴ Album 1998, 49; Schultz 1998.

¹⁰¹⁵ Album 1998, 50.

ʿIsmāʿīl ibn Abū Bakr, Ayyubid governor of Damascus in AH 638–64/1239–45 CE.¹⁰¹⁶ It must date sometime between 1242 and 1245 CE. Finally, RN 698 (pl. 81:c) from Locus K9d-1 is a square-in-circle dirham with legible central fields: “al-Mālik al-Ṣāliḥ ʿImād al-Dunyā wa-l-Dīn ʿIsmāʿīl ibn Abū Bakr” on the obverse and “al-Imām al-Mustaʿṣim Billah Abū Aḥmad Amīr al-Muʾminīn” on the reverse. It was struck in Damascus and must also date between 1242 and 1245 CE.¹⁰¹⁷

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 AH 648/1250 CE, as the Nile Valley trade would surely have brought dirhams of al-Muʿizz al-Dīn Aybak to Quseir al-Qadim quite quickly once they entered circulation, considering the length of the journey from Cairo to Qūs could be as short as one week.¹⁰¹⁸ Refinement of the dating of occupation at the site and the phases within can be done using the paper documents, some of which are dated, and reinserting them along with the coins into their contexts by phase; this is attempted in the following chapter.

¹⁰¹⁶ Album 1998, 50.

¹⁰¹⁷ Album 1998, 50.

¹⁰¹⁸ Garcin 1978, 307. A weekly mail service from Cairo to Qūs 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, 90, 98, 287).

CHAPTER 6

TEXTS IN CONTEXT: THE SHEIKH'S HOUSE TEXTS

DISPOSITION OF THE LETTERS

The preservation of letters in the Sheikh's House is not even throughout the complex (table 2). 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; 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.

Concentrations of letters occur in the main living rooms of both houses, and in Storerooms 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 as a storeroom in Phase I. The documents were for the most part clumped together in a mass

against wall E to the west, which raises the question of deliberate storage in a wall niche or shelf for this group of documents. It is unfortunate that none 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 legible. 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.

CONTENT OF THE LETTERS

Of the over fifteen hundred fragments excavated, eighty-four texts have been published fully,¹⁰¹⁷ while the incomplete contents of an additional eighty-four are discussed.¹⁰¹⁸ These eighty-four texts comprise approximately 287 fragments of paper, providing an idea of the difficulty in reading the poorly preserved samples.

The majority of these 168 read documents consist of business letters and shipping manifests regarding shipping and brokerage transactions that Sheikh Abū Mufarrij and his son Sheikh Ibrāhīm Abū

Table 2. Distribution of Paper Finds across the Sheikh's House

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

¹⁰¹⁷ Guo 1999a; 1999b; 2001; 2004.

¹⁰¹⁸ See index of documents in Guo 2004, 321–23; also see work by Jennifer Thayer in 1993; 1995.

Ishāq ran from their complex of houses and storehouses at Quseir al-Qadim (see tables 16–17). The direction of traffic preserved in the shipping manifests is, as expected, 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, 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, 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.¹⁰¹⁹

Locations in the Nile Valley are not named, with the exception of Qūs, the district capital, and Qenā, a town north of Qūs on the Nile. Two locations are preserved in the *nisāb* (singular *nisba*) of individuals, however: Qift (from the *nisba al-Qifti*), between Qūs and Qenā, the hometown of Abū Mufarrij himself and the important Roman town of Coptos, Quseir al-Qadim's primary trading partner at that time; and Šanhūr (from the *nisba al-Šanhūri*), a town south of Qūs on the Nile.¹⁰²⁰ Other *nisāb* indicate several clients of this company had much more distant origins, including Egypt's Alexandria and the regions of Fayyūm and the Delta, but also the Arabian Hijāz, Syria, and even Spain (specifically Cordoba) and Persia.¹⁰²¹

The trading business was primarily in flour and wheat, which the Quseiris shipped across the Red Sea to the *haramayn*, Mecca and Medina, supplementing the function that the port of 'Ayḏāb had

provided for Egypt since the Fatimid period.¹⁰²² As noted in chapter 1, pockets of grain were found in the excavations. Aside from grains, several other commodities are known to have passed through the port at Quseir al-Qadim from written or material evidence, or both. 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 5. 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.¹⁰²³ 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. This can partly be explained by retrieval methods (in the case of peppercorns) and partly by the value of the commodities, which would have discouraged wastage and loss. However, pepper was found in the Eastern Area by the University of Chicago, and in Islamic-era trenches at Quseir al-Qadim by the University of Southampton.¹⁰²⁴ Saffron, rose water, Jew's mallow, and henna are items that only appear in one document found near the Sheikh's House, RN 1077b.¹⁰²⁵ 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."¹⁰²⁶ 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 most of the Sheikh's House texts have already been read independent of their individual contexts, although Li Guo made much effort to correlate them generally with the site of Quseir al-Qadim using archaeological information from the preliminary

¹⁰¹⁹ Guo 2004, Texts 21, 23, 31.

¹⁰²⁰ See map in fig. 2; Guo 2004, 172–74, 247–48.

¹⁰²¹ Specifically the town of Istakhr, Guo 2004, 59, 64.

¹⁰²² Garcin 1976, 103; Guo 2004, 5, 10–12, 18–19, 22; Thayer 1993, 212.

¹⁰²³ Tables 19–22; Guo 2004, table 1, 256–58, 277–83; and see chapter 3.

¹⁰²⁴ Van der Veen 2004, 126.

¹⁰²⁵ The saffron was likely imported from Tunisia, see Goitein 1967, 153; Guo 2004, Text 68.

¹⁰²⁶ RN 1085; Guo 2004, Text 36.

reports and conversations with the excavators. The information they provide not only regarding activities at the house and warehouse, 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 warehouse), which correlates with the single mention of dried dates as an item of trade in the texts, for example. In the section that follows, the legible texts are described by locus, with reference to their immediate contexts, and noting patterns across the complex. Complete assemblages are only described for the best-preserved contexts, however, which are on the upper or rebuilt floors of the main living rooms of the two houses.

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

PHASE I

In the first phase, as discussed in chapter 1, the South House was built, Storeroom 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 (fig. 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

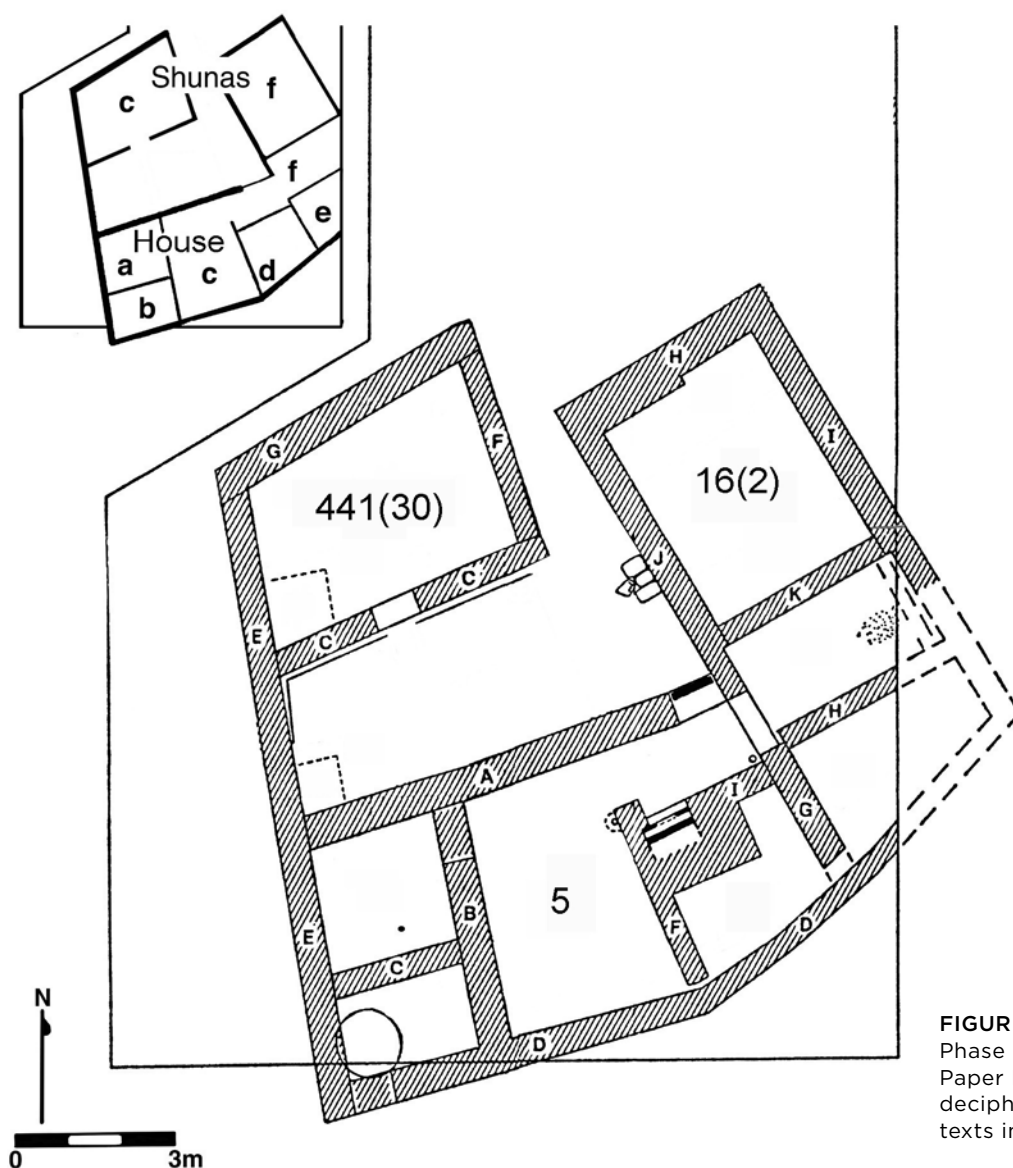


FIGURE 54. Sheikh's House Phase I, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

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 the shipping notes and other documents, including sermons, amulets, and lunar and astrological dials, were not initially discarded, but were kept at least temporarily.

The absence of documents from the earliest floors of the South House and the paucity from Storeroom 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 Storeroom 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.

The single published document from Phase I in Storeroom 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 Abū Aḥmad, and all of the latter's friends.¹⁰²⁷ 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.¹⁰²⁸ Another (RN 1068a) is a letter or shipping note addressed to Ibrāhīm.¹⁰²⁹ Locus J10c-19, in which these documents were found, contains several imported items: Yemen 1 Black on Yellow Ware,

the Yemen 2 brown painted ware bowl, and a sherd of qingbai porcelain from China. The pepper and perhaps also the porcelain were destined for Cairo, but the Yemeni ceramics may have been only for local use. Textile finds included two sewn pieces, one of which had an inscription or pseudo-inscription, 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, for use in rigging and shipbuilding or repair; ships were usually "sewn" with rope in this region rather than being nailed together.¹⁰³⁰ There is little documentation on the manufacture and circulation of rope within medieval 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,¹⁰³¹ two block-printed amulets, one in red and black ink, guaranteeing the safety of the wearer,¹⁰³² two hand-written amulets with magic numbers and letters,¹⁰³³ and several fragmentary sermons.¹⁰³⁴ In addition, at least five charts including zodiacs, astrological dials, lunar dials,¹⁰³⁵ and circular charts were in this group; the lunar dials were perhaps for keeping the religious calendar, including the correct times of prayer. The amulets indicate the vitality of popular religion at Quseir al-Qadim, which was experiencing a resurgence in Upper Egypt, along with a return to Sunnism, after the fall of the Fatimids.¹⁰³⁶ Sheikh Ibrāhīm is referred to as a *khaṭīb*, giver of sermons, in a text found in Phase IIb.¹⁰³⁷ He may represent one of the

¹⁰²⁷ And cf. Goitein 1967, 346; Guo 2004, 306–07, Text 79.

¹⁰²⁸ Guo 2004, 43.

¹⁰²⁹ Guo 2004, 3, 112.

¹⁰³⁰ Chakravarti 2002, 47; also see Flecker 2000; 2001; Kiribamune 1987, 74; Taylor 2007; and Whitewright 2011, 197–99.

¹⁰³¹ RN 1037a, RN 1042a, and RN 1049, Guo 2001, fig. 2; 2004, Texts 55–56, 73.

¹⁰³² RNs 1038, 1039a: Guo 2004, 77–78, pl. 1.

¹⁰³³ RNs 1031b, 1039f: Guo 2004, 81.

¹⁰³⁴ Guo 2004, 72.

¹⁰³⁵ Guo 2004, 82–83.

¹⁰³⁶ Garcin 1997, 165–69; Guo 2004, 75–86.

¹⁰³⁷ RN 1020b: Guo 2004, Text 18.

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.¹⁰³⁸ The finds in this room can be interpreted as 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.¹⁰³⁹ The remaining two published documents are shipping notes concerning the delivery of various items to Ibrāhīm ibn Abū Mufarrij at the shore of Quseir al-Qadim on behalf of a client: one note lists fresh water, barley, medicine, and leather baskets; and the second concerns delivery of three female camels and two loads of wheat.¹⁰⁴⁰ 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 (see the Medical Care section of chapter 3). Another fragmentary letter is addressed to Ibrāhīm (RN 1050a), and RN 1040b appears to be a list of accounts of amounts of grain collected by ‘Abd al-Raḥman Abū Ḥamd from various people for Ibrāhīm.¹⁰⁴¹ A letter (RN 1040c), the recipient of which is missing, mentions shipment of coral, pepper, and a flax comb.¹⁰⁴² These are the first references to items from afar, the coral having come from either the Mediterranean or the Red Sea¹⁰⁴³ 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.¹⁰⁴⁴ A possible business letter from ‘Asākir ‘Alī al-Mamlūkī contains several lines appropriate

to a sermon;¹⁰⁴⁵ later business correspondence between Ibrāhīm and a Ḥājj ‘Asākir (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 provide 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 Fuṣṭāṭ), rope (seventy-eight fragments), two fragments of leather shoes (commodities or domestic items), 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; they include a few fragments of coconut (imported from India), hazelnut and pistachio (both from the Mediterranean), almond (from the Fayyūm or the Mediterranean), dom palm fruits (from Egypt), and date pits (also an Egyptian product), which were found in significant quantities.

The twenty-three fragments of textiles from this locus included eleven pieces of blue-dyed fustian and two block-printed resist-dyed cotton pieces from India (RNs 922, 945).¹⁰⁴⁶ 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 (pl. 80:b). 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.¹⁰⁴⁷

Locus K9b-62 to the east was a thin layer of dirt over bedrock that composed the floor in this half

¹⁰³⁸ Michot 2000, 149; also see Saliba 1993.

¹⁰³⁹ Guo 2004, 293–95, Text 73.

¹⁰⁴⁰ Guo 2004, 251–53, Texts 55–56.

¹⁰⁴¹ Guo 2004, 3, 19, 45.

¹⁰⁴² Guo 2004, 40–41, 43, 73.

¹⁰⁴³ Lewis 1976, 449.

¹⁰⁴⁴ RN 1037d, Guo 2004, 28.

¹⁰⁴⁵ RN 1037c, Guo 2004, 18, 74.

¹⁰⁴⁶ See table 18 and Vogelsang-Eastwood 1989, 112, nos. 52–53.

¹⁰⁴⁷ Burke and Whitcomb 2007; Vogelsang-Eastwood 1989, 18–19, 73–75.

of the room. One shipping note to Abū Mufarrij is unpublished from this locus, RN 1036a.¹⁰⁴⁸ 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.¹⁰⁴⁹

In summary, the shipping notes from Phase I indicate that Ibrāhīm, the son of Abū Mufarrij, was a grown man running his own business when this complex was built between ca. 1200 and 1215 CE. Abū 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,¹⁰⁵⁰ 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: Yemeni ceramics, Indian resist-dyed textiles, coconuts, and Chinese porcelain came from the Indian Ocean trade, while hazelnut and pistachio came from the Mediterranean trade. 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 Qurʾān (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 the paper was not able to be reused.

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 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 Storeroom F were dismantled and the floor was replastered. Storerooms 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; see fig. 55), the thin layer of occupational debris that had accumulated on the first plastered floor. RN 1029a is a letter to Sheikh Ibrāhīm (called by his *kunya* Abū Ishāq here) instructing him to sell the pottery that he already has and give the money to another business associate.¹⁰⁵¹ The sender of the letter, Abū ʿUthmān, greets Sheikh Ibrāhīm's children and elders and extends a special blessing to Ibrāhīm's mother. The omission of Sheikh Abū Mufarrij by name is unexpected and rather mysterious. It may be an oblique reference to his death, or perhaps the sender simply wanted to send special blessings to Abū Mufarrij's wife; he may have been her relative.¹⁰⁵² The second text, RN 1031a, is an amulet for a woman who wants to bear a male child.¹⁰⁵³ Two other unpublished texts contain lunar and astrological dials, and block-printed Qurʾānic quotations, also likely belonging to Ibrāhīm like those on the previous floor.¹⁰⁵⁴

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 Abū Mufarrij, and one of which was sent to Abū Mufarrij (see table 17). The documents were poorly preserved but contained mention of flax (RN 1033c) and colored textiles (RN 1033e). An additional fragment of paper

¹⁰⁴⁸ Guo 2004, 2, 112.

¹⁰⁴⁹ References in Guo 2004, 116, n. 37; also see Kawatoko 1992; 1993a.

¹⁰⁵⁰ Two camel-loads in one shipment, Guo 2004, 28, Text 56.

¹⁰⁵¹ Although it is possible that one of Sheikh Ibrāhīm's children was named Ishaq, Ibrāhīm's *kunya* Abū Ishāq cannot be taken literally. It should rather be understood as a commemoration of the Qurʾānic prophet Ibrāhīm (Abraham), father of the prophet Ishaq (Isaac) as well as the prophet ʾIsmāʿīl (Ishmael). For example, In al-Udfūwī's (1286–1347 CE) biographical dictionary of personages in Early Mamluk Upper Egypt, 22 percent of the men named Ibrāhīm have the *kunya* Abū Ishāq (see the table of contents in Udfūwī 1914). A few others are known from the Cairo Geniza documents (e.g., Goitein and Friedman 2008, 529, n. 21, 605, 860–61).

¹⁰⁵² Guo 2004, 5, 187–89, Text 22.

¹⁰⁵³ Guo 2004, 311–12, Text 82.

¹⁰⁵⁴ Guo 2004, 83.

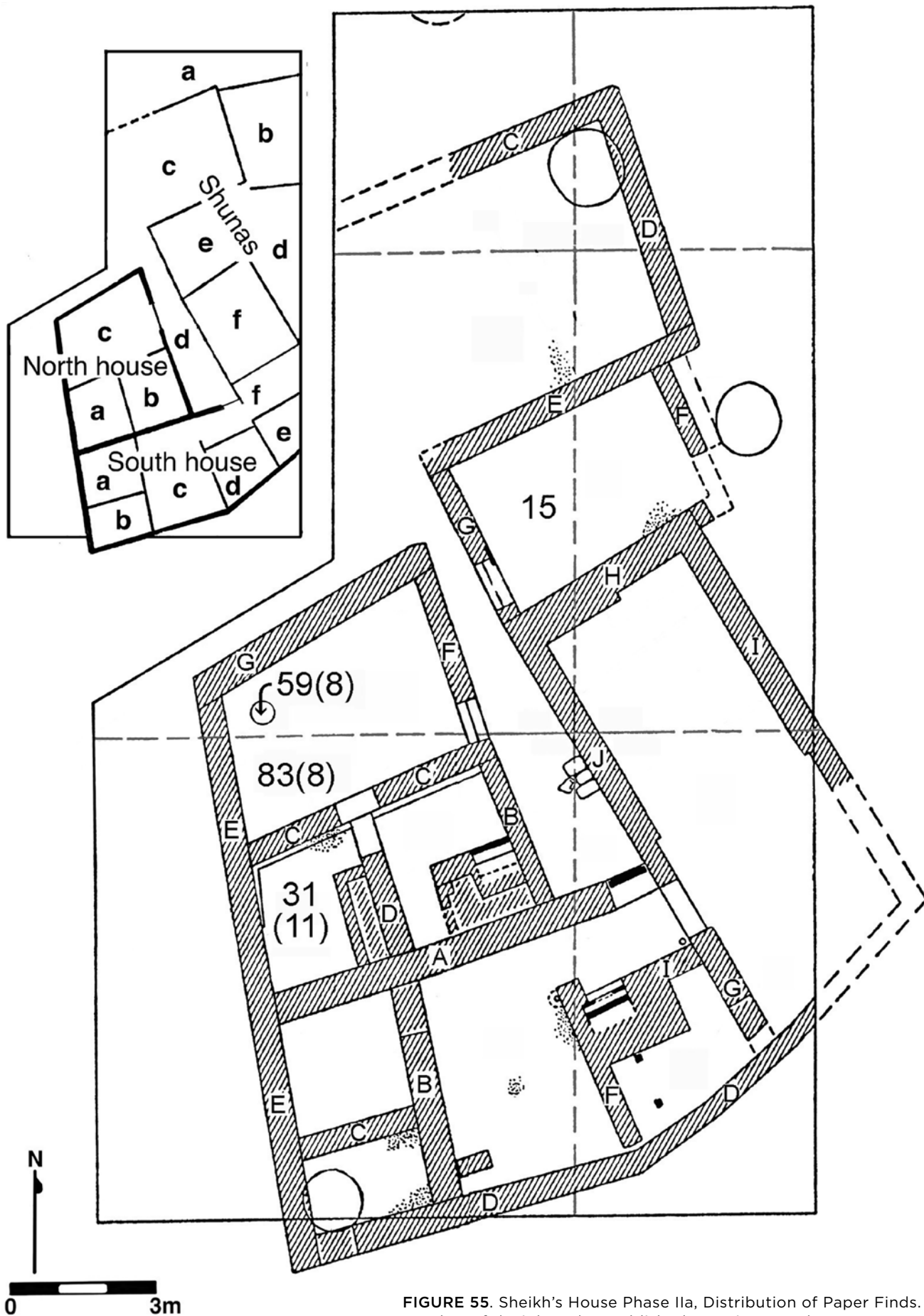


FIGURE 55. Sheikh's House Phase IIa, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

contains a drawing of lines and dots, and may be part of an astrological dial (RN 1035).¹⁰⁵⁵ The objects accompanying the letters in the pit seem to be mostly for domestic purposes, including glass, pottery, an incised acacia bowl, matting, and leather shoes. Rope also found in the pit could have been for domestic use or for sale.

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's contents are the usual domestic items, along with rope for sale and two sherds of ceramics imported from China.

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),¹⁰⁵⁶ letters to Abū Mufarrij and Ibrāhīm (RNs 1025, 1026d),¹⁰⁵⁷ and two fragmentary business letters mentioning pepper, flour, and the delivery of a *bayān* certificate, RNs 1027c and 1027d.¹⁰⁵⁸ The sender of RN 1026a, Ibrāhīm ibn Nāṣir Allāh, informs Abū Mufarrij (*ṣāhib al-šūna*, "the owner of the warehouse") that he has arrived at Qūs, the capital of the Ṣaʿīd and the shipping node for goods coming from Quseir al-Qadim to the Nile Valley.¹⁰⁵⁹ 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 *Ḥāǧǧ*. In this letter someone in the house (the addressee is missing) is informed about the delivery

of wheat, but also asked to let Sheikh Abū Mufarrij know that the sword which the pilgrim has ordered will be sent soon.¹⁰⁶⁰ 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. For example, an iron knife with a wooden handle was discovered in Locus J10c-17 above the surface in Storeroom 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 Storeroom). Finally, a small sliver of bronze, possibly a knife blade, was recovered from Locus K9b-38 (Phase IIb) in Corridor D.

RN 1027a is one of the longest preserved texts from the Sheikh's House. It is a lengthy letter addressed neither to Sheikh Abū Mufarrij nor Sheikh Ibrāhīm, but to Muḥammad ibn Jaʿfar, perhaps one of their trading associates. The bulk of the items shipped are the usual wheat and *barānī* (clay vessels, singular *barniya*) of oil (*zayt*, olive oil, possibly imported from Syria), as well as flour, but corals,¹⁰⁶¹ mirrors, *ṭirāz*-fabrics, and *baṭṭa*-containers are also among the goods shipped.¹⁰⁶² Embroidered textiles, while rare, were excavated in the house and elsewhere on the site.¹⁰⁶³ This is one of the few attestations that Quseir al-Qadim did participate in trade of high-priced items.¹⁰⁶⁴ 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.¹⁰⁶⁵

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

¹⁰⁵⁵ Guo 2004, 2–3, 40–41, 83, 112.

¹⁰⁵⁶ Guo 2004, 81.

¹⁰⁵⁷ Guo 2004, 2–3, 19.

¹⁰⁵⁸ Guo 2004, 29, 43, 103, n. 8.

¹⁰⁵⁹ Garcin 1978, 311; Guo 1999a, fig. 1; 2004, 148–51, Text 7.

¹⁰⁶⁰ Guo 2004, 151–53, Text 8.

¹⁰⁶¹ Goitein 1954, 192; 1963, 198.

¹⁰⁶² Guo 2004, 212–18, Text 31.

¹⁰⁶³ Eastwood 1982, 290–92; Vogelsang-Eastwood 1983a.

¹⁰⁶⁴ And cf. a text from elsewhere in Quseir mentioning the shipment of Mediterranean corals in Regourd 2011, 342–43.

¹⁰⁶⁵ Guo 2004, 218–20, Text 32.

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 solids out of the 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 Qūs) has come “from the south,” (*min al-qibl*) and “from outside” (*min ḥāriġ*), probably reference to a Nile port in Upper Egypt or Nubia.¹⁰⁶⁶

The last published document in this locus, RN 1027e, is a certificate of receipt of pepper issued by Abū Mufarrij.¹⁰⁶⁷ As noted above, pepper and other small items were unable to be retrieved in 1982 due to collection methods, but it is likely that pepper was present in the debris of the Sheikh’s House (see the section on Trade Commodities in chapter 3). Document RN 1027e 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. Qūs, 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 Ḥāġġ traffic is accommodated by the anchorage at this time. The material, on the other hand, largely reflects the daily needs of the Sheikh’s House occupants, with the exception of a sherd of porcelain and a celadon sherd that, along with the pepper in the documents, attests to connections with the Indian Ocean trade.

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. Storerooms A, B, and D were added north of the existing storerooms.

The largest proportion of legible documents in the Sheikh’s House came from Phase IIb of the North House, Room C Figure 56. Sheikh’s House Phase IIb, Distribution of Paper Finds. Number of deciphered or published texts in parentheses. (fig. 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.¹⁰⁶⁸ In this part of the room, a mat (pl. 82:a), a very long piece of rope, and a whole basket with handles were found together directly on the floor, and represent one of the very few relatively undisturbed deposits in the Sheikh’s House.

The large volume of Locus J9d-4 (640 cubic m) translates to a substantial quantity of artifacts, many well preserved. Forty-two additional rope fragments, two large coils of rope (pl. 82:b), 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 Ḥusayn (possibly the son of Abū Mufarrij), asking him to sell turbans for the sender, and requesting money to buy children’s clothes. Long coats are also mentioned.¹⁰⁶⁹ Greetings are sent to a *faqīh*, or jurist who may also have acted as a notary.¹⁰⁷⁰ His position would have been a government appointment and therefore we can view

¹⁰⁶⁶ Guo 2004, Text 43.

¹⁰⁶⁷ Guo 2004, 260–62, Text 60.

¹⁰⁶⁸ Ceramics are mentioned as items of trade in one document from the preceding sub phase in this room, RN 1029a, Guo 2004, 187–89.

¹⁰⁶⁹ Guo 2004, 192–96, Text 24.

¹⁰⁷⁰ Goitein 1971, 367.

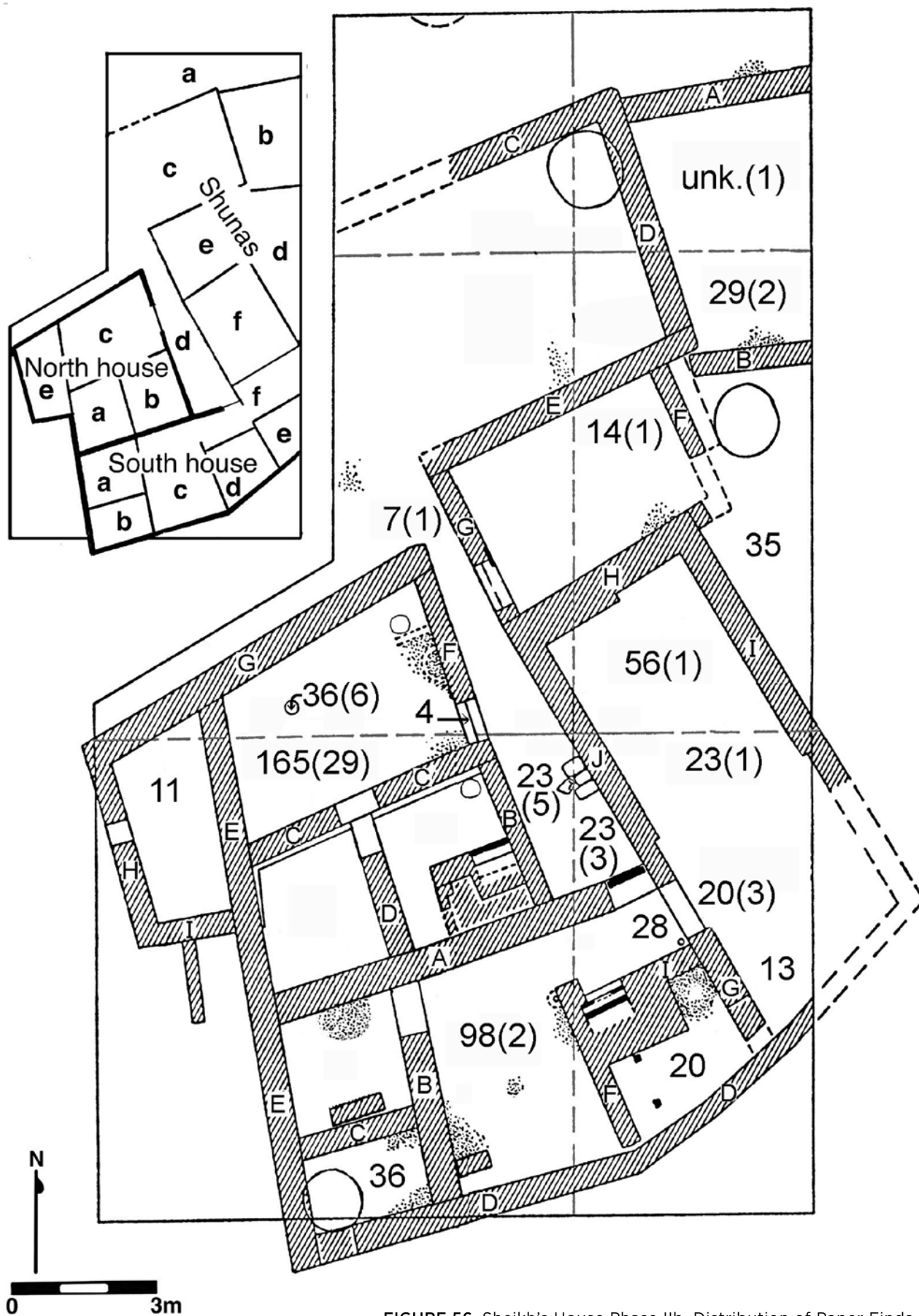


FIGURE 56. Sheikh's House Phase IIb, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

this man as another official link between the government of Qūs and Quseir al-Qadim. An unspecified disaster in the unnamed town from which the letter originates may be a reference to the epidemic of AH 633–34/1235–37 CE, which according to the Mamluk historian al-Maqrīzī (writing in the late fourteenth century) raged throughout Egypt and killed twelve thousand people in Fuṣṭāṭ and Miṣr in the first year alone.¹⁰⁷¹

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' continued practice of fishing as a supplementary means of living.¹⁰⁷²

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, water skins or perhaps *baṭṭa*-containers, which are also referred to in a document from this locus, RN 968b.¹⁰⁷³ Sixty-four of the fragments have wool attached to them, while 124 fragments do not. Additionally there are thirty-four 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 leather-working like that excavated by the University of Southampton nearby,

or may itself be a product of those leatherworks.¹⁰⁷⁴ If this is the case, then it is likely that among the leather products made were *baṭṭat* (singular *baṭṭa*), which are mentioned in several of the texts as containers for sugar, wheat, or barley, and as commodities themselves.¹⁰⁷⁵ *Baṭṭa* (literally “duck”) is a term that philologists have taken to mean a container of leather (or, less likely, glass), perhaps more or less in the shape of a duck,¹⁰⁷⁶ or as a measure of volume for flour equivalent to 1.5 *waybas*.¹⁰⁷⁷ One of the Quseir al-Qadim documents reveals that many of those used at Quseir al-Qadim could hold about 8 kg of grain,¹⁰⁷⁸ although another text, which refers to a small *baṭṭa*-container sent to Quseir al-Qadim, indicates they were not all of one size.¹⁰⁷⁹ A few texts request *baṭṭat* to be sent from Quseir al-Qadim to the Nile Valley, or acknowledge their arrival.¹⁰⁸⁰ 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.¹⁰⁸¹

Guo has published thirteen texts from Locus J9d-4, nearly 30 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,” a term connoting grain.¹⁰⁸² Three of these, Texts 1, 3, and 38, are addressed to Abū Mufarrij; two additional texts (RNs 966d and 967c) are addressed to Abū Mufarrij, but are otherwise too fragmentary to be published.¹⁰⁸³ Letters are also addressed to Brother Najīb, Brother

¹⁰⁷¹ Al-Maqrīzī 1980, 222, 225.

¹⁰⁷² And see discussion regarding Southampton finds in Thomas 2011, 218–19.

¹⁰⁷³ Guo 2004, 160–63, Text 12.

¹⁰⁷⁴ Cf. water skins excavated at Qaṣr Ibrīm in Nubia, W. Y. Adams 1996b, 126; Peacock and Blue 2006a, 166–68.

¹⁰⁷⁵ Guo 2004, Texts 12, 37, 49, 67.

¹⁰⁷⁶ Guo 2004, 33, n. 19.

¹⁰⁷⁷ Mortel 1990, 179.

¹⁰⁷⁸ Guo 2004, Text 49.

¹⁰⁷⁹ Guo 2004, 227–28, Text 37.

¹⁰⁸⁰ Guo 2004, Texts 27, 31, 37. 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). *Baṭṭat*, makers of leather bottles, are also frequently mentioned, as is the *Zuqāq al-Baṭṭātīn*, the lane of the leather bottle-makers in Fuṣṭāṭ. These containers (also *ziqq*, *qirāb*, *ḡirāb*, and *mizwad*) and hides and skins were also frequently mentioned commodities in those documents (Goitein 1967, 111, n. 78, 334, n. 7).

¹⁰⁸¹ E.g., RN 1017c, Guo 2004, 34.

¹⁰⁸² Guo 2004, Texts 1, 3, 12, 38, 47, 59, 63, 64.

¹⁰⁸³ Guo, personal communication.

Aḥmad, and Abū al-Ḥamd, usually at the warehouse of Abū Mufarrij.

The writer of RN 970a urges Abū Mufarrij to immediately sell the goods he is sending to him, and to accept payment only in Egyptian dinars rather than Meccan.¹⁰⁸⁴ Dinars struck in Mecca were extremely uncommon before the early fifteenth century and are rarely mentioned in the Arabic literature;¹⁰⁸⁵ there seem to be no surviving dinars struck in Mecca by the Ayyubids or Rasulids known from excavations or collections.¹⁰⁸⁶ It is perhaps their unfamiliarity that leads them to be mistrusted here.¹⁰⁸⁷

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.¹⁰⁸⁸ 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.¹⁰⁸⁹ RN 966a is a list of accounts, perhaps of money owed to Ibrāhīm or the company for the certain amounts of grain listed next to individual names. It reveals that an *irdabb* of wheat (70 kg) costs nearly twenty-six dirhams, while the accounts in RN 966b total forty-three *irdabbs* of wheat, or about 3,000 kg passing through the warehouse of Abū Mufarrij from only nine suppliers.¹⁰⁹⁰ RN 970b gives a glimpse into the organization of merchants and brokers, and reveals the relationship between the *ḥiml*, a measure of volume, and the *irdabb*, a measure of weight: Abū Mufarrij is to receive five *ḥimls* (loads) of wheat weighing sixteen *irdabbs* from the *ʿarif*, or trade-head, Abū ʿUmar, who would likely have been a government-appointed.¹⁰⁹¹ Thus one *ḥiml*-load weighs about 3.2 *irdabbs*, or 224 kg. The trade-head appears in RNs

966a and 977, as well. Letter RN 967b promises a tax payment, to be delivered to the shore, port, or anchorage of Quseir (*sāḥil* al-Quseir) to the care of Ibrāhīm ibn Abū Mufarrij, and is dated “the end of Jumādā I, the year 612” which is equivalent to the second half of September, 1215 CE.¹⁰⁹² Additional contents seem to mention a herd of camels or perhaps even a troop of cavalry.¹⁰⁹³ 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 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.*¹⁰⁹⁴

Several of the letters in this locus name several individuals but do not refer directly to Sheikh Abū Mufarrij or to Sheikh Ibrāhīm. Letter 968b sends no greetings to Ibrāhīm or his family, even though the goods are shipped to the warehouse of Abū Mufarrij. RN 967a, one of the rare complete letters, names several persons but not Sheikh Ibrāhīm or Abū Mufarrij.¹⁰⁹⁵ The accounts in Texts RN 966a and RN 966b also do not mention Ibrāhīm or Abū Mufarrij. RN 969 includes greetings to several people, but Ibrāhīm and Abū Mufarrij are not among them. Thus, in this third phase of occupation at the house, it seems that the business of Abū Mufarrij's company is run by several people, including his trusted associate Najīb,

¹⁰⁸⁴ Guo 2003, 117; 2004, 135–38, Text 1; Mortel 1989, 300.

¹⁰⁸⁵ Also see Jazm 2003–2005, 358–59, esp. n. 2607; Mortel 1989, 300.

¹⁰⁸⁶ Album 1998.

¹⁰⁸⁷ But see Guo 2003, 117–18 for other possible reasons for the merchant's preference for Egyptian dinars.

¹⁰⁸⁸ Chapter 5; Guo 2004, Text 2.

¹⁰⁸⁹ Guo 2001, fig. 5; 2004, 265–73, Texts 63–64.

¹⁰⁹⁰ Guo 2004, 35.

¹⁰⁹¹ Guo 2004, 229, Text 38.

¹⁰⁹² Friedman 2006, 402; Guo 2004, 246, Text 51; Regourd 2011, 340.

¹⁰⁹³ Guo 2004, 245–47.

¹⁰⁹⁴ Guo 2004, 314.

¹⁰⁹⁵ Guo 2001, fig. 4; 2004, 258–60, Text 59.

although the warehouses are still known by his name. Alternatively, Abū 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 which sends greetings to Sheikh Najīb regarding several common items and luxury textiles sent to Quseir al-Qadim in return for cakes, flour, and “crops” (grain). The items received at Quseir al-Qadim are wheat, two jars (*ǧarratayn*) of soap, three large sacks (*šūwalāt*), three ropes, rice, sacks (*tillis*) of flax,¹⁰⁹⁶ flour, “a fine *kiswa*-robe, tailored in pure silk, fine shawls, and fine *ǧalābīyah* clothes.”¹⁰⁹⁷ 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 *ǧarra* referred to in this text is a common term for jars, also used in eighth to tenth century CE Arabic papyri from Madīnat Fayyūm and Edfu.¹⁰⁹⁸ 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 document may have been brought from Tunisia, Greater Syria, or Iraq, or even have been made locally at Qift.¹⁰⁹⁹ The upper part of the page is missing, so the recipient is unknown, but greetings are sent to Najīb. The last two texts, RN 1004a and 1004b, are shipping notes to

Abū Mufarrij (one of which greets Najīb) about grain, one shipment possibly delivered by a boat named “Good Tidings.”¹¹⁰⁰

Locus K9b-48, the continuation of Loci J9d-4 and K9b-41 to the west, contained 116 fragments of paper, which include a drawing (pl. 83:a), block-printed amulets containing quotations from the Qurʾān (RN 1009a, b¹¹⁰¹), a hand-written amulet (RN 1016b), and eleven shipping notes.¹¹⁰² The amulets in this locus may be linked with the remains of thirteen *Terminalia* fruits, perhaps indicating, as Wetterstrom suggests in chapter 3, that Sheikh Ibrāhīm practiced folk medicine in addition to preparing amulets.

One of the shipping notes from K9b-48 is addressed to Ibrāhīm and sends greetings to both his parents. It is about fine flour that is intended to feed the “youths,” probably referring either to pilgrims or a military group.¹¹⁰³ The verso contains a letter to the sender of the note on the recto, carried by Ḥusayn, probably the brother of Ibrāhīm. Two unpublished shipping notes only preserve the addressee, Ibrāhīm, but none of the contents (RNs 1011, 1013a), and another to Najīb (at the storeroom) of Abū Mufarrij mentions *baṭṭa*-containers (RN 1017c). Four more are either addressed to Abū 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.¹¹⁰⁴

Several additional texts do not mention Sheikh Abū Mufarrij or Sheikh Ibrāhīm at all, but send information on shipments of fabric, waist wrappers,¹¹⁰⁵ cloaks, flour, and rice, and one also offers condolences on the death of the recipient’s daughter.¹¹⁰⁶ As Guo notes, 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.¹¹⁰⁷ RNs 1012b and 1013b, too fragmentary to be

¹⁰⁹⁶ Cf. Goitein 1967, 333.

¹⁰⁹⁷ Guo 2004, Text 27. An empty sack was found under the floor of Storeroom E in Locus J10c-17.

¹⁰⁹⁸ Vorderstrasse 2014.

¹⁰⁹⁹ Goitein 1967, 154; Smith 1995, 133.

¹¹⁰⁰ Guo 2004, Texts 40–41.

¹¹⁰¹ For which cf. W. Y. Adams 1996, pl. 56; Phillips 2003; Thomas and Masser 2006, 139.

¹¹⁰² Guo 2004, 3, 12, 76–77, 80, 88, pl. 1.

¹¹⁰³ Guo 2004, Text 21.

¹¹⁰⁴ Guo 2004, 143–48.

¹¹⁰⁵ An item of Yemeni dress, see Guo 2004, 62–63.

¹¹⁰⁶ Guo 2004, Texts 28, 72.

¹¹⁰⁷ Guo 2004, 204, Text 29.

fully published, preserve a shipping note to Abū ʿAlī (brother of Abū Mufarrij) and an outgoing letter sent to someone in the town of Qenā on the Nile.¹¹⁰⁸ RN 1015c appears to be the record of a witnessed court proceeding, or some kind of issue brought before a *qādī*, who is also a *faqīh*, named Zayn al-Dīn.

This text is also of note because it seems to stipulate that fees are to be paid in *dirāhim waraq*, the irregular cut-flan dirhams (also referred to as *dirāhim ʿaswad*, 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-Kāmil Muḥammad in AH 622/1225 CE.¹¹⁰⁹ 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 AH 622/1225 CE, 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, including thirty-six paper fragments the latter of which include a letter, RN 1022, regarding the shipment to Ibrāhīm ibn Abū Mufarrij at “the shore of Quseir al-Qadim” of wheat, stone-ware cups, a sugar container, a juice presser, and eleven fine sprinkler bottles, the last of which would have been made of glass.¹¹¹⁰ 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.¹¹¹¹ Another letter to Ibrāhīm, RN 1020b, informs us that he is a *ḥaṭīb*, one who gives sermons, and that his father Abū Mufarrij, was a *ḥāḡḡ* himself; the sermons found in

Phase I of the North House may have been authored by Ibrāhīm. This letter also possibly reveals that Ibrāhīm is head of the trading guild, although the reading is tentative.¹¹¹² A letter dated 1224–1231 CE, and thus probably belonging to Phase IIa (RN 1020a), informs a son of Abū Mufarrij, most likely Ibrāhīm, of a shipment of ropes.¹¹¹³ RNs 1021a and 1021b are shipping note or certificates concerning clothes and flour.¹¹¹⁴ 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 Ibrāhīm (although his name does not appear), and the other a list of cleared accounts. The document also provides the professions of several Quseiris: *ʿarīf* (superintendent), *ṣīrāfī* (money-changer), *qādī* (municipal judge), *raʿīs* (head of a profession), *wālī* (police chief, or mayor), *naḡḡār* (carpenter—Guo indicates this could also be read as *baḡār*, sailor), and *saqqāʿ* (water carrier—an extremely important profession in this waterless town). Few commodities are listed: almonds, a *baṭṭa* 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.¹¹¹⁵ 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 (tables 19–20). A largely undecipherable and therefore unpublished letter from this locus, RN 1019d, is addressed to Abū Mufarrij.¹¹¹⁶

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 mudbrick 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 fragments of rope, bits of worked wood, iron nails, a copper coin (Ayyubid, dating 1218–1238 CE), and 164 pottery

¹¹⁰⁸ Guo 2004, 59.

¹¹⁰⁹ Guo 2004, Text 70; Schultz 1998.

¹¹¹⁰ Guo 2004, 249–50, Text 54.

¹¹¹¹ Meyer 1992, 78–79, pl. 15:397.

¹¹¹² Guo 2004, Text 18.

¹¹¹³ Guo 2004, Text 17.

¹¹¹⁴ Guo 2004, Texts 30, 61.

¹¹¹⁵ Guo 2004, Text 67.

¹¹¹⁶ Guo, personal communication.

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 mentioning familiar items: “pure” grain, butter, chickpeas, soap, almonds, eggs, and a *barniya* of lighting oil are sent care of Abū Ishāq Ibrāhīm’s agent; the almonds and eggs are gifts rather than merchandise.¹¹¹⁷ 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 warehouse. 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 Burseracean¹¹¹⁸ origin.”¹¹¹⁹ Tree resin, *sandarūs*, is mentioned in a letter found outside the Sheikh’s House, and would have been a traded commodity in the medieval world, used in perfumes, ointments, and varnish.¹¹²⁰ 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 *ḡilāb* that plied the Red Sea, which he observed in port at ‘Ayḏāb, were caulked with “the shaving of the palm trees” and, as previously mentioned, bound together with coconut fiber ropes rather than nails.¹¹²¹

In the North House, Room B, three paper fragments were excavated in Locus K9b-36, the debris lying on the floor. None of the fragments are published, but two have been partially read: RN 999a mentions a merchant of Syrian origin (with the

nisba “*al-šāmī*”), and RN 999b notes that “the slave boys from Qenā . . . are coming in a boat.”¹¹²² This locus contains a high density of sherds and other small finds, including date pits, exotic hazelnuts, pistachio, remains of pomegranate, and eight *Terminalia* 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 Fustāt, 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-Qadim), a coconut, and one fragment of rope. Other 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.¹¹²³ RN 998 is an important shipping note, as it mentions the *ra’īs al-tuḡḡār*, a term believed to refer to the head of the Kārimī guild of merchants (pl. 83:b).¹¹²⁴ RN 997 nicely correlates to the finds in the locus as it is a brief note to Ibrāhīm regarding a shipment of flax he is to receive from an Alexandrian merchant. In this note Ibrāhīm’s *kunya* is “son of Abū Mufarrij,” after which the phrase “may God have mercy on

¹¹¹⁷ Guo 2004, 103, 256, Text 58.

¹¹¹⁸ *Burseraceae* is a family of trees and shrubs that secrete balsam and resin (Montasir and Hassib 1956, 276).

¹¹¹⁹ Beck and Moray 1979.

¹¹²⁰ Guo 2004, 43–44; Milwright 2001; 2003; also see Regert et al. 2008.

¹¹²¹ Broadhurst 1952, 65; Chakravarti 2002, 47.

¹¹²² Guo 2004, 59, 64.

¹¹²³ Guo 2004, 80–81. Fragments of the text of the RN 996 group were found in Loci 27, 28, 30, and 31.

¹¹²⁴ Guo 1999a, fig. 2; 2004, 64, Text 20.

him” is inserted, clearly referring to Abū Mufarrij’s death.¹¹²⁵

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).¹¹²⁶ The pottery included pieces from Yemen and the Nile Valley: one sherd of Yemen 4 Trackware, Yemen 1 Black on Yellow, Nile 3 monochrome 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.¹¹²⁷ The names of the persons mentioned in the petition do not include either Abū Mufarrij or Ibrāhīm. Guo suggests the petition would have been submitted to the Ayyubid court in Qūs or even in Cairo, but presented to Abū Mufarrij or Ibrāhīm as a certificate to be redeemed for the wheat.¹¹²⁸ RN 1056a is both a shipping note and a personal letter.¹¹²⁹ The ink on RN 1056b is largely too faded to read but for a mention of the entrepôt of ‘Aden in the Yemen.¹¹³⁰

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 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 Fustāṭ) 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 ‘Aswān Medieval White Ware. Two legible 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 Abū Mufarrij.¹¹³¹ RN 1063a is a shipping note addressed to Ibrāhīm (here “Sheikh Abū Ishāq”) dated “the year six hundred and twelve” (1215 CE),¹¹³² which must have come from Phase I.

Storeroom 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 *zakāt* tax. Entries are in amounts of one thousand *waybas*, but the commodity (presumably grain) is not listed; no names are preserved on the document.¹¹³³ The fragmentary unpublished documents include a shipping note mentioning brass and copper objects (RN 986b). It is possible that these objects were made in Qūs, as local toponyms preserve the memory of a copper quarter in the northern part of the town.¹¹³⁴ The Cairo Geniza documents mention copper as an Egyptian export to the east.¹¹³⁵ Other documents from this locus preserve references to textiles of various sorts:

¹¹²⁵ Guo 1999a, fig. 2; 2004, Text 53.

¹¹²⁶ Guo 2004, Text 62.

¹¹²⁷ Guo 1999a, fig. 4; 2004, Text 74.

¹¹²⁸ Guo 2004, 295.

¹¹²⁹ Guo 2004, Text 78.

¹¹³⁰ Guo 2004, 62.

¹¹³¹ Guo 2004, Text 10.

¹¹³² Guo 2004, Text 50.

¹¹³³ Guo 2004, Text 66.

¹¹³⁴ Garcin 1976, 275.

¹¹³⁵ Goitein 1954, 192; 1973, 79, 117.

accounts contain lists of quantities of garments sold (RN 987), and a shipping note mentions cloth for burial shrouds (RN 986a).¹¹³⁶ Numerous textile fragments in this context include undyed fabric and 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 business are date pits and numerous rope fragments. 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 Abū Ishāq Ibrāhīm ibn Abū Mufarrij, who is to put it in a secure place,¹¹³⁷ and another (RN 1054) is too damaged to read anything but the mention of waist wrappers, as noted above, a Yemeni item of dress.¹¹³⁸

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 mudbrick 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)¹¹³⁹ 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.¹¹⁴⁰

The 1,025 date pits found in this storeroom constitute 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 30 cubic m of soil excavated from the southeast corner of Corridor D, which clearly demonstrates the use of this space for storage. The published document, RN 1066a, concerns the shipment of not only two *qīṭa*'s of flour, but also half of a *ḥiml* (load) of dried dates, which would be about 112 kg of dates and the only mention of this apparently popular commodity in the documents. The letter is addressed to the shore of Quseir, to Abū Mufarrij, whose *nisba* here is *al-Qiftī*, “from Qift,” an ancient town just north of Qūs on the Nile, and along with Luxor an administrative center (*kura*) in the ninth and tenth centuries.¹¹⁴¹ Abū Mufarrij seems to represent a typical Qiftī, who are described by Yāqūt (1179–1229) as entrepreneurial, even traveling to India.¹¹⁴² Another document from this locus, RN 1059, makes mention of the city of Qūs, the district capital (pl. 84:a) and a second one is addressed to Ibrāhīm (RN 1060a), but has no other contents preserved.¹¹⁴³

¹¹³⁶ Guo 2004, 13, 40–42, 48.

¹¹³⁷ Guo 2004, Text 57.

¹¹³⁸ Guo 2004, 42.

¹¹³⁹ Vogelsang-Eastwood 1989, 114, nos. 56–57.

¹¹⁴⁰ Goitein 1967, 153, 210.

¹¹⁴¹ Garcin 1976, 66; Guo 2004, Text 16.

¹¹⁴² Yāqūt 1990, vol. 3, 435; and see Golb 1974, 136.

¹¹⁴³ Guo 2004, 3, 59.

In Storeroom E to the north of Storeroom F, in Locus J10c-11, RN 988c bears a zodiac chart and block-printed words in red and black.¹¹⁴⁴ A shipping note pieced together from two of the remainder of the fifteen RN 988 fragments is dated the fourteenth of *Ṣafar*, 633, or 1235 CE. It lists items that have been sent to the warehouse of Abū Mufarrij on behalf of Sheikh Nabigh and the jurist ʿUthmān: twenty-seven *irdabbs* of wheat, seven *barānī* of lighting oil, and ten ropes.¹¹⁴⁵ Locus J10c-11 is the main stratum of Storeroom 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 *barānī* 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.

Storeroom B contained a fragment of a letter that was torn and dispersed over the area. Part of RN 977 was found in Locus J10a-7, one piece was found in Locus J10a-6 (the surface debris of Storeroom 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, which likely would have been made at Qūs, a ship-building center in this period.¹¹⁴⁶ 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 Marl 4 monochrome) and one fragment of a painted wooden bowl (RN 542).¹¹⁴⁷

Mercantile evidence is seen in three date pits and a piece of rope.

Also in this phase of Storeroom 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 >2.0 sherds per cubic m and 4.3 date pits per cubic m. 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 *qullas*, 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 Ibrāhīm ibn Abū Mufarrij. The sender also instructs him to forgive the debts of the servant of Baraka and an unnamed porter.¹¹⁴⁸ This man named Baraka is perhaps the same Ḥājj Baraka whose name appears on one of the wooden keys found in the threshold of Storeroom E, also from this phase.¹¹⁴⁹

In Locus K9b-38, a deep accumulation of debris at the south end of Corridor D, four paper fragments out of twenty-three were legible, which among them contain six documents, as two of the leaves were reused. RNs 1001a and 1003a are shipping notes sent to Sheikh Abū Mufarrij about deliveries of chickpeas, flour, and wheat.¹¹⁵⁰ The paper of RN 1001a was reused to write several lines of magic characters on the

¹¹⁴⁴ Guo 2001, fig. 3; 2004, 88.

¹¹⁴⁵ Guo 2004, Text 46.

¹¹⁴⁶ Garcin 1976, 209; Guo 2004, Text 65.

¹¹⁴⁷ See Hiebert 1991, 145.

¹¹⁴⁸ Guo 2004, Text 52.

¹¹⁴⁹ Pl. 85; Guo 2004, 248; Hiebert 1991, 157.

¹¹⁵⁰ Guo 2001, fig. 1; 2004, Text 4; Thayer 1993, 213.

verso as an amulet or charm.¹¹⁵¹ RNs 1003c/1004d 1003b are business letters sent to Brother Najīb at the warehouse of Abū Mufarrij and to Sheikh Abū ‘Alī Ḥusayn at the shore of Quseir al-Qadim about perfume, riding animals, and “women’s wraps decorated with gold and gems,”¹¹⁵² and also reveal the exchange rate in Qenā and Qūs.

Locus K10a-11 is contiguous with K9b-38, and likewise was very rich in finds, trash blown in from elsewhere in the site. Twenty-three fragments of paper were recovered from this locus, a handful of which were decipherable. RN 1062b contains fourteen lines of a sermon-like text on both sides of the paper,¹¹⁵³ perhaps authored by Sheikh Ibrāhīm, and is one of the most complete sermon fragments found in the Sheikh’s House. RN 1062a is business correspondence between Muḥammad ibn Abū Mufarrij and a client.¹¹⁵⁴ Two other important documents seemingly provide direct links to the Ḥijāz and to the Yemen. In RN 1059 three merchants (among them two sons of Abū Mufarrij) are stuck in “deadly” and “extremely cold” weather in a place called Qaṣr al-Yamānī, perhaps in the Yemen, and request food, water, and warm clothes.¹¹⁵⁵ 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.”¹¹⁵⁶ 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 *sharīfs* of Mecca had *waqf* lands in Upper Egypt at Qift, Qenā, Damamin, and the district of Naqada, which supplied them wheat beginning in 569/1174;¹¹⁵⁷ a request for grain from the *sharīfs* of Mecca to the sultan in a time of scarcity is reported for the Mamluk period in Maqrīzī’s *Sulūk*.¹¹⁵⁸

In summary, Phase I Ib, because it contains the most documents, also contains the widest variety of references to trading partners with Quseir al-Qadim.

Qift and Qūs 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 Kārimīya, is also seen in documents from this phase. The proliferation of names of outsiders (not family members) testifies to the use of the warehouse by numerous merchants and brokers. Documents illustrate the port of Quseir al-Qadim’s official role in the supply of grain to the Ḥijāz, notably in the petition from Banu Shayba of Mecca, and the petition by pilgrims, and also its close supervision by the Ayyubid authorities, probably from Qūs. Material remains illustrate both domestic life in the ceramic, metal, and wooden objects, and mercantile activities in the large quantities of date pits, rope, textiles, and leather goods or leather containers as well as Chinese and Yemeni ceramics, and Mediterranean pomegranates and pistachios. In addition, Phase I Ib provides the strongest evidence for medical or healing activities at the Sheikh’s House, as fifty-eight *Terminalia* fruits are known from this phase, concentrated in Room B of the South House and Rooms B and C of the North House (see Wetterstrom, this volume).

SURFACE DEBRIS AND UNSTRATIFIED LOCI

Several letters and documents were also recovered from the surface layers (fig. 57), many of which seem to originate in Phase I Ib. 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 mud-brick debris from the collapse of the wall, containing a rich domestic and mercantile assemblage. The legible 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 Storeroom C, and

¹¹⁵¹ Guo 2004, 81, Text 39.

¹¹⁵² Guo 2004, 167, 200, Texts 13, 26.

¹¹⁵³ Guo 2004, 70–72.

¹¹⁵⁴ Guo 2004, Text 23.

¹¹⁵⁵ Pl. 84a; Guo 1999a, fig. 3; 2004, 9, Text 9.

¹¹⁵⁶ Guo 2004, Text 75.

¹¹⁵⁷ Also see al-Maqrīzī 1980, 50, 56; Garcin 1976, 134, 244, nos. 3, 5–7, 45, n. 2.

¹¹⁵⁸ Garcin 1976, 203, n. 5.

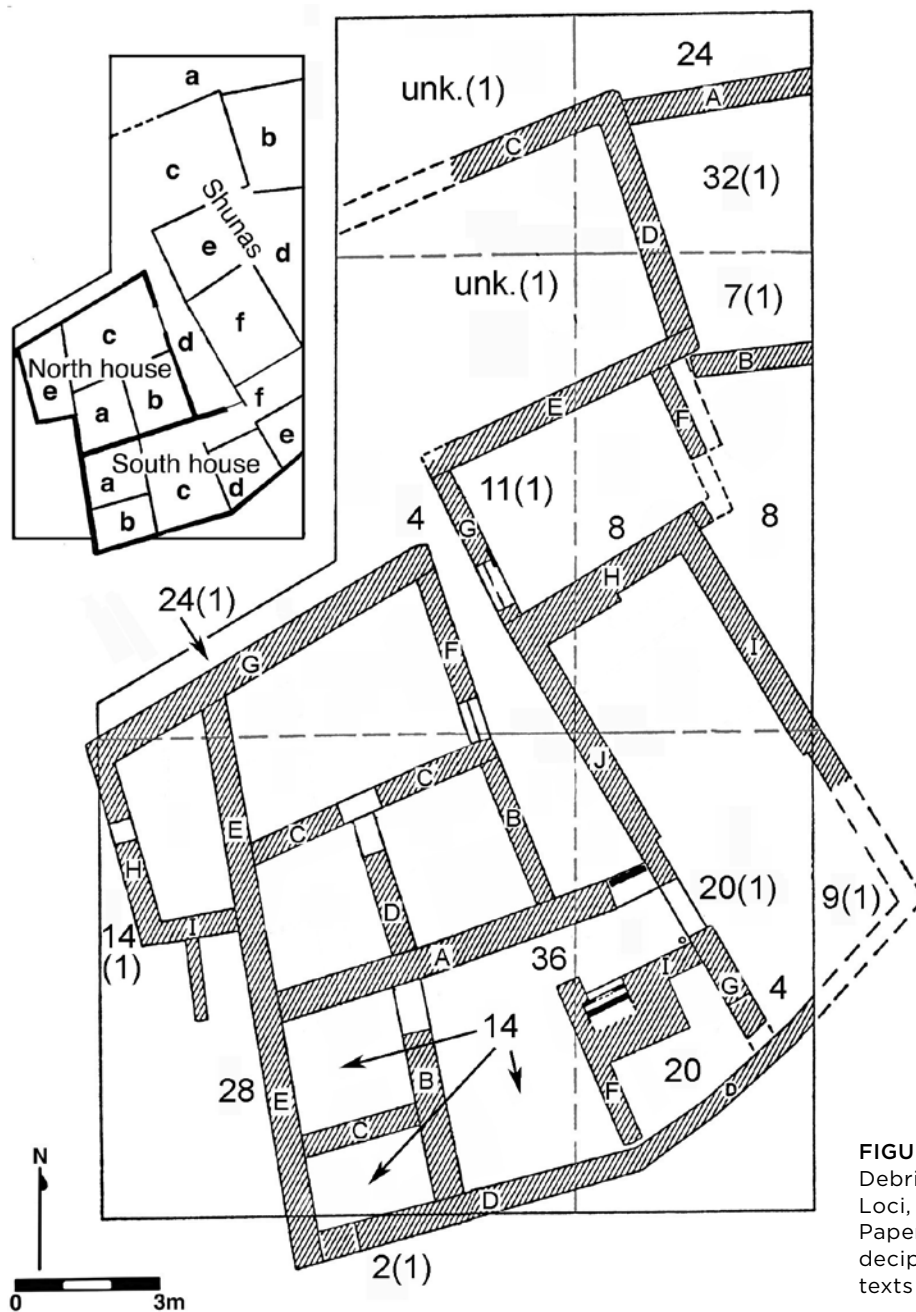


FIGURE 57. Surface Debris and Unstratified Loci, Distribution of Paper Finds. Number of deciphered or published texts in parentheses.

Locus J10a-7 in Phase IIb of Storeroom 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 warehouse of Abū 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."¹¹⁵⁹ 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 (chapter 4).

The surface debris in Storeroom B was excavated as Locus J10a-2 in the northern half of the room and

¹¹⁵⁹ Cf. Goitein 1983, 232; Guo 2004, 263–65, Text 62.

J10c-2 in the south, and reached bedrock very quickly in the northern three-quarters of the room. It was extremely rich in commercial and domestic finds. Legible 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 warehouse of Abū Mufarrij, and reveals the conversions from *himl* to *irdabb* to *wayba*, and even to *baṭṭa* (it appears that one *baṭṭa* could hold 8 kg of flour or barley, see Guo 2004, Text 49). 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.¹¹⁶⁰ Among the other thirty-one fragments of paper, one was complete, an amulet folded and tied with string.¹¹⁶¹ It contains twenty-nine lines with nearly 100 repetitions of the single word *huwa*, “he,” referring to God.¹¹⁶² Locus J10c-2 contains RN 980a, a letter addressed to Abū Ḥasan ‘Alī al-Mu’awwal, who is both a *qādī*, a judge at the *sharī’a* court, and a *hakam*, a judge of the municipal court. It is sent to him at *sāhil al-Quseir al-Qadim*, the shore, port, or anchorage of Quseir al-Qadim.¹¹⁶³ Abū Ḥasan’s title *hakam* suggests that Quseir al-Qadim possessed its own law court, which has not been traced in the excavations; it is likely that court was held in a building that served more than one purpose. A candidate is the large, decorated building unearthed by the University of Southampton.¹¹⁶⁴ Similarly, as *qādī*, Abū Ḥasan likely held court at the mosque,¹¹⁶⁵ but other locales could be shops or, in a large enough town, at the gate of a neighborhood.¹¹⁶⁶ The title of *qādī* also points again to Quseir al-Qadim’s connection with Qūs, as this position was an appointment by the provincial governor at Qūs.¹¹⁶⁷

Part of RN 977 was found in Locus J10a-6 of Storeroom C, one piece was found in Locus J10a-7 in Phase IIb of Storeroom 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 Storeroom C, and is fairly dense with material culture.¹¹⁶⁸

Another document (RN 984b) folded and tied with string was found in this storeroom (Storeroom 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 warehouse of Abū Mufarrij.¹¹⁶⁹ The second unpublished document from this locus is a tiny scrap of an amulet with only two lines of writing.¹¹⁷⁰ RN 984a is a shipping note for wheat and rice to be delivered to the warehouse of Abū Mufarrij.¹¹⁷¹ As in the surface levels of this storeroom, the debris below, blown against the south wall, was rather dense in finds.

In Storeroom 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 legible. 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.¹¹⁷² A woman’s name, Asma Um Musa, is also written on the verso, but upside 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 locus contents give clear indication of its use for storage, but 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 warehouse of Abū Mufarrij spent considerable time there or even slept overnight to safeguard the goods.

¹¹⁶⁰ Guo 2004, 64.

¹¹⁶¹ RN 978, in Guo 2004, pl. 4.

¹¹⁶² Guo 2004, 81.

¹¹⁶³ Guo 2004, Text 25.

¹¹⁶⁴ Beadsmoore and Walsh 2006.

¹¹⁶⁵ Hallaq 1998, 418.

¹¹⁶⁶ Petry and Mendenhall 1978, 58.

¹¹⁶⁷ Goitein 1971, 312.

¹¹⁶⁸ E.g., pl. 84:b.

¹¹⁶⁹ Guo 2004, 2, pl. 4.

¹¹⁷⁰ See Guo 2004, 80, RN 985a.

¹¹⁷¹ Guo 2004, Text 45.

¹¹⁷² Guo 2004, 307–9, Text 80.

Table 3. Dated Letters and Shipping Notes

Document No.	Date	Notes	Location	Published
RN 967b	"The end of Jumādā I, the year 612" (Second half of September, 1215)	Goods sent care of Ibrāhīm ibn Abū 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 Jumādā, the year 62_" (anywhere in 1224–31 CE)	Addressed to Sheikh Abū Ishāq Ibrāhīm ibn Abū Mufarrij	Locus K9b-49; N House, Rm C	Guo 2004, 175, Text 17
RN 1017g	626/1228	—	Locus K9b-48; N House, Rm C	—
RN 1063a	612/1215	Addressed to Sheikh Abū Ishāq 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 <i>Ṣafar</i> , year 633" (29 October, 1235)	Addressed to Sheikh Nabigh at the shore of Quseir al-Qadim, the warehouse of Abū Mufarrij	Locus J10c-11; Storeroom E	Guo 2004, 238–40, Text 46

The South House contained one legible 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 (*ḥuḡḡāḡ*), presumably on their way to Mecca.¹¹⁷³ The locus, because it is composed of wind-blown sand and other debris, contains a variety of materials of all categories.

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 legible 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 Sūrat al-Kahf, which is commonly found on amulets.¹¹⁷⁴

In summary, these surface documents provide further information on the religious activities of the inhabitants, the presence of government officials in the town, and the movement of pilgrims through the port. Regarding commerce, they also provide the most concrete evidence for goods coming from

Damascus (RNs 979c, 980b). Syrian imports are possibly seen in the Marl 4 underglaze-painted ceramics discussed in chapter 2, in numerous kinds of nuts imported from Palestine and perhaps beyond, and possibly in basalt grindstones.

THE DATING OF THE SHEIKH'S HOUSE

The dated paper documents provide a narrow range of AH 612–633, or between 1215 and 1235 (table 3). 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 5, broadens the dating slightly so that together they provide a date range of 1215–1249 CE, the final years of Ayyubid rule in Egypt (table 4), falling well within the thirteenth century parameters of the ceramics and glass.

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 4). Indeed all dated letters, almost all coins, and most of the decipherable documents

¹¹⁷³ Guo 2004, Text 33.

¹¹⁷⁴ Canaan 2004, 133; Guo 2004, Text 83; Qur'an 18:9–22.

Table 4. Dated Documents: Coins, Letters, and Shipping Notes

<i>Stratum Description Dated Contents</i>	<i>Phase</i>	<i>Locus Number</i>	<i>Dated Contents</i>
<i>North House, Room C</i>			
Possible surface below plaster floor of K9b-57	I	K9b-63	RN 694, half dirham of al-Şāliḥ Nağm al-Dīn Ayyūb, dated 644–646/1246–1248 (see pl. 81a)
Accumulation on plaster floor, below floor of K9b-48	Ila	K9b-57	RN 699, late Fatimid coin (1100–1169 CE)
Uppermost stratum, debris of room collapse on top of floor of K9b-48	Iib	J9d-4/K9b-41/K9b-48	RN 967b, letter dated 1215 CE; Letter RN 1017g dated 626/1228
<i>North House, Room A</i>			
Debris on floor	Iib	K9b-46	RN 685, fals of al-Kāmil Muḥammad, 1218–1238
<i>North House, Room B</i>			
Pit in northeast corner of K9b-36 floor	Iib	K9b-39	RN 683, globular half dirham of al-Kāmil Muḥammad, 1218–1238
<i>Storeroom E</i>			
Wall collapse lying on floor of storeroom	Iib	J10c-17	RN 696, half dirham datable to 1242–1249 (see pl. 81b)
Wall collapse lying on floor of storeroom	Iib	J10c-11	RN 988, letter dated 1235
<i>South House, Vestibule F</i>			
Wall collapse lying on plaster floor	Iib	K10a-12	RN 1063a, letter dated 612/1215
<i>South House, Room B</i>			
Mud brick wall and ceiling collapse, containing an earthen floor	Iib	K9d-1 (=K9b-43, K9b-28)	RN 698, dirham of al-Şāliḥ ʿIsmāʿīl, 1242–1245 (Damascus); (see pl. 81c)
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 1246–1249
<i>South House, Exterior</i>			
Erosion from Room D to the south of the exterior wall, over the slope	—	K10a-7	RN 682, globular half dirham, possibly dating 1225–1250

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-Şāliḥ Nağm al-Dīn Ayyūb, dating 1246–1248 CE, 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 storeroom in Phase I. 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 help 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, Storeroom F was used, Room C of the North House was used as a storeroom, and what became Rooms A and B of the North House were used as a courtyard, can be estimated to have begun ca. 1215 CE or just before. As the coins and letters indicate, occupation at the Sheikh's House must have

ended ca. 1250 CE or just after (see table 4). In terms of archaeological time this is already quite short, 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 Abū Mufarrij and Ibrāhīm.¹¹⁷⁵ RN 1063a, dated AH 612/1215 CE, is addressed to Sheikh Abū Ishāq at the shore of Quseir al-Qadim. As Guo notes, the use of the address "sheikh" indicates that by this date Ibrāhīm was considered a mature man, and must have been no younger than twenty.¹¹⁷⁶ This suggests that Abū Mufarrij was at least forty in AH 612/1215 CE.¹¹⁷⁷ The letter with the latest date, RN 988, was written twenty years later in AH 633/1235 CE, and is addressed to Sheikh Nabigh at the shore of Quseir al-Qadim, the warehouse of Abū Mufarrij. According to Guo reference to his storeroom is likely, although not certainly, to have been made only during Abū Mufarrij's lifetime,¹¹⁷⁸ perhaps around sixty years of age. Also in Phase IIB a shipping note to Ibrāhīm, RN 997, refers to Abū 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 Abū 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. 1235 to 1250 CE can be suggested for Phase IIB, during which time Abū Mufarrij died at an advanced age, perhaps nearing seventy-five.¹¹⁷⁹

This leaves ca. 1215–1235 CE to be divided between Phase I and sub phase IIA. Text 1027a of Phase IIA may provide a clue for its division. It mentions troops assembling in Quseir al-Qadim in preparation to battle the Franks.¹¹⁸⁰ 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 AH 615/1218 CE, as fighting raged along the coast and inland, and various towns and forts exchanged hands throughout the early 600s/1200s.¹¹⁸¹ Nevertheless, the best candidate for a fight in which these soldiers might have participated is the siege of Damietta, also known as the Fifth Crusade, begun in 1218 and lasting until 1219 CE, when the city fell, with negotiations and uncertain military actions continuing until the Franks accepted terms from Sultan al-Kāmil Muḥammad and evacuated the city in 1221 CE.¹¹⁸² For this engagement a general call to arms was issued throughout Egypt in the year AH 616/1219 CE, from 'Aswān to Cairo, "and not a soul was to stay behind."¹¹⁸³ This would make the date of this letter 1218 or 1219 CE, and leads to 1218–1235 CE for the proposed date range of Phase IIA, with the proposed date range of Phase I then being 1215 (or just before) to 1218 CE, and of Phase IIB being 1235–1250 CE.

The four remaining dated letters can then be assigned to their appropriate phase. RNs 967b and 1063a, both dating AH 612/1215 CE, belong to Phase I, and RNs 988 and 1020a, which together date to 1224–1231 CE, belong to Phase IIA. As described above, that they were all found in Phase IIB, and that three were addressed to Ibrāhīm may indicate

¹¹⁷⁵ Guo 2004, 3–4.

¹¹⁷⁶ Putting his birthdate ca. AH 592/1195 CE, Guo 2004, 3.

¹¹⁷⁷ Putting his birthdate ca. AH 572/1176 CE or before.

¹¹⁷⁸ Personal communication October 11, also see 2006; 2004, 3.

¹¹⁷⁹ This is not an unusually long lifespan compared to those of the educated men found in Udfūwī's biographical dictionary *Al-Badr al-sāfir wa tuhfāt al-musāfir*, on which Garcin relies heavily for his religious history of Upper Egypt. For example, Maḡd al-Dīn al-Quṣayrī, eventually *qādī* of the region or perhaps of all Egypt, lived 581–667/1185–1269 (Garcin 1976, 174–75), and Ibrāhīm Abū Ishāq al-Ṣaybānī (not to be confused with our Ibrāhīm Abū Ishāq), vizier of Aleppo from a Qiftī family, lived 594–658/1198–1260 (Garcin 1976, 153).

Also compare the correspondence of the wealthy Jewish merchant of Fuṣṭāṭ, Ibn 'Awkal, which spans thirty years. The oldest letter dated 1008 CE references two grown sons in business with him, indicating he must already be middle-aged. The last dated letter is from 1038 CE, when he must have been seventy at the youngest (N. A. Stillman 1973, 17).

¹¹⁸⁰ Guo 2004, 212, 215.

¹¹⁸¹ E.g., al-Maqrīzī 1980, 136–71.

¹¹⁸² Al-Maqrīzī 1980, 72–90, 166–67; M. Chamberlain 1998, 222–23; Garcin 1976, 148; Holt 2004, 80–81.

¹¹⁸³ Al-Maqrīzī 1980, 180.

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.

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 re-inserted 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 Abū Mufarrij, an almost equal number are addressed to his warehouse, and nearly thirty letters are addressed to Ibrāhīm.¹¹⁸⁴ Letters sent to Abū Mufarrij and Ibrāhīm are never addressed to the warehouse of Abū Mufarrij, but rather simply to Quseir or to the shore or port of Quseir, when a location is specified.¹¹⁸⁵ Letters are addressed to the

warehouse of Abū 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 Ibrāhīm had far fewer than his father of either (table 5). Guo's count of Abū Mufarrij's suppliers includes those sending shipping notes addressed to him, and those sending goods to the warehouse of Abū Mufarrij.¹¹⁸⁶ In addition, Abū Mufarrij had a close business associate, Sheikh Najīb, who did not work for Ibrāhīm, and several other associates or partners.¹¹⁸⁷ All of this points to two separate businesses operating out of the same space.¹¹⁸⁸

The presence of business letters addressed to Sheikh Ibrāhīm on the earliest floor of Room C, when it was used as a storeroom, indicates Sheikh Ibrāhīm was running his own part of the business from the beginning. 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, rather than that they were independent, if cooperative, operators from the beginning.¹¹⁸⁹ This is corroborated by the earliest of the dated documents (which were all found in the latest phase) from 1215 CE, also addressed to Ibrāhīm as *sheikh*.¹¹⁹⁰ Numerous religious documents in the same stratum, including sermons and lunar dials, may point to this room's contemporaneous use as Ibrāhīm's office, since we know from a Phase IIB text that he was a *ḥaṭīb*, or sermon-giver at the local mosque.¹¹⁹¹ One unpublished shipping note addressed to Abū Mufarrij was found on this floor as well (RN 1036a), suggesting there was not a strict division of the space and Abū 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 Room C remained the domain of Sheikh Ibrāhīm the sermon-giver and astronomer/astrologer throughout its use.

¹¹⁸⁴ A slightly different proposal for the organization of the Sheikh's House and its business 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.

¹¹⁸⁵ Guo 2004, 2–3.

¹¹⁸⁶ Guo 2004, 18–19, 22.

¹¹⁸⁷ Guo 2004, 11–13.

¹¹⁸⁸ Guo 2004, 93.

¹¹⁸⁹ E.g., Guo 2004, 10, 93.

¹¹⁹⁰ Guo 2004, 3.

¹¹⁹¹ RN 1020b: Guo 2004, Text 18.

Table 5. Suppliers/Clients of Sheikh Abū Mufarrij and Sheikh Ibrāhīm

<i>Abū Mufarrij</i>	<i>The warehouse of Abū Mufarrij</i>	<i>Ibrāhīm ibn Abū Mufarrij</i>
<i>Phase I</i>		
‘Asākir ‘Alī al-Mamlūki (RN 1037c, Phase I, 1066a, Phase IIb)	—	Yahyā (RN 1037a)
—	—	Sa‘d al-Jamālī (RN 1042a)
—	—	‘Abd al-Raḥman Abū Ḥamd (RN 1040b)
<i>Phase IIa</i>		
Ibrāhīm ibn Nāṣir Allāh (RN 1026a)	—	Abū ‘Uthmān (RN 1029a)
—	—	Aḥmad (RN 1025)
<i>Phase IIb</i>		
Al-Muẓaffar and Abū Bakr (RN 970a)	‘Alī ibn Iḥsān (RN 966c)	Sheikh Ḥasan, “the merchant of Alexandria” (RN 997)
al-‘Arif Abū ‘Umar...Daylam al-Mālīki (RN 970b)	‘Alī ibn Badr (RN 968b)	‘Abd al-Akram (RN 981b)
‘Alī ibn Ḥusayn al-Jābirī (RN 972a)	Mubārak (RN 1005a, surface, 1018a, Phase IIb)	Ḥājī Ja‘far (RN 1022)
‘Abd Allah (RN 972b, 1003c/1004d)	Rashīd ibn Najm al-Dīn (RN 1026b)	—
‘Ajlān Abū Maḥmūd (RN 982a)	—	—
Muḥammad ibn Sharīf al-Iṣṭākhrī (RN 1001a)	—	—
‘Alī ibn Ḥijāzī (RN 1003a)	—	—
Nāji (RN 1004a)	—	—
Mu‘īn [al-Dīn] (RN 1004a)	—	—
‘Abd Abū al-Sa‘āda ibn Riḍwān and Kīlān (RN 1063b)	—	—
Unnamed woman (RN 1021a)	—	—
<i>Surface</i>		
‘Umar al-‘Adī (RN 975)	—	—
Faraj al-Ḥāṭībī (RN 1064a)	—	—
The ‘Umar ibn Muḥammad family (RN 1090a)—found outside the Sheikh’s House in Trench L8c	—	—

Source: Guo 2004, 18–19

The stratification of the letters suggests that Abū Mufarrij did not enter into partnership with Sheikh Najīb until Phase IIa, or perhaps even Phase IIb. Only one document mentioning Sheikh Najīb is found in IIa, and all remaining documents that mention Sheikh Najīb, either addressed to him or sending greetings to him, were found in Phase IIb. According to Guo, Text 8 (RN 1026b) from Phase IIa indicates that Najīb is an employee or associate of Abū Mufarrij at this time.¹¹⁹² Texts from Phase IIb,

on the other hand, illustrate a partnership between Abū Mufarrij and Najīb that is of the *commenda* type also seen in relationships between merchants in the Cairo Geniza documents.¹¹⁹³ Thus while Najīb 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 Abū Mufarrij’s business was apportioned to others as he aged, or that he was

¹¹⁹² Friedman 2006, 403; Guo 2004, 151.

¹¹⁹³ Guo 2004, 13.

renting out space in the warehouse to other brokers in town, where they could receive mail. Recipients of business letters and shipping notes, sent either to the warehouse of Abū Mufarrij or the shore or port of Quseir al-Qadim (or which have no location specified) are Brother Aḥmad, Abū al-Ḥamd (who is accepting goods meant for “the master,” which could refer to Sheikh Najīb, Sheikh Abū Mufarrij, or Sheikh Ibrāhīm), Sheikh Abū ‘Alī Ḥusayn (the brother of Abū Mufarrij), Abu ‘Arafāt, Abū ‘Uthmān Mithqāl, and Muḥammad, the son of Abū Mufarrij. No business letters or shipping notes from the preceding sub phase, Iia, or even from Phase I, are addressed to anyone other than Abū Mufarrij or Ibrāhīm, making the appearance of these letters in Phase Iib all the more striking. Only one document from Phase I contains no mention of Ibrāhīm or Abū Mufarrij, and it is not a business letter but a petition to a high-ranking Ayyubid official named Rashīd al-Dīn ‘Alā’.¹¹⁹⁴

For this phase Sheikh Abū Mufarrij’s activities are most comparable to the office of *wakīl al-tuǧǧār*, 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 (*wikāla*) 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 *wikāla* also served as a post office.¹¹⁹⁵

Evidence from the South House suggests that some time during Phase Iib Sheikh Abū 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 Ibrāhīm “the son of Abū Mufarrij—may God have mercy on him!”¹¹⁹⁶ The multitude of shipping notes addressed or sending greetings to Abū 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. Around 1215 CE, Abū Mufarrij, a respected broker from Qift, and a *ḥāǧǧ* with grown sons, builds a house on the Red Sea shore at Quseir al-Qadim with his son Ibrāhīm, also a broker. The younger sons may be with them at this time as well.¹¹⁹⁷ 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 Ḥijāz, 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 of grain across the Red Sea to make the *ḥāǧǧ*. 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 store-rooms 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. 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 Ibrāhīm, 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 Abū Mufarrij tended to use this space as an office as well, but while Ibrāhīm kept goods in his office, Abū Mufarrij used the large storehouse across the corridor.

¹¹⁹⁴ RN 1049: Guo 2004, Text 73.

¹¹⁹⁵ Goitein 1963, 201.

¹¹⁹⁶ Guo 2004, 249, Text 53.

¹¹⁹⁷ Guo 2004, 10.

Just a few years later, by perhaps 1218 CE, the grain business had increased and the same small quantities of high-priced commodities continued to arrive. Pilgrims continued to use the port, and the constant flow of travelers kept Sheikh Ibrāhīm busy with amulets for their protection. As Ibrāhīm had his own affairs to attend, Abū Mufarrij hired Sheikh Najīb to help with his shipments, and also occasionally rented out space in his warehouse to other brokers. It seems that Ḥusayn and Muḥammad acquired wives and children around this time, or they and their brother ʿUmar moved from the Nile Valley to live with their father and brother. 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).¹¹⁹⁸

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 secure room was built to its north, with a high threshold and a door that locked.

Around 1235 CE, Abū Mufarrij, by this time very aged, asked Sheikh Najīb to partner with him and hired Abū ʿAlī Nuʿmān to help as well. By now the warehouse of Abū 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 other brokers were making use of the warehouse, perhaps

leasing space from the family, and Abū Mufarrij's brother and another son, as well as Ibrāhīm, continued to make use of Abū Mufarrij's warehouse for their own businesses. Nuḥ and Şubayḥ, grandsons of Abū Mufarrij, were now old enough 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 this warehouse.

Some time later Abū Mufarrij died, and for a while Ibrāhīm and the others carried on their affairs in Quseir al-Qadim, Ibrāhīm 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.¹¹⁹⁹

CONCLUSIONS

This imagined retelling of the history of the complex makes use of the texts and documents at more than

¹¹⁹⁸ Cf. extended-family households discussed in Cuno 1999, 317–23, table 14.1; Goitein 1978, 38–40; 1983, 85.

¹¹⁹⁹ 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 ah 650/1252–53 CE, taking advantage of another Frankish siege of Damietta in 1250 and the death of al-Mu'azzam Turan-shah, the last Ayyubid sultan, as noted by Ibn Ḥaldūn (and see Garcin 1976, 183–85, 372–79; Ḥaldūn 1867, 375). Revolts like this, along with skirmishes between qaysi and Yemeni tribes, only intensified in the following decades, continuing into the early fourteenth century and bringing massive Mamluk military operations into the Şaʿīd to quell them. This disrupted the eastern desert routes to ʿAydāb and no doubt also to Quseir al-Qadim (Garcin 1976, 372–79; cf. a previous period of disruption at the turn of the twelfth century in Goitein and Friedman 2008, 239–40). Because of the Egyptian government's reliance on nomadic or semi-nomadic tribes to police trade and pilgrimage routes, and these tribes made up a large proportion of the population of Upper Egypt, traffic to Quseir al-Qadim may have been suspended for a time even though the revolt was not in the immediate vicinity of Qūs or Quseir al-Qadim (Garcin 1976, 372–73). This would 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 immediately 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 the full publication of the ceramics from the University of Southampton's excavations.

one level, but both within Whitcomb's primary degree of relationship (described in the Introduction to this volume). 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 "warehouse of Abū 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 chapters three, four, and five) such as date pits, always in higher quantity in the storerooms; textiles, which occurred in much greater quantities there; and the faunal finds, which did not. Interpretation 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 Ibrāhīm is referred to as a *ḥaṭīb*, or giver of sermons. The town had other institutions as well. The possible administrative building uncovered by the University of Southampton may have been the customs house, overseen by the chief of police or mayor (*wālī*, who is mentioned in

the Sheikh's House documents).¹²⁰⁰ Another option would be a *dār al-zakāh* for the collection of this tax on certain imports, as is known at Ayyubid 'Aden,¹²⁰¹ or law court. Finally a *sūq* 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 9.¹²⁰²

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. Another aspect of this secondary relationship, however, 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 Abū Mufarrij's sons Muḥammad and Ḥusayn, who occasionally participated in his business not only at the warehouse,¹²⁰³ but as couriers¹²⁰⁴ and perhaps buyers,¹²⁰⁵ along with their wives and children.¹²⁰⁶ The estimated minimum number of persons is eleven, including another son 'Umar and his son Nuḥ, Ṣubayḥ the son of Ḥusayn, Ishaq the son of Ibrāhīm, and the wives of Abū Mufarrij, Ibrāhīm, Ḥusayn, and 'Umar, the last of whom is the recipient of letter RN 1056a. 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 60.2 square m. This would provide 5.47 square m available space per person, which falls close to the figure of 6 square m that Charles C. Kolb reached using data from ethnoarchaeological studies of Mesoamerican peasants. In doing so he refined the widely cited figure of 10 square m per person reached by Raoul Naroll in his

¹²⁰⁰ Smith 1996, 211; also see Varisco 2002.

¹²⁰¹ Smith 1995, 134.

¹²⁰² Blue et al. 2006.

¹²⁰³ Guo 2004, 194.

¹²⁰⁴ Guo 2004, 186.

¹²⁰⁵ Guo 2004, 155.

¹²⁰⁶ Guo 2004, 9.

study of floor area and population¹²⁰⁷ by eliminating uninhabitable rooms such as bathrooms, sculleries, warehouses, offices, and shop rooms from his count of floor area.¹²⁰⁸ Thus the estimated number of persons living in the complex is not unreasonable compared to modern populations living in pre-modern conditions.¹²⁰⁹

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.

¹²⁰⁷ Naroll 1962, 588.

¹²⁰⁸ Kolb 1985, 584.

¹²⁰⁹ 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, whereas Kolb's method is cited in the standard demography textbook (A. Chamberlain 2006, 126–27). 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 (1994).

CHAPTER 7

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.

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 *sūq* of the Ayyubid town, produced ceramics that may date to the late twelfth century.¹²⁰⁹ It is even possible that Quseir al-Qadim was settled as early as the end of the eleventh or beginning of the twelfth century, 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.¹²¹⁰

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. This would coincide with the plundering of 'Aydāb by Renaud de Châtillon in AH 578/1182 CE, from which that port never fully recovered, although it continued to be an important node of trade until at least the mid-fifteenth century.¹²¹¹ Since AH 569/1174 CE, de Châtillon had made the land route for the Muslim pilgrimage once again impassable, so that the sea route via 'Aydāb was the only available option until the treaty won by Ṣalāḥ al-Dīn in AH 592/1195 CE.¹²¹² The port at Quseir al-Qadim may have been established in order to meet the immediate need for a southerly Egyptian port after the attack on 'Aydāb. Additionally, the increased pilgrim traffic that must necessarily have been routed through 'Aydāb since AH 569/1174 CE may have already been straining 'Aydāb's capacity as it accommodated commerce, grain shipments to the Ḥijāz, and the rising number of pilgrims. An additional port may have been welcome regardless of the temporary halt of traffic at 'Aydāb in AH 578/1182 CE. Thus pilgrimage, the primary role of Ottoman and modern Quseir up to the nineteenth century, may also have played an important role in the founding of Quseir al-Qadim.

Even after the land route to the Ḥijāz was available again, the Sheikh's House documents indicate that although much less safe than the land route, the sea route was still frequently used by pilgrims. The southerly route to Mecca was the one preferred by Maghrebi Muslims such as the chronicler Ibn Jubayr (ca. AH 579/1183 CE), 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.¹²¹³ This last leg was perhaps by means of the regular caravan from Sijilmasa to

¹²⁰⁹ Blue et al. 2006, 103.

¹²¹⁰ See table 8; and Whitcomb 1995b, 25.

¹²¹¹ Garcin 1976, 136, 422.

¹²¹² Facey 2005; also see Frantz-Murphy 1982, 267, and Garcin 1976, 136–37.

¹²¹³ Garcin 1976, 60–65, 139; Hasan 1967, 75; Jubayr 1952, 50.

Egypt, reported in the Cairo Geniza documents for the Fatimid and Ayyubid period.¹²¹⁴ Further corroboration for Maghrebi pilgrim traffic is found in the numbers of Maghrebi holy men who are known to have lived in Qift, Qenā, and other Nile Valley towns, as they are listed in the biographical dictionaries even in the Mamluk period.¹²¹⁵ Additionally, a Sufi quatrain in Maghrebi script was excavated at Quseir in Southampton's Trench 13.¹²¹⁶ Later Maghrebi connections with Quseir al-Qadim can be traced in a memorial mosque in the modern town, named after Sheikh Mohammed el-Fassy.¹²¹⁷ The southerly (sea) route for pilgrimage was necessary when the northerly (land) route was closed due to war. Maqrīzī chronicled this for the year AH 649/1250 CE, for example, when al-Mālik al-Nāṣir had blocked access to the land route.¹²¹⁸ It was reportedly not until 1266 CE, 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 land route once again became the normal pilgrimage route from lower Egypt and Syria, but the sea route was still used by African Muslims.¹²¹⁹

The archaeological evidence demonstrates Quseir al-Qadim's lively but not extremely high volume trade, and rare references to trading activities at Quseir al-Qadim found in Yākūt, Qalqaṣandī, and the Rasulid *daftar* (see chapter 1) reflect its status as second in importance to 'Aydāb. 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 Hijāz, 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 Hijāz and harbor Yemeni ships to support the long-distance trade that Egypt so relied upon. Its utility extended beyond emergency and supplemented 'Aydāb throughout the Ayyubid and Mamluk periods; it doubtless also benefited by its proximity to the Nile entrepôt of Qūs.

QUSEIR AL-QADIM IN UPPER EGYPT

Quseir al-Qadim's interaction with the city of Qūs on the Nile is of primary importance, as it was situated in the hinterland of Qūs, contributing to that city's prosperity and benefiting from, indeed depending on, its administrative organization. The Red Sea port relied upon Qūs 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 Qūs, as well as merchandise for the outbound trade, especially the grain shipped to the Hijāz.¹²²⁰ As detailed in the previous chapter, several texts from the Sheikh's House indicate the role of Qūs in overseeing and regulating business at Quseir al-Qadim in the Ayyubid period.¹²²¹ This is seen in the private mercantile and official juridical activity of *qudāh*, religious judges, and *faqīhs*, jurists,¹²²² who were official appointees of the government, in this case the *qādī* of Qūs, who in turn was appointed by the *qādī* of Miṣr.¹²²³ We have three letters to *qudāh*, and one also appears in an account of amounts paid or owed to the storeroom of Abū Mufarrij. *Qudāh* in Ayyubid and Mamluk Egypt were known to oversee more than religious and legal matters.¹²²⁴ In the Cairo Geniza documents, *qudāh* of the

¹²¹⁴ Goitein 1967, 79, 212.

¹²¹⁵ Garcin 1976, 60–65, 139.

¹²¹⁶ Regourd 2011, 324–43.

¹²¹⁷ From Fez, Morocco; see el-Zeini 1982, 404.

¹²¹⁸ Al-Maqrīzī 1956–1957, vol. 1, pt. 1, 381–82; as noted by Garcin 1976, n. 1.

¹²¹⁹ F. E. Peters 1994, 93–94.

¹²²⁰ Garcin 1969; 1970; 1976; 1986a; 1991; Garcin et al. 2000.

¹²²¹ And see discussion in Guo 2004, 25, 44–51.

¹²²² Often the same person, in RNs 969, 980a, 1015c, 1064b; see table 17.

¹²²³ Garcin 1976, 325.

¹²²⁴ Frenkel 2002, 104.

Fatimid and Ayyubid periods are frequently engaged in mercantile activities and are very often ship owners and owners of *dār wakāla*, where merchants could stay overnight with their merchandise.¹²²⁵ More significantly, they sometimes acted as the *nāzir*, 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.¹²²⁶ This may provide a context for text RN 1015c, as the *qādī* in this case is ruling on an issue involving two shops in the *sūq* of Quseir al-Qadim.¹²²⁷

In the case of Quseir al-Qadim, the local *qādī* would have shared power with the *wālī* (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.¹²²⁸ 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.¹²²⁹ In addition, the Sheikh's House documents do not give a hint of the activities of the local *qādī* and *wālī* at Quseir al-Qadim other than their both being clients of Abū Mufarrij's storeroom.¹²³⁰ That we have two named *qudāh* may indicate they are active in Quseir al-Qadim at different times. Udfūwī's biographies of religious men serving as *qudāh* and *faqīhs* in early Mamluk Upper Egypt indicates they served in several towns successively.¹²³¹

Additional government connections with Qūs are seen in references to the *ʿarīf*, trade-head, and possibly head of merchants (RNs 970b, 977), or a supervisor of the marketplace appointed by the market police to prevent fraud.¹²³² 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] . . ."¹²³³ It is uncertain whether Quseir al-Qadim would have had its own market police or have been under the jurisdiction of the Qūs market. A petition to a high-ranking Ayyubid official named Rashīd al-Dīn ʿAlāʾ indicates he had some control over, or business interest in, the goings-on at Quseir al-Qadim.¹²³⁴ In several documents, instruction that portions of shipments be withheld for payment of taxes indicates they were collected at Quseir al-Qadim itself.¹²³⁵ Certificates to be redeemed for wheat were apparently presented to Abū Mufarrij or Ibrāhīm, 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.¹²³⁶ As previously mentioned, the *sūq* at Quseir al-Qadim, on which the *qādī* in RN 1015c was supposed to rule, and over which the *ʿarīf* 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 Qūs 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 Qūs uncovered large, well-built brick courtyard houses like those excavated at Fuṣṭāṭ by Aly Bahgat and later by George Scanlon.¹²³⁷ 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 Qūs, as

¹²²⁵ Goitein 1971, 67, 365.

¹²²⁶ Goitein 1971, 365.

¹²²⁷ Guo 2004, 287–89, Text 70.

¹²²⁸ Goitein 1971, 368.

¹²²⁹ M. Chamberlain 1998, 233.

¹²³⁰ Also see Guo 2004, 25.

¹²³¹ E.g., Udfūwī 1914, 301, entry 444.

¹²³² Goitein 1967, 84.

¹²³³ Guo 2004, 205.

¹²³⁴ RN 1049: Guo 2004, Text 73.

¹²³⁵ E.g., Guo 2004, Texts 27, 31, 42, 51, 58.

¹²³⁶ Guo 1999a, 186–90, fig. 4; 2004, 295, Text 74.

¹²³⁷ Bahgat and Gabriel 1921; Scanlon 1966; 1967; 1974a; 1976; 1981; 1984; Whitcomb 1997.

no architecture has been unearthed, although the standing mosque was repaired at the beginning of this period.¹²³⁸ Material remains nevertheless confirm the role of Qūs 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.¹²³⁹ Chinese celadons were also excavated, alongside a wooden box painted in a Nubian or Ethiopian style, and probably of thirteenth to fifteenth century date.¹²⁴⁰

Qūs is ideally placed on the rich plain of Thebes, and Arabic-language 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. The city itself was green; in the fourteenth century, al-ʿUmarī remarks on its numerous gardens, orchards, and herb gardens.¹²⁴¹ It had long been a port on the Nile, shipping grain to Fuṣṭāṭ, and also receiving Nubian goods that had come first through ʿAswān to send on to Fuṣṭāṭ. It had risen to importance under the Fatimids, who reorganized Upper Egypt, making Qūs the capital and center of commercial and military power, while ʿAswān, situated on the frontier, continued to watch over the Nubian border and

to receive goods from Sawakīn (Suakin), a port on the Red Sea that had become second to ʿAyḏāb.¹²⁴² The Fuṣṭāṭ-appointed governors of Qūs, who oversaw the entire Ṣaʿīd, became second in importance only to the vizier of Egypt, to which post they were sometimes promoted.¹²⁴³ Thus Qūs 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 ʿAyḏāb.¹²⁴⁴ At Qūs the goods were loaded on Nile barges and shipped downriver to warehouses in Fuṣṭāṭ.¹²⁴⁵ Likewise Syrian and other Mediterranean goods came up the Nile to Qūs from Fuṣṭāṭ and were sent out through ʿAyḏāb. By the end of the eleventh century, a customs house had been set up at Qūs,¹²⁴⁶ around the time that the Kārimī organization of merchants was beginning (see chapter 1, n. 87), according to evidence in the Cairo Geniza documents.¹²⁴⁷ Additional customs houses were placed at other ports along the Nile, at Aḥmīm, and at Fuṣṭāṭ, at the end of the eleventh century. Communities of Jewish, Christian, and Muslim merchants formed at these places, and they were nodes of customs and local sale, where goods from the Maghreb, Mediterranean, and Lower Egypt also found their way into the markets.¹²⁴⁸ The Quseir al-Qadim documents and material culture indicate a similar community of Muslim merchants, which perhaps included Kārimī, had formed at this small port. Other merchant communities formed in ʿAyḏāb, on the island of Dahlak in the Red Sea, at the port of ʿAden, and at Indian and Chinese ports, composed of merchants from all parts of the Indian Ocean.¹²⁴⁹

¹²³⁸ Garcin 1976, 265, pl. XIX.

¹²³⁹ El-Emary 1967.

¹²⁴⁰ Garcin 1976, 265, pl. XIX.

¹²⁴¹ Garcin 1976, 6. Garcin's sources are Idsrisi's *Description*, 49; Ibn Sai'd, *Kitāb al-Ḡuḡrāfiya*, Monumenta, t. III, fasc. 5, 1089; and al-ʿUmarī, *Masālik al-abṣār fi mamālik al-amṣār*, partly translated by Quatremère, *Mémoires géographiques* I, 194. Qūs is also frequently mentioned in the letters of the Cairo Geniza (Golb 1974, 136–37).

¹²⁴² Garcin 1976, 62, 73, 92, 209; also see Garcin 1980, 436; Hasan 1967, 96; Maspero and Wiet 1919, 157. For more on the history and standing remains of Sawakīn, which functioned until the early twentieth century, see Greenlaw 1995; Bloss 1936a, 1936b; Chittick 1981; Matthews 1953; and Mathew 1956.

¹²⁴³ Garcin 1976, 84–85, 88, 102.

¹²⁴⁴ E.g., Goitein and Friedman 2008, 239.

¹²⁴⁵ Mackenzie 1992, 71.

¹²⁴⁶ Garcin 1976, 101.

¹²⁴⁷ Garcin 1976, 102; Goitein 1968.

¹²⁴⁸ Garcin 1978, 308.

¹²⁴⁹ For surface reconnaissance of the archaeological remains on Dahlak island, see the work of Timothy Insoll (Insoll 2001). For a recent study of Dahlak's role in the India trade in this period, see Margariti 2009.

The success of the port, but more importantly of the administrative organization, also attracted Muslim pilgrims to Qūs by the mid-eleventh century;¹²⁵⁰ they had been traveling to the Ḥijāz through ʿAswān and ʿAydāb since at least the ninth century.¹²⁵¹ Upper Egypt continued to attract pilgrims throughout the Ayyubid and Mamluk periods, even after the northern route was open, as discussed above.¹²⁵² By the Ayyubid period, Qūs was the seat of commerce, government, and military power in Upper Egypt.

THE RED SEA-INDIAN OCEAN TRADE AND THE CULTURE OF THE RED SEA LITTORAL

The material remains at Quseir al-Qadim can help illuminate the culture of the Red Sea littoral traceable not just in the late Ayyubid period, but over a much longer period of time. Brief investigations of four sister ports in the Red Sea, important either for their volume of trade, well-documented material remains, or both, illustrate how Quseir al-Qadim fits the material pattern of Red Sea ports in the middle Islamic period. Indeed, the scientific excavations at Quseir al-Qadim may help predict the findings at the numerous small Red Sea ports that are known but unexcavated.

ʿADEN

ʿAden in the Yemen, which is mentioned in one fragmentary Quseir al-Qadim document (RN 1056b), served as the primary transshipment entrepôt for goods coming to Egypt from India and China, and vice-versa, and had occupied that role since at least the tenth century CE.¹²⁵³ Textual documentation for the trading activities at ʿAden have particular significance for the Sheikh's House and Quseir al-Qadim.

The *Tārīḥ al-mustabṣir*, written ca. AH 625/1228–1229 CE by a merchant named Ibn al-Muḡāwir, lists the merchandise from Egypt and India that was transshipped via ʿAden.¹²⁵⁴ The list of Egyptian goods exempt from customs duties in ʿAden closely corresponds to the list of items compiled from the Sheikh's House shipping notes: flour, sugar, rice, soap from Raqqā in the Ḡazīra, olive oil (which may have come from Bilād al-Šām), potash, *qutara* (a substitute for honey or sugar made of dates),¹²⁵⁵ 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-ʿarabiya*, presumably specifically for export to Muslim lands, and a type called *badiqala*), dates with and without their pits, bracelets (presumably of glass), leather mats, sandals, fish, and male and female goats.¹²⁵⁶ A court archival text, or *daftar*, compiled ca. AH 692/1293 CE for the second Rasulid sultan al-Mālik al-Muzaffar, also provides detailed lists of commodities shipped from Egypt and from India: Indian prickly ash, pepper, and resin (*sandarūs*) came through ʿAden 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 House excavations but not in shipping notes, flax, saffron, and *mahlab*, either a perfumed bark or wild cherry stones, went via Quseir al-Qadim to ʿAden and then on to India.¹²⁵⁷

Archaeological work at ʿAden would perhaps reveal a settlement similar to that at Quseir al-Qadim, if much larger, fortified, and with a better harbor.¹²⁵⁸ 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 ʿAden and Quseir al-Qadim trafficked in some of the same goods, and the ceramic and glass assemblage would also be very

¹²⁵⁰ Garcin 1976, 99–100.

¹²⁵¹ Garcin 1976, 52, 96.

¹²⁵² Garcin 1976, 114–15.

¹²⁵³ Varisco 2002.

¹²⁵⁴ Ducatez 2003, 137–39.

¹²⁵⁵ Thirteenth-century installations capable of producing large amounts of date honey for export have been excavated on Qalʿat al-Bahrain (Kervran, Hiebert, and Rougeulle 2005, 288–89, 382–83).

¹²⁵⁶ Ducatez 2003, 153; also see Smith 1995, 133.

¹²⁵⁷ Guo 2004, table 1; Jazm 2003–2005, 478–79; Lane 1985; Varisco 2002; and cf. Goitein and Friedman 2008, esp. 39.

¹²⁵⁸ Margariti 2002, 55, 60; Norris and Penhey 1955; Prados 1994, 301, 306.

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.¹²⁵⁹ In addition, one would expect to find the *ǧalābīyahs* 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, along with local specimens. 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. Whereas their Mamluk successors set up monopolies to control the spice trade, the Ayyubid sultans made other efforts to control and protect trade. They were able to do so in part because of the connections that the Fatimids had maintained across the Red Sea with Yemen and the Hijāz, which were strengthened by Upper Egypt's existing ties with the Yemen, dating from the movement of several Yemeni tribal contingents into the Sa'ūd during the Muslim conquests.¹²⁶⁰ The Ayyubids were able to retain these connections once they had re-established sunnism in the Yemen, at least at the beginning of their suzerainty, and made continued efforts to control the Yemen and the Hijāz. During their brief rule in Yemen, the Ayyubid governor set up a navy at 'Aden for the protection of merchant ships from pirates.¹²⁶¹ The Ayyubids also established new customs dues on goods coming in to that port and according to textual evidence, built the harbor and the first known *qaysariyya* in 'Aden in AH 571–579/1175–1183 CE.¹²⁶² They also built a *dār al-zakāh*

for the collection of the *zakāt* tax on certain imports, and later a *dār al-wakāla* in AH 625/1228 CE.¹²⁶³ The Ayyubid rulers likewise built the first *funduq* in Qūs in AH 606/1210 CE for the use of all merchants, and Ṣalāḥ al-Dīn abolished taxes on pilgrims and Yemeni merchants in AH 572/1176–1177 CE in order to encourage commerce, although it is not clear it was enforced.¹²⁶⁴ As we have seen, the local governors they installed at Qūs clearly protected the land routes to the Red Sea ports, including Quseir al-Qadim. Government-appointed *qudāh* 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 cloth sacks, leather skins, palm-frond baskets, and sometimes ceramic jars to the port, where they were weighed, counted, and stored safely until the arrival of ships, or until they were put on sale in the port's *sūq*.

Indian Ocean commerce, despite the dangers of shipwreck, piracy, and high customs dues, 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.¹²⁶⁵ 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, they moved clockwise to 'Aden and perhaps to Mokha, al-Buq'ah, or Fazah, and then to Jeddah and across the sea to the Egyptian ports.¹²⁶⁶ 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.¹²⁶⁷ On the return trip they would carry

¹²⁵⁹ Cf. Doe 1963; Lane and Serjeant 1948.

¹²⁶⁰ Garcin 1976, 45, 132.

¹²⁶¹ Serjeant 1988b, 63.

¹²⁶² Serjeant 1988a, 164; 1988b, 63; Smith 1988, 75.

¹²⁶³ Smith 1995, 134; 1996, 209.

¹²⁶⁴ Al-Maqrīzī 1980, 65; Garcin 1976, 141–42; Labib 1970a, 73.

¹²⁶⁵ E.g., Goitein and Friedman 2008, 23, 157–64; Lewis 1976, 469–70.

¹²⁶⁶ Ducatez 2003, 140; Serjeant 1988b, 61. See Facey (2004) on the location of ports in the Red Sea according to the wind regime. This arrangement changed somewhat after 1278 when the Rasulids conquered Zafar east of al-Shihr on the Yemeni coast (see fig. 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 2006, 289, 292), and in the late thirteenth century Egyptians were not allowed to bring ships to 'Aden; rather ships of the Rasulid *dīwān* would visit the Egyptian ports (Jazm 1997, 492).

¹²⁶⁷ Meloy 1998, 61; Serjeant 1988a, 164; Smith 1995, 129. See Facey (2009) for a brief study of Jeddah's role in the India Trade.

Egyptian, Yemeni, and Mediterranean goods, making one or two major stops on the Indian coast.¹²⁶⁸

As a consequence of this commerce, sites in the Indian Ocean littoral display a certain similarity of ceramic assemblage (e.g., at al-Tūr, Quseir al-Qadim, ʿAydāb, ʿAden, Shihr, and even farther out at Sohar, Kilwa, Shanga and Mafia, among others) or at least overlap in certain types, particularly imports from China and India.¹²⁶⁹ Chapter 2 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). Settlement organization and building styles also illustrate this common culture of the Red Sea littoral, which can be detailed in examples from several Red Sea ports for which we have archaeological and survey evidence.¹²⁷⁰

ʿAYDHĀB

ʿAydāb, in whose shadow Quseir al-Qadim lays, 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.¹²⁷¹ It has been the subject of reconnaissance by several scholars, and limited test excavations.¹²⁷² 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.¹²⁷³

The same is true for the glass corpus, which includes numerous glass bangles.¹²⁷⁴ The ceramic types, like those at the Sheikh's House, indicate ʿAydāb's numerous regional connections and include numerous sherds of *Yemen 1* Black on Yellow bowls, an Ayyubid-Mamluk *qulla*, and a few Egyptian earthenwares of the Fatimid period. Numerous imports from China and Thailand include earthenwares (one fragment of which was dated to the sixteenth century), white porcelains, blue and white porcelains, celadons, and brown-glazed jars.¹²⁷⁵

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 Baṭūṭa's descriptions of ʿAydāb as a village of huts Paul suggested are warehouses rather than dwellings.¹²⁷⁶ 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.¹²⁷⁷ A mosque has also been identified on the site.¹²⁷⁸

Textual evidence indicates ʿAydāb's port was used as early as the ninth century CE, but no evidence of this has yet been found, rather the earliest occupation seems to have begun in the eleventh or twelfth century, as the ceramics and glass show.¹²⁷⁹ Maqrīzī and Qalqaṣandī say trade had nearly ceased at ʿAydāb before the third quarter of the fourteenth century CE, but there is evidence for its continued use.¹²⁸⁰ 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

¹²⁶⁸ Goitein 1963, 203.

¹²⁶⁹ References for these sites have been given in chapter 2 on the pottery.

¹²⁷⁰ See Chittick 1980 for an early discussion of littoral culture.

¹²⁷¹ ʿAythab's location vis a vis the wind regime of the Red Sea is surely one of the reasons for its prosperity (Facey 2004, 12–13).

¹²⁷² Bent 1896; Elisséeff and El Hakim 1981; Hobson 1928; Kawatoko 1993b; G. W. Murray 1926; Paul 1955; also see the recent thorough literature review and study of the town and harbor in Peacock and Peacock 2007.

¹²⁷³ Kawatoko 1993b.

¹²⁷⁴ Kawatoko 1993b, 207.

¹²⁷⁵ Kawatoko 1993b, 206–7, fig. 2; G. W. Murray 1926.

¹²⁷⁶ Paul 1955, 167.

¹²⁷⁷ Bent 1896; Kawatoko 1993b, map 2.

¹²⁷⁸ G. W. Murray 1926.

¹²⁷⁹ Kawatoko 1993b; Paul 1955, 65.

¹²⁸⁰ Hasan 1967, 79.

of 'Aydāb in mid-fifteenth-century European travelers' accounts of the Red Sea.¹²⁸¹ For example, when the Portuguese Don João de Castro sailed up the Red Sea in the mid-sixteenth century, he attacked both the Sudanese port of Sawakīn and Quseir (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. Al-Tūr, he observed, was quite pleasant, and he describes Sawakīn's dealings with Jedda, Cairo, Alexandria, and Ethiopia; his omission of 'Aydāb therefore is glaring and seems to signify that it is past importance as a trading center.¹²⁸² The ceramic evidence indicates that it was not abandoned. Nor was it without some importance, as it is mentioned toward the end of the fifteenth century in Arabic sources as the fief of a Mamluk emir, and as a possible destination for the fleeing son of the *Sharif* of Mecca.¹²⁸³

AL-TÜR

Moving to the northern end of the Red Sea, to 'Aydāb's successor in terms of trading dominance of the Egyptian coast, several seasons of excavation at al-Tūr and the surrounding sites have produced an understanding of the use of the area since the Byzantine period, and it is instructive for interpreting Quseir al-Qadim. The fortress at Raya, built in the sixth century and used to the twelfth century CE, is like a walled village, containing streets, residential neighborhoods, and a mosque.¹²⁸⁴ As noted throughout chapter 1, 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.¹²⁸⁵ 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 Raya fortress in the twelfth century CE (perhaps due to the growth of coral reefs) simply meant the relocation of the port farther up the coast, analogous with the relocation of Quseir to the modern site in the late fifteenth or early sixteenth century.¹²⁸⁶ At al-Kilani, now part of the modern city of al-Tūr, ceramic remains indicate some sort of occupation in the twelfth and thirteenth centuries, but no corresponding architecture has been located.¹²⁸⁷ Surveys and test excavations evince three main phases of occupation: fourteenth–sixteenth centuries (residential), sixteenth–eighteenth centuries (also residential), and eighteenth–twentieth centuries.¹²⁸⁸ It is significant that the period that is least represented at al-Tūr is the period of Quseir al-Qadim's floruit, in the thirteenth and early fourteenth centuries. Thus the archaeological evidence supports the textual evidence of 'Aydāb's primary importance and Quseir al-Qadim's secondary importance for Egypt in the Ayyubid period and the beginning of the Mamluk period, both being replaced by al-Tūr in the late fourteenth century.¹²⁸⁹

ATHAR

In Athar on the Tihama coast of Yemen there are formal constructions of coral block, mud brick, and local sandstone, but also a neighborhood of *bārāstī* huts as may yet be found at 'Aydāb. The ruins of Athar are spread over a large area of *sebāḥ* and sand dunes, with the main area of occupation, Area B, built in the *sebāḥ*. This area is approximately 800 x 300 m and comprises structures built of partly shaped coral block, fired bricks, and *libn*. Two of these were excavated and interpreted as merchant quarters and the *sūq* area because of the large quantities of Chinese porcelain found in the smaller of the two buildings.¹²⁹⁰ Area A contained the likely remains of a mosque of mud brick, fired brick, coral

¹²⁸¹ Garcin 1976, 422; contra Garcin 1978, 311.

¹²⁸² Kennedy Cooke 1933, 151, 158–59; also see Lunde 2009.

¹²⁸³ Hasan 1967, 82.

¹²⁸⁴ Kawatoko 2003; 2005a.

¹²⁸⁵ See especially Kawatoko 2003, 2–3.

¹²⁸⁶ Kawatoko 2004.

¹²⁸⁷ Kawatoko 2004.

¹²⁸⁸ Public buildings, Kawatoko 2005b, 853.

¹²⁸⁹ E.g., al-Qalqašandī 1964, vol. 3, 464–65.

¹²⁹⁰ Zarins and Zahrani 1985, 74–75.

block, and sandstone, with a plastered floor, stucco decorations, and decorated column bases. In Area H a large courtyard house of mudbrick, sandstone, and *libn*, is similar to those excavated at Siraf.¹²⁹¹

Area F is a neighborhood of *bārāstī* 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.¹²⁹² The modern huts are built of stripped wooden poles, rope, and mud and dung plaster.¹²⁹³ The excavators suggest it is possible that this occupation postdates the main use of the port, as Yāḳūt details several small settlements near Athar along the coast and inland. Since he is writing after the reputed collapse of the port in the eleventh century, the *bārāstī* ruins may be the remains of one of these later villages.¹²⁹⁴ On the other hand, Areas F and G contained fair quantities of bowls decorated with sgraffiato and dated to the tenth century based on comparisons with Siraf, which is during the port's heyday.¹²⁹⁵ Thus, it seems likely that the informal and formal structures were both part of the port town in the Fatimid period.

THE MATERIAL CULTURE OF THE RED SEA LITTORAL

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 to the fourteenth century CE, but likely beyond these dates. The common use of housing built of poles, reeds, and matting

at sites such as 'Aydāb, Athar, and many port towns around the Red Sea and Gulf, indicates this style of architecture is a hallmark of littoral culture. Whereas excavations at Quseir al-Qadim have to date produced evidence for the use of matting only for roofing of storage or courtyard areas, and perhaps also for sleeping shelters on the roof, Quseir al-Qadim may have had its own neighborhood of *bārāstī*, yet to be excavated.¹²⁹⁶

Structures at Quseir al-Qadim are built 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 of the twelfth and thirteenth centuries in central Quseir al-Qadim, and in the less well-preserved fourteenth-century village on the beach, although no wooden treads or doorsills remain from the latter area. This style of architecture also occurs at al-Tūr in the ninth to eleventh century CE,¹²⁹⁷ and at tenth-century Athar, and can be seen as another hallmark of littoral culture. This technique has inland connections to the Fatimid houses of Qūs on the Nile¹²⁹⁸ and also the Fatimid houses in Fuṣṭāṭ C and the Fuṣṭāṭ Mahra quarter in terms of building materials (brick and stone), orthogonal designs, and wooden doorsills.¹²⁹⁹ The use of stone, coral block, and mud brick to build orthogonal structures suggests the presence of urban populations who have moved to the coast but build using traditional inland plans and techniques with locally available material. Thus while in its ceramic and textile remains Quseir al-Qadim displays evidence of the Red Sea littoral culture present in its sister ports, the settlement can also be seen as an inland town in a coastal location, and part of an urban Egyptian building tradition traceable from the previous Fatimid period at Qūs and Fuṣṭāṭ, and also seen al-Tūr.

¹²⁹¹ Zarins and Zahrani 1985, 72–73.

¹²⁹² Zarins 1989, 246.

¹²⁹³ Zarins and Zahrani 1985, 71–72.

¹²⁹⁴ Zarins and Zahrani 1985, 71–72.

¹²⁹⁵ Zarins and Zahrani 1985, 70, 77–78.

¹²⁹⁶ The Eastern Area was initially interpreted as such a neighborhood, partly owing to the preponderance of matting among the remains, which seemed to have been used as superstructures (Whitcomb and Johnson 1980, 30). The matting may also have been used as awnings set up to shade courtyards (Whitcomb 2004).

¹²⁹⁷ 'Abbasid and Fatimid periods, see Kawatoko 2003, 2–3, pls. 8–9, 26:3, 5.

¹²⁹⁸ Whitcomb 1997.

¹²⁹⁹ Kawatoko 2005b, fig. 2; Kubiak and Scanlon 1989, 11–31, plan I; Sakurai and Kawatoko 1992, pl. II-3-1.

CHAPTER 8

CONCLUSIONS

This study has been an experiment in methodologies available to historical archaeology. Throughout this work I have employed many of the methodologies outlined by Anders Andrén in order to avoid historical archaeology being seen as redundant and producing the same information that could be derived from texts. Another problem often encountered in historical archaeology is that, 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 exploration of why the data they provide may seem to contradict each other. Yet texts that are artifacts present an opportunity for a 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 archaeological 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 her or 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 begun by treating them as external documents and using their read contents to understand the "history" of the Sheikh's House. The texts are employed 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 and contrasts. Armed with this information, the

associations between each text and its archaeological context are then examined with all possible connections explored. Finally all the new information derived from these associations is brought 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.

This exploration of the archaeology of the Sheikh's House at Quseir al-Qadim not only has been useful in its methodological approach, but it has also demonstrated the importance of the Sheikh's House, and indeed the entire site of Quseir al-Qadim, 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 confirmed 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 architectural style, technique, and form. They could rely on the government's agreements with local tribes to protect the routes between Qūs, their main supplier in the Nile Valley, and the Red Sea, and to appoint a *wālī* and *qādī* to ensure lawful business practices. From Qūs, the Nile Valley entrepôt, the brokers and merchants at Quseir al-Qadim were able to procure not only the produce of the region, but also the products of the Fayyūm, 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 Hijāz, 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 warehouse 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 Qūs,

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 the few Chinese porcelains that must have first come through the entrepôt of ‘Aden at the end of their journey across the Indian Ocean. 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 the geographer Yāqūt 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 (Abū Mufarrij) and son (Ibrāhīm Abū Ishāq), 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 Ibrāhīm’s room was expanded to a three-room house, with built-in furniture and a staircase to the roof. The long storeroom east of Abū 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 the warehouse signifies an increase in business. Another subphase, which in the archaeological evidence is signaled by repairs to walls and floors in both houses as well as further expansion of storage space, is accompanied by a much greater

quantity of documents and named clients and a significant increase in named foreign places, including the Yemen and Damascus. It seems numerous Quseiri residents are using Abū Mufarrij’s warehouse as a locus of their own business at this time; it has become a kind of hub for local brokers. It is also a postal destination for the local *qādī* 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 Qūs and the other Nile Valley towns. Ibrāhīm 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 religious and social life of partnerships, 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 mudbrick house

and, together with all the strata and artifacts 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

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 included direct evidence of African connections in the ceramic and numismatic material.¹²⁹⁹ 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.¹³⁰⁰ Nevertheless, the importance of Quseir al-Qadim was declining. Al-Tūr in the Sinai peninsula was renovated in 780/1378–1379 to replace the port of Suez at Qulzum,¹³⁰¹ which had always been an important overland stop between Egypt and Arabia. This led to Al-Tūr's eclipsing of Quseir al-Qadim and ʿAydāb on the Egyptian coast, and coincided with the rise of Jeddah on the Arabian coast, despite the difficulty of sailing north into the northern half of the Red Sea.¹³⁰² 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.¹³⁰³ 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 *iqṭāʿ* lands in Upper Egypt, it is likely that the port continued to supply wheat to the Ḥijāz.¹³⁰⁴ Indeed,

evidence of continued direct communications with Arabia is given by the traveler Ibn Baṭṭūṭa, 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 ʿAydāb instead and avoided shipwreck.¹³⁰⁵

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,¹³⁰⁶ 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.¹³⁰⁷ 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.¹³⁰⁸ This event 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 5, two texts found at its sister fort of Qaṣr Ibrīm mention the Quseir fort and its garrison.¹³⁰⁹ The residents may have lived in *bārāstī* huts outside the fort, similar to those on the

¹²⁹⁹ Whitcomb 1995b, table 1.

¹³⁰⁰ Whitcomb 1983b, 103; 1995b, 27.

¹³⁰¹ Meloy 1998, 65.

¹³⁰² Facey 2004.

¹³⁰³ Marino Sanuto, cited in Bellorini, Hoade, and Ballarmino 1949; von Heyd 1967, vol. 2, 444, n. 2.

¹³⁰⁴ Garcin 1976, 418.

¹³⁰⁵ Ibn Baṭṭūṭa 1929, 123.

¹³⁰⁶ Kennedy Cooke 1933, 151.

¹³⁰⁷ Le Quesne 2004, 147.

¹³⁰⁸ Macklin 2006.

¹³⁰⁹ Hinds and Ménage 1991, 82, 95, 108, 110.

beach at ʿAydāb, according to the somewhat dubious account of Leo Africanus.¹³¹⁰ The archaeological evidence at the fort shows five phases of use, including occupation by Napoleon's troops and reoccupation by Egyptian forces under Muḥammad ʿAlī. 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 Ḥijāz.¹³¹¹ 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.¹³¹² As previously, Quseir continued to be known as a ḥāḡḡ station for pilgrims coming from Darfur and beyond into the early nineteenth century.¹³¹³

¹³¹⁰ Africanus 1979, 615.

¹³¹¹ Le Quesne 2004, 150–54.

¹³¹² J. Bruce, traveling in 1769, see Bernard 1972, 61–62. 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 (Bernard 1972, 61). This is a change from the security situation of the Ayyubid and early Mamluk periods, when the local tribes were used to protect the routes to Quseir al-Qadim.

¹³¹³ F. E. Peters 1994, 97, 214. For recent studies of early modern Quseir, see the work of Dominique Harre (2007; 2005).

APPENDIX B

LOCUS TABLES

Table 6. Locus List

<i>Locus No.</i>	<i>Equivalent Loci</i>	<i>Description</i>	<i>Location</i>	<i>Pottery sherds per cubic m</i>	<i>Phase</i>
J9d-1	J9d-8, J10c-4, J10c-14	Surface debris: wind-blown sand	Storeroom 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	Storeroom C	>0.1	—
J9d-7	J10c-13	Mud brick wall collapse and sand, to bedrock	Storeroom C	0.5	IIa
J9d-8	J9d-1, J10c-4, J10c-14	Surface debris: wind-blown sand	Storeroom E	1.1	—
J9d-9		Debris in door threshold	Storeroom E	0.6	IIb
J9d-10	J9d-6, J10a-6, J10c-1	Surface debris: sand and gravel	Storeroom 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)	Storeroom 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	—
J10a-2	J10c-2	Surface debris: trash in open courtyard	Storeroom 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	Storeroom B	2.4	IIb
J10a-6	J9d-6, J9d-10, J10c-1	Surface debris: sand and gravel	Storeroom C	3.8	—
J10a-7	J10c-7	Organic material on floor and under Wall A	Storeroom B	2.0	IIb
J10a-8	J9d-12	Trash pit with organic and inorganic debris (eastern part)	Storeroom C	0.9	IIb
J10a-9	J9d-12	Trash pit with organic and inorganic debris (eastern part)	Storeroom C	>0.1	IIb
J10c-1	J9d-6, J9d-10, J10a-6	Surface debris: sand and gravel	Storeroom C	3.6	—
J10c-2	J10a-2	Surface debris: trash in open courtyard	Storeroom B	2.8	—
J10c-3	J10c-16	Surface debris: wind-blown sand, bricky material	Storeroom D	0.9	—
J10c-4	J9d-1, J9d-8, J10c-14	Surface debris: wind-blown sand	Storeroom E	>0.1	—
J10c-5	—	Caliche and stony material	Storeroom D	0.3	IIb
J10c-6	—	Organic material: uppermost pit refuse	Storeroom D	1.9	IIb
J10c-7	—	Rocky organic material: middle layer of pit refuse	Storeroom D	0.4	IIb

Table 6. Locus List (*cont.*)

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic m	Phase
J10c-8	J10c-10	Laminations of matting and sand	Storeroom B	2.0	IIb
J10c-9	J10c-10	Laminations of matting and sand to clean sand layer	Storeroom B	0.4	IIb
J10c-10	J10c-8, J10c-9	Test trench: Laminations of matting and sand to clean sand, almost to bedrock	Storeroom B	3.3	IIb
J10c-11	—	Sand and matting to bedrock	Storeroom E	0.4	IIb
J10c-12	—	Soft organic material: lowest layer of pit refuse	Storeroom D	1.3	IIb
J10c-13	J9d-7	Rocky mud brick wall collapse and sand, to bedrock	Storeroom C	>0.1	IIa
J10c-14	J9d-1, J9d-8, J10c-4	Surface debris: wind-blown sand	Storeroom E	1.9	—
J10c-15	K10a-9	Mud brick wall collapse onto plaster floor	Storeroom F	0.3	IIb
J10c-16	J10c-3	Surface debris: wind-blown sand, bricky material	Storeroom D	1.2	—
J10c-17	—	Sand, matting, and fiber on floor	Storeroom E	2.4	IIb
J10c-18	—	Test trench under surface of J10c-18: sand and matting (constructional fill)	Storeroom E	4.3	IIa
J10c-19	J10c-20	Constructional fill under plaster surface of J10c-15	Storeroom F	1.2	I
J10c-20	J10c-19	Test trench: constructional fill under plaster surface of J10c-15	Storeroom F	0.6	I
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
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.	I
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

Table 6. Locus List (*cont.*)

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic m	Phase
K9b-21	—	Earliest floor	S House, Rm A	Unk.	I
K9b-22	—	Constructional fill for floor K9b-21	S House, Rm A	Unk.	I
K9b-23	—	Constructional fill for floor K9b-21	S House, Rm A	Unk.	I
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	>0.1	IIb
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
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

Table 6. Locus List (*cont.*)

Locus No.	Equivalent Loci	Description	Location	Pottery sherds per cubic m	Phase
K9b-53	K9b-55, K9b-56	Test trench: fill to bedrock below plaster floor of K9b-54	N House, Rm A	23.8	I
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	I
K9b-56	K9b-53, K9b-55	Constructional fill below plaster floor of K9b-54 to bedrock	N House, Rm A	3.7	I
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	11.0	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	I
K9b-63	K9b-62	Possible surface below plaster floor of K9b-57	N House, Rm C	3.2	I
K9b-64	K9b-62, K9b-63	Sand and pebble below K9b-63	N House, Rm C	0.8	I
K9b-65	—	Lower plaster surface	S House, Rm C	0.4	I
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
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	>0.1	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 Store-room F	6.8	—
K10a-9	J10c-15	Mud brick wall collapse onto floor	Storeroom F	0.6	IIb
K10a-10	K10a-5, K9b-27	Mud brick wall collapse and sand	S House, Vestibule F, and Store-room 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

Table 6. Locus List (*cont.*)

<i>Locus No.</i>	<i>Equivalent Loci</i>	<i>Description</i>	<i>Location</i>	<i>Pottery sherds per cubic m</i>	<i>Phase</i>
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	—
K10a-15	—	Coarse sand and mud brick debris on plaster floor	S House, Vestibule I, and Storeroom I	3.5	IIb
K10a-16	K10a-15, 17	Test trench outside square: erosion onto storeroom floor	SE corner of Storeroom I	0.1	—
K10a-17	—	Constructional fill on bedrock and under floor	Storeroom I	0.4	I
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	I
K10a-21	K10a-20	Fill below floor of K10a-18 to bedrock	S House, Rm E	0.2	I
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.	—

^a Data is unavailable for the quantities marked "unk." (unknown).

Table 7. Loci by Phase, with Dated Artifacts

<i>Locus No.</i>	<i>Description</i>	<i>Location</i>	<i>Dated Artifact</i>
<i>Phase I</i>			
J10c-19	Constructional fill under plaster surface of J10c-15	Storeroom F	—
J10c-20	Test trench: constructional fill under plaster surface of J10c-15	Storeroom 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	—
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	1246–1248 CE (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	Storeroom 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	—
<i>Phase IIa</i>			
J9d-7	Mud brick wall collapse and sand, to bedrock	Storeroom C	—
J10c-13	Rocky mud brick wall collapse and sand, to bedrock	Storeroom C	—
J10c-18	Test trench under surface of J10c-18: sand and matting (constructional fill)	Storeroom 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	1100–1210 CE (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	—
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	—
<i>Phase IIa Pits</i>			
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	—

Table 7. Loci by Phase, with Dated Artifacts (*cont.*)

Locus No.	Description	Location	Dated Artifact
<i>Phase IIb</i>			
J9d-2	Wind-blown debris	Corridor D	—
J9d-4	Wall and ceiling collapse onto earthen floor of K9b-48	N House, Rm C	1215 CE (RN 967b)
J9d-9	Debris in door threshold	Storeroom E	—
J9d-12	Trash pit with organic and inorganic debris (western part)	Storeroom 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	Storeroom B	—
J10a-7	Organic material on floor and under Wall A	Storeroom B	—
J10c-5	Caliche and stony material	Storeroom D	—
J10c-8	Laminations of matting and sand	Storeroom B	—
J10c-9	Laminations of matting and sand to clean sand layer	Storeroom B	—
J10c-10	Test trench: laminations of matting and sand to clean sand, almost to bedrock	Storeroom B	—
J10c-11	Mud brick wall collapse, sand and matting to bedrock	Storeroom E	1235 CE (RN 988)
J10c-15	Mud brick wall collapse onto plaster floor	Storeroom F	—
J10c-17	Sand, matting, and fiber on floor	Storeroom E	1242–1249 CE (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	—
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	—

Table 7. Loci by Phase, with Dated Artifacts (*cont.*)

<i>Locus No.</i>	<i>Description</i>	<i>Location</i>	<i>Dated Artifact</i>
K9b-46	Earth and plaster floor, and mud brick and organic debris on top of it	N House, Rm A	1218–1238 CE (Ayyubid coin)
K9b-48	Wall and ceiling collapse onto earthen floor, and floor surface	N House, Rm C	1228 CE (RN 1017g)
K9b-66	Upper plaster surface	S House, Rm C	—
K9b-67	Brick tumble and sand over bedrock-dug pit	S House, Rm B	1246–1249 CE (Ayyubid coin)
K9d-1	Mud brick wall and ceiling collapse	S House, Rm B	1242–1245 CE (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	Storeroom F	—
K10a-10	Mud brick wall collapse and sand	S House, Vestibule F, and Storeroom F	—
K10a-11	Mud brick wall collapse	Corridor D	—
K10a-12	Mud brick wall collapse onto plaster floor	S House, Vestibule F	1215 CE
(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 Storeroom F	—
<i>Phase IIb Pits</i>			
J10a-8	Trash pit with organic and inorganic debris (eastern part)	Storeroom C	—
J10a-9	Trash pit with organic and inorganic debris (eastern part)	Storeroom C	1173–1258 CE (Ayyubid coin)
J10c-6	Organic material: uppermost pit refuse	Storeroom D	—
J10c-7	Rocky organic material: middle layer of pit refuse	Storeroom D	—
J10c-12	Soft organic material: lowest layer of pit refuse	Storeroom D	—
K9b-39	Shallow pit dug into earthen floor of K9b-36	N House, Rm B	1218–1238 CE (Ayyubid coin)
K9b-49	Pit in floor of K9b-48	N House, Rm C	1224–1231 CE (RN 1020a)
K9b-61	Ash pit in floor of K9b-48	N House, Rm C	—
<i>Surface Debris and Other Unstratified Loci</i>			
J9d-1	Surface debris: wind-blown sand	Storeroom E	—
J9d-3	Wind-blown debris to bedrock	Area A and Corridor D	—
J9d-6	Surface debris: sand and gravel	Storeroom C	—
J9d-8	Surface debris: wind-blown sand	Storeroom E	—
J9d-10	Surface debris: sand and gravel	Storeroom 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	Storeroom B	—
J10a-6	Surface debris: sand and gravel	Storeroom C	—
J10c-1	Surface debris: sand and gravel	Storeroom C	—
J10c-2	Surface debris: trash in open courtyard	Storeroom B	—
J10c-3	Surface debris: wind-blown sand, bricky material	Storeroom D	—
J10c-4	Surface debris: wind-blown sand	Storeroom E	—
J10c-14	Surface debris: wind-blown sand	Storeroom E	—
J10c-16	Surface debris: wind-blown sand, bricky material	Storeroom D	—
K9b-1	Surface debris	S House, Rm A	—
K9b-6	Test trench down to bedrock	S House, Rm A	—

Table 7. Loci by Phase, with Dated Artifacts (*cont.*)

<i>Locus No.</i>	<i>Description</i>	<i>Location</i>	<i>Dated Artifact</i>
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	—
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	1225–1250 CE (Ayyubid coin)
K10a-8	Surface debris: windblown sand	S House, Vestibule F, and Storeroom F	—
K10a-14	Cleaning for photo	S House, Rm E	—
K10a-16	Test trench outside square: erosion onto storeroom floor	SE corner of Storeroom F	—
K10a-27	Surface debris: mud brick wall and ceiling collapse	S House, Rm C	—

APPENDIX C

POTTERY TABLES

Table 8. Egyptian Ceramic Fabrics and Associated Wares

² Aswān	
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. ² Aswān Medieval White Ware, 950–1400 CE; Ware U6. ² Aswān Medieval Grey Utility Ware, 950–1500 CE
Quseir al-Qadim Locations:	Sheikh's House; both wares also in Merchants' Houses, Eastern Area (in greater quantities)
Sheikh's House Phase:	² Aswān Painted Ware: I-IIb; ² Aswān Utility Ware: I-IIb
<i>Marl 1</i>	
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 1300–1400 CE from Egypt (W. Y. Adams 1986, 576, 578–79, 594) Fustāt 9th–11th c. (Kubiak and Scanlon 1989, 42–46, figs. 59–60, 62–65; Scanlon 1986); and compare vessels in the Tihamah Plain, 1150–1350 CE (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 qullas 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
<i>Marl 2</i>	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Fine-medium
Density:	Medium
Temper:	Common fine-coarse sand, black and red particles, and chaff

Table 8. Egyptian Ceramic Fabrics and Associated Wares (*cont.*)

<i>Marl 2</i>	
Hardness:	Medium-hard
Munsell Colors:	7.5YR 6/4 light brown
Surface Treatment:	Occasional slip
Forms:	Qullas
Parallels/Dates:	Fuṣṭāṭ 8th–9th c. (Scanlon 1974b, 68, fig. 7; 1986, 2, figs. 1–2)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ila–Iib
<i>Marl 3</i>	
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 1000–1500 CE from Egypt (W. Y. Adams 1986, 592)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Surface
<i>Marl 4</i>	
Wares:	Monochrome Glazed; Incised Monochrome Glazed; Underglaze Painted (Black under colored glaze or blue, black on white under colorless); 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
Parallels/Dates:	Various wares in Egypt and Syria: Monochrome Glazed bowls, Hadhramaut 11th c. (Rougeulle 2001, fig. 5:7–9), Manda mid-11th–late 12th c. (Chittick 1984, 81, pl. 35:c); Lamps, Fuṣṭāṭ 12th–14th c. (Kubiak 1970, 13–15, figs. 12–14), Incised Monochrome Glazed/Fuṣṭāṭ Fatimid Sgraffiato (Scanlon 1967, 75; 1971, 228, 9th–mid-13th c.), Tell Minis and Raqqa wares, 11th–13th c. Syria (Mason and Keall 1988, 461; Porter and Watson 1987; Tonghini 1998, 40, 44, 46–51); Incised Monochrome Glazed, Dragon/Phoenix in Fuṣṭāṭ (Bahgat and Massoul 1930, Color plate 2:d), Hadhramaut (Rougeulle 1999, fig. 8:7) Qal'at al-Ja'bar, 11th c. (Tonghini 1998, 39); Incised Monochrome Glazed, Celadon radial design, Fuṣṭāṭ 10th–11th c. (Mikami 1980–1981, fig. 28; 1988, fig. 15:a); Turquoise-glazed jars, Fuṣṭāṭ (Sakurai and Kawatoko 1992, pl. IV-3-7: 1), various sites in Palestine, 12th–13th c. (Avissar and Stern 2005, pl. 9:2); Blue and purple polychrome drip, Fuṣṭāṭ, 9th–11th c. (Scanlon 1974b, 73, pl. 18:6); In-glaze cobalt paint, Qal'at al-Ja'bar, 11th–12th c. (Tonghini 1998, fig. 48:c, 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. 65:a, 66:d, g, h, l, 68:a, 70 [Wares Y and AH, fritware 2]); Silhouette ware, Fuṣṭāṭ, 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

Table 8. Egyptian Ceramic Fabrics and Associated Wares (*cont.*)

<i>Marl 5</i>	
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
Parallels/Dates:	Ware U12, Ballas Drab Utility Ware, in Nubia 1100–1500 from Ballas, Egypt (W. Y. Adams 1986, 571–75)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ila–Ilb
<i>Marl 6</i>	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	Medium-fine
Density:	Dense
Temper:	Moderate fine to coarse sand
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:	Ila
<i>Nile 1</i>	
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 Egypt (W. Y. Adams 1986, 571) Fustāt (Bahgat and Massoul 1930, pl. LX:4)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ila

Table 8. Egyptian Ceramic Fabrics and Associated Wares (*cont.*)

<i>Nile 2</i>	
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: Fuṣṭāt, 11th–12th c. (Bahgat and Massoul 1930, pl. LX:6; Sakurai and Kawatoko 1992, vi, no. 13, 267 no. 2, 93, nos. 6–7; Scanlon 1974b, pl. 16:2; 1986, figs. 180, 184–85); Type 2: ‘Aden (Harding 1964, pls. IV: 34, VI: 3–4)
Quseir al-Qadim Locations:	Type 1 Merchants’ Houses, Sheikh’s House; Type 2 Eastern Area
Sheikh’s House Phase:	I–IIb
<i>Nile 3</i>	
Wares:	Monochrome Glazed, Blue and Yellow Glazed, Slip-painted, Sgraffiato
Manufacture:	Wheel
Texture:	Varies by ware
Density:	Varies by ware
Temper:	Sparse to abundant very fine sand
Hardness:	Hard
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 CE from Egypt (W. Y. Adams 1986, 596–97); slip-painted, ‘Aden (Hardy-Guilbert and Rougeulle 1995, fig. 4:12); “Mamluk” sgraffiato, Qal’at Ja’bar, 1300–1350 CE (Tonghini 1998, 58, figs. 89:k, 91:e, l), Capernaum, 11th c. (Berman 1989, fig. 71:25); Blue and yellow drip glaze, Fuṣṭāt, 10th c. (Sakurai and Kawatoko 1992, x, no. 8, 359 [pl. IV-3-3], nos. 5, 7, and pl. 407 [pl. IV-3-3], nos. 1, 3.)
Quseir al-Qadim Locations:	Sgraffiato = one sherd each in Sheikh’s House, Merchants’ Houses, twenty-nine 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
<i>Nile 4</i>	
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

Table 8. Egyptian Ceramic Fabrics and Associated Wares (*cont.*)

<i>Nile 5</i>	
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
<i>Nile 6</i>	
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:	ʿAden and the Hadhramaut, 800–1150 CE (Whitcomb 1988c, fig. 2:h)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	IIa
<i>Nile 7</i>	
Ware:	Decorated Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Medium-dense
Temper:	Moderate to abundant very fine to medium sand and black particles
Hardness:	Hard
Munsell Colors:	5YR 5/4 reddish brown, 7.5YR 6/6 reddish yellow
Surface Treatment:	Slipped 5YR 6/6–6/8 reddish yellow, 10YR 8/6 yellow
Forms:	Small-medium jars, small bowl
Parallels/Dates:	—
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area
Sheikh's House Phase:	IIb, surface

Table 8. Egyptian Ceramic Fabrics and Associated Wares (*cont.*)

<i>Stoneware</i>	
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:	Fuṣṭāṭ, Egypt, 11th c. (Scanlon 1974b, fig. 3); Meinarti, Nubia, Late Christian, 1200–1365 CE (W. Y. Adams 2002, pl. 16:e3); Hama, Syria (Pentz 1988); Rayy, Iran (Ghouchani and Adle 1992),
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	I–IIb

Table 9. Imported Ceramic Fabrics and Associated Wares

<i>Nubia 1</i>	
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, 1000–1300 CE Ware R21, Post-Classic Christian Polished Orange Ware, dated 1000–1300 CE (W. Y. Adams 1986, 497–98)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Ila
<i>Nubia 2</i>	
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 CE or later (W. Y. Adams 1986, 426–27)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	I
<i>Nubia 3</i>	
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 rotation marks in and out
Parallels/Dates:	Nubian decorative style N.IVA, 850–1100 CE (W. Y. Adams 1986, 52–53)
Quseir al-Qadim Locations:	Sheikh's House
Sheikh's House Phase:	Iib

Table 9. Imported Ceramic Fabrics and Associated Wares (*cont.*)

<i>Yemen 1</i>	
Ware:	Black on Yellow Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Medium
Temper:	Common fine to medium-sized sand and medium-sized dark particles; 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 green paint
Forms:	Bowls on a low footring, either conical with plain rim or hemispherical with ledge rim; filterneck jug (one)
Parallels/Dates:	"Mustard Ware," "Black on Yellow Ware" 13th–14th c. from Fuṣṭāṭ, al-Tūr, 'Aydāb, Yemen, East Africa, Persian Gulf (W. Y. Adams 1986, 597; Chittick 1974b, 304; 1984, 81–82; 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; Kennet 2004, 41–42; Rougeulle 2005, 229–44; Whitcomb and Johnson 1979, 105–6; 1982c, 137–38)
Quseir al-Qadim Locations:	Eastern Area, Sheikh's House, Merchants' Houses, Central Building A, F8–F9, F10a, S12c
Sheikh's House Phase:	I–IIb
<i>Yemen 2</i>	
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, 13th–15th c. Zabid (Mason and Keall 1988, 454, 457, fig. 4:b); Turquoise slip-painted ware, 13th–15th c. Zabid, 'Aden (Mason and Keall 1988, 462; Whitcomb 1988c, 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
<i>Yemen 3</i>	
Ware:	Utility Ware
Manufacture:	Wheel
Texture:	—
Density:	Dense
Temper:	Moderate fine to medium sand; sparse coarse sand
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," 950–1150 CE (Ciuk and Keall 1996, pl. 95/32: c, d); al-Shihr (Hardy-Guilbert 2004, fig. 18:3–5; Hardy-Guilbert and Rougeulle 1997a, fig. 5:14); Sharma (Rougeulle 2004, fig. 12:1–9, cf. esp. 1, 6); Abyan (Hardy-Guilbert and Rougeulle 1997a, fig. 2:5–6); Hadhramaut (Whitcomb 1988c, fig. 8:j)

Table 9. Imported Ceramic Fabrics and Associated Wares (*cont.*)

<i>Yemen 3</i>	
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area
Sheikh's House Phase:	Ila–Iib
<i>Yemen 4</i>	
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 (1150–1350 CE) 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, fig. 2:14–15; 1997b; Rougeulle 2004, fig. 12:9–17; Whitcomb 1988c, 181, fig. 2:e)
Quseir al-Qadim Locations:	Sheikh's House, Eastern Area
Sheikh's House Phase:	I–IIa
<i>Yemen 5</i>	
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
<i>India 1</i>	
Ware:	Black Utility Ware
Manufacture:	Wheel
Texture:	Medium
Density:	Dense
Temper:	Common fine to medium sand and dark temper, moderate coarse dark particles
Hardness:	Hard
Color:	2.5YR 2.5/0 black, 5YR 5/4 reddish brown on some rims
Surface Treatment:	Burnished and incised
Forms:	Carinated cooking pots (handis)

Table 9. Imported Ceramic Fabrics and Associated Wares (*cont.*)

<i>India 1</i>	
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, 160, fig. 13; Hardy-Guilbert and Rougeulle 1995, fig. 6:24; 1997a, 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 Area
Sheikh's House Phase:	I-IIa
<i>India 2</i>	
Ware:	Red Utility Ware
Manufacture:	Wheel
Texture:	Coarse
Density:	Medium
Temper:	Moderate to abundant fine to coarse sand, sparse very coarse sand and elongated voids
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
Surface Treatment:	Slipped
Forms:	Open-mouthed jars, storage jars, cooking pots
Parallels/Dates:	Dull red ware from 13th c. contexts at Barabati Fort in Cuttack near the Bay of Bengal (Rao 2002, fig. 8:6-8); "Fine Indian Red" from Kush, 5th-17th c. (Kennet 2004, 66); al-Shihr (Hardy-Guilbert and Rougeulle 1997b, fig. 5:1); Sharma (Rougeulle 2004, fig. 11:8-13)
Quseir al-Qadim Locations:	Sheikh's House, Merchants' Houses, 19d-19c, Central Building A
Sheikh's House Phase:	I
<i>China 1: Porcelains</i>	
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:	Qingbai wares, 10th-13th c. (Bing 2004, 258-59, fig. 1:7; Emerson et al. 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 (one sherd), Eastern Area
Sheikh's House Phase:	1-3 (I-III)
<i>China 2: Celadons</i>	
Wares:	Kinuta, Yüe, Yaouzhou, and Jingdezhen celadons
Manufacture:	Wheel
Texture:	Fine
Density:	Dense
Temper:	Sparse-moderate silt to very fine sand

Table 9. Imported Ceramic Fabrics and Associated Wares (*cont.*)

<i>China 2: Celadons</i>	
Hardness:	Very hard
Color:	5Y 8/1 white, 2.5Y 6/2 light brownish gray, 5Y 6/1 gray
Surface Treatment:	Molding; incising; milky greenish-blue, colorless, or olive green glaze
Forms:	Bowls
Parallels/Dates:	Kinuta celadons, late 12th–early 13th c. (Gompertz 1980, 148, 164, pl. 86A–B; Hardy-Guilbert 2001, fig. 7:2; P. Morgan 1991, fig. 7:22–23; Sakurai and Kawatoko 1992, pl. IV-4-10:2; Scanlon 1971, 228). Yüe, Yaouzhou, and Jingdezhen celadons, late 12th–14th c. (Bing 2004, 261; Gompertz 1980, pls. 44, 45; Gray 1984, pl. 31; Mikami 1980–1981, fig. 1; 1988, 10, fig. 7:a; Zarins and Zahrani 1985, 78–79)
Quseir al-Qadim Locations:	Sheikh's House, Merchants' Houses (one sherd olive celadon), Eastern Area (kinuta and olive celadons)
Sheikh's House Phase:	I, IIb
<i>China 3: Stoneware Jars</i>	
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
Parallels/Dates:	Jingdezhen brown-glazed jars, 15th c. (Mikami 1988, 12); yellowish-brown glazed jars, 12th c. (Carswell 1979, fig. 12); Glazed buffware jars, 9th–14th 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 10. Distribution of Ceramic 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
'Aswān Painted	1	—	2	6	1	—	—	1
'Aswān 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 Monochrome	2	3	5	15	—	3	22	33
Marl 4 Incised	1	1	9	5	—	4	4	7
Marl 4 Bichrome (blue paint under colorless glaze)	—	—	—	—	—	1	—	—
Marl 4 Bichrome (black paint on white slip under turquoise glaze)	1	1	—	—	—	2	—	3
Marl 4 Silhouette Ware (black paint under blue or green glaze)	—	—	—	1	1	—	—	—
Marl 4 Polychrome (blue and black paint on white slip under colorless glaze)	—	—	—	—	—	3	—	5
Marl 4 Blue, purple, white drip	—	—	—	—	—	2	4	1
Marl 5: Ballas	—	—	1	1	—	—	—	—
Marl 6	—	—	5	—	—	—	—	—
Nile 1 Utility	—	—	2	—	—	—	—	—
Nile 2 Decorated Ware (Slipped and incised water jars)	1	1	1	2	—	—	—	2
Nile 3 Monochrome Glazed	2	—	—	—	—	—	3	19
Nile 3 Blue or black on white slip under colorless glaze	—	—	—	—	—	—	—	5
Nile 3 Lead-glazed Sgraffiato on white slip	—	—	—	—	—	1	1	11
Nile 3 White slip-painted under yellowish-clear glaze	—	—	—	1	—	—	—	—
Nile 3 Incised and glazed (no slip)	—	—	—	1	—	—	—	13
Nile 3 Blue, yellow "splash" glaze	—	—	—	1	—	—	—	6
Nile 4 Utility Ware 1	1	1	—	—	—	—	—	—
Nile 4 Utility Ware 2	—	1	—	—	—	1	—	—
Nile 4 Utility Ware 3	—	—	—	2	—	—	—	—
Nile 5 Utility	1	—	7	3	—	2	—	—
Nile 6 Coarse Utility	—	3	—	—	—	—	—	—
Nile 7 Decorated	—	—	—	4	—	1	—	—
Stoneware	1	—	—	1	—	—	—	—
Nubia 1 Decorated	—	1	—	—	—	—	—	—
Nubia 2 Utility	1	—	—	—	—	—	—	—
Nubia 3 Figural Painted	—	—	—	2	—	—	—	—
Yemen 1 (Black on Yellow)	12	—	3	4	—	1	9	18

Table 10. Distribution of Ceramic Wares at Quseir al-Qadim by Phase and Sub phase: Count by Vessel of Kept and Published Pottery (*cont.*)

<i>Ware</i>	<i>Phase I</i>	<i>Phase IIa</i>	<i>Phase IIa Pits</i>	<i>Phase IIb</i>	<i>Phase IIb pits</i>	<i>Surface Debris and Unstratified</i>	<i>Merchants' Houses</i>	<i>Eastern Area</i>
<i>Yemen 2</i>	1	1	1	1	—	1	—	—
<i>Yemen 3 Utility</i>	—	—	4	1	—	—	—	—
<i>Yemen 4 Trackware</i>	7	3	—	—	—	1	—	—
<i>Yemen 5</i>	—	—	—	—	—	1	—	—
<i>India 1 Black Utility</i>	3	2	—	—	—	—	4	27
<i>India 2 Red Utility</i>	3	—	—	—	—	2	—	—
<i>China 1: qingbai porcelain and Kinuta celadon</i>	1	3	2	5	—	2	1	1
<i>China 1: Blue and White porcelain</i>	—	—	—	—	—	4	—	1
<i>China 2: Celadon</i>	1	—	—	4	—	8	1	18
<i>China 3: Stoneware jars</i>	—	—	—	—	—	4	—	2
<i>Roman</i>	6	5	—	4	—	7	—	—

Table 11. Distribution of Wares at the Sheikh's House by Phase and Sub phase:
Count by Sherd of all Excavated Pottery

	<i>Phase I</i>	<i>Phase IIa</i>	<i>Phase IIa pits</i>	<i>Phase IIb</i>	<i>Phase IIb pits</i>	<i>Surface and Unstratified</i>	<i>Ware Totals</i>
<i>Marl 1 Utility</i>	250	116	200	554	92	158	1,370
<i>Marl 1 Glazed^a</i>	1	5	0	8	0	5	19
<i>Marl 1 Painted</i>	0	2	0	0	0	0	2
<i>Marl 4 Mono-chrome^b glazed</i>	132	140	86	474	30	264	1,126
<i>Marl 4 Incised^c</i>	17	8	13	32	0	9	79
<i>Marl 4 Bichrome (blue only or blue and white paint under colorless glaze)</i>	0	1	0	0	0	0	1
<i>Marl 4 Bichrome (black paint on white slip under turquoise)</i>	1	1	0	0	0	0	2
<i>Marl 4 Silhouette Ware (black paint under blue or green)</i>	0	1	0	1	1	0	3
<i>Marl 4 black, blue under colorless</i>	0	1	0	0	0	0	1
<i>Marl 4 Blue, purple, white drip</i>	9	7	0	24	0	5	45
<i>Marl 4 other splash^d</i>	0	1	0	1	0	0	2
<i>Marl 4 Totals</i>	159	160	99	532	31	278	1,259
<i>Nile 2 Decorated Ware (Slipped and incised water jars)^e</i>	1	10	1	55	0	44	111
<i>Nile 3 Monochrome glazed^f</i>	15	10	2	107	4	68	206
<i>Nile 3 Slip-painted</i>	1	0	0	1	0	0	2
<i>Nile 3 Blue and/or black on white slip under colorless glaze</i>	0	0	0	2	0	0	2
<i>Nile 3 Black under colorless glaze</i>	0	0	0	1	0	1	2
<i>Nile 3 Sgraffiato (white slip)</i>	0	0	0	0	0	2	2
<i>Nile 3 Incised and glazed (no slip)^g</i>	1	0	0	0	0	4	5
<i>Nile 3 Blue, yellow "splash"</i>	0	0	0	28	0	33	61
<i>Nile 3 Totals</i>	17	10	2	139	4	108	280
<i>Stoneware</i>	11	4	0	5	0	1	21
<i>Yemen 1 (Black on Yellow)</i>	54	17	30	48	2	13	164
<i>Yemen 4 Track-wareh</i>	22	1	5	11	1	10	50
<i>China 1: qingbai porcelain</i>	0	1	1	5	0	1	8
<i>China 1: Blue and white</i>	0	0	0	0	0	4	4
<i>China 2: Celadon</i>	1	0	1	9	0	2	13
<i>China 3: Stoneware jars</i>	0	0	0	0	0	5	5

Table 11. Distribution of Wares at the Sheikh's House by Phase and Sub phase:
Count by Sherd of all Excavated Pottery (*cont.*)

	<i>Phase I</i>	<i>Phase IIa</i>	<i>Phase IIa pits</i>	<i>Phase IIb</i>	<i>Phase IIb pits</i>	<i>Surface and Unstratified</i>	<i>Ware Totals</i>
<i>Roman</i>	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	2,087		5,263		2,855	13,739

^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 colorless glaze are unknown except for the single example that has underglaze blue paint, J10c2_3/RN 289 (fig. 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.

^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 colorless 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 colorless glaze, and 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 12. Ceramic Fabrics as Percentage of Total Sherds

	<i>Phase I</i>	<i>Phase IIa</i>	<i>Phase IIa pits</i>	<i>Phase IIb</i>	<i>Phase IIb pits</i>	<i>All Phases</i>
<i>Marl 1</i>	7	9	26	11	2	11
<i>Marl 4</i>	5	8	13	11	8	9
<i>Nile 3</i>	0.5	0.7	0.3	3	1	2
<i>Yemen 1</i>	2	1	4	1	1	1
<i>Yemen 4</i>	0.6	0.07	0.7	0.2	0.3	0.4

APPENDIX D

BONE, GLASS, AND COIN TABLES

Table 13. Summary of Identified Bird Bones from the 1982 Season, by Steven M. Goodman

Bone/Bird	<i>Ammoperdix hevi</i>	<i>Gallus gallus</i>	<i>Pterocles coronatus</i>	<i>Burhinus oedicephalus</i>	<i>Corvus ruficollis</i>	<i>Corvus cf. rhipidurus</i>
Humerus						
L	—	8	1	2	—	—
R	—	10	1	—	—	—
Radius						
L	—	1	2	—	—	—
R	—	3	—	—	—	1
Ulna						
L	—	8	2	1	—	—
R	—	8	—	—	2	1
Carpometacarpus						
L	—	5	—	—	—	—
R	—	2	—	—	—	1
Femur						
L	—	10	—	—	—	—
R	—	7	1	1	—	—
Tibiotarsus						
L	—	13	2	—	—	—
R	1	8	1	1	—	—
Tarsometatarsus						
L	—	4	—	—	—	—
R	—	11	—	—	—	—
Corocoid						
L	—	7	—	—	—	—
R	—	8	1	—	—	—
Scapula						
L	—	2	—	—	—	—
R	—	2	—	—	—	—
Clavicle	—	1	—	—	—	—
Cranium	—	1	—	—	1	—
Synsacrum	—	8	1	—	—	—
Notarium	—	5	—	—	—	—
Total Bones	1	132	12	5	3	3
MNI Total	1	13	2	2	2	1

Table 14. Glass

<i>RN</i>	<i>Locus</i>	<i>Description</i>	<i>Color</i>	<i>Comparanda/ Date</i>	<i>Published</i>
5	K9b-3	Painted bodysherd	Transparent with blue, green, white, black paint	Manda mid-9th–mid-11th c., al-Mina, Syria 12th–13th c., Meinarti 13th–early 14th c. (Adams 2002, pl. 19:b). Manufactured in Syria or Cairo? ^a	Roth 1979, pl. 63:e; Meyer 1992, 89, 186
64	K9b-1	Ribbed bodysherd (bottle neck?)	Green tint, opaque magenta paint, many bubbles	Al-Mina, Syria, 12th–13th c.	Roth 1979, pl. 63:f (text), e (drawing); Meyer 1992, 89, 186
348	K9b-16	Bottle, very flaring rim	Green tint	Mostly 12th c. and earlier Manda, Mafia, Kilwa, al-Mina, Soba (Harden 1961, fig. 37:20–21), Serçe Limani early 11th c., Siraf 8th–11th c., Corinth, Meinarti 13th–early 14th c. (Adams 2002, pl. 19:c2), Beirut 11th c. (Jennings and Abdallah 2001, fig. 15:3)	Roth 1979, pl. 63:c (text), f (drawing); Meyer 1992, 77–78, pl. 15:388
352	K9b-36	Coil base (beaker)	Green tint, bubbly	‘Aydāb 11th–14th c., Beirut, 13th–15th c. (Jennings and Abdallah 2001, fig. 15:11–12)	Meyer 1992, 80, pl. 16:419
352	K9b-36	Blue coil base	Transparent and blue	No excavated parallels, close to a sherd found in Hama's uppermost stratum	Whitcomb 1983a, fig. 3:r; 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
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, 12th–13th c. (Meyer 1992, 89)	—
373	K10a-8	Bubble neck bottle	Dark amber	Multiple sites: 10th–16th c. CE and earlier	Meyer 1992, 77, pl. 15:381
373	K10a-3	Sprinkler bottle	Transparent	Very similar to Siraf (8th–11th c.), 13th c. Beirut (Jennings and Abdallah 2001, fig. 15:13)	Meyer 1992, 78–79, pl. 15:397
373	K10a-10	Coil base (beaker)	Light yellow-green	‘Aydāb 11th–14th c., Beirut, 13th–15th c. (Jennings and Abdallah 2001, fig. 15:11–12)	Meyer 1992, 80, 186
373	K10a-16	Vial mouth	Emerald green	Hadhrmaut 1150–1500 CE	Meyer 1992, 82, 186
374	J9d-8	Pedestal base	Transparent	‘Aydāb, 10th–14th c.?, Naqlun, Fatimid or Ayyubid (Mossakowska-Gaubert 2001: types 6–7), 13th c. Beirut (Jennings and Abdallah 2001, fig. 15:14)	Meyer 1992, 81, pl. 16:435
374	J9d-2	Molar/square flask	Blue	Early dates (9th 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, 8th–11th c.	Meyer 1992, 86, 184
374	J9d-4	Cut decoration (from a molar flask or cut vial)	Frosted transparent, curvilinear design	Kilwa, late 12th–13th c.?	Meyer 1992, 89, 187
376	K9b-70	Bottle neck	Yellow-green tint	Mid-9th–early 11th c. Manda	Meyer 1992, 78, pl. 15:389
376	K9b-33	Vial mouth	Light blue-green, bubbly	Serçe Limani, 11th c.	Whitcomb 1983, fig. 3:h; 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. 3:j; Meyer 1992, 79, pl. 15:400
376	K9b-70	Jar, tall neck, w/ trailed threads	Transparent	8th–11th c. Siraf, 10th–14th c. ‘Aydāb, Fatimid or Ayyubid Naqlun (Mossakowska-Gaubert 2001, type 6)	Meyer 1992, 79, pl. 16:402

Table 14. Glass (*cont.*)

RN	Locus	Description	Color	Comparanda/ Date	Published
376	K9b-28	Coil base (beaker), w/ trailed threads	Transparent	‘Aydāb 11th–14th c.	Whitcomb 1983a, fig. 3:p; Meyer 1992, 80, pl. 16:412
376	K9b-56	Coil base (beaker)	Light green	‘Aydāb 11th–14th c.	Meyer 1992, 80, pl. 16:415
376	K9b-69	Coil base (beaker)	Transparent	‘Aydāb 11th–14th 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	K9b-71	Vial mouth	Yellow-olive	Sparse comparanda: 14th c. and earlier Mafia, Hadhramaut?	Whitcomb 1983a, fig. 31; Meyer 1992, 82, pl. 17:446
376	K9b-65	Vial base	Cobalt blue, bubbly, iridescent	Numerous comparanda: 1000–1500 CE Ghors, Gedi, Kilwa, Hadhramaut, ‘Aqaba	Whitcomb 1983a, fig. 3:t; Meyer 1992, 82–83, pl. 17:464
376	K9b-28	Molar/square flask	Dark cobalt blue	Early dates (9th c. and later) but this is a later continuation	Whitcomb 1983a, fig. 3;q; Meyer 1992, 83, pl. 17:473
376	K9b-71	Rim, slightly flaring (cup or beaker)	Light yellow-green	Soba, 9th–12th c. ^c	Whitcomb 1983a, fig. 3;y; 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, 13th–early 14th 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: 10th–16th c. and earlier	Meyer 1992, 77, 186
382	J10a-9	Jar, tall neck (reconstructed)	Light green	8th–11th c. Siraf, 10th–14th c. ‘Aydāb	Meyer 1992, 79, pl. 15:399
433	J10c-15	Plain bangle with triangular cross-section	Dark green	Meiron 11th–14th c., ^d Qaṣr al-Hayr al-Sharqi (Meyer 1992, 91), al-Shihr 14th 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	‘Aydāb, 10th–14th c., Kawd am-Saila, 14th–16th c.	Meyer 1992, 84, pl. 18:476

^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 (Meyer 1992, 83–84). At Shanga, only six cut glass sherds were found, and their dating is unfortunately not discussed (Horton 1996, 318, fig. 244).

^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 et al. 1981, 6, 9, pl. 9.7:3).

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?	67 CE
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	AH 1169–1250 CE
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 × 0.7 mm	Ayyubid	AH 1169–1250 CE
82/682	K10a-7	Silver	Complete	Globular half dirham; 9.0 mm, 0.81 g	Sultan al-Kāmil I Nāṣir al-Dīn Muḥammad	AH 622–47 / 1225–1250 CE
82/683	K9b-39	Silver	Complete	Globular half dirham; 6.5 mm, 0.38 g	Sultan al-Kāmil I Nasir al-Dīn Muḥammad ^a	AH 615–35/ 1218–1238 CE
82/685	K9b-46	Bronze	Fragment	Fals (Muḥammad...al-Mālik al...); 16 mm, 0.85 g	Sultan al-Kāmil I Nāṣir al-Dīn Muḥammad?	AH 615–35/ 1218–1238 CE
82/687	J9d-9	Silver	Fragment	10 mm, 0.76 g	Islamic	—
82/694	K9b-63	Silver	Fragment	Half dirham, dodecalobe in circle (al-Mālik al-[ṣāliḥ] / al-Imām al-Mustaʿṣim); 11.5 × 10 mm, 2.13 g	al-Ṣāliḥ Naḡm al-Dīn Ayyūb	AH 644–46/ 1246–1248 CE (Damascus mint)
82/695	K9b-67	Silver	Fragment	16 mm, 1.18 g	Ayyubid	1246–1249 CE
82/696	J10c-17	Silver	Complete	Half dirham, square in circle (al-Mālik al-Ṣāliḥ / al-Imām al-Mustaʿṣim); 13 mm, 1.45 g	Either Sultan al-Ṣāliḥ Ayyub, or al-Ṣāliḥ ʿIsmāʿīl governor of Damascus, and Caliph al-Mustaʿṣim	1242–1245 CE
82/698	K9d-1	Silver	Complete	Dirham, square in circle (al-Mālik al-Ṣāliḥ ʿImād al-Dunyā wa-l-Dīn ʿIsmāʿīl ibn Abū Bakr / al-Imām al-Mustaʿṣim Billah Abū Aḥmad Amīr al-Muʾminīn); 20 mm, 2.36 g	al-Ṣāliḥ ʿIsmāʿīl governor of Damascus, and Caliph al-Mustaʿṣim	AH 1242–45 / 641–643 CE
82/699	K9b-57	Silver	Complete	Rectangular half dirham ʿaswad; 7–9 × 10–12.5 mm, 1.36 g	Fatimid	1100–1169 CE
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 CE

^aThis could also be of al-Ṣāliḥ Naḡm al-Dīn Ayyūb ibn al-Kāmil Muḥammad I (Cf. Balog 537 in Balog 1980, 185).

APPENDIX E

DOCUMENT TABLES

Table 16. Summary of Published Documents by Locus

<i>Locus No.</i>	<i>Locus Description</i>	<i>Location</i>	<i>Published Documents: Text No./RN No.</i>
<i>Phase I</i>			
K9b-63	Surface below plaster floor of K9b-57	N House, Rm C	55/1037a, 56/1042a, 73/1049 (Ayyubid coin dated 1246–1248 CE)
J10c-19	Constructional fill under plaster surface of J10c-15	Storeroom F	79/991a
<i>Phase IIa Loci</i>			
J10c-11	Sand and matting to bedrock	Storeroom E	46/988 (dated 1235 CE)
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 1100–1210 CE)
<i>Phase IIb Loci</i>			
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, 51/967b (dated 1215 CE), 59/967a, 63/966a, 64/966b, 84/968c
J10a-7	Organic material on floor and under wall A	Storeroom B	65/977
J10c-8	Laminations of matting and sand	Storeroom B	52/983
J10c-9	Laminations of matting and sand to clean sand layer	Storeroom B	45/984a
J10c-11	Sand and matting to bedrock	Storeroom E	46/988
J10c-15	Mudbrick wall collapse onto plaster floor	Storeroom F	66/987b
J10c-17	Sand, matting, and fiber on surface	Storeroom E	(Ayyubid coin dated 1242–1249 CE)
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 1218–1238 CE)
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 1228 CE
K9b-67	Brick tumble and sand over bedrock-dug pit	S House, Rm B	(Ayyubid coin dated 1246–49 CE)
K10a-9	Mudbrick wall collapse onto floor	Storeroom F	57/1055a
K10a-10	Mudbrick wall collapse and sand	S House, Vestibule F, and Storeroom 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 1215 CE), 10/1063b
K10a-15	Coarse sand and mudbrick debris on plaster floor	S House, Vestibule F, and Storeroom F	16/1066a

Table 16. Summary of Published Documents by Locus (*cont.*)

<i>Locus No.</i>	<i>Locus Description</i>	<i>Location</i>	<i>Published Documents: Text No./RN No.</i>
<i>Phase IIb Pits</i>			
J10a-9	Trash pit with organic and inorganic debris (eastern part)	Storeroom C	(Ayyubid coin dated 1173–1258 CE)
K9b-39	Shallow pit dug into earthen floor of K9b-36	N House, Rm B	(Ayyubid coin dated 1218–1238 CE)
K9b-49	Pit in floor of K9b-48	N House, Rm C	17/1020a (dated 1224–1231 CE), 18/1020b, 61/1021a, 30/1021b, 54/1022, 67/1023
<i>Unstratified</i>			
J9d-1	Surface debris: wind-blown sand	Storeroom E	80/964a
<i>Unstratified, continued</i>			
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	Storeroom B	49/979
J10a-6	Surface debris: sand and gravel	Storeroom C	65/977
J10c-2	Surface debris: trash in open courtyard	Storeroom 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 1225–1250 CE)
K10a-8	Surface debris: windblown sand	S House, Vestibule F, and Storeroom F	33/1053a
K10a-14	Cleaning for photo	S House, Rm E	11/1064a, 34/1064b
K10a-16	Test trench: erosion on Storeroom F floor	Corridor F/Storeroom F	76/1069

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
<i>Phase I</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 Abū 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 Ibrāhīm ibn Abū Mufarrij at the port of Quseir
1037b	—	72	K9b-63, Phase I	Sermon	—	—
1037c	—	18, 74	K9b-63, Phase I	Business letter including sermon?	—	From ‘Asākīr ‘Alī al-Mamlūkī
1037d	—	28	K9b-63, Phase I	Official letter	—	To Rashīd al-Jamālī from ‘Alī, 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’ān quotations	—	—
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	—	—
1040b	—	3, 19, 45	K9b-63, Phase I	Account	Wheat	To Ibrāhīm from ‘Abd al-Rahman Abū Ḥamd—a list of amounts of grain Ibrāhīm received from various individuals, collected by Abū Ḥamd
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 Ibrāhīm ibn Abū 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	—	—
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 Rashīd al-Dīn ‘Alā’
1049b	—	36 n. 25, 42	K9b-63, Phase I	Shipping note	Ropes, crops	Reference to boat building?
1050, 1050b	—	72, 74, 105	K9b-63, Phase I	Sermon	—	—
1050a	—	3	K9b-63, Phase I	Shipping note?	—	To Ibrāhīm
1051	—	72, 74, 105	K9b-64, 65, 66, Phase I	Sermon	—	—
1068a	—	3, 112	K10a-17, Phase I	Shipping note?	—	To Ibrāhīm

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Possible Phase I</i>						
967b	51	245	J9d-4, Phase IIb	Shipping note	—	To Ibrāhīm Abū Mufarrīj at the port of Quseir al-Qadim; dated AH 612/1215–1216 CE; ghalla (in kind) payments for taxes; cavalry
1063a	50	244	K10a-13, Phase IIb	Shipping note	—	To Sheikh Abū Ishāq at the port of Quseir al-Qadim; dated AH 612/1215–1216 CE
<i>Phase IIa</i>						
1025	—	3, 19	K9b-52, Phase IIa	Shipping note	—	To Ibrāhīm from Aḥmad
1026a	7	148	K9b-52, Phase IIa	Business letter	—	To Quseir al-Qadim, to Sheikh Abū Mufarrīj “the owner of the warehouse”; mentions Qūs
1026b	8	151	K9b-52, Phase IIa	Business letter	Wheat, a sword	Recipient unnamed; message to Abū Mufarrīj; Sheikh Najīb; mentions pilgrim; balance sheet on reverse (paper reused)
1026d	—	2	K9b-52, Phase IIa	Letter or note	—	To Abū Mufarrīj
1026e	—	81	K9b-52, Phase IIa	Hand-written amulet	—	Protects against a plague
1027a	31	212	K9b-52, Phase IIa	Business correspondence and shipping note	Embroidery, baṭṭa-container, wheat, flour, oil, corals, mirrors	To Muḥammad ibn Ja‘far; ghalla (in kind) payments for taxes, commissions discussed; on recto a letter from Muḥammad ibn Ja‘far; troops preparing to battle the Franks mentioned
1027b	43	234	K9b-52, Phase IIa	Shipping note	Grain?, oil strainer	To Sheikh Abū Mufarrīj; 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 bayān certificate for goods
1027d	—	29, 43	K9b-52, Phase IIa	Shipping note	Flour, pepper	Recipient missing; goods for Ḥasan ibn Ja‘far
1027e	60	260	K9b-52, Phase IIa	Certificate of receipt	Pepper	Issued by Abū Mufarrīj
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 Abū Ishāq Ibrāhīm; blessings on “the dear mother”; client ‘Abd al-Muḥsin (cf. 1017a)
1029b	—	83, 89	K9b-57, Phase IIa	Astrological dial, block-printed Qurʾān quotations	—	—
1029c	—	83, 89	K9b-57, Phase IIa	Lunar and astrological dials	—	—
1029d	—	2	K9b-57, Phase IIa	Letter or note	—	To Abū Mufarrīj
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 storeroom of Abū Mufarrīj
1031e	—	39	K9b-57, Phase IIa	Shipping note?	Beans, watermelon	—
1032	—	103 n. 8	K9b-59, Phase IIa	Shipping note	—	Mentions sending a bayān certificate

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Phase IIa</i>						
1033a	—	2	K9b-59, Phase IIa	Letter or note	—	To Abū Mufarrij
1033b	—	3, 112	K9b-59, Phase IIa	Letter or note	—	To Ibrāhīm
1033c	—	2, 40	K9b-59, Phase IIa	Shipping note	Flax	To Abū Mufarrij
1033d	—	112	K9b-59, Phase IIa	Letter or note	—	—
<i>Possible Phase IIa</i>						
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 Abū Mufarrij
1035	—	83	K9b-59, Phase IIa	Drawing	—	—
1015c	70	287	K9b-48, Phase IIb	Witnessed document	—	Sworn in front of the <i>qādī</i> Zayn al-Dīn, who is also a faqīh; the ‘ulamā, a hakam, the <i>sūq</i> , and the port mentioned; fee to be paid in dirham waraq
1017a	5	143	K9b-48, Phase IIb	Business letter	Grain?	To Sheikh Abū Mufarrij; client ‘Abd al-Muḥsin (cf. RN 1029a)
1017g	—	3	K9b-48, Phase IIb	Letter or note	—	Dated AH 626/1228 CE
1020a	17	175	K9b-49, Phase IIb pit	Shipping note	Ropes	To Sheikh Abū Ishāq Ibrāhīm ibn Abū Mufarrij; dated 1224–1231 CE
<i>Phase IIb</i>						
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 Aḥmad; goods sent to the storeroom of Abū Mufarrij
966d	—	2, 112	J9d-4, Phase IIb	Letter or note	—	To Sheikh Abū Mufarrij
967a	59	258	J9d-4, Phase IIb	Shipping note	Flour, rice	To Abū al-Ḥamd; goods meant for “the master”
967c	—	2, 112	J9d-4, Phase IIb	Letter or note	—	To Sheikh Abū Mufarrij
968a	48	242	J9d-4, Phase IIb	Shipping note	Flour	To Sheikh Najīb ibn Mabādī al-Sayyidi al-Fayyūmī, to the storeroom of Abū Mufarrij
968b	12	160	J9d-4, Phase IIb	Shipping note and business letter	Flour “sifted in a sieve for barley,” <i>baṭṭa</i> -containers, clarified butter, oil	To Brother Najīb, to the storeroom of Abū Mufarrij
968c	84	314	J9d-4, Phase IIb	Prayer or poem	—	Expresses longing for a person who has gone on a journey
969	24	192	J9d-4, Phase IIb	Business letter and shipping note	Clothing	Possibly to Ḥusayn, location missing; greetings to his father (Abū Mufarrij?), the jurist or notary (faqīh), Muḥammad, 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 Abū Mufarrij; Egyptian <i>danānīr</i> (sing. <i>dīnār</i>) preferred over Meccan <i>danānīr</i>
970b	38	229	J9d-4, Phase IIb	Shipping note	Wheat	To Abū Mufarrij
971	2	138	J9d-4, Phase IIb	Shipping note	Grain or flour?	To Sheikh Abū Mufarrij

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Phase IIb</i>						
973	—	2	J10c-8	Shipping note?	—	To the storeroom of Abū Mufarrij
972a	3	140	J9d-4, Phase IIb	Shipping note	Fine flour, butter	To Sheikh Abū Mufarrij
972b	—	2, 18	J9d-4, Phase IIb	Shipping note	—	To Sheikh Abū Mufarrij
977	65	273	J10a-1, 6, 7, Phase IIb and Surface layer	Account	—	Head of Merchants underwrites a loan for Nile barges; Najīb al-Fayumi named
981b	—	3, 18	J10c-5, Phase IIb	Shipping note	—	To Sheikh Ibrāhīm
982a	—	2, 18	J10c-6, 8, Phase IIb	Shipping note	—	To Abū Mufarrij
983	52	247	J10c-8, Phase IIb	Shipping note	Flour	To Sheikh Ibrāhīm ibn Abū Mufarrij; debts forgiven
984a	45	237	J10c-9, Phase IIb	Shipping note	Wheat, rice, crops	Recipient missing; goods delivered to the storeroom of Abū Mufarrij care of Abū 'Alī Nu'mān (cf. RN 1058c)
984b	—	2, 85, 110; pl. 4	J10c-9, Phase IIb	Letter including prayer for safety of loved ones	—	To the storeroom of Abū 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 storeroom of Abū Mufarrij; dated AH 533/ 1235 CE; another business letter on recto
988c	—	88	J10c-11, Phase IIb	Block-printed zodiac?	Contains a dial and a grid	—
996a	—	3, 10	K9b-27, 28, 30, 31, Phase IIb	Letter or note	—	To Sheikh Ibrāhīm
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 Ibrāhīm ibn Abū Mufarrij—"May God have mercy on him!" (Sheikh Abū Mufarrij has died)
998	20	179	K9b-32, Phase IIb	Shipping note and business letter	Mattocks, perfume	To Quseir al-Qadim, to Sheikh Abū Ishāq Ibrāhīm ibn Abū Mufarrij; greetings to (his brother) Ḥusayn and "the father" (Abū Mufarrij?); chief merchant (<i>ra'īs al-tuġġār</i>) Yusuf mentioned
999a	—	64	K9b-36, Phase IIb	Business letter	—	A merchant of Syrian origin (<i>al-šāmi</i>)
999b	—	59	K9b-36, Phase IIb	Business letter	Slaves	"the slave boys from Qenā... are coming in a boat"
1001a	39	230	K9b-38, Phase IIb	Shipping note and magical text	Chickpeas, flour	To Sheikh Abū Mufarrij; verso magic numbers
1003a	4	142	K9b-38, Phase IIb	Shipping note	Flour, wheat	To Sheikh Abū Mufarrij
1003b	26	198	K9b-38, Phase IIb	Business letter	Women's wraps decorated with gold and gemstones	To the port of Quseir, to Sheikh Abū 'Alī Ḥusayn (brother of Abū Mufarrij)

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Phase IIb</i>						
1003c/1004d	13	163	K9b-38, 41, Phase IIb	Shipping note and business letter	Flour, foodstuffs, perfume	To Brother Najīb, to the port of Quseir, to the storeroom of Abū Mufarrij; greetings to Abū Mufarrij; exchange rates in Qenā and Qūs; dirham (silver coins) preferred over <i>danānīr</i> (gold coins)
1004a	40	231	K9b-41, Phase IIb	Shipping note	—	To Abū Mufarrij
1004b	41	232	K9b-41, Phase IIb	Shipping note	—	To Abū Mufarrij, address missing; greetings to Brother Najīb
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 Najīb; instructions about paying zakāt 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 Ibrāhīm, the son of Abū Mufarrij; ghalla (in kind) payments for taxes
1009	—	76–79	K9b-48, Phase IIb	Block-printed amulet	—	—
1009a	—	76, 88	K9b-48, Phase IIb	Block-printed Qurʾān quotations	—	—
1009b	—	76, 88	K9b-48, Phase IIb	Block-printed Qurʾān quotations	—	—
1011	—	3	K9b-48, Phase IIb	Shipping note	—	To Sheikh Ibrāhīm
1012b	—	6	K9b-48, Phase IIb	Shipping note	—	To Abū ‘Alī (brother of Abū Mufarrij)
1013b	—	59	K9b-48, Phase IIb	Shipping note	—	Outgoing letter to Qenā
1015a	21	183	K9b-48, Phase IIb	Business correspondence	Fine wheat	To Sheikh Abū Ishāq Ibrāhīm “the son of” Abū Mufarrij from Ḥājī ‘Asākīr; greetings to his parents; verso contains a letter to ‘Asākīr; fine wheat to feed “the youths” (soldiers or pilgrims)
1015b	14	167	K9b-48, Phase IIb	Business letter	Oil, grain	To Brother Najīb; greetings to Abū Mufarrij
1016a	15	170	K9b-48, Phase IIb	Business letter	—	Recipient missing; greetings to Abū Mufarrij and his sons
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	<i>Baṭṭat</i> (containers)	To the port of Quseir, the storeroom of Abū Mufarrij, to the care of Najīb
1018a	6	145	K9b-48, Phase IIb	Shipping note and business letter	Barley, wheat	To Sheikh Abū Mufarrij
1018b	—	12	K9b-48, Phase IIb	Shipping note or business letter	—	To Sheikh Najīb at the storeroom of Abū Mufarrij
1018c	28	204	K9b-48, Phase IIb	Business letter	Fabrics, flour, rice, waist-wrappers, cloaks	Address missing; pilgrim mentioned

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Phase IIb</i>						
1018d	29	207	K9b-48, Phase IIb	Business and personal letter	Rice, medicine	Address missing; a woman negotiates with the tax collector; a woman sends her love and instructions to her son; request for medicine
1019d	—	1–2	K9b-49, Phase IIb pit	Shipping note or business letter	—	To the port of Quseir, the storeroom of Abū Mufarrij—“may God prolong his prosperity!”
1021a	61	262	K9b-49, Phase IIb pit	Business certificate	Flour	Signed by Abū 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 Abū Ishāq Ibrāhīm ibn Abū Mufarrij
1056a	78	303	K10a-10, Phase IIb	Personal and business letter	—	To the sender's mother; greetings to Abū Ishāq
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 Abū Zakariyā requesting wheat for youths (soldiers or pilgrims)
1058a	—	3, 10, 59	K10a-11, Phase IIb	Receipt	—	Issued by Ibrāhīm; mentions Qūs
1058c	—	14, 112	K10a-11, Phase IIb	Shipping note	—	Recipient missing; goods delivered to the port of Quseir care of Abū ‘Alī Nu‘mān ibn ‘Aṭīya (cf. RN 984a)
1059	9	153	K10a-11, Phase IIb	Business/ personal letter	—	Recipient addressed “Oh my father” (Abū Mufarrij?); From Ḥusayn, Muḥammad, and ‘Umar stuck in Qaṣr al-Yamānī, requesting warm clothes, food, and water
1060a	—	3	K10a-11, Phase IIb	Shipping note or business letter	—	To Ibrāhīm
1060b	75	297	K10a-11, Phase IIb	Official petition from Mecca, accounts	—	—
1062a	23	189	K10a-11, Phase IIb	Business correspondence	Flax?	To Abū ‘Uthmān Mithqāl and Muḥammad, the son of Abū 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 Abū Mufarrij al-‘Abāwī at the port of Quseir al-Qadīm
1066a	16	172	K10a-15, Phase IIb	Shipping note and business letter	Dried dates	To Brother ‘Arafāt, to the port of Quseir, to the storeroom of Abū Mufarrij al-Qiftī; flour
1020b	18	176	K9b-49, Phase IIb pit	Shipping note	—	To the port of Quseir, to Abū Ishāq Ibrāhīm, “master, dear brother, sermon giver, trade leader, son of the Ḥājj Abū 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 Ibrāhīm ibn Abū Mufarrij, to the port of Quseir

Table 17. Details of All Documents by Phase (*cont.*)

RN	Guo 2004 Text No.	Guo 2004 Page Nos.	Locus and Phase of Origin	Document Type	Commodities	Notes
<i>Phase IIb</i>						
1023	67	277	K9b-49, Phase IIb pit	Accounts of at least fifty clients	Baṭṭa-container of grain, almonds, clothes, a necklace, "Ethiopian gowns," "Jewish cloaks"	Dirham amounts; Nile barges; the Yemen; wālī (mayor/police chief) a client, as well as a qādī; the ʿarīf (superintendent) and raʿīs (head of a profession, possibly of merchants) also mentioned
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 Muḥammad
<i>Phase I, IIa, or IIb</i>						
965	62	263	J9d-3, Surface layer	Account of groceries	Flour, chickpeas, onions, lemons, carrots, milk, butter, chicken eggs	For four households: Qirtās ibn ʿImrān, Yūsuf al-Damanhūrī, ʿAtāʾ, and Thābit
975a	—	2, 18	J9d-13, Surface layer	Letter or note	—	To Abū Mufarrij
976	19	177	J9d-13, Surface layer	Shipping note	Mattocks, perfume	To Abū Ishāq Ibrāhīm from his uncle Abū ʿAlī; greetings to Ibrāhīm's brothers Muḥammad and Ḥusayn and his nephew Šubayḥ, son of Ḥusayn
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 batta-containers	Recipient missing; to the storeroom of Abū Mufarrij
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 port of Quseir; to Abū Ḥasan ʿAlī al-Muʿawwal, a qādī (religious judge) and a hakam (municipal judge)
980b	—	64	J10c-2, Surface layer	Shipping note	—	Damascus mentioned
1005a	—	18	K9b-44, Surface layer	Shipping note	—	To the storeroom of Abū Mufarrij, from Mubārak
1024	42	233	K9b-50, Surface layer	Shipping note	Wheat?	To Abū 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 Abū Mufarrij
1064b	34	221	K10a-14, Surface layer	Chancery document (business letter) and shipping note or account	Wheat	To an unnamed judge (qādī) about wheat shipped to Qūs; on verso a shipping note for goods delivered to Saʿd by ʿAnmār (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-Dīn
1077a	44	236	L8c-1 in Roman oven across the harbor from the Sheikh's House	Shipping note	Flax, barley	To Sheikh Abū Mufarrij

Table 17. Details of All Documents by Phase (*cont.*)

<i>RN</i>	<i>Guo 2004 Text No.</i>	<i>Guo 2004 Page Nos.</i>	<i>Locus and Phase of Origin</i>	<i>Document Type</i>	<i>Commodities</i>	<i>Notes</i>
<i>Phase I, IIa, or IIb</i>						
1083b	—	2, 26, 28	L8c-16 in Roman oven across the harbor from the Sheikh's House	Business letter	—	To Abū 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 port of Quseir, to the storeroom of Abū Mufarrij; goods as ghalla payments
1090b	69	104, 286	L8c-37, 50, 51 outside the Sheikh's House	Business diary	Wheat	—
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 port of Quseir

APPENDIX F

TEXTILE AND ARCHAEOBOTANICAL TABLES

Table 18. Resist-Dyed Textiles Found in the Sheikh's House

<i>RN</i>	<i>Locus</i>	<i>Color</i>	<i>Size (cm)</i>	<i>Description</i>	<i>Published</i>
<i>Phase I</i>					
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
<i>Phase IIb</i>					
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
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
<i>Surface</i>					
923	J10a-2 (Storeroom 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 (Storeroom F)	Red on natural ground	2.5 × 2.8 1.5 × 1.5 5 × 5	Epigraphic?	Vogelsang-Eastwood 1989, 113, no. 54

Table 19. Nutshell Pieces, Fruit Stones, and Fruit by Locus, by Wilma Wetterstrom

Locus	Nutshell pieces					Fruit stones					Fruit					
	Hazelnut	Almond	Pista- chio	Walnut	Pine nut	Date	Peach	Olive	Nabakh	Plum	Water- melon seeds	Coconut shell frag- ments	Lime rind frag- ments	Dom Palm	Pome- granate rind frag- ments	Carob pod frag- ments
G8a-8	—	—	—	—	—	7	—	1	—	—	—	—	—	—	—	—
G8a-14	1	—	—	—	1	11	—	—	—	—	—	—	2	—	—	—
G8a-15	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
G8b-25	1	—	—	—	—	59	—	—	—	—	—	—	—	—	—	—
G8b-31	1	—	—	—	—	47	—	—	—	—	—	4	—	1 frag.	—	—
G8b-33	18	2	—	—	—	307	—	—	1	—	—	6	—	4	—	—
K9b-24	1	—	—	—	—	207	—	—	—	—	—	—	—	2	—	—
K9b-25	3	—	1	—	—	2	3	—	—	—	1	—	—	1	—	—
K9b-27	—	—	—	—	—	366	—	—	—	—	—	—	5	1	—	1
K9b-28	1	—	—	—	—	43	—	1	—	1	—	—	—	—	—	—
K9b-30	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
K9b-31	—	—	—	—	—	86	—	—	—	—	—	1	—	—	—	—
Kb9-32	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Kb9-35	—	—	—	—	—	13	—	1	1	1	—	—	—	—	—	—
Kb9-36	21	—	1	—	—	344	—	—	—	—	—	—	—	—	2	—
Kb9-38	15	3	3	—	—	819	12	—	1	—	—	—	6	—	—	—
K9b-39	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Kb9-40	—	—	—	—	—	47	—	—	1	—	—	—	2	—	—	—
Kb9-41	2	—	2	—	—	98	—	—	—	—	—	—	1	—	—	—
Kb9-44	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Kb9-46	—	1	—	—	—	255	—	—	—	—	—	—	5	—	—	—
Kb9-47	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Kb9-48	2	—	—	1	—	226	1	—	—	—	—	—	—	—	4	—
Kb9-49	2	—	—	2	—	53	3	—	—	—	—	—	2	—	—	—
Kb9-54	2	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—
Kb9-55	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kb9-57	4	—	2	—	—	82	1	—	1	1	—	—	—	1	—	—
Kb9-62	—	—	—	1	—	43	—	—	—	—	—	—	—	—	—	—
Kb9-63	5	1	1	—	—	132	—	—	—	—	—	1	—	2	—	—
Kb9-64	8	1	—	—	—	—	—	—	—	—	—	3	—	—	—	—
Kb9-65	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kb9-66	2	—	1	—	—	38	—	—	—	—	—	—	—	—	—	—
Kb9-68	—	—	—	—	—	7	—	—	—	—	2	—	—	—	—	—

For Latin names, see table 24 and text.

*Unidentified items are mostly small fragments, some in poor condition. They are not included in the grand total.

Table 19. Nutshell Pieces, Fruit Stones, and Fruit by Locus, by Wilma Wetterstrom (*cont.*)

Locus	Nutshell pieces					Fruit stones					Fruit					
	Hazelnut	Almond	Pista- chio	Walnut	Pine nut	Date	Peach	Olive	Nabakh	Plum	Water- melon seeds	Coconut shell frag- ments	Lime rind frag- ments	Dom Palm	Pome- granate rind frag- ments	Carob pod frag- ments
L8c-1	4	3	1	1	—	88	2	—	—	—	2	3	1	2	—	—
L8c-2	3	—	—	—	—	146	—	—	—	—	—	1	1	1	—	—
L8c-3	1	—	—	—	—	36	1	—	—	—	—	1	—	1	—	—
L8c-4	—	—	—	—	—	18	1	—	—	—	—	—	—	—	—	—
L8c-5	19	1	—	2	—	366	3	—	—	—	—	1	—	—	—	—
L8c-7	1	—	—	—	—	6	—	—	—	—	—	—	—	—	—	—
L8c-8	2	—	—	—	—	62	1	—	—	—	—	—	—	—	—	—
L8c-11	1	—	—	—	—	5	—	—	—	—	—	1	—	—	—	—
L8c-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
L8c-13	2	—	—	—	—	15	—	—	—	—	—	—	—	—	—	—
L8c-14	3	—	1	1	—	8	—	—	—	—	—	—	—	—	—	—
L8c-16	5	—	—	—	—	182	—	—	—	—	—	1	1	—	—	—
L8c-17	31	—	—	—	—	106	—	—	—	—	1	—	—	—	—	—
L8c-23	16	—	—	1	—	114	—	—	—	—	—	—	—	3	—	—
L8c-25	2	1	—	—	—	2	—	—	—	—	—	1	—	—	—	—
L8c-29	1	—	—	—	—	47	—	—	—	—	—	—	—	—	—	—
L8c-30	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
L8c-31	2	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—
L8c-33	—	—	—	—	—	3	—	—	—	—	45	—	—	—	—	—
L8c-35	4	—	1	2	—	46	—	1	—	—	—	—	—	—	—	1
L8c-51	—	—	—	—	—	270	3	—	—	—	—	1	—	—	—	—
L8c-52	2	—	1	—	—	55	—	—	—	—	—	1	—	—	—	—
L8c-53	1	—	—	—	—	64	1	—	—	—	—	—	—	—	—	—
L8c-55	1	—	—	—	—	110	—	—	1	—	—	—	—	—	—	—
L8c-57	1	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—
Total	203	15	15	13	1	5052	32	6	6	3	51	27	26	19	6	2

For Latin names, see table 24 and text.

*Unidentified items are mostly small fragments, some in poor condition. They are not included in the grand total.

Table 20. Medicinal Plants, Cereals, and Other Plant Remains by Locus, by Wilma Wetterstrom

Locus	Medicinal Plants		Cereals		Other	Unidentified Items*
	<i>Terminalia chebula</i>		Barley	Wheat durum		
	Fruit	Stone				
G8a-8	—	—	—	—	—	—
G8a-14	—	—	—	—	—	—
G8a-15	—	—	—	—	2 Frag. garlic bulb tunic (outer covering)	2 nut shells frags.; fruit rind (?) frags.
G8b-25	—	—	—	—	—	—
G8b-31	—	—	—	—	1 Coconut husk frag.	—
G8b-33	—	—	—	—	1 <i>Acacia nilotica</i> seed pod	3 husk (?) frags.
					1 Date fruit	
K9b-24	—	—	—	—	—	—
K9b-25	—	2	—	—	1 Date fruit	1 nut shell, 1 fruit perianth
K9b-27	1	4	—	—	—	—
K9b-28	17	6	—	—	—	—
K9b-30	—	—	—	—	1 <i>Acacia nilotica</i> seed	—
K9b-31	—	—	—	—	—	1 unknown
Kb9-32	—	—	—	—	1 Coconut husk with shell frag.	—
Kb9-35	22	3	—	—	—	—
Kb9-36	7	8	—	—	5 Date perianth frags.	—
Kb9-38	1	4	—	—	1 Carob seed	3 fruit rind frags., cucurbit (?)
					1 Lupine seed	
					1 Garlic bulb	
					2 Citrus seeds	
K9b-39	—	—	—	—	—	—
Kb9-40	1	—	—	—	—	—
Kb9-41	—	1	—	—	1 Apricot stone	—
					1 Bottle gourd frag.	
Kb9-44	—	—	—	—	—	—
Kb9-46	—	—	—	—	—	—
Kb9-47	—	—	—	—	—	—
Kb9-48	—	2	—	—	—	1 cucurbit (?) frag.
						1 tuber frag. <i>Cyperus</i> (?)
Kb9-49	—	—	—	—	—	—
Kb9-54	—	—	—	—	—	—
Kb9-55	—	—	—	—	1 Jericho rose plant	—
Kb9-57	—	—	—	—	1 cf. <i>Juncus</i> stem	—
					1 <i>Cordia myxa</i> stone	
Kb9-62	—	—	—	—	—	Fruit (?) skin frags., 1 fruit stem (?)
Kb9-63	—	—	—	—	—	1 fruit rind frag.
Kb9-64	—	—	—	—	—	—
Kb9-65	—	—	—	—	—	—

For Latin names, see table 24 and text.

*Unidentified items are mostly small fragments, some in poor condition. They are not included in the grand total.

Table 20. Medicinal Plants, Cereals, and Other Plant Remains by Locus, by Wilma Wetterstrom (cont.)

Locus	Medicinal Plants		Cereals		Other	Unidentified Items*
	Terminalia chebula		Barley	Wheat durum		
	Fruit	Stone				
Kb9-66	—	—	—	—	1 Frag. garlic bulb tunic (outer covering)	—
Kb9-68	—	—	—	—	—	—
L8c-1	—	—	82	2	5 Fruit rinds, citron (?)	Fruit rind frags., cucurbit (?); corm frag.
L8c-2	—	—	—	—	1 cf. emmer wheat	—
L8c-3	—	—	—	—	—	1 seed, Convolvulacea?
L8c-4	—	—	—	—	—	—
L8c-5	—	—	—	—	5 Faba bean frags.	Frag. of fruit flesh (?)
					5 Tamarind seeds	
L8c-7	—	—	—	—	—	—
L8c-8	—	—	—	—	1 Terminalia cf. bellerica stone	—
					5 Tamerind seeds	
L8c-11	—	—	—	—	—	—
L8c-12	—	—	—	—	—	—
L8c-13	—	—	—	—	—	—
L8c-14	—	1	—	—	—	—
L8c-16	—	1	—	—	—	—
L8c-17	—	—	—	—	—	—
L8c-23	—	—	—	—	—	—
L8c-25	—	—	—	—	—	—
L8c-29	—	—	15	—	—	—
L8c-30	—	—	—	—	—	Cucurbita rind frags., bottle gourd (?)
L8c-31	—	—	—	—	—	—
L8c-33	—	—	—	—	—	—
L8c-35	—	—	12	—	—	—
L8c-51	—	—	—	—	—	—
L8c-52	—	—	—	—	—	1 nutshell frag.
L8c-53	—	—	—	—	—	—
L8c-55	—	—	—	—	—	—
L8c-57	—	—	—	—	—	—
Total	49	32	109	2	44	—
Grand Total (not including unidentified specimens)						5713

For Latin names, see table 24 and text.

*Unidentified items are mostly small fragments, some in poor condition. They are not included in the grand total.

Table 21. Description of the Plant Remains from Ouseir al-Qadim, 1982 Campaign, by Wilma Wetterstrom

<i>Plant</i>		
<i>Common name</i>	<i>Latin names</i>	<i>Description</i>
<i>Grains</i>		
Barley	<i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>	Grains—hulled grains, spindle-shaped with flattened dorsal and ventral surfaces. Most are well preserved with a reddish-yellow color. Some specimens show lateral twist indicating that these are from 6-rowed barley. Dimensions: 0.99–1.24 cm long 0.32–0.44 cm wide 0.23–0.31 cm thick
Wheat, durum	<i>Triticum durum</i> Desf.	Free-threshing grain—short, broad and puffy, with rounded dorsal and flattened ventral surface. Well-preserved, sandy brown color. Dimensions: 0.76 × 0.44 × 0.36 cm
Wheat—probably emmer	<i>Triticum</i> cf. <i>dicoccum</i> Schübl	Cf. Emmer grain—longer and narrower than above, with a triangular cross-section and grooves along the flanks. Well preserved with a sandy brown color. Dimensions: 0.75 × 0.27 × 0.27 cm 0.81 × 0.38 × 0.43 cm
<i>Pulses</i>		
Fava beans	<i>Vicia faba</i> L.	Seed and seed coat fragments—compressed, vaguely oblate bean, angular at one end. Remains of seed coat dull purple brown. Dimensions: 1.19 × 0.95 × 0.68 cm
Lupine	<i>Lupinus alba</i> L.	Seed—globose compressed, with small ellipsoid hilum. Dimensions: 1.0 × 0.9 × 0.5 cm. Hilum length: ca. 5 mm
<i>Fruits</i>		
Apricot	<i>Prunus armeniaca</i> L.	Fruit stone—compressed globose, smooth surface except for a few fine ridges along the length on either side of half of the sharp keel around circumference. Dimensions: 1.7 × 1.7 × 1.1 cm
Carob	<i>Ceratonia siliqua</i> L.	Fruits (pod segments)—flattened, dull black surface with slight longitudinal striations. Cross-section elliptical to rectangular, shows traces of dark resinous material (remains of sugars and other substances). Dimensions (for segments, not complete pods): ca. 2 cm long, 1.5 cm wide.
Citrus—probably lime	<i>Citrus</i> cf. <i>aurantifolia</i> Swing.	Fruit and rind fragments—flattened, but originally globose or elongated globose; outer surface bumpy, covered with glands. Rind ca. 1.0 mm thick, smooth inner surface with remnants of membranous septa. Dimensions: ca. 3.0–3.5 cm diameter.
Christ's thorn, nabakh	<i>Ziziphus spina-christi</i> L. Willd.	Fruit stone—globose to slightly elongate globose with a pattern of raised diamond-shaped bumps on the outer surface. Dimensions: 1.0–1.45 cm long, 0.9–1.15 cm wide
Date	<i>Phoenix dactylifera</i> L.	Seed—cylindrical with a round cross-section and deep longitudinal furrow. Range widely in shape and size from short, squat seeds, about 1.5 cm long, with rounded ends, to long narrow stones up to 3 cm long with pointed ends.
Dom palm	<i>Hyphaene thebaica</i> (L.) Mart.	Fruits—complete specimens and fragments. Large, irregularly globoid fruit with a longitudinal ridge or keel along one side. It appears that individual fruits were used either for food or ivory. On some specimens the mesocarp has been scraped, presumably for consumption, but the hard stone is untouched. In others the fruit has been cut to extract the ivory but the mesocarp is still intact. Dimensions: 3. 1–6.2 cm long, 3.6–5.4 cm wide
Olive	<i>Olea europaea</i> L.	Fruit stone—elongated ellipsoid with pointed or rounded ends, round cross-section. Surface covered with irregular furrows that run the length of the stone. Dimensions: 1.34–2.10 cm long, 0.87–1.12 cm wide
Peach	<i>Prunus persica</i> L.	Fruit stone—globose with a rounded to blunt base, pointed apex, and sharp keel running from base to apex. Dimensions: 1.96–3.00 cm long 1.24–2.00 cm wide, 1.11–1.62 cm thick
Plum	<i>Prunus domestica</i> L.	Fruit stone—compressed ovoid prolate; wide ridge along one side with deep grooves; narrow ridges form a reticulate pattern on both sides. Dimensions: 1.9–2.4 cm × 1.0 × 1.2 cm
Pomegranate	<i>Punica granatum</i> L.	Fruit wall fragments—outer surface slightly punctate, inner surface smooth with a few ridges. Fruit wall dimensions: ca. 2–4 mm thick.
Sebesten, Egyptian plum	<i>Cordia myxa</i> L.	Fruit stone—globose compressed with an elliptical or diamond-shaped cross-section. A sharp keel goes around the entire stone. Irregular pattern of bumps over surface. Dimensions: 1.23 × 1.08 × 0.75 cm

Table 21. Description of the Plant Remains from Ouseir al-Qadim, 1982 Campaign, by Wilma Wetterstrom (*cont.*)

<i>Plant</i>		
<i>Common name</i>	<i>Latin names</i>	<i>Description</i>
Tamerind	<i>Tamarindus indica</i> L.	Seeds—irregular shapes, varying with position in the pod: more or less quadrate on outer two surfaces, flattened. Dimension: 1.0–1.3 cm × 0.9–1.0 cm × 0.7–0.8 cm
Watermelon	<i>Citrullus lanatus</i> (Thunb.) Matsum & Nakai	Seeds—ovate, flattened, rounded at one end, tapering at the other. Margins rounded except at the narrow end where two short notches run from the tip along the sides on both dorsal and central surfaces. Dimensions: 1.2–1.5 cm long, 0.74–0.90 cm wide
<i>Nuts</i>		
Almond	<i>Prunus dulcis</i> (Mill.) D. A. Webb	Nutshells—ovoid, compressed with elliptical cross-section; smooth but slightly punctate surface; blunt at base, pointed at apex. Dimensions: 2.2–3.1 cm × 1.4–2.11 cm Walls: 2.4–4.5 mm thick, solid except for vessels running longitudinally, which are visible in cross-section.
Coconut	<i>Cocos nucifera</i> L.	Coconut shell—fragments, dark brown, very dense and hard, approximately 2.5–3.0 mm thick, with smooth inner and outer surfaces. The fragments range from 3–8 cm × 2.5–6.5 cm., but none are large enough to extrapolate the dimensions of the whole coconut. Fragments of the husk—longitudinal sections of mesocarp composed of coarse fibers with a thin, smooth epidermis. Husk dimensions: 15.5 × 9.0 cm; 21.0 × 5.5 cm; ca. 1.5–2.0 cm thick
Hazelnuts	<i>Coryllus avellana</i> L.	Nutshells—slightly compressed spheroid nut with rounded or pointed apex. Flattened at the base where nut was attached to involucre. Shell wall 1.0–2.5 mm thick. Interior smooth with faint longitudinal striations. Similar striations on the exterior. Nearly all the specimens are complete halves, neatly cracked in order to extract the nut. Dimensions: 1.71–2.26 cm long, 1.65–2.00 cm in diameter
Pine nut	<i>Pinus pinea</i> L.	Nutshell—fragments, elongated ovoid nut, rounded or squared at the ends, with a squarish cross-section. Thick wall, 1.1–2.8 mm. Dimensions: 1.93 cm long, 0.68–0.70 cm wide
Pistachio	<i>Pistacia vera</i> L.	Nutshell halves—ellipsoid shape, smooth outer surface. Dimensions: 1.24–2.34 cm long, 1.07–1.55 cm wide. Wall thickness: 1.1–1.9 mm
Walnut	<i>Juglans regia</i> L.	Nutshells – fragments of the thin-walled shell averaging 1.5 mm in thickness. The pieces show the nut's curvature and bear shallow irregular lines. The inner surface has an irregular pattern of ridges. Dimensions: 2.78 × 1.97 cm, 2.89 × 2.77 cm The remainder are small fragments.
<i>Vegetables</i>		
Bottle gourd	<i>Lagenaria siceraria</i> (Mol.) Standley	Basal end of the fruit with the peduncle still attached. Dimensions: 8 cm long, 6.5–7.0 cm wide Fruit wall dimensions: 6–7 mm thick
Garlic	<i>Allium sativum</i> L.	Bulb—complete small ovoid bulb, fleshy portions shriveled and dark brown. Bulb scales brittle, buff color. Dimensions: ca. 2.1 × 1.4 cm Ragged fragments of bulb tunic (outer covering), buff to beige color. Dimensions: 3.0–4 × 2–2.5 cm
<i>Medicinal Plants</i>		
Black chebulic myrobalans	<i>Terminalia chebula</i> Retz.	Fruits—prolate, but with somewhat rounded apex; 5-ridged; shriveled, deeply wrinkled dried flesh conforms to shape of the stone. Fruit dimensions: 1.5–4.3 cm × 0.8–2.5 cm Stone dimensions: 1.7–2.6 cm × 1.0–1.9 cm
Belleric myrobalans	<i>Terminalia bellerica</i> (Gaertn.) Roxb.	Stone—globose with five ridges, some distinct, some faint. Dimensions: 2.0 × 1.5 cm
Rose of Jericho	<i>Anastatica hierochuntica</i> L.	Whole dried plant, branches curled inward like a fist. Somewhat flattened. Dimensions: 3.5 cm × 5.0 cm (including stem), 3.0 × 2.5 cm (without stem)

APPENDIX G

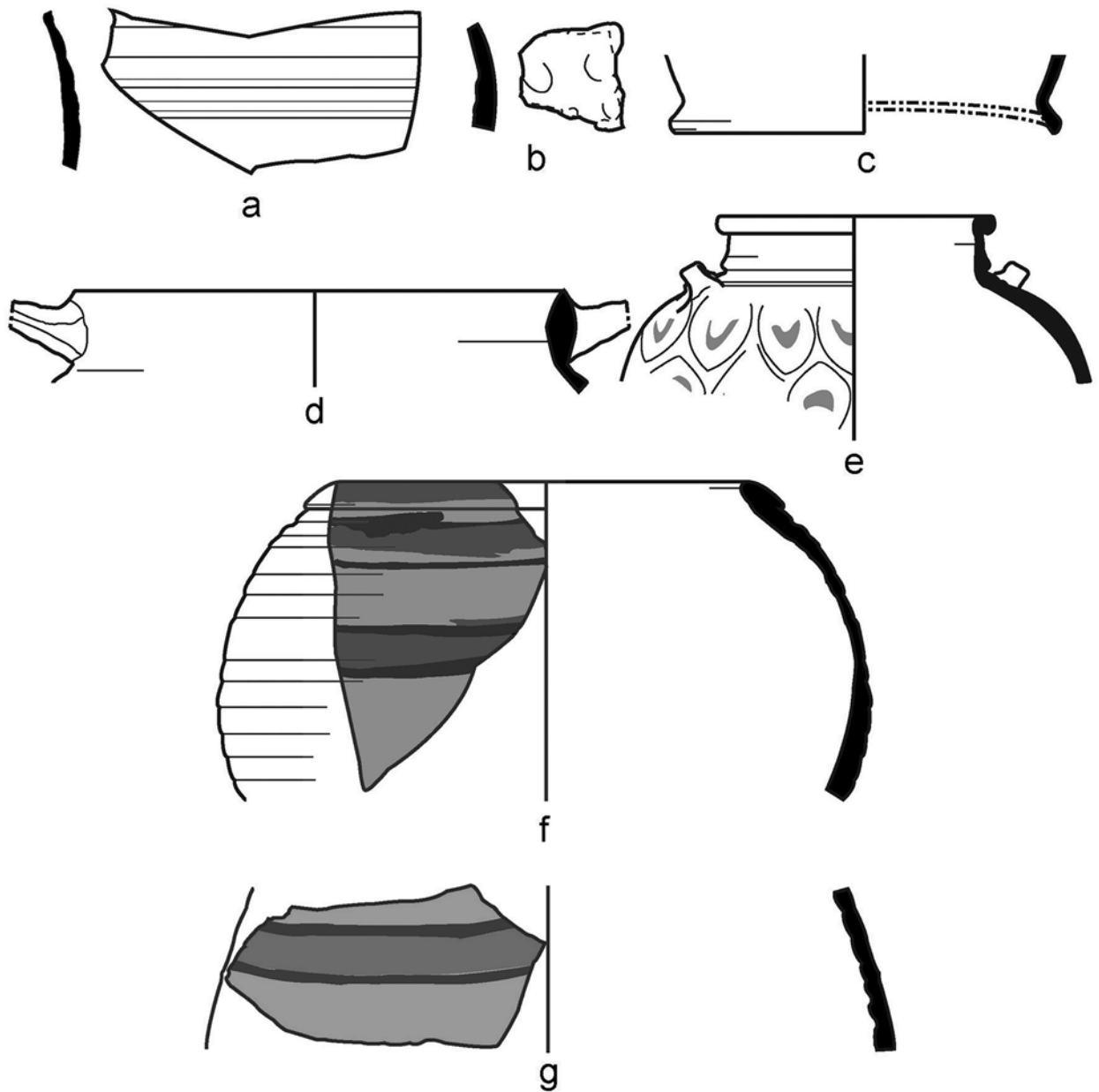
POTTERY PLATES BY LOCUS

The following pottery plates are in alphanumeric order by locus, rather than grouped by phase. For the phase of a locus, refer to table 7. The sherds were all drawn at 1:1 scale, but as with the illustrations in chapter 2, 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. Captions list the fabric type for each sherd, which can be cross-referenced with tables 8–9. Fabrics of sherds that do not fall into fabric groups are described in detail.

Pottery from Locus J9d-2

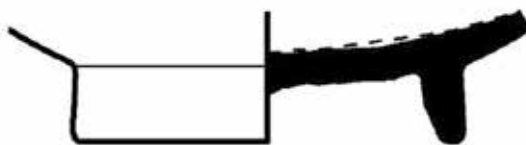
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J9d2_22-23/RN 30	Bodysherds of cooking pot	Diam. 30cm	None discernible	³ Aswān Utility	—
b	J9d2_13/ RN 264	Bodysherd of jar	—	Incised or molded; opaque shiny turquoise glaze 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	³ Aswān 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:k
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	³ Aswān Painted	W. Y. 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 1974b, pl. 20:3



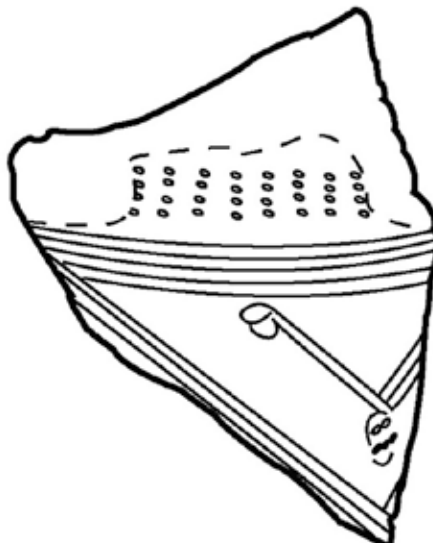
Pottery from Locus J9d-2

Pottery from Locus J9d-3

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	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 zir	—	Incised and molded surface decoration	Yemen 5 Decorated Utility	Bridgman 2000, pl. 12c



a



b



Pottery from Locus J9d-3

Pottery from Locus J9d-4

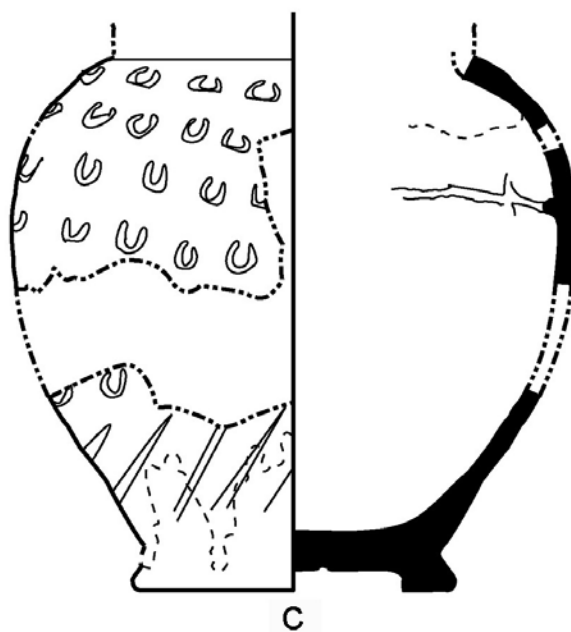
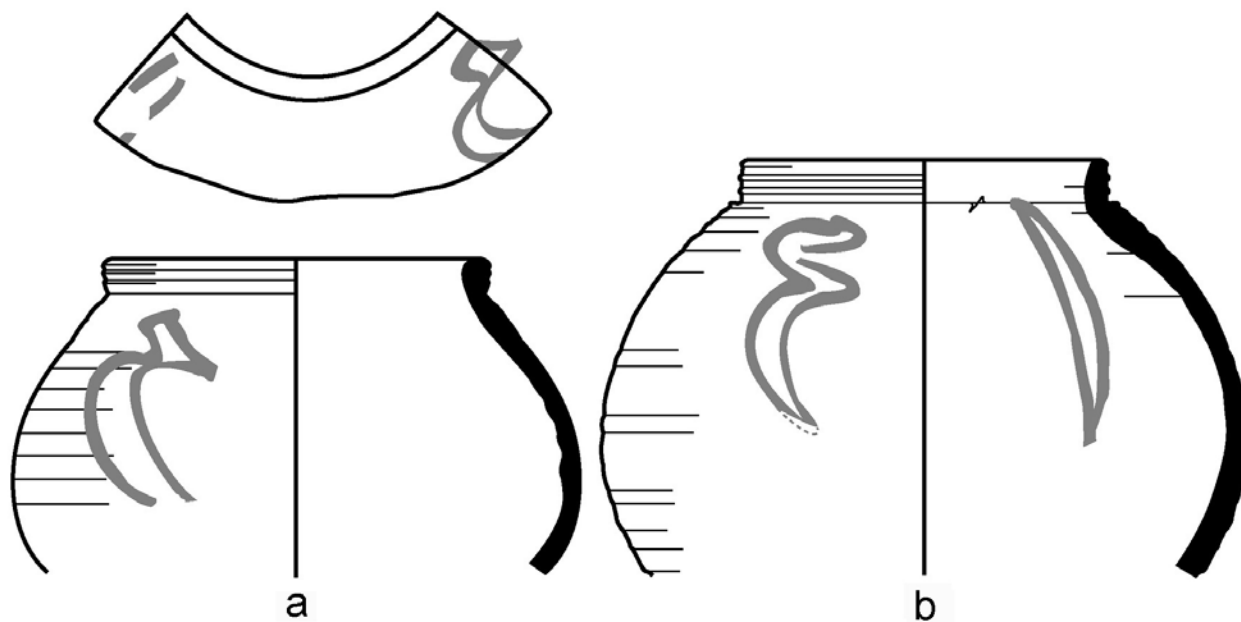
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J9d4_3/ RN 44	Rim of bowl	Diam. 20 cm	Comb incised	Yemen 4 Trackware	Ciuk and Keall 1996, pl. 95/41:k
b	J9d4_10/N 233	Base of bowl	Diam. 6 cm	Greenish-clear glaze out, over base, pooling dark green in creases; bluish white (5Y 8/2 white) glaze in, with dark blue crackle	Marl 4 Mono-chrome 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	ʔAswān 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, pl. 95/45:g



Pottery from Locus J9d-4

Pottery from Locus J9d-4 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	—



Pottery from Locus J9d-4 (cont.)

Pottery from Locus J9d-6

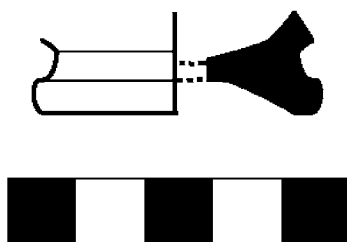
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J9d6_2/ RN 322	Bodysherd of bowl	—	White glaze in and out, overglaze black paint and cobalt blue paint or glaze	Marl 4 polychrome	Avissar and Stern 2005, 28; Tonghini 1998, 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	—
c	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



Pottery from Locus J9d-6

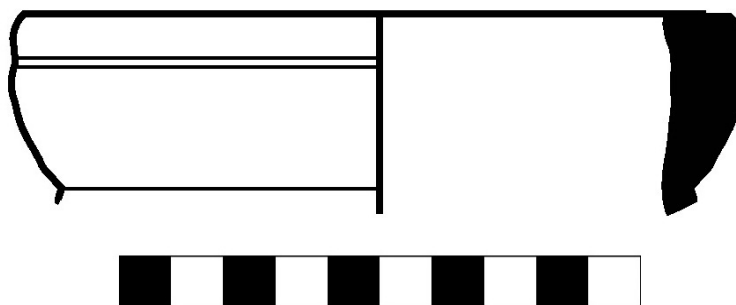
Pottery from Locus J9d-7

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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 1982c, pl. 29:s



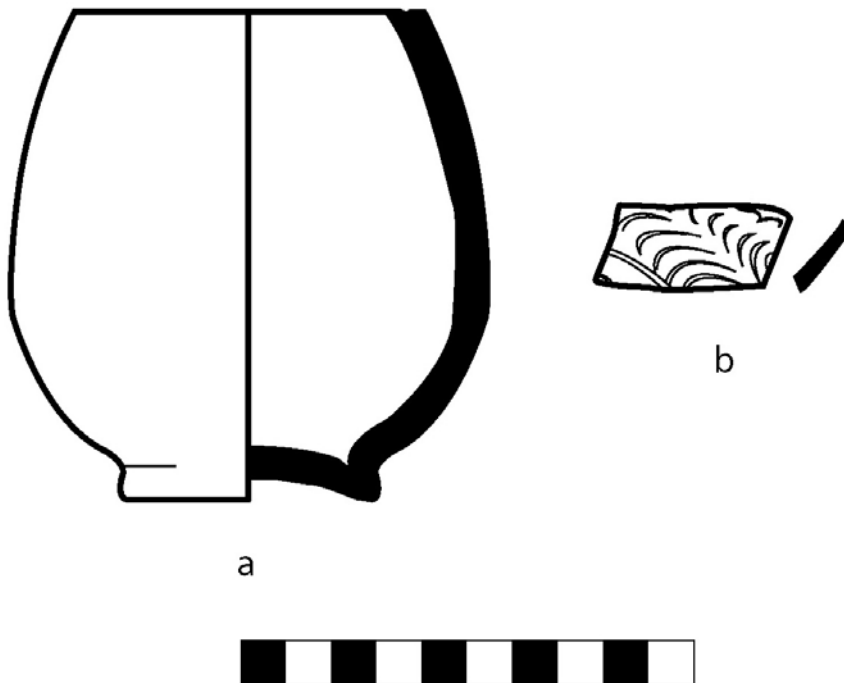
Pottery from Locus J9d-11, and Locus J10a-1

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
J9d11_1/RN 14	Rim of jar	Diam. 14 cm	—	Nile 5	—



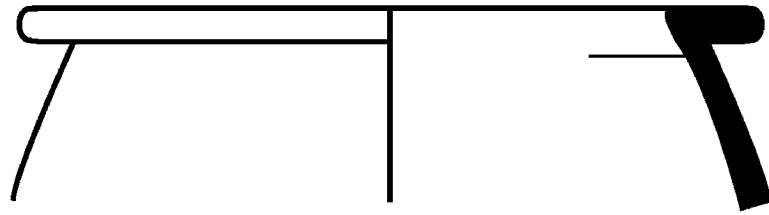
Pottery from Locus J9d-12

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	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)	—

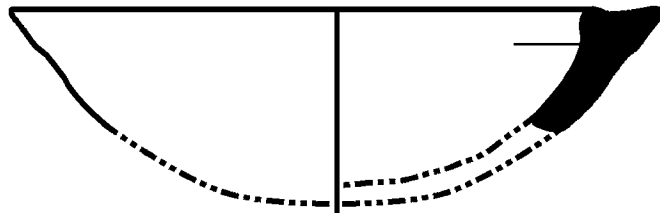


Pottery from Locus J9d-13

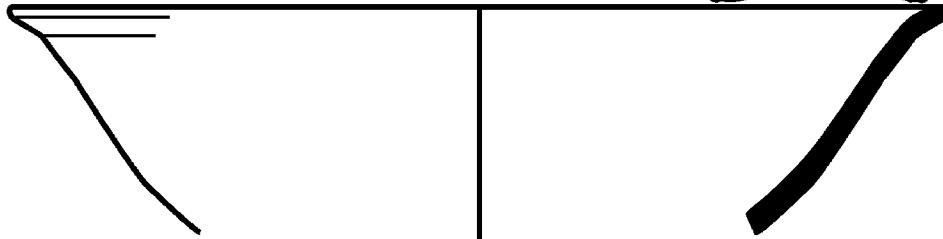
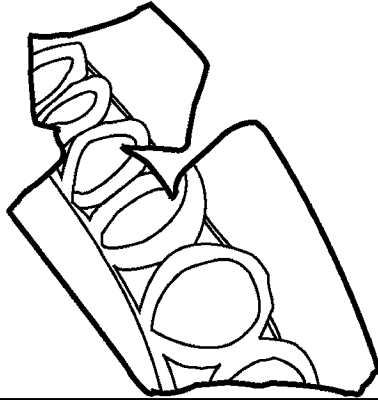
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J9d13_1/ RN 260	Rim of jar	Diam. 18 cm	Yellow and green glaze in and out	Nile 6 Coarse Utility	Sasaki 1986, fig. 3:115; Sakurai and Kawatoko 1992, 227 (pl. IV_1_18), nos. 17 and 22, 391 (pl. IV-3-19), no. 1; cf. W.Y. 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. 5:7-9



a



b



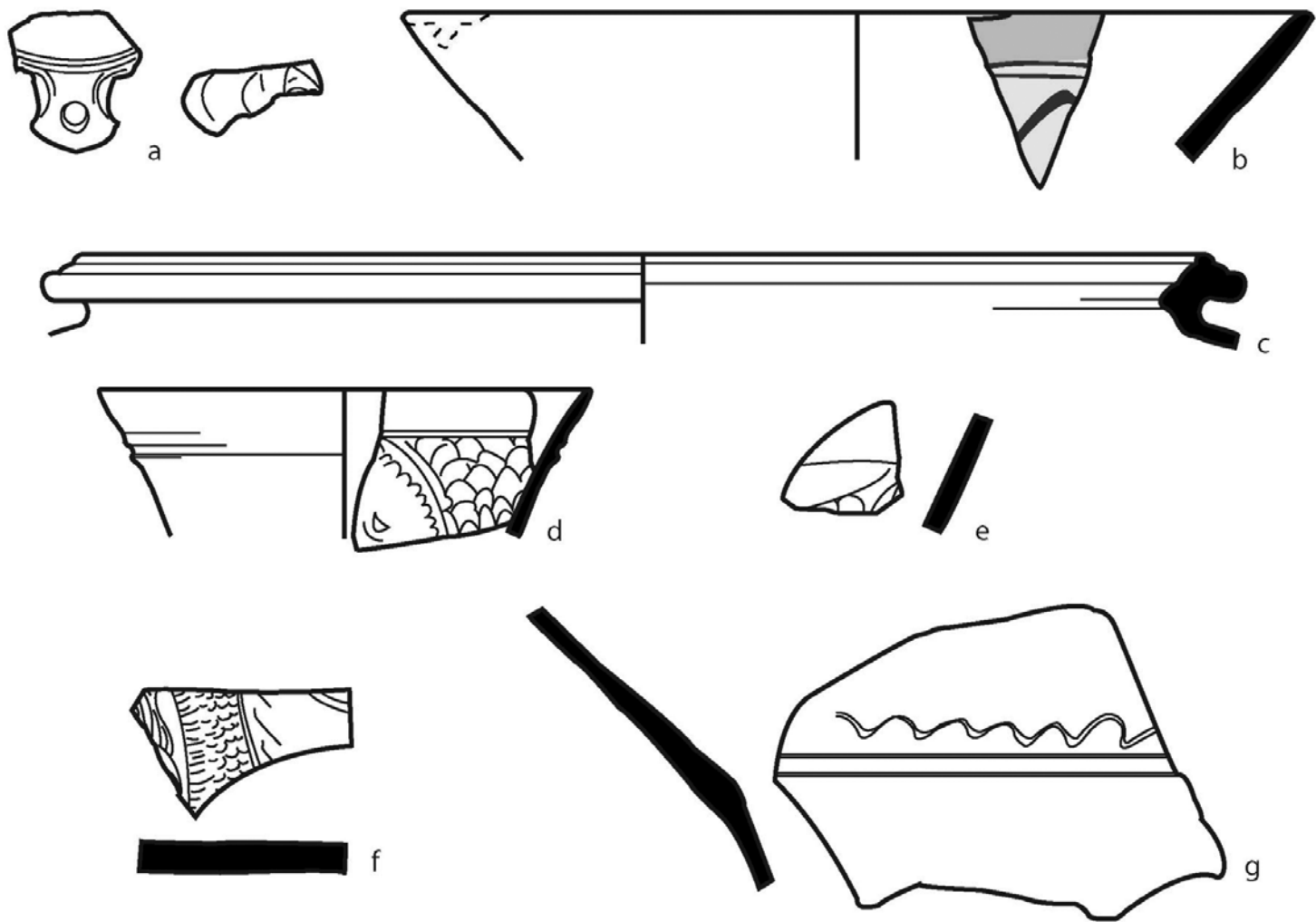
c



Pottery from Locus J9d-13

Pottery from Locus J10a-2

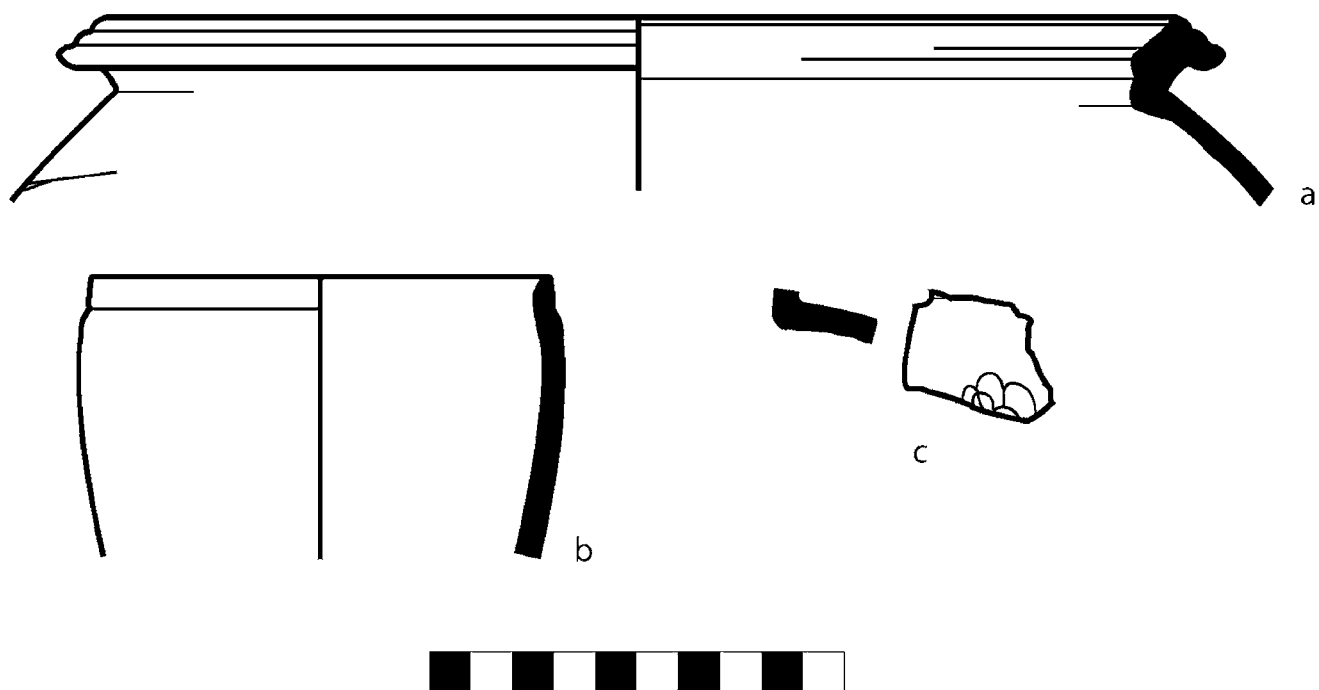
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J10a2_1/ RN 213	Nozzle of lamp	—	Slipped 2.5YR 3/4 dark reddish brown	Roman	—
b	J10a2_2/ RN 278	Rim of bowl	Diam. 26 cm	Yellow glaze in and over rim; green glaze over rim; brown paint	Yemen 1	Whitcomb 1988c, fig. 12:q; 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 colorless glaze	China 2: celadon (Yüe?)	Mikami 1988, fig. 7:a
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



Pottery from Locus J10a-2

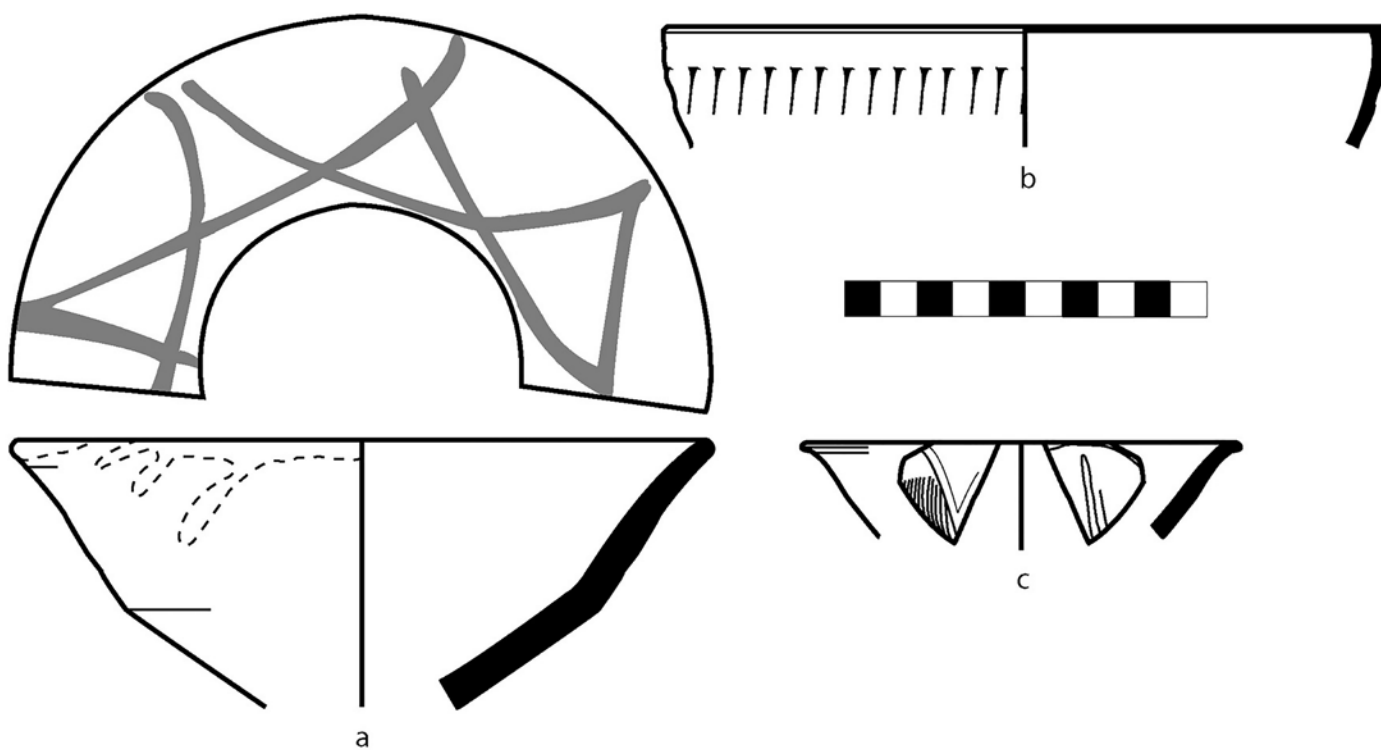
Pottery from Locus J10c-2

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J10c2_1/ RN 289	Rim of cooking pot	Diam. 28 cm	—	India 1	See sherd J10a2_3/ RN 278
b	J10c2_2/ RN 289	Rim of jar	Diam. 11 cm	—	Marl 1 Utility	W. Y. Adams 1986, fig. 318:H5
c	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. 48:c



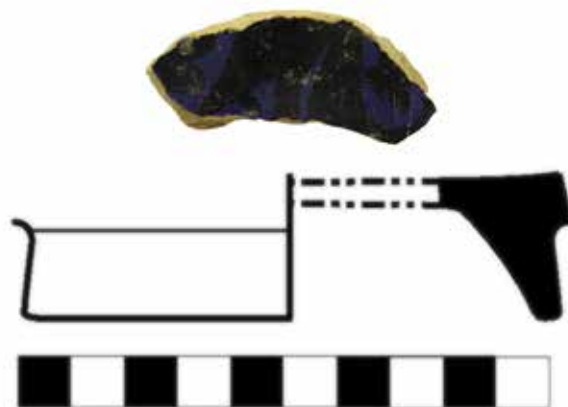
Pottery from Locus J10a-9

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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-Guilbert 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



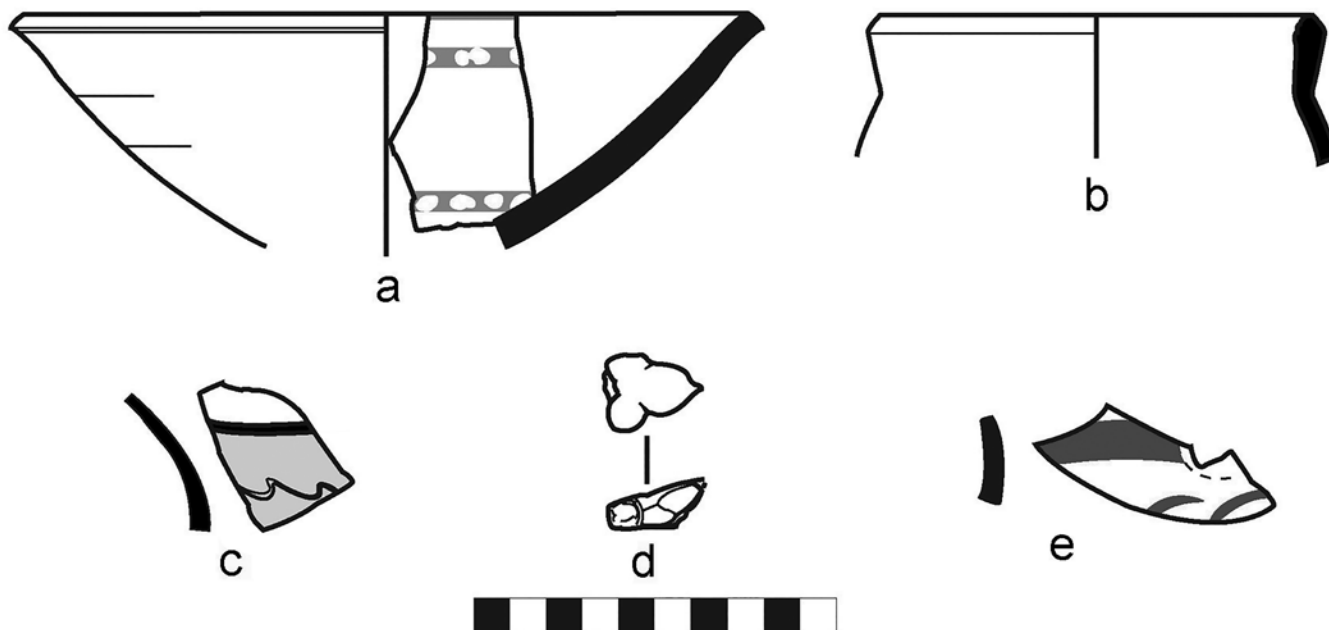
Pottery from Locus J10c-6

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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



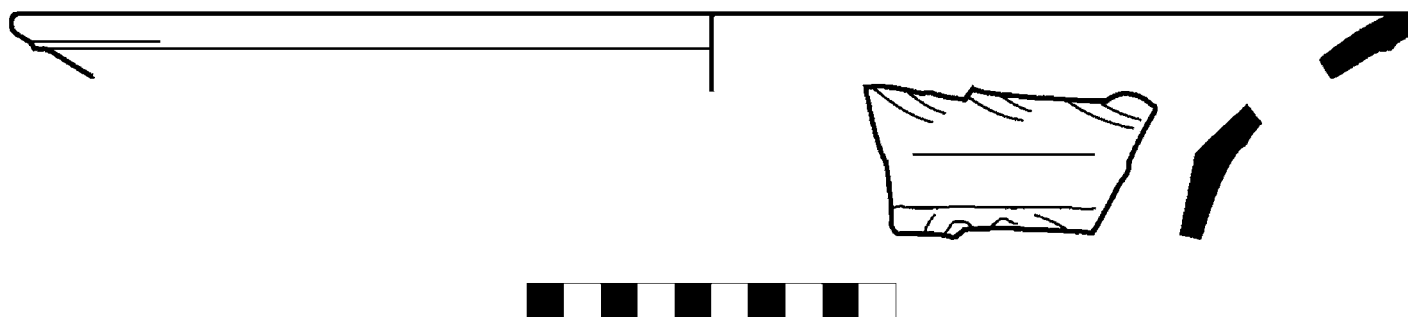
Pottery from Locus J10c-8

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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-Guilbert 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 Mas-soul 1930, pl. LX:6?; Sakurai and Kawatoko 1992, 293, nos. 6-7; Scanlon 1974b, 68, pl. 16:2; Scanlon 1986, figs. 180, 184, 185; Whitcomb 1979, pl. 43:g
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; colorless glaze, now mat, makes the cream slip appear orange? (10YR 7/6 yellow)	Aswān Painted	W. Y. Adams 1986, fig. 225



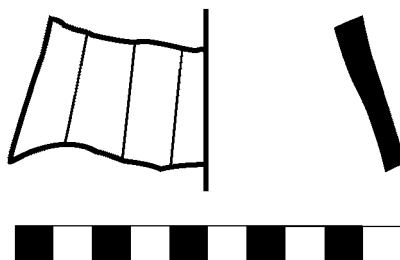
Pottery from Locus J10c-11

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
J10c11_1/ RN 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	—



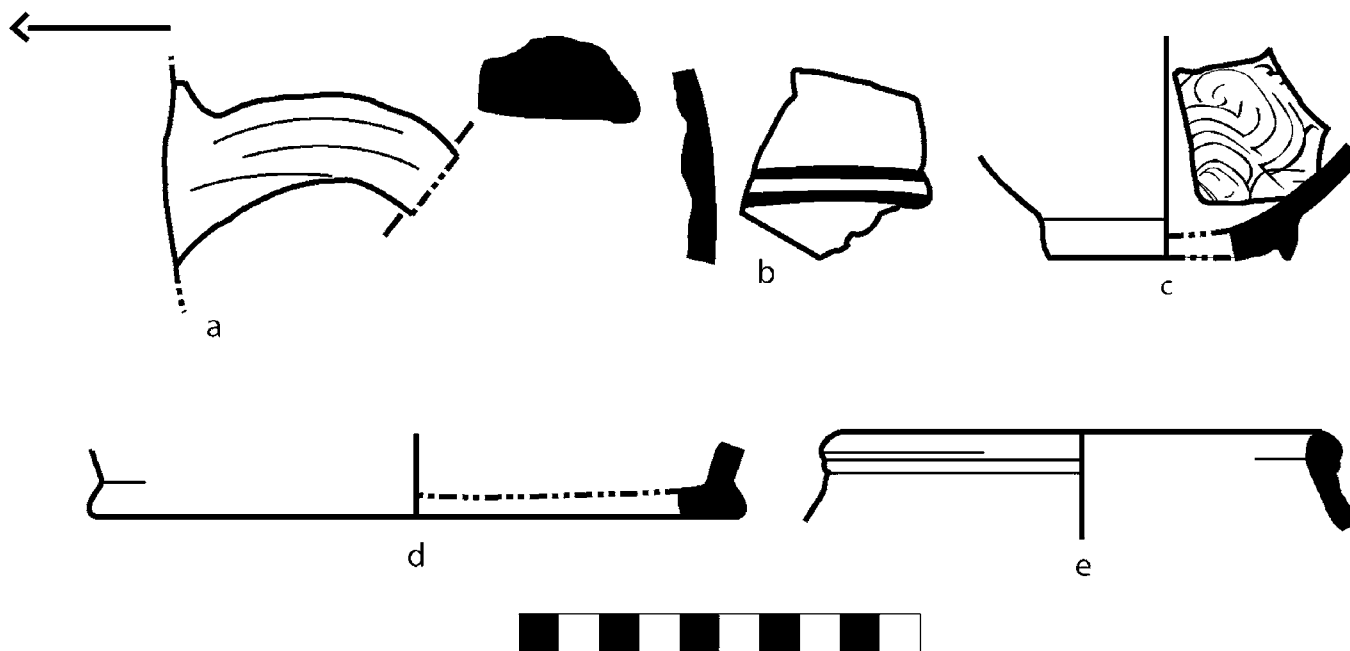
Pottery from Locus J10c-14

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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. 47:g; Avisar and Stern 2005, pl. 9:2



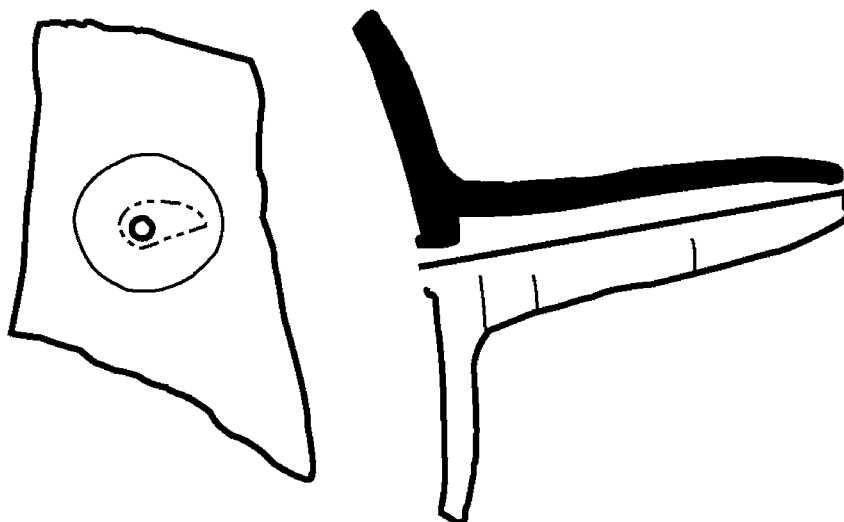
Pottery from Locus J10c-16

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J10c16_1/ RN 13	Handle of jar	—	Exterior surface 2.5Y 7/4 pale yellow	ʿAswān 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, figs. 3:k and 4:a-d
c	J10c8_4/ RN 284	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	—



Pottery from Locus J10c-17

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
J10c17_1/ RN 71	Spout of qulla	—	—	Marl 1 Utility	—



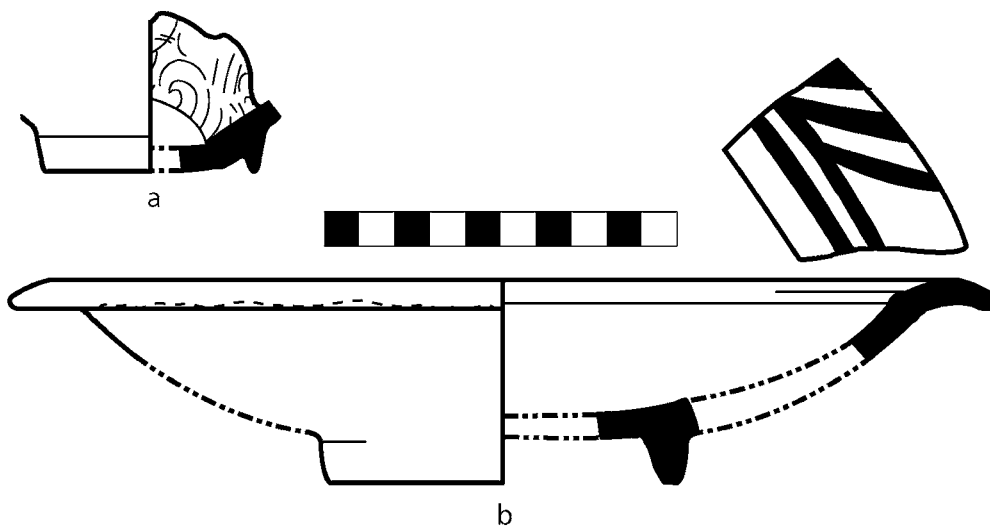
Pottery from Locus J10c-18

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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. 65:a; 66:d, g; 68:a



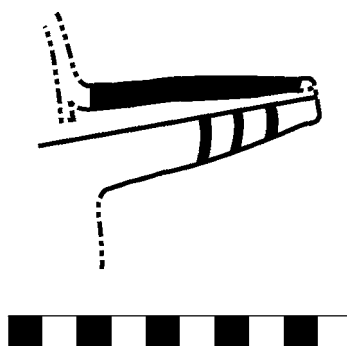
Pottery from Locus J10c-19

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	J10c19_1/ RN 299	Handle of jar	—	Exterior surface 2.5Y 7/4 pale yellow	² Aswān Painted	—
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, 457, fig. 4:b



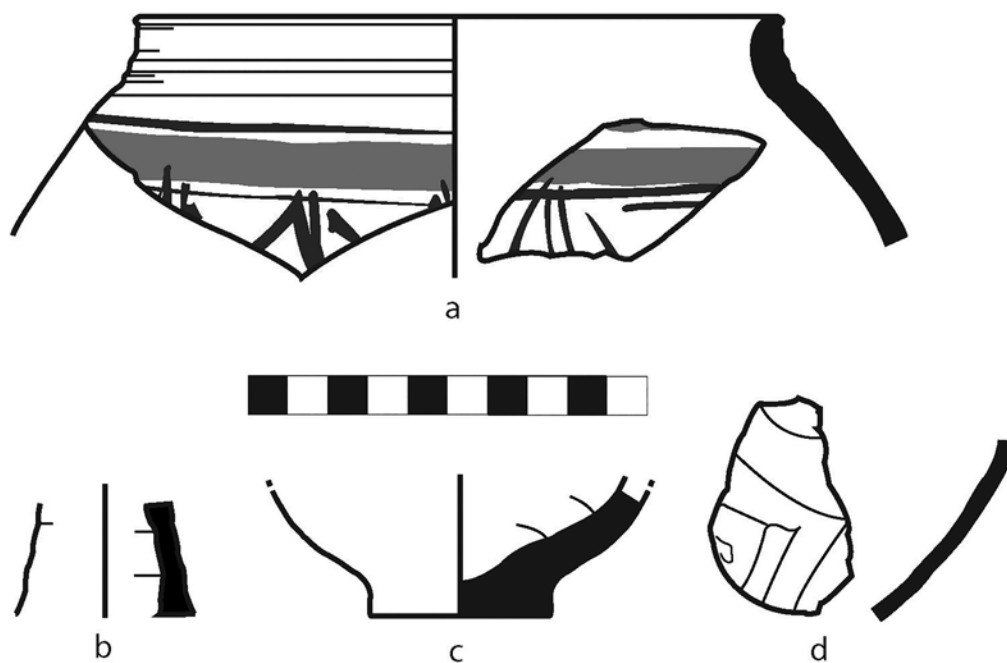
Pottery from Locus K9b-1

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b1_1/ RN 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	² Aswān	W. Y. Adams 1986, fig. 299:J17; 537, ware W24



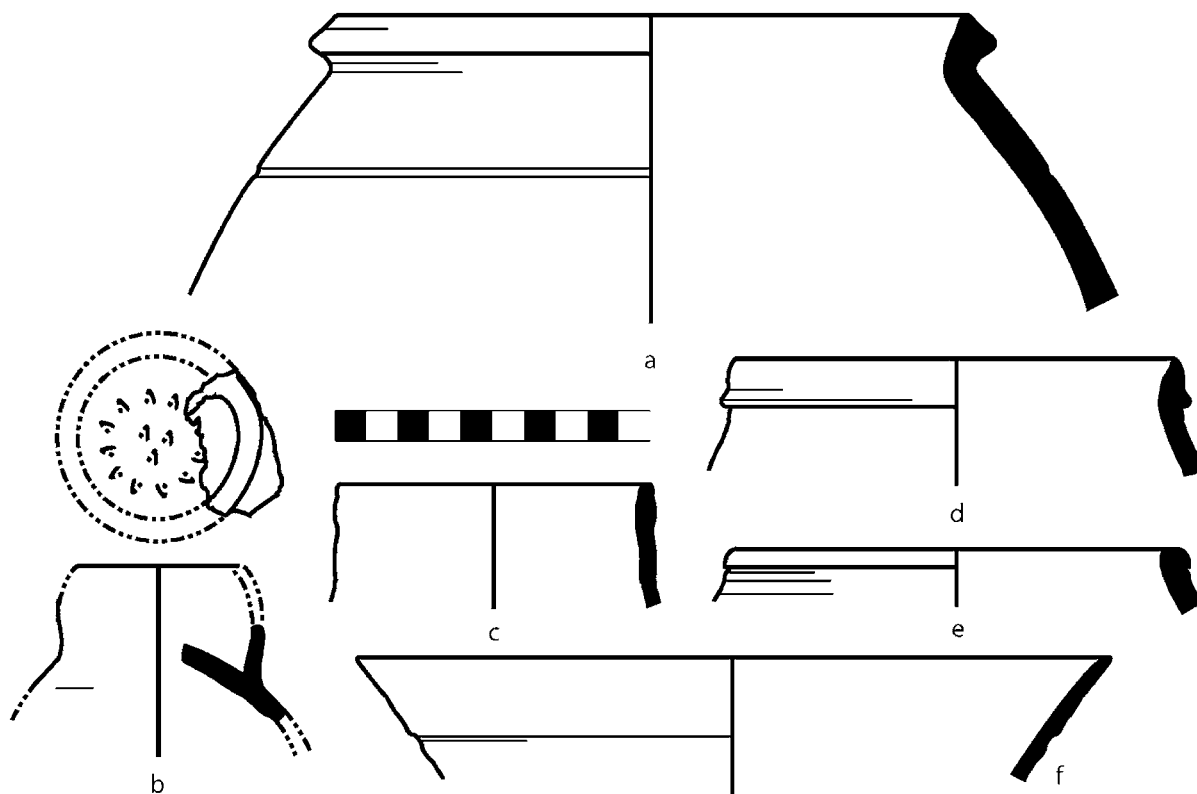
Pottery from Locus K9b-3

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
a	K9b3_1-2/ RN 9	Rim and bodysherd of jar	Diam. 16 cm	Smooth orange-red slip on rim, exterior, 5YR 6/6 reddish yellow, polished. Faded paint, 5YR 2.5/2 dark reddish brown and 2.5YR 5/6 red	Nile 7 Decorated	Whitcomb and Johnson 1980, pl. 39:f
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	—
c	K9b3_5/ RN 678	Base of jar	Diam. 5 cm	—	Nile 4 Coarse Utility	Whitcomb and Johnson 1980, pl. 39:r; 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, pl. 35:c; Whitcomb and Johnson 1980, pl. 39:j



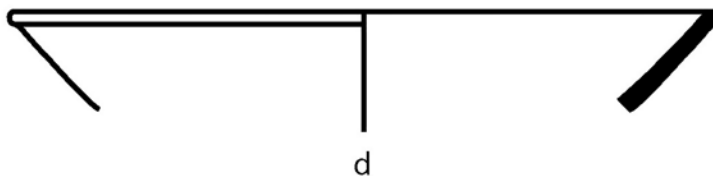
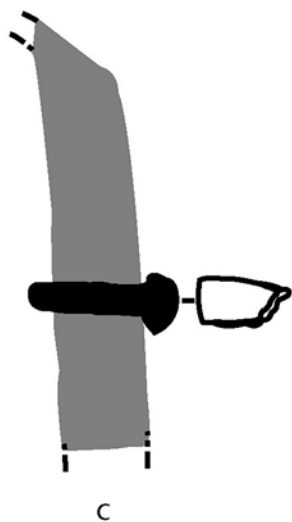
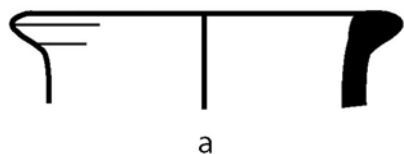
Pottery from Locus K9b-5

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published; Notes</i>
a	K9b5_2/ RN 678	Rim of jar	Diam. 20 cm	—	Yemen 4	Whitcomb and Johnson 1980, pl. 39:g
b	K9b5_3/ RN 678	Neck and filter of qulla	Rim diam. ca. 5 cm	—	Marl 1 Utility	Cf. Sakurai and Kawatoko 1992, ix, no. 10
c	K9b5_1/ No RN	Rim of jar	Diam. 9 cm	—	Nile 6 Coarse Utility	Whitcomb and Johnson 1980, pl. 39:p
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. 39:i; cf. Whitcomb 1988b, fig. 2:h
e	K9b5_5/ RN 678	Rim of jar	Diam. 14 cm	—	ʿAswān Utility	Whitcomb and Johnson 1980, pl. 39:h; cf. Michałowski 1965, pl. 17:5-7, 64, nos. 10-12; W. Y. Adams 2005, 151
f	K9b5_6/ RN 678	Rim of bowl	Diam. 22 cm	Opaque white or colorless glaze, now decayed	Marl 4 Mono-chrome Glazed	Whitcomb and Johnson 1980, pl. 39:d; cf. Avissar and Stern 2005; Scanlon 1974b, pl. 18:2-3



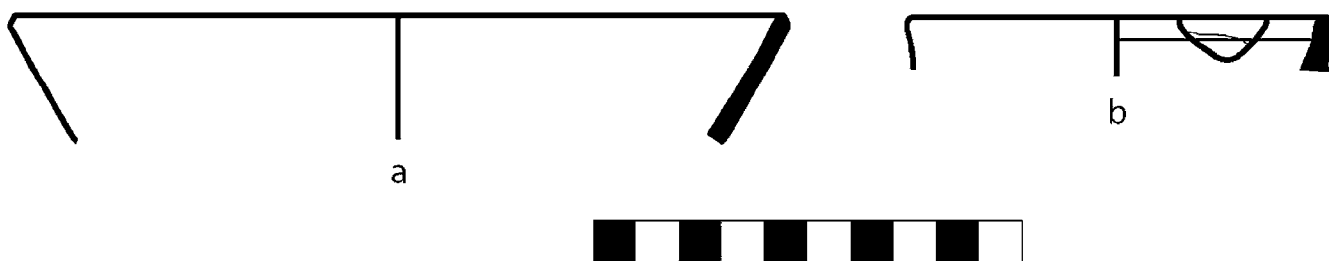
Pottery from Locus K9b-7

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b7_1/ RN 678	Rim of jar	Diam. 9.5 cm	Opaque turquoise glaze in and out	Marl 4 Mono-chrome Glazed	Whitcomb and Johnson 1980, pl. 39:q
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 Mono-chrome Glazed	Whitcomb and Johnson 1980, pl. 39:a; Rougeulle 2001, fig. 5:7-9; Avissar and Stern 2005, 25



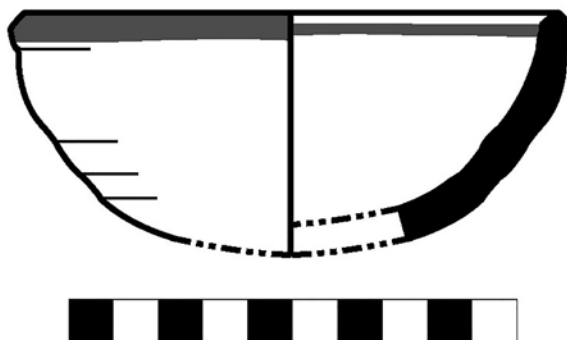
Pottery from Locus K9b-12

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	Net bobbin	—	—	Marl 1 Utility	—



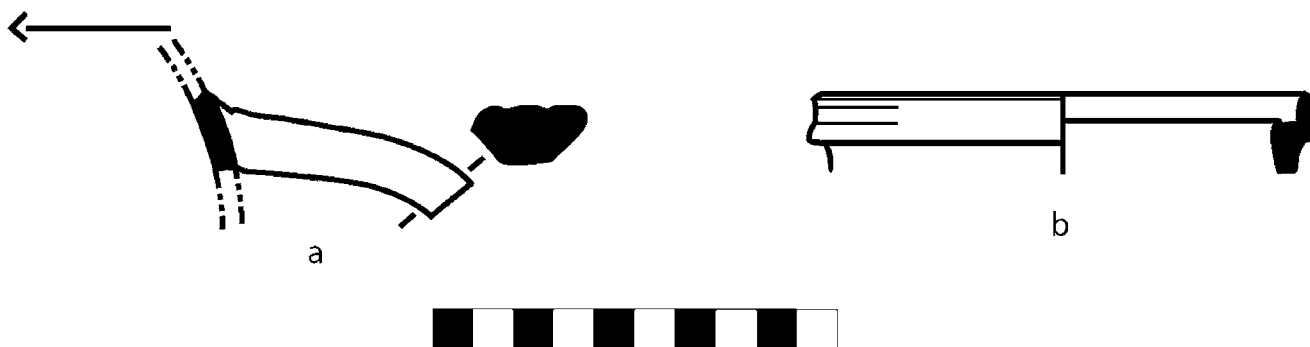
Pottery from Locus K9b-13

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
	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. 3:a



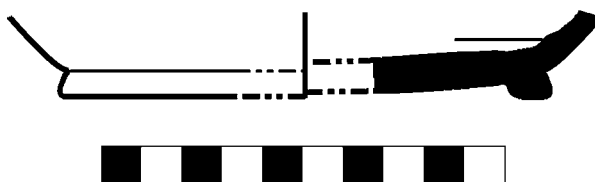
Pottery from Locus K9b-14

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published; Comparanda</i>
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. 39:n
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



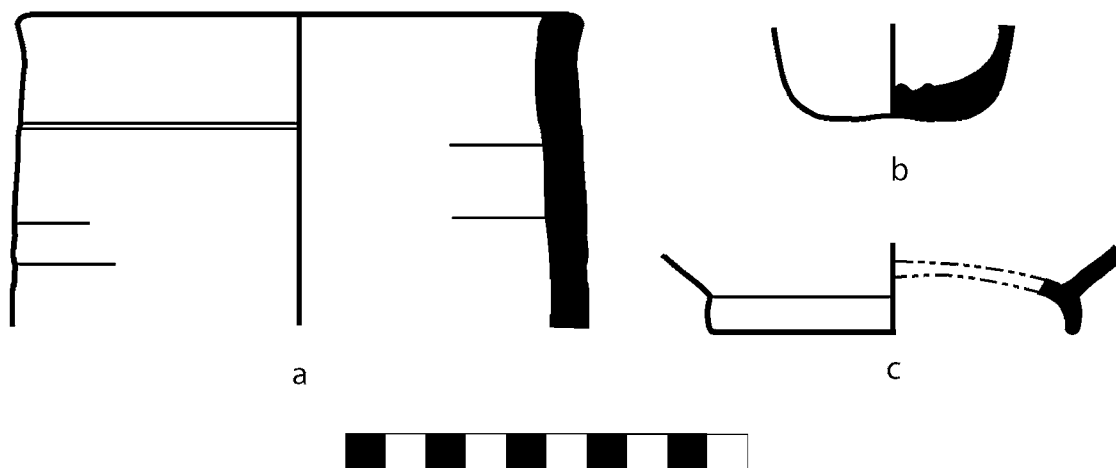
Pottery from Locus K9b-16

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
K9b16_1/ RN 173	Base of jar	Diam. 12 cm	None (interior covered with black bitumen)	Nile 2 Decorated	Whitcomb and Johnson 1980, pl. 40:v



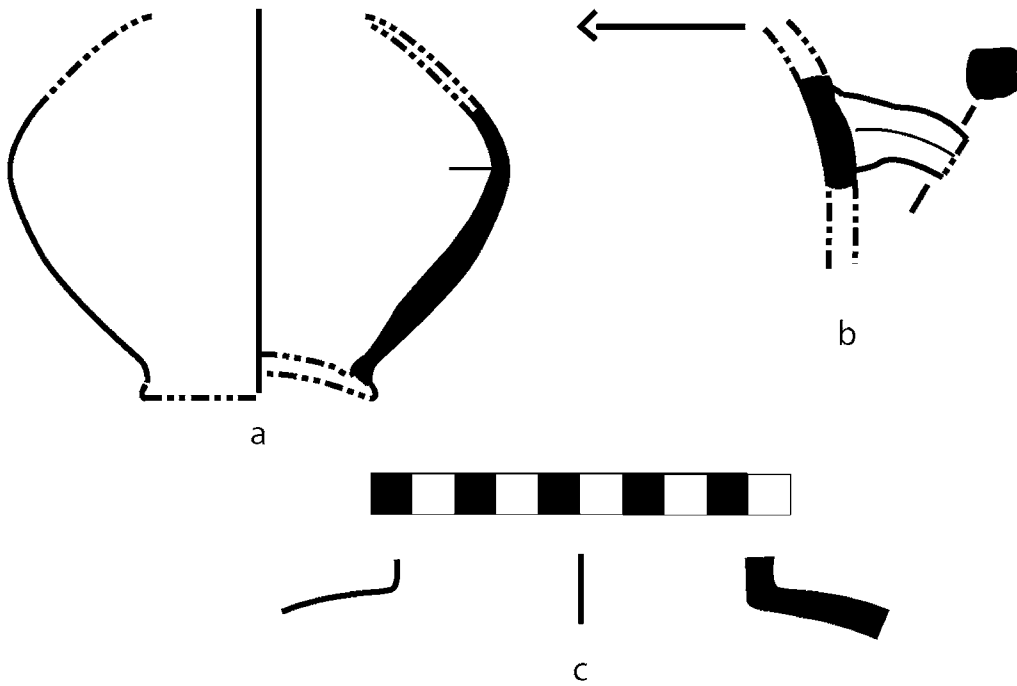
Pottery from Loci K9b-17 and K9b-18

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
a	K9b17_2/ RN 678	Rim of jar	Diam. 13 cm	Traces of brown underglaze paint out, 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. 39:l
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. 39:o
c	K9b18_1/ RN 173	Base of jar	Diam. 8.5 cm	Slipped 5YR 6/8 reddish yellow on exterior surface	² Aswān (Roman period)	Whitcomb and Johnson 1980, pl. 40:s



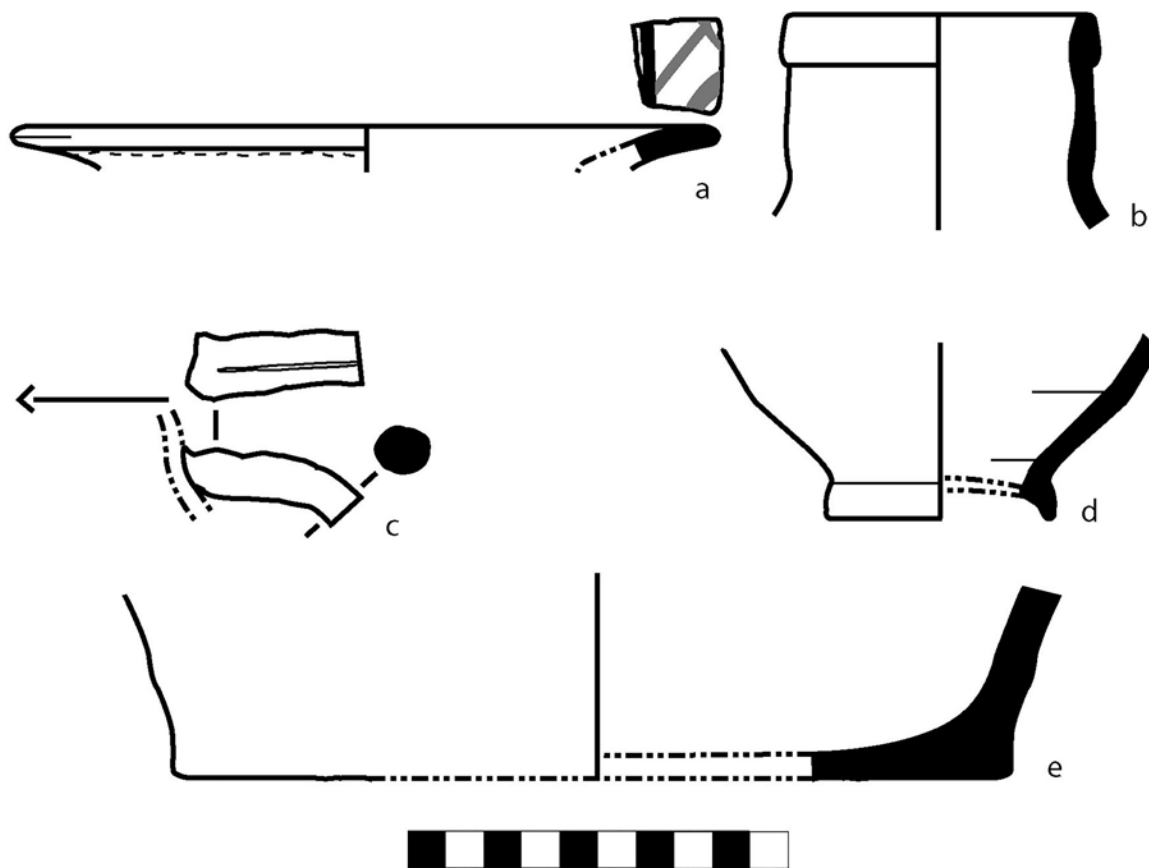
Pottery from Locus K9b-19

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
a	K9b19_1/ RN 173	Bodysherd near base of jar	—	—	Marl 1 Utility	Whitcomb and Johnson 1980, pl. 40:b; cf. Whitcomb and Johnson 1980, pl. 48:f
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. 39:d
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. 40:k



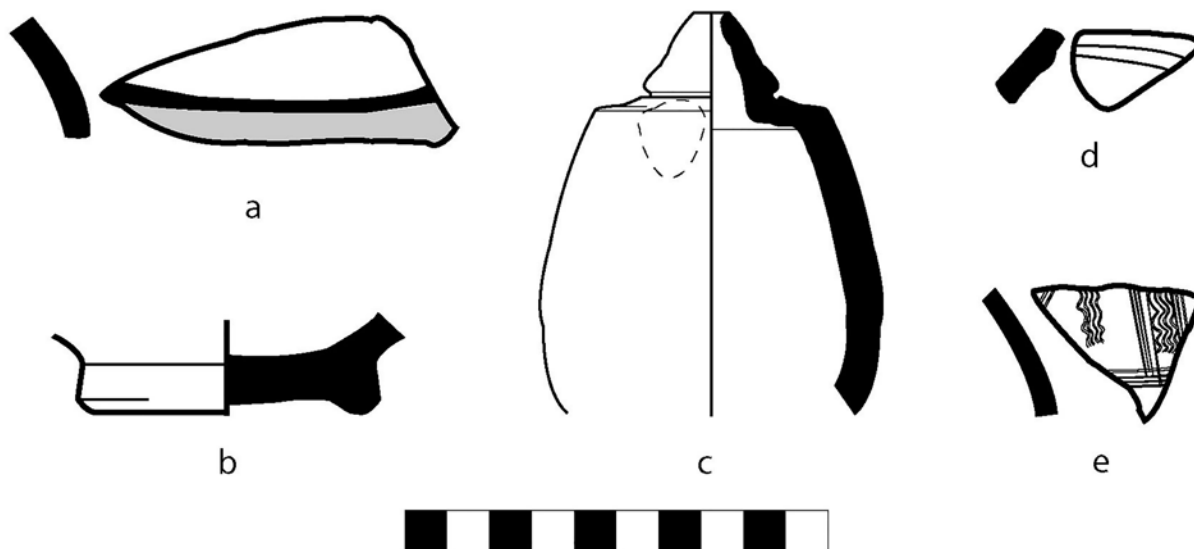
Pottery from Locus K9b-21

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published; Comparanda</i>
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. 40:g
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. 40:j
c	K9b21_4/ RN 584	Handle of jar	—	Covered with a translucent bright green glaze	Marl 4 Incised Monochrome Glazed	Whitcomb and Johnson 1980, pl. 40:m
d	K9b21_5/ RN 587	Base of jar	Diam. 6 cm	—	Marl 1 Utility	Whitcomb and Johnson 1980, pl. 40:t
e	K9b21_1/ RN 173	Base of basin	Diam. 22 cm	—	Yemen 4	Whitcomb and Johnson 1980, pl. 40:w; cf. Ciuk and Keall 1996, pls. 95/30:c, 95/32:g; 95/42:e



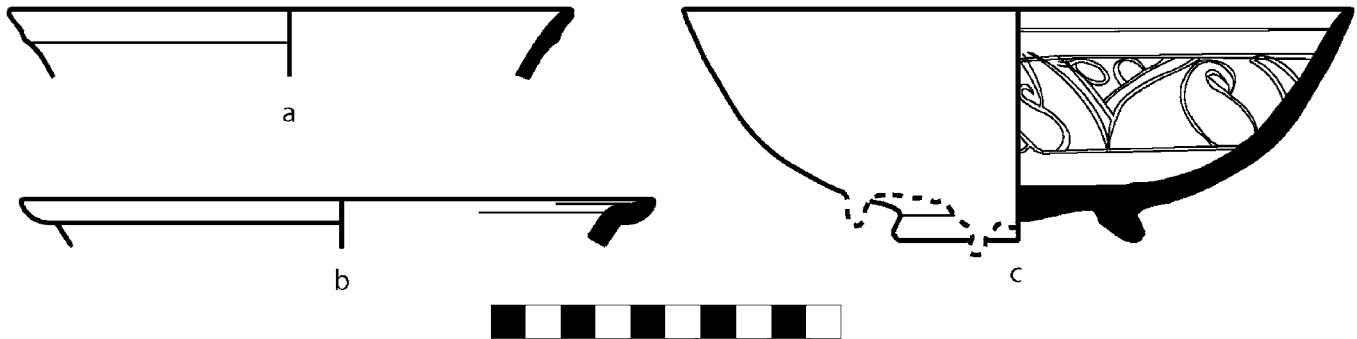
Pottery from Locus K9b-23

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published; Comparanda</i>
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. 40:n; cf. Cairo Ayyubid Wall, Old Cairo Wastewater, and Whitcomb 1979, pl. 43:g
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. 40:u; 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. 40:q; cf. Sakurai and Kawatoko 1992, 229 (pl. IV-1-19?), no. 2, 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 Mono-chrome Glazed	Whitcomb and Johnson 1980, pl. 40:o
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. 40:p; cf. Ciuk and Keall 1996, pl. 95/14:e, g



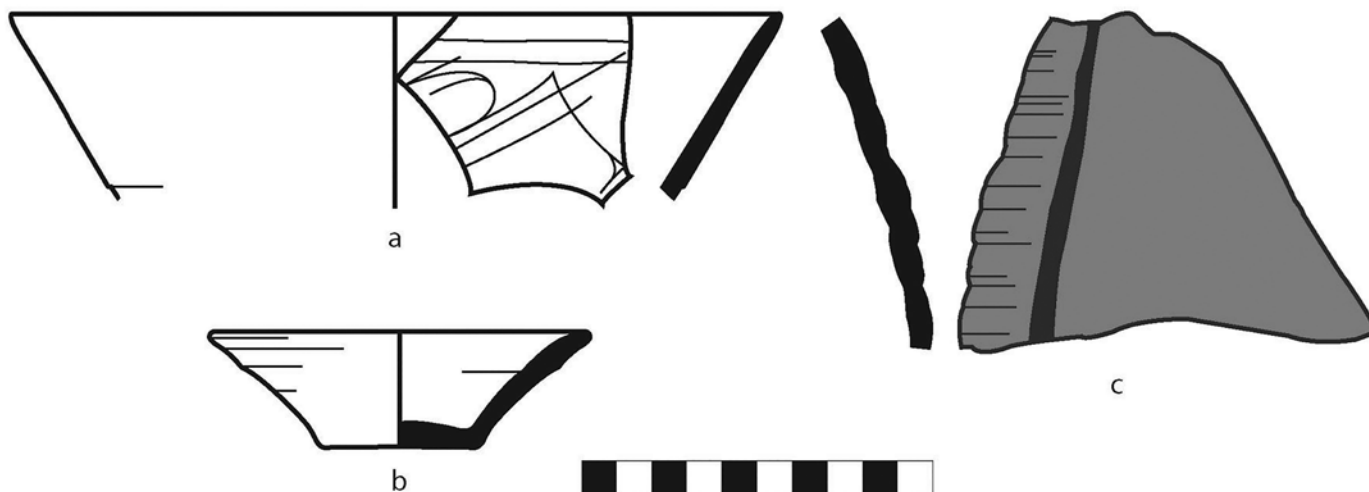
Pottery from Locus K9b-25/27

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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 1980-81, 78-79, figs. 28-29; Whitcomb and Johnson 1980, pls. 43:q, 44:s
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. 35:c; Mason 2004, fig. 4:8; Scanlon 1971, 228; Avissar and Stern 2005, 25



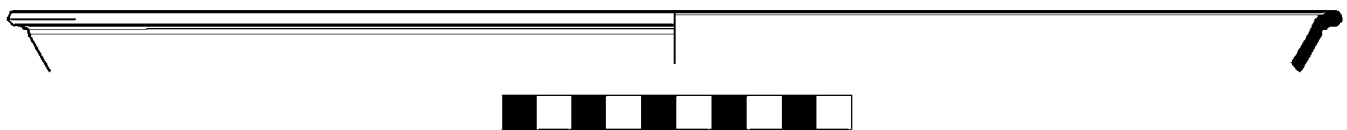
Pottery from Locus K9b-29

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	ʿAswān Utility	Adams 1986, fig. 312, Ware U6; 2005, 151; Michałowski, 1965, pl. 17:5-7, 64, nos. 10-12
c	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; W. Y. Adams 1986, 591, Group G.I



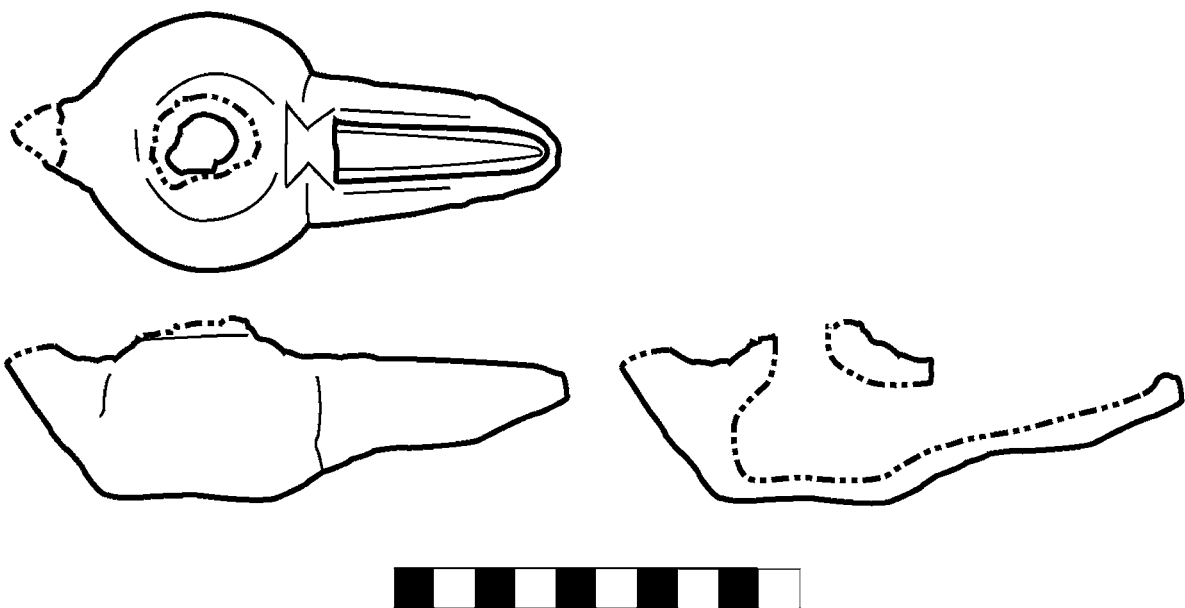
a. Pottery from Locus K9b-30

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
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, table 8:8.1.1; Tomber 1999, fig. 5-2:3; Whitcomb and Johnson 1982c, pl. 30:g



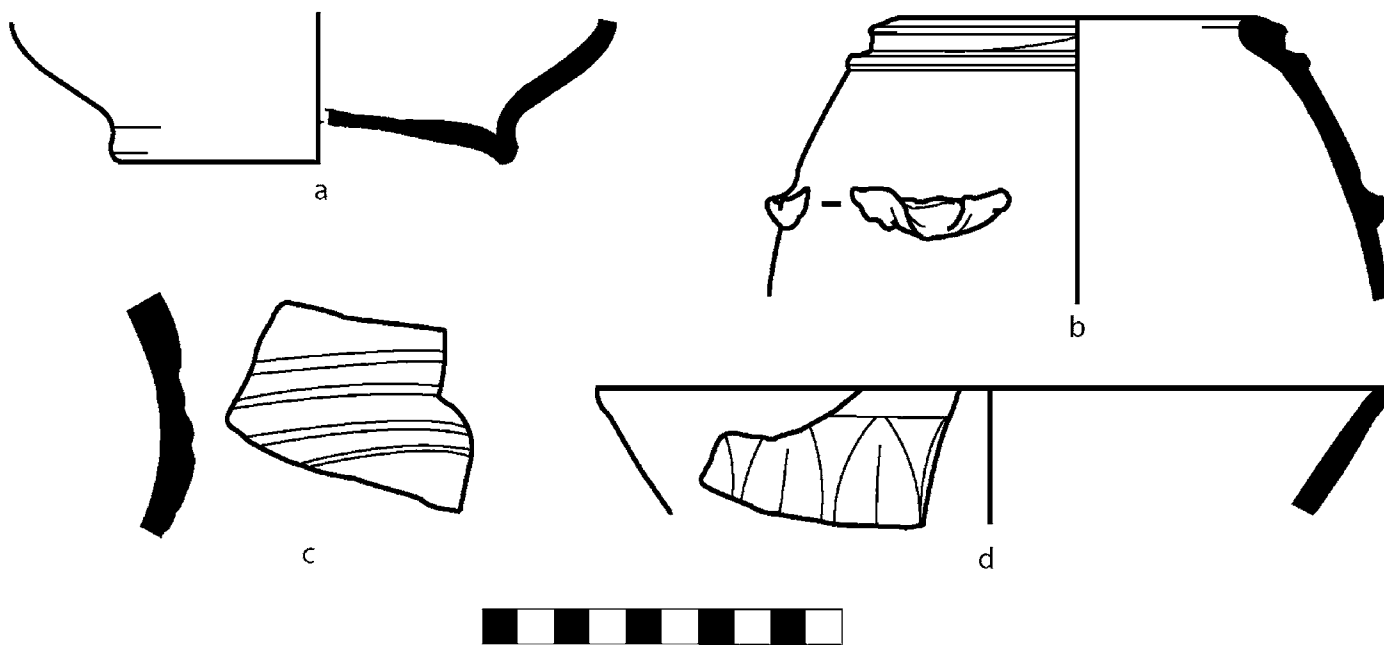
b. Pottery from Locus K9b-33

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Published</i>
K9b30_1/ RN 24	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



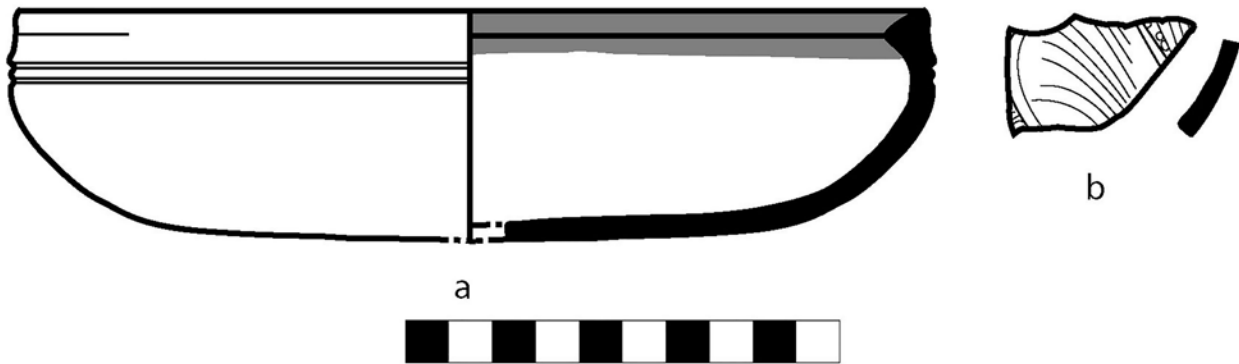
Pottery from Locus K9b-36

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	² Aswān Painted	—
b	K9b36_6-8/ RN 107	Rim of cooking pot	Diam. 10 cm	—	² Aswān Utility	—
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; Scanlon 1971, 228



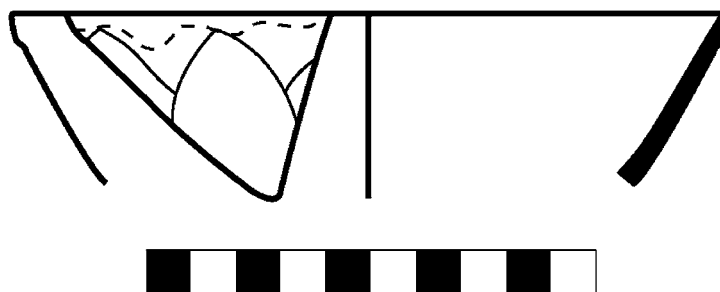
a. Pottery from Locus K9b-38

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b38_1-15/ RN 103	Rim to base of cooking bowl	Diam. 21 cm	Black painted rim stripe	Nile 7 Decorated	Stacey 2004, fig. 5.32:13
b	K9b38_16/ RN 313	Bodysherd of bowl	—	Incised in, glazed greenish-clear in and out, which appears light olive	China 3: celadon	—



b. Pottery from Locus K9b-41

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b41_1/ RN 310	Rim of bowl	Diam. 16 cm	Incised lotus leaves out; opaque greenish-blue glaze in and out	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; Gom- pertz 1980, 62, pl. 17:b



a. Pottery from Locus K9b-42

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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. 8:b; Scanlon 1971, pl. 3:g



b. Pottery from Locus K9b-43

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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



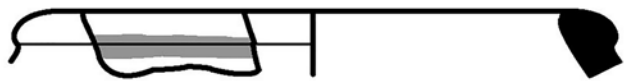
Pottery from Locus K9b-45

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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



Pottery from Locus K9b-46

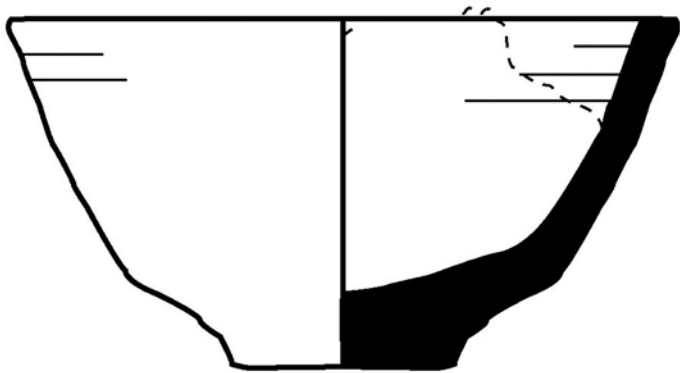
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b46_1/ RN 20	Rim of jar	Diam. 12.5 cm	Black paint, faded to 5Y 4/1 dark gray; colorless glaze in and out, which makes the surface appear 5Y 6/3 pale olive	Marl 1 Glazed	Bridgman 2000, pl. 3:a
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



a



b

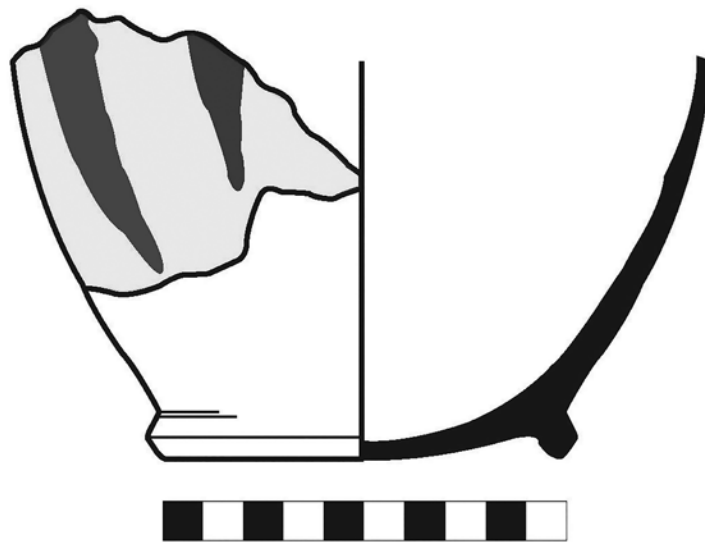


c



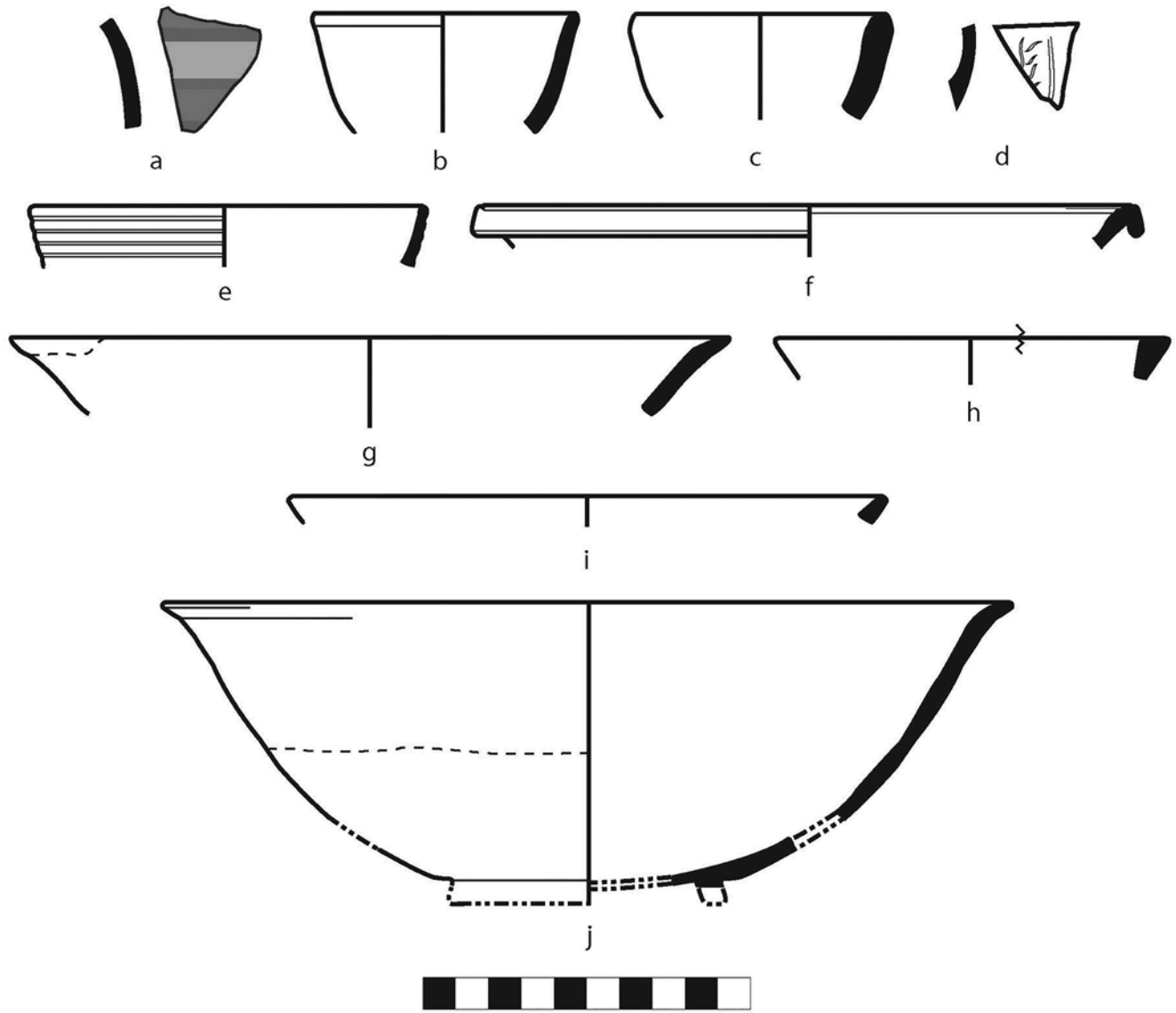
Pottery from Locus K9b-47

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b47_1-7/ RN 331	Base and bodysherds of jar	Base diam. 11 cm	Colorless glaze in and out; opaque light blue glaze (over colorless glaze) with brown and cobalt blue drips out	Marl 3 Glazed	Scanlon 1971, 229



Pottery from Locus K9b-48

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	ʿAswān 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 qulla	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 1980–81, 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 al. 1990, table 11:12.2.2; Whitcomb and Johnson 1982c, pls. 29:a, 30:p
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



Pottery from Locus K9b-48

a. Pottery from Locus K9b-49

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b49_1/ RN 49	Bodysherd of jar	—	Slipped 10YR 8/4 very pale brown. Paint 5YR 3/2 dark reddish brown	² Aswān Painted	—



b. Pottery from Locus K9b-50

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b50_1/ RN 282	Base of goblet	Diam. 6 cm	Greenish-clear glaze out, including base; turquoise drips on stem exterior	Marl 4 Monochrome	—



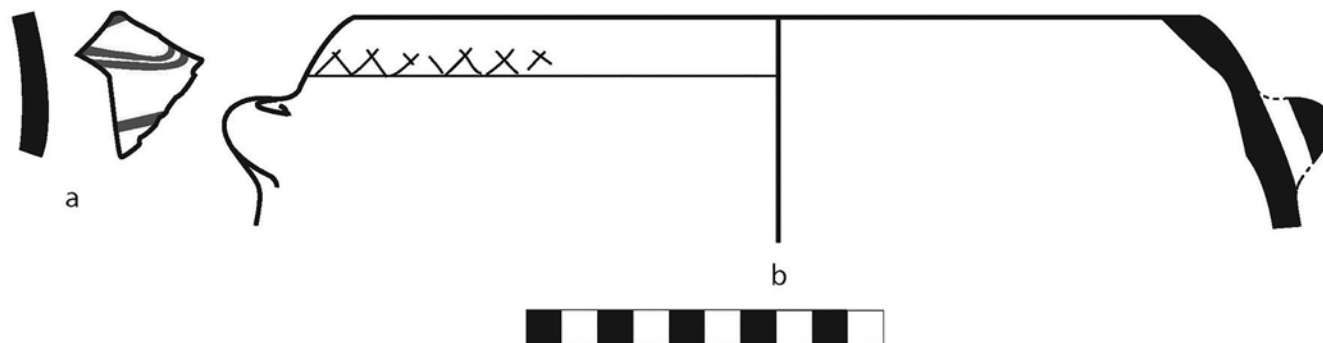
a. Pottery from Locus K9b-51

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	W. Y. Adams 1986, 497-98, figs. 118, 282:C36; Rougeulle 1999, fig. 8:15



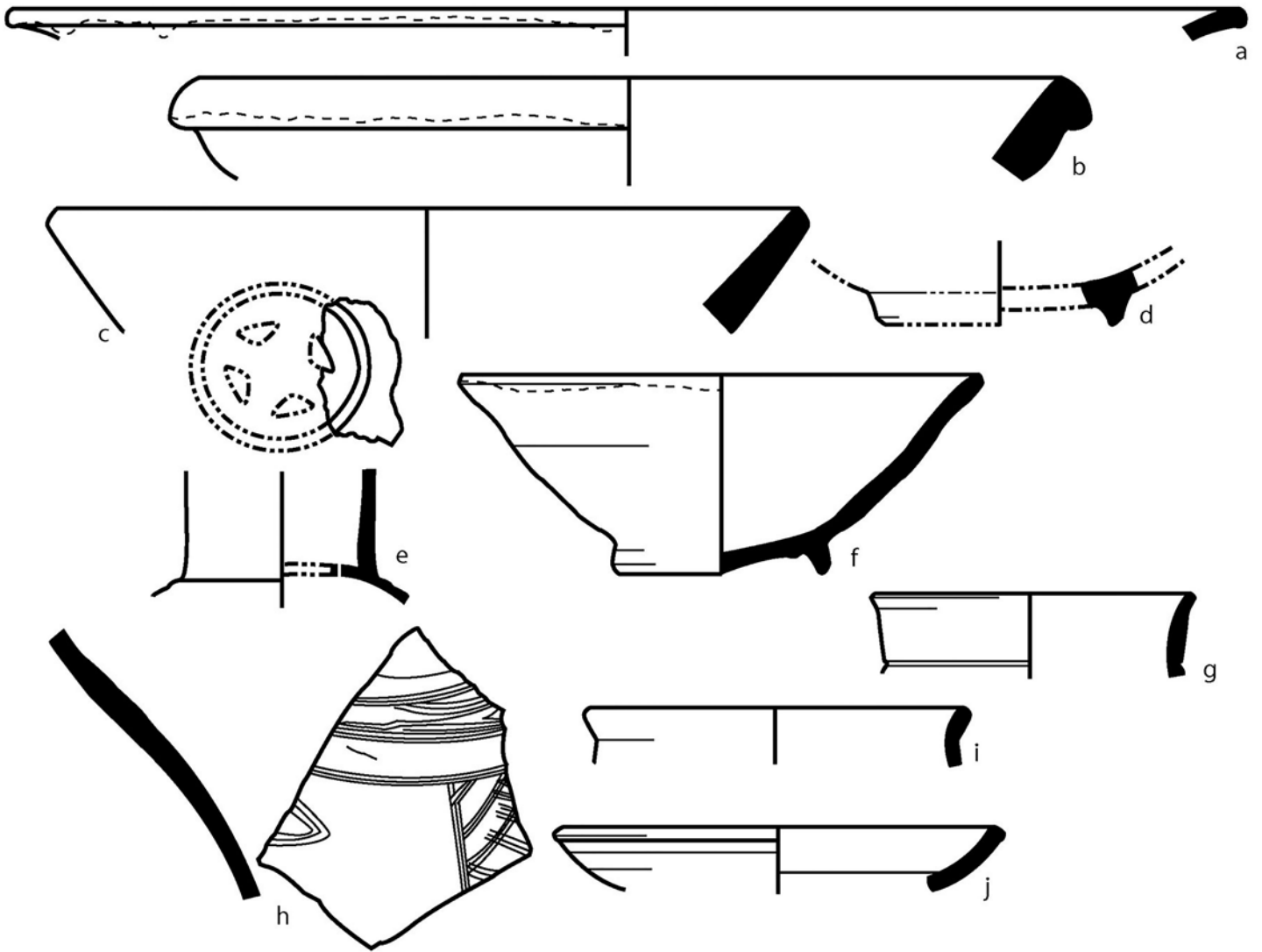
b. Pottery from Locus K9b-52

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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, vi, nos. 2, 13, and 267 (pl. IV-1-5?)
b	K9b52_2/ RN 47	Cooking pot with cut rim	Diam. 24 cm	Incised decoration on exterior	Yemen 2 Utility	Harden 1961, pls. IV: 34, VI: 3-4



Pottery from Locus K9b-53, p. 1

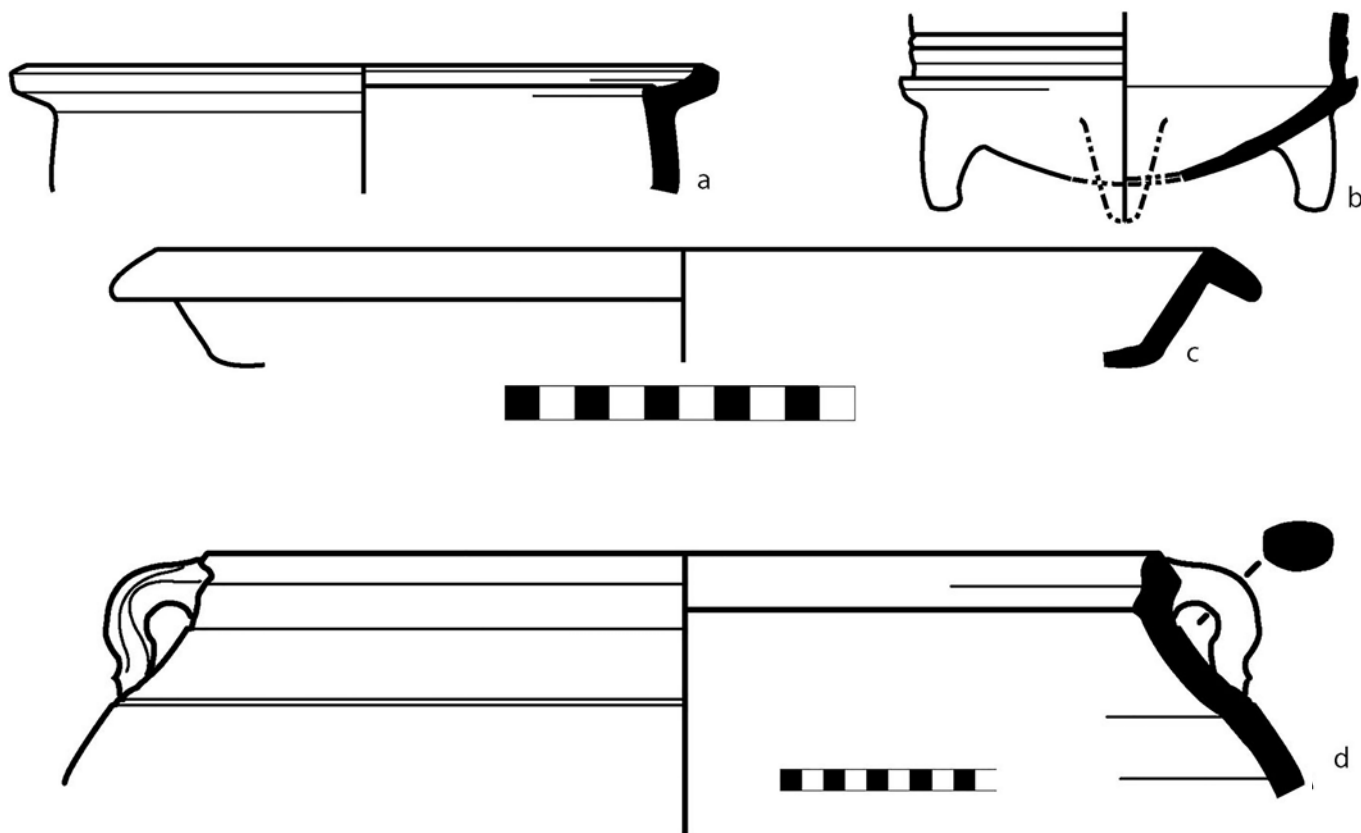
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda; Notes</i>
a	K9b53_13/ RN 338	Rim of bowl	Diam. 40 cm	Mat yellow glaze in, over rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996, pl. 95/45:g; 95/46:i
b	K9b53_12/ RN 338	Rim of bowl	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. 3:a
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 qulla	Diam. 6 cm	Glaze in and out, 2.5Y 8/6 yellow	Yemen 1 Black on Yellow	Bahgat and Mas-soul 1930, 88; Scanlon 1974b, pl. 16:3; 1986, 59
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, pl. 95/14: e.g. Hardy-Guilbert and Rougeulle 1995, fig. 5:18
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	—



Pottery from Locus K9b-53

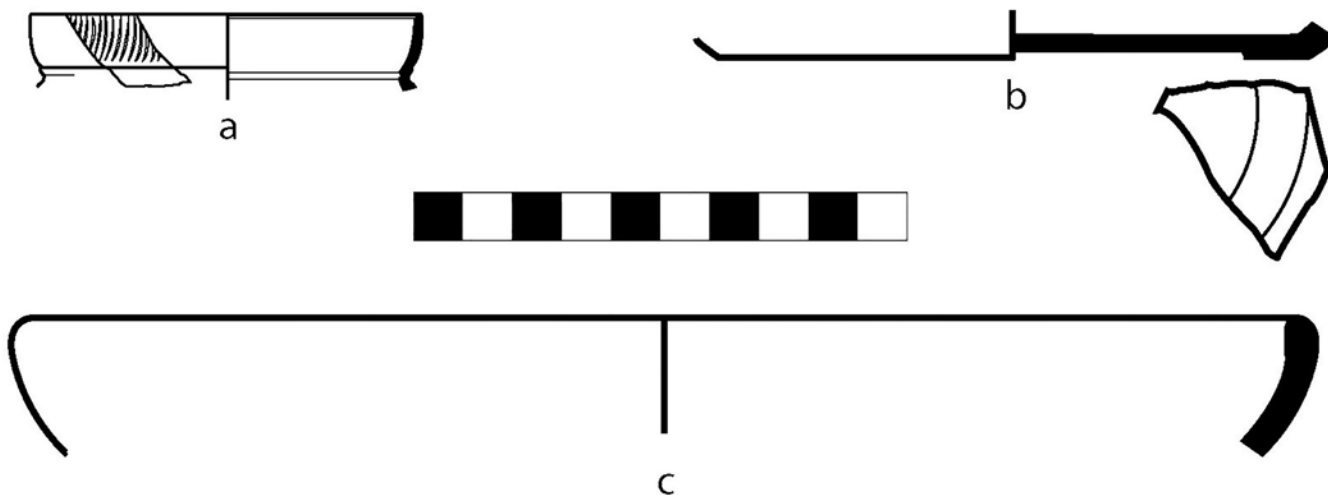
Pottery from Locus K9b-53 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda; Notes</i>
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
c	K9b53_2/ RN 269	Rim of cooking pan	Diam. 30 cm	Polished and slipped surface, 2.5YR 3/4 dark reddish brown	Egyptian, Roman period	Hayes 1972, 397-99
d	K9b53_1/ RN 118	Rim and handle of storage jar	Diam. 44 cm	—	India 2 Red Utility	—



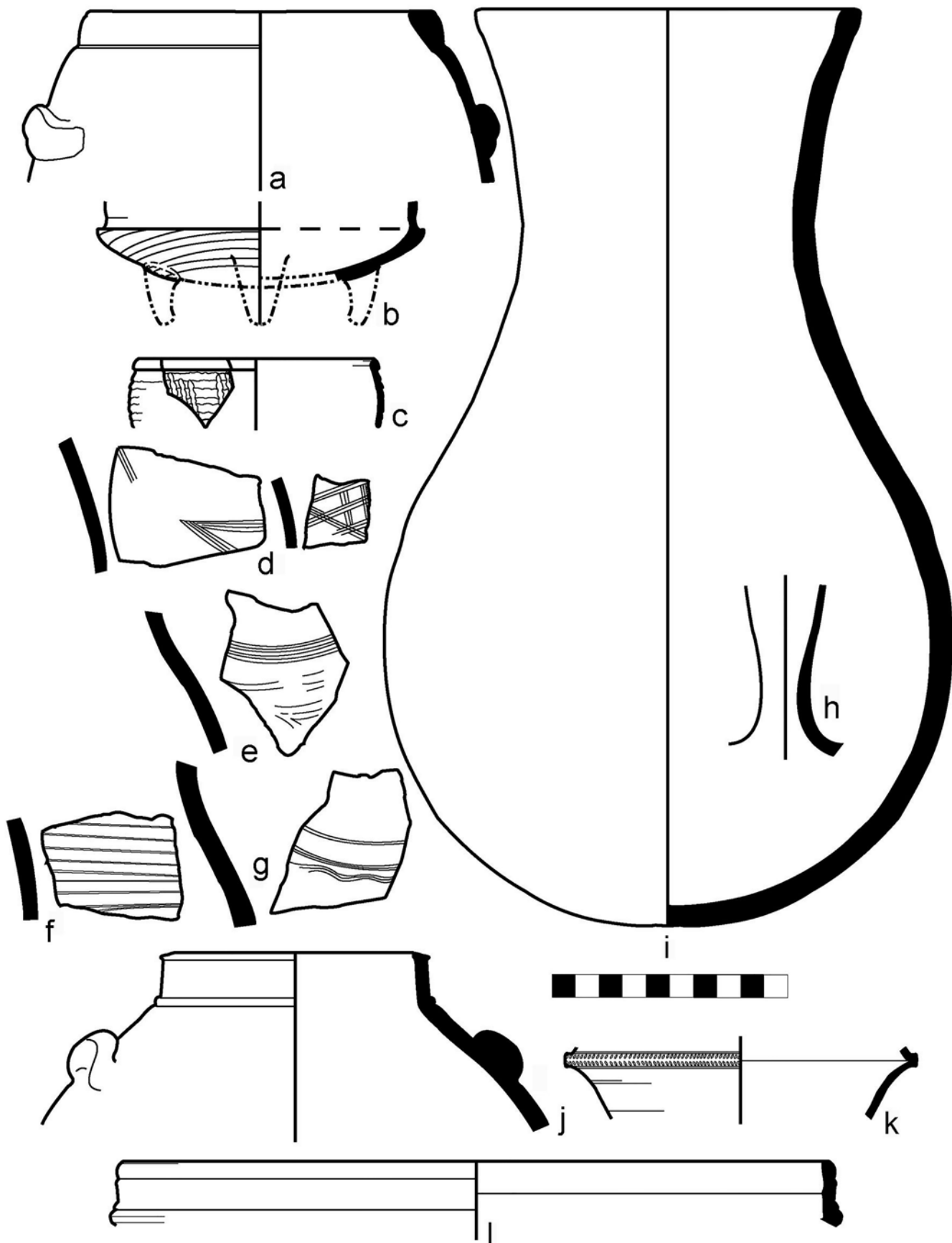
Pottery from Locus K9b-54

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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. 29:l
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. 29:z
c	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, 28:d, 29:y



Pottery from Locus K9b-56

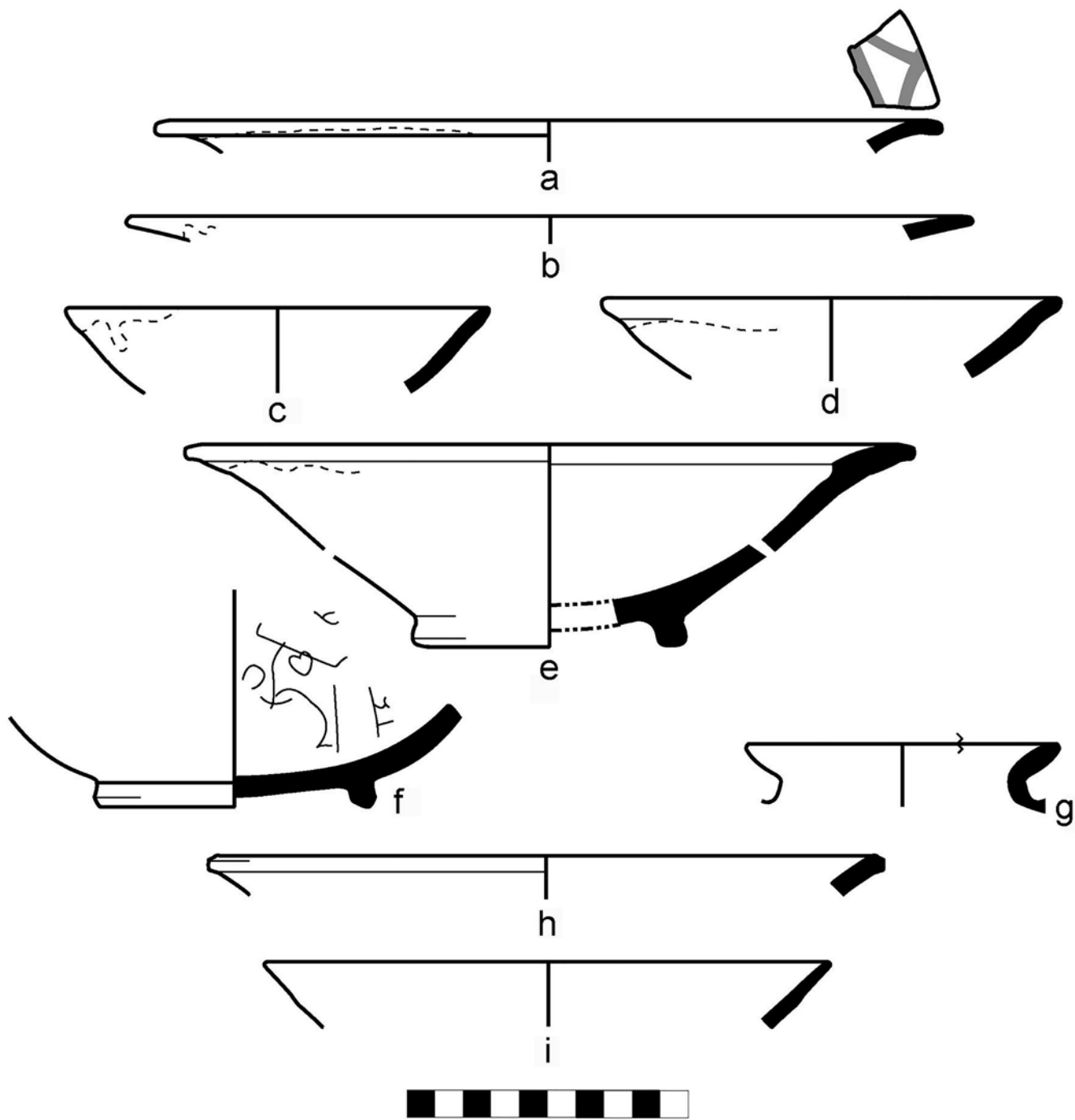
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b56_1/ RN 98	Cooking pot rim with handle	Diam. 15 cm	—	² Aswān Utility	—
b	K9b56_14/ RN 262	Base of footed bowl (Same vessel as K9b53_7)	Diam. 14 cm at widest	—	Nubian Meroitic?	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 1997a, 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 1997a, fig. 3:10-12
h	K9b56_15/ RN 262	Neck of jar or jug	Diam. 2.1 cm at narrowest	—	Marl 1 Utility	W. Y. Adams 1986, 578-79, Ware U17
i	K9b56_44-48/ RN 119	Rim, body, and base sherds of jar	Rim diam. 16.75 cm	—	Nubia 2 Utility	W. Y. Adams 1986, 427
j	K9b56_1/ /RN 262	Rim of cooking pot	Diam. 12 cm	—	² Aswān Utility	W. Y. 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
l	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, figs. 6-16:4, 18



Pottery from Locus K9b-56

Pottery from Locus K9b-56 (*cont.*)

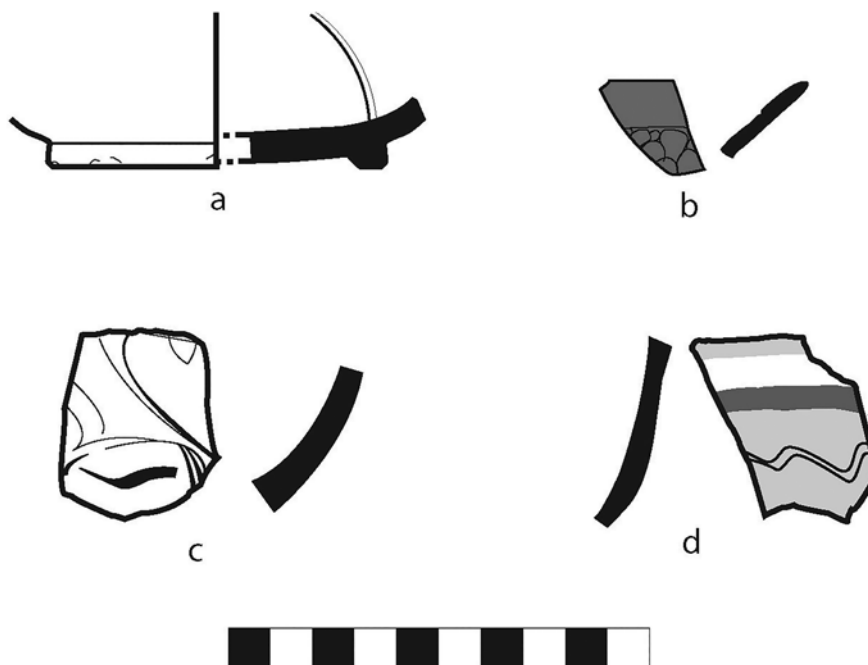
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b56_29/ RN 297	Rim of bowl	Diam. 28–36 cm	Decayed yellow glaze in and over rim; brown paint inside rim	Yemen 1 Black on Yellow	Ciuk and Keall 1996, pl. 95/45:h
b	K9b56_27/ 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 colorless 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	—



Pottery from Locus K9b-56 (cont.)

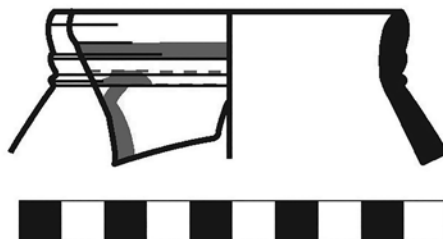
Pottery from Locus K9b-59

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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: Kinuta 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, 293 (pl. IV-1-18?), nos. 6-7; Scanlon 1974b, pl. 16:2; Scanlon 1986, figs. 180, 184, 185; Whitcomb and Johnson 1979, pl. 43:g; 1980, pl. 43:g



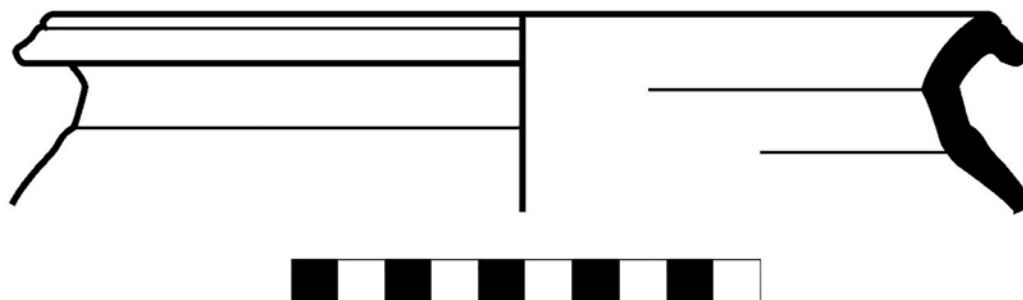
Pottery from Locus K9b-63

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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	² Aswān Painted	—



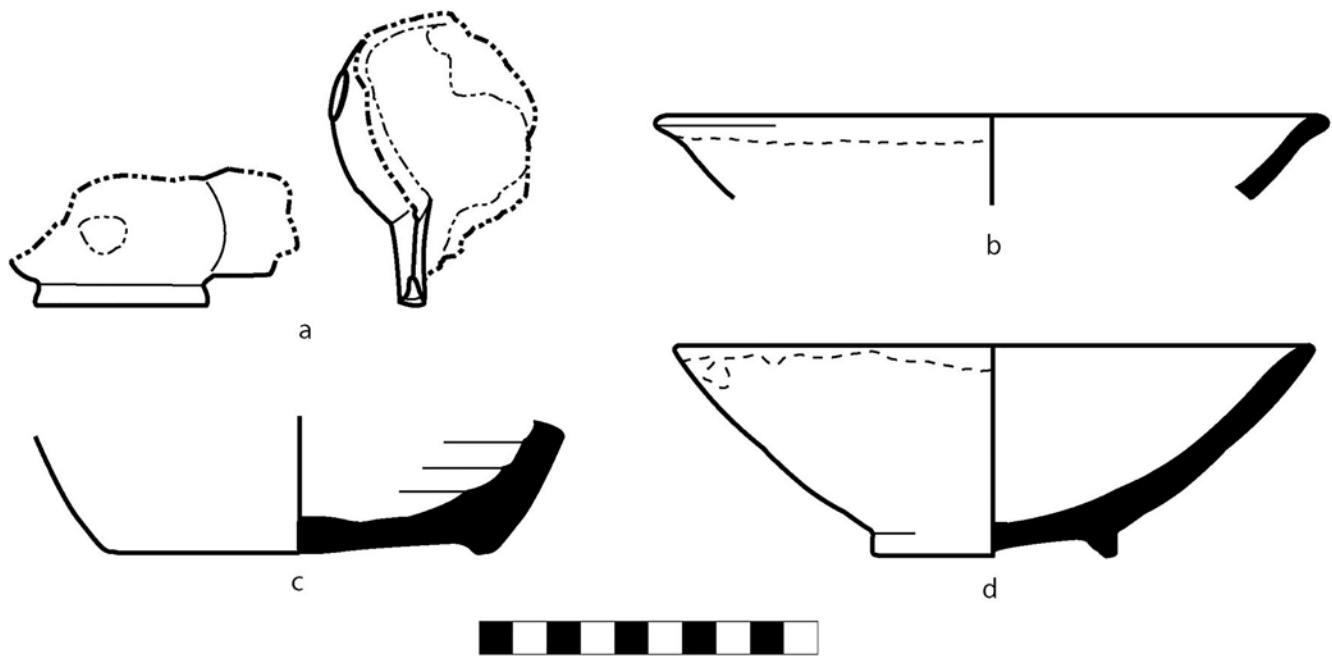
Pottery from Locus K9b-64

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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, figs. 11:2, 21



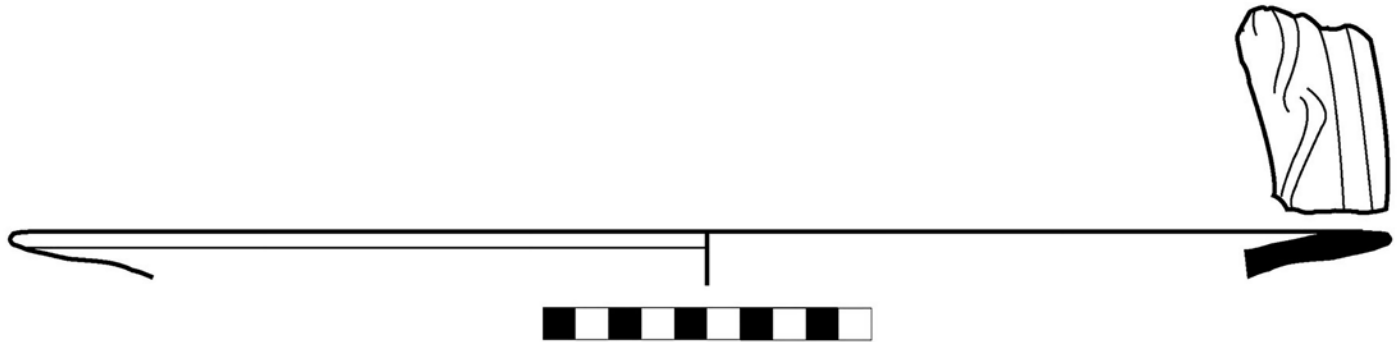
Pottery from Locus K9b-67

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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 Mono-chrome 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. 43:j



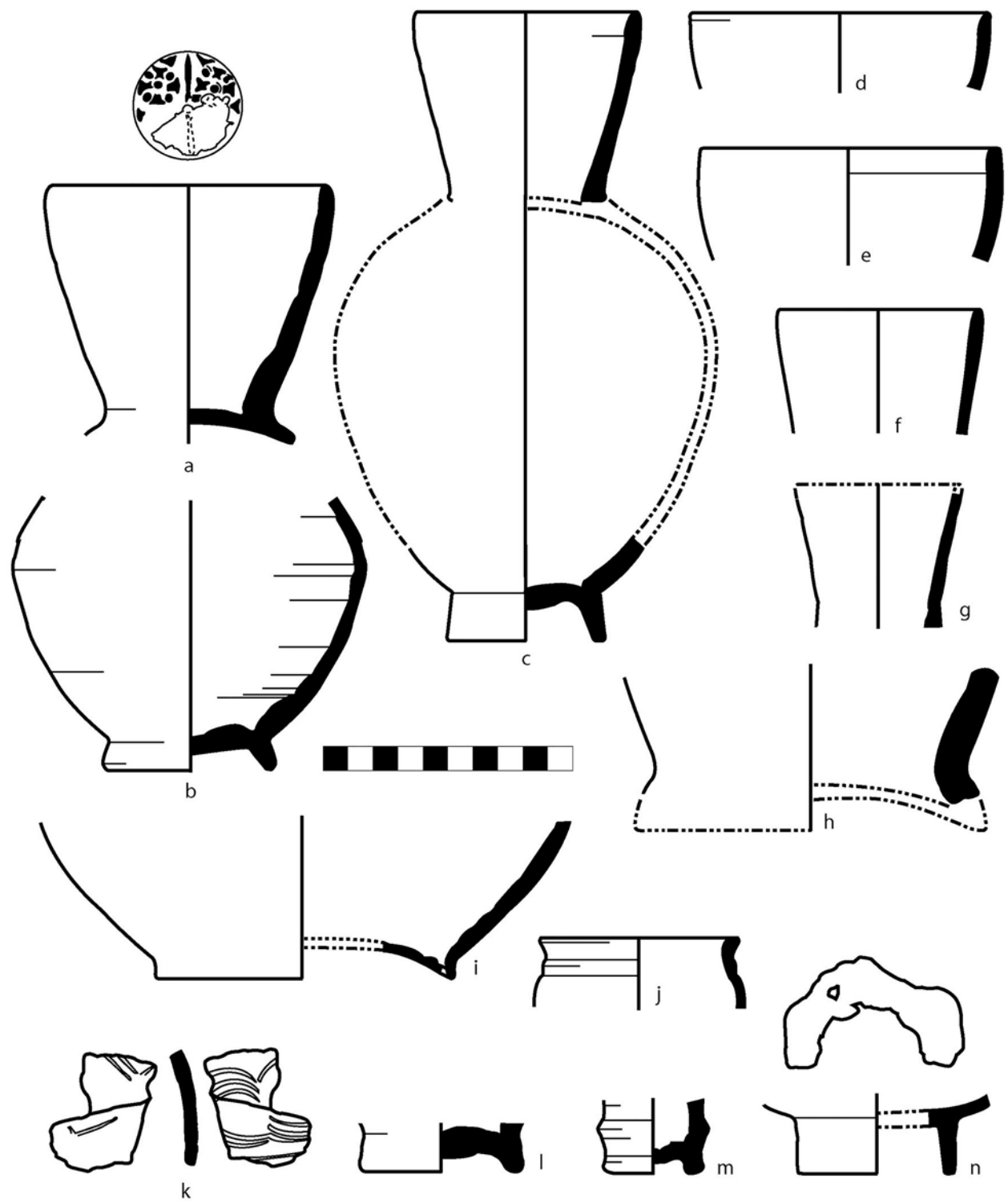
Pottery from Locus K9b-68

<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
K9b68_1/ RN 334	Rim of ledge-rimmed dish	Diam. 42 cm	Incised design on rim, then glazed dark bluish green, severely decayed	Marl 4 Incised Monochrome Glazed	—



Pottery from Locus K9b-69

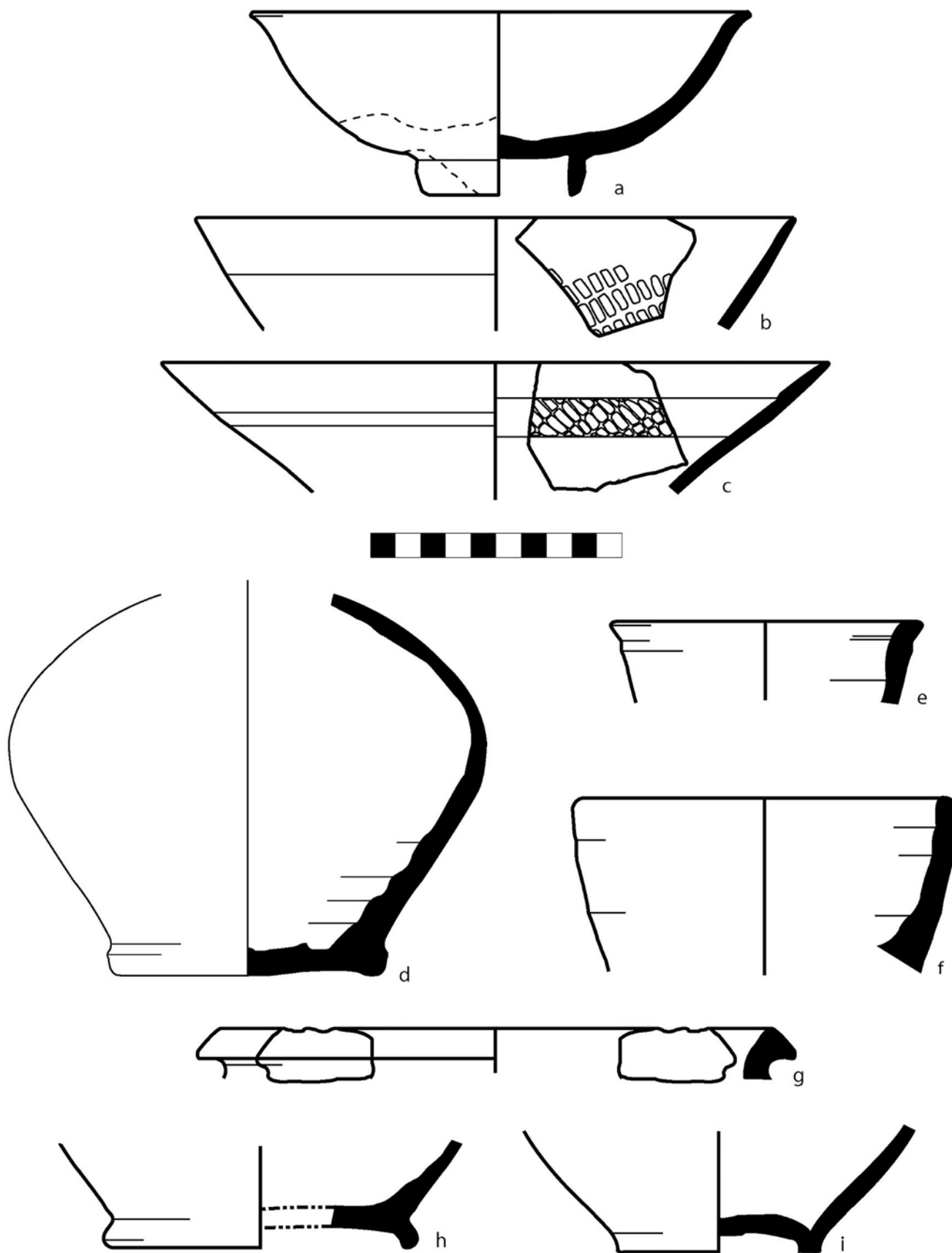
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b69_1/ RN 346	Rim and filter of qulla	Rim diam. 11 cm	—	Marl 1 Utility	Scanlon 1986, figs. 126–30, pls. 5:b, 20:a; Sakurai and Kawatoko 1992, ix, nos. 1–6
b	K9b69_2/ RN 346	Base of qulla	Diam. 7 cm	—	Marl 1 Utility	Scanlon 1986, fig. 138
c	K9b69_62–63/ RN 346	Rim and base of qulla	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 qulla	Diam. 12 cm	—	Marl 1 Utility	Ciuk and Keall 1996, pl. 95/12:e
e	K9b69_111/ RN 348	Rim of qulla	Diam. 12 cm	—	Marl 1 Utility	Ciuk and Keall 1996, pl. 95/12:e
f	K9b69_108b/ RN 348	Rim of qulla	Diam. 7–8 cm	—	Marl 1 Utility	Ciuk and Keall 1996, pl. 95/12:e
g	K9b69_95/ RN 348	Bodysherd near rim of qulla	Diam. ca. 7 cm	—	Marl 1 Utility	—
h	K9b69_109/ RN 348	Sherd near base of jar or qulla	Base diam. ca. 14 cm	—	Marl 1 Utility	—
i	K9b69_71–74/ RN 348	Base of jar or qulla	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	—
l	K9b69_113/ RN 348	Base of qulla or jar	Diam. 6 cm	—	Marl 1 Utility	—
m	K9b69_57/ RN 346	Base of qulla or jar	Diam. 4 cm	—	Marl 2 Utility	—
n	K9b69_64/ RN 346	Base of a colander	Diam. 6.5 cm	—	Marl 1 Utility	—



Pottery from Locus K9b-69

Pottery from Locus K9b-69 (*cont.*)

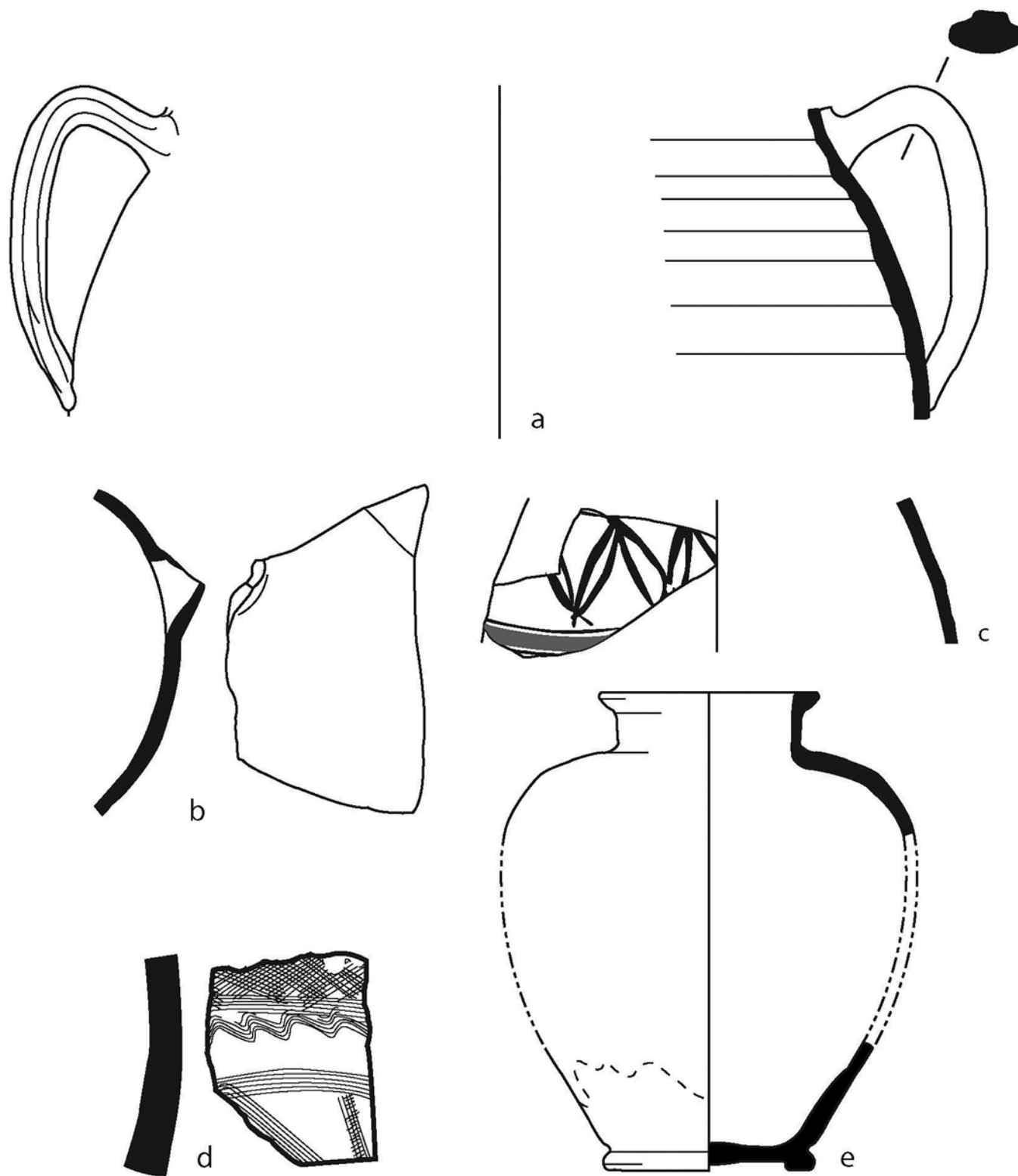
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b69_116/ RN 349	Rim to base of bowl	Rim diam. 20 cm, base diam. 6.5 cm	Turquoise-green glaze in and out to base, two coats	Marl 4 Mono- chrome Glazed	—
b	K9b69_141/ RN 349	Rim of bowl	Diam. 24 cm	Molded “waffle” decoration. De- cayed 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, pl. 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	—



Pottery from Locus K9b-69 (cont.)

Pottery from Locus K9b-69 (cont.)

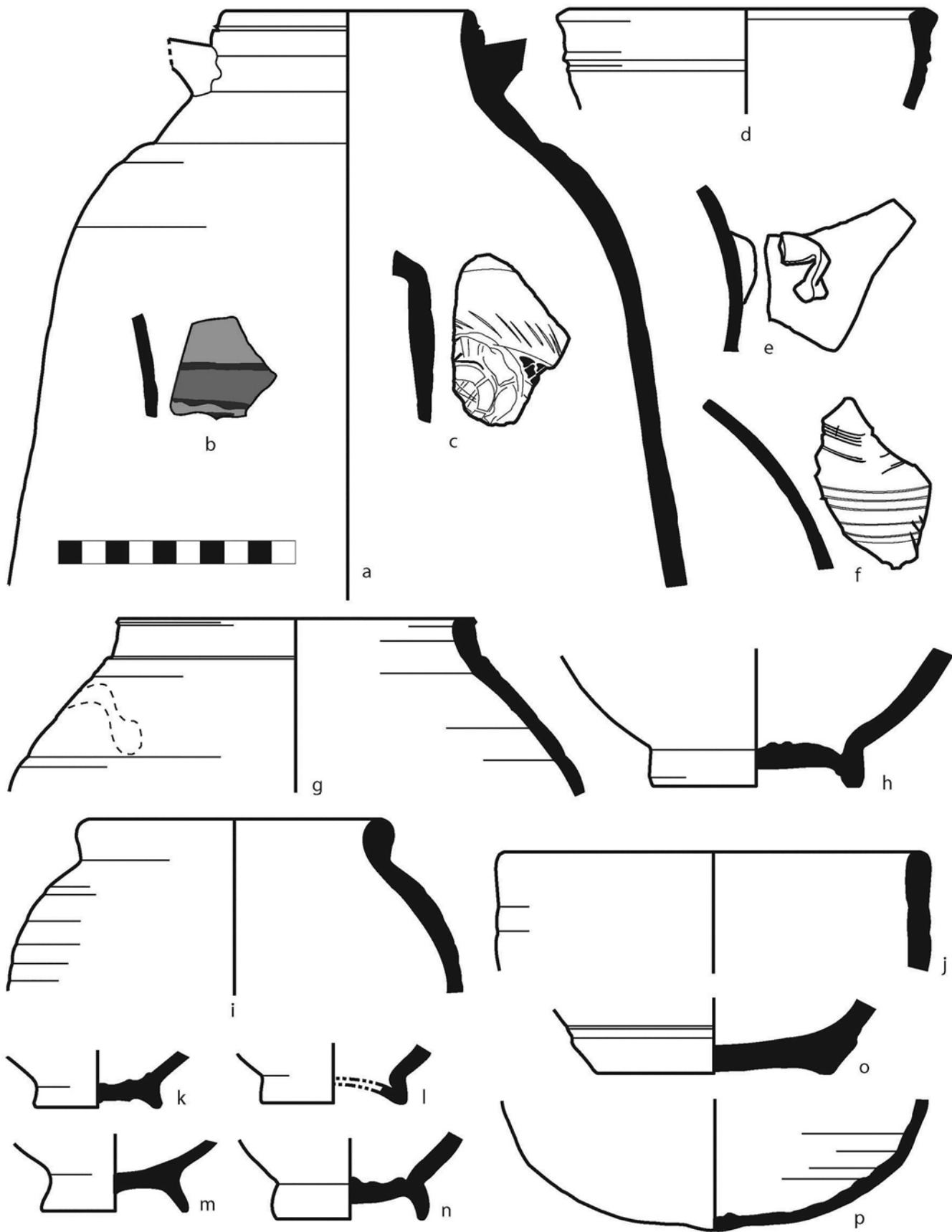
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b69_67/ RN 347	Bodysherd and handle of zir	Diam of body at largest point 47.5 cm	—	² Aswān Painted	Cf. J10c16_1
b	K9b69_66/ RN 347	Bodysherds of spouted jug	—	—	Nile 1 Utility	W. Y. Adams 1986, 571; cf. K9b70_11
c	K9b69_120/ RN 349	Bodysherds of jar	—	Slipped 2.5YR 5/4 reddish brown, and black paint in foliate design	² Aswān Painted	W. Y. Adams 1986, 558, fig. 311:f23; Sakurai and Kawatoko 1992: 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 Keall 1996, pl. 95/37:b; Hardy-Guilbert and Rougeulle 1997a, 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 colorless glaze down to base (on one side)	Marl 4 Monochrome Glazed	Sakurai and Kawatoko 1992, pl. IV-3-7: 1; Avissar and Stern 2005, pl. 9:2; Whitcomb and Johnson 1980, pl. 44:h, j



Pottery from Locus K9b-69 (cont.)

Pottery from Locus K9b-70

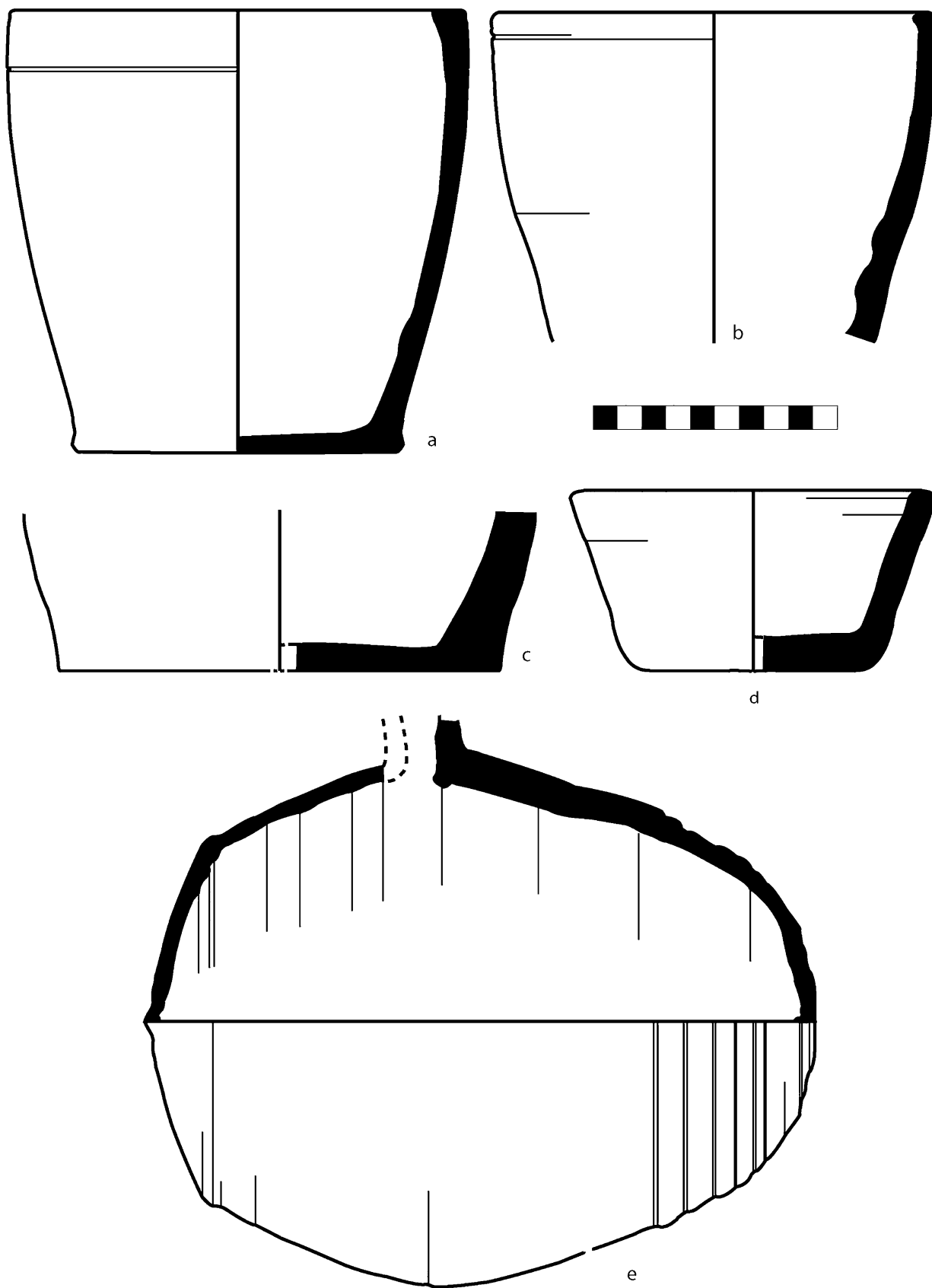
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b70_9/ RN 347	Rim, neck, and body of jar	Rim diam. 11 cm	—	Marl 6 Utility	—
b	K9b70_84/ RN 349	Bodysherd of jar or qulla	—	Slipped 5YR 6/6 reddish yellow; painted 2.5YR 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	ʿAswān Utility	—
h	K9b70_16–20/ RN 348	Base of qulla	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 qulla	Diam. 5 cm	—	Marl 2 Utility	—
l	K9b70_69/ RN 348	Base of qulla	Diam. 6 cm	—	Marl 1 Utility	—
m	K9b70_2/ RN 346	Base of qulla	Diam. 6 cm	—	Marl 2 Utility	—
n	K9b70_79/ RN 348	Base of qulla	Diam. 6 cm	—	Marl 1 Utility	Ciuk and Keall 1996, pl. 95/12:l
o	K9b70_66/ RN 348	Base of qulla	Diam. 10 cm	Incised horizontal lines	Marl 2 Utility	—
p	K9b70_71/ RN 348	Round, belly-button base of jar	—	—	Marl 2 Utility	—



Pottery from Locus K9b-70

Pottery from Locus K9b-70 (*cont.*)

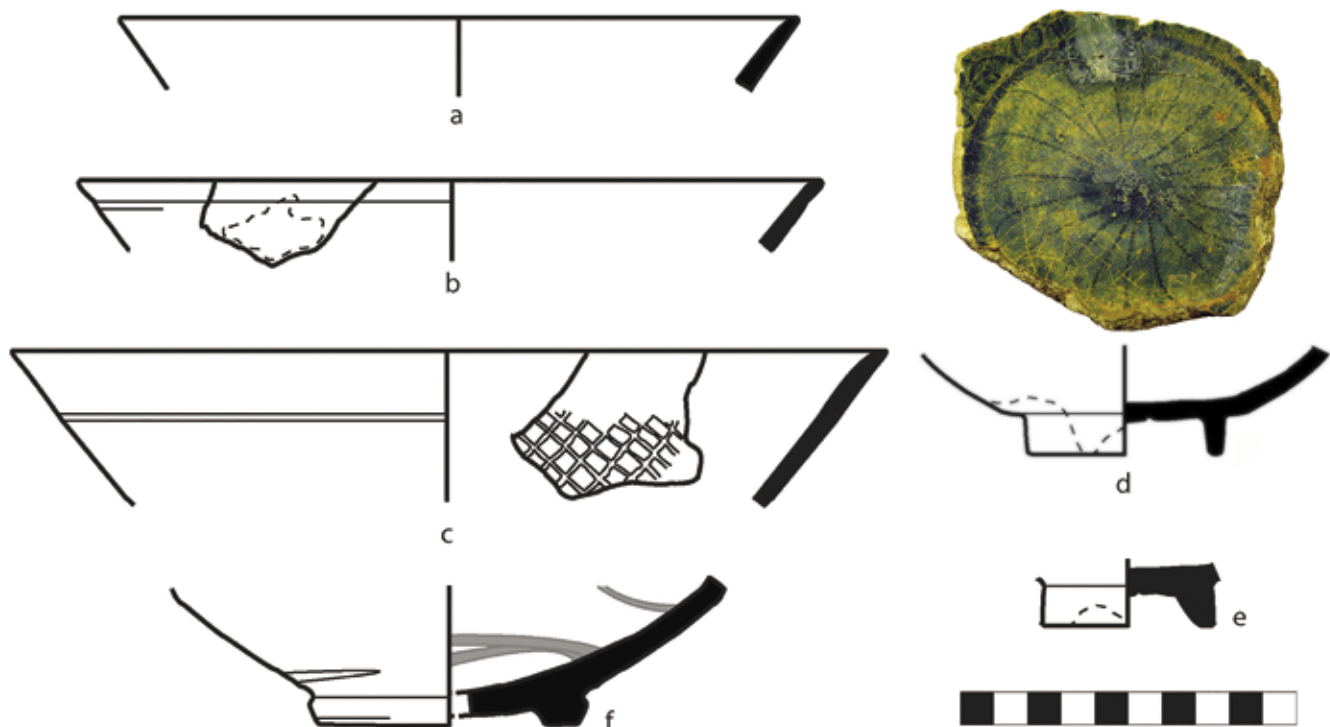
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b70_8/ RN 347, 348	Rim to base of basin	Rim diam. 19 cm; base diam. 13 cm	Incised decoration	Yemen 3 Utility	Ciuk and Keall 1996 pls. 95/30:c-d; 95/32:g; 95/42:e; Hardy-Guilbert and Rougeulle 1997a, 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 1997a, 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 1997a, 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. 46:g
e	K9b70_12-13, 92/ RN 347	Body and end sherds of keg	Length 27 cm; diam. ca. 22 cm	—	Marl 6 Utility	W. Y. Adams 1986, 574-75; Bahgat and Massoul 1930, pl. LX:4; Rougeulle 1999, fig. 8:11; 2004, fig. 15: 8-12



Pottery from Locus K9b-70 (cont.)

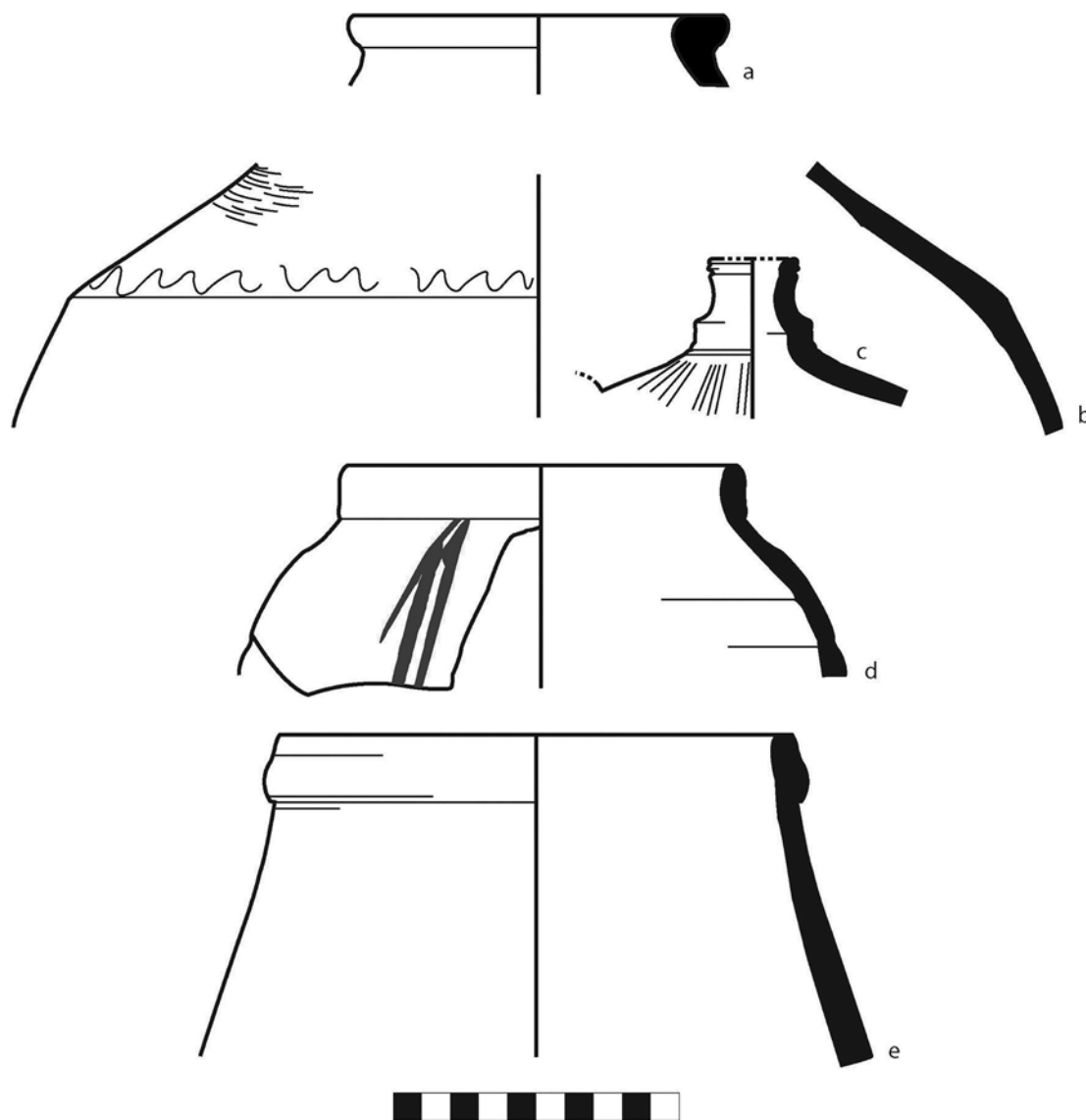
Pottery from Locus K9b-70 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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.15:a
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. 41:b
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



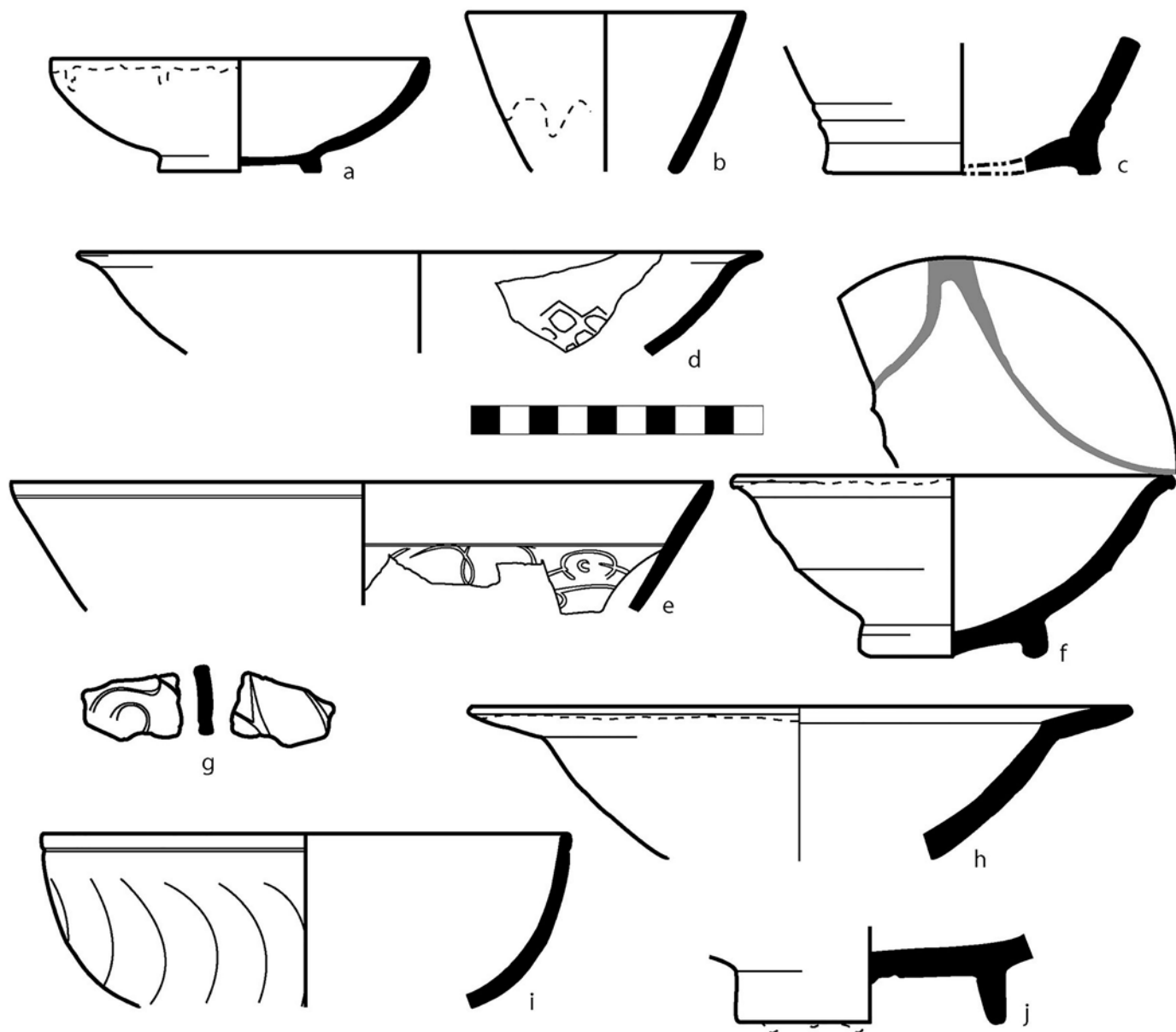
Pottery from Locus K9b-71

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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
c	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	—



Pottery from Locus K9b-71 (cont.)

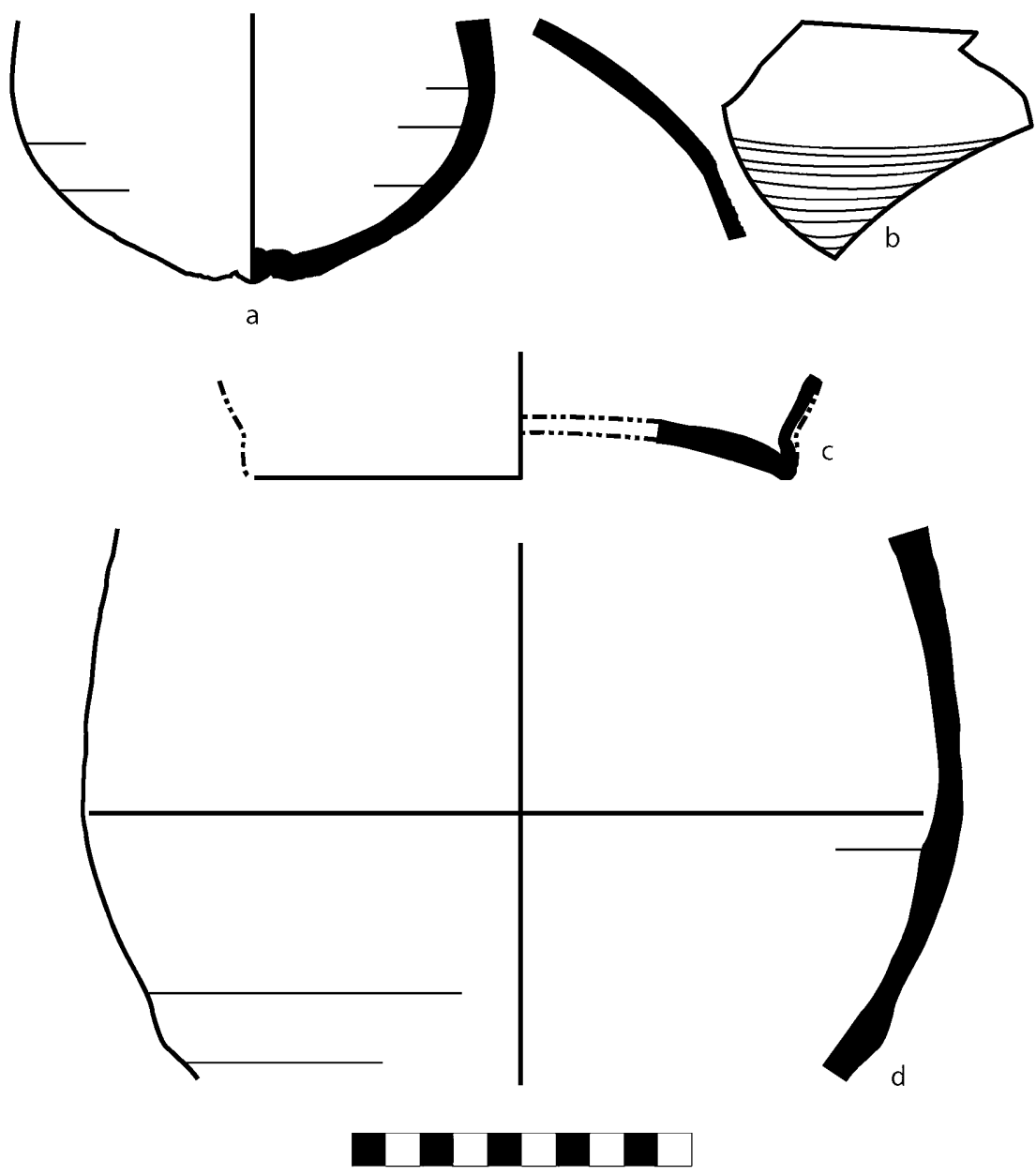
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b71_30/ RN 349	Rim to base of small bowl	Rim diam. 13 cm; base diam. 5.6 cm	Light slip in and partly out; colorless glaze in and over rim	Nile 5 Utility	—
b	K9b71_25/ RN 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 colorless glaze in and out	Marl 4 Incised Monochrome Glazed	Chittick 1984, 81, pl. 35:c
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 Mas-soul 1930, pl. LIV:5; Chittick 1984, 81, pl. 35:c; Mikami 1980-81, figs. 36-37
j	K9b71_49/ RN 349	Base of bowl	Diam. 9 cm	Glazed solid purple in, thick and colorless(?) (indeterminate) out	Marl 4 Monochrome Glazed	—



Pottery from Locus K9b-71 (cont.)

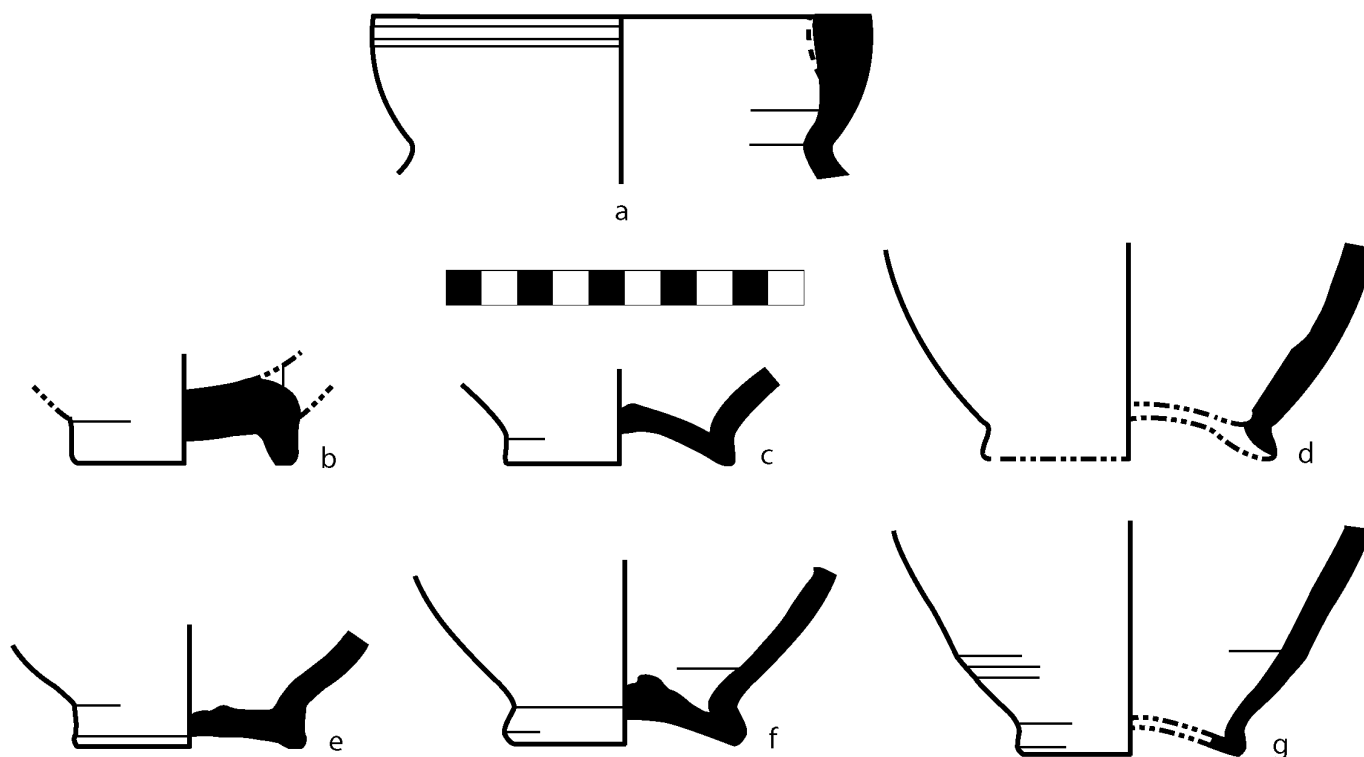
Pottery from Locus K9b-71 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	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	—
c	K9b71_50/ RN 346	Base of jar	Diam. 8 cm	Slipped 7.5YR 7/8 reddish yellow out	ʔAswān Painted	—
d	K9b71_51/ RN 347	Bodysherds of jar or keg	Diam. 26 cm	—	Marl 6 Utility	—



Pottery from Locus K9b-71 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b71_24/ RN 348	Rim of jar	Diam. 14 cm	—	Marl 1 Utility	—
b	K9b71_7/ RN 348	Base of water jar (qulla)	Diam. 6 cm	—	Marl 2 Utility	—
c	K9b71_52/ RN 348	Base of water jar (qulla)	Diam. 6.25 cm	—	Marl 1 Utility	Scanlon 1974b, fig. 7; Whitcomb and Johnson 1980, pl. 46:a
d	K9b71_55/ RN 348	Bodysherd from near base of water jar (qulla)	Diam. ca. 8.5 cm	—	Marl 1 Utility	—
e	K9b71_23/ RN 348	Base of water jar (qulla)	Diam. 6.25 cm	—	Marl 1 Utility	—
f	K9b71_13–19/ RN 348	Base of water jar (qulla)	Diam. 6.25 cm	—	Marl 1 Utility	Scanlon 1974b, fig. 7
g	K9b71_22/ RN 348	Base of water jar (qulla)	Diam. 6 cm	—	Marl 1 Utility	Whitcomb and Johnson 1980, pl. 46:a



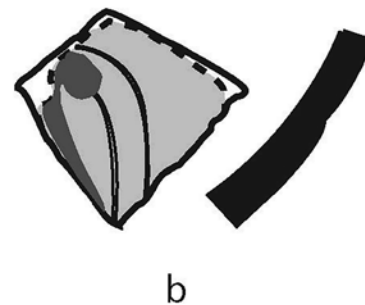
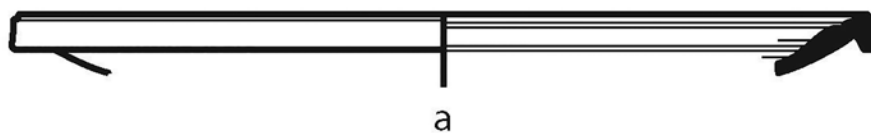
Pottery from Locus K9d-2

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9d2_1/ RN 300	Rim of jar	Diam. 12 cm	Turquoise glaze in and out	Marl 4 Mono-chrome Glazed	Whitcomb and Johnson 1980, pl. 44:h
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



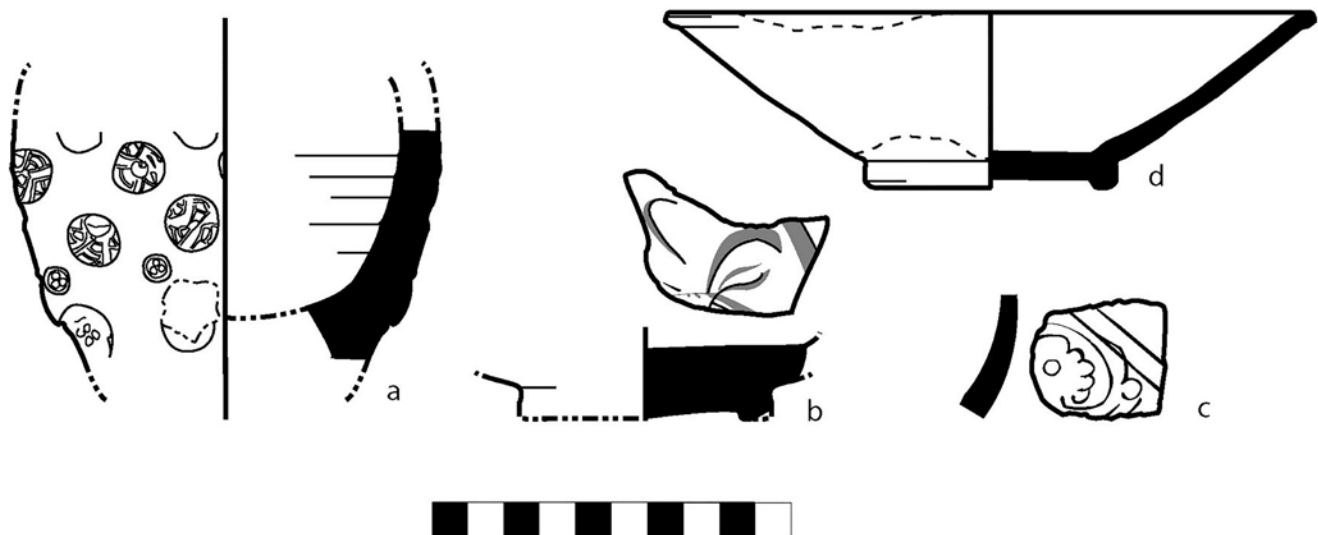
Pottery from Locus K10a-10

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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 1982c, pls. 29:a, 30:p
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	—



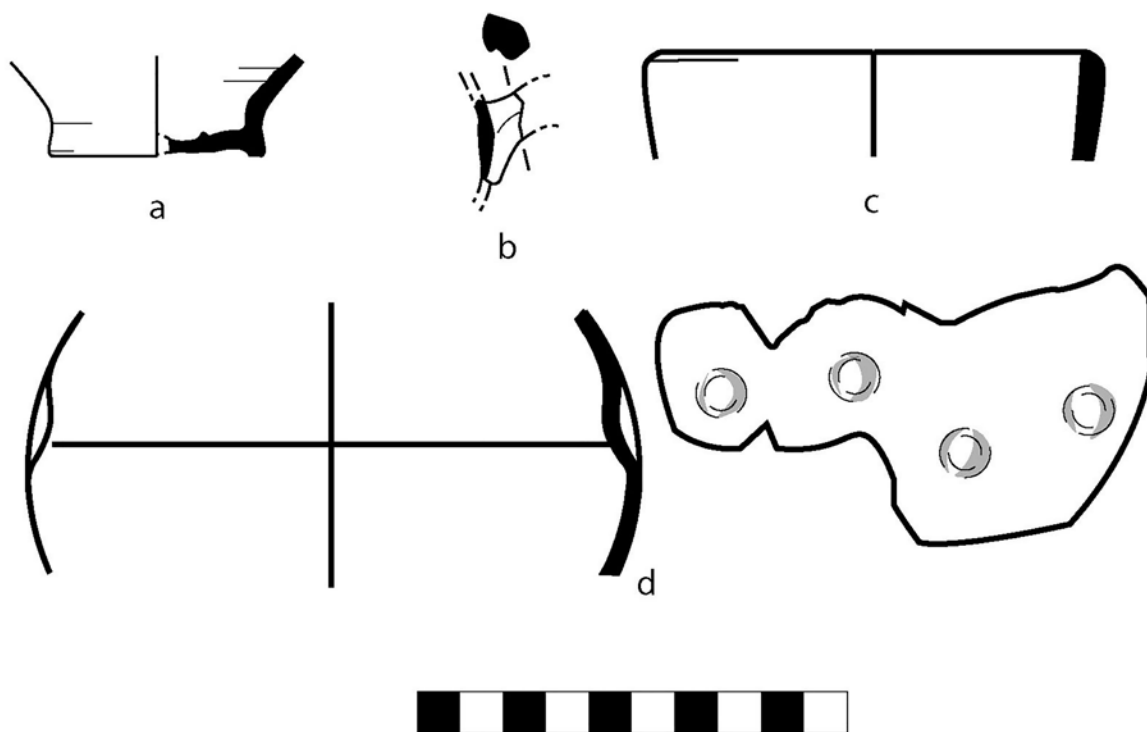
Pottery from Locus K10a-11

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K10a11_1/ RN 248	Bodysherd of sphero-conical vessel	Diam. at widest point, 12 cm	Exterior stamped	Stoneware	Scanlon 1974a, 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 Mas-soul 1930, pls. 4:d, 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 colorless glaze, dripped over rim exterior	China 1: Qingbai or Ding-imitation porcelain	—



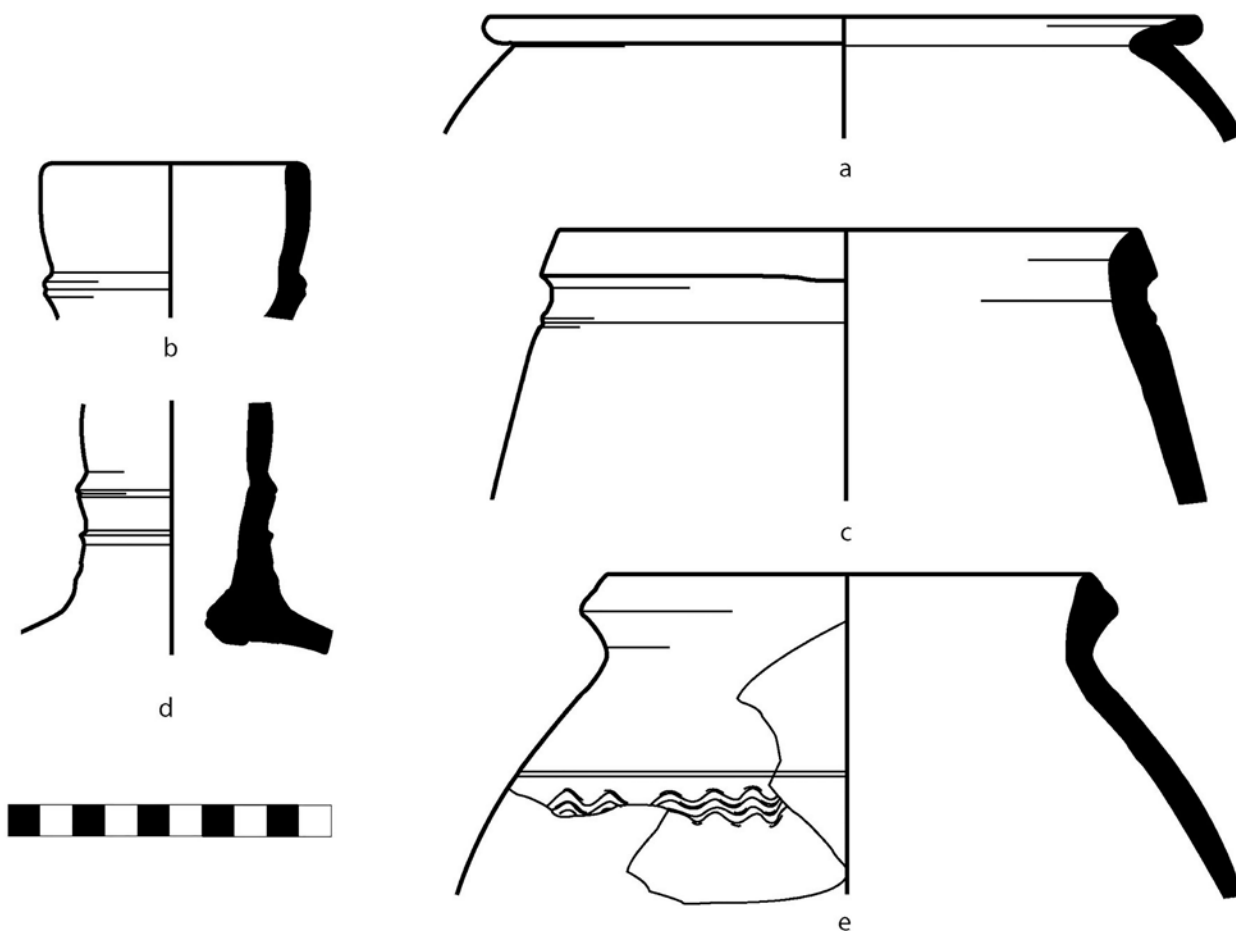
Pottery from Locus K10a-13

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	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	—	—	ʿAswān Painted	—
c	K10a13_1/ RN 45	Rim of water jar (qulla)	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	ʿAswān (Roman)	LACMA Inventory # M.2002.1.100; W. Y. Adams 1986, fig. 58



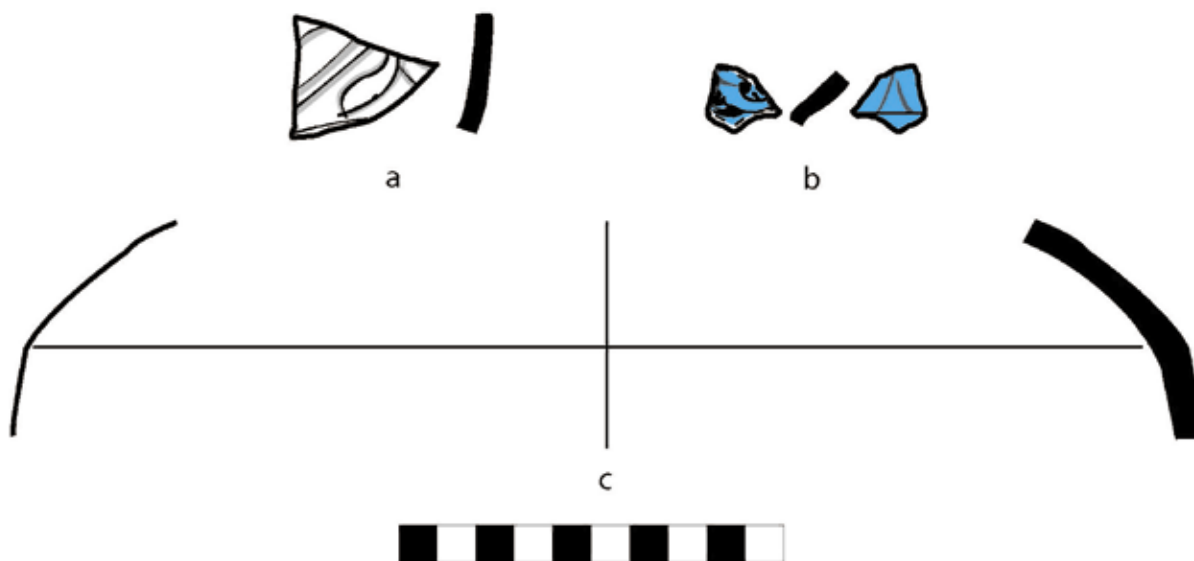
Pottery from Locus K10a-15

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K10a15_3/ RN 66	Rim of jar	Diam. 22 cm	—	Nile 7 Decorated	W. Y. 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
c	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



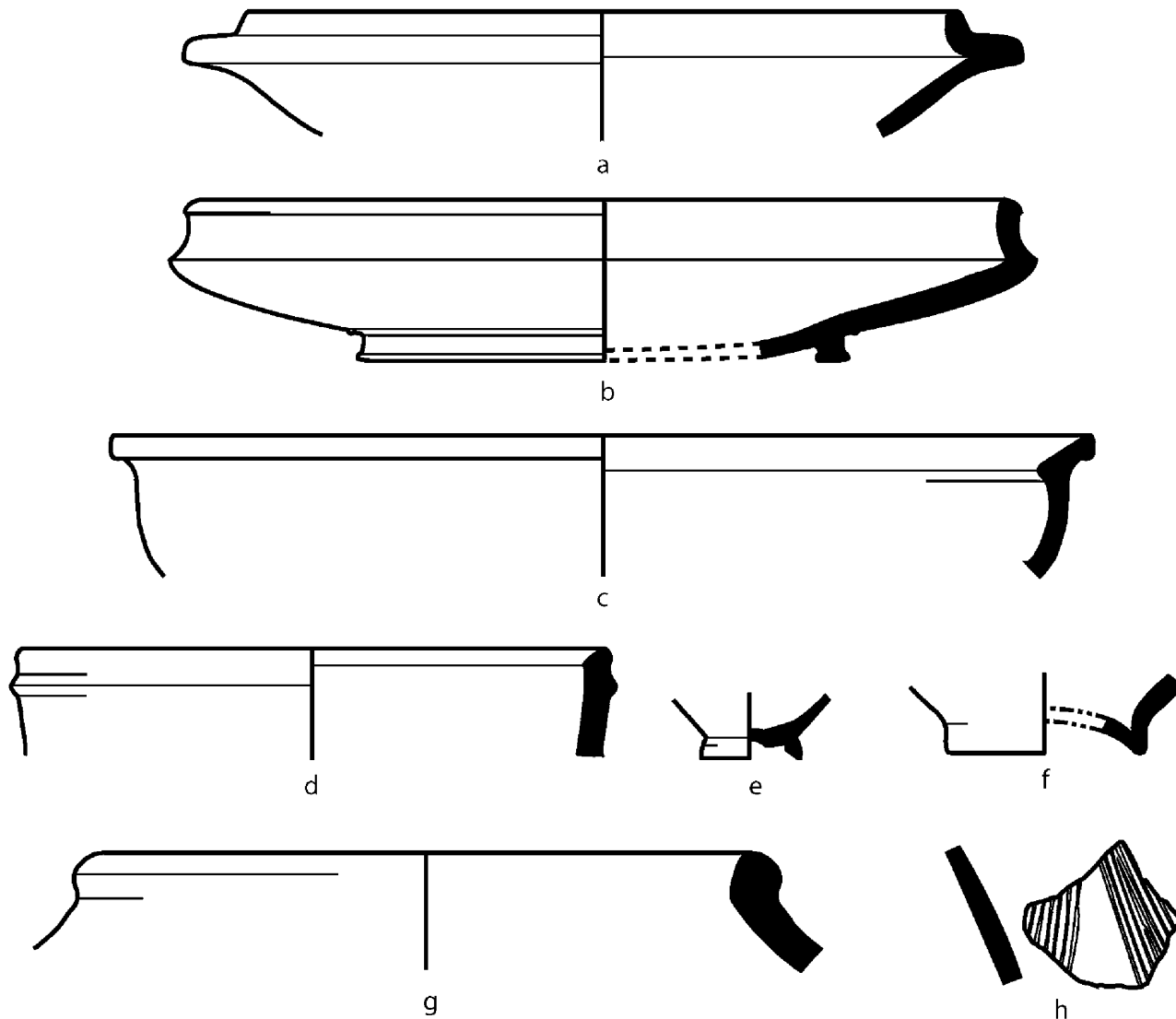
Pottery from Locus K10a-20

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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. 65:a; 66:d, g; 68:a
c	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	ʿAswān Graeco-Roman	W. Y. Adams 1986, 536-38, figs. 229:J17, 300:Z24



Trench Surface Sample, 1978

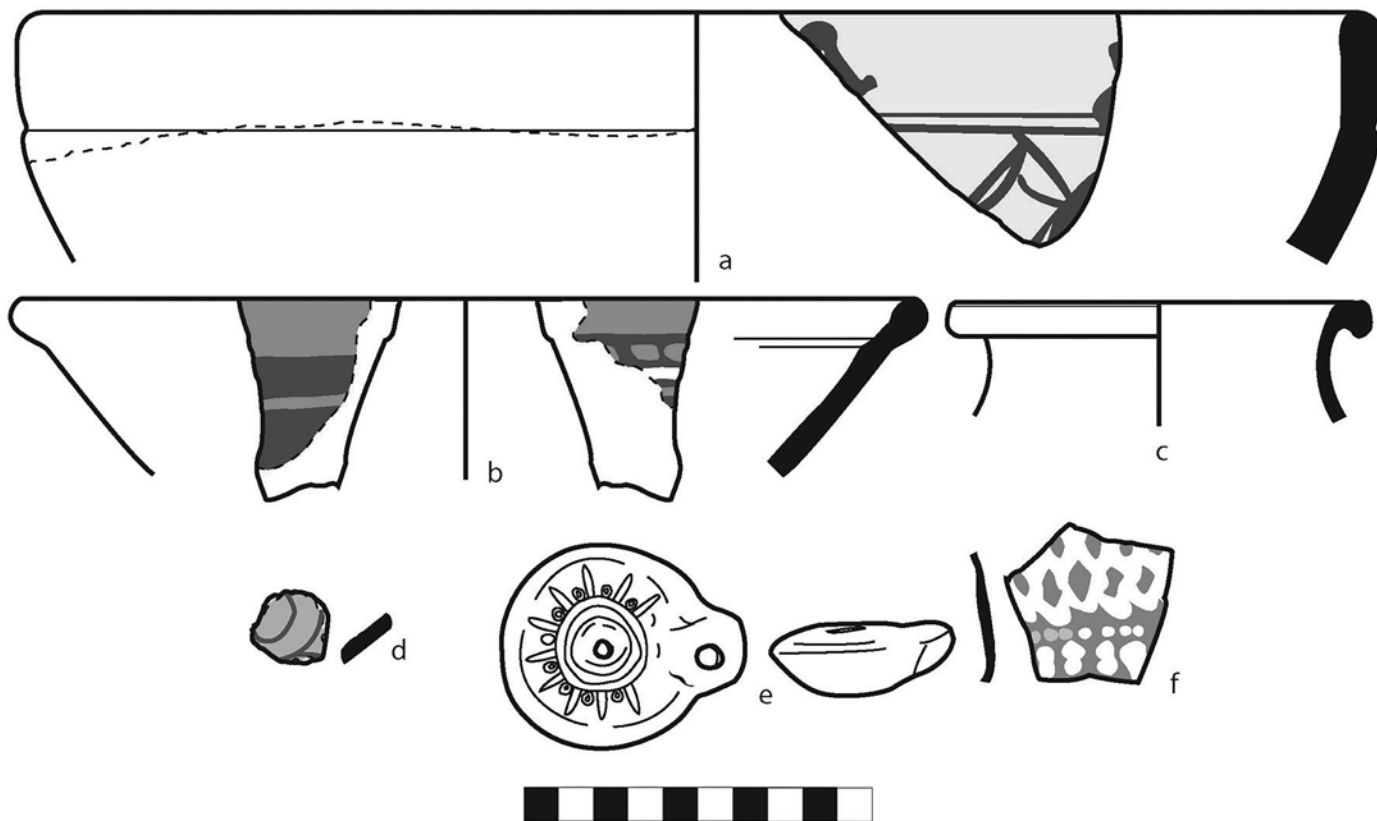
	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b_3	Rim of dish	Diam. 22 cm	—	Indian Satavahana: hard, flaky; common medium-coarse sand and voids; core and ext. surf. 2.5Y 2/0 black; int. surf. 2.5YR 4/4 reddish brown	Begley and Tomber 1999, fig. 6-5:11; Ghosh 1980, fig. 3:20r; Nath 2000, fig. 21:25, 26; Pal 1987, fig. 10:11; Tomber and Begley 2000, fig. 3-5:14; Whitcomb and Johnson 1982c, pl. 11:n
b	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 1982c, pl. 11:m
c	K9b_2	Rim of dish	Diam. 30 cm	—	Hard; moderate fine-medium sand and voids; core and 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 1982c, pl. 11:i
d	K9b_1	Rim of jar	Diam. 18 cm	—	Nile 4 Utility Ware 2	—
e	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 1982c, pl. 30:w
f	K9b_7	Base of water jar (qulla)	Diam. 6.25 cm	—	Marl 1 Utility	Scanlon 1974b, fig. 7; Whitcomb and Johnson 1980, pl. 46:a
g	K9b_6	Rim of jar	Diam. 25 cm	7.5YR 8/4 pink	Yemen 4 Trackware	—
h	K9b_9	Bodysherd of jar	—	Incised	Yemen 2 Utility	—



Trench Surface Sample, 1978

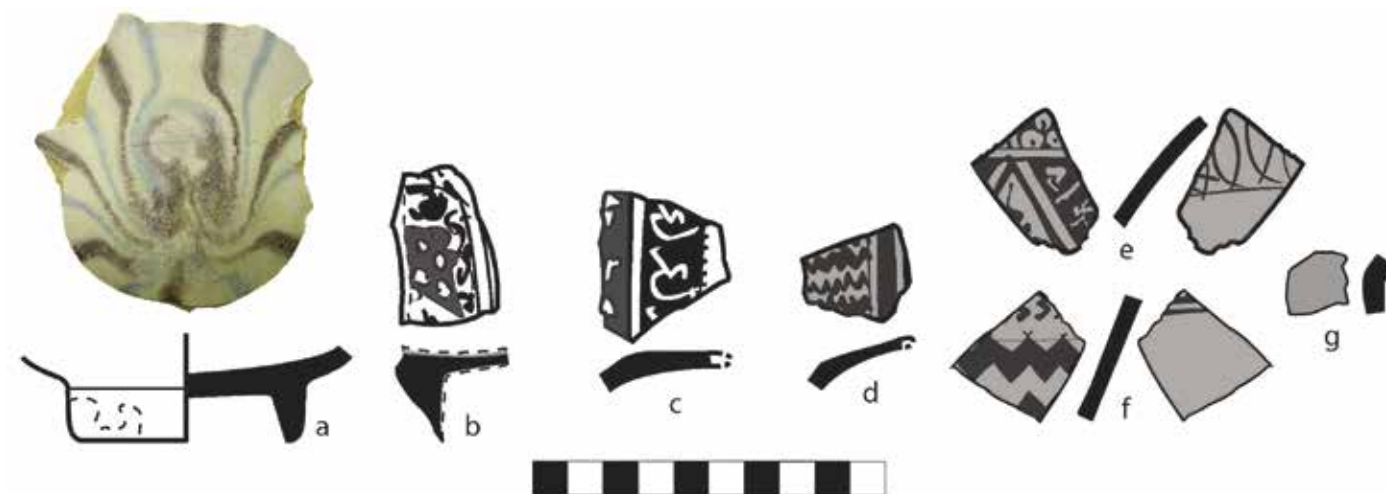
Sheikh's House Surface Sample, 1982

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
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 1988c, fig. 10:c-d
c	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 Monochrome Glazed	Bahgat and Mas-soul 1930, pls. 4:d, XXXIII:7
e	RN 216	Whole lamp	Length 6 cm	Molded	Roman	Johnson 1979, 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, 1st c. CE	Johnson 1979, 67, pl. 22:a [bottom]



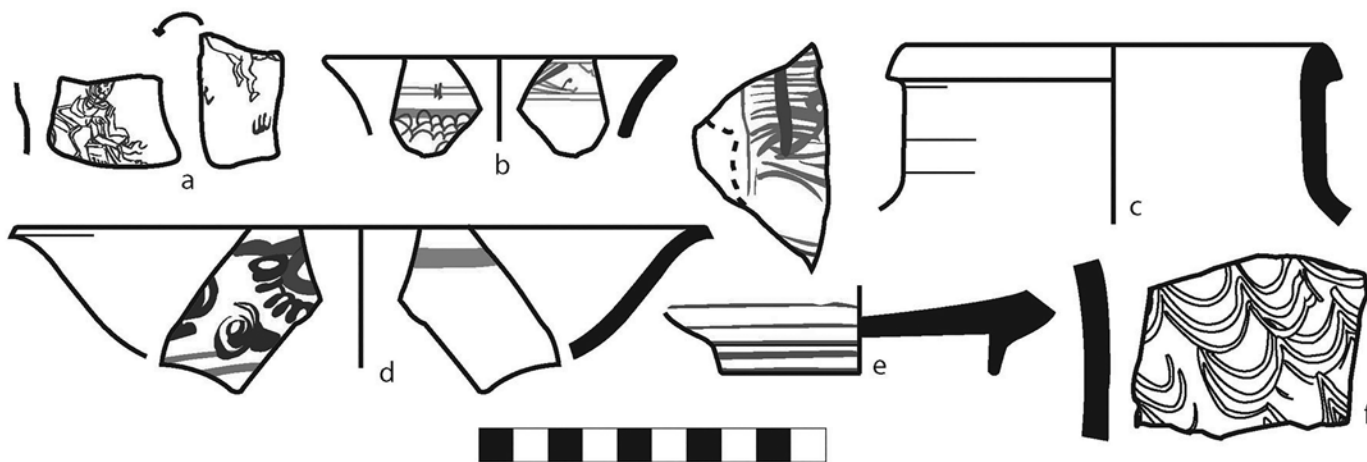
Sheikh's House Surface Sample, 1982 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b_surf_11/ RN 336	Base of bowl	Diam. 6.25 cm	White glaze with manganese and cobalt in, traces of colorless glaze under drips of white out	Marl 4 Blue, Purple, White Drip	Bridgman 2000, pl. 11:b
b	K9b_surf_9/ RN 336	Base of bowl	—	Thick white slip in and out; black and blue underglaze paint in; colorless glaze in and out	Marl 4 Underglaze Painted	Redlak 2003, fig. 1, Type 4
c	K9b_surf_19/ RN 336	Ledge of bowl	—	Thick white slip in and out; black and blue paint under a colorless 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	—



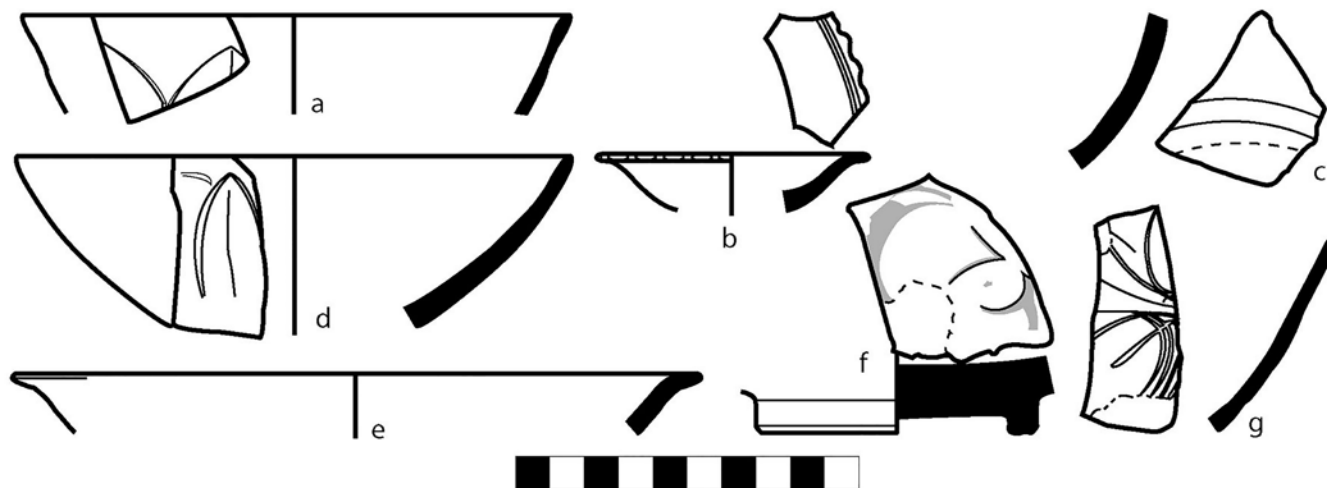
Sheikh's House Surface Sample, 1982 (*cont.*)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b_surf_17/ no RN	Bodysherd of cup or bowl	—	Cobalt paint under colorless glaze	China 1: Blue and White, 15th c.?	Krahl 1984–85, 51; Esten 1987, 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, 16th c.?	Carswell 1977, 286–87, pl. 64:c
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_ RN 336	Rim of bowl	Diam. 16 cm	Bluish-white glaze, blue paint in and out	China 1: Blue and White, 15th–17th 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, 15th c. Jingdezhen?	Kawatoko 1998a, 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, 11th–14th c.



Sheikh's House Surface Sample, 1982 (cont.)

	<i>Sherd and RN Nos.</i>	<i>Description</i>	<i>Dimensions</i>	<i>Surface Treatment</i>	<i>Fabric and Ware</i>	<i>Comparanda</i>
a	K9b_surf_7/ RN 336	Rim of bowl	Diam. 16 cm	Carved lotus leaves out; colorless 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	—	Colorless 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, colorless glaze in and out, appears dark olive	China 2 celadon	—
g	K9b_surf_20/ RN 336	Bodysherd near rim of bowl	—	Incised out, colorless glaze in and out	China 2 celadon	—



APPENDIX H

**PHOTOGRAPHS OF THE EXCAVATIONS
AND SEVERAL SMALL FINDS**

Photos courtesy Donald Whitcomb



a. 1982 Season. View south over the Sheikh's House.



b. 1982 season. View north over Quseir al-Qadim.



a. 1982 season, midway through the excavations. View west toward the Red Sea Mountains.



b. 1982 season. View south over the Sheikh's House, the Roman oven, and Merchants' Houses excavation areas.



a. 1982 season. Excavation of the Merchants' Houses.



b. 1982 season. View south over the Eastern Area.



a. 1982 season. View east over the Sheikh's House.



b. 1982 season. View east over the Sheikh's House to the shore of the Red Sea.



a. 1982 season. Taking elevations using survey equipment. View NW over the Sheikh's House.



b. 1982 season. View south over the Sheikh's House during an excavation day.



a. 1982 season. View west over the warehouse.



b. 1982 season.
View from Room C
of the North House
across Corridor D to
the stones in front
of the entrance to
Storeroom F.



a. 1982 season. View north up Corridor D of the Sheikh's House, during excavations.



b. 1982 season. View north up Corridor D from the entrance vestibule (F) of the South House, after excavations.



a. 1982 season. View south down Corridor D to Vestibule F of the South House.



b. 1982 season. Entrance to Room C of the North House, later blocked up.



a. 1982 season. North House, Room A. Pot buried in the floor in front of the mastaba.



b. 1982 season.
View south from the
end of Corridor D
across the threshold
of Vestibule F
containing the stairs
in Wall I of the South
House.



a. 1982 season. View south to Wall I and the stairs at the end of Vestibule F of the South House.



b. 1982 season. Excavating the pit in South House B.



a. Woven Sack or Basket from Storeroom E.



b. Resist-dyed textile from Locus K9b-63.



a. RN 694, Dirham of Sultan al-*ṣ*ālīḥ Naḡm al-Dīn Ayyūb and al-Musta^ʿṣim.



b. RN 696, Half dirham of al-Mālik al-*ṣ*ālīḥ and al-Musta^ʿṣim.



c. RN 698, Dirham of al-Mālik al-*ṣ*ālīḥ Isma^ʿil b. Abū Bakr and al-Musta^ʿṣim.



a. Matting from Locus J9d-4.



b. Two Large Coils of Rope from Locus J9d-4.



a. Drawing or Map from Locus K9b-48 in Room C of the North House.



b. Shipping Note RN 998 mentioning the *ra'īs* al-tuḡḡār from Room C of the South House.



a. RN 1059: Document on paper from the latest phase of use of the storerooms. It mentions Qūs, the district capital, and details the plight of three merchants, among them two sons of Abū Mufarrij.



b. RN 576: String Bobbin Found in Locus J10a-6 of Storeroom C.



Wooden Keys from the Threshold of Storeroom E. RN 524 measures 22.2 × 2.3 cm; RN 560 measures 21.7 × 2.2 cm.

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