WEDGE- AND CIRCLE-IMPRESSIONED POTTERY: AN ARABIAN CONNECTION

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In his 1982 The Material Culture of the Land of the Bible in the Persian Period 538–332 B.C., Stern summarized what was then known about a class of decorated pottery characterized by rows of impressed wedges and/or rows of impressed circles which was generally dated to the Persian period (1982: 133–36). This is an extremely valuable resource as Stern was able to examine and briefly describe specimens from excavations that were then, and the majority of which are, unpublished, as well as those published up to that time. Since Stern’s work, other examples have come to light, including one piece from the Persian period at Tel Poleg (Herzog, Rapp, and Negbi 1989: fig. 35:2.16); four examples from Tell el-Fül from Stratum IIIB deposits of the sixth century from Cistern 1 (N. L. Lapp 1981: pl. 65:5–7, 13); eight pieces from late sixth to early fifth century contexts at Shechem (N. L. Lapp 1985: fig. 6:1–8); three pieces from the fifth century at Qadum are listed, of which two pieces are illustrated (Stern and Magen 1984: 10–14, figs. 4, 9.1); six pieces from Ramat Rahel not published in the two later formal site reports (Aharoni 1956: pl. 13B); five pieces from pre-Herodian fills in Jerusalem (Tushingham 1985: fig. 15:15–16, 18–19, 21, p. 35); five pieces from Hellenistic and Roman strata at Tell Anafa (Berlin 1997: pl. 71:565–569); two examples from fifth to fourth century contexts at Gezer (Gitin 1990: pl. 28:27, 29, pp. 230–31); one example from an uncertain context at Ashdod (Dothan and Porath 1982: pl. 25:4); one piece from a sixth to fifth century context at Jabel Nimra, near Hebron (Hizmi and Shabtai 1994: 78, pl. 2:10); one piece from a generally Persian fill at Tell el-Sumeiriya (Feig 1988–1989: pl. 13:6); seven pieces, of which four are illustrated, are known from Jericho (Kenyon and Holland 1982: figs. 210: 12, 19, 212: 13–14). Unfortunately the Jericho pieces come from erosional washes, destruction debris exposed to erosion and later peeling, and an uncertain phase of burnt material (see the convoluted presentations in Kenyon 1981: 17, 111–13, 524–25). Kenyon and Holland (1982: 455–56) correctly note that erosion has likely removed occupation levels of the Late Iron Age and possibly the Persian period from the mound. So far only one, perhaps two, examples are published from Jordan, from Tell el-‘Umeiri, in contexts described as Late Iron II or Early Persian (Lawlor 1991: 27, fig. 3.12.34; Herr 1991: 241–42; Lawlor 1997: 46, fig. 3.22.12; Herr 1997: 245). Unpublished fragments include: four examples from Tell Erani; one piece from Pisgat Ze’ev D; an unspecified number of sherds from the City of David in Jerusalem; fragments of at least four vessels from a cave near the Holyland Hotel in Jerusalem (Ben-Arieh 2000, figs.

1. Other brief treatments are those of Wampler (1940) and P. W. Lapp (1970: 185–86).
8–9); 2 and four pieces from recent excavations on Mt. Scopus, Area E. Finally, the example cited by Stern from Macalister and Duncan (1926) is in Annual of the Palestine Exploration Fund Annual, volume 4 (pl. 19:3), not volume 5.

Since Stern’s publication, some additional information on this decorative style has come to light. It is also possible to make a few observations on its geographic distribution.

The most common types of pottery on which this decoration occurs are deep kraters (Wampler 1947: pl. 67:1510) and holemouth jars (Wampler 1947: pl. 7:96). These can either have no handles or two–four handles which can be either horizontal or vertical (vertical handles usually, though not always, reach the rim). Fewer examples are known from deep bowls, and fewer still from jars or pyxis forms (Stern 1982: 133).

The decoration itself most often takes the form of impressed wedges, usually linked to each other at their bases, arranged in one or more rows along the rim of the vessel (Aharoni 1964: fig. 13:9; Pritchard 1964: fig. 48:17), below the rim (Wampler 1947: pl. 66:1497), at the base of the neck (Tufnell 1953: pl. 91:405), on the shoulder (Wampler 1947: pl. 67:1521) or some combination of the above; rarely they occur on a raised band on the neck of a krater (Wampler 1947: pl. 20:349). Sometimes the wedges are smaller and more widely spaced (Sellers et al. 1968: fig. 20:6). One example bears a line of inverted “U”s (Stern and Magen 1984: fig. 9:1). At least one example has two bands of incised wedges along with a row of impressed wedges (Wampler 1947: pl. 66:1495; possibly Crowfoot, Crowfoot, and Kenyon 1957: fig. 12:17). The pyxis form seems to be the only vessel type ever to be almost completely covered with wedges (Pritchard 1964: fig. 33:13; Lamon and Shipton 1939: pl. 43:6; Mazar and Dunayevsky 1964: pl. 28: top center). Rows of circles are less common and usually accompany rows of wedges (Wampler 1947: pl. 67:1510); only rarely do they occur on their own. 3 Occasionally other stamped designs accompany the wedges, either rosettes or squares within squares (Stern 1982: fig. 218; Mazar and Dunayevsky 1964: pl. 28: bottom right) or lozenges with checkerboard patterns (Wampler 1947: pl. 20:348). An example from Samaria has a raised modeled ram’s head (Crowfoot, Crowfoot, and Kenyon 1957: fig. 32:9A–B). There is one example of the use of drops of clay set in rows (Stern 1982: fig. 227; Mazar and Dunayevsky 1964: pl. 28: top left). A holemouth form with painted human, animal, and floral decoration, as well as a one–word graffito, was found at Qadum (Stern and Magen 1984: fig. 4). In his corpus Stern also includes vessels stamped with floral motifs, but his example from Mevorakh contains neither wedges nor circles, and so should be excluded from this body of material (Stern 1978: fig. 8:21, pl. 26:5).

Excavations at the site of Qasr al-Hamrā in Taymā in northwestern Arabia have produced seven examples of wedge decoration on kraters or deep bowls, four of which have been illustrated (fig. 34.1 = Abu-Duruk 1986: 86:47; fig. 34.2 = Bawden, Edens, and Miller 1980: pl. 64: 15; figs. 34.3 and 34.4 = Abu-Duruk and Murad 1985: pls. 59:1, 60:2; also Abu-Duruk and

2. I am grateful to Sam Wolff (Israel Antiquities Authority) for the information on the Tell Erani pieces, to Yonatan Nadleman (Israel Antiquities Authority) for reference to the Pisgat Ze’ev example, to Sam Wolff and Alon DeGroot (Israel Antiquities Authority) for the City of David reference, to Sarah Ben-Arieh (Israel Antiquities Authority) for the pieces from the Jerusalem cave, and to Sam Wolff, David Amit, Jon Seligman, and Irina Zilberbed for the Mt. Scopus specimens. I thank all of these colleagues for permission to cite these pieces here in advance of their publications of this material.

3. Most often they appear alone on handles (Macalister 1912: pl. 182:8; Sellers et al. 1968: fig. 20:1), or on sherds too small to be certain that the lack of wedges is not accidental (Sellers et al. 1968: fig 20: 6; though see N. L. Lapp 1981: pl. 65:13).

FIGURE 34.2. Bowl from Taymā'3. Scale 1:4.

FIGURE 34.3. Krater from Taymā'3. Scale not given.

FIGURE 34.4. Bowl from Taymā'3. Scale not given.
Murad 1986: pl. 54). Figure 34.1, a krater, is decorated first with a row of circles below its rim, followed by a row of small wedges, a row of rosettes, a second row of circles, and finally by a row of wedges. This piece thus contains almost all the decorative devices found in this style. All seven pieces were found in what appears to be a palace/temple complex on the small mound of Qasr al-Hamrā‘. After the first season of excavation it was believed to be a single-period occupation site which dated to the ten years (ca. 550–540 B.C.) when Nabonidus, the last of the Neo-Babylonian kings, made his base at Taymā‘ (Abu-Duruk 1986: 54, 96; Abu-Duruk and Murad 1985: 61–64). Remains of a stone table and a stela decorated with Babylonian motifs were found in this complex (Abu-Duruk 1986: 56–66, figs. 7–8, pls. XLIX–L; Bawden, Edens, and Miller 1980: 83–84, pl. 69). However, subsequent excavation, discussion, and evaluation have determined that there are two periods of occupation at the site and that the period from which the wedge-decorated vessels originate (the earliest occupation phase) begins in the sixth century and probably extends to the end of the fifth (Parr 1989: 53–61). Another wedge-decorated deep bowl, published without a context, is known from al-Hijr, also in northwest Arabia (fig. 34.5 = Ibrahim and Al-Talhi 1989: pl. 14:5).

In his summary Stern traces the discussion of the dating of wedge-decorated vessels (1982: 135). After an initial assignment to the Hellenistic period, the dating of this decorative style has gradually crept backward into the Persian period generally, and since Stern’s work, to the end of the sixth–beginning of the fifth centuries. Aharoni published six fragments of wedge-impressed pottery from Ramat Raḥel which are said to come from the floor of the courtyard of the Stratum VA citadel and its surrounding casemate wall (1956: pl. 13B:142–43). If so, these pieces would be the earliest examples yet excavated, dating no later than the beginning of the sixth century. However, no subsequent report provided details as to their precise findspots, making an evaluation of their archaeological contexts impossible. Unfortunately the new evidence from Taymā‘ and al-Hijr does not allow for any more precise dating than that arrived at for the specimens from ancient Israel.

It has been assumed that the original inspiration for wedge-decorated pottery was Mesopotamian cuneiform (Stern 1982: 136; Wampler 1940: 15). Although wedge-decorated pot-

4. Yadin et al. (1961: pls. CLXXIII:3, CCCL:15) show a fragment of a vessel of uncertain type decorated with incised wedges and impressed circles from Stratum X of the tenth century B.C. This may represent the earliest example of this general style of decoration in the Iron Age. However, the 400+ year gap between this example and those pieces with impressed wedges of the sixth and fifth centuries makes a direct connection difficult to accept.

5. Stern (1982: 136) suggests that another possible origin for wedge decoration derives from motifs on Assyrian and Persian metal vessels, but he provides no examples. Zertal (1989) discusses the nature and dating of late Iron Age bowls whose bases on the interior are covered with impressed wedges bounded by an incised
tery is known from Mesopotamia from as early as the Hassuna period (Zertal 1989: 81), its use as an external decorative device is relatively rare and does not seem to occur on large kraters or holemouth jars. A few shallow bowls are known from Nippur, but they could be either Neo-Babylonian or Persian (McCown and Haines 1967: 71, pl. 103:16). A bowl from Nimrud is from a Hellenistic grave (Mallowan 1966: fig. 295). If cuneiform, as observed by potters in sixth century Israel or northern Arabia, did provide the inspiration for external wedge-decoration, it is just as possible that Israel or northern Arabia was the original source for vessels so decorated, and that the style spread east to Mesopotamia, rather than from the east to the west.

It is not surprising that identical decorative styles on similar vessel types should be found in both ancient Israel and northern Arabia. Contacts between the two areas would have begun to intensify with rising Assyrian intervention in the west. Tiglath Pileser III and Sargon II made efforts to control the movement of Arab herdsmen and caravans along the periphery of their empire and used Arab leaders to control the border with Egypt, where Sargon established a trading center (Eph‘al 1982: 83–100, 108). Sargon also settled some Arabs in Samaria (Eph‘al 1982: 105–08). Sennacherib campaigned in northern Arabia (Eph‘al 1982: 118–23). Assyrian military and political intervention brought at least some of the tribes of northern Arabia within the Assyrian orbit certainly by the reign of Esarhaddon who relied on them to supply his army with water when he invaded Egypt in 675 B.C. (Saggs 1984: 107–08). Assurbanipal (Eph‘al 1982: 114), and later Nebuchadnezzar of Babylon (Roux 1980: 349), both campaigned in northern Arabia. Nabonidus, the last Babylonian ruler, moved his court to Tayma‘ and used it for ten years as a base of operations in Arabia, reaching even as far as Medina in the south (Roux 1980; Eph‘al 1982: 179–82). Assyrian forts and administrative centers dot the area from the south coastal zone around Gaza, extending inland across the northern Negev to Edom (Finkelstein 1995: 147), and Assyrian Palace Ware is common at most sites in the same region (Finkelstein 1995). Assyrian campaigns and building activities seem aimed at linking northwestern Arabia with southern coastal Palestine.

One of the reasons for this interest in Arabia might have been a desire to control the spice trade routes which threaded through the region. A number of biblical texts, mostly from contexts of the seventh and sixth centuries, refer to Arab traders and their activities, including the trade in frankincense (1 Kgs 10:1–13 and 2 Chron 9:1–12; Isa 21:13, 60: 6; Jer 6:20; Ezek 27:22, 38:13; Job 6:20; Ps 72:10). The increasing number of small, cuboid limestone incense altars (Stern 1982: 182–95; Gitin 1992: 46; Stern 1973: 52–53) found in ancient Israel from the seventh century onward attest to the importance of spices, and the trade which brought them, in this region. An increase in the relative quantity of camel bones from Tell Jemmeh in the seventh century and the recovery of south Arabian inscriptions from southern Israel and Edom may also be connected with the rising importance of this trade (Finkelstein 1995: 148; Shiloh 1987).

Although Stern notes that this type of decoration is known throughout ancient Israel and is not limited to Judah and Samaria, as had been thought earlier, there is some patterning to its
distribution. The total number of published examples comes to approximately 160. Of this total about 130 come from the area of Judah (including Jericho), while the remainder come from the north (including Gezer). Of the 130 from Judah, sixty-two come from Tell en-Nasbeh, with most of the rest coming from Jerusalem, Ramat Rahel, En-Gedi, Tell el-Fül, Beth Zur, and Jericho, mainly from sites that continued to be occupied after the fall of Jerusalem, or that were resettled soon after the return from the Exile. The northern sites that have yielded the largest number of examples are Shechem and Samaria. It thus seems that this form of decoration was most popular in the south, showing up at many relatively small sites, while in the north it is most often found at major population centers.

If the Ramat Rahel sherds do date to the seventh–early sixth centuries, the rise and spread of the wedge- and circle-pressed pottery may be connected with the suggested increase in Mesopotamian interest in exerting some control over Arabian trade, which began under the Assyrians and continued under the Babylonians and Persians. At this stage of research, however, it remains uncertain if the perceived overlap of the generally southern range of this form of decorated pottery and the distribution of Assyrian forts, pottery, and south Arabian inscriptions is fortuitous, or in some way related. The two specimens from 'Umeiri may be a forerunner of future discoveries in Jordan that will provide the crucial link between northern Arabia and southern Israel.

The high incidence of such decorated vessels at Tell en-Nasbeh/Mizpah should not be surprising. The floruit of Mizpah's development, when it served as the administrative center for Judah under the Babylonians, was in the wake of the Babylonian conquest in 586 B.C., and it continued as a major administrative center down into the fifth century. One would naturally expect such an important southern center to have some connection with the rising Arabian trade. A fragment of one of the limestone cuboid incense altars was found at Tell en-Nasbeh in a wall of Stratum 2 of the Babylonian to Persian period and helps underscore the importance of the spice trade in ancient Judah (McCown 1947: 236–37, fig. 61A, pl. 84:14).

Archaeological exploration of northern Arabia is still modest compared with the intensive research carried out in Israel and, to a lesser extent, in Jordan. For this reason it is not certain if the relative paucity of wedge-impressed pottery in northern Arabia is due to the vagaries of excavation, or if it truly reflects a concentration of such material in ancient Israel. It is also

6. See Stern 1982: 133 and n. 1 (above) for the distribution of this material in Israel.
7. Stern 1982: 135, refers to some 140 vessels decorated with wedges and/or circles at Tell en-Nasbeh; however, the records in the Badé Institute of Biblical Archaeology in Berkeley, California, contain references to only approximately seventy-five vessels with this style of decoration, not all of which were published in Wampler's 1947 report. See Neh 3:1ff. and 7:6ff. for a list of those who helped rebuild the walls of Jerusalem and those towns settled after the return from the Exile. Ezek 47:10 suggests that En-Gedi was settled during this time as well.
8. The two largest clusters of wedge-decorated sherds at Tell en-Nasbeh are found in the southwest side of the tell, from AD20 southwestward to AG17 (25 total), and in the intergate area from X12 south to AA24 (eleven total). These two areas contain extensive building remains from Stratum 2, which this author has suggested was constructed in the Babylonian period and continued down to the end of the fifth century B.C. See Zorn (1993a: 163–85; 1993b: 1098–1102) for a discussion of the stratigraphy and architecture of Stratum 2. See 2 Kgs 25:23ff. and Jer 40:6ff. for Mizpah in the Babylonian period. See Neh 3:7, 15, 19 for Mizpah in the Persian period.
unclear if the vessels themselves, or their contents, were the object of the trade. Until a source analysis is performed on the Arabian and Israelite material, it will be impossible to say in which direction the trade in these vessels flowed, or if these vessels were locally produced and this form of decoration was common to both regions.

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In 1978 Douglas Esse wrote a seminar paper on “Settlement Patterns in the Persian Period.” In an appendix to this paper he briefly discussed “The Stamped Impressed Ware” which is the subject of the present article. Though the paper was never published it showed a clear grasp of the issues involving this decorative style and contained useful insights. It is fitting that in a volume honoring Doug Esse’s memory there be a piece which hearkens back to his formative years as a student. Much of this paper was prepared during my time at the Albright Institute of Archaeological Research, Jerusalem, as a National Endowment for the Humanities Fellow. I would like to thank Sam Wolff for inviting me to contribute this article, for helpful comments during its preparation, and for bringing several wedge-impressed specimens to my attention. Any errors or omissions are mine alone.

REFERENCES

Abu-Duruk, H. I.
1986 Introduction to the Archaeology of Tayma. Riyadh: Department of Antiquities and Museums.
Abu-Duruk, H., and Murad, A. J.
Aharoni, Y.
Bawden, G.; Edens, C.; and Miller, R.
Ben-Arie, S.
Berlin, A.
Crowfoot, J. W.; Crowfoot, G. M.; and Kenyon, K. M.
Dothan, M., and Porath, Y.
Eph' al, I.
Feig, N.
Finkelstein, I.  

Gitin, S.  
1990  *Gezer III.* Jerusalem: Hebrew Union College, Jewish Institute of Religion.

Herr, L. G.  

Herzog, Z.; Rapp, G. Jr.; and Negbi, O., eds.  
1989  *Excavations at Tel Michal, Israel.* Tel Aviv University, Publications of the Institute of Archaeology 8. Minneapolis/Tel Aviv: University of Minneapolis Press/Tel Aviv University, Sonia, and Marco Nadler Institute of Archaeology.

Hizmi, H., and Shabtai, Z.  

Ibrahim, M. A., and Al-Talhi, D.  

Kenyon, K. M.  

Lamon, R. S., and Shipton, G. M.  

Lapp, N. L.  

Lapp, P. W.  

Lawlor, J. I.  

London, G.  
Macalister, R. A. S.

Macalister, R. A. S., and Duncan, J. G.

Mallowan, M. E. L.

McCown, C. C.

McCown, D. E., and Haines, R. C.

Mazar, B., and Dunayevsky, I.

Parr, P. J.

Pritchard, J. B.

Roux, G.

Saggs, H. W. F.

Sellers, O. R.; Funk, R. W.; McKenzie, J. L.; Lapp, P.; and Lapp, N.

Shiloh, Y.

Sinclair, L. A.

Stern, E.

Stern, E., and Magen, Y.

Tufnell, O.

Tushingham, A. D.

Wampler, J. C.
Yadin, Y.; Aharoni, Y.; Amiran, R.; Dothan, T.; Dunayevsky, I.; and Perrot, J.

Zertal, A.

Zorn, J. R.