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# The Pottery of Jordan: The Early Islamic Period (Umayyad, Abbasid, Fatimid) – update

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# The Pottery of Jordan

## A MANUAL

*Edited by Jehad Haron and Douglas R. Clark*



*Late Hellenistic farmstead assemblage, Courtesy Madaba Plains Project-`Umayri*

*This manual, funded by USAID's Sustainable Cultural Heritage Through Engagement of Local Communities Project (SCHEP), implemented by the American Center of Research (ACOR), originated as a companion resource to Madaba Regional Archaeological Museum Project (MRAMP) Pottery of Jordan Training Workshops that occurred in 2021.*

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## PERMISSIONS

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# Introduction

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The purpose of this manual on the pottery of Jordan is to provide museum personnel in Jordan, Jordanian archaeologists and archaeology students, and other specialists a concise but thorough treatment of Jordan's pottery repertoire in illustrated online and print formats. Our hope is that it becomes the standard reference resource (in Arabic and English) on Jordanian pottery for ongoing archaeological research and cultural heritage preservation.

The development of pottery manufacturing during different periods in Jordan's history provides a window onto the variations in material culture representative of each archaeological period. This, in turn, has contributed to systematizing the history of pottery and linking the evidence with each different historical period. So, it can be argued that pottery has become one of the most representative marks of cultural identity of previous civilizations and nations.

Given the ubiquitous presence of pottery sherds almost everywhere archaeological sites are found, our study of ceramic remains enriches immeasurably our attempts to understand ancient chronology, cultural expressions, trade and industry, social structures, and everyday life.

Since the first archaeologists began to visit the Levant in the nineteenth century, many different and sometimes contradictory theories have appeared due to the scarcity of tools and scientific skills related to the history of archaeological ruins. With the advent of the careful analysis of pottery, it became the most reliable material evidence for researchers to date archaeological ruins and link them to periods of cultural expression.

The science of pottery research went through various stages, which led to its maturity as it moved from mere touching by hand to nuclear analysis. Scientific and laboratory research has brought us to an advanced stage that enables linkage of archaeological layers and ruins with each other.

The idea of developing this guide arose as a contribution by local and foreign researchers working in the field of archaeological research in Jordan. Perhaps this does not seem like a huge scientific work compared to some other works in the area of studying and analyzing pottery. However, we believe that this book puts us on the right path. It is a simplified guide, but it will benefit students and new researchers in this field.

The guide is divided into multiple sections consistent with the historical division of Jordan's past, starting with the Neolithic period of pottery (ca. 8000 BC) and ending with beginning of the 20th century AD. With a distinguished group of specialized researchers, we are attempting to use precise if simplified language expressing the most important development stages of the pottery industry throughout history, explaining the most important features associated with pottery manufacturing.

Researchers were able to present scientific content with photos and graphics that make this guide a good start for every student or novice researcher. In addition, it has a list of distinguished research, resources, and literature for those who seek further information and for the purposes of documentation and citation.

The bilingual glossary of terms in this guide gives it a scientific grounding and helps the reader in understanding many scientific terms related to pottery analysis.

Our objective is to produce a digital copy of this guide to allow easy access for researchers and students on different websites, as well as a durable, lab-ready, hard-copy version for use in research settings.

**PART**  
**2**

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**POTTERY BY ARCHAEO-  
LOGICAL PERIOD**

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# The Early Islamic Period

## (Umayyad, Abbasid, and Fatimid)

Alan G. Walmsley  
(alawalms@live.co.uk)

**I**slam's advent in Arḍ ash-Shām in the AD 630s caused little disruption to urban and rural life, with longstanding social customs barely affected including pottery traditions. Over the next five centuries, however, a range of cultural innovations evolved in response to growing community aspirations, of which Islamification was one. With the pottery, two broad trends can be identified: an unbroken continuation and refinement in the wares and forms from Byzantine times and, from the eighth to early ninth centuries (c.) AD onwards, the appearance of new styles and techniques inspired by rapid developments in ceramic technologies across the Middle East. Yet in Jordan these new styles only slowly gained widespread acceptance in the highlands; rather, a long tradition of locally produced wares continued to dominate. Unlike in the mountains, however, the pottery profiles at sites in the Jordan and Arabah valleys show that the adoption of Islamic glazed and cream fabric wares occurred at the same time traditional forms were retained. The crossover between traditional and new ceramic types in the Rift Valley provides a crucial typo-chronological key with which to securely date the local early Islamic wares in the highlands, resulting in an inclusive pottery typology that covers the seventh to 11th centuries.

Early Islamic pottery in Jordan can be better understood by focusing on two major themes: first, wares and technology and second, forms and function. Changes in these four features serve to map out a chronological progression, which reflect evolving social preferences (Holmqvist 2019: 34). Given space restraints, this study

focuses on pottery types that are common in the archaeological record.

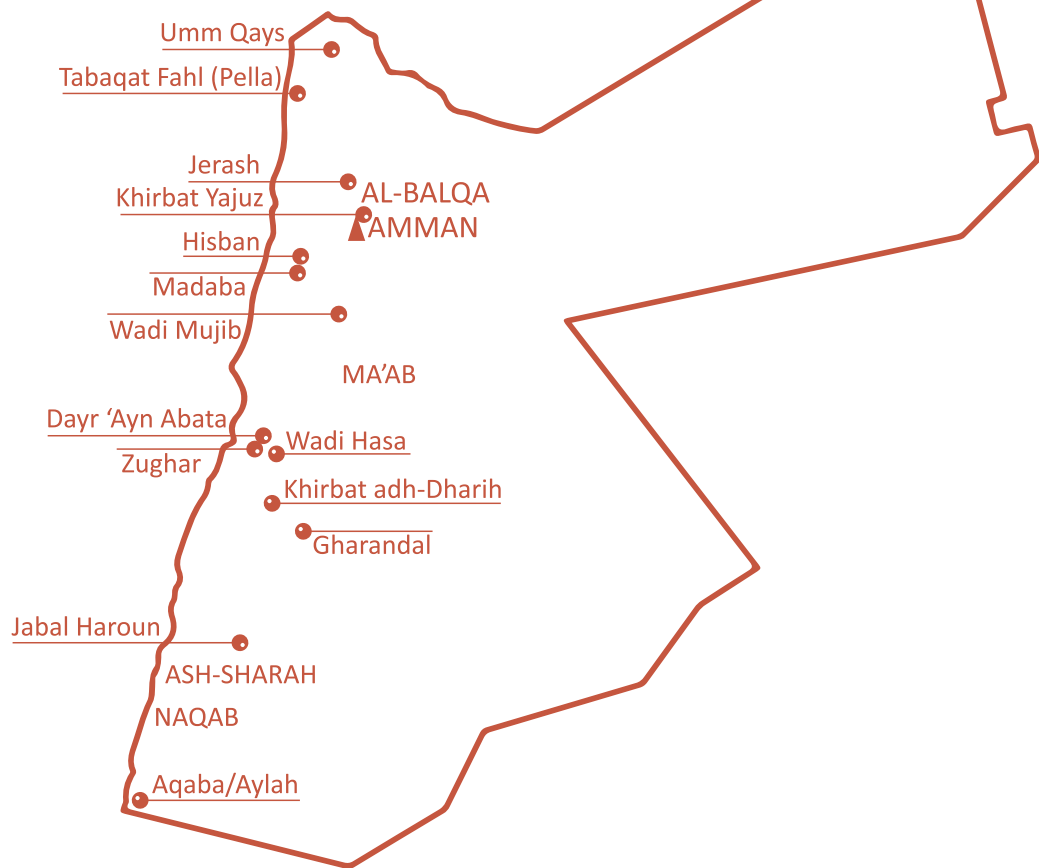
### WARES AND TECHNOLOGY

Three distinct regional clusters can be identified for Jordan: the northern hills with Jarash as the primary center; a central cluster of al-Balqā and Ma'āb; and a third south of the Wādī Mūjib with a center at al-Aqabah (Aylah). These three clusters have been defined by Firas Mohamad Alawneh (2006) based on the chemical analysis of sherds, while Maher Tarboush focused on north Jordan, identifying additional production areas (Tarboush 2015).

In all three clusters, fast-wheel technology was applied in producing utilitarian objects—notably jars, jugs, cups, cooking pots and casseroles, bowls, lids, and small basins—with smooth or ribbed (rilled) surfaces. Large vessels such as mixing basins and storage jars were handmade with rims finished on a slow wheel. Greater regional individuality can be seen in the clay selection from local sources, kiln firing conditions, and decorative preferences.

In the North Jordan cluster, clays shared a common recipe across vessel types: well mixed, slight to moderate grits, with some larger lime inclusions. The primary variable factor was coarseness, depending on purpose. Firing in updraft kilns resulted in a thin, hard, brittle fabric colored a range of reds, browns, and dark grays. Handmade basins and storage jars were gray. Decoration in the seventh to early eighth c. favored comb incision, rim pinching, impressed bands, and white-painted motifs, but by the mid-eighth c. painted abstract designs were applied to fine wares in white and reddish-brown tints, with red dominating in

**JORDAN MAP**  
**Sites in Pottery of Jordan**  
**Manual**  
**Early Islamic Period**  
**AD 636-900**



the eighth to 10th c. Comb incision on large vessels decreased, but deep-cut geometric designs featured on handmade bowls.

The al-Balqā' cluster shared many features with the Jarash cluster, although there is refinement in clay preparation, firing, and painted decoration. In a sign of independent production centers, Alawneh (2006: 226) has shown that there is a “high degree of chemical disparity” between the two clusters. For finer wares, al-Balqā' consumers favored light colors in cream, beige, and browns, occasionally with a cream slip. From the mid-eighth c. and ninth c., al-Balqā' ceramics excelled in a series of high-quality, high-art, and elegant bowls in a cream-to-light-orange ware overpainted with intricate geometric patterns in red.

The South Jordan cluster shared many technological features with the north and central clusters until the eighth c., after which its pottery matched styles in the Naqab. Using chemical and petrographic evidence, Alawneh (2006: 201) and E. Holmqvist

(2019: 109–18) have identified two distinct groups in south Jordan: a shared tradition in al-Jibāl and al-Sharāh mountains, and a second at Aylah. The mountain wares were made from local clays only slightly prepared. Colors were light, from cream to brown and pink to mid-red. Decoration favored incisions in straight and wavy lines and finger impressed bands. The few rare examples of painted jars had red lines. In Aylah, an early glazed tradition appeared in the eighth c. as part of a technological innovation in fine table wares. In the second half of the 10th c., handmade pottery re-emerged in chaff-tempered cooking and domestic wares.

### **FORMS AND FUNCTION**

Earlier Islamic Jordan saw significant developments in the forms (shapes) and function (use) of pottery as changing tastes and developing technologies introduced new assemblages to households. Historically, the path of cultural continuity, change, and innovation

occurred in three stages, different to the dynastic history of the seventh to 11th c. The three stages are:

Stage 1: seventh and eighth c. (Rāshidūn, Umayyad, and early Abbāsid), with archaeologically significant earthquakes in AD 659/660 and a second more powerful one in AD 749.

Stage 2: roughly ninth to mid-10th c. (Abbāsid), a period of significant political and economic change that focused on al-Balqā', the far north, and the far south of Jordan, but elsewhere activity was continuous and subdued, but not absent.

Stage 3: mid-10th and 11th c. (Fāṭimid and Saljūq), during which resistance measures were undertaken by the local tribal leaders in al-Jibāl and al-Sharāh to prevent political and sectarian intervention by neighboring power groups.

A wide range of pottery forms attributable to an early Islamic date are known for Jordan, but not until the eighth c. can some certainty



about dating be assured. Pottery of the seventh c., as a result, can be considered transitional. Thereafter, dates are given by centuries AD, wholly or in parts, for dynastic labels obfuscate cultural trends.

1) Cooking pots and casseroles (Fig. 1.1–21). Cooking wares show little variation across the three regional clusters in the seventh to early 10th c. To resist heat shock, a hard, highly granulated clay was used, but this varied in its makeup among the clusters depending on the local clay sources. Both pot and casserole forms were thrown on a fast wheel and the bodies often heavily ribbed to maximize heat uptake. For the first four centuries few changes occurred to their shape, making them poor chronological markers. From the eighth c. pots had elongated necks, whereas the horizontal handles on the casseroles turned upwards and the upper body and rim curved inwards; higher handles meant a more angular cut to the rim was necessary. The lids were characterized by flat-top button handles and, at Jarash, loop handles; bigger casseroles had a pierced hole to release steam. Smaller flat-bottomed casseroles in a finer fabric were intended for serving food, not cooking, and often came with lids decorated with loops and wavy lines in a white or red paint (the north and al-Balqāʿ) or incised comb bands (the south). Good-quality casseroles were in high demand; casseroles at Baysān were sourced from Jarash in the eighth c. (Bar-Nathan 2011), and Petra casseroles were sent to Aylah in the eighth and ninth c. despite the availability of a local product (Holmqvist 2019: 116).

By the 10th c. the internal surfaces of wheel-made pots and casseroles were lined in a plain, brownish-

colored glaze to improve strength and function. Concurrently, locally handmade globular cooking pots in a chaff-tempered, low-fired ware appeared especially in south Jordan, for example at Dayr Ayn Abātā, Gharandal, and Khirbat al-Dhariḥ. Thereafter, handmade chaff ware pottery and wheel-made wares, including glazed vessels, coexisted. In central and north Jordan, large cooking pots with side strap handles, thumb-impressed ledge handles, and internal glazing first appear no later than the 11th c. Whereas the chaff-tempered pots were meant for the cooking of family meals, the large strap-handle pots indicate the communal consumption of food at large regal/military gatherings.

2) Basins (Fig. 2.22–44). Basins feature in all three clusters, although with regional variations in fabric and decoration. The size and shape of basins reflect their use in the preparation and mixing of materials, from bread dough to potter's clay. Their slightly out-leaning sides provided an open working space within the basins for two hands, while the thickened rims withstood shock. Functionality was supported by flat bases and applied external loop handles positioned vertically or, in south Jordan, horizontally. Decoration of external surfaces was by surface treatment—bands of combed incision, impressed chisel rocking (especially in north Jordan), finger-impressed appliqué, and pinched rims. Being mostly handmade, variability in shape and decoration was considerable.

In north Jordan, basins of Jarash manufacture were of a hard, finely mixed gritty fabric with some larger white inclusions, consistently fired to an even gray but with occasional light brown faces. Rims were thickened by

applying a clay coil and rotating the basin on a slow wheel. In the seventh c. these rims were flat topped, sometimes with incised comb work, and finished with a distinct ridged collar on the outside. The ridges became less pronounced before disappearing around the early eighth c.; thereafter rims became rounded with pointed outside lips. In the eighth c. impressed chisel-rocked trails were added to combed wavy-line and pinched decoration (“pie crust,” “scallop”) common in the seventh c. Changes in the ninth c. were more subtle. The rim became elongated by sloping downwards and ending externally with a sharper point. Body decoration, if any, consisted of a few comb-incised straight and wavy lines.

The basins of al-Balqāʿ shared many attributes with those of north Jordan but were of different fabric and color. The corpus from Ḥisbān, for example, shows an aversion to “Jarash gray” in preference for much lighter hues: pinks, light red, reddish-yellow, and pale brown. Rim shapes varied between simple and enlarged, while surface treatment was by band appliqué or combed incision, or both (Walker and Sauer 2012: 525–27, 539–40).

The basins of highland south Jordan look different. Their color is generally more saturated and darker than al-Balqāʿ, ranging widely between cream, yellow, red, brown, and gray. A detailed analysis of body fabric has identified the use of a fast wheel, unlike farther north (Holmqvist 2019: 44, 56–59). External surface treatment was limited to incised horizontal lines and wavy comb patterns, sometimes accompanied with finger-impressed appliqué clay bands (Gerber 2016: 134, 144–45). Rim profiles have the same general form of a protruding or



outward-folded edge. Unusually, the Jabal Hārūn basins featured horizontal handles. Aylah's basins of the later eighth and ninth c. stood apart. They were made of the local cream-to-orange Mahesh ware in a different shape, especially in-turned flat rims, but shared the comb incisions on outer walls.

3) Containers – jars, jugs, and flasks (Fig. 3.45–67, Fig. 4.68–81). Smaller containers are household wares having a closed form and a neck, normally elongated. Jars, jugs, and flasks were produced in commercial workshops using shared fast-wheel methods. The local clay fabric was usually fine to moderate in grittiness, with vessel surfaces ribbed or smoothed, with a light cream-to-orange, red, and gray external surface.

Jars had two vertical handles with flat or round profiles placed either from rim to shoulder or, usually in larger jars, as rounded vertical loops attached at the shoulder. Jugs had a single rim-to-shoulder handle and a pinched rim, or a spout added to the upper body for dispensing liquids. Bases were omphalos, ring, or flat in style. Similar in manufacture were flasks with a small necked opening and two loop handles on the body. These were a soft brown to reddish-brown fabric in the seventh c. and, starting in the early eighth c., in a creamy-buff ware, both undecorated. Jar and jug decoration, when applied, was of two types: painted, usually in creamy-white or reddish-brown, although rare in the south (Amr and Schick 2001: 114, Gerber 2016: 135); or scratched, incised, applied, and cut interventions made before firing (everywhere). While the forms of jars and jugs did not vary much among the

three regions, the selection of clays, firing techniques, and decorative features at each workshop created a recognizable difference in appearance.

a) Widespread in the seventh to early 10th c. is a crisp, fine fabric evenly fired to a light orange to brown that originated in mid-sixth c. Jerusalem (Magness 1993: 166–71). While commonly known as Fine Byzantine Ware, the name Palestinian Fine Homeware is preferred, given this series' origin and long existence. Thrown thinly on a fast wheel, elegant jars and jugs with incised body slashes reached all three clusters in Jordan (as with plates, cups, and bowls, see §5, below), and are a dependable chronological indicator. The jar and jug forms ceased in the early eighth c., while the other forms continued (5).

b) At Jarash both jugs and jars (and other forms; see §5) were manufactured in a gritty reddish-orange through brown-to-dark gray fabric, commonly adorned with freehand designs in white paint. First looping swirls, later preferences were for straight and wavy lines with stripes on rims and handles. These became widespread throughout north Jordan and al-Balqā' in the eighth century.

c) Starting a little later in time, a different ware type appeared, made up of middle-sized jars and jugs with ring or omphalos bases in a medium-hard, finely mixed fabric decorated in freehand, reddish-brown (dusky red) designs covering the vessel body. The series likely originated in al-Balqā' during the second quarter of the eighth c., with major jar and jug groups recovered

from destruction levels attributed to the AD 749 earthquake (Daviau 2010, Lichtenberger et al. 2016, Northedge 1992, Walmsley 1982). There is some confusion over chronology, but the series continued through much of the ninth c. (informed discussion in Holmqvist 2019:47–48). The misdating of wheel-made jars and jugs (as well as bowls, §5) in a medium-hard to softish Cream-Buff ware has confused ceramic chronologies in Jordan and Palestine alike. However, P. Watson at Fiḥl (Ṭabaqat Faḥl – Pella) established that Cream-Buff ware originated in the late seventh century in the form of thick-bodied pilgrim flasks and jars; these came from the kilns of Baysān (Watson 1992: 243, Bar-Nathan 2011:231–32). Not until the later eighth to 11th c. do “Samarran”-style jars and jugs appear in the archaeological record. These are immediately recognizable by their smooth angular bodies in an eggshell-thin fabric, tall flaring necks, high-set handles from rim to body, paring on the lower body, and string-cut flat disk bases. Vessels were decorated with incised lines, finger imprints, and barbotine appliqué work including “turban” knobs on handles; later, vessels were formed in a mold. Neck filters were common. Traded from Palestine (al-Ramlah, Cytryn-Silverman 2010: 104–8; Ṭabariyah, Stacey 2004: 130–38), Cream-Buff wares are common at sites in the Jordan rift, both on main routes (Fiḥl, Walmsley 1991; Dayr Ayn Abātā, Grey and Politis 2012) and in rural sites such as Tall Abu Qadān (Franken and Kalsbeek 1975, unreliable chronology). They





for the serving and consumption of food, dining wares were a diverse and highly decorated class of pottery of mostly local manufacture in early Islamic Jordan. Bowls, cups, and plates initially shared designs with late antique wares until the eighth c., when sweeping changes occurred in their shape and decoration. As a product closely affiliated with community, these changes reflected rapidly evolving social customs and widening economic activity typical of the eighth to 10th c.

a) The most recognized group produced in the Jordanian highlands were the pictorial series termed “Jerash Bowls,” made from the mid-sixth c. to the third quarter of the seventh c. The discovery of kilns and wasters confirms Jarash as the main production site (Uscatescu and Marot 2016). Well-prepared if slightly granular clays produced a hard-fired, reddish-orange fabric with smooth surfaces and a ring base inspired by Late Roman Red Slip wares. The internal surface was decorated with impressed medallions or pictorial images in reddish-brown paint on a white background or infilled in white (Watson 1994). By the mid-seventh c., however, the insides of the bowls were often coated with a white slip, over which abstract designs were painted in a dusky red. While the earlier Jerash Bowls were widely traded, the seventh c. types were confined to north Jordan and al-Balqā’.

b) Potters at Jarash in the late seventh and eighth c. produced a variety of decorated bowls and drinking cups in a hard, moderately gritty fabric fired red to gray. The bowls in a fine

hard gray ware (similar to \$2) were decorated with multiple trails of impressed chisel rocking, pinched rims, and strokes of white paint on the rim. Less common were thin-walled, reddish-colored bowls with rounded walls and internal white painted lines (same as \$3.b). By the mid-eighth century, rounded cups were mostly dark gray in color with decoration in contrasting white painted lines either wavy or horizontal, but no incision. Overlapping with the white painted series were cups and bowls with abstract motifs in brownish-red paint. Jarash in the ninth c. saw the appearance of two distinctive forms: thin-walled burnished or incised cups in a near-black color and hand-crafted, flat-bottomed bowls known as Kerbschnitt ware, the sides of which featured deeply cut geometric designs copied from woodwork. Similar bowls at Fihl were larger and included painted decoration in white and deep red.

c) Jerash Bowls were replaced by a new series of bowls of uncertain origin, perhaps partially at Jarash (although no kilns or wasters have been located) but also at sites in al-Balqā, given the many finds there. Generally, the fabric was hard-fired to colors of reddish-brown to orange-buff (cf. \$3.c), a shared attribute indicative of potters relocating from Jarash in the early eighth c. Prominent were large bowls (24–33 cm) with outward-leaning ring bases and distinctive concave rims (“double rim”) and occasionally convex rims. Applied over a creamy slip on the interior surface of the bowls were patterned

straight and wavy lines in deep red to reddish-brown paint. Small bowls of cream, pink, and reddish-yellow hues were also made in a variety of shapes, with some decorated with abstract designs in dusky red paint. Around the middle of the eighth c. a new style of high-walled bowls, cups, and lids with applied dusky red paint came to dominate the field of high-quality, high-status pottery in Jordan; these continued well into the ninth c. The two main varieties are straight-walled cups with abstract designs, and vertical-walled, flat-bottomed bowls with elaborate geometric motifs, with lids for each. Cups in a reddish pink to beige color had curved bases, thin walls, and an enlarged rim with an out-turning pointed lip, with painted abstract designs on external walls featuring pendant garlands (loops), bisecting lines (lattice), and parallel wavy lines. Their relative rarity in secure AD 749 earthquake contexts would indicate that cup production started only a few years before the earthquake. Entirely absent in pre-AD 749 contexts, however, are the fine ware bowls known as “Palace ware,” with a strong presence at the Ammān Citadel palace. These were decorated with intricate geometric motifs in dusky red paint reminiscent of artistic frames used in contemporary wall paintings and mosaics. The formal paintwork on the bowls is in stark contrast to the free-hand abstraction of the earlier cups, large bowls, and dusky-red painted jars and jugs (\$3.c). The production of dusky-red vessels probably ended in the early 10th c.,



and by that date, in the case of finer wares, any late antique influences in pottery form and ornamentation had ended.

d) Originating in the mid–sixth c. and continuing into the 10th were bowls, cups, and plates in Palestinian Fine Homeware (above, §3.a; for corpus and dating, see Magness 1993, 1999, 2016). Finds of PFH bowls and cups are more common in the Jordan Rift valley than the highlands, but specimens have been found in all three cluster areas. From the sixth and especially seventh c., the bowl/cup form had burnished walls and a ring base shaped by paring, and often a single, evenly incised, wavy line below the external rim. The eighth to 10th c. bowls/cups replaced the ring base and incised line for heavily pared and burnished external walls on the lower half, a rounded base, and lengthened sides with thin walls. Uncommonly, cups late in the series were painted in red, black, white, and green (Grey and Politis 2012: 174, 190).

e) New to the field were bowls in Cream–Buff ware (§3.d, second half of the eighth to ninth c.), featuring flat bases and high sides decorated on the outside with incised lines irregularly arranged within bands below the rim. Clay dots were sometimes added. These traded bowls most likely originated in Ṭabariyah (Stacey 2004: 92–93). Similar bowls were found at Aylah in Mahesh ware. More generally, a wide range of bowl types from the later eighth to ninth c. were recovered from Khirbat Yājūz near Ammān (Khalil and Kareem 2002:

117–19). This diverse collection in two ware groups shows the extent of localized production and supply in domestic wares during the eighth to ninth c.

f) Recently, opinions on the origins of early Islamic glazed pottery have changed dramatically. Whereas the first mass–produced glazed bowls and jars were once seen as ninth c. Irāqī copies of imported Chinese wares, new evidence from Egypt and al–Aqabah argues for an eighth c. date for the manufacture of tin–based glazed wares in Egypt, known as Coptic Glazed ware, and their introduction into Arḍ ash–Shām (Matin, Tite, and Watson 2018; Watson 2014). Glassmaking was an ancient profession in the east Mediterranean, and readily provided the technology required to layer colored glass on an earthenware base. Crucial evidence from Aylah has shown that two local glazed varieties quickly appeared sometime in the second half of the eighth c. as demand grew, one sourced from the Ḥijāz and another from coastal Palestine (Whitcomb 1989a, 1990–1991). By no later than the last quarter of the eighth c., the distinctive glazed series collectively named the Yellow Glaze Family (YGF, the glaze being an established lead–silica–tin mixture) had become standard throughout Arḍ ash–Shām (Watson 2014: 128), with more than enough variation to suggest multiple production centers. In Jordan, Coptic Glazed and related YGF wares (mostly the latter) have been found at Jadar (Umm Qays), Fiḥl, Jarash, Ammān, Mādabā, and Dayr Ayn Abātā, in addition to

Aylah. Embodying the aesthetics of a new era, these brightly colored glazes brought glamour and style to households through an affordable yet prestigious spectacle that enriched community life.

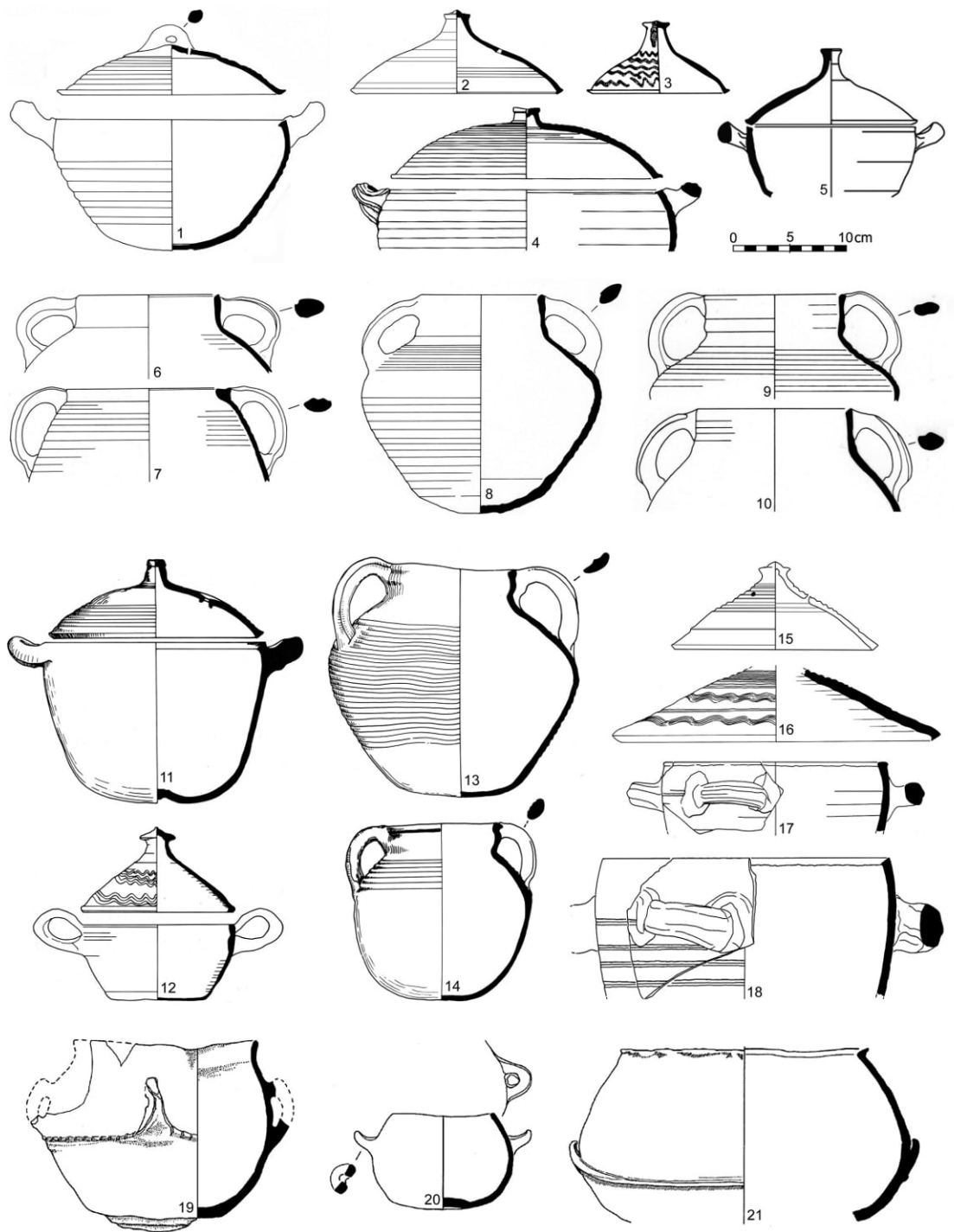


Figure 1 – Cooking pots and casseroles



## Descriptions of illustrations

*The quality and detail of the descriptions vary due to data limitations in the original sources. Note that the scales in the illustrations are only approximate for the same reason. All vessels should be wheel made unless otherwise stated, although that again relies upon the information given. Some drawings have been slightly modified for consistency between images. Irregularities and errors are inevitable, apologies.*

### Figure 1 – Cooking pots and casseroles

#### a) North Jordan Cluster

1. Cooking casserole and lid with loop handle, ribbed exterior, gritty well-mixed fabric with copious inclusions, smokey orange-brown to gray, Fiḥl (Jarash kilns), earthquake deposits, AD 749.
2. Cooking casserole lid, “button” handle, fabric as 1, Jarash (North Theatre kilns), earthquake deposits, AD 749.
3. Serving casserole lid, button handle, patchy orange-red fabric with medium to small inclusions, white paint decoration, Fiḥl (Jarash kilns), earthquake deposits, AD 749.
4. Cooking casserole and lid with button handle, mild ribbing on exterior, fabric gritty with copious inclusions, reddish-brown (10R 4/4), Fiḥl (Jarash?) ninth c.
5. Serving casserole and lid with tall button handle, reddish fabric with medium to small inclusions, white paint on handles (likely Jarash), eighth-ninth c.
- 6–7. Cooking pots necked and neckless, fabric as 1, Fiḥl (Jarash kilns), earthquake deposits, AD 659 (seventh c.).
8. Cooking pot, necked, fabric as 1, Fiḥl (Jarash kilns), earthquake deposits, AD 749.
- 9–10. Cooking pots, necked, shallow ribbing, fabric as 4, Fiḥl (Jarash), later eighth-ninth c.

#### b) Al-Balqa’ Cluster

11. Cooking casserole, dark gray (N4/), ‘Ammān Citadel, earthquake deposits, AD 749.
12. Serving casserole, brownish fabric, flat base, pointed button handle, combed wavy lines on lid, Umm al-Walīd, possibly earthquake deposits dated AD 749 (eighth c.).
- 13–14. Cooking pots, coarse ware, dark gray (N4/) to reddish-yellow (5YR 6/6), ‘Ammān Citadel, earthquake deposits, AD 749.

#### c) South Jordan Cluster

15. Casserole lid, button handle, two steam holes, gritty, patchy cream (10YR 8/2) to light red, core red-light red (2.5YR 5.5/6), regular shallow ribbing, Jabal Hārūn Phase XI/XIII, mid-seventh to ninth/10th c.
16. Casserole lid, incised wavy and horizontal lines, gritty, pink (7.5YR 8/1), core light red (2.5YR 6/6), slight ribbing on upper part, Jabal Hārūn Phases XIII–XIV, mid-eighth to ninth/10th c.
17. Casserole, gritty, blackened exterior, core light red (2.5YR 6/6), slight ribbing, Jabal Hārūn Phase XI, mid-seventh to mid-eighth c.
18. Casserole, large deep shape with ribbed and grooved exterior, low-set horizontal handle, gritty, gray-light brown (7.5YR 5.5/1–6/3), core light red (2.5YR 6/6), Jabal Hārūn Phase XIII mid-eighth to 9/10th c.
19. Globular cooking pot, handmade chaff-tempered ware, slipped, vertical loop handles, finger-impressed band, light red (10R 6/6) to strong brown (7.5YR 5/6), core dark gray (N4/), Gharandal, later 10th and 11th c.
20. Globular cooking pot, handmade chaff-tempered ware, horizontal loop handles, light reddish brown (5YR 6/3), core very dark gray (7.5YR N3).
21. Globular cooking pot, handmade chaff-tempered ware, clay band around lower body, pink (5YR 7/4) to reddish yellow (5YR 7/6), pink core (5YR 7/4).

Sources: Blanke 2017, Gerber 2016, Haldimann 1992, Holmqvist 2019, Northedge 1992, Schaefer and Falkner 1986, Walmsley 1982, 1995, Walmsley and Grey 2001, Watson 1992b.



Figure 2 – Basins



Figure 2 – Basins

a) North Jordan Cluster

22–29. Jarash Gray ware, dark gray fabric, handmade, vertical loop handles, small to medium gray, white, and transparent inclusions, Fihl (Jarash kilns); 22 earlier sixth, 23–24 later sixth, 25–27 early mid–seventh, 28 seventh–mid eighth, 29 later seventh to mid–eighth c. (P.M. Watson 1992b: fig. 6). The chisel and incised decoration of the later seventh c. is replaced by banded wavy and/or straight comb incisions by the mid–eighth c.

30. Jarash Gray ware (as above). The larger ninth c. basins (2) are of a darker gray (N5/), have flat and more out–pointing rims, and either single or multiple wavy lines below the rim or no decoration.

b) Al–Balqā’ Cluster

Basins are handmade with a thickened rim in a variety of styles and forms. The near–vertical walls have loop handles and a flat base, and wavy–comb incised decoration (see Daviau 2010: 275–84). All are eighth c.

31. Combed walls, very pale brown (10YR 8/3), core light red (2.5YR 6/8), rim 42.5 cm.

32. Red ware, extensive wavy and intertwining combing, very pale brown (10YR 8/2), core pink (5YR 7/4), internal rim 40.0 cm

33. Red ware, everted thickened rim, pale yellow (2.5Y 8/2), core light reddish brown (2.5YR 6/3), internal rim 45.0 cm.

34. Red ware, pinched rim and wavy comb decoration between handles, very pale brown (10YR 8/2), core light red (10R 6/6), rim 27.0 cm.

c) South Jordan Cluster

Khirbat al–Dharīh, Jabal Hārūn, and Aylah mostly sourced plain pottery from local workshops, such as these basins.

35. Basin, in–turning rim, comb–incised wavy lines on rim top and below rim, rim >36.0 cm, light reddish brown (5YR 6/4), Jabal Hārūn Phase XIII, eighth/ninth–10th c. (likely late seventh to eighth c.).

36. Large deep basin, flat rim and projecting lip, finger–impressed clay strip and incised wavy lines, rim 27.0 cm, white (10YR 8/2), core light red to red (2.5YR 5/6), Jabal Hārūn Phase XIII, mid–eighth /ninth –10th c.

37. Basin, flat grooved rim and projecting lip, horizontal handle, incised wavy lines, rim 25.0 cm, core light reddish brown (5YR 6/4) to red/light red (2.5YR 5/6), Jabal Hārūn Phase XIV, mid–eighth /ninth –10th c.

38. Flat base basin, protruding flat–topped rim, slight ribbing at base, grooved horizontal loop handle, combed wavy and straight incised lines on exterior walls, rim 26 cm, Khirbat al–Dharīh, mid–eighth to mid–ninth c. (rectified image).

39. Large basin, ribbed high walls, thick rim, flat base, medium sandy grits, cream surfaces, core red, Aylah (Aylah kilns) later seventh into eighth c.

40. Large basin, high–walled, flat vertical rim, incised walls, Mahesh (cream) ware in a coarse grit, Aylah later eighth to ninth c.

41. Heavily decorated basin, out–turned incised rim, comb incised “arcade” resting on a finger–impressed clay band on the exterior basin walls, coarse grit and chaff fabric with cream surfaces and greenish cream core, rim 50, Aylah, 10–11th c.

42. Flat base basin, acutely angled straight sides, out–turned rim incised with wavy lines, sand and mica tempered buff–orange fabric with exterior cream surface and dark green glaze on rim and interior, rim 46 cm, Aylah, 10th–11th c.

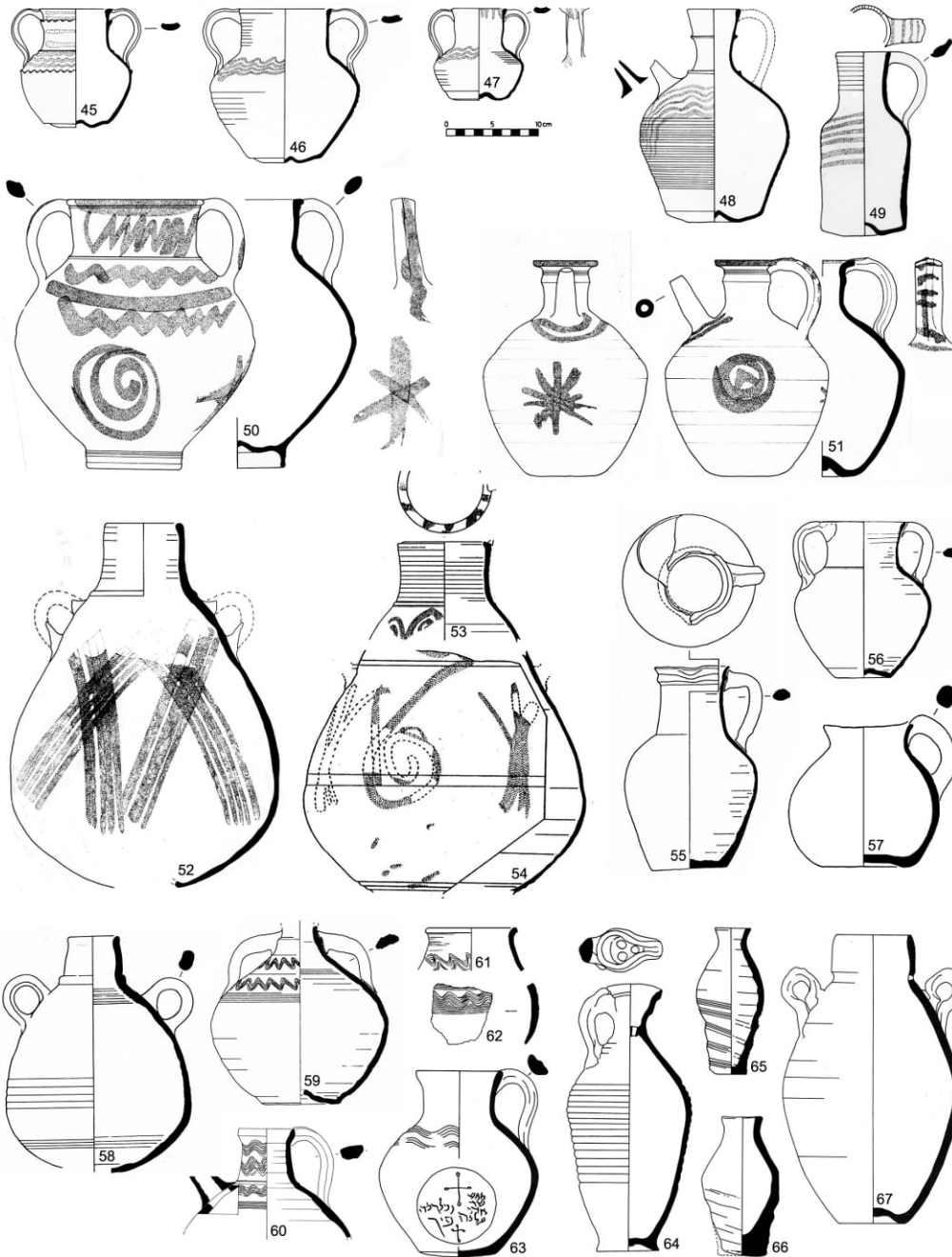
43. Bulbous rim of basin, incised and finger impressed clay band decoration, sand–tempered red–orange fabric with buff–orange surfaces, rim 43 cm, Aylah, 10th–11th c.

44. ‘Tupperware’ basin, notched rim and incised wavy lines between vertical loop handles, sandy orange–tan fabric with cream–orange surfaces, Aylah, 10–11th c.

Sources: Daviau 2010, Edwards et al. 1990, Gerber 2016, Holmqvist 2019, Watson 1992b, Whitcomb 1988, 1989.



Figure 3. Containers – jars, jugs, and flasks



a) North Jordan Cluster

The white-painted jars and jugs are a product of the Jarash kilns and are found in large numbers at Fihl. There was also an unpainted variety.

45. Small jar, small grits with occasional medium-sized white limestone grits fabric fired patchy red-orange to gray, two vertical thin strap handles and an omphalos base, pie-crust ridge on the neck and body, multiple wavy lines on body in a thin white paint, Fihl (Jarash), mid-eighth c. (earthquake destruction).

46. As 1 but without pie crust, many small white limestone and gray chert grits fired red (2.5YR 5/8) to gray (N5/) core grey (N5/), bands of wavy lines in white paint on body, Fihl (Jarash), eighth c.

47. As 1 but without pie crust, same fabric fired patchy 2.5YR 5/6 to 7.5YR and core 2.5YR 5/6, white paint in bands of wavy lines on shoulder and vertical multiple strokes on handle and rim, Fihl (Jarash) eighth c.

48. Spouted jug, thin neck and single strap handle, ribbed body, omphalos base, Fihl (Jarash), mid-eighth c. (earthquake destruction).

49. Jug, tall wide ribbed neck with ribbing, probable pinched rim spout (missing), deep omphalos base, white paint lines, Fihl (Jarash), mid-eighth c (earthquake destruction).

b) Al-Balqa' Cluster

The propensity for Dusky-Red Painted ware in al-Balqa' indicates production in this district, with at least two main artisan centers.

50. Jar, Dusky-Red Painted ware, smooth bulbous body, wide neck with groove below rounded rim, two handles from rim



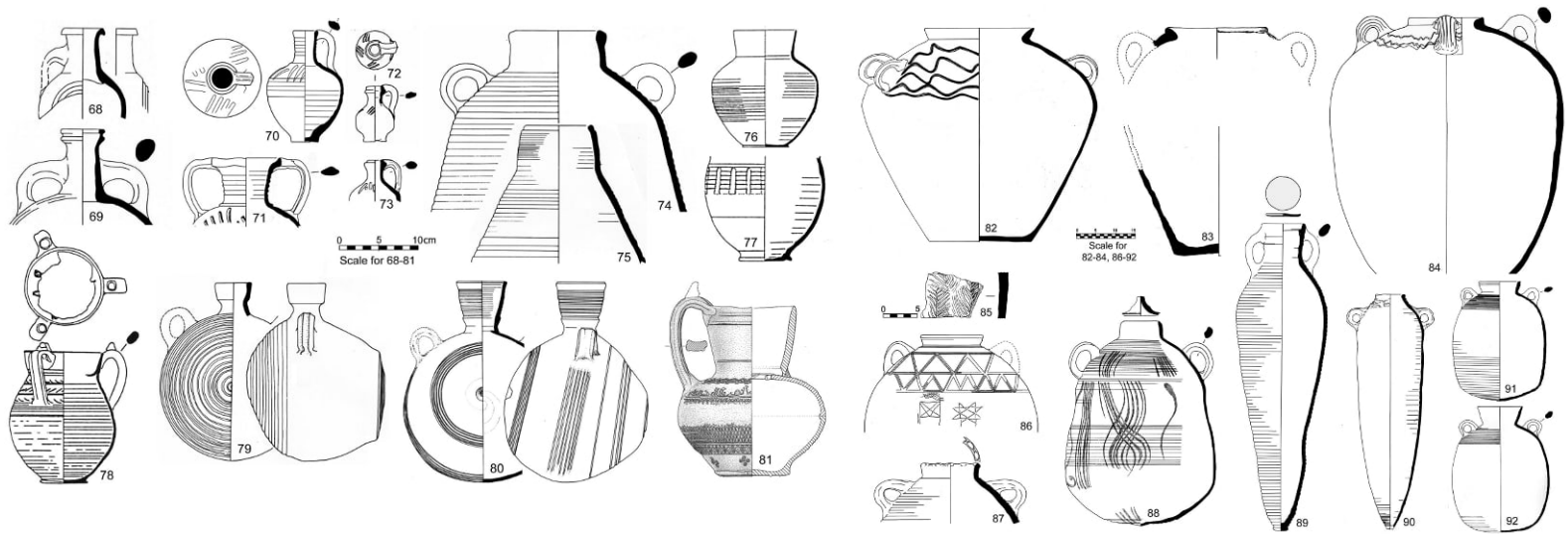


Figure 4 – Containers: jars, jugs, and flasks; Storage jars and amphorae

68. Flask, tall neck, out-turned rim, circular body, medium gritty sand fabric, cream, Aylah (Aylah kilns), later seventh into eighth c.

69. Large flask, as above but larger, medium gritty sand fabric, light orange with cream surfaces, Aylah (Aylah kilns), later seventh into eighth c.

a) Interregional

70. Jug, Palestinian Fine Homeware (Fine Byzantine Ware), tall straight neck, simple rim, handle from rim to shoulder, slightly concave base, long nicks running parallel on shoulder, very finely mixed fabric fired reddish yellow (5YR 6/6) core gray (5YR 6/1), Humaymah (Jerusalem area), late seventh to early eighth c.

71. Jar (jug?), Palestinian Fine Homeware Form 1B, outward-flaring ribbed neck with sharply out turned rim, sets of four nicks on shoulder, fine mix with some minute dark and limestone grits, “slurried” surface, fired hard reddish yellow (5YR 5/6) core gray (7.5R 5/0), rim 9.0 cm, Fihl (Jerusalem area), mid-sixth to early eighth c.

72–73. Small jugs, Palestinian Fine Homeware Form 2A, very narrow neck, handle from rim to shoulder, nicks on shoulder, bulbous body, flat base, ware as previous, rim 3.0 cm, (72) Khirbat al-Dhariḥ and (73) Fihl (Jerusalem area), mid-sixth to early eighth c.

74. Jar, Cream-buff ware, fine inclusions with small air voids, medium height neck, bulbous rim, two loop handles on shoulder, body ribbed, Fihl (Baysān kilns), early eighth c.

75. Jar, Cream-buff ware (handles missing), tall-necked jar with deep groove below rim, fine ribbing on neck and broader ribbing on body, softish fine fabric with small gray chert and reddish-brown ‘grog’ grits, fired pale yellow (5Y 8/3) core very pale brown (10YR 7/4), Fihl (origin uncertain), early to mid-ninth c.

76. Jar, Cream-buff ware (handles missing), thin bodied, slight ribbing otherwise plain, medium fabric with many small, medium, and occasionally large gray and reddish grits, voids, trimmed base and lower body, fired pink (2.5YR 8/3), Fihl (origin uncertain), mid- to late-ninth c.

77. Jar, Cream-buff ware (neck and handles missing), thin-bodied, fine ribbing on body with broad vertical finger grooves, pared lower body and disk base, fine fabric with many small gray chert and white limestone grits with some larger limestone pieces fired pale yellow (2.5Y 8/2) core pale yellow (2.5Y 7/4), Fihl (origin uncertain), early to mid-ninth c.

78. Jar, Cream-buff ware, thin-bodied, wide neck folded inwards to form sieve, three handles with applied “turbans” from rim to shoulder, three bands of incised decoration of angled arcs bounded by four incised lines on upper body, fine ribbing mid-body and pared lower body and base, finely mixed fabric with many small gray inclusions and some medium to small white and clear inclusions, voids, fired pink (2.5YR 8/3), Fihl (origin uncertain), mid- to late-ninth c.

79. Flask, Cream-buff ware, plain applied neck, body with ribbed rounded and projecting sides, small vertical loop handle (second



handle missing), finely levigated ware fired pinkish white (2.5YR 8/2)

80. Flask, Cream–buff ware, applied elongated neck with sharp ribbing, body with rounded and projecting sides, small vertical loop handle (second handle missing), patterned mild ribbing on body and evidence of paring, well–levigated ware with very few small black and limestone grits, fired pale yellow (5Y 8/3) core pink (2.5YR 8/3), Fiḥl (origin uncertain), mid– to late–ninth c.

81. Jug (Ewer), mold–made, tall wide neck, broad body, single rim to shoulder handle with applied “turban,” ring base, extensive molded decoration in abstract motifs and Kufic inscription (name of maker, Abū ‘Isā al–Wāṭiq, and blessings), fine pale brown fabric, Dayr ‘Ayn ‘Abātāorigin uncertain, al–Ramlah?), later ninth to 10th c.

Storage jars and amphorae

b) North Jordan Cluster

82. Storage jar, Jarash Gray ware, handmade with wheel–finished rim, bulbous, neckless, low out–turning rim, two double–set vertical handles, wavy incised lines on shoulder between handles, flat base. Fiḥl (Jarash kilns), mid–eighth c. (earthquake destruction).

c) Al–Balqa’ Cluster

83. Storage jar (incomplete), handmade, fired very pale brown (10YR 7/3), Amman Citadel (origin uncertain), 11th c.

d) South Jordan Cluster

84. Storage jar, sandy red ware, handmade with low wheel–finished rim, high–set shoulder with four unevenly spaced vertical handles and shallow incised wavy lines, tapered sides that end in knob base (missing), gritty, medium–hard fabric of small to medium sand inclusions, smoothed exterior, fired dark reddish gray (5YR 4/2) core red 10R 5/8, rim exterior light red (2.5YR 6/7) with an uneven slip on the exterior body of, from top to bottom, pinkish gray/reddish gray (5YR 5.5/2) to pink/light reddish brown (5YR 6.5/3), Humaymah (origin uncertain, Zurrabah kilns near Petra?), mid–seventh c. (+).

85. Storage jar (sherd), handmade, neckless with two ring handles, outer walls decorated with palm branch impressions, heavy gritty and rough fabric, fired red (2.5YR 5/6), Gharandal (origin uncertain), later? sixth to seventh c.

86. Jar, Soft Brown ware, handmade, low out–pointed rim, two loop handles on shoulder with combed triangles between horizontal bands supplemented with scratched designs below, softish and flakey brown ware of fine sandy grits, fired pink (5YR 7/3) to light reddish brown (2.5YR 5/6) core red 2.5YR 5/6, Gharandal (origin uncertain, probably local), later eighth–early ninth c.

87. Jar, red ware, straight neck with pinched rim, two loop handles on shoulder, ribbed body, red fabric with cream exterior, coarse grits, Aylah, likely local as some jars “may be Aqaba products, particularly [the] one with a pie–crust rim” (Whitcomb 2001: 298), late seventh to mid–eighth c.

89. Amphora, cream ware, cylindrical with long wide neck with internal ledge to support a disk stopper, stout handles from top of neck to upper shoulder, pronounced ribbing on body, tapering to flattened knob, dense gritty fabric with abundant medium sand fired cream/greenish cream, core commonly pinkish to dark red, Aqabah (local kilns), seventh to eighth c., date range 5th to ninth/early 10th c.

e) Interregional

88. Amphora, Brownish Gray White Painted ware, wheel made, ribbed body, vertical neck ending in an in–sloping pointed lip to receive a pointed lid, two vertical handles above a protruding ridge at the junction of shoulder and body, rounded base, a hard, thin, brownish–gray brown fabric with small to medium white, gray and brown inclusions, freely applied white painted decoration in broad intersecting wavy lines and loops, Fiḥl (Baysān), mid–eighth c. (earthquake destruction). Widely found in North Jordan and al–Balqā.

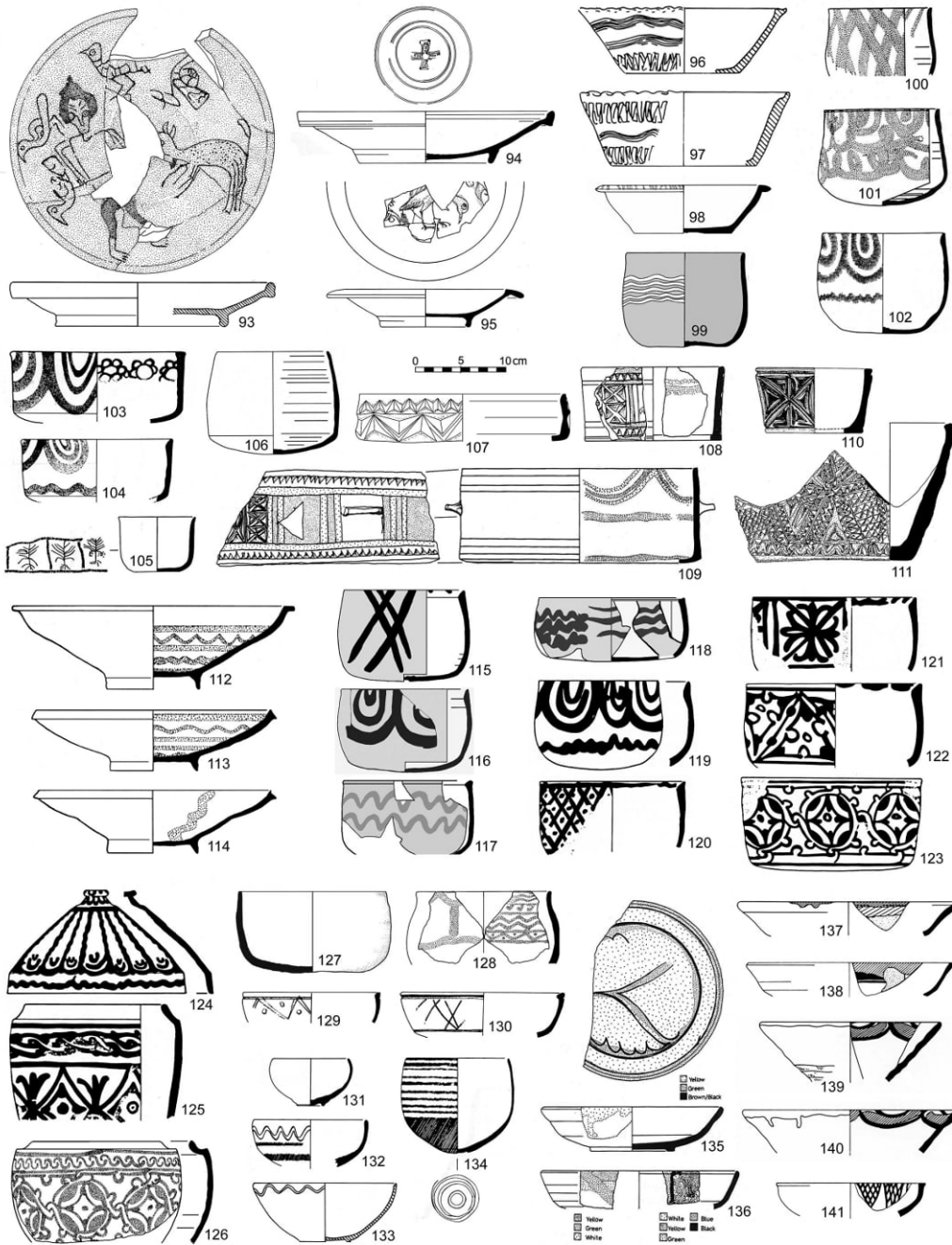
90. Amphora, Gaza (Ghazzah) type, cylindrical, neckless, clay accretions below rim, two vertical loop handles on shoulder, slurried body tapering to pointed base, fine hard fabric with small gray and opaque pebbles and occasional large grits, fired pale brown to brown, Fiḥl (Ghazzah kilns), earthquake deposits AD 659, date range late 5th to late seventh c.

91–92. Amphora, necked jar with two shoulder loop handles, fine ribbing/combing on upper body and broad ribbing on lower body, gritty hard fabric with many gray, mica, and organic inclusions, fired dull reddish brown with grey core, Fiḥl (Egypt delta, Terenouti), mid–eighth c. (earthquake destruction). Found in eighth c. North Jordan (Fiḥl, Jarash) and al–Balqā (Umm al–Raṣāṣ, Umm al–Walīd) contexts.

Sources: K. Amr and Schick 2001; Grey and Politis 2012; Magness 1993: 236–41; Northedge 1992; Politis 2012; Schick 2013; Waliszewski 2001; Walmsley 1995, 1982, 2001; Walmsley and Grey 2001; P.M. Watson 1992a; Whitcomb 2001.



Figure 5 – Bowls and platters: plain, painted, glazed



The term bowl – bowl (a moderately deep, usually round-base open container) is used rather loosely to mean any smaller, mostly domestic, vessel for the serving of edibles, from prepared foods to fruits, nuts, and sweets. The growing consumption of rice and changes to food preparation in early Islamic times encouraged the trend towards larger and deeper bowls.

a) North Jordan Cluster

93. Jerash Bowl, almost complete, thickened rim with inward sloping ring base, pinkish–orange fabric, quartz temper, cream slip outside with a white slipped border and inside, decorated in dusky red paint inside with a stylized hunt scene consisting of a male human ringed by four birds and a feline, rim 28.4 cm, base 18.5 cm, height 4.8 cm, Jarash macellum (Jarash kilns), early to mid–seventh c.

94. Jerash Bowl, almost complete, thickened rim (Watson 1989 7b) with inward–sloping ring base, internal stamped decoration of cross in medallion, light red fabric throughout (2.5YR 6/8), Pella earthquake deposits AD 659 (Jarash kilns), early to mid–seventh c. (courtesy of P. Watson).

95. Jerash Bowl, almost complete, drooping ledge rim with rounded end (Watson 1989 12b), inward sloping ring base, fabric light red (2.5YR 6/8), decorated inside on base with pecking bird (cf. birds in #93) in weak red (10R 4/4) paint on white background, Moh 4.5, Pella earthquake deposits AD 659 (Jarash kilns), early to mid–seventh c. (courtesy of P. Watson).

96. Bowl, Jarash gray ware (#22–30), finger–impressed rim, two rows of comb–incised wavy lines above a single band of chisel–rocked impressions, blackish hue,



rim 26.8 cm, base 15.0 cm, height 8.2 cm, Jarash (Jarash North Theatre kilns, AD 749 destruction), range late seventh to earlier eighth c.

97. Bowl, Jarash gray ware, finger-impressed rim, two bands of chisel-rocked impressions separated by one row of comb-incised wavy line, blackish hue, rim 26.4 cm, base 8.0 cm, height 9.5 cm, Jarash (Jarash North Theatre kilns, AD 749 destruction), late seventh to earlier eighth c.

98. Bowl, Jarash gray ware, shallow bowl with flat base and ledge rim ending at a point, multiple strokes of white paint on rim top, small to medium sized white limestone and quartz-like grits, patchy light red (2.5YR 6/6) to light brown (7.5YR 6/4) and gray (N5/) core dark gray (N4/), Jarash (Jarash North Theatre kilns, AD 749 destruction), eighth c.

99. Hand bowl, white painted, tall concave walls to chamfered rim, slight lift to base, group of five white painted wavy lines on mid outside wall, grey fabric (cf. #45), Jarash (Jarash kilns), eighth c.

100. Hand bowl, red painted, tall concave walls to chamfered rim, slight ribbing on internal walls, bold crisscrossed lines in dull red paint with trails extending over the rim the internal surfaces, small and some medium white and grey inclusions fabric, patchy light red to light grey (2.5YR 6/8 to 2.5Y 8/2), paint dark red (7.5R 3/4), Fihl (Jarash kilns), eighth to ninth c.

101. Hand bowl, red painted, tall straight walls to chamfered rim, shallow ribbing on internal walls, mild carination to round base, liberal application of continuous line of loops on exterior and, at rim, garlands in red paint, fabric same as #100, light red to pale yellow (2.5YR 7/6 to 2.5Y 8/3), paint dark reddish brown (2.5YR 2/3), Fihl (Jarash kilns), eighth to ninth c.

102. Hand bowl, red painted, high vertical walls with chamfered rim, and flat base, ordered row of garlands hanging from rim and wavy line below in deep red paint, Jarash (Jarash kilns, south decumanus, later eighth c.), later eighth to ninth c.

103–104. Bowls, red painted, wide opening, vertical walls rounding to flat base, pointed (chamfered) or flat-topped rim, red-painted garlands at rim with internal decoration (#103) or wavy line below (#104, cf. #102, which suggests a demand for serving sets).

105. Small hand bowl, largely complete, black ware, straight sides with splayed pointed rim, smoothed external surface with incised date palms (note date bunches) within finely chiseled borders, hard fabric with many small white limestone grits (cf. #45) gray (10YR 5/1) core light brownish gray (10YR 6/2), Fihl (likely Jarash kilns), mid-eighth to ninth c.

106. Hand bowl, black ware, largely complete, slightly incurving sides, pointed rim, carination to rounded base, burnished sides, hard fine fabric, black, Jarash (likely Jarash kilns), later eighth to ninth c.

107. Bowl, kerbschnitt, low sides, flat base, cut pattern of alternating triangles, small to medium lime and quartz grits, light yellowish brown (10YR 6/4), Jarash (uncertain origin), seventh to eighth c.

108–109. Bowl, kerbschnitt, handmade gray ware, flat base, vertical walls with ledge handles, cut and incised geometric patterns with red-painted exterior panels and red and white painted lines inside (possibly copies of wooden originals), compact fabric with many white, yellow, grey, red and black inclusions of various sizes, fired light red to brown/grayish brown (2.5YR 7/7 to 7.5YR 5/3 – 10YR 5/2) paint dusky red (7.5R 4/4 – 10R 3/3) and very pale brown (10YR 7/3) on exterior, red and cream garlands and horizontal lines on interior, Fihl (Jarash?), mid-to late ninth c.

#### b) Al-Balqā' Cluster

110. Bowl, kerbschnitt, grey ware, handmade, high walls, pared rim, flat base, occasional thumb impression, outside walls covered with cut decoration of adjoining squares each segmented into two-by-two matching triangular excisions all framed within zigzag bands of small triangular excisions, gritty ware, dark gray throughout, Rujm al Kursī, (local source?), likely ninth to 10th c.

111. Bowl, kerbschnitt, pink ware, handmade with deep vertical sides, flat base (d. 18 cm.), cut ware in triangles; molded decoration; self-slipped on inside; small and medium limestone grits, pink (5YR 7/4) core pinkish gray (5YR 7/2), Khirbat Yājūz (wasters suggest a local production), 10th to 11th c.

112. Bowl, out-pointing ring base, gently curving sides with upturn near rim, short ledge rim with rounded edge (cf. #95), traces of cream slip inside and outside, red-painted abstract designs within the bowl of, from base, a straight line, a thick rounded wavy line, a straight line, a pointed wavy line, and a thick straight line, hard fine fabric with some white grits, brick red, rim 30.2, height 8.9 cm, Rās al-Siyāghah/Mount Nebo (origin uncertain), first half of the eighth c. + (mistakenly dated sixth c. in Schneider 1941).

113. Bowl, out-pointing ring base with grooves, very gentle curving sides to pointed top rim with a slightly concave outer face, red-paint designs within the bowl of, from base, wavy line, two parallel straight lines, broad wavy line, and thick straight line, brick red with brown core, rim 26.1, height 6.5 cm, Rās al-Siyāghah, first half of the eighth c.



114. Bowl, slightly out-pointing ring base, curved sides with inverse carination midway to double-lipped rim, dark red painted wavy lines radiating from center to rim, brown interior and core, brick red exterior, all white slipped, rim 27.5, height 7.1 cm, Rās al-Siyāghah, first half of the eighth c

115. Hand bowl, red painted, tall inward-curved sides thicker than #99–102 with internally thickened chamfered rim, round base, external surface painted with lattice pattern in red (10R 5/6), fabric light red (2.5YR 6/6) with light reddish-brown exterior (2.5YR 7/4), rim 13.0 cm thickness 0.8 cm height 10.0 cm, Tall Jawa (origin uncertain), mid-eighth c. (range mid-eighth to ninth c.).

116. Hand bowl, red painted, shape as #115, painted garlands in weak red (10R 4/4), fabric pink (5YR 7/3) core pinkish gray, slipped exterior in very pale brown (10YR 8/3), rim 14.0 cm thickness 0.6 cm height 9.5 cm, Tall Jawa (origin uncertain), mid-eighth c. (range mid-eighth to ninth c.).

117. Bowl, brown painted, straight vertical sides, rounded base, enlarged “triangular” rim with pronounced external lip, painted double wavy lines on exterior in light brown (7.5YR 6/4), fabric pale yellow (2.5Y 7/3) core pink (7.5YR 7/3), no slip, rim 13.0 cm thickness 0.9 cm height 8.5 cm, Tall Jawa (origin uncertain), mid-eighth c. (range mid-eighth to ninth c.).

118. Bowl, brown painted, inward curving sides with rounded base and double-lipped rim, and a wider opening and lower walls than #115–17, three horizontal wavy lines on outside surface painted in light brown to brown (7.5YR 6/4 – 10YR 5/3), fabric pale yellow (2.5Y 8/3), rim 16.0 cm thickness 0.9 cm height 7.0 cm, Tall Jawa, mid-eighth c. (range mid-eighth to ninth c.).

119. Hand bowl, red painted, tall inward curving sides with internally thickened chamfered rim, round base, painted garlands with horizontal wavy line below in dark red (cf. #102, 116), finely mixed fabric, pink throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

120. Bowl, slightly incurving sides, enlarged and chamfered rim, even white outer slip overpainted with a dark red lattice design with a dot inside each diamond, horizontal red line on outside and inside of rim (cf. #115, but more intricate design), finely mixed fabric, light red throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

121. Bowl, shape as #120, white slip externally and on lip overpainted with segmented square design (cf. #110) and internally on rim lip in dark red paint, finely mixed fabric, pale brownish pink throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

122. Bowl, shape as #120 but thicker walls, near flat base indicated by sharp turn (cf. #123), whitish cream slip on rim top and external sides overpainted in a brownish hue with alternating triangular fields infilled with a notched triangular design around a central circle, splashes on inside of rim, very fine fabric, creamy buff throughout, rim 15.3 cm thickness 0.6 cm, Rujm al Kursī (‘Ammān?), ninth–10th c.

123. Bowl, red painted, slightly out-leaning sides with flat rim, slightly convex base, white slip inside only, external surface features geometric pattern of segmented medallions with opposing arcs and a central circle (cf. #122) continuously linked by intertwining painted bands in dark red paint (“Medallion style”, originally a Persian design later used in wall paintings at eighth c. Khirbat al-Maffar palace) with additional red-painted strokes and wavy lines on rim top and a five-pointed star on inside base (not shown), fine fabric, light pink throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

124. Lid, red painted, button handle, slightly convex sides, carinated lip, white slipped external face overpainted in dark red of a radiate pattern ending at a wavy line, finely mixed fabric, yellowish pink throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

125. Deep cylindrical bowl, red painted, slightly concave walls with incurving rim at carination, white slipped external face overpainted with a geometric pattern in dark red motifs of two intertwined bands framed in two horizontal lines and a repetitive pattern of double triangles with a circle in the center, well mixed fine fabric, light pink throughout, ‘Ammān Citadel (‘Ammān?), ninth–10th c.

126. Bowl, red painted, concave walls with sharply incurving rim at carination, geometric pattern on external surface as #123 with single helix design between horizontal lines above in dusky red (10R 3/4), hard fabric of small grey and white inclusions with occasional larger white grits, external surface pink (5YR 8/4) internal reddish yellow (5YR 7/8) core pinkish gray (7.5YR 7/2), Fiḥl (origin uncertain), later ninth c. (range ninth–10th c.).

#### c) South Jordan Cluster

As Gerber (2016: 148–49) remarks, local plain bowl forms with thin walls are “rather difficult to date”, although a tendency to simplicity in shape and greater depth in Early Islamic times is noted, as is seen elsewhere in Jordan. These vessels are not presented here due to the dating ambiguity with pre-Islamic times. However, two local handmade wares of a later date (#19–21, above) have recently been identified, as follows.

127. Bowl, handmade, plain ware, straight walls curving to slightly rounded base, coarse fabric of quartz, mica, and chaff temper, exterior light brown (7.5YR 6/4) interior brown (10YR 5/3), Khirbat al-Dhariḥ (local source), late 10th–12th c.

128. Bowl, handmade, red painted, curving walls to rounded rim, slipped exterior face decorated with bands of double wavy lines below which is a zigzag line with spaced dots all framed by single horizontal lines in monochrome red (5YR 5/6) paint, fine sandy fabric with oxidized



surfaces, exterior light reddish brown (5YR 6/4) interior light gray (10 YR 7/2) core gray (5YR 5/1), Gharandal (local origin unknown), late 10th to 11th c.

d) Interregional

129. Bowl, Cream–Buff ware, curved walls with deep incised line below flattened inward–sloping rim, incised double zigzag lines with clay dots in each triangle (cf. circles in voids of painted bowls #120, 122–125), well mixed soft fabric with fine white, orange, and grey grits with some voids, pale yellow (5Y 7/4), Fiḥl (Ṭabariyah kilns), later eighth to ninth c.

130. Bowl, Cream–Buff ware, curved walls with deep incised line below enlarged and flattened inward–sloping rim, incised random lines (lattice?) with further incised line below, with walls curving to flattened base, fabric as #129, Fiḥl (Ṭabariyah kilns), later eighth to ninth c.

131. Hand bowl, Palestinian Fine Homeware, thin curved walls, plain rounded rim, ring base, wet–smoothed surfaces, well–mixed fabric with fine white and dark grits with occasional larger but small white grits, hard fired, pale brown to pale orange, Fiḥl (Jerusalem area), mid–sixth to seventh c.

132–133. Hand bowl, Palestinian Fine Homeware, thin curved sides to rounded rim, single incised line below rim externally with paring below to heavier base, usually with a ring foot (Magness 1993: 193–94), fabric as #131, Fiḥl (#132) and Jarash (#133), (Jerusalem area), mid–sixth to late seventh to early eighth c.

134. Hand bowl, Palestinian Fine Homeware, exceptionally thin and high wall in–curving to plain rounded rim, heavier base, extensive paring with burnishing marks on external walls and to base, grooved spiral under base, well–mixed fabric with very small white limestone and chert grits, hard fired, light brown (7.5YR 6/4), burnishing reddish yellow (5YR 6/6) core pink (7.5YR 7/4), Fiḥl (Jerusalem area), late eighth and ninth c.

135. Bowl, Glazed ware, carinated wall, rounded rim, low ring base, cream–slipped inside under bubbly (degraded) yellow and green glaze separated into zones by brown glaze with drooping yellow glaze extending unevenly over rim, gritty core fabric with many fine to medium dark grey and some quartz, red, and white grits, reddish orange (5YR 6/6), Fiḥl (Yellow Glaze Family), early to mid–ninth c.

136. Bowl, Glazed ware, carinated wall, rounded rim, thin and patchy white slip under colored–glaze decoration in thick glassy green, turquoise, and yellow glaze, fabric pink (5YR 8/4) exterior surface pink (7.5YR 8/4), Fiḥl (Yellow Glaze Family), late eighth to mid–ninth c.

137. Bowl, Glazed ware, cream surfaces with light green, yellow, and white glaze, and brown paint on interior, exterior pared horizontally, fabric moderately gritty with medium–sized sand grits, orange, Aylah (Egypt?), later eighth to early ninth c. (Whitcomb 1989a: 171 Group 1; 1990–1991: 49 “Coptic Glazed ware”).

138. Bowl, Glazed ware, cream slip under yellow, dark green, and light green glaze on interior and rim, fabric moderately gritty with medium–sized sand grits, light orange pink, Aylah (Egypt? “Coptic Glazed ware”), later eighth to early ninth c.

139. Bowl, Glazed ware, cream slip, yellowish clear, green glaze and brown paint on interior and rim, fabric moderately gritty with medium–sized sand and mica grits, reddish orange, Aylah (al–Ḥijāz), early ninth c. (Whitcomb 1989a: 171 Group 4; 1990–1991: 49 “Hijazi”).

140. Bowl, Glazed ware, greenish clear, green glaze and brown paint on interior and rim, fabric moderately gritty with medium–sized sand and mica grits, orange, Aylah (al–Ḥijāz), early ninth c.

141. Bowl, Glazed ware, white slip under yellow glaze and brown paint on interior and rim, yellow glaze on exterior, fabric moderately gritty with medium–sized sand grits, tan–brown, Aylah (al–Ḥijāz), early ninth c.

Sources: A.–J. ‘Amr 1986, 1990; Blanke 2018; Daviau 2010b; Edwards et al. 1990; Gawlikowski 1986, 1995; Khalil and Kareem 2002; Makowski 2020a, 2020b; McNicoll et al. 1986; Olávarri–Goicoechea 1985; Pappalardo 2019; Schaefer and Falkner 1986; Schneider 1941; Uscatescu 1996; Uscatescu and Marot 2016; Walmsley 1982, 1995; Walmsley et al. 1993; P.M. Watson 1989, 1992b; Whitcomb 1989a, 1990–1991.



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