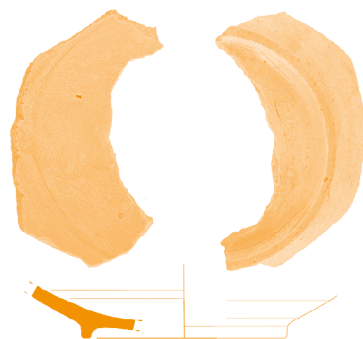


Beyond the bonds of periodization: continuity and change in the ceramic repertoire of southern Jordan between the mid-8th and 11th centuries AD



Abstract: This paper utilizes pottery as a key tool to explore recent scholarly developments in understanding the settlement history of southern Jordan between the mid-8th and 11th centuries AD — a period often overlooked in academic discourse. Through comprehensive studies of pottery assemblages, researchers have redefined this period, challenging the notion of a “false” settlement gap. The analysis of ceramic records reveals diverse settlement dynamics and adaptive strategies employed by local communities, highlighting a significant degree of cultural diversity and material variability in the region. This review synthesizes current research to offer a comprehensive overview of settlement continuity and transformation during the transition between the Early and Middle Islamic repertoires of material culture.

Keywords: Southern Jordan, cream wares, Early Plain Handmade Ware, Abbasid period, Fatimid period

INTRODUCTION

In his influential paper, Donald Whitcomb (1992) challenged the commonly held belief in settlement regression and historical insignificance of the Jordanian territory during the later 8th to 11th centuries AD (e.g. Sauer 1982: 332–333), emphasizing the relative and subjective nature

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of this perception. For over 30 years, his work has sparked a reassessment of the Abbasid and Fatimid/Seljuq-period occupation in the region within scholarly discourse (e.g. Walmsley 1995; 2001a; 2001b; Schick 1997; Damgaard 2013; Jones, Najjar, and Levy 2014; Holmqvist 2019). It is now clear, therefore, that this long period is far more nuanced, characterized by internal dynamics and marked by dispersal and contraction rather than wholesale abandonment of settlements (Makowski 2020a: 227). Yet, despite the updated theoretical frameworks employed in the current literature, the main challenges remain essentially the same: the imperfection of pottery taxonomies and the difficulty of interpreting scattered settlements. A key issue is that attitude-based deduction continues to drive the approach of field archaeologists. It remains common for scholars to focus more on interpreting excavated or surveyed remains than on their identification, constructing narratives based on a conventional overview of material culture (Whitcomb 2016: 246).

Operating within the binary framework of “presence/absence”, by excavators and surveyors working in the region, has led to oversimplifications in the understanding of settlement patterns and has fostered convictions about the existence of occupation gaps —particularly during the 10th and 11th centuries (e.g. Johns 1994: 8; Schick 1997: 81; Walmsley 2001a: 526). Whitcomb’s (1992: 388) insightful observation that a reevaluation of ceramics from the Byzantine and Ayyubid-Mamluk periods could help address this lacuna has inspired field archaeologists working on the Islamic periods. As a result, it has been consistently demonstrated that various

categories of Umayyad pottery, often originating in the Byzantine period (e.g. Sordini and Villeneuve 1992; Walmsley 2007: 51; Vokaer 2013: 492), continued to be in use, often with minimal changes, throughout the Abbasid and even into the early Fatimid period (e.g. Tal and Taxel 2008: 210). This is particularly notable for cooking wares, which displayed remarkable resilience to cultural changes (Walmsley 2022: 91, with further references).

Despite this continuity, the Abbasid and Fatimid/Seljuq periods also witnessed significant transformations in their pottery repertoires, especially during the late 8th and early 9th centuries. These changes reflected a shift in commercial power eastward and, notably, a profound transformation in consumers’ aesthetic preferences (Walmsley 2001c; for a broader perspective, see Avni 2014: 292). Noteworthy among these developments is the intensified distribution of various regional and imported glazed wares (Taxel 2014, with additional references; for a wide repertoire of early glazed wares, see Avissar 1996), as well as the emergence of a family of cream wares.

Given the existing variety in the ceramic typology of southern Jordan, the following discussion focuses only on selected pottery categories that, as Whitcomb (1992: 388) predicted, have to a certain extent helped to fill the conceptual gap between the mid-8th and 11th centuries. In particular, this paper presents observations on several aspects of change and continuity evident in the ceramic repertoires of various sites in the region, highlighting a number of chronological and methodological reassessments.

PRACTICAL AND METHODOLOGICAL CONSTRAINTS

Various facets of Islamic archaeology that affect our understanding of the Islamic phases of occupation warrant consideration here. The most evident obstacle stems from the disturbed nature of stratification, which often complicates efforts to establish precise chronological sequences. At best, archaeological contexts allow for the separation of phases spanning two to three centuries (for the most clearly defined correlations between ceramic and stratigraphic records in southern Jordan, see Walmsley, Karsgaard, and Grey 1999; Gerber 2016). More often, however, the high degree of intermixing in upper levels permits only the identification of relative associations between specific units. In southern Jordan, the destructive earthquake of AD 749 —although occasionally definable (e.g. Fiema 2016: 562)— typically does not provide a clear stratigraphic *caesura* between the Umayyad and Abbasid periods, as it does in northern Jordan (e.g. Lichtenberger and Raja 2019). As a result, at many sites, material from the Umayyad and Abbasid periods is very difficult —if not impossible— to distinguish.

In general, the ceramic repertoire in southern Jordan is highly idiosyncratic, often exhibiting considerable variation even between neighboring sites. As a result, it is often difficult to rely solely on typological similarities of certain vessels, since strong morphological parallels are rare and only sporadically extend beyond the conventional borders of southern Jordan

(Gerber 2008: 288). Added to this is the scarcity of reliable chronological markers and the omnipresent phenomenon of the long-term use of various types of coarse wares (e.g. Holmqvist 2019: 3; Walmsley 2022: 89).

This last issue, in particular, frequently compels scholars working on pottery from Islamic-period sites to rely on arbitrary chronological divisions. Consequently, ceramic material is often conventionally divided into two broad phases: the Early and the Middle/Late Islamic periods. This division creates significant interpretative challenges, as some poorly understood categories of coarse pottery in use during the Early Islamic period may have continued into the beginning of the Middle Islamic period. The reverse situation can also be observed. Until recently, for example, Islamic plain and painted handmade wares were routinely attributed exclusively to the Ayyubid-Mamluk or even Ottoman periods, although, in reality, at least some of them may have originated in earlier periods (Makowski 2023a: 377–378; Makowski et al. 2025).

A further complication arises from the use of archaeological periodization itself. In short, there is no standardized archaeological periodization for southern Jordan during the Islamic era (for a useful overview, see Jones, Levy, and Najjar 2012: 68–69, Fig. 1, with further references). This problem is particularly evident in the case of the period between the mid-10th to 11th centuries, which in Jordan corresponds to the Fatimid and Seljuk reigns. There is no

consensus on whether this timeframe should be classified as part of the Early or Middle Islamic period. In a recently published manual on Jordanian pottery, the Fatimid period is discussed in both the chapters on the Early Islamic period (Walmsley 2022) and the Middle Islamic period (Walker 2022), highlighting different issues and perspectives.

According to a commonly used approach —frequently employed by scholars working in Israel and, more rarely, in Jordan (e.g. Brown 1992; Milwright 2008: 2)— the entire Fatimid/Seljuk period is included within the Early Islamic period. A different system, more closely aligned with changes in material culture, was proposed by Whitcomb (1992). His model divides the Fatimid/Seljuk period between the Early and Middle Islamic phases, suggesting that the Middle Islamic period begins in the 11th century (Whitcomb 1992: 386; this approach was also adopted during the Ḥisbān excavations, e.g. Walker 2012). Interestingly, Whitcomb (2008: 483, Fig. 15.7; 2010: 127, Fig. 6) later argued that the 11th century should be viewed as a transitional period, somewhat separated from the standard periodization system, although this idea has not gained wide acceptance in academia. While the present paper focuses exclusively on material culture for analytical reasons, it is reasonable to adopt Whitcomb's system for the archaeological periodization. However, in line with Alan Walmsley's (2001b: 633–634) proposal regarding pottery from excavations in southern Jordan, there remains a strong case for using calendar dates whenever possible.

Defining the strata is challenging, in part due to the infrequent use of scientific dating methods (Makowski et al. 2025) and the limited availability of datable non-ceramic artifacts. Given that the first signs of demonetization can be observed as early as the late 7th century (Walmsley 2010: 39), it is not surprising that coins from after the mid-8th century are exceedingly rare in southern Jordan (e.g. Villeneuve 2011: 317; Bowsher 2016: 396–397). Moreover, these coins typically provide only a rough *terminus post quem* and rarely offer a *terminus ante quem*. Exceptions are found only at Ayla (e.g. Whitcomb 1988a: 210; 2010: 129–130, Fig. 15). A similar situation exists with dated epigraphic records, which are almost entirely absent — particularly in stratified contexts (for a notable exception, see 'Amr et al. 2000: 240–243, Fig. 17). To enhance our understanding of ceramic chronologies in southern Jordan, closer integration with glass evidence may be promising. While glass vessels are generally considered more luxurious than pottery, they often allow for more precise dating. However, glass finds post-dating the mid-8th century in southern Jordan are rare (e.g. Dusart 2007: 216–217, Fig. 10; Keller and Lindblom 2016: 284–288, Figs 16.1–8, 17.1–3; O'Hea 2017: 163–166) and are usually poorly preserved, which hampers advanced chronological and typological classification. Furthermore, glass studies face similar challenges to ceramic studies, including pronounced regionalism and the longevity of local and regional forms (O'Hea 2003: 134).

DEFINING THE GEOGRAPHICAL AND HISTORICAL SETTING

Many scholars have highlighted the distinctive character of the southern Jordanian pottery repertoire during the Early Islamic period. Yvonne Gerber (2016: 168) even suggests that we can speak of a “southern Transjordan ceramic koine”, while Walmsley (1992: 381; see also Walmsley and Grey 2001: 163) describes southern Jordan as representing a separate ceramic horizon. Indeed, notable differences in the appearance of certain wares and typological features are particularly evident when compared to material from north Jordan (e.g. Alawneh and Béarat 2011; Walmsley 2007: 59; Holmqvist 2019: 37). As Piotr Bienkowski (2003; see also Gerber 2014) has convincingly demonstrated, this north–south dichotomy was already present in earlier periods and was primarily shaped by geographical determinism and the configuration of trade routes.

However, the distinctiveness of the southern Jordanian ceramic repertoire should not be interpreted as a sign of isolationism or as fundamentally opposed to the better-documented north. Elisabeth Holmqvist (2019: 37) rightly cautions that points of interaction and zones of shared influence existed, and that southern Jordan was, more broadly, an integral part of the wider Levantine ceramic *koiné*. This is particularly evident at sites in the Ghores-Šāfi region, where ceramic assemblages display a transitional and highly inclusive character (e.g. Grey and Politis 2012: 186).

That being said, it should be emphasized that there is no single, standardized concept of “southern Jordan” in academic discourse (for a map of southern Jordan and adjacent territories, see [Fig. 1]). In this

article, the term is conventionally used to refer to the territory extending from Wādī Mūjib down to the Gulf of Aqaba. This area corresponds closely with one of the three ceramic clusters identified in Jordan—alongside the northern highlands, el-Bālqa, and Ma‘āb—distinguished through both archaeometric (Alawneh and Béarat 2011) and typological studies (Walmsley 2022: 89). This territory encompasses contrasting environmental and exploitation zones within a relatively small geographic area. At the same time, it clearly constitutes a coherent unit in terms of certain pre-defined features, especially in the field of material culture. Nevertheless, it should be noted that the ceramic assemblages from southern Jordan are generally unrepresentative of the material found at better-studied sites north of Wādī Mūjib (Johns 1994: 8; see also Gerber 2016: 168).

Historically, our knowledge of southern Jordan between the mid-8th and 11th centuries remains limited. It is commonly assumed that with the rise of the Abbasids in AD 750 and the subsequent relocation of the capital to Baghdad in AD 762, the region experienced political and economic marginalization. Unsurprisingly, while several valuable accounts describe the broader situation in Bilād el-Shām, most make only brief or indirect references to southern Jordan (for discussions, see Walmsley 1992: 381–382; 2001a: 518; 2001b: 634–635; Schick 1997: 73–75; Damgaard 2013: 68–72).

Particularly informative, however, are the geographical chronicles of the 9th and 10th centuries, which provide valuable lists of sites, occasional brief—usually positive—descriptions, and, most im-

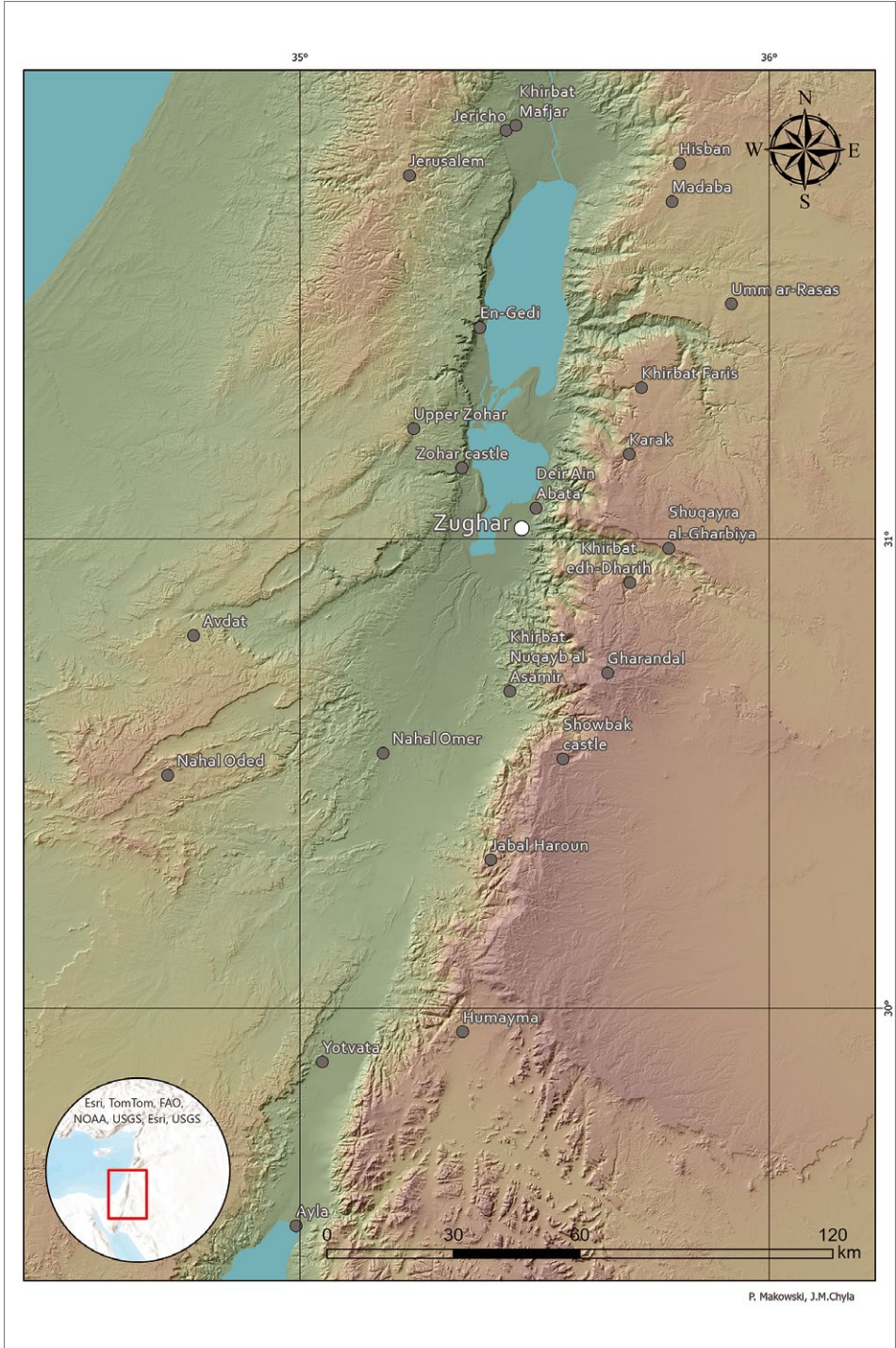


Fig. 1. Map highlighting the main sites discussed in the text (Processing P. Makowski, J.M. Chyla)

portantly, insight into the administrative division of the region. Here, it is worth briefly recalling two key 10th-century sources: al-Isṭakhrī (writing around AD 951) and Ibn Ḥawqal (writing around AD 978). Both authors describe the region as fertile and predominantly inhabited by an Arab population (for a list of sources with partial translations, see Le Strange 1890: 28, 35, 395; for further discussions, see Schick 1997: 75; Walmsley and Grey 2001: 139; Walmsley and Barnes 2002: 486; Walmsley 2007: 74–76; Damgaard 2013: 67–72; Jones 2018: 696–697).

Nevertheless, when referring to the inhabitants as “Arabs”, these geographers

likely did not intend an ethnic designation but rather a reference to their predominantly nomadic, “Bedouin” lifestyle (Pini 2019: 27; for the “Bedouinization” of the term Arab after the mid-9th century, see especially Webb 2016). Indeed, it appears that, particularly during the 10th and 11th centuries, minimal state involvement and adverse socio-economic conditions contributed to the increasing nomadization of southern Jordanian society, potentially fostering a degree of autonomy among local tribal groups, with the Jarrāḥids as a most prominent example (Schick 1997: 76–78; Damgaard 2013: 69).

ASPECTS OF CONTINUITY AND CHANGE IN THE REPERTOIRE OF FINE AND SEMI-FINE WARES

It is important to remember that the intuitive division between what should be considered fine and coarse within the ceramic repertoire is inherently relative and largely dependent on regional socio-cultural contexts. In this article, the distinction is used conventionally to organize the discussion and to highlight the striking discrepancies in the distribution of various pottery classes.

The study of ceramic material dating from the mid-8th to the 11th century at various sites in southern Jordan immediately reveals a general scarcity of high-quality tableware. This phenomenon appears to stem from two primary factors. The first is undoubtedly the region’s specific settlement character (for some reflections

on this issue, see Schick 1994). During this period, southern Jordan was sparsely populated, dominated by scattered and thinly distributed rural and ephemeral sites. The only true urban centers were Ayla and Zughar, while other key sites—though occasionally mentioned by 9th- and 10th-century geographers—should more accurately be understood as small towns or villages with limited trade connections and relatively modest populations (e.g. Schick 1994: 143–144; 1997: 73–78). The second factor is the uneven state of research. Many important sites, such as Ruwāth (Walmsley and Barnes 2002), Maʿān (Genequand 2003), and Udhruh (Killick 1983),¹ have been only cursorily investigated and remain ceramically unrecognized.

1 Recent work by the Dutch-Jordanian project promises to provide long-awaited insight into the pottery from this site.

While both Ayla and Zughar were well integrated into trade networks, local demand for fine wares was primarily met through imports, eliminating the need for local production. As a result, since demand for such goods was relatively limited, their secondary distribution to peripheral hinterland sites remained marginal at best. Over time, particularly in the 10th and 11th centuries, the growing social divide between urban and rural settlements further restricted the redistribution of imported ceramics.

During the Byzantine and Umayyad periods, the presence of Late Roman red slip ware in Jordan was largely tied to the activities of ecclesiastical elites, who received such goods as endowments (Hamarneh 2020: 266), and eventually to military troops (e.g. Sochacki 2023: 91, 97–98). Since these groups played only a minor role in the region, the presence of Late Roman red slip ware was always quantitatively insignificant (e.g. Walmsley and Grey 2001: 148, Figs 8:1–2; Grey and Politis 2012: 177–178, Table 4; Gerber 2016: 130–132, Figs 1:7–8, 29, 31, 4:68–72; Jones 2018: 514–526, Fig. 6.16) and usually residual, rendering it of limited chronological value (Gerber 2008: 289). Furthermore, while the use of these wares was economically and socially restricted, it had little impact on the consumption patterns of rural communities, including semi-sedentary shepherds and farmers, as well as nomadic and semi-nomadic groups, which together constituted the majority of the southern Jordanian population. It follows that the gradual decline

in the influence of church elites during the later part of the Early Islamic period likely contributed to a sharp decrease in the overall importation of fine wares. More fundamentally, there was probably no significant social demand for their continued use.

This is illustrated by the fact that, unlike in other parts of Bilād el-Shām (e.g. Sodini and Villeneuve 1992: 208; Hayes 2001: 277; Wickham 2005: 773; Vokaer 2013: 486–488, Fig. 2, with further references), the phenomenon of imitating Late Roman forms—even after the original prototypes had ceased to circulate—is only marginally attested in southern Jordan. The only examples are the so-called “derived Late Roman fine wares” from Gharandal (for which, unfortunately, no illustrations or further commentary are available) (Walmsley and Grey 2001: 149), and two copies of Late Roman red slip wares found at Jabal Hārūn (Gerber 2016: 162, Figs 4:71–72).

Unlike northern Jordan and Palestine, southern Jordan did not witness the emergence of new categories of local fine wares echoing the morphological features of Late Roman slip forms following their disappearance. Their influence on local consumption preferences and cultural agency was therefore minimal. One may speculate that this resulted from the limited distribution of these wares. It is thus unsurprising that the influx of various types of regionally produced fine wares remained exceptionally low.

A notable example is Fine Palestinian Ware,² a ceramic category originat-

2 More commonly recognized as “Fine Byzantine Ware” (for the important critiques of this term, see Walmsley 2012: 315).

ing from the Jerusalem region. Between the mid-6th and 10th centuries (Magness 1993: 166–171, 193; see also comments in Walmsley 2000: 322–324; 2012: 315, Fig. 13.3), this ware first coexisted with, and later partially replaced, Late Roman red slip wares as the dominant fine ware in Palestine and northern Jordan. In southern Jordan, it likely arrived through subsidiary distribution centers but consistently appeared in small quantities in both lowland sites (Jones 2018: 487–488, Figs 6.13: 2–3) and highland sites such as Gharandal (Walmsley and Grey 2001: 149) and Jabal Hārūn (Gerber 2016: 132, Figs 17:217, 27:307, 28:332–333). Likewise, the so-called Red Painted Ware is only marginally attested in southern Jordan, which contrasts significantly with the north, where this highly distinctive pottery class —generally characterized by exceptionally well-prepared clay and a buff to pale orange fabric— is typically

well represented. The production of high-walled cups and bowls decorated with drooping loops and wavy lines, one of the main sub-types of Red Painted Ware, has been identified in 9th-century contexts in the so-called Umayyad house in Jerash (Gawlikowski 1986: 117–118, Pls 11–12). Other typological variants are commonly associated with the area of ‘Amman (Walmsley 2000: 324–325, Fig. 5; 2012: 315–316, Fig. 13.5). Among these, the so-called Palace Ware —characterized by high-quality manufacture and extensive painted decoration— serves as a reliable chronological indicator of Abbasid occupation, as it consistently appears in strata postdating the AD 749 earthquake and disappears in the early 10th century (Walmsley 2022: 94).

The limited penetration of various typological variants of Red Painted Ware into southern Jordan points to a modest, though existing, network of trade and



Fig. 2. Palace ware from Dharrah (Photo F. Villeneuve)

exchange between northern and southern Jordan (Holmqvist 2019: 39). Interestingly, while scarce, this pottery class has been found at sites near Wādī el-Hasā (e.g. Walmsley, Karsgaard, and Grey 1999: 464; Kareem 2001: Figs 1:7, 2:7–8; Waliszewski 2001: 98, Fig. 7:1–3; Grey and Politis 2022: Fig. 6.6.1). A noteworthy example is Dharih, which represents the southernmost occurrence of Palace Ware (Villeneuve 2011: Fig. 3) [Fig. 2]. Further south, as evidenced at Jabal Hārūn (Gerber 2016: 135) and el-Ḥumayma (Amr and Schick 2001: 114), finds of painted wares are sporadic and limited to a few highly fragmented sherds. Interestingly, archaeometric research has shown that sherds from Jabal Hārūn should probably be considered as local/regional imitations of northern Jordanian products (Holmqvist 2022: 162). The gradual decrease in the quantity of Red Painted Ware as one moves further south illustrates the extent of the influence of northern Jordanian pottery traditions, which appears to diminish the further one gets from the production centers.

Throughout the entire period under discussion, we observe the rise and spread of a new family of semi-fine and fine cream wares that clearly break with the earlier Late Antique pottery traditions. This development formed part of a broader evolution in material culture (discussed in Mulder 2014, with further references), also attested in other parts of the Islamic world, including Iraq (e.g. Northedge 1996; Nováček 2022), Iran (e.g. Wilkinson 1974: 290–305; Nováček 2009),

and even North Africa (Louihihi 2010: 52, Fig. 23). Across these regions, we find similar typological and stylistic features, as well as comparable production techniques.

In Syro-Palestine, cream wares are similarly characterized by a consistent range of shapes and manufacturing practices, including vessel forming, firing, and finishing. However, subtle yet distinct regional differences can be observed across various parts of Bilād el-Shām. Moreover, the broader spectrum of cream wares reflects a remarkable diversity in fabric repertoire, technological characteristics, and provenance. To account for this variety, Walmsley (2001c) introduced the collective term “Islamic Cream Ware” (ICW). However, this designation should be applied with caution, as the term “ware” in this context encompasses an exceptionally broad range. One might argue that the full spectrum of Early Islamic cream wares in Syro-Palestine, including those from southern Jordan, is better understood as a family of wares rather than a single, cohesive category.³

Despite this methodological difficulty, adhering to Walmsley’s primary division appears reasonable, as it offers an efficient organizational framework for a broad and diverse body of evidence. In short, this classification system divides the entire corpus of cream wares into three subcategories, conventionally denoted as ICW A, B, and C (Walmsley 2001c: 306–310, Table 1). It is important to note here that the nomenclature surrounding Early Islamic cream wares is highly inconsistent. For instance, Israeli scholars often prefer

3 See the guiding principles outlined by the Levantine Ceramic Project: <https://www.levantineceramics.org/glossary>.

the more neutral term “Buff Ware” (e.g. Stacey, Berman, and Lester 2004; Tal and Taxel 2008; Cytryn-Silverman 2010, among others), which can be misleading, as this term is also widely used to describe other ceramic categories and does not convey the cultural significance of ICW.

Of primary interest here are the categories Walmsley designates as ICW B and C. The former mainly comprises closed

forms such as necked jars and jugs, often equipped with filters and turban-shaped appliqués [Fig. 3:b-e]. Decoration tends to be extensive, ranging from abstract geometric and floral motifs to calligraphic and pseudo-calligraphic themes. Notable techniques include incising, gouging, hatching, stamping, barbotine application, or combinations thereof (e.g. Cytryn-Silverman 2010: 104). ICW C,

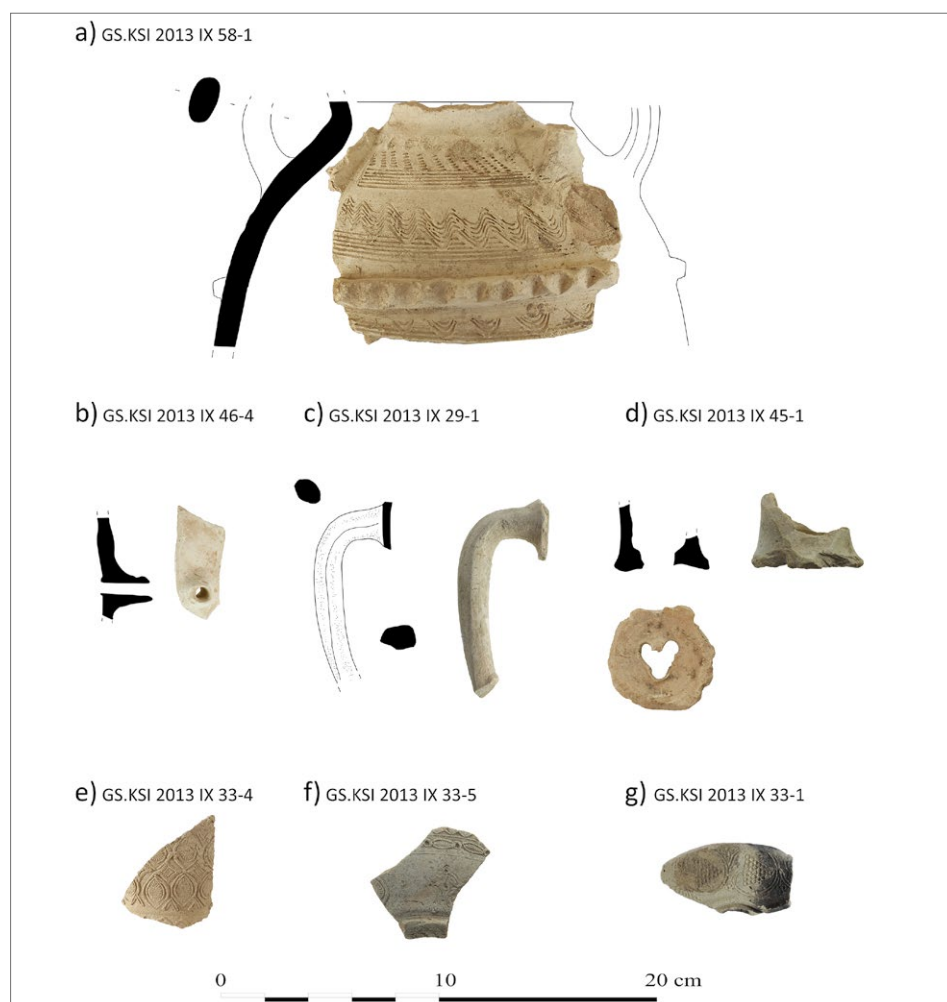


Fig. 3. Selection of wares from Trench IX at Khirbat ash-Sheikh 'Isā: a – Coarse Cream Ware; b–d – ICW B; e–f – ICW C; g – ICW lamp (Photos and drawings P. Makowski)

by contrast, is a relief-molded ware, frequently referred to as Mafjar ware. It primarily includes thin-walled, fine-fabric jars, jugs, and —more rarely— pilgrim flasks, typically characterized by standardized geometric decoration patterns [Fig. 3f, g]. Recent analysis suggests that ICW C usually appears alongside ICW B, indicating that both subcategories may have shared similar production and distribution patterns [Figs 4, 5]. It also appears to be more characteristic of urban centers or sites associated with Muslim elites (Makowski and Chyla 2024: 5, Figs 4, 7; for detailed information, see Chyla and Makowski 2024).

In general, ICW B and C are particularly scarce in southern Jordan (Makowski and Chyla 2024: 3–4). Only at Ghor es-Šafi do they appear in somewhat more substantial, though still comparatively marginal, quantities within the assemblages (Grey and Politis 2012: 176, Figs 355–357; 2022: 97–99, Fig. 6.4; Grey et al. 2017: 122–123, Fig. 6.3:6–14; Makowski forthcoming: Pl. 2, Fig. 4) [see Figs 4, 5]. Other isolated fragments have been found at Dharīh (Waliszewski 2001: Fig. 7:5), Jabal Hārūn (Gerber 2008: 292, 306, Fig. 8.170), and Khirbat el-Nawāfila (al-Nawāfleh 2000: Fig. 7). The production of ICW B and C has not yet been identified in southern Jordan, although Zoena Høserich (2012) initially suspected that cream ware molded jugs from Dayr ‘Ayn ‘Abāṭa might have been produced in the Ghor es-Šafi region. David Ben-Shlomo (2018: 68) also hypothesized that some ICW C sherds found in Hebron could have originated in Jordan. However, it now seems more likely that vessels from Dayr ‘Ayn ‘Abāṭa were imported from the

coastal area of central Palestine, as they appear to belong to Petrographic Group 1, defined by Anat Cohen-Weinberger and Davida Eisenberg-Degen (2024: 123, Fig. 1). The production centers of this group were likely located at el-Ramla and Lod, where molds have been found during excavations (Cytryn-Silverman 2010: 104–108, Fig. 9.12). At Khirbat ash-Sheikh ‘Isā, the recent archaeometric investigations, including chemical and mineralogical analyses, have shown clear compositional differences between fragments of ICW C and cream fabric lamps and the majority of ICW A and B assemblage most probably representing local production. Among them, it is possible to distinguish examples of both Petrographic Group 1 and possible northern Jordanian or northern Palestinian origins (Makowski et al. 2026).

Despite their quantitative insignificance, the finds of ICW B and C should not be underestimated from a chronological perspective. Initially, many scholars —particularly those working in Israel— erroneously assigned ICW B and C to the Umayyad period (for discussion, see Walmsley 2001c; 2022: 92). This misattribution stemmed from the conventional reliance on a mistakenly dated assemblage from Khirbat el-Mafjar (Baramki 1944). However, this misconception was corrected thanks to a thorough re-examination of the material (Whitcomb 1988c) and supporting data from other sites (Avisar 1996; Magness 1997). Building on this revised typology, Jodi Magness (2003) re-evaluated the dating of various rural settlements in the Negev Desert, extending the occupation of many into the Abbasid period.

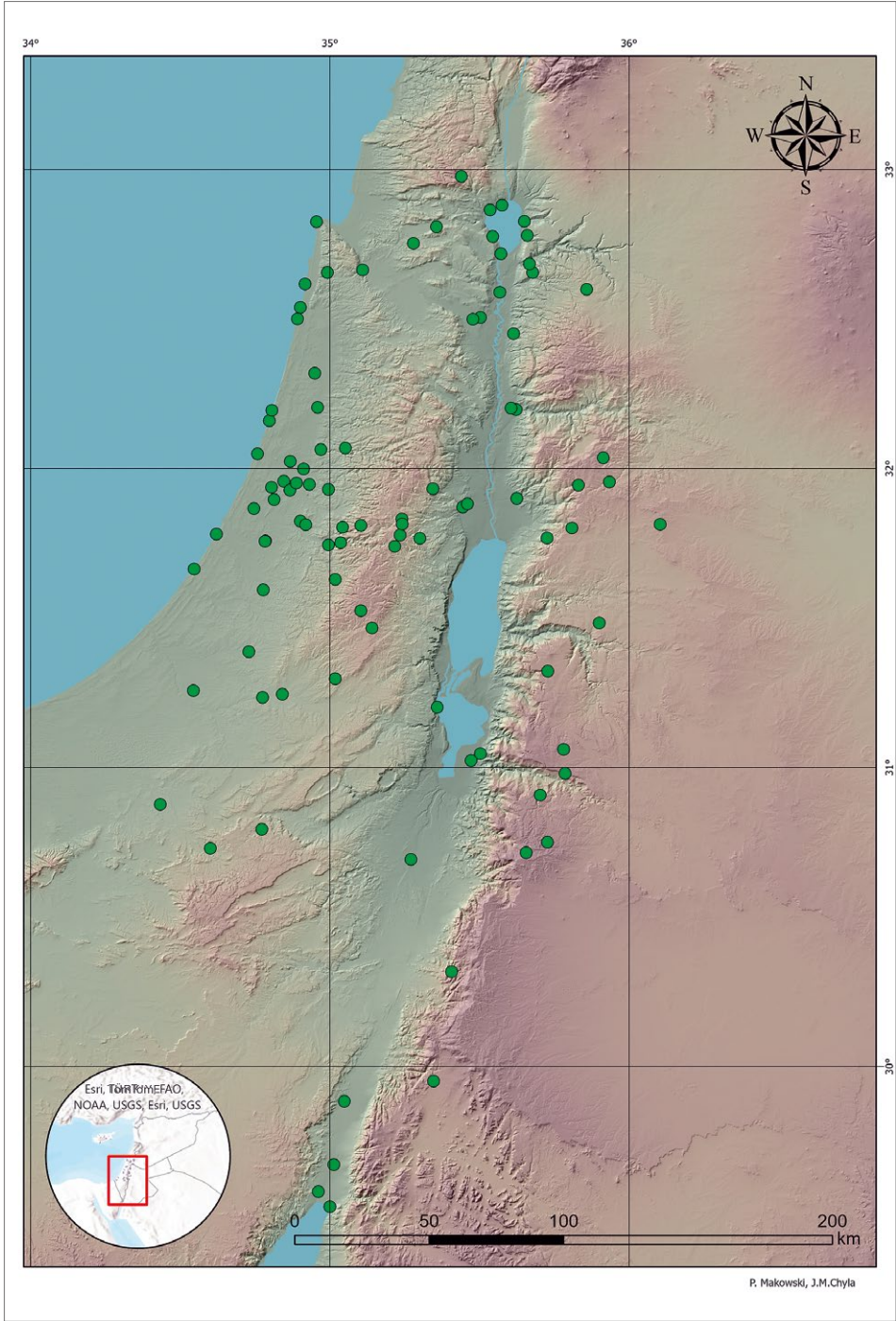


Fig. 4. Distribution of Islamic Cream Ware B in southern Bilād el-Shām (Processing P. Makowski, J.M. Chyla)

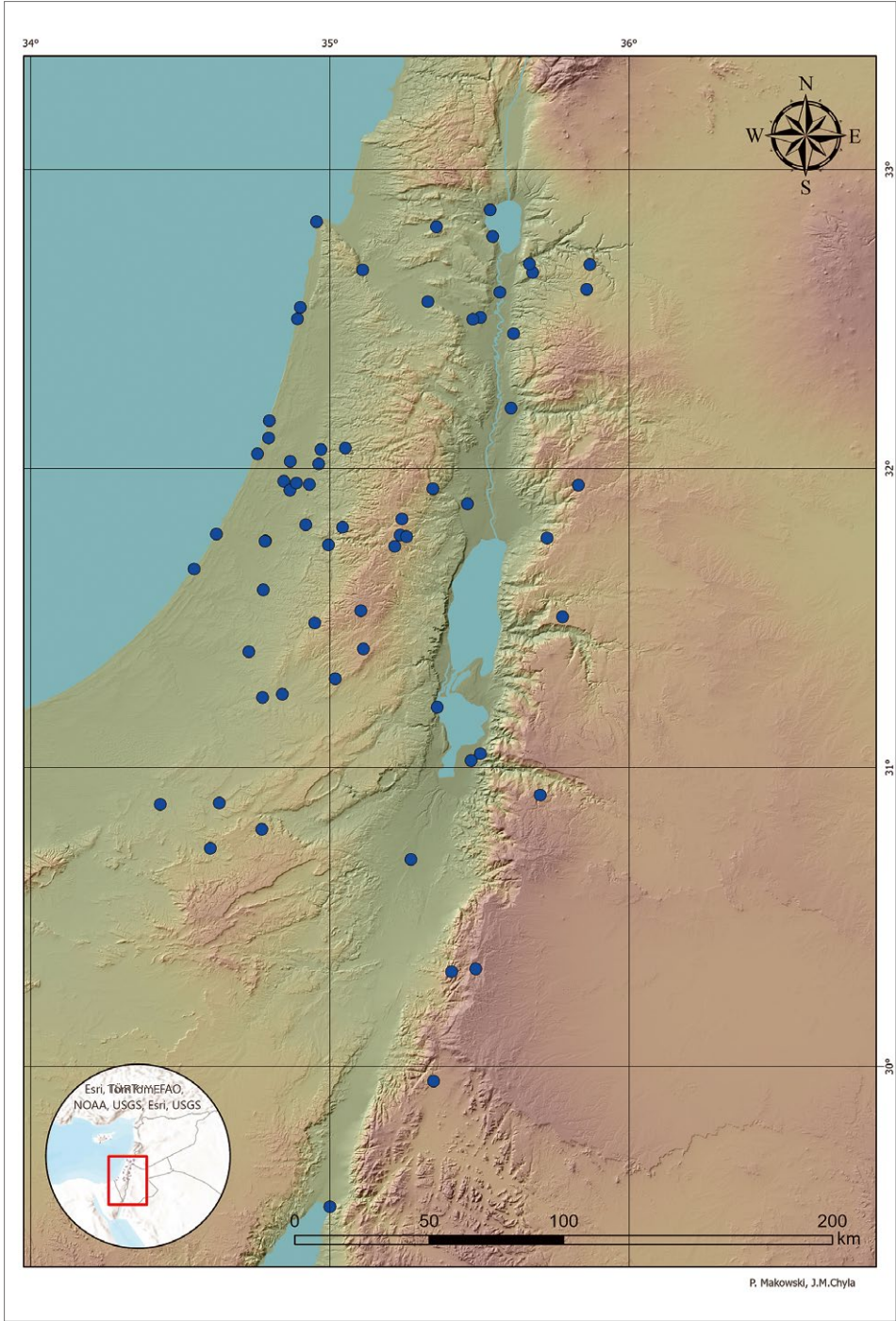


Fig. 5. Distribution of Islamic Cream Ware C in southern Bilād el-Shām (Processing P. Makowski, J.M. Chyla)

A review of the scholarly literature suggests that ICW B and C consistently appear in post-749 earthquake strata. In most cases, however, their chronology can be further narrowed to the early 9th through 11th centuries (for a comprehensive discussion, see Cytryn-Silverman 2010: 106–107). This dating is partly

supported by their frequent association with rarer but more securely dated early glazed wares and steatite vessels. It is also important to note that in other parts of the Islamic world, molded cream wares typologically related to Palestinian ICW C may have continued in use into the 13th century and beyond (Mulder 2014).

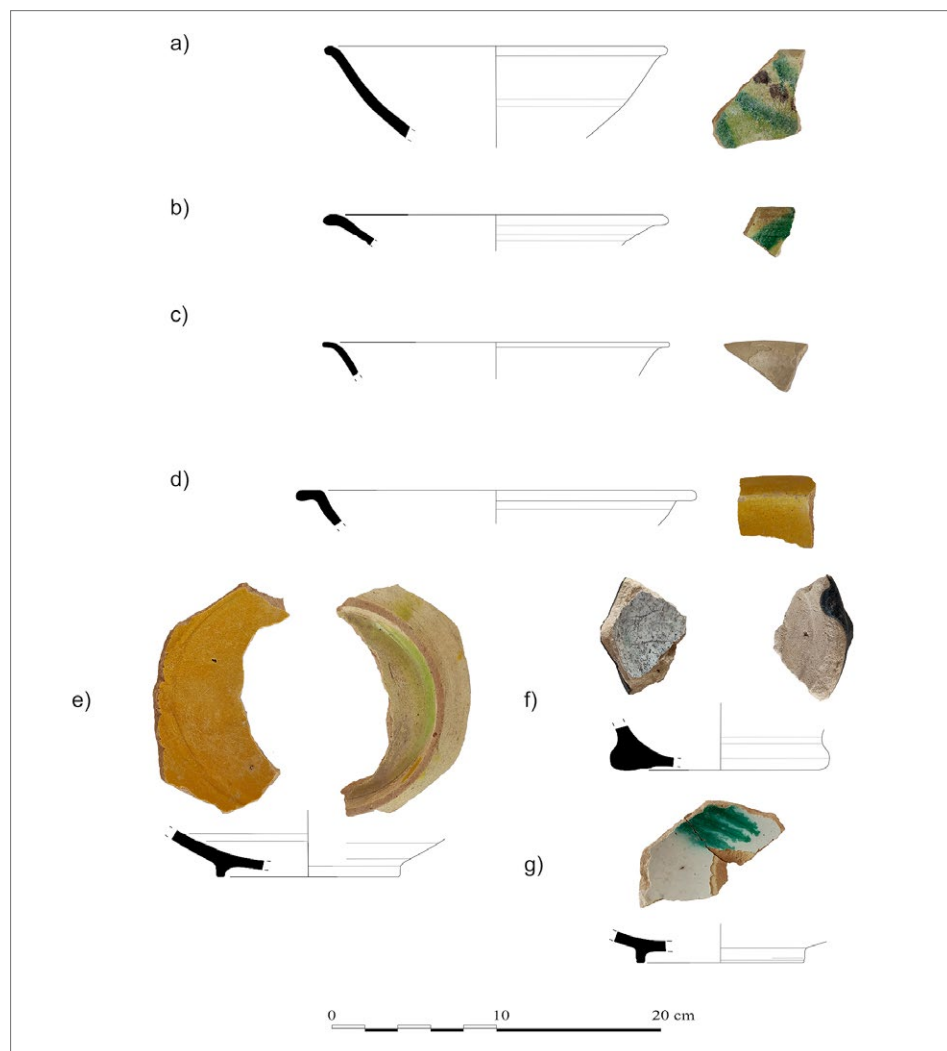


Fig. 6. Selection of Early Islamic glazed wares from Trench IX at Khirbat ash-Sheikh 'Tsā: a–b – Common Lead-Glazed Ware; d–e – Fine Lead-Glazed Ware; c, f, g – Opaque Tin-Glazed Ware (Processing P. Makowski)

The introduction of glazed technology into the local ceramic repertoire marks a significant shift in the perception of fine wares. However, the distribution of early glazed ceramics across southern Jordan does not follow a consistent pattern. Notably, the two urban sites of Ayla and Zughar stand out. According to Whitcomb's (1988a: 212; 1988b: 22) estimates, glazed wares at Ayla constitute between 5% and 10% of the total sherd count — an exceptionally high percentage not only for southern Jordan but for the entire Bilād el-Shām region. By contrast, at Khirbat ash-Sheikh ʿIsā, early glazed wares collectively make up around 3.3% of the total ceramic assemblage (Grey et al. 2017: Table 6.1). Focusing specifically on the recently investigated material from Trench IX, glazed ceramics accounted for only 1.46% of the pottery from the Abbasid and Fatimid period strata (Makowski forthcoming: Fig. 5). At other sites in the region, early glazed wares are extremely rare and typically survive only as small, fragmented pieces, making identification challenging. A good example illustrating the limited presence of early glazed ceramics in non-urban contexts is the isolated sherd from Dharih (Holmqvist 2019: 56, Fig. 5.20).

It is clear that throughout the entire period under study, glazed wares were not produced in the territory of southern Jordan. As such, all fragments found there should be considered imports. These wares first appear in Ayla in early 8th-century strata, preceding the Abbasid and Fatimid period occupations, and are represented mainly by Egyptian products

commonly referred to as “Coptic Glazed Ware” (Whitcomb 1989a: 170, 182; for a broader overview, see Ting and Taxel 2020), supplemented by a small quantity of so-called Hijazi Sgraffito Ware (Whitcomb 1989a: 171, Fig. 4:c, d; see also Damgaard 2013: Fig. 3). Their spread to other parts of Jordan was marginal at best, with the only known examples of Coptic Glazed Ware outside Ayla being two sherds from Jabal Hārūn (Sinibaldi 2016: 205, Fig. 1:3–4).⁴ These rather incidental finds from the pilgrimage center of Saint Aaron may reflect the existence of a trade route linking Ayla with the Negev cities and central Palestine.

While slightly more frequent, the influx of glazed wares remained minimal by the end of the 8th century and especially into the early 9th century. At Khirbat ash-Sheikh ʿIsā, a wide range of imported glazed wares dates mainly from the early 9th to 11th centuries. Proper classification of these wares is challenging due to the inconsistent terminology used in the scholarly literature. It is therefore reasonable to adopt the typology proposed by Miriam Avissar (1996: 74–86) and later expanded by Itamar Taxel (2014), as it encompasses most types occurring in the Jordanian context.

One can observe that the most widespread category of glazed wares can be defined as Common Lead-Glazed Ware (Grey et al. 2017: 126–125, Fig. 6.4:20–24; Grey and Politis 2022: 115–118, Fig. 6.9–11; Makowski forthcoming: Pl. 3:a, b) [Fig. 6:a, b]. It is represented mostly by bowls with out-turned rims and a characteristic semi-

4 It is important to note that Sinibaldi (2016: 205) expresses some doubts regarding the certain identification of these sherds as Coptic Glazed Wares.

fine, buff fabric with occasional red or black grits, decorated with polychrome painted patterns composed of green, yellow, purple, or brown stripes, splashes, and daubs under a thin layer of transparent yellowish glaze. Besides Khirbat ash-Sheikh ʿĪsā, this ware is also attested at Khirbat el-Nakhil (Kareem 2001: Fig. 6:4, 6), Gharandal (Walmsley and Grey 2001: 153), and probably Ayla (Whitcomb 1989a: Fig. 4:a). Notably, most scholars suggest that this category should be considered an import from central Palestine, and more specifically, from el-Ramla (e.g. Tal and Taxel 2008: 129; Reuven 2020: 401–403). Petrographic analyses of finds from the north Sinai Peninsula have identified the central Palestinian coastal plain as the most likely region of origin. Furthermore, it appears that common lead-glazed bowls may have been technologically related to the local buff ware (Islamic Cream Ware) (Cytryn-Silverman 2001: 18; 2011: 110). In addition, the ceramic assemblage from Khirbat ash-Sheikh ʿĪsā also includes a small quantity of Fine Lead-Glazed Ware, probably from Egypt (Ting et al. 2025) [Fig. 6:d, e], as well as opaque Tin-Glazed Wares [Fig. 6:c–f, g], probably originating from Iraq, and Fayyumi Ware from Egypt (Grey et al. 2017: 124–126, Fig. 6.4; Grey and Politis 2022: 109–119, Figs 6.9–11; Makowski 2024: Fig. 5, Pl. 3).

The Fatimid period material from Ayla displays even greater diversity, including a considerable number of Iraqi and Egyptian lustre wares, Chinese celadons, and fragments of Qingbai and Song porcelain (Whitcomb 1988a: 212, 222, Fig. 8:i–o; 2010: 130–131, Fig. 17; see also Damgaard 2013: 72–73, Fig. 3). This reflects the complex socio-economic context in which the gradually declining city of Ayla continued to function as an important port and exchange center, benefiting from the opening of the Red Sea to Indian Ocean and Far Eastern trade under the Fatimids (Walmsley 2000: 296; 2001a: 518; Whitcomb 2010: 131; for a historical perspective, see Bramoullé 2012).

Despite their quantitative insignificance, early glazed wares in southern Jordan represent a relatively diverse group, whose importance is underscored by their social significance. Taxel (2014: 135) was likely correct in suggesting that, during the Early Islamic period, these wares were characterized by relatively high prices. This would have been particularly true in southern Jordan, where glazed wares appeared only as subsidiary products, and the socio-economic gap between urban and rural centers was likely more pronounced. One might hypothesize, therefore, that glazed wares were regarded as prestige items, especially at more peripheral sites.

ASPECTS OF CONTINUITY AND CHANGE IN THE REPERTOIRE OF COARSE WARES

To properly understand the character of the regional ceramic repertoire of southern Jordan, it is essential to thoroughly contextualize the wide spectrum of coarse

wares, which constitute the overwhelming majority of pottery at all sites in the region, sometimes accounting for as much as 95% of the assemblages. This task, how-

ever, presents particular challenges, given that most studies—especially preliminary reports—tend to focus on easily definable and datable fragments, often failing to provide a broader overview of the assemblage as a whole. It is usually difficult to assess the actual proportion of different coarse ware types within an entire assemblage, as scholars have only recently begun to include quantitative analyses in published reports.

In short, between the mid-8th and 11th centuries, the repertoire of coarse wares in southern Jordan did not constitute a homogeneous group. Ceramic assemblages frequently exhibited considerable variation, even between neighboring sites. Moreover, they evolved at their own pace, shaped by socio-cultural conditions unique to each locality. It is important to emphasize that these changes typically occurred with a significant delay—at least half a century—relative to major political transformations in the region. Neither the Arab conquests of the mid-7th century nor the Abbasid revolution of AD 750 had an immediate impact on material culture. Instead, most observable changes appear to have culminated in the early 8th century and, later, likely in the early to mid-9th century. One might argue, therefore, that aesthetic preferences and consumer trends developed largely independently of event-driven history in the traditional sense (Whitcomb 1992: 386).

It is reasonable to assume that most coarse wares should primarily be regarded as local products. This has been convincingly demonstrated by Holmqvist's (2019) archaeometric study, which revealed that the ceramic assemblages from Dharih and Jabal Hārūn consisted predominantly of

local wares (Holmqvist's groups one and three, respectively). Although both sites share a similar geological setting, their ceramic materials exhibit slightly different compositions of comparable raw materials. This indicates production in distinct workshops that exploited closely related sources of raw materials (Holmqvist 2019: 109–111). Notably, despite the high degree of self-sufficiency at both sites, the ceramic evidence also points to an established pattern of pottery exchange between them, involving products from at least two workshops (Holmqvist 2019: 114, with broader discussion).

One may observe that, from the early 8th century—or perhaps even the later part of the 7th century—the color of local coarse wares generally shifts toward pink or creamish hues. This trend contributed not only to the emergence of new pottery classes but also to the gradual transformation of existing ones, which often retained strong roots in Late Antique traditions. Although changes in pottery color can be a misleading marker of transformation (Holmqvist 2019: 111), it is reasonable to assume that, in this case, they do reflect a broader evolution in the aesthetic preferences of Early Islamic society. This process is particularly evident in the well-documented assemblages from Jabal Hārūn (Gerber 2016: 164) and Ayla (Whitcomb 1987: Fig. 9). The assemblage from Khirbat ash-Sheikh ʿĪsā is also especially indicative, as it clearly shows that this transformation became more pronounced after AD 800 (Makowski forthcoming). At this time, new typological innovations appear—notably necked jars and pinched-spout jugs—characterized by sandy fabrics in pink or cream tones, with either a plain surface or

incised decoration (e.g. Whitcomb 1988a: Fig. 4; see also Damgaard 2013: 78, Fig. 4 for additional commentary) [see Fig. 3:a].

As Walmsley (2001c) has noted, the emergence of these forms roughly coincides with the spread of various semi-fine and fine decorated wheel-thrown (ICW B) and molded (ICW C) cream wares. On this basis, it is reasonable to follow his nomenclature and classify the new forms as ICW A. The chronology of ICW A in southern Jordan remains somewhat uncertain, although evidence suggests that it reached the area slightly later than it did in other regions such as northern Jordan (Watson 1992: 243; see also Walmsley 2001c: 308;

2022: 92) and Palestine (e.g. Bar-Nathan 2011: 231–232), where production began in the late 7th century. Its longevity is also difficult to assess, yet finds from Ayla indicate that the ware remained in use until at least the 11th century (Whitcomb 1988a: 212).

It is also reasonable to treat the so-called Mahesh ware (Whitcomb 1989b; Sauer and Magness 1997: 478) as a distinctive local variant of ICW A (Walmsley 2001c: Table 1), although some scholars interpret it rather as a regional imitation of ICW (e.g. Raith et al. 2013: 324). Unlike other ICW categories, Mahesh ware consists mainly of basins, bowls, and cups featuring incised or knife-cut wavy decora-

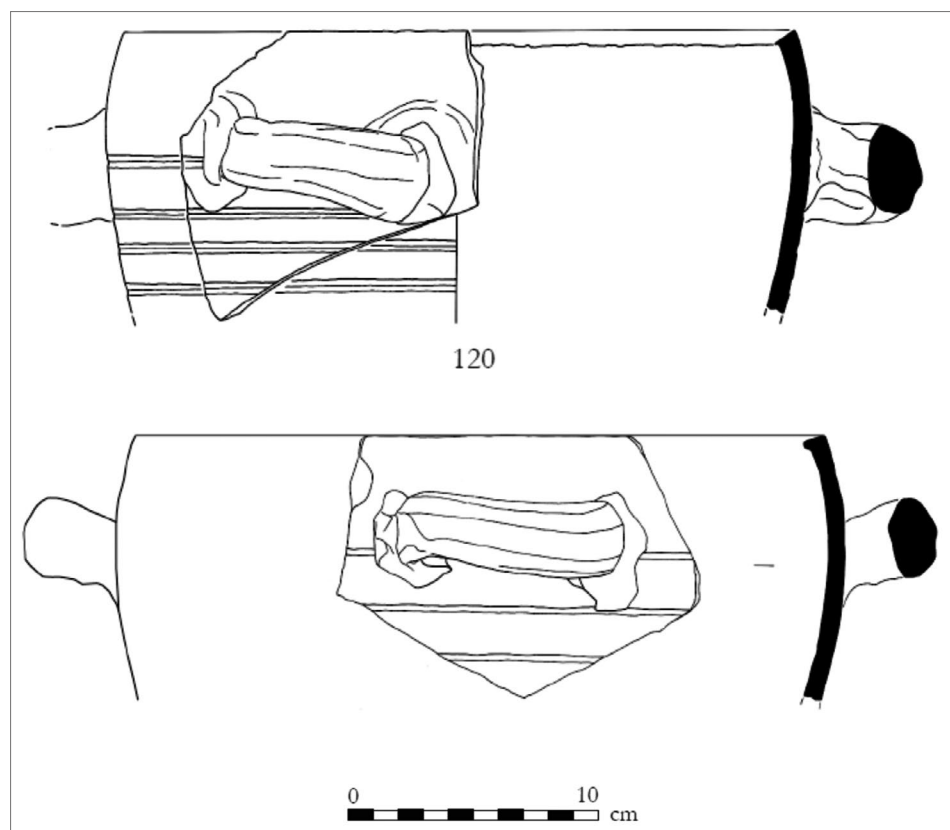


Fig. 7. Casseroles from Jabal Hārūn (After Gerber 2016: Fig. 9:120–121)

tive patterns — a motif common on other Early Islamic basins found in both southern Jordan (see Walmsley and Grey 2001: 152–153, Fig. 9:1–2; Gerber 2016: 132–133) and northern Jordan (Walker 2012: 525, Fig. 4.8:4–8). The production of Mahesh ware at Ayla has recently been confirmed archaeometrically (Holmqvist 2022: 166), but the city does not appear to have been the exclusive production center for this pottery class. As it seems even more prevalent in the Wādī ‘Arabah —as evidenced by the recently published assemblage from Yotvata (Taxel 2022b: 247–254, Figs 23,3–7). More sporadically, it occurs also in the Negev Desert (Magness 2003: 149, 154, 169, 181, 194). Mahesh ware is typically associated with early Abbasid occupation (e.g. Nol 2015: 53, after Whitcomb 1989b); yet evidence from the Wādī ‘Arabah suggests a broader span, encompassing the whole of the 8th century and possibly the late 7th century (Taxel 2022b: 247). This hypothesis still awaits confirmation from more securely stratified contexts. Moreover, although Mahesh ware occurs in Fatimid layers (Makowski forthcoming), it remains unclear whether such examples are residual (for a proposed longer span of utilization, see Gerber 2008: 292).

In addition to significant changes in the repertoire of coarse wares during the 8th and 9th centuries, it is equally important to highlight clear signs of continuity in the use of certain forms and wares. This continuity appears to have been shaped by both the cultural conservatism of local communities and the relative isolation of southern Jordan. The most notable examples of this phenomenon are seen in cooking wares, which typically undergo less dynamic typological change (Walmsley 2022:

91). During the 8th century, traditional Byzantine and Umayyad cooking pots with convex necks and beveled, rounded, flat, or inwardly grooved rims —often accompanied by rounded or angular ribs— gradually disappeared from the regional ceramic repertoire (Gerber 2016: 137, 164; for a broader perspective, see Magness 2010: 138; Taxel 2018: 9). Zbigniew Fiema’s (2016: 561) hypothesis that the disappearance of this form may have encouraged the use of larger jars for culinary purposes deserves consideration. This idea is plausible, particularly given the multifunctionality of vessels — an aspect often undervalued in archaeological studies (e.g. Makowski 2023a: 367). However, this hypothesis remains unproven, as no cooking traces have yet been identified on Early Islamic jars.

In any case, from this time onward, the repertoire of cooking wares came to be dominated by casseroles, which steadily evolved into more globular and deeper forms [Fig. 7]. This trend closely parallels developments in Palestine (Magness 1993: 211–221; 2010: 138). In southern Jordan, the tradition persisted at least until the 10th century, underscoring the remarkable continuity of ceramic practices rooted in Late Antiquity. This does not imply, however, that cooking wares remained morphologically static throughout this period. Subtle changes are evident. For example, Gerber’s study of the Jabal Hārūn assemblage shows that Abbasid-period casseroles became thinner-walled, harder-fired, and featured distinctive ribbing (Gerber 2016: 146; for a detailed discussion of casserole typologies, see Holmqvist 2019: 41–42).

Culinary practices during the Early Islamic period were also intermediated by various types of open vessels. Among

these, basins are certainly the most abundant, typically characterized by darker tones ranging from light gray to dark reddish gray [Fig. 8]. What also distinguishes them is their surface treatment, which usually features horizontal, wavy incised lines or, more rarely, fingerprint decoration (Walmsley 2022: 91). Typologically, southern Jordanian basins belong to a rather generic group also attested in Palestine and northern Jordan (Gerber 2008: 296; for further references, see Holmqvist 2019: 44–45). A review of the published material reveals a general resistance to morphological change, with forms remaining largely consistent throughout the mid-8th and 9th centuries and probably beyond.

In general, the shapes of these basins suggest a dual purpose: both for food preparation and mixing, as well as for

communal consumption (Walmsley 2022: 91). Notably, their appearance in the ceramic repertoire seems to coincide with a decline in the use of small cups and bowls. This shift likely reflects broader changes in consumption patterns and possibly dietary practices introduced during the latter part of the Umayyad period. These trends persisted with minimal modification until the 9th century—and possibly beyond—and are observable across the entire territory of Bilād el-Shām (Magnez 2010: 138).

The period under discussion also witnessed the emergence of the earliest phase in the long evolutionary sequence of Islamic handmade wares. Recent research has confirmed that their appearance in the ceramic repertoire should be dated to the 9th century, if not the mid-8th century—significantly ear-

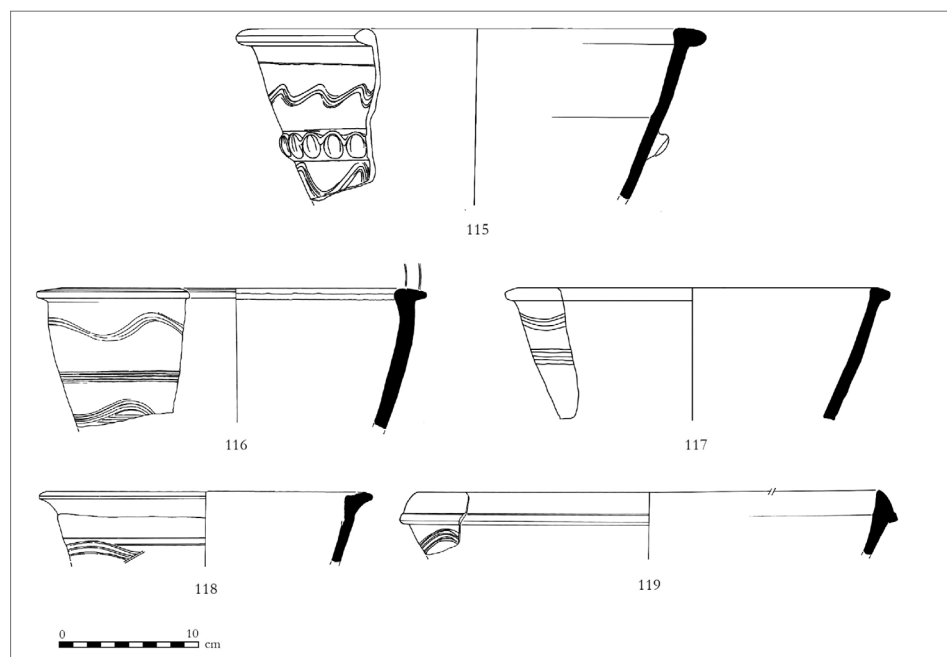


Fig. 8. Incised basins from Jabal Hārūn (After Gerber 2016: Fig. 9:115–119)

lier than previously believed (Taxel et al. 2022; Makowski et al. 2025). Initially, the distribution of this pottery class was limited, appearing only at isolated sites. However, during the 10th and 11th centuries, handmade wares began to appear more broadly across the region (e.g. Whitcomb 1988a: 212, Fig. 5; Lindner 1999: 495, Fig. 5; Walmsley, Karsgaard, and Grey 1999: 468–472, Fig. 11; ‘Amr et al. 2000: 244, Fig. 18; Walmsley and Grey 2001: 153–158, Figs 9:6–10, 10:1–5; Grey and Politis 2012: 183, Figs 407–408; Oleson, ‘Amr, and Holmqvist-Saukkonen 2013: 14; Sinibaldi 2016: 203–207, Fig. 1; Grey et al. 2017: 131–133, Figs 6.6:48–55, 6.9:73–80; Makowski 2020b; 2023a; Makowski et al. 2025) [Fig. 9]. In many cases, these wares became the predominant—or even exclusive—choice for local communities. Nonetheless, their presence in assemblages varied significantly across sites (for a broader discussion, see Makowski 2023b: 127; Makowski et al. 2025).

Cooking pots commonly constitute the dominant component of Early Plain Handmade Ware⁵ assemblages. They are typically characterized by exceptionally small dimensions, a globular shape, and handles positioned in the middle of the body. Although it is possible to identify a number of recurring features or even morphological types, their overall variety seems to reflect primarily the local communal needs of specific groups and complex social choices related to cooking practices (Makowski 2023a: 374; 2023b: 127; Makowski et al. 2025). Some forms of Early Plain Handmade Ware appear to

have served as prototypes for later, more widespread varieties (e.g. Walmsley and Grey 2001: 153, 158; see also Makowski et al. 2025) [Fig. 10:a–c]. Others, however, disappeared entirely from the local material culture repertoire.

When comparing southern Jordan to other regions, it appears that—aside from exceptions like Ayla and Khirbat ash-Sheikh ‘Isā—the diversity of cooking and dining vessels was relatively limited (cf. Magness 2010). Notably, the repertoire of cooking wares consists almost entirely of locally and regionally produced ceramics. As a result, the southern Jordanian corpus generally lacks the widespread forms that emerged in other parts of Bilād el-Shām. A particularly illustrative example is the characteristic 10th–11th-century wheel-thrown globular cooking pot—distinguished by its red fabric and broad strap handles—commonly found in northern Palestine (Stern, Waksman, and Shapiro 2020: Fig. 9) and northern Jordan (Rousset 1999: 255, Figs 4, 5; Walmsley 2001c: Fig. 15.4:1). What stands out, however, is the notable presence of distinctive flat-based steatite bowls and cooking pots (e.g. Whitcomb 1987: Fig. 8:m; Villeneuve 2011: Fig. 7; Porath et al. 2016: Fig. 30; Jones 2018: 636–638, Fig. 7.19; Taxel 2022a) [Fig. 11]. These vessels were imported from the western part of the Hijāz (e.g. Marchand 2022), and written sources extol their superior culinary properties (Gascoigne 2013; see also Magness 2010: 137). Given their high quality and desirability, they should undoubtedly be considered prestige items

5 These terms were initially proposed to define the early phase of Islamic handmade wares at Gharandal (Walmsley and Grey 2001: 153–158), and were later applied at Khirbat ash-Sheikh ‘Isā (Grey et al. 2017: 131–133, 138) and Dharih (Makowski 2023a).

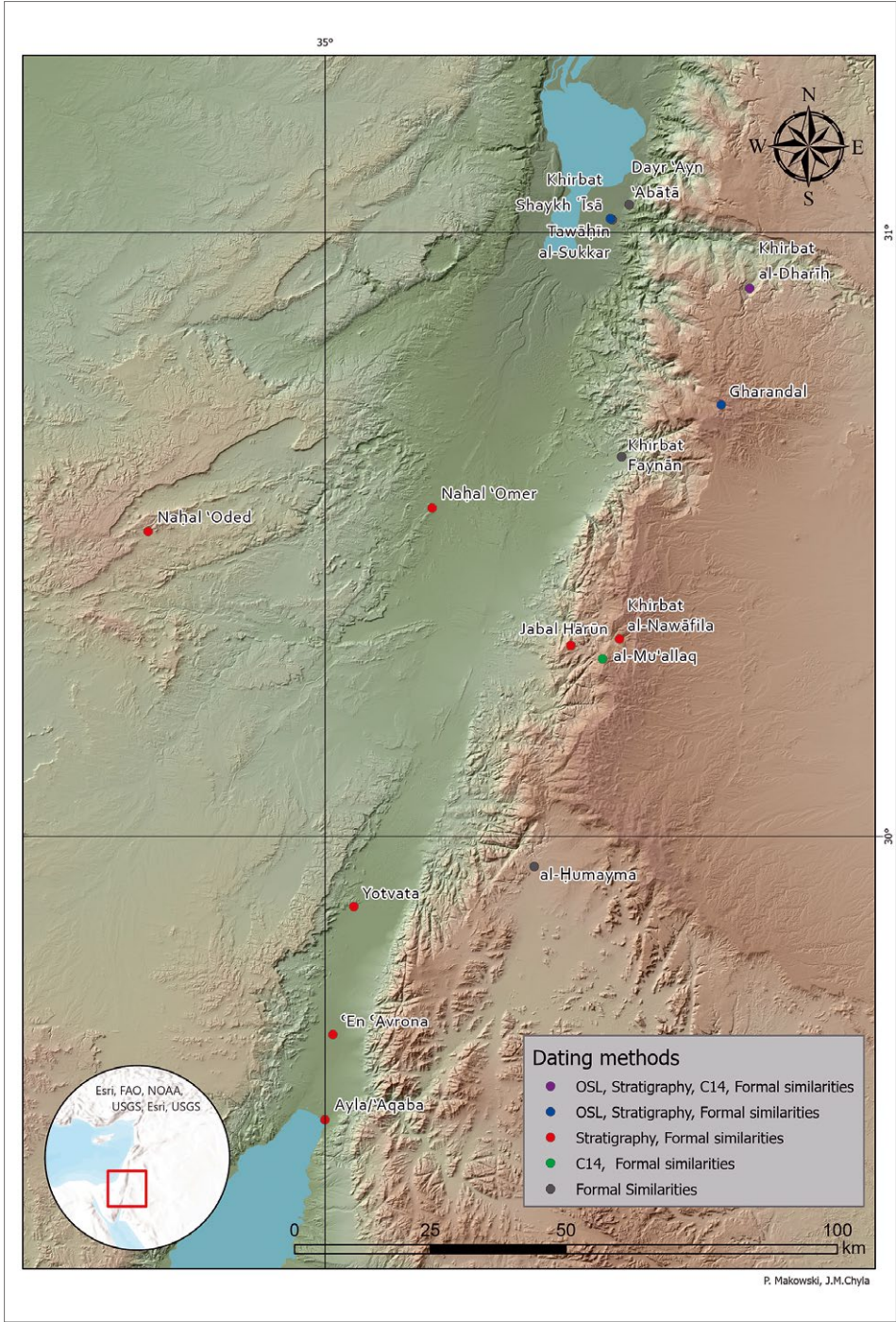


Fig. 9. The rise of Early Plain Handmade Ware in southern Jordan (Processing P. Makowski, J.M. Chyla)

(Walmsley 2000: 331).

Examining the ceramic repertoires of southern Jordan reveals a notable scarcity of amphorae in Early Islamic strata, especially after the 8th century. This gap seems to result largely from a decline in the importation of various Late Roman

amphora types — a trend that likely began as early as the mid-7th century and is generally attributed to the waning importance of the wine trade and shifting consumption preferences (for a broader discussion, see Taxel 2024). By the mid-8th century, there is also evidence for

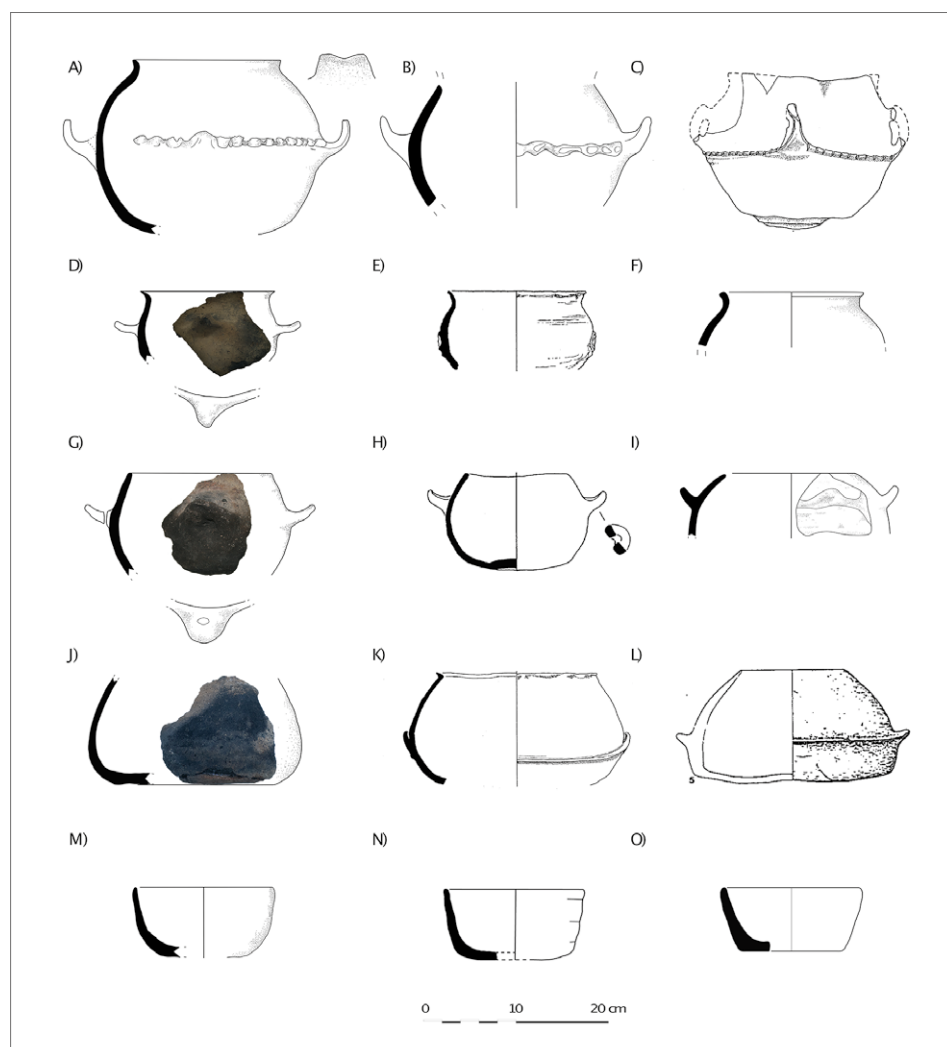


Fig. 10. Early Plain Handmade Ware of southern Jordan and western Wādī ‘Arabah: a, d, g, j, m – Dhar-ih; b, f – Khirbat ash-Sheikh ‘Īsā (After Grey et al. 2017: Fig. 6.9:73, 76); c, e, h, k – Gharandal (After Walmsley and Grey 2001: Fig. 9:6–7, 9–10); i – el-Mu‘allaq (After Lindner 1999: Fig. 5:a); n – Yotvata (After Taxel et al. 2022: Fig. 4:9); o – el-Ḥumayma (After ‘Amr and Oleson 2013: Fig. 5:48)

a reduction in amphora distribution from Ayla, whose vessels probably carried fish products such as garum (Gerber 2016: 142; Holmqvist 2019: 115; Oleksiak 2024: 386–387).

This overall decrease in amphorae use may have encouraged the development of

regionally distinct storage wares unique to southern Jordan. A prime example is a group of large orange or brown-ware jars [Fig. 12] that echo the morphology of Late Roman amphora 5. These jars are typically made of a soft, flaky, and apparently low-fired fabric that may have facilitated the evaporative cooling of water or other liquids, and they often bear incised geometric decoration on the body and neck. Although recorded at several sites, such as Dharih (Durand and Piraud-Fournet 2013: 424, Pl. 3 DH 96 S2T, 03:1), Khirbat Nuqayb el-Asaymir (Jones 2018: 495, Fig. 6.14:15), Gharandal (Walmsley and Grey 2001: 152, Fig. 8:6), Jabal Hārūn (Gerber 2016: 144, Fig. 8:113), and Khirbat ash-Sheikh ʿIsā (Makowski forthcoming: Pl. 1), they have yet to receive detailed scholarly analysis. Their chronology also remains tentative, although current evidence suggests they continued in use into the Abbasid period and possibly later.



Fig. 11. Steatite cooking pot from Dharih (Photo F. Villeneuve)

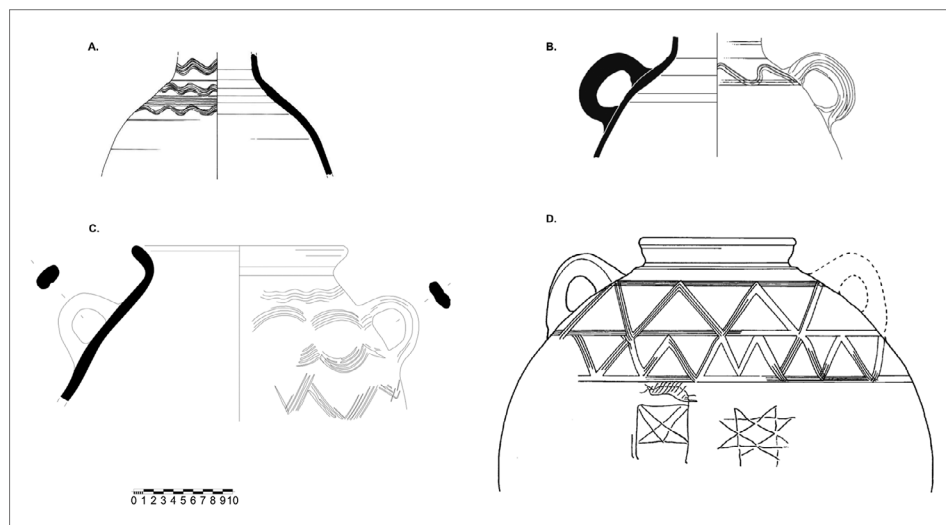


Fig. 12. Brown ware incised storage jars: A – Jabal Hārūn (After Gerber 2016: Fig. 8:113); B – Dharih (After Durand and Piraud-Fournet 2013: Pl. 3 DH 96 S2T est 03: 1); C – Khirbat ash-Sheikh ʿIsā (After Makowski forthcoming: Pl. 1: e); D – Gharandal (After Walmsley and Grey 2001: Fig. 8:6)

DISCUSSION

In recent decades, our understanding of Islamic-period pottery in the Bilād el-Shām region, including southern Jordan, has improved significantly. This progress has been driven in part by the publication of new assemblages from key sites such as Dharih, Jabal Hārūn, Khirbat ash-Sheikh ʿĪsā, and Dayr ʿAyn ʿAbātā. These new data have helped, at least partially, to address substantial gaps in the region’s settlement history. To illustrate these advancements, a simplified chronology of site occupations is presented in [Table 1].

This compilation may be viewed both as a supplement to and a reassessment of the valuable chart published by Gerber (2008: Table 1) in her chapter introducing the Jabal Hārūn ceramic assemblage. One of the most striking observations is the evidence for long-term continuity of occupation, extending through the 8th and 9th centuries. Moreover, at many sites in the region, this continuity persists into the 10th and 11th centuries, albeit often with reduced intensity or a more ephemeral character.

Table 1. Chronology of habitation at key sites in southern Jordan (dark blue: certain, blue: very likely, light blue: possible)⁶

Chronology of the pottery records				
No.	Site	8th century	9th century	10th century 11th century
1.	Khirbat al-Nakhīl			
2.	Shuqayrā al-Gharbiyya			
3.	Khirbat al-Dharīḥ			
4.	Gharandal			
5.	aṭ-Tuwāna			
6.	Khirbat Shaykh ʿĪsā			
7.	Dayr ʿAyn Abātā			
8.	Khirbat al-Nawāfila			
9.	Jabal Hārūn			
10.	al-Muʿallaq			
11.	al-Ḥumayma			
12.	Ayla/ʿAqaba			

6 In general, our interpretation of the chronological distribution of certain wares is based on published materials. However, the evidence from Dharih and Khirbat ash-Sheikh ʿĪsā reflects first-hand analysis of the ceramic record. The first author also had the opportunity to study material from Gharandal (Makowski et al. 2025; 2026). Additionally, he conducted a preliminary assessment of unpublished materials from el-Tuwāna and Shuqayrā el-Gharbiyya, made possible through the generous support of Prof. Jarosław Bodzek and Prof. Bethany Walker, respectively.

Importantly, the findings from these recently excavated sites challenge the results of earlier regional survey projects (e.g. MacDonald 1988: 250–251; Brown 1991: 224–232; MacDonald et al. 2004: 65, Figs 27–28; Knodell et al. 2017: 642–643, Fig. 11, Table 5), which had suggested a settlement gap during this period. The apparent discrepancy between the survey results and the excavation evidence likely stems from difficulties in identifying pottery from the mid-8th to 11th centuries (for a broader discussion, see Makowski 2020a: 212–216; Makowski et al. 2025). Thus, this perceived “gap” may reflect methodological limitations rather than a historical reality.

As Chris Wickham (2005: 779) has compellingly argued, during the 8th and 9th centuries, the Bilād el-Shām region was divided into relatively small but active and independent economic microregions. Southern Jordan was undoubtedly one such microregion, characterized by its predominantly self-sufficient and relatively isolated nature. This is reflected in the limited evidence for the exchange of influences and inspirations with other areas. For example, during the Early Islamic period and beyond, there is only marginal evidence of ceramic exchange between southern and northern Jordan (Holmqvist 2019: 37–38; cf. Watson 1992: 246), and even these connections appear to be confined mainly to the region of el-Jibāl. In Ayla, for instance, we do not observe significant structural connections to the prosperous cities of northern Jordan (Wickham 2005: 778).

On the other hand, the connections between southern Jordan and northern Arabia may have been closer than

one might expect. Based on current evidence, however, these links are primarily observable in Ayla, particularly through the presence of steatite vessels and the so-called Hijazi Ware. It is likely no coincidence that Al-Muqaddasī (2001: 149, 178) describes Ayla as the great port of Palestine and the emporium of the Hijāz. While the current state of research on pottery in Saudi Arabia remains at a very early stage, potential links in other categories of material culture are, at present, impossible to verify. Strikingly, some similarities can be identified at el-Ula and Dūmat al-Jandal, particularly in the repertoire of cream and handmade wares (e.g. Tourtet et al. 2024: 300–303, Fig. 7; Berardino 2022). The ongoing increase in archaeological activity in this area as well as the northern Hijāz —especially at sites like Aynūna (Juchniewicz 2022), and Magna— promises to provide a more refined understanding of these connections in the near future.

Throughout the period under discussion, southern Jordan was ceramically less homogeneous than many might expect. This is exemplified by a remarkable degree of internal variability in the chronological attestation of certain pottery classes [Table 2]. A review of the scientific literature allows us to divide the region of southern Jordan into three —or possibly four— sub-regions, each characterized by slightly different repertoires of material culture. Starting from the south, the first sub-region is formed by Ayla and its hinterlands. This site undoubtedly constitutes a unique case and cannot, by any means, be treated as representative of southern Jordan as a whole.

Table 2. Diversity in the appearance of selected pottery classes at key sites in southern Jordan

Site	Phase	Chronology	Categories of material culture						
			Early Plain Handmade Ware	Early Painted Handmade Ware	Coarse Cream Ware	ICW B and C	Brown Ware jars/jugs	Glazed wares of the Early Islamic period	Steatite vessels
Dharīh	Last phase of the Early Islamic residence	Mid-8th–9th centuries	x (marginal)		x	x	x	x (one sherd)	x
	Domestic reoccupation	10th and 11th centuries	x (dominant)	x	x?				
Gharandal	Level four (trench IX)	Late 8th to 10th centuries			x		x	x?	
	Level three (trench IX)	10th–11th centuries (probably extends to 13th century)	x	x	x	x		x	
Khīrbat ash-Shaykh ʿĪsā (Trench IX)	Phase I, Subphase I	8th to mid-9th centuries			x		x	x	
	Phase II, Subphase II	Mid-9th to 11th centuries	x		x	x	x	x	
Dayr ʿAyn ʿAbātā	Early Islamic occupation	Mid-8th to 10th centuries			x	x		x	
	Ephemeral reoccupation	10th–11th centuries	x					x	
Yotvata	Stratum I	Mid-7th/early 8th century – 9th centuries	x	x	x				x
	Stratum II	Mid-7th/early 8th century – 9th centuries	x	x	x			x	x
Ayla	Abbasid occupation	Mid-8th to 10th centuries			x			x	
	Fatimid residence	10th–11th centuries	x (Tupperware)	x	x	x		x	x
Jabal Hārūn	Phase XIII (church)	7th/8th to 9th centuries			x	x	x	x	
	Phase XIV (church)	Late Umayyad/ Abbasid periods, probably extends into the 10th, if not 11th century	x		x				x

The archaeometric project conducted by Holmqvist (2019: 109–118) identified a local group of coarse wares, which was clearly related to a well-organized and standardized pottery production centered in a nucleated workshop containing five kilns (Melkawi, ‘Amr, and Whitcomb 1994; Whitcomb 2001: 298; for comments on the organization of production, see Bessard 2020: 111). This workshop operated until the mid-8th or perhaps 9th century (Holmqvist 2019: 116).

It is important to note that pottery production at the site continued even later in different workshops, with the appearance of new types of coarse pottery (Holmqvist 2022). From the mid-8th century until its abandonment—likely precipitated by the destructive earthquake of AD 1068—the ceramic assemblage of Early Islamic Ayla exhibited a complex character, marked by signs of both economic vitality and gradual decline (Whitcomb 2010: 123–124, 131; see also Walmsley 2000: 296). This period is characterized by Ayla’s distinctly cosmopolitan nature, reflected in the significant number of imports and a clear Egyptian influence on local pottery production (Wickham 2005: 775, 778; on the mixed identity of Ayla, see also Whitcomb 2010: 131; Damgaard 2013: 71). At the same time, Ayla’s ceramic repertoire reveals a unique local identity, particularly through the production of highly localized coarse wares with restricted distribution patterns, such as Mahesh ware (Whitcomb 1989b) and, from the 10th century onward, the so-called “Tupperware” type of early handmade ware (Whitcomb 1988a: 212, Fig. 5; 2010: Fig. 16; Damgaard 2013: 73, 84, Fig. 4; Holmqvist 2022: 16, 168).

Even into the 11th century, the southern and central parts of Wādī ‘Arabah served as Ayla’s extensive and thriving hinterland focused on copper- and gold-mining, ore processing, and intensive agriculture (Avner and Magness 1998; Whitcomb 2006; Nol 2015; Jones 2018: 125). Ayla’s influence is evident there, most clearly demonstrated by the distribution pattern of Mahesh ware (listed in Nol 2015: Table 1). Archaeometric research further confirms that the vast majority of the coarse ware assemblage at el-Humayma can be linked to Ayla’s production (Oleson, ‘Amr, and Holmqvist-Saukkonen 2013: 19). To a lesser degree, this tradition is also marginally attested at Dharih and Jabal Hārūn (Holmqvist 2019: 116). Dharih is also the northernmost site to yield Ayla amphorae (Raith et al. 2013: Fig. 1; Holmqvist 2019: 117; Oleksiak 2024: Fig. 3), suggesting that it may mark the inland limit of Ayla’s trade network in southern Jordan.

The broadly defined Petra region forms a distinct ceramic cluster. Excavations at multiple sites within the Late Antique city consistently indicate that Petra lost its urban character during the Early Islamic period: most public buildings were abandoned or repurposed by squatter-like communities (Fiema 2002, with further references). Ceramic evidence from several areas within the ancient city likewise points to a break in occupation after the mid-7th century (Gerber 2008: Table 1). This view of urban decline is not universally accepted, however; Walmsley (2007: 90), for instance, argues that it reflects a conventional—and perhaps misleading—reading of the material culture. Regardless of that debate’s outcome, the

surrounding region shows notable continuity, transitioning into a dispersed, village-focused community centered on agriculture (‘Amr and al-Momani 2011: 314). Evidence suggests that the population may have shifted southward, particularly to Khirbat el-Nawāfila, a substantial village that preserves an unbroken sequence of occupation from the Abbasid to Ottoman period. Unfortunately, however, the ceramic material from this site has so far been only partially published (‘Amr et al. 2000, commented also in Sinibaldi 2014: 234–235).

Recent investigations at Jabal Hārūn have similarly revealed remarkable continuity of occupation, though significant changes are evident after the mid-8th century. At this time, the site contracted and experienced a general decline in the quality of its material culture (Fiema 2016: 562), as evidenced by a notable decrease in pottery sherd quantities (Gerber 2008; 2016). Even so, the site’s ecclesiastical and monastic functions appear to have influenced its ceramic repertoire, which remained typologically more diverse than those of other regional sites. This situation changed dramatically by the mid-9th to 10th century, when the monastery ceased functioning and the site became one of only ephemeral occupation or sporadic pilgrimage (Fiema 2016: 563–564). By this point, its ceramic repertoire likely resembled that of nearby villages, such as Khirbat el-Nawāfila (‘Amr et al. 2000: 244, Fig. 18) or el-Mu‘allaq (Lindner 1999: 495, Fig. 5), both dominated by plain handmade ware.

The next sub-region of southern Jordan corresponds approximately to the boundaries of the Islamic province of el-Jibāl (e.g. Schick 1997: Fig. 1). This area also closely aligns with the ancient region of Gobolotide (for a geographical definition, see Villeneuve 1992; Kopij and Bała 2021), with an additional northern extension encompassing the southern Kerak plateau. Broadly speaking, this sub-region includes the territories of the Dead Sea Rift Valley, the Transjordanian Plateau/West Highlands, the western fringes of the Arabian Desert, and the southern extent of the Middle Eastern steppe — bordered to the west by the southern Ghor and, further south, by Wādī ‘Arabah. Its southern boundary is defined by the courses of Wādī Ghuweir, Wādī Faynān, and Wādī Fidan, extending to the modern ‘Unayza–Shawbak road (Villeneuve 1992: 278).

Signs of el-Jibāl’s cultural unity —likely shaped by its distinctive geographical conditions— can be observed as early as the Nabataean period, if not before (Villeneuve 1992; Kopij and Bała 2021). A review of the pottery repertoire suggests that during the Early Islamic period, sites such as Dharih (Waliszewski 2001; Durand and Piraud-Fournet 2013; Makowski 2020b; 2023a), Gharandal (Walmsley and Grey 2001), el-Tuwāna (Sochacki 2023), and likely Ruwāth (Walmsley and Barnes 2002)⁷ shared a similar material culture profile. To this group, one might also add various sites in the Wādī Faynān region, which were comprehensively studied in Ian Jones’s (2018) Ph.D. dissertation.

7 The pottery assemblage from this site remains unstudied. This observation is based on information from the field report and personal on-site observations.

What distinguished el-Jibāl from other parts of southern Jordan, however, was its closer ties to other regions of Bilād el-Shām. This is evident, for example, in the spread of Red Painted Ware from northern Jordan, as well as Common Lead-Glazed Ware and Fine Palestine Ware from central Palestine. These connections appear to have gradually diminished by the 10th century, a time when the region seems to have become increasingly isolated. Despite this, el-Jibāl's strong cultural cohesion persisted, as seen in the ceramic repertoire — particularly in the emergence of consistent typological features among the cooking pots of Early Plain Handmade Ware (Makowski 2020b: 588; 2023a: 373; Makowski et al. 2025) [Fig. 10].

Finally, the micro-region of Ghor es-Šāfi warrants separate consideration due to its unique pottery distribution patterns. Its specific geographical location — at the crossroads of various cultural influences — had a profound impact on the transitional character of its ceramic repertoire. Assemblages from Khirbat ash-Sheikh 'Īsā and Dayr 'Ayn 'Abātā (Grey and Politis 2012: 186) reveal typological

features characteristic of both Wādī 'Arabāh and el-Jibāl. However, the most distinctive aspect is the evident influence from central Palestine, visible in both local production and the notable quantity of imported wares. Of particular interest is the diffusion of glazed wares and ICW C, likely originating from the el-Ramla region. This stands in sharp contrast to the minimal presence of Fine Palestinian Ware from the Jerusalem area. Although this disparity is difficult to explain, it may be hypothesized that trade connections between Ghor es-Šāfi and Palestinian cities intensified after the 9th century, coinciding with Zughar's rise in administrative importance as the capital of el-Sharāḥ (e.g. Politis 2020: 97). At the same time, Khirbat ash-Sheikh 'Īsā was also connected to Red Sea trade via Ayla. However, the penetration of trade goods from this direction appears to have been limited primarily to imports from Iraq and the Gulf region. It is likely no coincidence, therefore, that Al-Muqaddasī (2001: 149, 178), writing around AD 985, emphasizes the commercial importance of Zughar, even referring to it as “a little Basra”.

CONCLUSION

The period between the mid-8th and 11th centuries in southern Jordan represents a transitional phase in the evolution of its ceramic repertoire. While characterized by notable continuity in the use of several types of wares, it also witnessed the emergence of new aesthetic and functional solutions and the final disappearance of forms rooted in Late Antique traditions (e.g. Walmsley 2001c: 310). Some of these innovations appeared only marginally

and with a delay compared to other parts of Bilād el-Shām. Others, such as the rise and spread of handmade wares, seem to have originated in southern Jordan itself (Makowski 2023b: 142; Makowski et al. 2025).

The pottery repertoire of this era reflects the region's socio-economic structure, which was dominated by largely self-sufficient, semi-sedentary shepherds and farmers, along with nomadic and semi-

nomadic groups. Ceramic assemblages primarily served the everyday needs of these mostly family-oriented communities. The most obvious manifestation of this trend is the expansion of Early Plain Handmade Ware. Despite some indicators of cultural cohesion, the assemblages remain highly localized, favoring durable, long-lasting types that display remarkable morphological stability. Variability within these assemblages generally mirrors fluctuations in settlement patterns. At Dharih, for example, the shift from an Early Islamic residence (e.g. Waliszewski 2001; Villeneuve 2011; Durand and Piraud-Fournet 2013) to a makeshift domestic quarter was accompanied by a radical change in the ceramic repertoire (Makowski 2023a). A clear divide is likewise visible between urban and rural centers, and this gap appears to widen steadily: by the 10th and 11th centuries, fine wares are almost absent in rural contexts.

Research on mid-8th- to 11th-century pottery, therefore, demands a nuanced approach that integrates multiple

lines of evidence to refine chronological frameworks. Many pottery classes, such as the various cream wares and Early Plain Handmade Ware, provide crucial links between Early and Middle Islamic stratigraphic and ceramic sequences in southern Jordan. Yet their identification cannot rely on morphology alone; under unstable stratigraphic conditions, they are easily confused with other pottery classes, rendering the transition between Early and Middle Islamic horizons ambiguous or even invisible. Moreover, neither Early Islamic nor Middle Islamic material culture should be treated as static or neatly bounded. Both comprise long-lived ware families whose production and use frequently overlap conventional chronological divisions. As shown, the temporal span of a given ware may, but need not, align with traditional archaeological period boundaries. Interpreting these ceramics thus often requires us to move beyond the bonds of conventional periodization.

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