

THE DATE OF THE QURAYYAH PAINTED WARE IN THE SOUTHERN LEVANT

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Summary: The Date of the Qurayyah Painted Ware in the Southern Levant

The “Qurayyah Painted Ware” (known also as “Midianite Ware”), which originated in northern Hejaz, has been conventionally dated to the period between the 13th (or late 14th) and the mid-12th century BCE based on the Egyptian finds from Timna Site 200—the Hathor temple. During the last decade, due to new finds from excavations in the southern regions of Cis- and Transjordan, the date of this pottery group became a much-debated topic. Scholars have questioned the above dating, arguing that the time frame during which this pottery was in use is much longer, and even included in it the Iron IIA and Iron IIB periods. The aim of this paper is to reexamine the data pertaining to the date of this pottery, and consider the possibility that it was in use in Cis- and Transjordan longer than in its area of origin in northern Hejaz.

Keywords: Qurayyah Painted Ware – Midianite Ware – Iron Age

Resumen: La fecha de la cerámica pintada Qurayya en el sur del Levante

La “cerámica pintada Qurayya” (también conocida como “cerámica madianita”), originaria del norte del Hejaz, ha sido datada convencionalmente en el período entre el siglo XIII (o finales del XIV) y mediados del siglo XII a.C. sobre la base de los hallazgos egipcios de Timna, Sitio 200—el templo de Hathor. Durante la última década, debido a nuevos hallazgos en excavaciones en las regiones sur de Cis- y Transjordania, la datación de este grupo cerámico se convirtió en un tema muy debatido. Los investigadores han cuestionado la fecha mencionada anteriormente, sosteniendo que el marco temporal durante el cual esta cerámica fue utilizada es mucho más extenso, que incluso comprendía la Edad del Hierro IIA y IIB. El objetivo de este artículo es reexaminar la información relativa a la datación de esta cerámica, y considerar la posibilidad de que estuviera en uso en Cis- y Transjordania durante más tiempo que en su área de origen en el norte del Hejaz.

Palabras Clave: Cerámica pintada Qurayya – Cerámica madianita – Edad del Hierro

Article received: November 24th 2014; approved: January 21th 2015.

The painted pottery group which forms the subject of this paper was initially discerned in the north-western part of the Arabian Peninsula (Hejaz) and the southern part of Wadi Arabah more than forty years ago, and was identified and defined at that time as “Midianite ware”.¹ Over the years, many more vessels of this group have been found at other sites in northern Hejaz, and in the southern regions of Cisjordan and Transjordan.² In an attempt to avoid a name associated with an ethnic group (“Midianite Ware”), and based on the data from Qurayyah in the north-western Arabian Peninsula where the richest assemblages of this pottery group as well as the kilns probably used in their manufacture had been found, Parr³ suggested the name “Qurayyah Painted Ware”, a term that is widely accepted in the current literature (henceforth QPW).⁴ Petrographic and chemical analyses demonstrated that the pottery found at sites in the southern regions of Cisjordan and Transjordan were manufactured in the Hejaz—most probably in Qurayyah and/or Tayma.⁵

Opinions differ as to the artistic sources that influenced the potters who produced this pottery group, *i.e.*, whether they were inspired by Bichrome Ware or Mycenaean pottery,⁶ by Egyptian faience vessels,⁷ by an early group of Sea People,⁸ or by a mixture of local Levantine, Eastern Mediterranean and Arabian motives present in the rock art of Arabia.⁹

Based on the Egyptian finds from Timna Site 200—the Hathor temple—the QPW has been conventionally dated to the period between the 13th (or late 14th) and the mid-12th century BCE (the time of the Nineteenth and Twentieth Egyptian Dynasties).¹⁰ This pottery has been found at relatively many sites in southern Cis- and Transjordan, but most of these sites have each yielded merely a few sherds, not always found in stratigraphic context.¹¹

During the last decade, the date of this pottery group became a much-debated topic, especially since new excavations have taken place in the southern

¹ Parr *et al.* 1970; Rothenberg 1970.

² Parr 1988; Rothenberg and Glass 1983; Tebes 2013a.

³ Parr 1982; 1988.

⁴ Knauf (1983), for the same reasons, suggested the name “Hejaz Ware”.

⁵ Rothenberg and Glass 1983; Glass 1988; Gunneweg *et al.* 1991; Kalsbeek and London 1978; Slatkine 1974; Daszkiewicz in Hausleiter 2014: 409–413.

⁶ Dayton 1972; Muhly 1984.

⁷ Parr 1982: 129–130.

⁸ Parr 1996; Rothenberg 1998.

⁹ Tebes 2014. For a detailed study of the painted decorative motives, see Tebes 2015.

¹⁰ Rothenberg and Glass 1983: 100–101; Rothenberg 1998: 201.

¹¹ For a list of sites see Rothenberg and Glass 1983; Tebes 2013a.

regions of Cisjordan (Timna valley by Erez Ben-Yosef and Tali Erickson-Gini) and Transjordan (Wadi Faynan by Thomas Levy and Mohammad Najjar). As a result, scholars have questioned the generally accepted dating stated above, arguing that the time frame in which this pottery was in use is much longer, and included even the Iron IIA and Iron IIB periods (*i.e.*, c. 700 years).¹²

In addition to Qurayyah, QPW was found in about a dozen sites in the northern Hejaz, the homeland of this pottery group.¹³ However, until recent years none of these sites were properly excavated and all available data were based on surveys and surface finds.

Recently, the expedition of the Saudi-German Joint Archaeology Project has conducted archaeological excavations at Tayma, which revealed some stratified contexts that may help shed light on the issue of the QPW date.¹⁴ Based on the stratigraphy at the Oasis of Tayma, Hauseleiter¹⁵ defined four different successive pottery groups and created a pottery sequence for the Late Bronze and Iron Age in this site. Relying on radiocarbon tests, Hauseleiter suggested that at Tayma the QPW probably began to appear in the 13th–12th centuries BCE and that the main phase of its production and use may have come to an end before the end of the 11th century BCE.¹⁶

In the discussion below, I shall reexamine the presence of this pottery at sites on both sides of the Jordan River, my aim being to consider whether at these regions the duration of QPW could have lasted longer than at its area of origin. I will focus mainly on sites that have been stratigraphically excavated and published, in which one can examine the pottery assemblages that accompanied the QPW.

¹² Ben-Yosef 2010: 574; Ben-Yosef *et al.* 2012: 63; Bienkowski 2001; Bienkowski and van der Steen 2001: 23 n. 2, 26 n. 8; Bimson and Tebes 2009; Smith 2009: 569; Smith and Levy 2008: 84; 2014: 412; Tebes 2007: 12, 14; 2013a: 320–323.

¹³ Parr *et al.* 1970: 229–238; Ingraham *et al.* 1981: 71–74.

¹⁴ The fact that kilns have been found at Tayma and Qurayyah and that the source of clay and technology are similar, may suggest that this pottery was produced at both sites (Abu Duruk 1990: 16–17; Hauseleiter 2014).

¹⁵ Hauseleiter 2014.

¹⁶ Hauseleiter 2014: 408. In Table 1 Hauseleiter (2014: 423) states that the terminal date of this group is probably the 10th century BCE (with question mark). This suggested date is based on the dates proposed by scholars for some Levantine sites (Hauseleiter 2014: 402) as will be discussed below.

CISJORDAN

Timna Valley

Site 200: As mentioned earlier, the dating of QPW to the 13th and 12th centuries BCE (the period of the Nineteenth and Twentieth Egyptian Dynasties), was based on the Egyptian finds from the Hathor Temple—Site 200.¹⁷ Seventy fragments of QPW as well as hand- and wheel-made vessels of other types uncovered in the temple were published.¹⁸ Examination of the stratigraphic context of the QPW sherds as determined by Rothenberg¹⁹ reveals that 37 of them cannot be attributed to a specific stratum, whereas 18 fragments could be assigned only to a long sequence of strata (V, V–III, III–I; with Stratum V dated by the excavator to the Chalcolithic and Stratum I to the Roman period). Only 15 QPW sherds were assigned to Strata III or II. According to Rothenberg,²⁰ Stratum III, the main construction period of the temple, was built by Ramesses II of the Nineteenth Dynasty and was in use until the time of Ramesses V of the Twentieth Dynasty, while Stratum II was short-lived.

The temple strata are largely disturbed, a conclusion supported by the fact that fragments of several vessels were found dispersed in all strata.²¹ Since most of the finds cannot be assigned to a specific stratum due to various disturbances, it cannot be established whether the presence of QPW parallels the entire period of time in which the temple was in use, *i.e.*, from the reign of Ramesses II in the 13th century until the time of Ramesses V in the 12th century, or if its time frame can or should be narrowed.

Site 30: A large smelting site labeled Site 30 was excavated by Rothenberg in 1974 and 1976.²² Rothenberg excavated a c. 2 meters high “slag mound” where he distinguished three major layers—Layers III and II dated from the end of the 14th to the mid-12th century and Layer I dated to the 10th–9th centuries BCE.²³ QPW sherds were found in Layers III and II but not in Layer I. In

¹⁷ Rothenberg and Glass 1983: 100–101; Rothenberg 1998: 201.

¹⁸ Rothenberg 1988: Figs. 4–10.

¹⁹ Rothenberg 1988: 287–290.

²⁰ Rothenberg 1988: 277–278.

²¹ Rothenberg 1988: 270–271.

²² Rothenberg 1980; 1999: 158–163.

²³ Rothenberg 1980: 210–211.

2009, new excavations were carried out at the site by Ben-Yosef.²⁴ The main goal was to clarify the chronology by using AMS Radiocarbon tests. Ben-Yosef re-excavated the “slag mound” (Area S) and dug a probe in metallurgical deposits (Area L) where he defined an earlier layer (Layer IV) as well. Only a few pottery sherds have been found, among them two QPW sherds. The radiocarbon dates (only three of the eleven samples were short-lived) obtained for Layers IV–I demonstrated that activity started here in the last decades of the 12th Century BCE.²⁵ Layers III and II (which form, in fact, the same metallurgical sequence with no distinct difference in material culture²⁶) began in the 11th century BCE (although one radiocarbon date is from the end of the 12th century) and Level I is dated to the 10th–9th centuries BCE.²⁷ As QPW sherds were found at Layers III and II, it follows according to Ben-Yosef’s revised chronology that this pottery was present at Site 30 in the 11th century BCE.

Site 2: Site 2 is a large smelting site that was excavated by Rothenberg between 1964 and 1966.²⁸ A relatively large quantity of pottery sherds and a scarab from the reign of Ramesses II were found there. The pottery includes QPW, hand-made and wheel-made vessels.²⁹ Among the wheel-made vessels are two collared rim pithoi,³⁰ carinated bowls and kraters, cooking-pots, a jug and a pyxis³¹ that are typical to the end of the Late Bronze and Iron I periods. Based on these finds Rothenberg dated the site to the 13th–12th centuries BCE.³²

Between 2005 and 2011 Erickson-Gini³³ renewed the excavations at Site 2. The ceramic finds from her excavations include vessels similar to those discovered by Rothenberg in this site and in Site 200.³⁴ Radiocarbon analysis of

²⁴ Ben-Yosef *et al.* 2012.

²⁵ Ben-Yosef *et al.* 2012: 51, Table 4.

²⁶ Ben-Yosef *et al.* 2012: 51.

²⁷ Ben-Yosef *et al.* 2012: Table 4.

²⁸ Rothenberg 1972: 67–111; 1999: 151–158.

²⁹ Rothenberg 1972: Figs. 30–32.

³⁰ Rothenberg 1972: 109.

³¹ Rothenberg 1972: Fig. 30.

³² Rothenberg 1972: 110.

³³ Erickson-Gini 2014.

³⁴ Erickson-Gini 2014: 64, Figs. 13–16.

charcoal samples found in the 2005 excavation indicated that the material had been deposited sometime between the late 13th and 11th centuries BCE.³⁵ These finds led Erickson-Gini³⁶ to suggest that the date of 13th–12th centuries BCE suggested by Rothenberg should be maintained.

Yotvata

The site of Yotvata, located 20 km. north of Timna Valley, was excavated by Meshel in 1974.³⁷ An irregular casemate wall enclosed the site from three sides. In the casemate rooms two QPW bowls were found³⁸ together with hand-made and wheel-made vessels of other types.

This site has particular bearing on the dating of QPW, as it is a single stratum site, and its pottery assemblage includes a series of complete local vessels (mainly storage jars), as opposed to sherds usually found at most other Arabah sites.

The excavation report is currently in preparation for publication by Meshel, while the pottery assemblage is being studied by the author. Most local vessels have parallels in sites located in the southern part of Cisjordan and point to continuity between the Late Bronze and the Iron I periods. Some vessels, which have direct Late Bronze antecedents, are known mainly at the early Iron I period. It seems that we can date the assemblage to the transition period between the end of the Late Bronze and early Iron I periods.

‘En Hazeva

A few QPW sherds have been found out of stratigraphical context in the earliest stratum at the site—Stratum IX, which predates the Early Iron IIA settlement (Stratum VIII) and should therefore be dated to the Iron I period.³⁹

Central Negev Highland settlements

Three hundred and eighty settlements dated to the Early Iron IIA period were studied in the wilderness regions to the south of the Beersheba Valley and in

³⁵ Erickson-Gini 2014: 58 and Table 1.

³⁶ Erickson-Gini 2014: 76.

³⁷ Meshel 1993.

³⁸ Kalsbeek and London 1978.

³⁹ I would like to thank Tali Erickson-Gini who is preparing the publication of the pottery from ‘En Hazeva for this information.

the Negev Highlands.⁴⁰ C. 50 of the sites were excavated. Only one QPW sherd (its clay was not tested) has been reported from them (Har Romem).⁴¹ It is clear that far-reaching conclusions cannot be drawn from a single sherd uncovered during the investigation of three hundred and eighty sites.

Tel Masos

Tel Masos was the largest settlement in the Beersheba Valley during both the Iron I (Stratum III) and Early Iron IIA (Strata II–I) periods.⁴² Two QPW sherds were found in Stratum II.⁴³ Yannai⁴⁴ is probably correct that these sherds were mistakenly assigned to Stratum II, and that they, as well as two fragments of Egyptian pottery typical to the time of the Twentieth Dynasty⁴⁵ should be assigned to the earlier Stratum III. The Stratum III pottery was produced in the Late Bronze ceramic tradition of the southern part of Cisjordan.⁴⁶

The stratigraphy at Tel Masos is complicated due to continuity of occupation at the site without major destruction layers. Some of the Stratum III buildings were also in use in Stratum II, and since the Stratum II floors were close to those of Stratum III,⁴⁷ the presence of earlier sherds in a later context is most likely.

Tell el-Far‘ah (south)

A few QPW were found at Tell el-Far‘ah (south) on paved courtyard YX of Building YR, known as the “Governor’s Residency.”⁴⁸ Together with them were found Philistine pottery⁴⁹ and a fragment of an Egyptian vessel bearing

⁴⁰ Cohen and Cohen-Amin 2004; Haiman 1992: 160.

⁴¹ Cohen and Cohen-Amin 2004: 141, Fig. 80:1.

⁴² Stratum II was attributed by the excavators to the Iron I as well and was dated by them to the 12th–11th centuries BCE (Fritz and Kempinski 1983: 78, 87). Later research has shown that this stratum should be dated to the Early Iron IIA period (Herzog and Singer-Avitz 2004: 222–223).

⁴³ Fritz and Kempinski 1983: Pls. 142: 10, 148:11.

⁴⁴ Yannai 1996: 144–145.

⁴⁵ Fritz and Kempinski 1983: Pls. 134:4, 151:7.

⁴⁶ Kempinski 1983: 73; Yannai 1996: 144.

⁴⁷ Fritz and Kempinski 1983: 37.

⁴⁸ Starkey and Harding 1932: Pl. LXIII:53–56.

⁴⁹ Dothan 1982: 27–29. Yannai (2002) showed that the pottery from the courtyard is restricted to the early types of the Philistine pottery (monochrome) only.

the cartouches of Seti II.⁵⁰ The initial stage of the building probably dates to the end of the 13th century and it was occupied during the 12th century BCE.⁵¹

A complete QPW juglet⁵² was found in the rich bench chamber Tomb 542 together with Egyptian bowls and Philistine pottery (monochrome and bichrome).⁵³ Among the finds, scarabs dated to the reign of Thutmosis III and to the Nineteenth and Twentieth Dynasties were found as well.⁵⁴ These finds indicate that the tomb was used for a long period of time (there is also evidence that the bones were pushed aside to a corner of the tomb),⁵⁵ thus it is impossible to establish to which of the tomb phases the juglet belongs.

Lachish

Three fragments of QPW vessels were unearthed in the foundation fills of Palace B, the Level IV Palace-Fort which contained debris removed mostly from Levels VII, VI and V.⁵⁶ The stratigraphic context of these sherds is unclear; however, due to various considerations they were attributed to Level VI⁵⁷ which is dated to the 12th century BCE (until c. 1130 BCE).

Tell Jedur

One QPW bowl was found among hundreds of vessels recovered from a plundered tomb at Tell Jedur.⁵⁸ The tomb was in use for a considerable period of time during the Late Bronze II period. It contained many burials but the various burial stages could not be separated, and the assemblage was analyzed typologically. Vessels similar to the Lachish Level VI pottery were among the ceramic finds,⁵⁹ thus it may well be assumed that the QPW bowl should be assigned to the latest phase of the tomb in the 12th century BCE.

⁵⁰ Starkey and Harding 1932: Pl. LXIV:74.

⁵¹ Oren 1985: 47–48.

⁵² Laemmel 2003, Vol. 3: Pl. 120:542/87.

⁵³ Laemmel 2003, Vol. 3: Pls. 104–120.

⁵⁴ Laemmel 2003, Vol. 2: 94–95.

⁵⁵ Laemmel 2003, Vol. 1: 72–73.

⁵⁶ Singer-Avitz 2004: Figs. 20.55, 20.56.

⁵⁷ Singer-Avitz 2004.

⁵⁸ Ben-Arieh 1981: Fig. 5:1.

⁵⁹ Ben-Arieh 1981: 125.

Gezer

A bowl found at the site by Macalister and assigned by him to his “Third Semitic Period” was defined as QPW by Brandl.⁶⁰ The exact find-spot of the bowl was not given by Macalister and the stratigraphic context of the bowl is unknown. The importance of the bowl is due to the fact that Gezer is the most northern site in Cisjordan where this type of pottery is known to have been present.

Kadesh-Barnea (northern Sinai)

The site of Kadesh Barnea covers the entire sequence of the Iron Age (Strata 4–2). Two near-complete QPW vessels, as well as 18 body fragments (labeled as “Midianite Ware”) were unearthed at Kadesh-Barnea.⁶¹ Most of the QPW items were not found in-situ and could not be stratigraphically associated with one of the occupation levels. Rudolph Cohen, the excavator, and Hannah Bernick-Greenberg, who prepared the excavation report, believed that the site had not been settled in the Iron I period, hence they dated the QPW vessels and sherds to the Iron IIA period, *i.e.* to the 10th century BCE.⁶²

A different solution was suggested by me in an earlier study.⁶³ Remains of an early stratum (labeled by the excavators as Substratum 4c) have been noticed in a few places at the site. This substratum which was dubbed by the excavators as “Pre-Fortress Occupation” marks the earliest occupation of the site and predates the oval “fortress”⁶⁴ dated to the Early Iron IIA. The QPW as well as other Iron I pottery vessels (such as bowls and collared-rim pithoi)⁶⁵ should be attributed to this pre-Iron IIA occupation. This conclusion is further reinforced by four stamp seals and seal impressions that stylistically should be assigned to the time of the New Kingdom (Nineteenth and Twentieth Dynasties),⁶⁶ and by two radiocarbon measurements of charcoal⁶⁷ that provided dates in the 12th–11th centuries BCE.⁶⁸

⁶⁰ Macalister 1912: Pl. CLXI:16; Brandl 1984.

⁶¹ Bernick-Greenberg 2007: 140, Pls. 11.6, 11.7.

⁶² Bernick-Greenberg 2007: 143.

⁶³ Singer-Avitz 2008.

⁶⁴ Cohen and Bernick-Greenberg 2007: 7, 141.

⁶⁵ See Bernick-Greenberg 2007: Pls. 11.11:4, 6; 11.15:2; 11.20:1, 16; 11.39:12.

⁶⁶ Münger 2007.

⁶⁷ Bruins and van der Plicht 2005: 352, 357; 2007: 493.

⁶⁸ For arguments supporting an Iron I Age date of the radiocarbon samples see Finkelstein 2010: 113–117 contra Gilboa *et al.* 2009.

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Tell el-Kheleifeh

While reexamining the Tell el-Kheleifeh pottery, Pratico observed that “the earliest pottery is represented by six Midianite sherds (Glueck 1967: Figs.1: 2 [5: 1] and 4: 3–5).”⁶⁹ Unfortunately, however, the “records do not provide reliable provenance for those pieces.”⁷⁰ Rothenberg and Glass assumed that these early-in-date sherds should be attributed to an early settlement that probably existed at the site.⁷¹ We may assume that in parallel to Kadesh-Barnea⁷² and ‘En Hazeva (see above) an early occupation level existed also at Tell el-Kheleifeh, indicating the existence of a settlement that predated the fortresses.

Ghrareh

One small painted sherd was found at the single period site dated at the earliest to the 8th century BCE.⁷³ Hart was not sure whether it belongs to QPW and defined it as “Midianite” with a question mark.⁷⁴

Tawilan

One sherd found during Glueck’s survey of the Tawilan region appears to be of the QPW type.⁷⁵ A single body sherd found during Bennett’s excavations at Tawilan (which was dated to the 8th–early 6th centuries BCE) was suspected by Hart as QPW.⁷⁶ The sherd was too small to enable determination of its vessel type, and it is not presented in the report by either drawing or photograph. Possibly an analysis of its clay could have helped to solve the issue, but this has not been done.

A hoard of gold jewellery was found at the site in a copper alloy vessel.⁷⁷ Following analysis of the stylistic characteristics of the items, Ogden conclu-

⁶⁹ Pratico 1993: 49.

⁷⁰ Pratico 1993: 50.

⁷¹ Rothenberg and Glass 1983: 75–76.

⁷² Singer-Avitz 2008: 79; Finkelstein 2014: 122–123.

⁷³ Hart 1989: Pl. 25:4.

⁷⁴ Hart 1989: 239.

⁷⁵ Rothenberg and Glass 1983: 84.

⁷⁶ Hart 1995: 60.

⁷⁷ Ogden 1995.

ded that “there seems little doubt that the hoard pre-dates the majority of the other finds from the site and either presents evidence for earlier settlement or is a hoard, or separate finds, discovered in antiquity and then reburied for safety.”⁷⁸ One interesting item in this hoard is a tassel earring.⁷⁹ Noteworthy, similar tassel earrings were found at the Hathor temple in Timna⁸⁰ and at several tombs at Tell el-Far‘ah (south).⁸¹

Following Ogden’s suggestion and the above comparisons, we may conclude that the two QPW sherds (assuming that the sherd found in Bennett’s excavations is indeed QPW) belong to an earlier settlement or earlier human activity at Tawilan.

Khirbet en-Nahas

Excavations in this most important copper production site in the Faynan area, which are being carried out since 2002 by Levy and his team,⁸² yielded a relatively rich collection of QPW sherds. The sherds were scattered in all strata.⁸³ Thus, it is impossible to establish to which phase of occupation the QPW sherds originally belonged. Based on the presence of New Kingdom-Third Intermediate period Egyptian scarabs (which were found in association with later contexts) the excavators suggested a possible 12th century BCE date for the beginning of the site’s occupation.⁸⁴ This early date is supported by Iron I pottery found at the site⁸⁵ and radiocarbon dates indicating that the site was occupied during the 12th and 11th centuries BCE.⁸⁶

⁷⁸ Ogden 1995: 74–75.

⁷⁹ Ogden 1995: 69–72, Fig. 8.6–8.15.

⁸⁰ Rothenberg 1988: 181–182 [Cat. No. 3], Fig. 55:15.

⁸¹ For dating these earrings see Sass 2002: 23; Laemmel 2003, Vol. 1: 260.

⁸² Levy *et al.* 2004; 2010; 2012; 2014a.

⁸³ Smith and Levy 2014: Figs. 4.17:18, 4.24:3 – Str. I; Figs. 4.16:4–8, 4.22:9–12 – Str. II; Fig. 4.8:7–8 – Str. II-III; Fig. 4.20:9–10, 15–17 – Str. III; Fig. 4.11:10 – Str. III-IV; Fig. 4.3:8 – Str. IV; Fig. 4.7:9 – Str. IV-V; Fig. 4.4:7 – Str. V;

⁸⁴ Levy *et al.* 2004: 875–876; 2014b: 982, 988; Smith and Levy 2008: 86.

⁸⁵ Finkelstein and Singer-Avitz 2009.

⁸⁶ Ben-Yosef *et al.* 2010: 742; Levy *et al.* 2007: 24; 2014c: Tables 2.4, 2.9, 2.11–2.12, 2.17, 2.19.

Barqa el-Hetiye

Barqa el-Hetiye is a smelting site in the Faynan area where large slag heaps as well as a four-room house were unearthed by Fritz.⁸⁷ Several QPW sherds were among the pottery found in the building.⁸⁸

Based on pottery comparisons (local and QPW) Fritz dated the building to the 11th century BCE.⁸⁹ Later on, this site was dated to the 9th century BCE based on a single radiocarbon test,⁹⁰ a date that was accepted by several scholars.⁹¹

Reexamination of the pottery published by Fritz⁹² leads to the conclusion that this late date contradicts the date indicated by the pottery. The collared rim pithoi that are included in the assemblage⁹³ appear at stratified sites only at Iron I strata and are unknown at Iron II contexts. It seems that the Iron I date determined by Fritz should be maintained.

Several houses were unearthed at a one-period site near Barqa el-Hetiye by Russell Adams.⁹⁴ Several QPW sherds were found, which are being studied petrographically by Adams.⁹⁵

Rujm Hamra Ifdan

Two soundings were made at Rujm Hamra Ifdan by Levy and his team: Sounding A near the summit of the site and Sounding B at its foot near a large enclosure wall. Based on radiocarbon dates, Sounding A was dated to the 10th–9th centuries BCE and Sounding B to the 7th to 6th centuries BCE.⁹⁶

One QPW sherd is reported from Sounding A and was thus attributed to the 10th century.⁹⁷ However, it seems that the pottery sherds from Sounding A

⁸⁷ Fritz 1994; 2002.

⁸⁸ Fritz 1994: Abb.12.

⁸⁹ Fritz 1994: 142–147, Abb. 10–13.

⁹⁰ Hauptmann 2000: 66, Table 7; 2007: 89, Table 5.1.

⁹¹ Bienkowski 2001: 261–262; Levy *et al.* 1999: 305; Tebes 2007: 18.

⁹² Fritz 1994.

⁹³ Fritz 1994: Abb. 11:8–9.

⁹⁴ See Tebes 2013b.

⁹⁵ J.M. Tebes, pers. comm, 2015.

⁹⁶ Levy *et al.* 2008: 16464–16465; Smith *et al.* 2014.

⁹⁷ Levy *et al.* 2008: 16465; Smith 2009: 569; Smith and Levy 2014: 412.

are similar to those of Sounding B: the open folded-rim bowl from Sounding A can be paralleled to those in Sounding B;⁹⁸ the medium-sized globular bowls (painted and unpainted) are found in both soundings⁹⁹ and so are the cooking-pots.¹⁰⁰

Based on pottery comparisons it appears that both soundings A and B are contemporaneous and should be dated to the end of the Iron Age. The QPW sherd was not presented with the published drawings of the Sounding A sherds.¹⁰¹ Petrographic analysis could have possibly proven whether this sherd was indeed imported from Qurayyah.

Amman Airport Building

A large pottery assemblage was uncovered in rescue excavations of a public building at Amman Airport.¹⁰² Many Mycenaean vessels that range in time from Myc IIA to late Myc IIIB and a few Cypriote vessels were recovered inside the building.¹⁰³ The assemblage also included a few local vessels¹⁰⁴ and a QPW bowl.¹⁰⁵ Outside the building only local pottery was found.¹⁰⁶ Based on the imported pottery Hankey dated the building to the 14th–13th centuries BCE, but the local pottery suggests a later date, as the latest forms already reflect the transition from Late Bronze II to the Iron I horizon.¹⁰⁷ Unfortunately, the original find spot of the QPW bowl is unknown and it is unknown which vessels accompanied it.

⁹⁸ Smith and Levy 2014: Figs. 4.27:1; 4.28:7–9 respectively.

⁹⁹ Smith and Levy 2014: Figs. 4.27:2–3; 4.28:21; 4.29:5, 7, 16, 41–43.

¹⁰⁰ Smith and Levy 2014: Figs. 4.27:7–10; 4.31:10–12.

¹⁰¹ Smith and Levy 2014: Fig. 4.27.

¹⁰² Many of the finds inside the building were collected after bulldozing operations and thus the original find spot is not clear (Hankey 1995: 169).

¹⁰³ Hankey 1974.

¹⁰⁴ Most of the local pottery was lost, but among the few local pottery published by Hankey are lentoid flasks (1995: Fig. 12). These vessels occur through the Late Bronze II and Iron I periods (Ben-Shlomo 2012: 136; Gilboa and Sharon 2003: Table 9 on p. 29; Laemmel 2003, Vol. 1: 176; Oren 1973: 113).

¹⁰⁵ Hankey 1995: Fig. 11.

¹⁰⁶ Herr 1983; Kafafi 1983.

¹⁰⁷ Herr 1983: 21.

Amman Citadel

One QPW jug neck is reported from Bennett's excavations at the Amman Citadel.¹⁰⁸ As hardly anything is known about the settlement of Amman during the Late Bronze and Early Iron periods,¹⁰⁹ it is impossible to relate it to any context and to date it.

The two sites in Amman are the northernmost sites in Transjordan where QPW is known to have been present.

Finally, it should be noted that a few QPW sherds were found in surveys in Cis- and Transjordan.¹¹⁰ As they lack any stratigraphical context, these finds cannot contribute to the present discussion.

DISCUSSION: DATING THE QPW

As shown in the above review only in a limited number of sites fragmentary or complete QPW vessels were found in a reliable context. At Timna (Sites 200 and 2) and the "Governor's Residency" at Tell el-Far'ah (south) this pottery was found in a context dated to the period of the Twentieth Egyptian Dynasty in the 12th century BCE. We may assume that the QPW bowls found at the Tell Jedur tomb and at the Amman Airport building should be attributed to the latest phases of the tomb and the site respectively and thus should be dated to the 12th century BCE. Also Strata III–II at Timna Site 30 can perhaps be dated to the late 12th and 11th centuries. The single period site of Yotvata is dated to the end of the Late Bronze and beginning of the Iron I periods.

The early occupation phases (which preceded the erection of the fortresses) at Kadesh Barnea, 'En Hazeva, Tell el-Kheleifeh and Khirbet en-Nahas should be dated to the Iron I period, but thus far it is not possible to define their date more accurately. Similar is the case of Tomb 542 at Tell el-Far'ah (south) that was in use in the Iron I period.

The available data on the sporadically found sherds, supposedly QPW and their date, upon which scholars try to extend the time range of this pottery group to the 10th–9th and even to the 8th–7th centuries BCE (Rujm Hamra Ifdan, Tawilan, Ghrareh) are partial, as their drawings or photographs were not

¹⁰⁸ Kalsbeek and London 1978: 47.

¹⁰⁹ Hübner 1992: 24.

¹¹⁰ Avner 2002: 115; Jobling 1981: 110; Rothenberg and Glass 1983.

published and their clay was not analyzed. Significantly, the similarity between the QPW decoration and the Edomite painted pottery (Busayra Painted Ware) can sometimes be confusing,¹¹¹ especially when the sherds are small. Thus, only petrographic or Neutron Activation analyses can validate the origin of the sherds in question.

In addition, dating by radiocarbon test results, while at the same time ignoring ceramic typology (Barqa el-Hetiye and Rujm Hamra Ifdan) is methodically incorrect as it creates a new pottery chronology that is inconsistent with other sites and even within the same site. It is important to note that there are serious impediments in the radiocarbon dating method and the procedure of data processing.¹¹² Therefore we must be aware that

*radiocarbon dating does not (presently) seem capable of differing a definitive solution for our dispute over such a short period; it should instead be considered one of many lines of evidence that inform our chronological picture of the Iron Age.*¹¹³

The above discussion suggests that the QPW appeared at the end of the Late Bronze period and continued in the beginning of the Iron I.¹¹⁴

The date of the transition between these periods is a much-debated topic and the terminology employed by different scholars is not uniform. The traditional date of 1200 BCE for this transition was set in 1921 when the three official schools of archaeology in Jerusalem (British, French, and American), in co-operation with the Department of Antiquities, drew up a system of archaeological periods in which the Iron Age was sub-divided.¹¹⁵

Following excavations in sites such as Lachish, Megiddo and Tel Sera' it turned out that the Canaanite material culture continued into the 12th century (the time of the Egyptian Twentieth-Dynasty presence in Canaan) and ended only after the reign of Ramesses VI (c. 1130 BCE).¹¹⁶ These data create some

¹¹¹ Bimson and Tebes 2009: 93.

¹¹² E.g., Bietak 2013; Singer-Avitz 2009; Wiener 2012.

¹¹³ Frese and Levy 2010: 197.

¹¹⁴ In an earlier paper, I expressed the view (following Rothenberg) that the end of Egyptian rule in Canaan (under Ramesses V or VI) also marks the disappearance of QPW from Canaan (Singer-Avitz 2004). However, based on the current analysis, it seems that this conclusion should be revised.

¹¹⁵ Albright 1949: 111–112.

¹¹⁶ Finkelstein 1995; Oren 1985; Ussishkin 1985; 1995.

scholarly confusion since there is no consensus and scholars are divided as to the character of the 12th century BCE and how to term this period. The 12th century assemblages are called “Iron Age I,”¹¹⁷ “Late Bronze IIIB,”¹¹⁸ “LB|IR transition”¹¹⁹ or “Transitional (Late) Bronze and Iron Ages” (TBI).¹²⁰ Following Ussishkin, the term Late Bronze IIIB will be used here for the period of the 12th century BCE (until c. 1130 BCE). Consequently, the Iron I period begins only at the last third of the 12th century BCE and continues into the 11th century BCE.

Dating the QPW to the Late Bronze IIIB and the beginning of the Iron I period, *i.e.* the 12th–11th centuries BCE, corresponds well with the dates given recently at the Hejaz (Tayma), the homeland of this ware, from where it was exported northward. Based on the sites discussed above, it seems that there are no data confirming the notion that the QPW survived for several centuries, long after its manufacture at its place of origin had come to an end.¹²¹

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¹¹⁷ Mazar 2008: 86–87; Bunimovitz and Lederman 2009: Table on p. 116.

¹¹⁸ Ussishkin 2004: 74–75.

¹¹⁹ Sharon *et al.* 2008: 185.

¹²⁰ Martin 2011: 20.

¹²¹ The homogenous nature of QPW, expressed by its material, shapes and decoration (Rothenberg and Glass 1983: 102), may also indicate that it was used for only a brief period of time.

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