BEERSHEBA– A GATEWAY COMMUNITY IN SOUTHERN ARABIAN LONG-DISTANCE TRADE IN THE EIGHTH CENTURY B.C.E.

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Introduction

A study of the ceramic assemblage of Beersheba[1] Stratum II reveals that along with pottery types that are well known from Judea and the Beersheba Valley, are several ceramic groups atypical to the region. Besides the group of vessels typical of sites in Judea, there are vessels characteristic of sites in southern coastal plain, and a small group whose origins may be traced to Edom, Egypt and the kingdom of Israel.

The group of vessels with coastal characteristics was found in Beersheba in large quantities as an integral and typical part of the stratum, whereas in 'classic' Judean assemblages these same vessels are rare, and in some cases even absent. A quantitative analysis shows 12.5% of the Beersheba vessels have coastal characteristics, whereas in Lachish Level III, only 2.9% of the vessels bear the same regional characteristics. In Tell Beit Mirsim Stratum A, the percentages resemble those of Lachish: 3.08% of the vessels bear coastal characteristics.

Why, then, the meager repertoire in 8th century Judean assemblages, as opposed to the large variety in Beersheba? In this case we cannot rely on the traditional geographic approach which analyses the distribution of finds according to the distance from the source of influence since in some Judean sites, such as Lachish and Beth Shemesh that are much closer to the southern coast than Beersheba, the pottery assemblage is primarily Judean.

The basic premise of this study is that the connection between Beersheba and the coastal sites was an outcome of international economic-commercial activity that did not exist in the other regions of Judea. Moreover, the variety typifying the Beersheba assemblage was a consequence of the southern Arabian commerce that operated in the Beersheba Valley as early as the second half of the 8th century B.C.E. This commerce exposed the city to contacts with both the west (the southern coast and Egypt) and the east (Edom and Arabia).

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[1] For the various opinions on the identification of Tel Beersheba with the biblical Beersheba see: Aharoni 1973:111-113; Na'aman 1980; Fowler 1982; Rainey 1984.

The History of Arabian Trade

The trade with southern Arabia created one of the main commercial routes in the ancient Near East. Numerous studies have attempted to date the beginnings of this trade: the end of the Late Bronze Age (Artzy 1994; Sauer 1995), the early Iron Age (Finkelstein 1988), the reign of Solomon (Liverani 1992) or the seventh and sixth centuries B.C.E. (Groom 1981:37; Crone 1987:15).

As early as the 40's, Albright pointed out that the shipping of goods across the Arabian desert would have been impossible without camels. In his opinion, camels were domesticated only towards the end of the 12th century B.C.E. (Albright 1960:206–207). Despite claims of earlier evidence for the appearance of the domesticated camel, most scholars seem to have accepted Bulliet's distinction that although the camel was indeed domesticated at an earlier period, it was used mostly for household products (milk, meat, wool, fuel) and riding, and was employed as a long-distance beast of burden only from the end of the second millennium onwards (Bulliet 1975; Resto 1991).

The spice trade dealt mainly with myrrh and frankincense, two substances that were in great demand throughout the ancient Middle East (Van Beek 1960; Elat 1977; Crone 1987). Since these items are perishables that leave no direct archaeological evidence, we have to rely on historical texts for most of our information. For classical periods there are detailed Greek and Roman texts, while for the period we are dealing with here the sources are Assyrian and biblical.

The Written Sources

The *Assyrian* sources are devoid of commercial documents reporting economic activities between countries, and international trade is rarely mentioned in the texts. The import of goods from other countries into Assyria, on the other hand, is defined as enforced import: booty, tribute and offerings the vassal states had to pay the Assyrian king (Elat 1990:72). The earliest reference of traders' caravans from southern Arabia to Mesopotamia is in a document found in Sur Jur'eh on the middle Euphrates and dated to mid-8th century B.C.E. This document mentions a large caravan (at least 200 camels) that came from Sheba via Teima[2] and was robbed and looted by a Suhu army upon arrival at Hindanu (Cavigneaux and Ismail 1990; Liverani 1992:111–112[2]). The goods this caravan is said to have carried (camels, purple-dyed wool, iron, alabaster) are also mentioned in the Annals of Ashurnasirpal (883–859 B.C.E.) and his predecessor, Tukulti-Ninurta II (890–884 B.C.E.), as products that the two kings imported from Hindanu and its vicinity. This data led Liverani to

[2] I am grateful to Nadav Na'aman for bringing this article to my attention.

conclude that merchants' caravans traveled between Arabia and Mesopotamia as early as the beginning of the 9th century B.C.E. and used Hindanu as a way station (Liverani 1992:112). From this period onwards an Arab presence is constantly mentioned. During the reign of Shalmaneser III (858–824 B.C.E.), Suhu is mentioned as a source of incense (Liverani 1992:112); in the battle of Qarqar, the queen of Arabia sends 1000 camels to aid the rebel Syrian kingdoms. Tiglath-pileser III (744–727 B.C.E.) looted 30,000 camels and "500 (sacks) of all kinds of spices" from Samsi, queen of Sheba. Sargon II received tribute from both Samsi queen of Sheba and Ita'amar, king of Sheba. Sennacherib placed the tribute he had received from Karibilu, king of Sheba, as a foundation offering in a temple in Assyria. The gifts of the people of Teima' entered Nineveh through one of the gates of the city, called "the Desert gate". Essarhadon and Ashurbanipal also report of taxes levied on the kingdoms of Arabia (for a detailed list see Eph'al 1982:21–59).

Judging by the historical documents and administrative-economic letters, it seems that although the Arab tribes were not under the direct rule of the Assyrian kingdom, the routes on which this trade operated were indeed governed by this empire. To ensure regular trade, the Arabs had to pay a heavy tribute to Assyria. To supervise this, the Assyrians incorporated the nomads into the security forces along the main trade routes (Eph'al 1982:82–100).

Biblical references of traders and trade are few and far between (Elat 1979:527). Biblical sources mentioning Arabia and its products are sparse and secondary. The report concerning the contacts between king Solomon and the queen of Sheba is fraught with numerous difficulties, and one cannot be certain whether the reality reflected in the tale is indeed that of the Solomonic period (Groom 1981:52–54; Crone 1987:14–15; Resto 1991:204–205).[3]

The clashes between Arab tribes and the Judean kingdom, along its southwestern border, probably occurred during the 9th–8th century B.C.E. These tribes however, were apparently not the same as those living in the Syro-Arabian desert (Na'aman 1987).

Since the domination of the trade routes yielded considerable profit, various political bodies tried to seize them throughout the period: Egyptians, Edomites, Assyrians and Nabateans. The view commonly held is that rather than one route there were numerous routes. It appears that the changing political and military conditions dictated the routes between Arabia and the ports in the southern coastal plain: whether the route crossed over the Sinai (Darb el-Ghaza) (Meshel 1981) or passed through Transjordan and the Beersheba Valley (Darb el-Hajj).

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[3] Liverani (1992), who has found evidence of trade with Mesopotamia as early as the 9th century B.C.E. (according to Assyrian documents), thinks it may be dated earlier, to Solomon's reign i.e., the 10th century B.C.E.

Since the caravans had to pass through Palestine on their way north, several studies have attempted to explain the economic development of certain regions and settlements as a result of the trade with Arabia. In view of the widespread appearance of the collared-rim jars at the end of the Late Bronze Age, Michal Artzy suggested these were containers for trade goods, brought on camelback by southern Arabian traders who used Tel Nami as an important port. According to Artzy, Tel Nami's position on the trade route explains the settlement's affluence and the presence of bronze and pottery incense-burners (Artzy 1994). It is highly unlikely that these large, heavy vessels were used to transport goods overland. Empty, such a jar weighs about 32 kg. and has a capacity of 150–200 litres (Wengrow 1996:307). Since a single camel could carry no more than 400 lbs. (ca. 180 kg.) (Groom 1981:160), it could not possibly have carried one such jar, much less two, as Artzy claims (1994:137).

In an attempt to fathom the vigorous settlement activity in southern Palestine during Iron Age I, and specifically the foundation of a site as big and rich as Tel Masos, Finkelstein (1988) concludes that this was the result of the southern Arabian trade passing through the Beersheba Valley and that Tel Masos played a central role along this route.[4] Along similar lines, Finkelstein demonstrates that the trade through the Beersheba Valley went on in the 7th century B.C.E. as well. Unlike Beit-Arieh who regards Ḥorvat Qitmit as an Edomite religious site, Finkelstein (1992) sees it as a religious site serving travelers on the Spice Road, which explains its various connections (to Edom, Judea and the north). In his opinion, the Assyrians preferred to channel the Arabian trade via the territories of vassal states (Edom and Judea) during this period. However, in an earlier phase of their activities in Philistia the Assyrians had apparently dominated the trade with Arabia, which was then taking the indirect route - Darb el-Ghaza (*ibid.*:163–165). Finkelstein himself wonders why the process hadn't begun as early as the "early Assyrian phase", i.e. the second half of the 8th cent. B.C.E. (*ibid.*:165), under Tiglath-pileser III and Sargon II.

Assyrian Ideology and International Trade

Upon the ascension of Tiglath-pileser III to the throne, Assyria became a world power and the foundations of the Neo-Assyrian Empire were laid. Imperial systems, by definition,[5] may be examined as "center-periphery" systems,

4 Knauf, however, attributes Masos' prosperity to its position as an important trading post governing the copper production in the Arava (Feinan) (Knauf-Belleri 1995:112).

5 An 'empire' is a political mechanism enabling one state to rule a large region containing economically and culturally different societies. In early, non-industrial societies, an empire may be defined as "a mechanism for collecting tribute", "a primitive means of

since the center accumulates wealth based on a means of production collected over a large territory. The economic connection between the center and the periphery can be based on various models and each system may be comprised of elements taken from various models. Larsen (1979), in his study of the imperial "control sphere" in Mesopotamia from the 3rd millennium B.C.E. onwards, has shown that in most periods in the ancient Near East the center functions as an economic parasite, forcibly coercing the extraction of resources from the peripheries through the imposition and collection of tribute and taxes. He distinguished between a direct and an indirect control sphere.

The areas under direct control are under permanent military occupation, i.e. a military presence and constant supervision of the provincial government by the central government. The economic system in such a region is based not only on tribute, but also on control of the means of production and actual ownership of property in the provinces.

In the areas under indirect control, the central government supervises the local population without the aid of a military garrison. The constant military threat alone guaranteed the loyalty of the population in such areas. In an indirect control system, the economic ties are based on taxation, with the means of production left entirely in the hands of the local population. The central government did not interfere with production and trade, although these were regulated by rules and contracts signed between the central government and the vassal king.

Santley and Alexander (1992) also examined relations between inter-regional systems and the nature of the center's influence on the periphery. Two of the systems they defined as "hegemonic empire" and "territorial empire" are quite similar to the control sphere systems (direct and indirect) as defined by Larsen.

In an attempt to explain the inequality of the exploitative imperial government (the center) and the exploited occupied nation (the periphery), the Assyrian empire fashioned an ideology that helped to perceive and accept the inequality as 'right'. The official Assyrian view presented the king as one who brings peace and harmony to the entire world. War was not perceived as the opposite of peace, but rather as a means for creating a state of peace (within Assyria and outside its borders) (Liverani 1979; Oded 1992; 1993). The "liberated" nations, however, refused to adopt the official Assyrian propaganda and this attitude found expression in the various and recurrent rebellions throughout the empire.

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economic domination" (Wallerstein 1974), and "a political mechanism, the control over a large multi-society region by a single state" (Ekholm and Friedman 1979:46).

The motive behind Tiglath-pileser III's campaigns to the west (Lebanon and Philistia coasts) was primarily economic, expressed by the desire to obtain control of the Mediterranean ports and the trade going through them (Tadmor 1966; Oded 1974). Tiglath-pileser III and his heirs refrained from annexing the ports of Philistia to the empire and allowed them to remain vassal cities, thus forming a buffer zone separating Assyria from Egypt. The kingdom of Judea was also permitted to remain a vassal state for the same reason (Otzen 1979). Besides their importance to trade, the kingdoms of Transjordan (Ammon, Moab and Edom) also served as a buffer zone against the nomadic Arab tribes (Otzen 1979; Na'aman 1995).

The importance of the vassal states[6], as areas of indirect rule, was mainly in channeling their treasures to the center of the empire in a practically one-way flow. In return for this flow of products to the center, the Assyrians supplied ideological "products" (law, order, protection) (Liverani 1979:313). Since the Assyrians were unable to direct the trade themselves or cross the huge geographic regions the trade routes traversed, they created a political mechanism that enabled them to control main roads and settlements. The Assyrians did not initiate trade in Philistia, Phoenicia and Arabia where it had existed centuries before their ascendancy as a major power but forced themselves on the trade system. Since they wished to take a part of the profit, they gave the vassal kingdoms free reign, refrained from interrupting trade and in fact, encouraged it. The Assyrians ensured their cut of the trade profits through taxes and tributes (Elat 1977; 1982; 1990). An active Assyrian presence was detected along known trade routes when, during the second half of the 8th century B.C.E., a network of fortified settlements was established along the southern coast (Elat 1978; Na'aman 1979b; 1995; Oren 1993). Edom's prosperity towards the end of the 8th century B.C.E. is decidedly related to the Assyrian Empire (Oded 1970; Weippert 1987; Bartlett 1989; Bienkowski 1990; 1995c; Knauf 1992). As previously mentioned, the nomadic Arab tribes were incorporated into the forces defending traffic along the main trade routes (Eph'al 1982:82–100), moreover, the Arabian peninsula has also yielded evidence of connections to Assyria and Assyrian cultural influences (see below).

Edom and its relations with Judea

The Assyrian documents, as well as the archaeological data, indicate that the Edomite kingdom was consolidated during the 8th century B.C.E.

[6] Postgate (1992) prefers to call them 'client kingdoms' rather than 'vassal' to avoid feudal connotations.

concurrent with the primary building activities carried out in Buseirah, Tawilan and Tell el-Kheleifeh (Oakeshott 1978:181; Pratico 1983:194–195; Bartlett 1989; Bienkowski 1992:104).

Trade between Arabia and the coastal plain by way of trade routes crossing the Beersheba Valley, depended on normal relations between the kingdoms of Edom and Judea, a state of affairs contradicting commonly-held interpretations of the relations between the two states. The historic reconstruction of the enmity between Edom and Judea is based on evidence that is not quite concrete. As inscriptions from Edom itself are nonexistent, we are not acquainted with the Edomite 'version' of Edom's history. Assyrian documentation, crucial to the understanding of the political relations during the period, only deals with Edom in reference to the Assyrians themselves. Most of the information regarding Edom and its relations with Judea are biblical. During the 150 years or so between the rule of Ahaz (734 B.C.E.) and the destruction of Judea by Babylon in 586 B.C.E., there is no mention of struggles between Edom and Judea. The many wrathful prophecies uttered by various prophets concerning Edom do not mention occupation, and the period they reflect is still a matter of controversy (Dicou 1994; Glazier-McDonald 1995).

The dramatic closing phrase of Ostracon No. 24 from Arad: "lest Edom should come there", led Aharoni (1981:150) to suggest that the Edomite army was responsible for the destruction of the Negev fortresses at the beginning of the 6th century B.C.E. This is the principal external evidence for the existence of an Edomite threat. Bartlett (1989:142), on the other hand, maintains that the Edomite presence in the region, at that period, was not purely military. Ostracon No. 40, found in Arad Stratum VIII (end of the 8th century B.C.E.), discusses the transfer of letters (?) sent by Gemaryahu and Nehemyahu to Malkiyahu in Arad, and ends with a reference to the evil done by Edom (one must note here, however, that the word 'Edom' is partially restored - Aharoni 1981:71). Aharoni thinks that while preparing for the revolt against Assyria, Hezekiah had somehow offended Edom and thus brought about the deterioration of relations between the two states (*ibid.*:149). This historic interpretation remains unsupported by additional sources while Bartlett maintains that the letter attests to diplomatic activity taking place between Edom and Judea on the eve of Sennacherib's campaign to Judea (Bartlett 1989:131).

According to the commonly-held assumption, relations between the kingdoms of Judea and Edom, be they hostile (Aharoni 1981:150; Beit-Arieh 1995) or economic-political (Bartlett 1989; Finkelstein 1992; Edelman 1995:6; Glazier-McDonald 1995:27–28) did not emerge prior to the late 7th or early 6th century B.C.E. In the following pages an attempt will be made to show that there were cultural inter-actions as early as the late 8th century B.C.E.

Our ability to define the typological-chronological changes in Edomite culture during the 8th and 7th centuries B.C.E. is extremely limited. Therefore we must rely on datings from sites in Palestine (for detailed discussion on chronology of Edomite pottery and its problems, see pp. 30–33).

In cases where Edomite pottery was identified at sites in Palestine, it was mostly prominent vessels such as cooking pots, 'Assyrian' bowls and painted pottery. It seems that there are additional pottery types characteristic of the Edomite pottery assemblage, which appear in Judean assemblages as early as the 8th century B.C.E. By attempting to isolate the 'Edomite' finds in Beersheba, it may be possible to examine the nature of the relations between Edom and Beersheba during the latter half of the 8th century B.C.E.

An analysis of the Beersheba pottery finds as indications of trade

The Beersheba Valley is the most passable valley in the Negev region, devoid of any physical obstacles. Therefore, it serves as a passage between the Judean hills to the north and the Negev to the south, as well as between the settlements on the coastal plain to the west and Edom and the Aravah to the east. As one of the most important junctions in the Negev, all the main longitudinal routes in the Negev and the southern part of the Judean hills either focus on the Beersheba - Arad Valleys or cross them. Thus, it was there that the only latitudinal Roman limes in the southern part of the country was established with forts built along it (Gichon 1975).

Tel Beersheba is located on a promontory overlooking the confluence of the Beersheba and Hebron streams. During the Roman period a fortress that was part of the Roman *limes* was built on it (Fritz 1973). The Nabatean route across the Aravah and the Negev was called the "Petra-Gaza road" (Negev 1966). Although it does not cross Beersheba itself, the rich finds of coins dating to Aretas III and IV (a total of 60 coins) (Kushnir-Stein and Gitler 1992–93), as well as the Nabatean pottery scattered both on the tel's surface and in the lower city (Aharoni 1975:165–166), attest to a Nabatean presence.

The excavations in Beersheba brought to light nine settlement strata dating to the Iron Age (Aharoni 1973; Herzog 1984). The extensively-excavated Stratum II yielded the city-plan in its entirety, including public buildings and residential quarters, all containing rich and varied finds.

Regional characteristic in the Beersheba Stratum II pottery assemblage

The Beersheba Stratum II city, encompassing some two and a half acres, was enclosed within a casemate wall conforming to the topography of the hill.

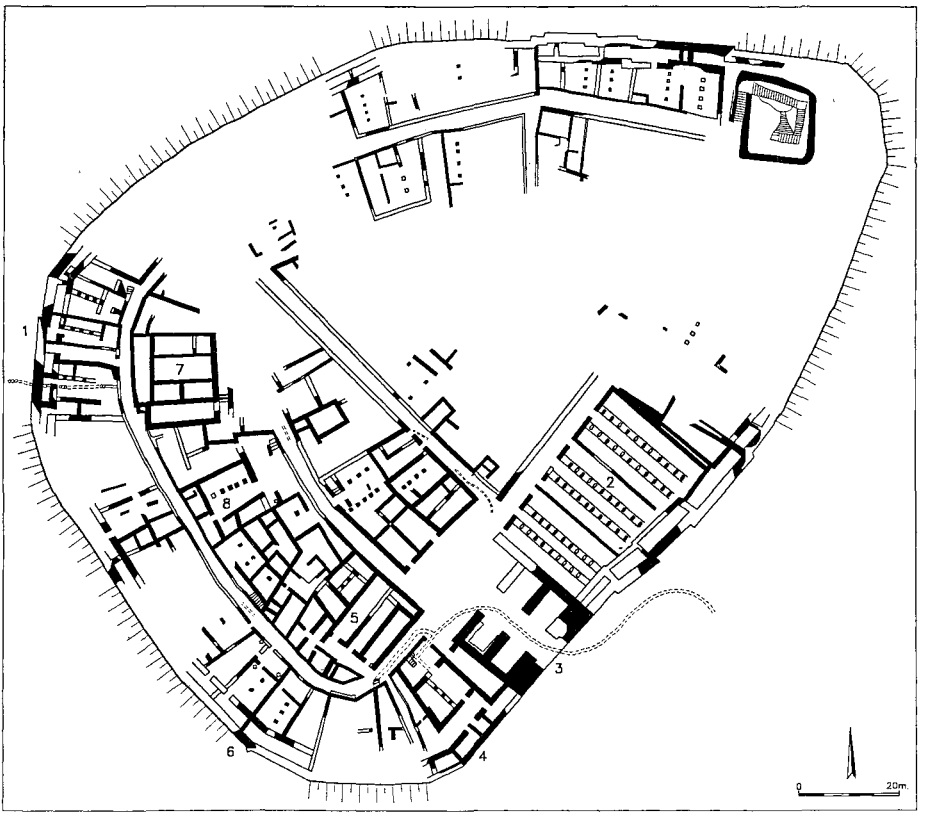

Fig 1. Map of Beersheba Stratum II: 1. Western quarter; 2. Storehouses; 3. Gate; 4. Building 430; 5. Building 416; 6. Southwestern quarter; 7. Building 32; 8. Building 855/859.

A perpendicular street that cut across the city and facilitated travel between its various quarters crossed the peripheral street, laid out parallel to the city wall. All streets led to a square in the vicinity of the town gate. This is where the public buildings were erected including three units of storehouses and administrative edifices. A water system, ensuring a regular supply of water, was dug near the storehouses. The city was pre-planned, apparently as an administrative center (Herzog 1992:258–261; 1997a:244–247).

The excavators of Beersheba correctly dated the destruction of Stratum II to 701 B.C.E., during Sennacherib's campaign. This dating is based mainly on the resemblance of the pottery assemblages to Lachish Levels III or II. Most scholars agree on the considerable similarity between the Beersheba Stratum II and Lachish Level III pottery. Only a few drew a parallel between Beersheba Stratum II and Lachish Level II, and thus dated Beersheba Stratum II to the 7th century B.C.E. (Yadin and Geva 1983). Kenyon determined that the Beersheba Stratum II pottery assemblages precede the pottery of Lachish Level III.

But since she dates the destruction of the latter to 597 B.C.E., she maintains that the existence of Beersheba must be dated to the 7th century B.C.E. (Kenyon 1976). Na'aman, who suggested that the destruction of Stratum II occurred as early as 720–712 B.C.E. (Na'aman 1979a:75; 1986:13–14), now sees the Sennacherib campaign as the reason for the city's destruction (Na'aman - personal communication).

An analysis of the Beersheba Stratum II pottery assemblage shows that besides the types of vessels common to Judea and the Beersheba Valley, it also includes several pottery groups that are not characteristic of the region. Typologically, the assemblage may be classified into several groups, each with its own characteristics: vessels with Judean characteristics, southern coastal plain characteristics, and groups whose origins may be traced to the Israelite kingdom, Edom, Assyria and Egypt.

This discussion is based mostly on the pottery assemblage found in approximately half of the excavated area: the western quarter, the storehouses, the gate, Building 430, Building 416 ("the Governor's Residence") and the southwestern quarter (Fig. 1). The 889 complete vessels excavated solely on floors may be regarded as a representative assemblage. Some 84% of the vessels display Judean characteristics, 12.5% possess coastal characteristics, and the rest have Northern, Edomite, Assyrian or Egyptian characteristics.

When comparing Beersheba with other Judean sites, such as Lachish Level III and Tell Beit Mirsim Stratum A, a completely different ratio emerges. Out of 204 vessels at Lachish (Tufnell 1953), 96.5% display Judean characteristics, 2.9% display coastal characteristics, and a mere 0.5% display other characteristics. The ratio in Tell Beit Mirsim (Albright 1943) resembles Lachish. 96.9% of the pottery shows Judean characteristics and 3.08% displays coastal features. The pottery assemblages of Arad and Beth Shemesh paint a similar picture. Therefore, it seems obvious that the material culture in Beersheba was closely related to the sites on the southern coast, and the two regions were connected by much stronger ties than found at any other Judean site.

REGIONAL POTTERY CHARACTERISTICS

Site	Judean	Coastal	Others
Beersheba	84.18%	12.53%	3.27%
Lachish	96.5%	2.94%	0.49%
TBM	96.9%	3.08%	---

It is quite likely that Philistia and Judea maintained relations. However, although we are acquainted with a considerable number of sites existing in 8th century B.C.E. Philistia such as Ekron, Tel Batash, Ashdod, Ruqeish and Tell Jemmeh, the only large ceramic assemblages published were those found in Ashdod and Ruqeish (and in the case of the latter, only the vessels found in graves). Therefore the nature of the contacts between Judea and Philistia is hard to fathom. The Ashdod data indicate that out of 263 published vessels excavated in Area D Stratum 3 (general Stratum VIII) (Bachi 1971), some 5% (12 vessels) can be defined as Judean.[7]

A detailed review of the Beersheba pottery groups is presented below. It includes defining their cultural attribution through typological analysis and their origins according to petrographic tests carried out by Yuval Goren. The review attempts to show that the 'international' nature of the assemblage reflects Beersheba's foreign connections and cultural openness towards the end of the 8th century B.C.E.

Vessels with Judean Characteristics (Figs. 2–4)

As this group is well known from sites such as Lachish Level III, Tell Beit Mirsim Stratum A and Beersheba Stratum II, a detailed discussion of the entire Beersheba assemblage will not be attempted here, but rather just a brief description of the quantitatively-prominent types.

Figure 2

1. A shallow, open bowl with a disc-base, usually red-slipped and wheel-burnished on the inner side. This group of 13 bowls has several variants, forming 6.4% of the total number of bowls (204).

2. A small, straight-sided bowl, carinated near its base. The base itself is flat. Some of these bowls are red-slipped and wheel-burnished whereas others are merely burnished and left unslipped. 20 such bowls were found.

3. This type resembles the previous bowl, except that it has a small disc-base rather than a flat one. This bowl is not slipped and is merely burnished. 26 such bowls were found.

Bowl types 2 and 3 are secondary categories in one group of bowls (a total of 46) which forms 22.5% of the total number of bowls found.

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[7] Although the published plates in the Lachish, Tell Beit Mirsim and Ashdod reports were not selected for statistical purposes, because of the large quantity of ceramic types they have been used here as a representative sample.

4. A bowl with a folded rim, a carination at the upper third of its wall and a ring-base. Nearly all of the 90 bowls found are wheel-burnished on the inner side and the rim, whereas only a few are red-slipped. This type of bowl is the most predominant at Beersheba and contemporary Judean sites, and forms 44.1% of the total number of bowls found.

5. A large open krater with a folded rim, a slight carination in the upper part of its wall, a ring-base and four loop handles drawn from the rim to the wall of the krater. Out of 26 such kraters, 24 are wheel-burnished on the inside and rim while one is unburnished, and only one is red-slipped on the inner side and burnished. These kraters are very common to Judean sites and in Beersheba they form 66.6% of the total number of kraters (both open and closed-mouth).

6. An open cooking-pot with a rounded base, a rounded carination half way up its wall and a thickened rim grooved along its outer side. A pair of loop handles is drawn from the rim to the body of the vessel. The ware is coarse and crumbly and full of white grits. 22 cooking-pots of this type were found, thus forming 34.4% of the 64 open cooking-pots excavated.

7. An open cooking-pot with an elongated rim, ridged on its outer side and with a pair of loop handles drawn from the rim to the wall of the vessel. The wall itself is sharply carinated at the bottom part of the vessel and the base is rounded. Unlike other cooking-pots, these were made of a relatively fine, well-levigated clay containing minuscule grits, lending the vessel a 'metallic' quality. They are usually darker than other cooking-pots. This type is highly prominent in Beersheba consisting of 19 vessels that form 29.7% of the total number of open cooking-pots.

FIGURE 2. VESSELS WITH 'JUDEAN' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
1.	Bowl	28	4036/1	14056/5	*Rendzina*	Shephelah
2.	Bowl	282	2113/3	3419/3	Loess	N. Negev
3.	Bowl	1004	14096/2	5565/5	Motza Form.	Judea
4.	Bowl	221	1165/1	8879/3	*Terra rosa*	Judea
5.	Krater	221	1208/7	11708/1	*Terra rosa*	Judea
6.	Cooking-pot	221	1223/1	8719/3	*Terra rosa*	Judea
7.	Cooking-pot	44	1598/1	7634/1	*Terra rosa*	Judean
					+ Sand	Shephelah
8.	Cooking-pot	282	9238/2	9972/1	*Terra rosa*	Judea
				571/2	*Terra rosa*	Judea
				2960/1	*Terra rosa*	Judea
9.	Jug	283	2211/1			
10.	Decanter	282	2132/4			

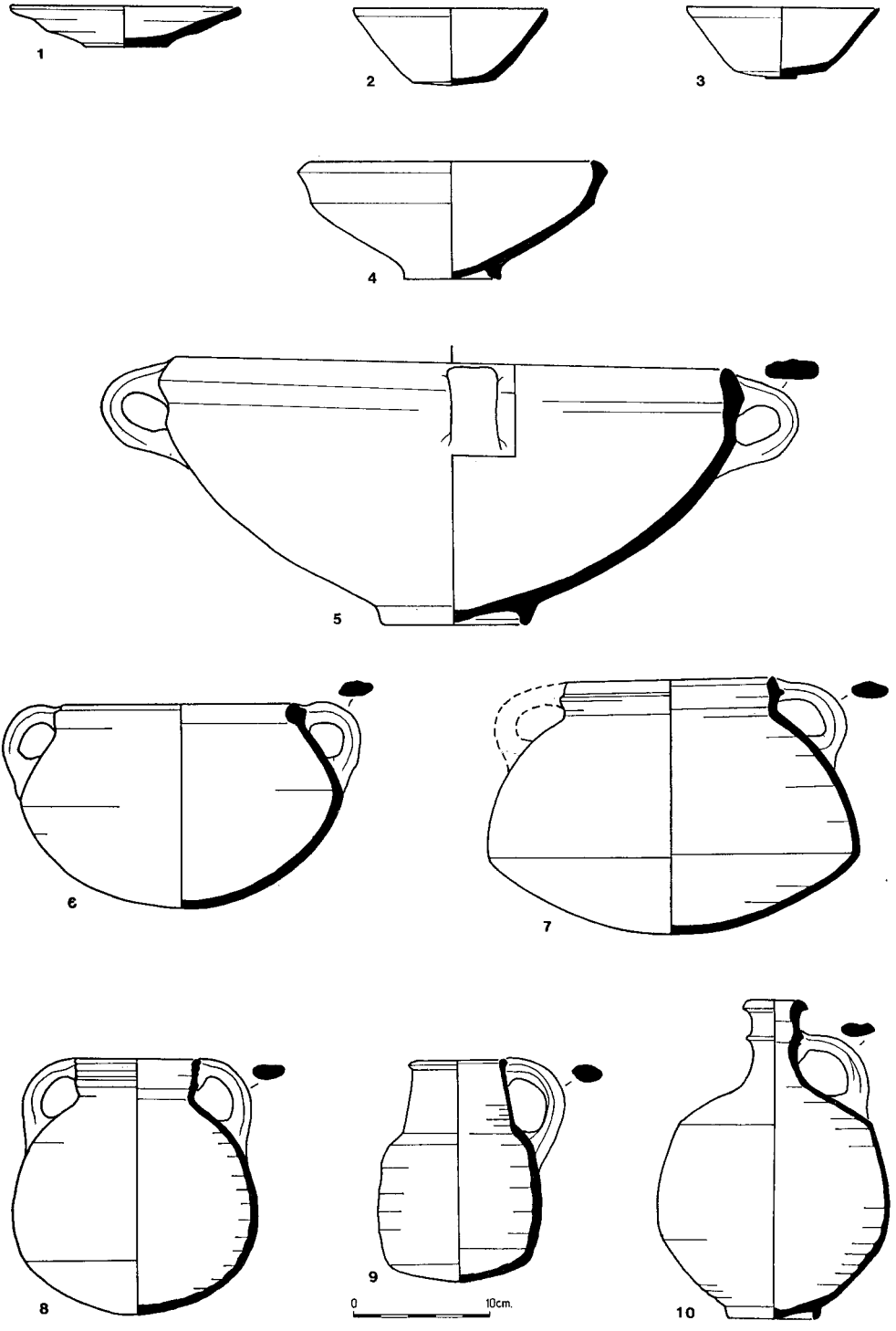

Fig. 2. Group of vessels with 'Judean' characteristics.

This type of cooking-pot is totally absent from other Judean sites while at the coastal sites only a few (three) vessels are found: Ashdod Stratum VIII (Bachi 1971: Fig. 46:9), Tell Jemmeh Stratum E (Petrie 1928: Pl. 41:32r) and in Tell Abu Salima Strata H-J (Petrie 1937: Pl. XXXIV:32–D3)[8].

During the 7th and early 6th centuries B.C.E., the 'successor' to this cooking-pot enjoys a larger distribution, mostly in coastal sites, but also in Judea. The sharp carination of its wall disappears, but all its other characteristics remain intact. It is found at Meẓad Ḥashavyahu (Naveh 1962: Fig. 5:4), Ashdod Stratum VI (Bachi 1971: Fig. 55:1), Ekron Stratum Ib (Gitin 1989: Fig. 2.13:13), Tel Batash Stratum II (Kelm and Mazar 1985: Fig. 17:1) and Tel Masos (Zimhoni 1983: Pl. 165:10–13). When analysing the findings of the excavation in Ekron, Gitin called this cooking-pot, "a coastal type" (Gitin 1989:48). Mazar, when discussing the results of the excavations at Tel Batash, notes that this cooking-pot is "an unusual type, lacking any parallels in Judea, although Ashdod has several examples of such a pot, which must therefore be regarded a type typical of Philistia" (A. Mazar 1985:314).

Quantitatively, this type of cooking-pot is nearly exclusive to Beersheba throughout the 8th century B.C.E. In all likelihood, it is the 'local invention' of a potter who supplied Beersheba with his wares. It was only in the 7th century B.C.E. that this type became prevalent in the southern coastal plain.

8. A closed-mouth cooking-pot with a globular body nearly as wide as it is high. The neck is ridged and a pair of loop handles is drawn from the rim to the shoulder of the vessel. These pots vary in size; their height ranges from 13 to 25 cm. at fixed (0.5 cm.) increments. This is one of the most common vessels in Judea and was found at all excavated sites. In Beersheba, 47 such pots were found, forming 77% of a total of 61 closed-mouth cooking-pots.

9. A jug with a wide neck, squat body, rounded base, and a handle drawn from the rim to the shoulder. Jugs are most difficult to classify since they are found in numerous variants, many of which are unique and thus form a category of their own. This jug is relatively common to Beersheba - 22 out of a total of 69 jugs.

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[8] Petrie dates Strata E and F at Tell Jemmeh to 932–810 B.C.E. (1928:4)) The dates given by Petrie to the strata at Tell Abu Salima are as follows: Stratum J, 905–805 B.C.E.; Stratum H, 805–625 B.C.E.; Stratum G, 630–497 B.C.E. Reich pointed out that the fortress in Stratum G is Assyrian and was apparently built during the reign of Sargon, ca. 716 B.C.E. (Reich 1984). It is therefore possible to conclude that the date assigned to Stratum H must be raised to the 8th century B.C.E. as well. After careful analysis of the ceramic assemblage of Strata G and H, McClellan incorporated them into one on grounds of their similarities and parallels to Strata E-F at Tel Jemmeh (McClellan 1975:260). This entire assemblage also parallels Tell Beit Mirsim Stratum A2 (*ibid.*:413).

10. A decanter with a globular body and a sloping shoulder separated from the body by a sharp carination. The narrow neck is ridged in the middle and the handle is drawn from the ridge to the shoulder. The rim is splayed and the vessel is wheel-burnished. These decanters come in varying sizes, from 16 to 28 cm. A total of 23 specimens were found at Beersheba.

Figure 3

11. A dipper juglet with an elongated cylindrical body, a rounded base, an elongated neck with a wide opening and a handle drawn from the rim to the shoulder. Most of these juglets are hand-burnished vertically and a minute percentage is red-slipped. Of 88 dipper juglets, 33 (37.5%) were of this type.

12. A dipper juglet with a globular body, a rounded base with a slight protrusion at the center, a short, narrow neck, and a handle drawn from the rim to the shoulder. The 49 specimens found form 55.7% of all dipper juglets found.

13. A small black juglet with a squat body, a rounded base with a slight protrusion at its center, and a short, narrow neck. The relatively large handle is drawn from the rim to the shoulder. This type is sparsely hand-burnished vertically. 25 specimens were found.

14. A lamp with a disc-base, and a wide, emphasized, pinched rim. 38 such lamps were excavated.

15. A storage jar with an ovoid body, a rounded base, sloping shoulders and a short neck. A pair of loop handles is drawn from the shoulder carination to the wall of the vessel. 29 specimens were found, forming 21% of the total number of storage jars (excluding the cylindrical holemouth jars).

16. A storage jar with four loop handles drawn from the shoulder carination to the body. The body itself is very wide at the shoulder, and gradually tapers towards the rounded base. This is the jar known as *lmlk,* although no handles bearing the seal impression were found in Beersheba. Three variants of this type are known (Zimhoni 1990:15–19, Groups IIIA–IIIB), with a total of 9 vessels altogether.

17. A spouted storage jar. This type has a globular body, a ring-base, three loop handles drawn from the rim to the shoulder, and a spout joined to the rim. The shoulder is occasionally decorated with two grooves. 10 specimens were found.

18. A cylindrical holemouth jar with a rounded, sometimes slightly pointed base. The ridged rim slopes inwards forming an obtuse angle with the side of the vessel. In comparison to other storage vessels the holemouth jars are small, ranging in height between 23 and 40 cm. 69 specimens were found at Beersheba.

19. A holemouth storage jar with a barrel-shaped body and a ring-base. Below the rim there are three (sometimes four) ridges. The vessel has four loop handles joined to the body at the ridges. The rim circumference is relatively large. 14 specimens were found.

FIGURE 3. VESSELS WITH 'JUDEAN' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
11.	Juglet	270	2169/1			
12.	Juglet	289	2159/1			
13.	Juglet	1004	9179/1	20926/1	Motza Form.	Judea
14.	Lamp	46	1550/1	6050/1	*Terra rosa*	Judea
15.	Storage Jar	76	1619/1	19807/13	*Terra rosa*	Judea
16.	Storage Jar	75	1592/1	6041/2	*Terra rosa*	Judea
17.	Storage Jar	221	972/1			
18.	Holemouth Jar	222	1231/2			
19.	Storage Jar	464	3623/2	12178/1	*Terra rosa*	Judea

Figure 4

20. A pithos with an elongated body, a thickened, inward-sloping, grooved rim, no neck and sloping shoulders which are joined to the side of the vessel with a rounded carination. The body tapers towards the narrow, rounded base. A pair of loop handles is drawn from the shoulder carination to the side of the pithos. Unlike the other vessels, these pithoi feature a different clay and particularly thick sides. Six such pithoi were found, one bearing a *"lmlk zif"* seal impression on its shoulder (Aharoni 1973:76–77).

Places of manufacture

In order to pinpoint the places where this pottery was manufactured, Yuval Goren carried out a petrographic analysis. In most cases, a single specimen was sampled. Possibly, if a larger number of vessels had been analysed, they may have yielded a clearer, more detailed picture. Most vessels included in the following figure references are not those used for the petrographic analysis, although they represent the same types. In most cases sherds were used for the analysis, in an attempt not to damage whole vessels.

The pottery may be divided into three main wares:

1. Vessels made of local clay - loess soil.

2. Vessels made of *terra rosa* - a type of soil present in the Judean hills and the Judean Shephelah but not in the Beersheba Valley.

3. Vessels made of clay from the "Motza formation" in the Jerusalem area.

The clay used to manufacture most of the tested vessels is *terra rosa*, originating in Judea. This clay was used to make the open bowl (Fig. 2:5), the open cooking-pot with a thickened rim (Fig. 2:6), the open, carinated cooking-pot (Fig. 2:7), and a closed-mouth cooking-pot (two samples of the three tested) (Fig. 2:8).

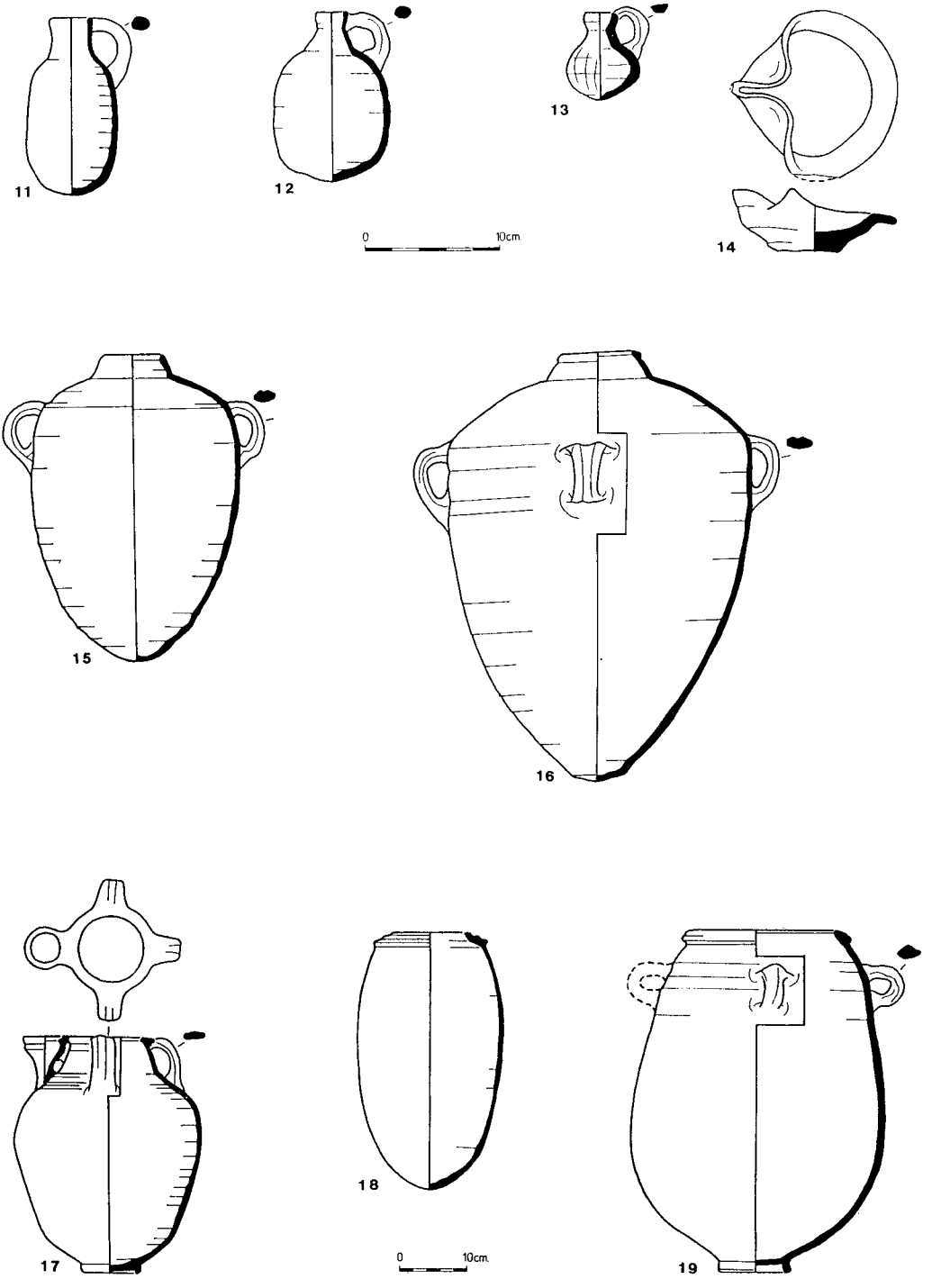

Fig. 3. Group of vessels with 'Judean' characteristics.

The *terra rosa* clay was also used to make an 'ovoid' jar (Fig. 3:15), a *lmlk* jar[9] (Fig. 3:16), a holemouth storage jar (Fig. 3:19) and a lamp (Fig. 3:14).

The vessels made of clay originating in the "Motza formation" in the Jerusalem area are a small bowl (Fig. 2:3), a black juglet (Fig. 3:13) and a pithos[10] (Fig. 4:20).

The small bowl (Fig. 2:2) was made of loess originating in the northern Negev, whereas the open bowl (Fig. 2:1) was made of *rendzina* (humus-carbonated soil) found in the Shephelah.

Interestingly enough, one out of the three closed-mouth cooking-pots analysed (Fig. 2:8), as well as the carinated cooking-pot (Fig. 2:7) made of *terra rosa* also contained sand, probably from the coastal plain. Whether the addition of sand was deliberate or accidental can only be determined when a larger sample of these cooking pots is analysed.

Why were most vessels (bowls, cooking-pots, jars, holemouth storage jars) manufactured from *terra rosa* clay, rather than the local loess soil? The answer to that may be the fact that different-sized vessels require differing qualities of clay. Large vessels, of greater surface and longer durability, need stronger walls that won't crack whereas in smaller vessels these factors are less significant (Nicklin 1979:440). Therefore, it seems smaller bowls were made of the local loess clay, whereas the iron oxide-rich *terra rosa* was used for the manufacture of the larger vessels, as well as some of the cooking-pots. High iron content gives the ware even heat distribution and higher resistibility in varying heat conditions. The iron content also serves to lend the clay a darker hue - much preferred in cooking pots, as the darker color retains heat longer (Arnold 1988:23).

The question still unanswered is where were the *terra rosa* vessels made? Were they manufactured in the vicinity of the clay's origins and transported to Beersheba? Was there some central workshop specializing in their manufacture at some site in the Shephelah or Hebron region? Or was the clay itself transported to Beersheba and used there? More extensive tests, aided by comparisons with other excavations, may eventually supply the answers to these questions.

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[9] The results of analyses done on a large sample of these jars, found at different sites and put to NAA tests, affirm that all of them are made of clay originating in the Judean Shephelah (Mommsen, Perlman and Yellin 1984).

[10] When pithoi from Kuntillet ʿAjrud, Beersheba, Arad and Jerusalem were put to the NAA test to determine their clay composition, the tin component in all was similar, originating in "Motza formation" clay from the Jerusalem region (Mommsen, Perlman and Yellin 1984; Gunneweg, Perlman, and Meshel 1985).

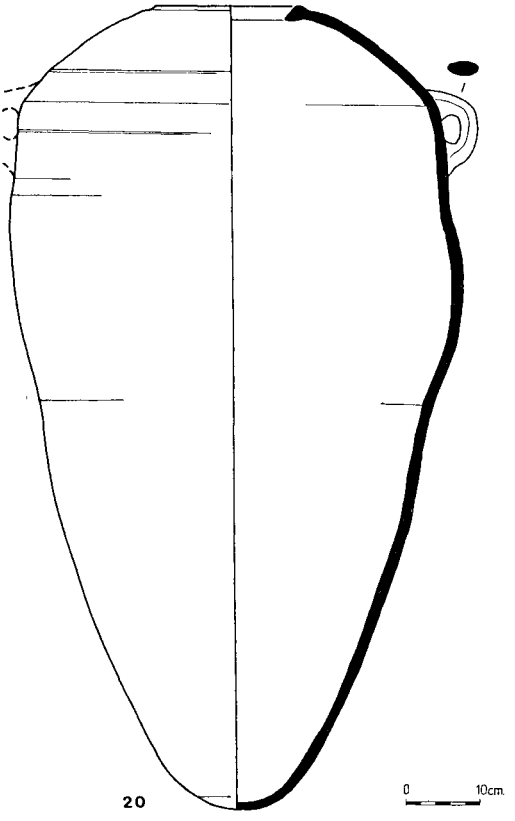

Fig. 4. Pithos with 'Judean' characteristics.

FIGURE 4. PITHOS WITH 'JUDEAN' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Clay*	*Origin*
20.	Pithos	311	2432/2	Motza Form.	Judea

Vessels with coastal Characteristics (Figs. 5–8)

The krater assemblage comprises 26 open kraters and 13 closed-mouth kraters. The closed-mouth kraters, which are 33.3% of all the kraters, include a wide range of secondary types. They are generally globular in shape, their neck is short (or absent) and they are usually equipped with a ring-base. Some have no handles, others have a pair of (loop or horizontal) handles, sometimes with an additional spout attached to the rim. Each such sub-category comprises one or two bowls, at the most.

Figure 5

1–2. Kraters with a squat globular body, a short neck, a relatively wide opening, a ring-base and a pair of loop handles attached to the widest part of the vessel.

3. A globular krater with a relatively large opening, a ring-base and a sharp carination halfway up its side. It has a thickened rim and neither neck nor handles.

4. A globular krater with a wide opening, a folded ring-base, a very short neck and a rim with a triangular section.

5. A globular krater with a wide opening, a ring-base, a neck and upright rim, and an incision on the neck.

6. A globular krater with a ring-base, an upright neck and a groove below the rim. Very similar to the krater in Fig. 5:5, except for a pair of horizontal handles. Three letters are inscribed on the shoulder *kds* (holiness).

Figure 6

7. A globular krater with a rounded base. Three loop handles drawn from the base serve as a stand (base). The neck is upright and the krater has two horizontal handles as well as a spout. This krater is the only one slipped in white and decorated with reddish-brown stripes, drawn vertically on the neck and horizontally on the body.

8. A piriform krater devoid of a neck, with a thickened rim, folded ring-base, a pair of horizontal handles on the shoulder and a spout attached to the rim.

Figure 7

9. A globular, slightly squat krater with a short neck, a ring-base and a spout attached to the rim. It has no handles.

10–11. A globular krater with a relatively small opening, folded ring-base, neck and a folded rim. A pair of horizontal handles is attached to the shoulder.

12. A globular krater with a ring-base and no neck. The rim is thickened, and a pair of loop handles is drawn from the rim to the widest part of the walls.

13. Very similar to Fig. 7:12, but with a neck.

FIGURE 5. VESSELS WITH 'COASTAL' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
1.	Krater	1004	14159/3			
2.	Krater	25	176/1			
3.	Krater	1004	14072/2			
4.	Krater	1007	9230/5			
5.	Krater	124	1438/1			
6.	Krater	93	3985/1	7605/1	*Terra rosa*	Judea
6.				12930/1	*Terra rosa*	Judea

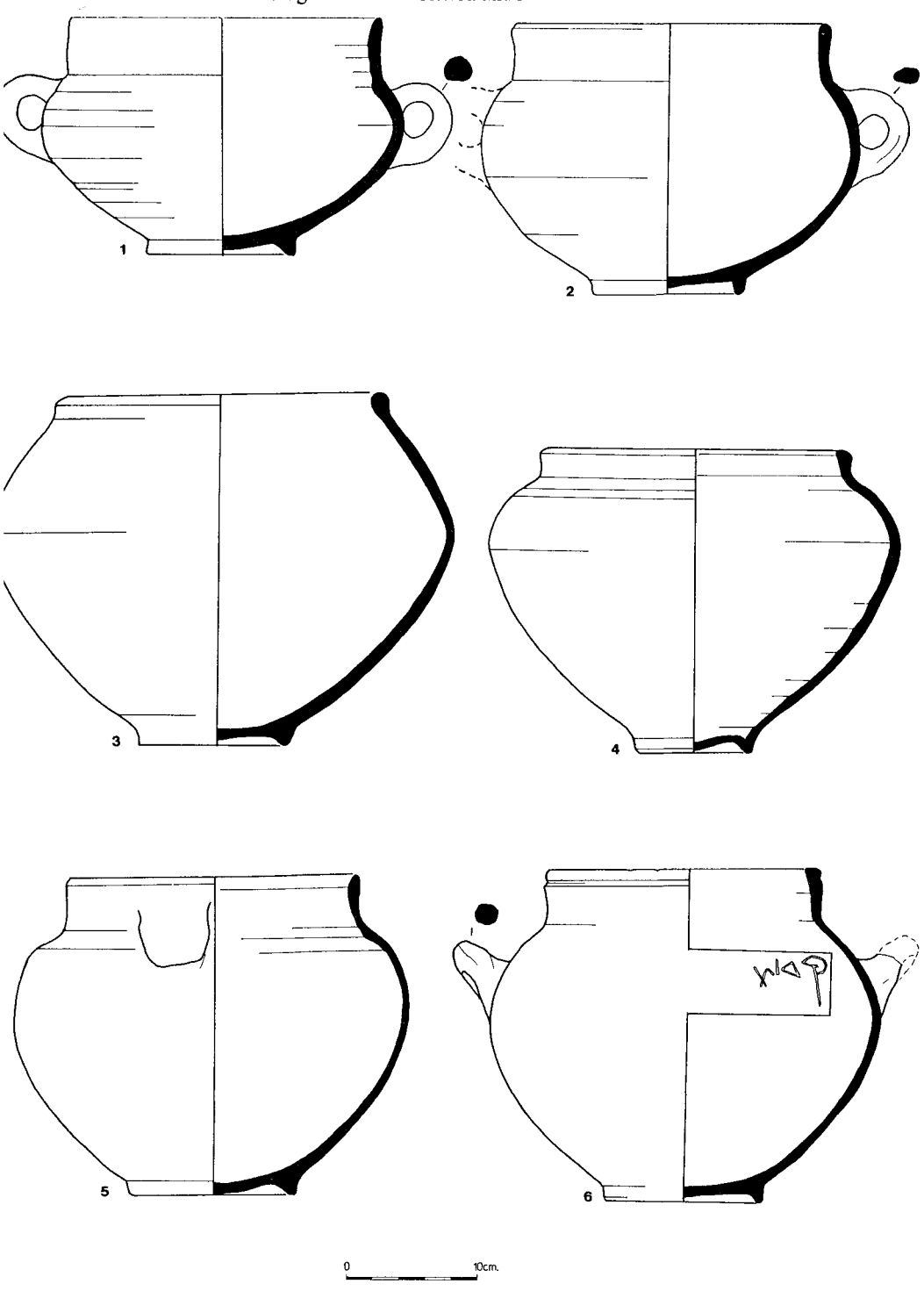

Fig. 5. Group of vessels with 'coastal' characteristics.

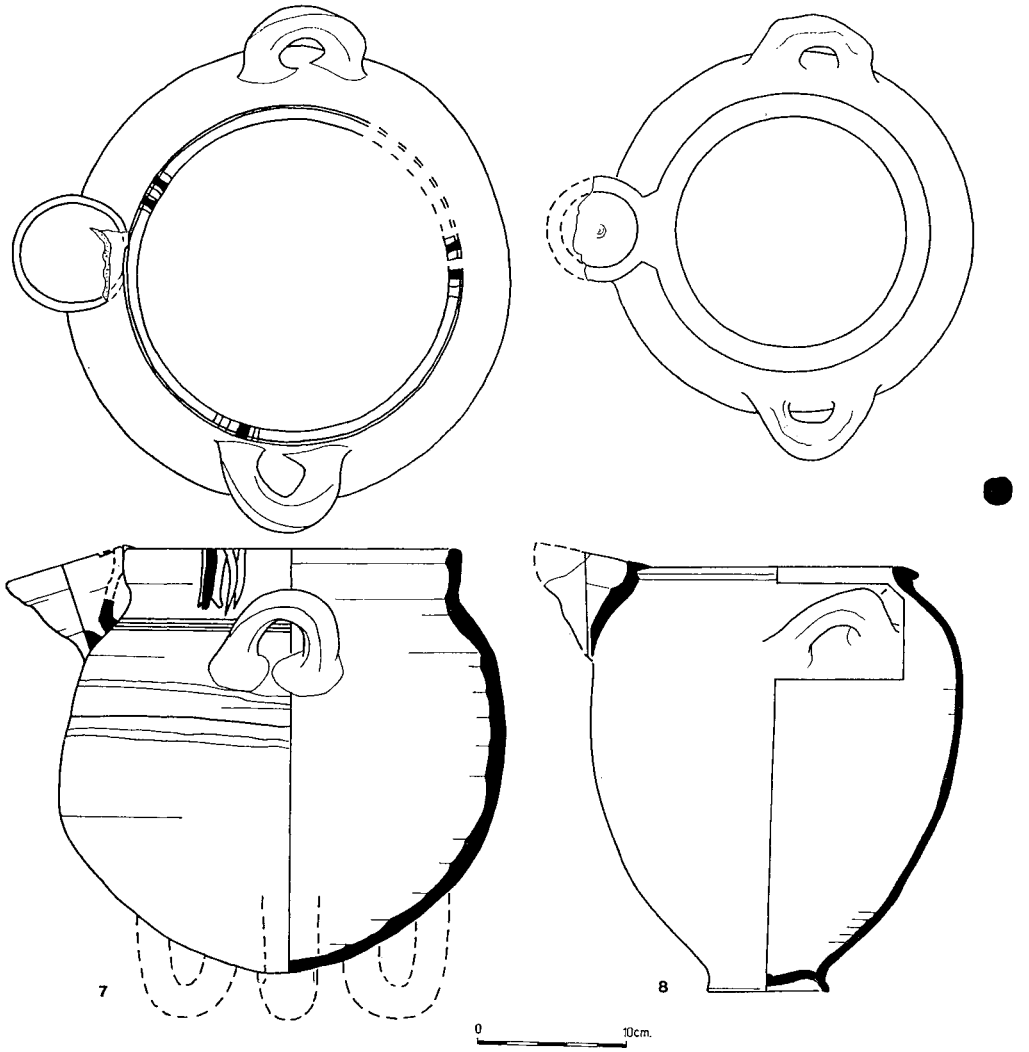

Fig. 6. Group of vessels with 'coastal' characteristics.

FIGURE 6. VESSELS WITH 'COASTAL' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
7.	Krater	430	3420/1	7223/1	Loess	N. Negev/S. Shephelah
8.	Krater	282	2085/1	16037/1	Loess	N. Negev/S. Shephelah

Gabriella Bachi (1973) analysed some of the closed-mouth krater types excavated at Beersheba and it seems that her conclusions are applicable to the entire group. However not all kraters had already been restored or even excavated upon publication and thus are not included in the article. Following an analysis of the finds, Bachi concludes the vessels were manufactured in Beersheba. She thinks that the Beersheba potter was influenced by vessels made in the southern coastal plain. Therefore he fashioned vessels combining coastal elements (the general concept of the vessel) with Judean elements (spout, holemouth rim, loop handles serving as a base, the absence of both decoration and burnish), and thus created new and unique forms.

In an attempt to refute these conclusions, Shulamit Geva (1985) claims that the Beersheba vessels were influenced by Greek pottery. In her opinion, the potter, or whoever guided the potter or described to him the originals upon which these finds were based, had envisioned Greek vessels and attempted to imitate their general form (*ibid.*:233). Obviously, there is no need for her to look for nearer, similar comparisons. Moreover, Geva thinks the vessels were manufactured under direct Greek influence rather than through 'middlemen' - such as Phoenician or Ashdodean-Philistine influences. She founds this claim on the typological variety of the Phoenician and Philistine-Ashdodean pottery: the horizontal loop handles are not a characteristic feature, and the vessels are distinguished by other typological elements such as red burnish, striped decoration, the addition of decorative knobs, etc. Had contacts been mediated through middlemen, it is unlikely that such middlemen would have left any mark of their own on the pottery (*ibid.*:235–236).

The claim that the decorations on the Ashdod vessels should have found some expression on the Beersheba pottery makes no sense, whereas the absence of Greek decorations at Beersheba apparently raises no questions. It seems that Geva overlooks several problems that her theory generates. First, assemblages attributed to the 8th century B.C.E., in coastal plain sites both in Palestine (Bachi 1973; Hestrin and Dayagi-Mendels 1983:56) and the Syrian-Lebanese coast (Seeden 1991) include analogies to some of the pottery vessels, whereas the East Greek influence is later in date. Secondly, a spout attached to the rim is a common element in 8th century vessels, and nearly non-existent in the 7th century B.C.E. Finally, bilateral contacts with the southern Shephelah are also seen in other pottery groups. So, treating the closed-mouth kraters as one more group related to the interactions between the Beersheba Valley and the coast would seem to be natural and logical, whereas no other finds display an East Greek contact.

14. A small bowl, carinated at the top third of the body, with an everted rim, and a disc-base. It is unslipped and in most cases wheel-burnished on the inside. 16 such bowls were found (7.8% of the total number of bowls). This type predominates Ashdod Stratum VIII (Bachi 1971: Fig. 39:2–7, 9).

15. A jug with a wide neck, inverted rim and a ring-base. The handle is drawn from the rim to the side of the vessel. A similar group of jugs was found in Ashdod Stratum VIII (Bachi 1971: Fig. 45:23–24, 28–29), although the body in the Ashdod group is more sack-like, unlike the globular body in the Beersheba group. These jugs are "a typical product of the Ashdod potters, and differing mainly in the shape of the rim" (Bachi 1971:102). They are also found towards the end of the Iron Age, in coastal sites such as Tel Batash Stratum II (A. Mazar 1985: Fig. 10:2) and Ekron (Gitin 1995: Fig. 4.5:8).

Figure 8

16. A large, plump jug with a wide neck, a handle drawn from the thickened rim to the shoulder, and a ring-base. There is a total of three such jugs. This type of jug was found mainly at coastal sites such as Ashdod Stratum VIII (Bachi 1971: Figs. 42:1–2; 46:1; 51:1–2; Dothan and Porat 1982: Fig. 15:2), at cremation burials in Ruqeish (Culican 1973: Figs. 1:R6; 2:R10) and is hardly known at Judean sites (for further comparisons see Ayalon 1995:166–167; Figs. 14:1; 15).

17. A large jug with a globular body, a wide neck, a pair of handles drawn from the rim to the shoulder and a disc-base. Only one such jug was found. This jug is similar to the well-known jugs from Ruqeish, although in the Beersheba variant the neck tapers towards the rim, whereas at Ruqeish the neck is usually straight and the rim is different in shape. At Ruqeish, these vessels are usually decorated or burnished (Culican 1973: Fig. 2:R7). A similar jug was found in Tell Beit Mirsim Stratum A (Albright 1943: Pl. 56:15–17).

FIGURE 7. VESSELS WITH 'COASTAL' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
9.	Krater	458	3716/2			
10.	Krater	282	2053/3			
11.	Krater	311	2431/1			
12.	Krater	222	1255/1			
13.	Krater	48	1643/1			
14.	Bowl	383	4046/2	14056/4	*Terra rosa*	Judea
15.	Jug	1004	14107/4	14107/4	*Terra rosa* + Sand	Shephelah
				11647/2	*Terra rosa* + Sand	Shephelah

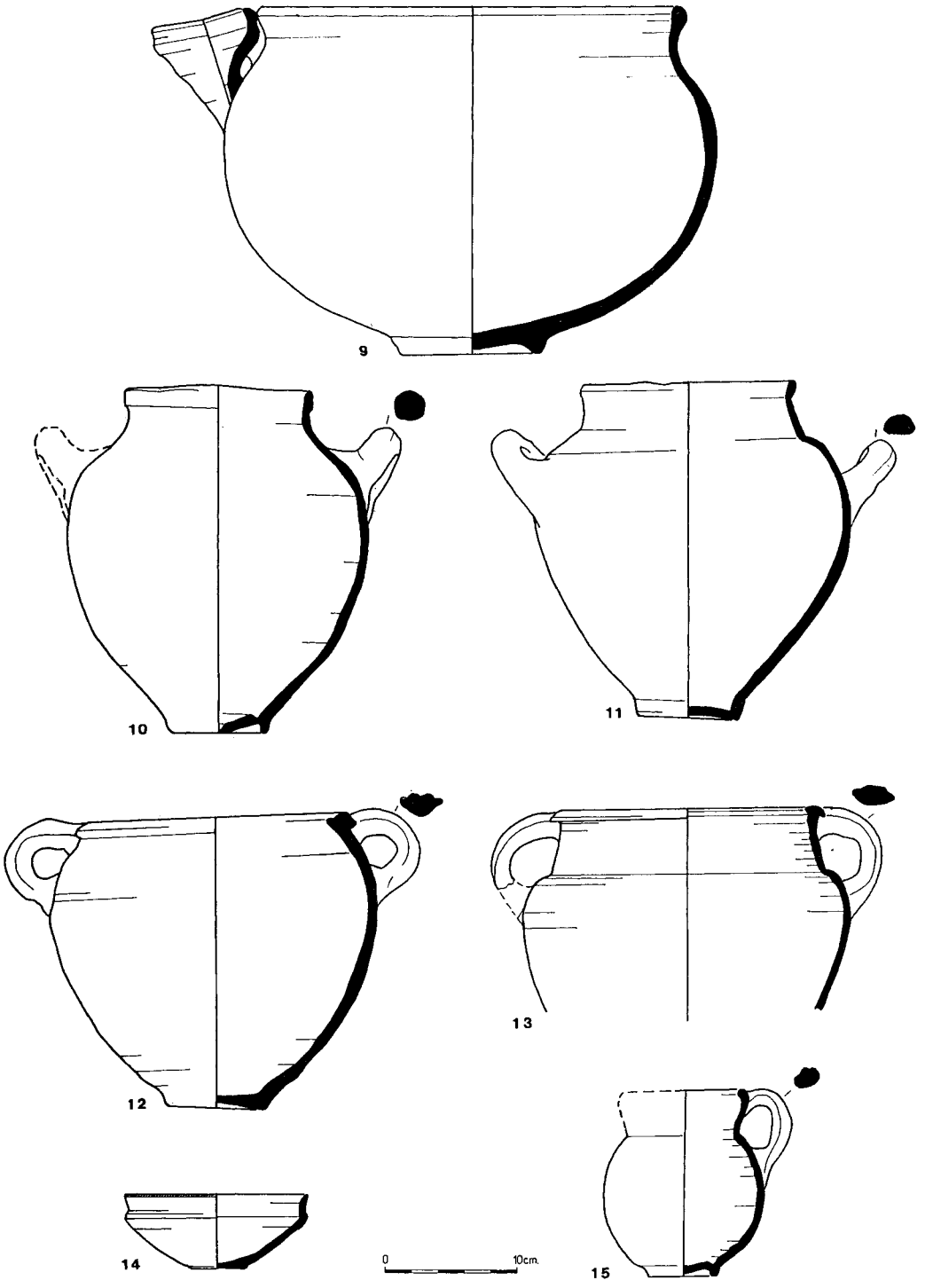

Fig. 7. Group of vessels with 'coastal' characteristics.

18. A globular juglet with a rounded base, a wide neck, and a handle drawn from rim to shoulder. Four such juglets were found - one red-slipped, and the remaining three burnished vertically. One of the burnished vessels is equipped with a raised handle. Juglets with raised handles are common to Ashdod Stratum VIII (Bachi 1971: Figs. 41:14–17; 50:10–11).

19–20. Juglets with one or two handles, always drawn from a ridge in the middle of the neck. These seem to be thicker, coarser imitations of the 'Red-on-Black' group of juglets. The surface treatment varies: although occasionally decorated, in some cases the juglets are left plain and are merely burnished. One such juglet is red-slipped and wheel-burnished. A total of 11 juglets were found. This type of juglet is common to the southern coastal plain, Transjordan and sites in the Egyptian Delta (Culican 1973:87–88).

21. A storage jar with a plump upper body tapering gradually towards the truncated base, a short neck and usually a simple rim. The shoulder is rounded and a pair of loop handles is drawn from the shoulder carination to the sides. This is one of the commonest types of storage jars in Beersheba (32 vessels) comprising 23.3% of the entire jar assemblage (numbering a total of 137, excluding the cylindrical holemouth jars.)

A large number of the storage jars bear various incisions: In two cases both handles bear the symbols  ,  ,  . In one case one handle is incised  . In three cases the jar's body bears an incision (two- , one-). One jar bears a *lmlk* incised inscription.

Two jars have a small hole place near the base. The jars may have been placed higher (perhaps on a shelf), with the hole serving to draw their liquid content (oil, water or wine). The hole at the lower part of the vessel (that could be stopped or plugged) made access easier. The base of a jar found in Kuntillet ʿAjrud had a hole near the bottom with the original plug - a wooden stick wrapped in a small piece of fabric - still preserved in it (Ayalon 1995: Figs. 23:6; 24).

FIGURE 8. VESSELS WITH 'COASTAL' CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
16.	Jug	283	2312/8			
17.	Jug	75	1592/1			
18.	Juglet	48	1584/1			
19.	Juglet	443	5813/2	5813/2	Loess	N. Negev
20.	Juglet	1504	13607/1	13607/1	*Terra rosa*	Judea
21.	Storage Jar		2088/1			
22.	Storage Jar	311	1195/1			
23.	Storage Jar	25	173/1			

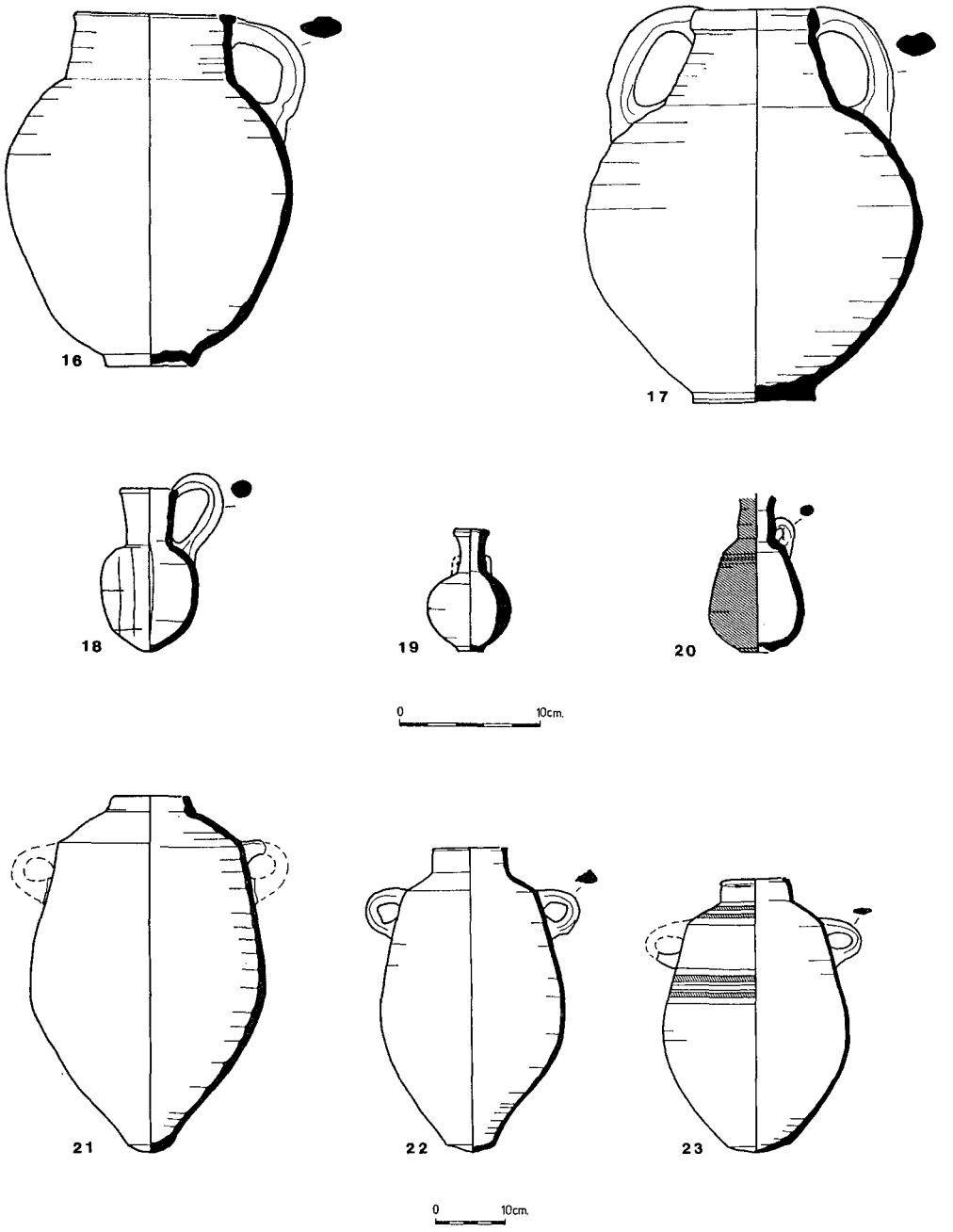

Fig. 8. Group of vessels with 'coastal' characteristics.

When the distribution of this type of jar was examined, it was found to be rare at sites like Lachish, Tell Beit Mirsim and Arad, but quite common in sites of the northern and western Negev as well as the southern coastal plain (Zimhoni 1990:27–29; Group IIIE).

22. A storage jar, similar in body shape to No. 21, although smaller and equipped with a taller neck. Relatively few such vessels were found (3 only). The shoulder of one of these jars bears the incised letter "s". A similar jar was found in Ashdod Stratum VIII (Bachi 1971: Fig. 43:7).

23. A storage jar, similar in body shape to No. 21, although smaller, with a less emphasized and more rounded base. In most cases (4 out of 5) the jar bears red and white or red, white and black decorations.

Places of Manufacture

Thirteen vessels belonging to the "coastal" assemblage were submitted for petrographic analysis. These can be divided by ware into two main groups:

1. Vessels made of the local clay - loess soil.

2. Vessels made of *terra rosa*, the type of soil found in the Judean hills or foothills.

One should note that in some cases, the same type of vessel was made from different types of clay (*terra rosa* and loess). Four closed-mouth kraters were tested: three were made of *terra rosa* and one of loess. Of the four small carinated bowls analysed (Fig. 7:14), two were made of *terra rosa* and two of loess. Of the two 'Red-on-Black' imitation juglets analysed (Fig. 8:19–20), one was made of *terra rosa* and one of loess. Both storage jars tested (Fig. 8:21) were made of *terra rosa*. These results attest again to the importance of quantitative analyses and samplings of each type to provide a better answer to the question of the origin of the vessels.

Vessels with Edomite and Assyrian Characteristics (Figs. 9–10)

Iron Age pottery in southern Jordan, particularly painted pottery, was first described by Nelson Glueck in the 30's (Glueck 1935). Several decades later, large pottery assemblages were discovered in excavations held at Buseirah (Bennett 1973, 1974, 1975, 1977, 1983), Tawilan (Bennett and Bienkowski 1995), Umm el-Biyara (Bennett 1966; Bienkowski 1990) and Tel el-Kheleifeh (for full bibliography see Pratico 1993). Several other sites were excavated in recent years besides these four main sites. However, since only very little of the pottery found was ever published, they cannot be included in this discussion (Lindner and Farajat 1987; Hart 1988; 1992; Lindner, *et al.* 1990; Lindner 1992; Zeitler 1992; Lapp 1994).

The first to carry out a detailed ceramic analysis of the Edomite pottery was Marion Oakeshott, during excavations at Buseirah (Oakeshott 1978). Based solely on the ceramic evidence, Oakeshott identified three phases. According to her, the pottery at the site is homogenous and most ceramic types are known throughout the Iron Age. Certain types which appeared in limited quantities she classified as "key types" and by checking their relative quantities in each phase created a developmental sequence (*ibid.*:77–79). Oakeshott determined the Buseirah assemblage to be almost identical to that of Tawilan. Having noticed a difference between the Umm el-Biyara assemblage and that of Buseirah and Tawilan, she concluded that the settlement at Umm el-Biyara was contemporary to the later phase at Buseirah and Tawilan (Oakeshott 1983:60–61).

Eilat Mazar (1985) tried to reassign new phases to the settlement at Buseirah. Referring to Oakeshott's "settlement phases" at Buseirah (Oakeshott 1978:77–79), which are based not on stratigraphy but rather on pottery analysis, Mazar defined six strata in the site. Gary Pratico (1993:71), who published the results of Nelson Glueck's excavations at Tel el-Kheleifeh and discussed the rich ceramic finds, found it impossible to tie in the ceramic findings with the two phases of the fort. Recently, Stephen Hart (1995b) tried to produce both a relative and an absolute chronological sequence of Edomite pottery. From the absence of decorated Edomite pottery at the early phases of Buseirah Area D (where the three phases supply a rare example of ceramic sequence), Hart concluded that Umm el-Biyara where the decorated pottery is also absent, belongs to the early phase in the Edomite settlement sequence. Since Umm el-Biyara is dated by a seal impression of Qos-Gabr, known from Assyrian texts dated to 670 B.C.E., the later phases in Buseirah, Ghrareh and Tawilan should be postdated to 670 B.C.E. in his opinion.

Bienkowski (1995d:52–53) objects to Hart's suggestion, claiming that the pottery assemblage in Area D at Buseirah is too small to permit such distinctions. He suggests that the absence of decorated pottery may have been the result of Umm el-Biyara's location, on a nearly-inaccessible mountain top. Decorated pottery is absent from other 'mountain top' sites in the Petra region, such as es-Sadeh and Ba'ja III (Zeitler 1992).[11]

Despite detailed studies, we still have no solid relative sequence of Edomite pottery (Bienkowski 1995c:102). There are several reasons for this. First of all, not one Iron Age excavation in Edom contained a full sequence of strata encompassing the entire Iron Age. Due to limitations stemming from excavation, recording and registry methods, as well as the time that had elapsed between excavation and publication, it is nearly impossible to connect the finds to the stratigraphy.

[11] For a possible explanation of the unusual location of these sites, and what enemy they were trying to defend themselves against, see Knauf 1992:52.

Any discussions of the ceramic finds has to be carried out on strictly typological grounds, without any stratigraphic reference or attempts to attribute finds to the various strata in the towns excavated (Oakeshott 1978:77; Pratico 1993:13–15; Bienkowski 1995a:16–17; Hart 1995a:53). Lastly, this region was not destroyed as a result of the Assyrian kings' campaigns, so it is extremely difficult to differentiate between the various settlement phases and date them. Therefore, any dates given for the sites' existence are general, ranging between the 8th and 6th centuries B.C.E.

Only some of the vessels in the eastern Transjordan ceramic assemblage may be defined as local and devoid of foreign influence. It is these unique vessels that give the entire group its name, 'Edomite pottery', and it includes cooking pots, flowerpot-shaped bowls, the thin 'Assyrian' bowls (which, despite their foreign origins, were assigned to the local assemblage due to their high incidence - Dornemann 1983:175) and the painted and decorated pottery (which Bienkowski suggested should be named "Buseirah painted ware" - Bienkowski 1995b:139). Other vessels resemble those of western Palestine, and sometimes seem to be a local variation on types well known in both Israel (mainly Samaria) and Judea (Oakeshott 1978:158–165; 1983:62; E. Mazar 1985:256; Pratico 1993:50). Interestingly enough, Edomite architecture also displays a resemblance to that across the Jordan (Bienkowski 1995b).

Other vessel types display a marked Assyrian influence: by this we refer mainly to the thin bowls called 'Assyrian palace ware', carinated bowls, goblets and bottles. These foreign influences were detected by all who studied this pottery, and all stressed the fact that the vessels were locally made, rather than imported (Bennett 1978; 1982:187; Oakeshott 1978:167–178; Dornemann 1983:175; Pratico 1993:41–43). Assyrian influence was also seen in architecture (structures A and B in Buseirah Area A, and the structure in Area C) and in art (Bennett 1978; 1982; Bienkowski 1995b; 1995d:58).[12]

Our acquaintance with Assyrian pottery is limited, since within Assyria itself, in comparison with the rich findings of the Neo-Assyrian period, pottery was deemed unimportant and unworthy of much study. The assemblages available for the study of this type of pottery include mainly those of the excavations at Nimrud (the acropolis and the Shalmaneser fort). What few vessels were published come from a stratum ending in destruction and dated to the years 666–612 B.C.E., and the squatters' settlement that lasted for the following 50 years (Oates 1959). However,

[12] The eclectic nature of the Edomite material culture, as reflected in architecture, art and pottery, draws on Judean, Israelite, Assyrian and Arabian sources (Beck 1996:112). The foreign components within the Edomite material culture are prominent enough to have earned it the title "imported culture" (Knauf 1992:53). Interestingly enough, even the name of the principal Edomite deity, Qos, is derived from Arabic (Bartlett 1989:201–202; Dicou 1994:177).

many of these vessel types are already known from the 8th century B.C.E. (Lines 1954:164; Rawson 1954:172). The salvage excavations held in recent years at several sites during the construction of the Saddam Dam (located on the Tigris River, some 25 miles northwest of Mossul), resulted in the publication of additional assemblages, including some that are dated to the 8th century B.C.E. (Curtis 1989; 1992).

In both Assyria and Edom, our ability to define the typological-chronological changes occurring in the pottery assemblages during the 8th and 7th centuries B.C.E. is extremely limited. In contemporary Israel and Judea, the strata at the sites, as well as the finds, can be dated with relative accuracy so that here one must rely on datings from sites in Palestine.

The assemblage shown in Figs. 9–10 comprises vessels that are uncommon to Beersheba, all displaying Transjordanian and/or Assyrian influence. In part, they are made of brown-colored clay resembling the clay used to manufacture the other Judean vessels whereas others are made of a very pale clay, whitish-greenish in color, that resembles in particular the Assyrian/Edomite bowls. The decorated vessels, so typical of Edomite pottery, were not found in Beersheba. Based on a typological analysis of Edomite assemblages, Eilat Mazar (1985:261) concludes that these vessels belong to the last developmental stage of this group. The excavations in Aroer bear out her conclusions. Stratum II in Aroer has two phases, dated to the 7th century B.C.E., with the decorated pottery found only during the last phase of Stratum II (Biran 1993:91). The assemblage uncovered at Beersheba matches the earlier stage in the development of Edomite pottery during which the vessels are left undecorated.

Since this group is smaller than the previous groups discussed, the discussion includes all vessels found in all excavated areas at Beersheba and is not limited only to the areas defined at the beginning of our discussion.

Figure 9

1–4. Small globular bowls with everted rims. Three are red-slipped. This type of bowl is common to Buseirah where the bowls are made of red or white clay and are almost always decorated with red, brown or black painted circles (Oakeshott 1978:42, 160, Pl. 15:7–9, 24–25, 29, 33–34 - Type J1). These bowls are also found at Tell el-Kheleifeh (Pratico 1993:Pls. 27:15–17; 28:1–11) and a small number at Tawilan (Oakeshott 1978:160, Pl. 45:1–2; Hart 1995a: Fig. 6.8:1, 7).

5–8. Globular bowls which are large, deep and have straight necks. In Jordan they were found at all Edomite sites (Oakeshott 1978:161, Pls. 20, 45:21–23 - Type N; Hart 1989: Pl. 10:9–16; 1995a: Fig. 6.10).

9. A deep bowl, carinated, equipped with a straight, outwardly-splayed neck, red-slipped and decorated with black and white bands.

It is common mainly to Buseirah (Oakeshott 1978:161, Pl. 18:3–4 - Type M).

10–12. Carinated bowls, which have an everted rim and display a marked Assyrian influence. These bowls are commonly found at Edomite sites and at Tel ell-Kheleifeh they form the second largest group (Oakeshott 1978:160, Pl. 16:26–27 - Type K; Pratico 1993:41–42, Pls. 25:7–18, 26:1–12, 27:1–11). Bowl No. 11 is red-slipped. The carination bears a serrated decoration incised with a knife. This kind of plastic decoration is very common in the bowl assemblage at both Buseirah and Tell el-Kheleifeh and is found on rim and carination alike (Oakeshott 1978:67; 1983:59–60; Pratico 1993: Pl. 37:1–7).

FIGURE 9. VESSELS WITH EDOMITE AND ASSYRIAN CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
1.	Bowl	859	8825/10	8825/10	Taqiye marl	Shephelah
2.	Bowl	850	8826/10	8826/10	Taqiye marl + calcareous sand	Shephelah
3.	Bowl	2406	18697/1	18697/1	*Terra rosa* + sand + straw	Judea or Shephelah
4.	Bowl	856	8835/6	8835/6	*Terra rosa*	Judea
5.	Bowl	1007	14064/1			
6.	Bowl	1007	14070/2			
7.	Bowl	458	3730/2			
8.	Bowl	1231	11604/2	11604/2	Loess	N. Negev
9.	Bowl	630	8508/1			
10.	Bowl	283	2178/1			
11.	Bowl	1449	12264/1	12264/1	Loess	N. Negev/S. Shephelah
12.	Bowl	1062	9808/1			
13.	Bowl	1007	14102/2	14102/2	Loess without temper	N. Negev
14.	Bowl	192	1809/1	1809/1	*Terra rosa*	Judea
15.	Bowl	834	7945/1	7945/1	Loess + Sand	W. Negev
16.	Bowl	3509	20814/2	20814/2	Loess	N. Negev/S. Shephelah
17.	Bowl	3620	21065/1			
18.	Bowl	2720	19723/1	19723/1	Loess	N. Negev/S. Shephelah
19.	Bowl	881	8065/1			
20.	Bowl	614	6055/1			
21.	Bowl	221	1208/8			
22.	Bowl	48	1582/3			

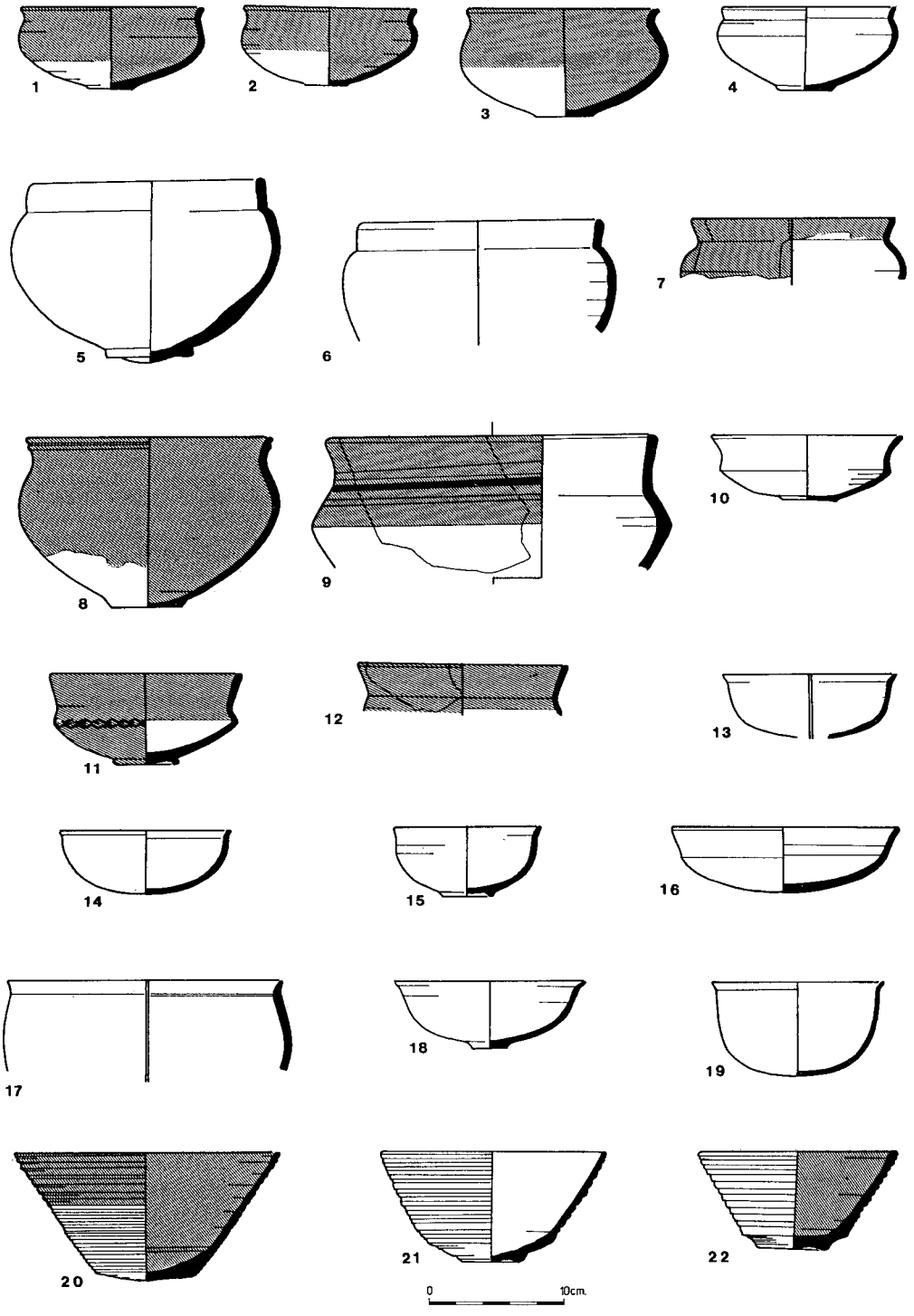

Fig. 9. Group of vessels with Edomite and Assyrian characteristics.

13–18. Thin delicate bowls that are wheel-burnished and have a rounded carination, with an everted rim. All bowls except one (No. 14) were made of whitish-green clay. They resemble bowl type J3c at Buseirah, where this type is also made of light-colored clay (Oakeshott 1978:41, Pl. 15:4, 6, 21–23).

19. This bowl resembles the previous examples, except for the slight outward slope of the sides. At Buseirah this type was defined as type J3a (Oakeshott 1978:41, Pl. 16:12).

20–22. Bowls with straight sides, grooved on the outside. Of the three bowls found, two are red-slipped on the inside and wheel-burnished, while the third was left unslipped, and was merely burnished. Similar bowls found at Buseirah are decorated with horizontal painted lines. Some of these bowls also have three knobs attached to the base, and some have a flat base and no knobs (Oakeshott 1978:161, Pl. 16:24, 28 - Type O). The grooves on the Beersheba samples may be an attempt to imitate the painted decoration at Buseirah.

Figure 10

23. A one-handled cup with a rounded base and an everted rim. It is extremely common at Buseirah and all other Transjordanian sites. Oakeshott notes that no such vessels were found in Palestine (Oakeshott 1978:160, Pls. 17:2–5, 11–14, 20–21, 23–28; 45:12–17 - Type L). Eilat Mazar's examination of Buseirah suggest that the cup is only found in one of the earlier phases (Mazar's Stratum 4) and is absent in Strata 1–3 (E. Mazar 1985:259). A large group was also found at Ghrareh, Tel el-Kheleifeh and Tawilan (Hart 1989: Pl. 8; 1995a: Fig. 6.9; Pratico 1993: Pls. 25; 26:1–5).

24. A pilgrim flask that is asymmetrical has one side more convex than the other. The join between the two parts of the vessel is emphasized by a series of grooves along its circumference. The shoulder bears two horizontal handles. Similar flasks were found at Buseirah, Ghrareh and Tell el-Kheleifeh (Oakeshott 1978: Pl. 34:1; Hart 1989: Pl. 25:2; Pratico 1993: Pl. 40).

25–26. Jugs with a narrow neck and a handle that is drawn from neck to shoulder. Jug No. 26 has a spout and a strainer halfway down the thickest part of the body. A similar jug was found at Buseirah and another, provenance unknown, is on display in the Amman Museum (Oakeshott 1978:164, Pl. 38:1). Nothing resembling No. 25, a jug with a strainer at its neck, was found, but the general shape and the light clay it was made of enable us to assign it to the Edomite range of influence.

27–32. Bottles of Assyrian tradition. Bottle No. 27 is made of delicate brown clay and decorated in red and white. Finger pressure was used to shape the bottle's body, lending it a form resembling a pomegranate. This may be an attempt to imitate an Assyrian technique (Rawson 1954) and consequently also

Edomite (Hart 1995a: Pl. 6.8:9–10), and the resulting pomegranate-like shape may be accidental.

One may reasonably assume that the vessels discussed so far, even if some originated in Assyrian pottery, needed Edomite mediation to reach Beersheba. The vessels in Figure 10:33–36 are not found in the 'Edomite' repertoire, and were doubtlessly the result of Assyrian influence.

33. A closed globular bowl with a ring-base, moulded rim and a ridge at the base of the neck. This is one of the commonest vessels in Nimrud (Oates 1959:134, 135, Pl. XXXVIII:93) as well as other excavations in Assyria (Curtis 1989:48, Figs. 32:147; 34:183–184).

34. A flat, open bowl with a very low carination and a flattened, flaring rim. It has very thick sides and is heavily wheel-burnished. Three clay rectangles were attached to the base of the bowl - this might be an attempt to imitate the bowls with three knobs at the base, known from Assyria (Mallowan 1950: Pl. 32:1; Lines 1954: Pl. 38:1; Rawson 1954:171–172, Pl. XLI:2; Oates 1959: Pl. 35:15–16; Curtis 1989:48, Fig. 30:112–115).

35–36. Two small, thick-sided goblets called *istikan*, probably used for drinking. Such vessels were also found at Nimrud, in the Shalmaneser fort and the acropolis (Oates 1959:132–133, Pl. XXXVI:37–49).

Places of Manufacture

In the petrographic analysis carried out on the 'Edomite-Assyrian' ware, all were found to be made of clay originating in Judea. The shapes, and sometimes even the clay's texture and shade, are attempts to imitate the well-known eastern vessels. The analysis of the Edomite vessels found at Ḥorvat Qitmit evokes a similar picture: all the vessels, except the cooking-pots, were manufactured in the vicinity of the site (Gunneweg and Mommsen 1990). The same is true of most of the Assyrian vessels from Tell Keisan, Hazor, Tel Ammal, Samaria, Tell el-Farʿah (North) and Tell Jemmeh (Bloom 1988:169–178). The main sources of the clay used to manufacture the Assyrian/Edomite vessels in Beersheba very much resemble the other groups examined. Most of the vessels were made of *terra rosa* or loess, with only a few made of clay originating in the Motza Formation or Taqiye marl. Here, too, in some cases the same vessels were manufactured from different kinds of clay. Two out of the four small, rounded bowls (Fig. 9:3–4), as well as a bowl (Fig. 9:14) closely resembling the group of 'white' loess bowls, a jug with a spout (Fig. 10:26), two bottles (out of the five tested) (Fig. 10:27,30) and an 'Assyrian' *istican* (Fig. 10:36) are among the vessels made of *terra rosa*. The large rounded bowl (Fig. 9:8), the group of 'white' bowls (Fig. 9:13, 15–16, 18) and the 'Assyrian' bowl (Fig. 9:11), a cup (Fig. 10:23) and two bottles (Fig. 10:28–29) are made of loess originating in the northern Negev.

Another bottle tested (Fig. 10:32) was found to be made of clay from the Motza Formation. Two small, rounded bowls (Fig. 9:1–2) were manufactured of Taqiye marl, apparently originating in the Shephelah.

The results of the petrographic analysis are surprising and rather baffling. It was to be expected that the vessels with foreign stylistic features, found in the Beersheba Valley and absent from Judean sites outside the valley, would be made of clay originating in the valley's loess soil. The analysis, however, shows that alongside the vessels made of loess, there are vessels made of clay originating in *terra rosa*, found outside the loess soil regions. Thus the question arises, why aren't the vessels made of *terra rosa* clay found at sites nearer to the origins of the clay? The reason for these vessels' appearance solely in the Beersheba Valley sites may be that the clay used to manufacture them was transported from the *terra rosa* regions to production centers in the Beersheba Valley. Transportation of clay from far-away mining sources is well documented in various ethnographic studies (Nicklin 1979:444–446; Kramer 1985:79). Only an extensive study, that would include a large number of sites and try to locate the Judean potters' manufacturing centres, may supply a more satisfactory answer.

Non-Ceramic Finds

1. A large group of unique ritual finds was unearthed in the debris covering Street 844. Additional ritualistic finds were discovered on the floor of one of the rooms in nearby Building 859 (also called Building 855); and the entire edifice contained a particularly rich pottery assemblage (Singer-Avitz 1996).

FIGURE 10. VESSELS WITH EDOMITE AND ASSYRIAN CHARACTERISTICS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
23.	Cup	630	6273/2	6273/2	Loess + sand	N. Negev
24.	Flask	1004	14157/1			
25.	Jug	1842	16360/1	16360/1	Loess	N. Negev/S. Shephelah
26.	Jug	589	5638/2	5638/2	*Terra rosa*	Judea
27.	Bottle	442	5659/1	5659/1	*Terra rosa*	Judea
28.	Bottle	557	5031/3	5031/3	Loess	N. Negev
29.	Bottle	282	2252/1	2252/1	Loess(?)	N. Negev
30.	Bottle	1220	11251/1	11251/1	*Terra rosa*	Judea
31.	Bottle	881	8072/1			
32.	Bottle	665	6441/2	6441/2	Motza Form.	Judea
33.	Bowl	2004	16627/2			
34.	Bowl	430	3380/1			
35.	*Istican*	1262	16994/1			
36.	*Istican*	38	15839/1	15839/1	*Terra rosa*	Judea

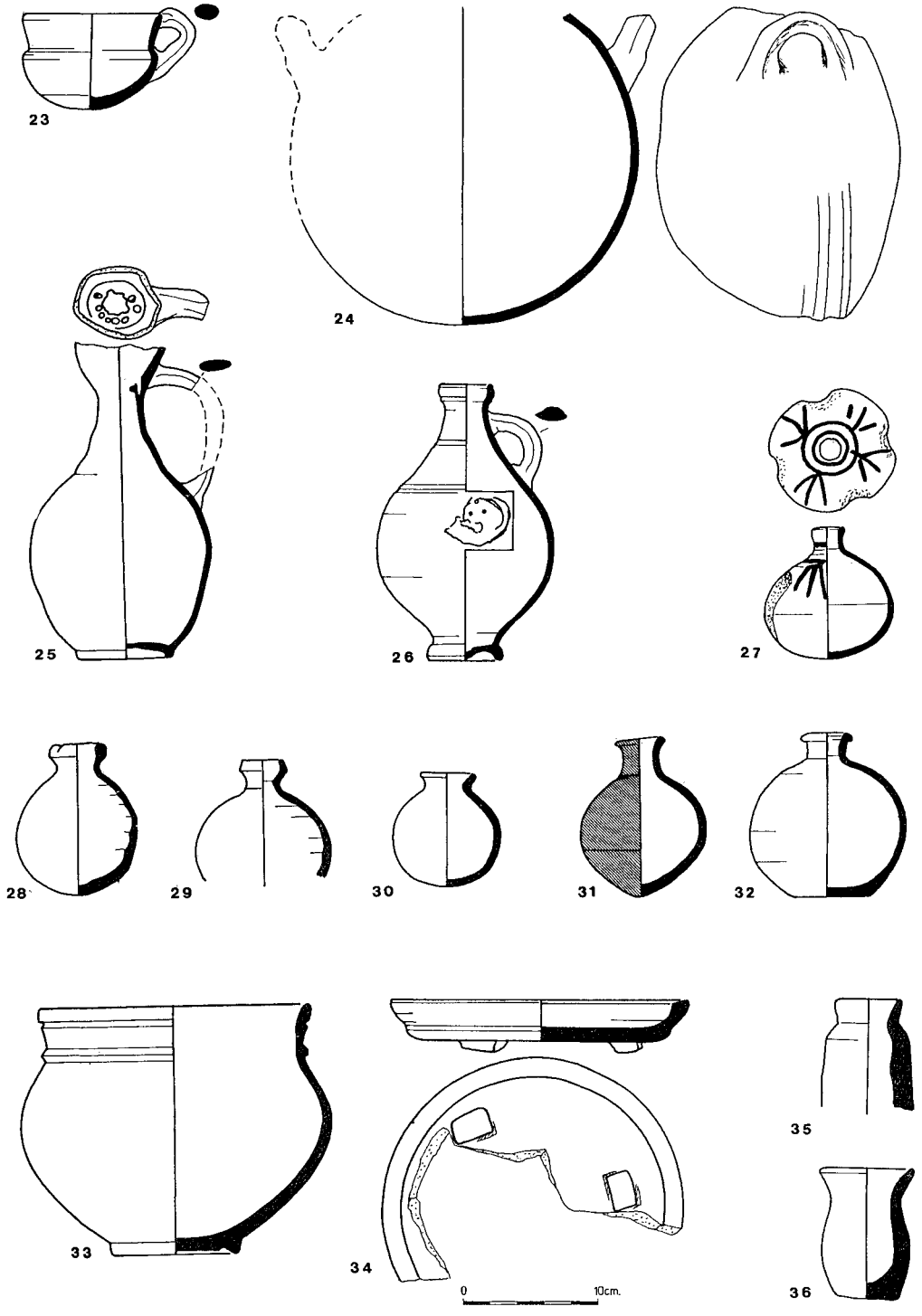

Fig. 10. Group of vessels with Edomite and Assyrian characteristics.

Since a Hellenistic floor was uncovered next to the debris, Aharoni suggested the finds may be dated to this period (Aharoni 1973:16–17). A typological analysis of some of the Egyptian finds, done by Giveon (1973:54–55), is inconclusive in assigning an absolute dating to most. When the Hellenistic temple and the favissae dug near the altar and in the vicinity of the temple were found, Aharoni thought that most of the ceremonial finds originated in these favissae. In his opinion, the majority of these finds predate the temple although they are later than the Iron Age (Aharoni 1975:164–165).

As previously stated, most of the ceremonial finds were uncovered among fallen bricks (probably from Building 855/859) on top of the street, without a direct link to any stratigraphic context. Moreover, four Bedouin graves were dug into this square, further disturbing the area. Since Building 855/859 itself contained ceremonial finds (Aharoni 1973:17), it seems reasonable to connect the finds uncovered in the debris to the structure and its content. One of those finds was a chalcedony cylinder seal bearing a cuneiform dedication inscription and a scene of a god being worshipped. The seal was dedicated to Apil-Adad, a god whose central cult was located in the mid-Euphrates region (Beck 1973; Rainey 1973). Beck dated this seal to the end of the 8th century and the 7th century B.C.E. (Beck 1973:59), whereas Ornan (1990:11) chose to date it more narrowly, to the end of the 8th century B.C.E. An iconographic and linguistic analysis shows that the seal was not made in Assyria itself, but was rather a provincial product, possibly originating in the mid-Euphrates region (Beck 1973:59; Rainey 1973:65). Miriam and Haim Tadmor (1995:353–354) think the seal may have originally come from the Apil-Adad temple in the city of Anat in the Suhu province, and fell from around the neck of one of Nebuchadnezzar II's soldiers stationed in Beersheba after the fall of Jerusalem in 586 B.C.E. This explanation for the circumstances of this seal's presence in Beersheba is rather unsatisfactory, since in this particular period the city had long been abandoned, and it is hardly likely that Babylonian troops were stationed there.

The land of Suhu was an important trade center and its relations with the Assyrian kings were fraught with struggles and attempts at subordination and liberation from the reign of Tiglath-pileser I onwards. The local rulers paid tribute to the Assyrian kings throughout the period of the Neo-Assyrian empire. From the second half of the 8th century B.C.E. until its occupation by Nabopolassar king of Babylon, in 631 B.C.E., Suhu was under Assyrian rule (Brinkman 1968:183–184, n. 1127; Russel 1985; Isma'il, *et al.* 1988). Suhu is mentioned in the earliest Assyrian document reporting trade caravans traveling from southern Arabia to Mesopotamia (dated to mid-8th century B.C.E., see p. 4).

A cylinder seal dated to the reign of Sargon II and bearing a proto-Arabic inscription was found in the region (Zadok 1981:65).

An archaeological survey of the middle Euphrates region uncovered remains of settlements (mostly fortresses) dating to the Neo-Assyrian period (Ibrahim 1986:78–80; Abdul-Amir 1997). In the emergency excavations following the erection of the Qadissiyah Dam, several sites were excavated including Bijan (Gawlikowski 1981) (the southernmost city in the land of Suhu, probably called *sabirutu/sapirate* in Assyrian), and the ʿAna fortress (Northedge, *et al.* 1988). Six phases dating to the Neo-Assyrian period were excavated in ʿAna (Anat), one of the central cities of Suhu. According to the written documents found at the site, these phases may be dated to the 9th and 8th centuries B.C.E. (Killick 1988:57).

Ornan (1990:141) has shown that the appearance of Neo-Assyrian seals, discovered in Israel and Transjordan at sites dating to the last quarter of the 8th century B.C.E., may be linked with the Assyrian conquest. Even without a direct Assyrian presence in Beersheba, one may still assume the seal's presence there to be the result of indirect contacts with Assyria, in much the same manner that cultural influences detected mainly in pottery and stone altars (see below) made their way into the region.

2. Stratum II contained seven small, cuboid limestone altars. Each has four legs and a top with a roughly square hollow containing traces of soot (see Figs. 11–12).[13] Four of the altars bear incised decorations (Figs. 11:1–2; 12:5,7). One has circles drilled into its rim (Fig. 12:6) and the remaining two are plain (Fig. 12:3–4). Similar altars are known from other sites in Israel, Mesopotamia and the Arabian peninsula (for references see Stern 1982:182–195; Shea 1983; Zwickel 1990). In Palestine they are prevalent mainly during the Persian period, but are already in existence by the end of the Iron Age (Stern 1973). In the Arabian peninsula they presumably first appear in the 7th century B.C.E. (Rashid 1974:165; Zwickel 1990:70, n. 60). In Mesopotamia they are made of clay, were found mainly in Babylon (only one such altar was reported in Ashur) and date to the Assyrian, Babylonian and Persian periods (Ziegler 1942; Shea 1983). Their origin has still not been pinpointed.

FIGURE 11. LIMESTONE ALTARS

No.	*Type*	*Locus*	*Basket No.*
1.	Altar	518	4717/50
2.	Altar	2242	18121/50

[13] Another legless altar was discovered in Stratum III.

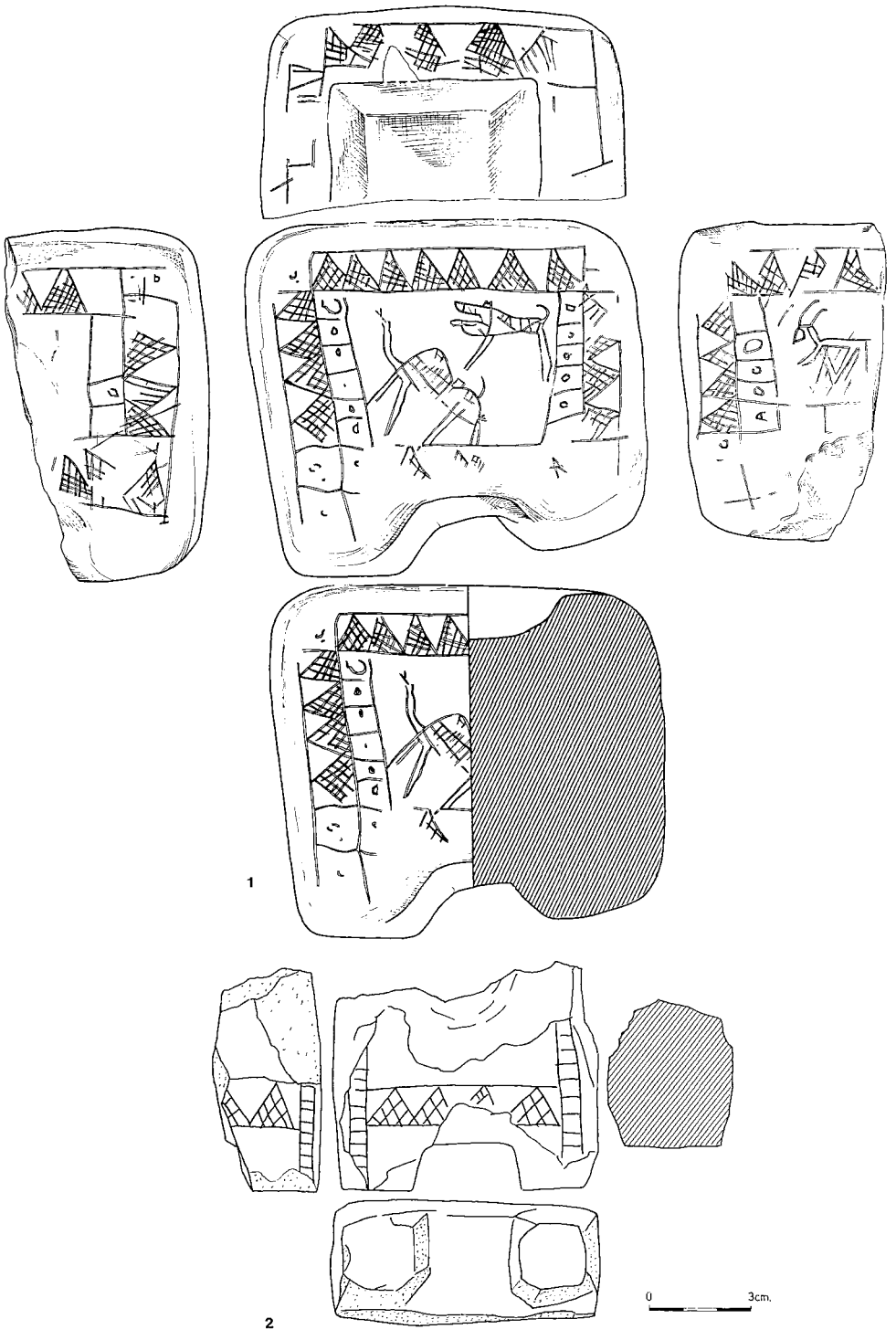

Fig. 11. Limestone altars.

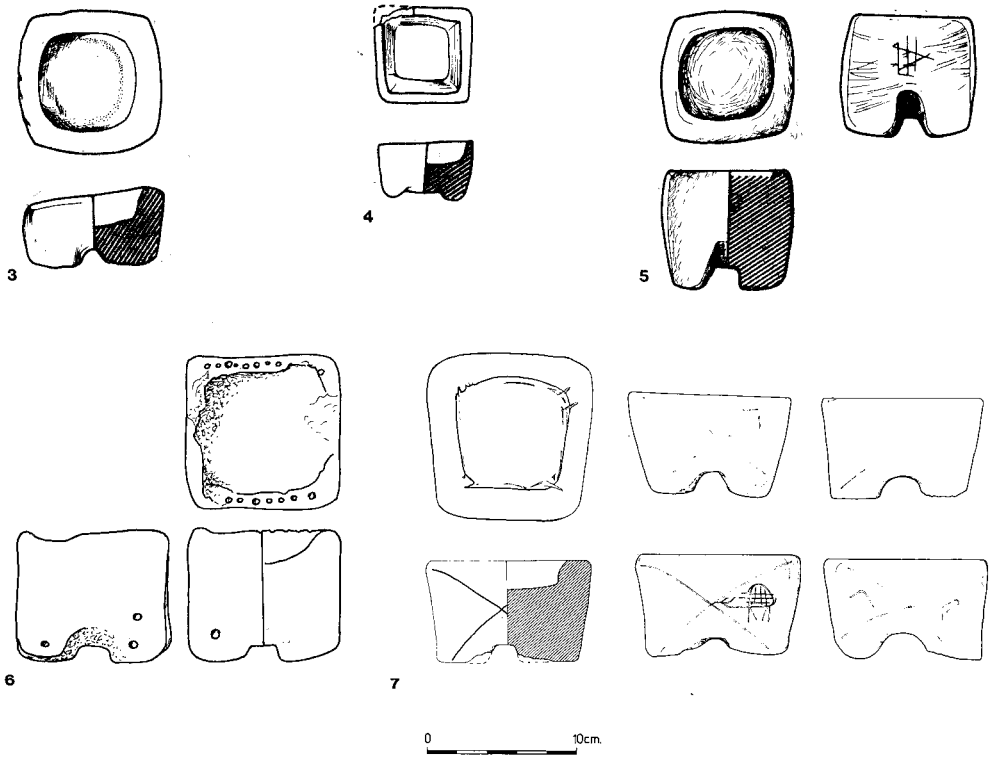

Fig. 12. Limestone altars.

FIGURE 12. LIMESTONE ALTARS

No.	*Type*	*Locus*	*Basket No.*
3.	Altar	442	3405/50
4.	Altar	442	3413/50
5.	Altar	866	8896/50
6.	Altar	1441	12240/50
7.	Altar	809	7541/50

In Albright's opinion (1945:28; 1953), the altars found in Palestine were of southern Arabian origin, attesting to commercial connections between the two. Petrie (1928:18–19), on the other hand, thought they were Assyrian, a view adopted by Glueck (1971:122) and Stern (1982). In the latter's opinion, these altars, although originally Mesopotamian, were manufactured locally, in Phoenician workshops.

The excavations at Emar, on the middle Euphrates, shed new light on the subject. At the site, whose settlement ended at the beginning of the 12th century B.C.E. and was not resumed until the Roman period, more than forty cuboid altars were uncovered in the fill underneath the structures. In the excavators' view, these fills predate the known settlement, dating to the 14th–13th centuries B.C.E., and should be attributed to an earlier period, of which no settlement remains were discovered (Margueron 1982; 1995; Millard 1984). At Tel Kannas, some 14 miles north of Emar, the excavation brought to light additional altars dated to the end of the 3rd millennium B.C.E., and others dated to the renewed settlement at the beginning of the second millennium B.C.E. (Finet 1982:123). These discoveries suggest a gap in time when such altars are unknown, although Millard thinks that this is not an unusual phenomenon in archaeology (Millard 1984:173). Despite the problems, one cannot ignore the possibility that the altars' existence as early as the second millennium B.C.E. may suggest a Mesopotamian origin - perhaps in the middle Euphrates region.

3. A *Tridacna squamosa* shell was found in the western quarter. Such shells come from the Red Sea, and many specimens, some plain and others incised, were uncovered at Tawilan, Buseirah, Umm el-Biyara and various other sites throughout the ancient Near East (Brandl 1984a; 1984b; Reese 1988; 1995:93). In eastern Transjordan, such shells have been uncovered at sites ranging from the Neolithic period until modern times (Poplin et Caubet 1995:492–493).

The Egyptian Finds (Fig. 13)

When some of the Egyptian vessels were submitted for petrographic analysis, they were found to be Egyptian imports.[14]

FIGURE 13. EGYPTIAN FINDS

No.	*Type*	*Locus*	*Basket No.*	*Analysis No.*	*Clay*	*Origin*
1.	Bowl	43	1582/1		Nile silt	Egypt
2.	Bowl	184	778/2		Nile silt	Egypt
3.	Storage Jar	1466	12304/2		Nile silt	Egypt
4.	*Nephtis* Inscr.	812	7579/1		Nile silt	Egypt
5.	Hathor Figurine	559	5063/1		Loess	N. Negev
6.	Ear-Stud	1178	10960/40		Ivory	
7.	Pendant	1229	10111/80		Faience	
8.	Figurine	666	6560/80		Faience	

[14] Deborah Sweeney will publish elsewhere a detailed discussion of the non-ceramic finds.

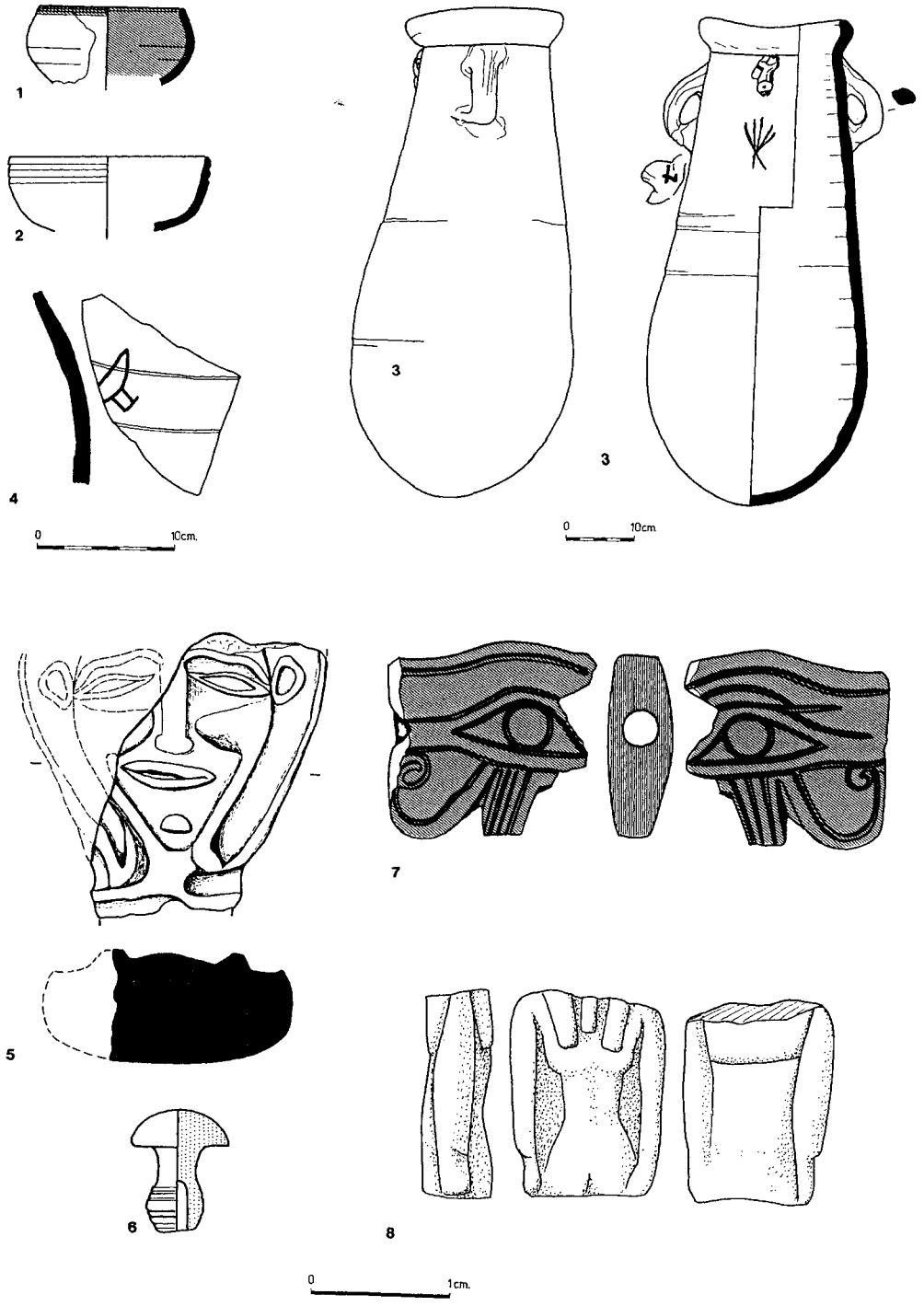

Fig. 13. Group of Egyptian finds.

Figure 13

1–2. Small, rounded bowls with two grooves underneath their rims. The reddish-brown clay is Nile clay, originating in Egypt.

3. A two-handled storage jar with a sack-like body and a thickened rim. A strangely-shaped piece of clay was stuck between the handles, above an incised decoration. The storage jar was made of red clay, also analysed as Egyptian Nilotic clay. Similar storage jars were found in Lachish Level III (Tufnell 1953: Pl. 96:497) and Tell el-Far'ah (South) (Duncan 1930:47W). A similar jar (with no plastic decoration) was found at Abydos, where it was dated to Dynasties XXII–XXVI (Kelley 1976: Pl. 83.2:60).

4. A body sherd from a storage jar, which must have been extremely large judging by its thickness (15 mm.). Prior to firing, the jar was incised with an Egyptian hieroglyph, which Orly Goldwasser read as *Nephtis*. The petrographic analysis defined the clay as Nilotic, originating in Egypt.

5. The head of a mould-made figurine depicting the goddess Hathor. The clay is red, well-levigated and originated in loess according to the petrographic analysis. So despite its foreign style, the figurine was obviously made locally.

6. A mushroom-shaped object of ivory. In Egypt, such objects are known from the El-Amarna period onwards, and were used as ear-studs (Aldred 1971:210, Pl. 68).

7. A faience "Eye of Horus" pendant, drilled crosswise, and painted brown on both sides.

8. A piece of a body of a faience figurine. The shaping of the body and the hairdo leave no doubt as to the Egyptian origin of this object. It is a common motif in Iron Age amulets in Palestine (Keel and Uehlinger 1995:294 esp. n. 268).

The Arabian peninsula

In the past two centuries numerous European travelers have visited the ancient monuments of the Arabian peninsula and recorded their impressions for posterity. Despite these reports and despite the excavations held in the region (for references see Bowen and Albright 1958; Doe 1971; Potts 1990), the archaeological research in this part of the world is still in its infancy. For the most part, the systematic study of the region has been carried out in the last two decades, beginning in 1976, with a comprehensive archaeological survey of Saudi Arabia, in which thousands of sites were recorded (Adams, *et al.* 1977; Abu-Duruk 1995). An extensive study of Oman and Yemen was initiated roughly at the same time (Blakely and Sauer 1985; Sauer and Blakely 1988; Costa 1989).

Notwithstanding the rich archaeological and epigraphic finds in the peninsula, archaeologists have been unable to arrive at a uniform chronology. Most of the pre-Islamic epigraphic finds are located either on large building stones which have been dismantled from their original location and incorporated into later buildings, both locally and outside the sites themselves, or in rock-graffiti in the vicinity of the sites. Since the inscriptions cannot be linked stratigraphically to the sites, they cannot be used for dating purposes.

Studies, surveys and excavations carried out in the northwestern part of the peninsula revealed sites dating to the late second millennium and first half of the first millennium B.C.E. Consequently, the contacts between southern Jordan and Arabia became clearer. Researchers focused on the painted pottery found at al-Ula, probably related to the painted Edomite pottery of the end of the Iron Age (Parr 1982:132–133; 1992:43), and the painted pottery of Qurrayyah, Teima' and other northern Hijjazi sites dating to the end of the second millennium. This type of pottery is also known at sites in the Aravah and the Negev ('Midianite' pottery) (Dayton 1970b; Parr, *et al.* 1970; 1972; Ingraham, *et al.* 1981:59; Parr 1982; 1993; 1996; Rothenberg and Glass 1983; Bawden and Edens 1988). Parr (1987:65) is of the opinion that there were no permanent settlements in the central regions of northern Arabia between the two periods. However, more recent excavations seem to indicate continuous settlement, and suggest the area was indeed settled during the first half of the first millennium B.C.E. (Bawden and Edens 1988; Edens and Bawden 1989; Bawden 1992).

Researchers studying the peninsula are divided as to the date of the beginning of pre-Islamic Arab culture. Should it be dated towards the end of the second millennium B.C.E., or rather towards the middle of the first millennium B.C.E. (for a synopsis of the various opinions see Pirenne 1987–1988). The data from finds coming to light in recently-held excavations seem to support the earlier dating (Blakely and Sauer 1985; Sauer and Blakely 1988; de Maigret and Robin 1989).

One of the problems involved in the archaeological study of the Arabian peninsula is that the various geographical regions have been studied separately, with hardly any attempts to determine the nature of the relations between one region and the next. Dayton (1984:370–371) pointed out that the painted pottery of the Hijjaz region (Midianite and Edomite) may be found at other sites along the Persian Gulf. So far this study is one of very few dealing with this issue. The contacts between the Hijjaz region, Edom and the Negev find their expression in the painted pottery dating to the beginning and the end of the Iron Age. This region, in the northwestern part of the peninsula, also displays marked contacts with Assyria, detected in both the ceramic finds and the *objects d'Art* (Rashid 1974; 1980; Edens and Bawden 1989:57; Potts 1991:12).

Northern influences can also be observed in the southern part of the peninsula in art (Segal 1956; 1957; Mallowan 1966; Turner 1973; Yule and Kervan 1993:93), architectural style (Van Beek 1958) and the adoption of writing (Sass 1991:86–90). Several archaeologists (Segal 1956; Orchard 1982) maintain that a mixture of foreign influences, as seen in the art objects, reflects not only external influences but rather the adoption of foreign characteristics and their assimilation into the local products.

Despite the paucity of the published ceramic finds uncovered in the various surveys and excavation in the Arabian peninsula, it seems that beyond the painted 'Midianite' and 'Edomite' wares, it is possible to identify other Iron Age II vessels belonging to the cultural horizon of Judea and Edom.

In order to map out the rest of the trade route, the finds at sites along this route in the western part of the Arabian peninsula were examined (see Fig. 14):

Teimaʾ is a large oasis in the northwestern part of the peninsula, some 150 miles southeast of Tabuq. Teimaʾ appears in Assyrian texts from the 8th century B.C.E. and in later periods is known as an important way station on the trade route (Potts 1991). The site was explored at the turn of the century by Jaussen and Savignac (1914) and later by Philby (1957), as well as Winnett and Reed (1970). Since 1979 the Saudi Arabian Department of Antiquities has been excavating the site. One of the most prominent features at the site is the remains of a 5 square mile enclosure, surrounded by a stone wall. Various parts of the enclosure were excavated and all were found to contain Iron Age pottery (Bawden and Edens 1988). Most of the published pottery is of the painted variety, and consists mainly of surface finds with very little coming from stratigraphic assemblages (Bawden, *et al.* 1980:92). Based on finds from the cemetery, the excavators date its pottery to the 9th century B.C.E. (Abu-Duruk 1989:19). Of the very few finds published, a photograph of an intact lamp that probably should be dated to the Iron Age II stands out (*ibid.*: Pl. 7:13). Peter Parr notes that the cemetery also contained red-burnished pottery (on display in the Riyadh Museum) which is similar to Judean pottery (Parr in Dayton 1970a:256).

Montar Bani Atiya, an isolated tower and probably part of the Teimaʾ defence system, was located some 5 miles northwest of Teimaʾ. The site was never excavated, and the few sherds collected on the surface include the rim of a Judean hole-mouth jar of the Iron Age II period (Parr, *et al.* 1972:26–27; Fig. 3:7).

Al-Ula (Khuraybah - biblical Dadan), an oasis located about 100 miles southwest of Teimaʾ, was one of the main oases on the trade route in the northern part of the peninsula. Jaussen and Savignac (1914), who surveyed and described the site at the beginning of the century, were also responsible for the

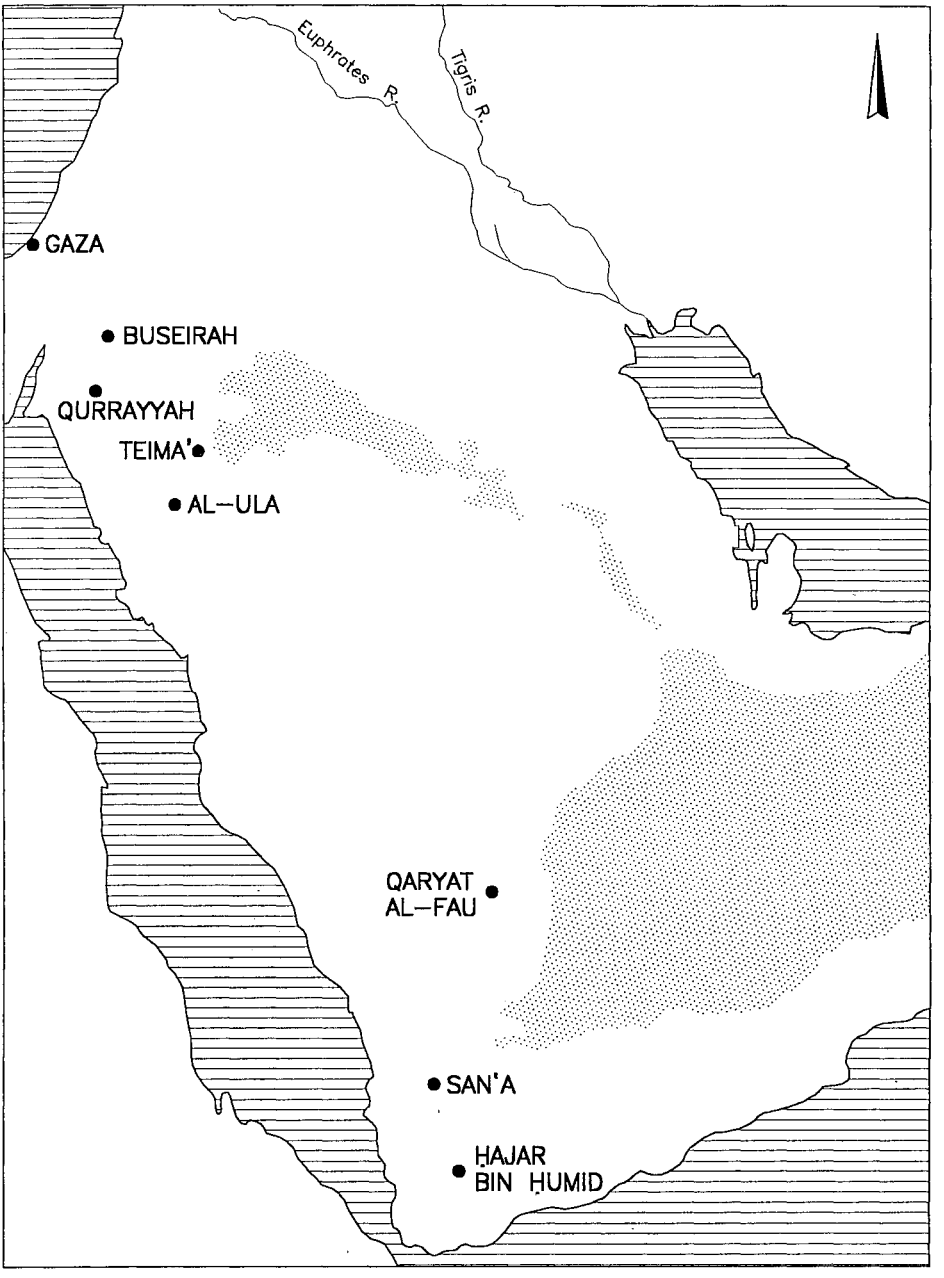

Fig. 14. The Arabian peninsula.

documentation of a major part of the pre-Islamic rock inscriptions. Parr conducted a survey in 1968 (Parr, *et al.* 1970:204–214), and claims that the absence of local data precludes the dating of pottery collected on the surface.

Existing comparisons are to finds in Israel and Jordan, which must serve to date the finds in Al-Ula. The bowls known from Judea in Iron Age II (*ibid.*: Figs. 5:15; 7:3) are prominent among the sherds collected at the site.

Khief el-Zahrah is a small settlement within Al-Ula with a ceramic assemblage that is similar and concurrent to that of Al-Ula (Bawden 1979).

Our archaeological knowledge of southern Arabia is even more meagre. The data is sparse and difficult to interpret. Assyrian texts and archaeological data, dated by finds from other sites in the region, may assist in studying the period and understanding the trade links to the north.

Qaryat al-Fau, excavated by the Saudi Department of Antiquities, is dated by rock inscriptions to the period between the 2nd century B.C.E. and the 5th century C.E., despite the fact that the rock inscriptions are not stratigraphically linked to the site. The ceramic assemblage includes 2 pilgrim flasks resembling well-known Iron Age flasks, as well as vessels resembling seven-spouted lamps (al-Ansary 1982:68:1–2; 69:3, 5). These lamp-like vessels, sometimes pierced at the base like a strainer or sometimes left whole, were also found in Yemen (*ibid.*:69). The seven-spouted lamps, occasionally found at other sites in Judea and Israel throughout the Iron Age (Glueck 1969:58–59), may be a variant of this form.

Hajar bin Humid is a site located some 160 miles north of Aden. During excavations directed by Van Beek (1969), an attempt was made to create a chronological typology of pottery dating to the pre-Islamic periods ranging from 1100 B.C.E. to 200 C.E. In Stratum Q, carbon-dated to 740 B.C.E. ± 100, Van Beek tries to define certain ceramic characteristics, which he views as related to the Iron Age in Palestine. These characteristics are: red-burnish, bar handles, knob handles, and vessels resembling Samarian pottery (1969:355–360).

Contacts with Beersheba (Fig. 15)

Several stone items found at Beersheba may attest to contacts between sites in southern Arabia, Jordan and Beersheba:

1. A rectangular limestone object (Fig. 15:1), found in the courtyard of Building 32 at the center of the mound. Three, perhaps four, letters are incised on one end, surrounded by an incised frame. The surface of the engraved area is perfectly smooth, while the other sides were left rough. These facts led Brandl (oral communication) to conclude that this is a large, unfinished seal - the letters still needed to be carved deeper, and the sides finished.

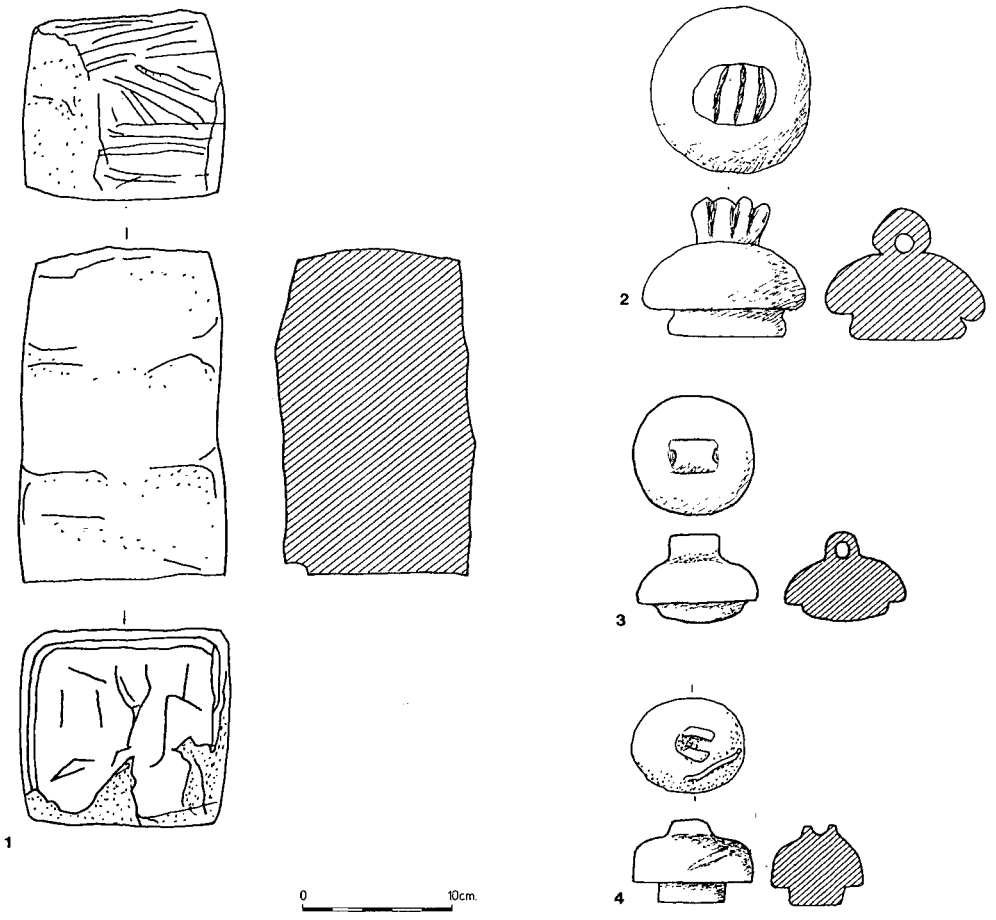

Fig. 15. Stone objects.

FIGURE 15. STONE OBJECTS

No.	*Type*	*Locus*	*Basket No.*
1.	Arabian Inscription	1361	10735/50
2.	Stopper	1258	11533/50
3.	Stopper	427	19647/50
4.	Stopper	856	9776/50

The inscription, which was examined by Francois Bron, is in the South Arabic script and may be read from left to right – *khn* (priest). *khn* is not a known private name and may be a description of some religious function.

A test to detect calcareous nanoplankton, carried out by Yoram Eshet, shows the stone used to manufacture this seal seems to have come from the Beersheba region (see Appendix). A similar inscription incised on a pottery sherd was found in Stratum A at the ad-Duraib excavations, some 20 miles south of Marib. Maigret dated this stratum to the period between the latter half of the 8th century and the latter half of the 6th century B.C.E. (Garbini 1992:83, Figs. 15, 27:15).

2. Hajar bin-Humid, Qaryat al-Fau and the graves at Shuqa all yielded small alabaster or limestone stoppers intended to seal small alabaster and stone bottles (Harding 1964: Pl. XII:13; Van Beek 1969: Figs. 118:i; 119:i; al-Ansary 1982:73:4; 74:2). Similar stoppers, provenance unknown, were purchased in San'a (Rathjens 1955:282, Photos 578–579; 288, Photo 589; Figs. 292–293). At Qaryat el-Fau, additional clay stoppers were found alongside the stone specimen (al-Ansary 1982:64.9). A similar stone stopper was found at Buseirah (on display in the Karak Museum) and another at Tawilan (Bennett and Bienkowski 1995: Fig. 9.24:3). Surprisingly enough, three such stoppers were found at Beersheba (Fig. 15:2–4) and another (as yet unpublished) in Arad Stratum VIII. No doubt the stoppers from Beersheba, Arad, Buseirah and Tawilan date to the Iron Age. Their presence at Hajar bin-Humid, where the Iron Age is otherwise represented, reaffirms the assumption that they should be dated to the equivalent period in the southern Arabian peninsula.

3. The cuboid altars discussed above (Figs. 11–12), probably of Mesopotamian origin, were introduced to Palestine and Arabia with the expansion of the Assyrian empire, and were then manufactured by the local population, using local raw materials. Two of the cuboid altars found in Beersheba bear an incised decoration depicting dromedaries (Figs. 11:1; 12:7). Both altars were published by Stern (1973: Pl. 52:5, 6). The altar in Fig. 11:1 was not found *in situ* and its stratigraphic context is doubtful. In view of the fact that most altars found in Palestine date to the Persian period, Stern attributed the Beersheba altar to the same period (*ibid.*:52, No. 4717/50). Stratigraphically, the altar in Fig. 12:7 belongs to Stratum II, so that the previous sample may have also come from this stratum. Representations of incised figures of camels on various objects, figurines and reliefs dating to the Iron Age (as well as the bones of this particular animal)[15] are well known throughout the ancient Near East (Hakker-Orion 1984; Wapnish 1984; Barnett 1985; Knauf 1987; Resto 1991:199–201; Sauer 1995). These artistic representations were inspired, no doubt, by the camels employed in the caravans plying the southern Arabian trade routes.

[15] Camel bones were also found in Beersheba Stratum II. Aharon Sasson will discuss these finds elsewhere.

'Eastern' and 'Western' Cultural Interaction

Defining the material characteristics of a culture, or its 'style', and explaining the process by which stylistic changes occur, are complicated processes. The questions arising from these processes - is style affected by political change, is a stylistic change an active or rather a passive decision, is it a conscious or an unconscious decision, does production leave room for spontaneity - are not easily answered. In fact, despite the lively interest this subject generates (see collected papers edited by Kingery 1985; Carr and Neitzel 1995; Conkey and Hastorf 1995), one may say that the basic issues remain generally unresolved (Plog 1995:369).

Within the assemblages uncovered in Beersheba Stratum II, an attempt has been made to define those material characteristics constituting the local assemblage and the foreign assemblages, as well as their origins. At Beersheba, one can clearly distinguish the foreign vessel groups from the east (Edom, Arabia and Assyria) as opposed to that from the west (the southern coast and Egypt). The group with eastern characteristics is relatively small and the limited range of products consists mainly of small vessels such as bowls, jugs and bottles. No cooking-pots and larger storage vessels such as jars were found. The 'western' group is large and extremely varied. Besides vessels such as bowls, jugs and juglets, it also includes larger vessels such as kraters and jars. The Egyptian finds are a prominent part of this group. Except for the Egyptian imports, all vessels were manufactured of local clay, imitating the foreign vessels in shape, and occasionally in the texture and shade of the clay itself.

What may we conclude from the various import/influence patterns? Can the differences in quantities of finds and the nature of these groups ('western' and 'eastern') indicate the type of relations and the intensity of contact between the foreign cultural systems and Beersheba? Is it possible to evaluate or measure the intensity of past relations by the quantity of foreign products?

Historic and ethnographic data indicate that products taken along the southern Arabian trade routes were wrapped in straw and leather packaging (Groom 1981:135–136); these being perishable, they are gone without a trace. The traveling caravan traders would not have taken with them fragile and awkwardly shaped pottery vessels. They may, however, have picked up smaller vessels, mainly drinking and pouring vessels, at road stations along their way. It is these vessels that inspired imitations by the local potters. Thus, the traders were the agents distributing vessels in the settlements they visited, which precludes the need for any direct contact between the inhabitants of Beersheba, Edom and Assyria. The local imitation may sometimes be an attempt at producing an exact copy, and in other cases only the borrowing of certain elements and their incorporation into an existing local product.

On their way back from Philistia to Arabia, the caravans brought with them various products received at their point of departure, and these left their traces at Beersheba. Between Beersheba and Philistia there may have existed a local trading system, as a part of the international system. But, it is equally likely that the 'coastal' group was formed as a result of the passage of traders, without any need for direct contacts between the inhabitants of Philistia and the Beersheba Valley.

The Egyptian group is limited in scope and unusual in nature. Various studies examining trade, stress that prestigious import products, serving to emphasize their owners' status, are never traded in large numbers and therefore, their quantity does not reflect their significance (for references see Schortman and Urban 1992:236). Here one should ask whether the Egyptian finds could be defined or distinguished as such. Wells analyses the contacts formed between the Roman Empire and European states and constructs a model proving that easy accessibility to products of another culture brings about their inclusion in the everyday assemblage, where they do not denote prestige or symbolize status. In cases where a culture is not easily accessible, on the other hand, the elite in the population may adopt its products to display status (Wells 1992). An examination of the spatial distribution of the Egyptian finds reveals neither systematic distribution nor concentration in any specific area or structure. Therefore one cannot say with any measure of certainty that the places in which they were found indicate structures belonging to a more affluent part of the population.

Conclusions

At the beginning of archaeological research, stylistic changes detected in assemblages were mostly associated with chronological determinations, migration of populations, military conquests and political changes. Numerous discussions held in recent years, however, offer additional explanations for such changes. Contrary to the common assumption of a direct link between the material find and the cultural groups which carry it, the difficulties in defining an ethnic entity by material culture alone now become more and more apparent (Kramer 1977; Kamp and Yoffee 1980; Finkelstein 1997; Herzog 1997b). Studies examining inter-regional and inter-societal interactions have shown that in many cases, the flow and passage of influences, information, ideas, technology and material objects can be explained as the result of economic contacts such as family ties (Hill 1970; Longacre 1970), gift exchanges (Gregory 1982; Zaccagnini 1987) or trade. In contact between different societies, it is cultural-material elements that are exchanged. These exchanges may find expression in the import of products, the adoption of forms and motifs and

their imitation, or the incorporation of foreign elements into the local culture.

Based on those finds in the Beersheba assemblage coming from the west (the southern coast and Egypt) and the east (Edom, Assyria and Arabia), an attempt has been made to show how Beersheba served as a road-station for the Arabian international trade caravans. As an already flourishing town in the second half of the 8th century B.C.E., it was situated on one of the main routes crossing the Beersheba Valley.[16]

The trade with southern Arabia went on for centuries in changing social and political circumstances. The economic motives i.e., the need to acquire exotic raw materials, were the principal factors shaping the relations between Arabia and the predominant empire of the period. The Assyrian empire, in its heyday, determined the trade routes (perceived as tribute from an Assyrian point of view) passing through the areas under its control. The vassal states Judea, Philistia and the kingdoms of Transjordan were not under direct military control, but were governed through a political system of indirect control (Larsen 1979; Knauf-Belleri 1995:114), which ensured their loyalty to the Assyrian empire. The documents of the Neo-Assyrian kings enable us to follow the development of trade with southern Arabia at a time when all the routes were under Assyrian rule. Rather than interrupt the international trade, the Assyrians encouraged it. Their dependence upon the cooperation of the other kingdoms must have been one of the reasons that most of the kingdoms in the region could exist and maintain their political and economic structure (Elat 1977; 1982; 1990; 1993). Assyrian rule relied not only on its armies, but on a highly organized administrative apparatus, working from the center to the peripheries. This enabled Assyria to control the trade routes, which were the sources for raw materials, to levy taxes and ensure a safe and steady flow of products from the peripheries (Larsen 1979:100; Pecirkova 1987). The developing international trade engendered prosperity in the region and increased cooperation between the elements participating in the trade. Under the aegis of the Assyrian hegemony, the various peoples could get acquainted with cultures they were not in direct contact with. Therefore, rather than being 'closed' social systems, the various cultures/states in the region were exposed to foreign influences. There is archaeological evidence for interactions between all peoples of the region, with each entity displaying foreign elements gleaned from neighboring cultures.

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[16] Despite the fact that Assyrian historical data indicate that trade with Arabia had existed as early as the beginning of the 9th century B.C.E. (Liverani 1992), the archaeological data from the Beersheba Valley provide no evidence as to its route. The question whether trade routes at this stage traversed the Sinai (Eph'al 1982:15; Finkelstein 1992:163) or the Beersheba Valley (Na'aman 1992:87-88) cannot be decided on archaeological grounds.

The routes the trade caravans traveled in the Beersheba Valley are not documented in written or direct evidence. Nevertheless, the nature of the material culture reflected in excavations at the Beersheba Valley sites, and differing from that of other Judean sites (in the hills and Shephelah), indicates contacts with neighboring countries. The products of the Arabian trade (and seemingly their packing materials) were perishable, so that circumstantial evidence and remains of side products left on the road are the only way to trace the routes.

Most 8th century sites in Judea (Lachish Level III, Tell Beit Mirsim Stratum A, Beth Shemesh Stratum IIC) yielded no vessels similar to the coastal plain group or the 'Edomite' group. In an examination of parallel strata in the Beersheba Valley sites, however, a picture similar to Beersheba emerges.

The Beersheba Valley began to prosper as early as the 8th century B.C.E., with the establishment of settlements in Tel ʿIra and Aroer, alongside the already-occupied sites of Beersheba, Tel Malḥata and Arad.[17]

Stratum VII at Tel ʿIra contains a large assemblage of 'Judean' vessels identical to Beersheba Stratum II and Lachish Level III (Freud 1999:226). Alongside this assemblage there are also vessels defined as 'coastal': a closed krater (*ibid.*: Fig. 6.82:5), a small carinated bowl (*ibid.*: Fig. 6.82:2) and storage jars with shoulder carinations (*ibid.*: Figs. 6.75:5–6, 6.81:2–3, 5). Vessels defined as 'Edomite' such as globular bowls (large and small) (*ibid.*: Figs. 6.80:4–5, 6.84:7, 6.87:8, 6.88:6), open bowls with a serrated plastic decoration (*ibid.*: Figs. 6.84:4, 6.87:6), a one-handled cup (*ibid.*: Fig. 6.74:4), and an 'Assyrian' bottle (*ibid.*: Fig. 6.86:18) were also found. The excavators date this stratum to the end of the 8th – the first half of the 7th centuries B.C.E (Beit-Arieh 1999:176).

A similar picture emerges at Aroer where Strata IV–III and II are dated by the excavators to the 7th century B.C.E. This dating is based in part on the Assyrian influence discernible mainly in the pottery uncovered in Strata III and II (Biran 1993). Judging by what pottery was published from these strata, it seems beyond doubt that the vessels of Stratum III (Biran and Cohen 1981: Figs. 7–8) can be assigned an earlier date. Their resemblance to the well-known assemblages from Lachish Level III, Beersheba Stratum II, Tell Beit Mirsim Stratum A, among others, is complete. Stratum II, on the other hand, consists of two phases and does indeed date to the end of the Iron Age.

The renewed excavation at Tel Malḥata, directed by Beit-Arieh (1996:165),

[17] An increase in the sheer number of settlements can be seen in other parts of Judea (Ofer 1993:125–127; Dagan 1996:144). This may be the result of Israelite migration into Judea following Tiglath-pileser III's first campaign (Broshi and Finkelstein 1992:147).

brought to light a large assemblage from a stratum dated to the 8th century B.C.E., including "Edomite/Assyrian" pottery in addition to the familiar repertoire of the 7th century B.C.E. stratum.[18]

Strata X and VIII at Arad contained a small number of "Edomite/Assyrian" pottery. This includes a one-handled cup in Stratum X, and two small globular bowls (similar to those in Fig. 9:1–4), one large globular bowl (similar to those in Fig. 9:5–8) and a stepped open bowl, all from Stratum VIII. Furthermore, Stratum IX yielded a lion figurine that was probably used as a weight (unpublished) and a limestone cylinder seal (Aharoni 1996), both displaying Assyrian motifs. Ostracon 40, found in Stratum VIII, is apparently associated with some diplomatic activity between Edom and Judea (Bartlett 1989:131).

We have already mentioned that in Beersheba we find pottery from the ceramic repertoires of Edom, Assyria, and the southern coastal plain as well as Egypt. Additional evidence of far-reaching contacts may also be seen at Beersheba in the non-ceramic finds. The cuboid altars and the cylinder seal originated in Mesopotamia. The inscription incised on the stone seal, the stone stoppers and apparently also the acquaintance with the camel (as seen in the depictions on objects and zoological finds), all have Arabian origins. There is a small collection of Egyptian objects, while even raw materials, such as the *tridacna* shell from the Red Sea, show foreign contact. Since this phenomenon is not unique to Beersheba, it would seem that the similar picture emerging from other sites in the Beersheba Valley (Tel ʿIra, Aroer, Tel Malḥata and Arad) allows us to identify this sequence of settlements as delineating the trade route (see Fig. 16). Meẓad Ḥaẓeva[19] would have been the last station in Judea, from which the road continued to Buseirah and farther south, into Arabia.

The archeological finds uncovered in the Beersheba Valley confirm and shed new light on the written sources, which indicate that international trading systems, encouraged by the Assyrians, already existed in the latter third of the 8th century B.C.E.

Can the occurrence of an event be defined in 'real' time based on the finds' typology? Can the specified changes in material culture have occurred in so short a time i.e., the last third of the 8th century B.C.E., the period from Judea becoming a vassal state under Tiglath-pileser III until the destruction of Beersheba by Sennacherib in 701 B.C.E.? The accepted view is that a long interval separates the introduction of a new product and its acceptance.

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[18] I am grateful to I. Beit-Arieh and E. Brand for the information.

[19] Although the pottery assemblages from the citadel in Stratum 5 at Meẓad Ḥaẓeva, dated by the excavators to the 9th–8th centuries B.C.E. (Cohen and Yisrael 1995), are not yet published, I tend to surmise that it too would yield pottery made in the Edomite and Assyrian traditions.

Studies in ethno-archaeological literature dealing with ceramic production, indicate that the potter is a conservative creature, rarely tending to change his style (Foster 1965:47–51; Kramer 1985:95). Other ethnographic studies on the contrary, point to the fact that in certain societies, foreign material characteristics seep very rapidly into a local culture (Hodder 1978:267–268). Some historical studies indicate that political changes do not affect the material culture (Adams 1968; 1979). On the other hand there is historical evidence that gives rise to the conclusion that the process in which foreign stylistic elements are incorporated into the 'local style' is rather brief. Thus, in 843 B.C.E., the campaigns of Shalmaneser III brought Hasanlu into contact with Assyria. The Stratum IVB city had imported Assyrian products as well as local products combining assimilated Assyrian elements. This stratum was destroyed towards the end of the 9th century B.C.E., so that the interval between exposure, assimilation, production and the final destruction of the settlement could not have been more than forty years (Winter 1977). A similar situation was noted in Beersheba, where the pottery assemblages display stylistic changes under Assyrian hegemony and the subsequent exposure to neighboring cultures. Since Beersheba was destroyed in the Sennacherib campaign, these changes must have occurred during the last thirty years of the 8th century B.C.E. As the settlement at Beersheba was never renewed after 701 B.C.E., one cannot follow the development of relations with these foreign cultures, a process seen in all other settlements in the Beersheba Valley that remained settled throughout the 7th and early 6th centuries B.C.E.

What part did the city of Beersheba play in the international trade system, and how did it benefit from it? The city was probably not founded as a result of the trade or in order to fulfill its needs, since the general city plan was already laid out in Stratum V. Although only limited parts of this stratum were excavated, the outline of the city wall, the location of the gate, the circular street and the water system were defined in this early stage. One should note that the three storehouse buildings adjacent to the gate were only erected in Strata III–II, not Stratum V. The fact that these storehouses contained a large variety of household vessels and other finds, in addition to the hundreds of storage vessels, led the excavators to conclude that they did not serve only for food storage, but were also centers of food collection and distribution by the central authority (Herzog 1973:29). The caravans plying the southern Arabian trade routes had to traverse large distances, so this can obviously be defined as long-distance trade. Since the Beersheba Valley was geographically convenient for the passage of caravans, it served as part of the trade route connecting Arabia/Edom with Philistia (Gaza/Egypt).

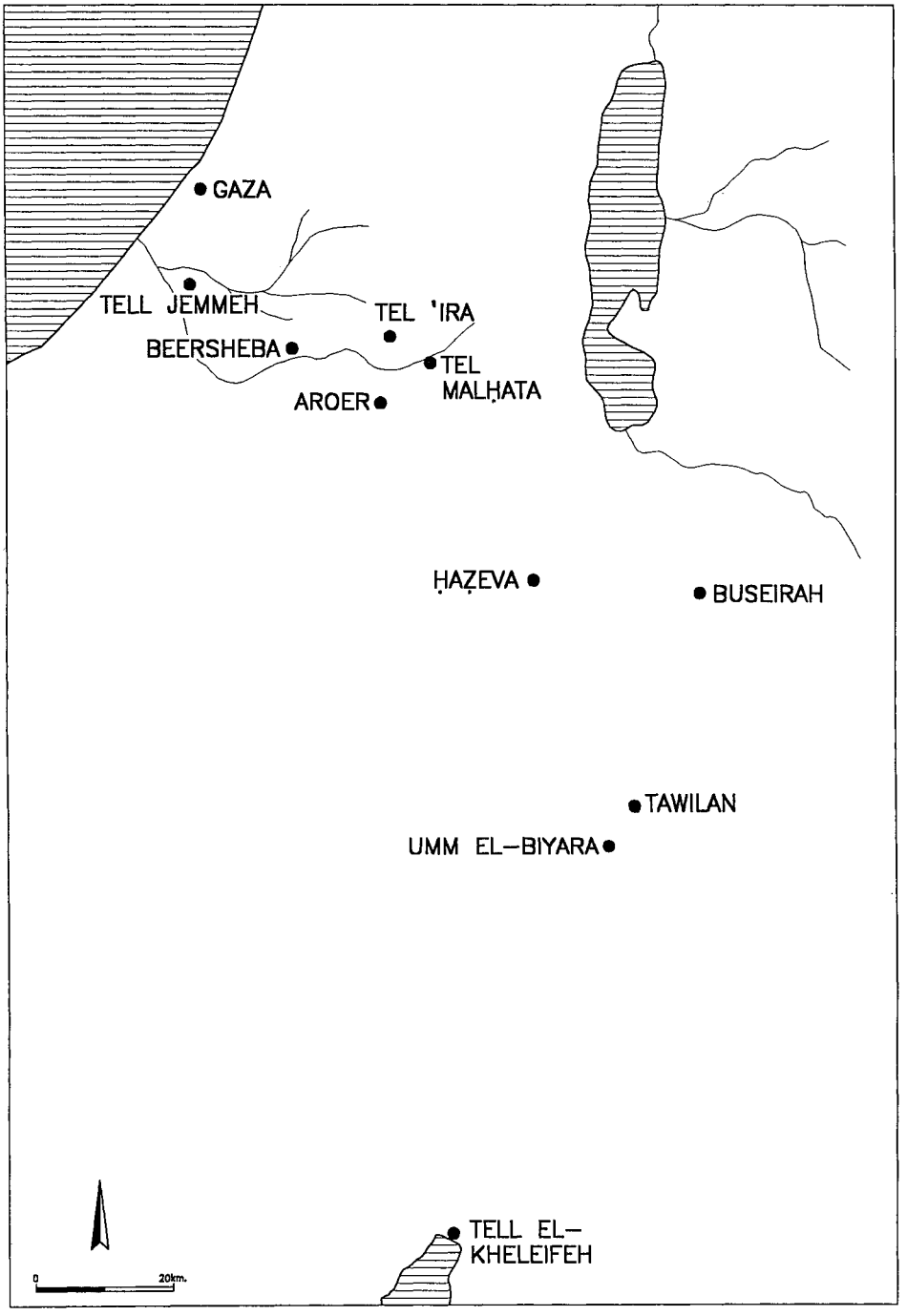

Fig. 16. Sites of the Beersheba Valley through which the trade route passed during the 8th century B.C.E.

Although Beersheba was not economically dependent on international trade, this system apparently necessitated the building of the storehouses. We have no direct evidence for large-scale direct trading with the local inhabitants. The most prominent fact arising from an analysis of the finds from the city is their wide variety and the foreign influences they manifest, the latter indicating exposure to neighboring cultures. Beersheba, by the very nature of its location along the trade route, must have naturally assumed the economic role of gateway community (Burghardt 1971; Hirth 1978). Within this trade system it was not a destination market for the trade caravans, since the products themselves were not traded there, but rather supplied the necessary services and served as a way station along the route.

Acknowledgements

This article is based on the author's M.A. thesis, submitted to Tel Aviv University, which was written under the guidance of Prof. Ze'ev Herzog. The research was supported by the Israel Science Foundation. I wish to thank Dr. Yuval Goren who undertook the petrographic analyses of the Beersheba clay vessels and Dr. Francois Bron who kindly advised me and provided me with information on the South Arabian inscription. Prof. Nadav Na'aman, Prof. Itzhaq Beit-Arieh and the late Prof. Pirhiya Beck read the manuscript and made valuable remarks. Ms. Adi Ginzbourg-Hirsh translated the Hebrew to English, and Linda Meiberg helped with various technical matters. The vessels were drawn by Mr. Yosef Kapelian and Ms. Rodica Pinchas. The maps were produced by Ms. Ora Paran.

REFERENCES

Abdul-Amir, S.J. 1997. Assyrian Frontier Sites on the Middle Euphrates. New Evidence from Al-Qadisiya (Haditha) Dam Region in the Western Desert of Iraq. In: *Assyrien im wandel der zeiten. 39th Rencontre Assyriologique internationale. Heidelberg 6–10 Juli 1992.* Heidelberg: 219–221.

Abu-Duruk, I.H. 1989. A Preliminary Report on the Industrial Site Excavation at Tayma, First Season 1408 H/1987 A.D. *Atlal* 12:9–19.

Abu-Duruk, I.H. 1995. Archaeology Thriving in Saudi Arabia. *Biblical Archaeology Review* 21:68–73.

Adams, R.McC., Parr, J.P., Ibrahim, M. and al-Mughannun, S.A. 1977. Saudi Arabian Archaeological Reconnaissance 1976. The Preliminary Report on the First Phase of the Comprehensive Archaeological Survey Program. *Atlal* 1:21–40.

Adams, W.Y. 1968. Invasion, Diffusion, Evolution? *Antiquity* 42:194–215.

Adams, W.Y. 1979. On the Arguments from Ceramic to History: a Challenge Based on Evidence from Medieval Nubia. *Current Anthropology* 20:727–744.

Aharoni, M. 1996. An Iron Age Cylinder Seal. *IEJ* 46:52–54.

Aharoni, Y. ed. 1973. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv.

Aharoni, Y. 1975. Excavations at Tel Beer-Sheba: Preliminary Report of the Fifth and Sixth Seasons, 1973–1974. *Tel Aviv* 2:146–168.

Aharoni, Y. 1981. *Arad Inscriptions*. Jerusalem.

al-Ansary, R.A. 1982. *Qaryat al-Fau: a Portrait of pre-Islamic Civilisation in Saudi Arabia*. Riyadh.

Albright, W.F. 1943. The Excavation of Tell Beit Mirsim, III: the Iron Age. *AASOR* 21–22.

Albright, W.F. 1945. Some Recent Publications Received by the Editor. *BASOR* 98:27–31.

Albright, W.F. 1953. Some Recent Publications. *BASOR* 132:46–47.

Albright, W.F. 1960. *The Archaeology of Palestine*. Harmondsworth.

Aldred, C. 1971. *Jewels of the Pharaohs*. London.

Arnold, D.E. 1988. *Ceramic Theory and Cultural Process*. Cambridge.

Artzy, M. 1994. Incense, Camels and Collared-rim Jars: Desert Trade Routes and Maritime Outlets in the Second Millennium. *Oxford Journal of Archaeology* 13:121–147.

Ayalon, E. 1995. The Iron Age II Pottery Assemblage from Ḥorvat Teiman (Kuntillet ʿAjrud). *Tel Aviv* 22:141–205.

Bachi, G. 1971. Area D: the Finds. In: Dothan, M. ed. Ashdod II–III: the Second and Third Seasons of Excavations, 1963 and 1965. *Atiqot* 9–10:86–124.

Bachi, G. 1973. Several Kraters from Stratum II. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 38–42.

Barnett, R.D. 1985. Lachish, Ashkelon and the Camel: a Discussion of its Use in Southern Palestine. In: Tubb, J.N. ed. *Palestine in the Bronze and Iron Ages. Papers in Honour of Olga Tufnell*. London: 15–30.

Bartlett, J.R. 1989. *Edom and the Edomites*. Sheffield.

Bawden, G. 1979. Khief El-Zahrah and the Nature of Dedanite Hegemony in the Al-'Ula Oasis. *Atlal* 3:63–72.

Bawden, G. 1992. Continuity and Disruption in the Ancient Hejaz: an Assessment of Current Archaeological Strategies. *Arabian Archaeology and Epigraphy* 3:1–22.

Bawden, G. and Edens, C. 1988. Tayma Painted Ware and the Hejazi Iron Age Ceramic Tradition to Appear. *Levant* 20:197–213.

Bawden, G., Edens, C. and Miller, R. 1980. Typological and Analytical Studies: a Preliminary Archaeological Investigation at Tayma. *Atlal* 4:69–106.

Beck, P. 1973. A Votive Cylinder Seal. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 56–60.

Beck, P. 1996. Ḥorvat Qitmit Revisited via ʿEn Ḥazeva. *Tel Aviv* 23:102–114.

Beit-Arieh, I. 1995. *Ḥorvat Qitmit: an Edomite Shrine in the Biblical Negev*. Tel Aviv.

Beit-Arieh, I. 1996. Tel Malḥata – 1995. *Had. Arkh.* 106:164–165. (Hebrew)

Beit-Arieh, I. 1999. *Tel ʿIra: A Stronghold in the Biblical Negev*. (Tel Aviv University Monograph Series No. 15.) Tel Aviv.

Beit-Arieh, I. and Cresson, B. 1991. Ḥorvat ʿUza: a Fortified Outpost on the Eastern Negev Border. *BA* 54:126–135.

Bennett, C.M. 1966. Umm el-Biyara. *PEQ* 98:123–126.

Bennett, C.M. 1973. Excavations at Buseirah, Southern Jordan, 1971: a Preliminary Report. *Levant* 5:1–11.

Bennett, C.M. 1974. Excavations at Buseirah, Southern Jordan, 1972: Preliminary Report. *Levant* 6:1–24.

Bennett, C.M. 1975. Excavations at Buseirah, Southern Jordan, 1973: Third Preliminary Report. *Levant* 7:1–19.

Bennett, C.M. 1977. Excavations at Buseirah, Southern Jordan, 1974: Fourth Preliminary Report. *Levant* 9:1–10.

Bennett, C.M. 1978. Some Reflections on Neo-Assyrian Influence in Transjordan. In: Moorey, P.R.S. and Parr, P.J. eds. *Archaeology in the Levant: Essays for Kathleen Kenyon*. Warminster: 164–171.

Bennett, C.M. 1982. Neo-Assyrian Influence in Transjordan. In: Hadidi, A. ed. *Studies in the History and Archaeology of Jordan*. Amman: 181–187.

Bennett, C.M. 1983. Excavations at Buseirah (Biblical Bozrah). In: Sawyer, J.F.A. and Clines, D.J.A. eds. *Midian, Moab and Edom. The history and archaeology of Late Bronze and Iron Age Jordan and Northwest Arabia*. Sheffield: 9–17.

Bennett, C.M., and Bienkowski, P. eds. 1995. *Excavations at Tawilan in Southern Jordan*. Oxford.

Bienkowski, P. 1990. Umm el-Biyara, Tawilan and Buseira in Retrospect. *Levant* 22:91–109.

Bienkowski, P. 1992. The Date of Sedentary Occupation in Edom: Evidence from Um el-Biyara, Tawilan and Buseirah. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan*. Sheffield: 99–112.

Bienkowski, P. 1995a. The Site and its Exploration. In: Bennett, C.M. and Bienkowski, P. eds. *Excavations at Tawilan in Southern Jordan.* Oxford: 15–18.

Bienkowski, P. 1995b. The Architecture of Edom. In: 'Amr, K., Zayadine, F. and Zaghloul, M. eds. *Studies in the History and Archaeology of Jordan V.* Amman: 135–143.

Bienkowski, P. 1995c. Conclusions. In: Bennett, C.M. and Bienkowski, P. eds. *Excavations at Tawilan in Southern Jordan.* Oxford: 101–105.

Bienkowski, P. 1995d. The Edomites; the Archaeological Evidence from Transjordan. In: Edelman, D.V. ed. *You shall not Abhor an Edomite for He is your Brother: Edom and Seir in History and Tradition.* Atlanta: 41–92.

Biran, A. 1993. Aroer (in Judea). *New Enc. Arch. Exc.* 1:89–92.

Biran, A. and Cohen, R. 1981. Aroer in the Negev. *EI* 15:250–273. (Hebrew).

Blakely, J.A. and Sauer, J.A. 1985. The Road to Wadi al-Jibah: Archaeology on the Ancient Spice Route in Yemen. *Expedition* 27:2–9.

Bloom, J. B. 1988. *Material remains of the Neo-Assyrian presence in Palestine and Transjordan.* (Ph.D. dissertation, Bryn Mawr) Bryn Mawr.

Bowen, R.L. and Albright, F.P. 1958. *Archaeological Discoveries in South Arabia.* Baltimore.

Brandl, B. 1984a. The Engraved Tridacna Shell Discs. *AnSt* 34:15–41.

Brandl, B. 1984b. The Restoration of an Engraved Tridacna Shell from Arad. *Israel Museum Journal* 3:76–79.

Brinkman, J.A. 1968. *A Political History of post-Kassite Babylonia.* Rome.

Broshi, M. and Finkelstein, I. 1992. The Population of Palestine in Iron Age II. *BASOR* 287:147–160.

Bulliet, R.W. 1975. *The Camel and the Wheel.* New York.

Burghardt, A.F. 1971. A Hypothesis about Gateway Cities. *Annals of the Association of American Geographers* 61:269–285.

Carr, C. and Neitzel, J.E. eds. 1995. *Style, Society and Person: Archaeological and Ethnological Perspectives.* New York.

Cavigneaux, A. and Ismail, B.K. 1990. Die Statthalter von Suhu and Mari in 8 Jh. V. Chr. Anhand neuer Teste aus den irakischen Grabungen im Staugebiet des Qadissiya-Damms. *Baghdader Mitteilungen* 21:321–456.

Cohen, R. and Yisrael, Y. 1995. The Iron Age Fortress at En Ḥaseva. *BA* 58:223–235.

Conkey, M.W. and Hastorf, C.A. 1995. *The Uses of Style in Archaeology.* Cambridge.

Costa, P. 1989. A Review of Recent Archaeological Research in Oman. In: Ibrahim, M.M. ed. *Arabian Studies in Honour of Mahmoud Ghuli.* Wiesbaden: 20–26.

Crone, P. 1987. *Meccan Trade and the Rise of Islam*. Princeton.

Culican, W. 1973. The Graves at Tell er-Reqeish. *The Australian Journal of Biblical Archaeology* 2:66–105.

Curtis, J. 1989. *Excavations at Qasrij Cliff and Khirbet Qasrij*. London.

Curtis, J. 1992. Recent British Museum Excavations in Assyria. *Journal of the Royal Asiatic Society* 163:147–165.

Dagan, Y. 1996. Cities of the Judean Shephelah and their Division into Districts based on Joshua 16. *EI* 25:136–146. (Hebrew).

Dayton, J.E. 1970a. The City of Teima and the Land of Edom. *Bulletin of the Institute of Archaeology, University of London* 8–9:253–256.

Dayton, J.E. 1970b. Midianite and Edomite Pottery. *Proceedings of the Seminar for Arabian Studies* 5:25–38. London.

Dayton, J.E. 1984. Herodotus, Phoenicia, the Persian Gulf and India in the First Millennium B.C. In: Boucharlat, R. and Scelles, J.-F. eds. *Arabie Orientale, Mesopotamie et Iran Meridional: l'Age du Fer au debut de la periode islamique*. Paris: 363–375.

de Maigret, A. and Robin, C. 1989. Les fouilles italiennes de Yala (Yemen du Nord): nouvelles donn? es sur la chronologie de l'Arabie du sud preislamique. *Comptes Rendus des Seances de l'Academie des Inscriptions et Belles Letters*. Paris: 255–291.

Dicou, B. 1994. Edom, Israel's Brother and Antagonist: the Role of Edom in Biblical Prophecy and Story. *Journal for the Study of the Old Testament* (Supplement Series 169). Sheffield.

Doe, B. 1971. *Southern Arabia*. London.

Dornemann, R. H. 1983. *The Archaeology of the Transjordan in the Bronze and Iron Ages*. Milwaukee.

Dothan, M. and Porat, Y. 1982. Ashdod IV: Excavation of Area M. *Atiqot* 15.

Duncan, J. G. 1930. *Corpus of the dated Palestinian Pottery*. London.

Edelman, D.V. ed. 1995. *You shall not Abhor an Edomite for He is your Brother: Edom and Seir in History and Tradition*. Atlanta.

Edens, C. and Bawden, G. 1989. History of Tayma' and Hijazi Trade during the First Millennium B.C. *Journal of Economic and Social History of the Orient* 32:48–103.

Ekholm, K. and Friedman, J. 1979. "Capital" Imperialism and Exploitation in Ancient World Systems. In: Larsen, M.T. ed. *Power and Propaganda: a Symposium on Ancient Empires*. Copenhagen: 41–58.

Elat, M. 1977. *Economic Relations in the Lands of the Bible c. 1000–539 B.C.* Jerusalem. (Hebrew).

Elat, M. 1978. The Economic Relations of the Neo-Assyrian Empire with Egypt. *JAOS* 98:20–34.

Elat, M. 1979. The Monarchy and the Development of Trade in Ancient Israel. In: Lipinski, E. ed. *State and Temple Economy in the Ancient Near East II*. Leuven: 527–546.

Elat, M. 1982. The Impact of Tribute and Booty on Countries and People within the Assyrian Empire. *AfO* 19:244–251.

Elat, M. 1990. International Trade in the Land of Israel under Assyrian Control. In: Kedar, B.Z., Dothan, T. and Safrai, S. eds. *Commerce in Palestine throughout the Ages*. Jerusalem: 67–88. (Hebrew).

Elat, M. 1993. International Trade of the Assyrian Empire and its Traders. *EI* 24:12–17. (Hebrew).

Eph'al, I. 1982. *The Ancient Arabs: Nomads on the Borders of the Fertile Crescent, 9th–5th Centuries B.C.* Leiden.

Finet, A. ed. 1982. *"Lorsque la royaut e des cendit du ciel...": les fouilles belges de Tell Kannas sur l'Euphrate en Syrie*. Marlanwelz (Belgium).

Finkelstein, I. 1988. Arabian Trade and Socio-political Conditions in the Negev in the Twelfth-Eleventh Centuries, B.C.E. *JNES* 47:241–252.

Finkelstein, I. 1992. Ḥorvat Qitmit and the Southern Trade in the late Iron Age II. *ZDPV* 108:156–170.

Finkelstein, I. 1997. Pots and People Revisited: Ethnic Boundaries in the Iron Age I. In: Silberman, N.A. and Small, D.B. eds. *The Archaeology of Israel: Constructing the Past, Interpreting the Present*. Sheffield: 216–237.

Foster, G.M. 1965. The Sociology of Pottery: Questions and Hypotheses arising from Contemporary Mexican Work. In: Matson, F.R. ed. *Ceramics and Man*. London: 43–61.

Fowler, M.D. 1982. The Excavation at Tell Beer-Sheba and the Biblical Record. *PEQ* 114:7–11.

Freud, L. 1999. The Iron Age. In: Beit-Arieh, I. ed. *Tel ʿIra: A Stronghold in the Biblical Negev*. (Tel Aviv University Monograph Series No. 15.) Tel Aviv: 189–289.

Fritz, V. 1973. The Roman Fortress. In: Aharoni, Y. ed. *Beer-Sheba I: Excavations at Tel Beer-Sheba 1969-1971 Seasons*. Tel Aviv: 83–89.

Garbini, G. 1992. Le inscrizioni su ceramica ad-Durayb - Yala. *Yemen* 1:79–91.

Gawlikowski, M. 1981. Bijan in the Euphrates. *Sumer* 42:15–21.

Geva, S. 1985. Greek Influence on Pottery Vessels from Beer-Sheva. *EI* 18:233–237. (Hebrew).

Gichon, M. 1975. The Sites of the *limes* in the Negev. *EI* 12:149–166. (Hebrew).

Gitin, S. 1989. Tel-Miqne-Eqron: a Type-site for the inner Coastal Plain in the Iron Age II Period. In: Gitin, S. and Dever, W.G. eds. *Recent Excavations in Israel: Studies in Iron Age Archaeology*. Winona Lake: 23–58.

Gitin, S. 1995. Tel Miqne-Ekron in the 7th century B.C.: the Impact of Economic Innovation and Foreign Cultural Influences on a Neo-Assyrian Vassal City-State. In: Gitin, S. ed. *Recent Excavations in Israel: a View to the West*. Dubuque: 61–79.

Giveon, R. 1973. Egyptian Objects in Bronze and Faience. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 54–55.

Glazier-McDonald, B. 1995. Edom in the Prophetical Corpus. In: Edelman, D.V. ed. *You Shall not Abhor an Edomite for He is your Brother: Edom and Seir in History and Tradition*. Atlanta: 23–32.

Glueck, N. 1935. Explanations in Eastern Palestine II. *AASOR* 15.

Glueck, N. 1969. Some Ezion-Geber: Elath Iron II pottery. *EI* 9:51–59.

Glueck, N. 1971. Incense Altars. *EI* 10:120–125. (Hebrew).

Gregory, A. 1982. *Gifts and Commodities*. London.

Groom, N. 1981. *Frankincense and Myrrh: a Study of the Arabian Incense Trade*. London.

Gunneweg, J. and H. Mommsen. 1990. Instrumental neutron activation analysis and the origin of some cult objects and Edomite vessels from the Ḥorvat Qitmit shrine. *Archaeometry* 32:7–18.

Gunneweg, J., Perlman, I. and Meshel, Z. 1985. The Origin of the Pottery of Kuntillet ʿAjrud. *IEJ* 35:270–283.

Hakker-Orion, D. 1984. The Role of the Camel in Israel's early History. In: Clutton-Brock, J. and Grigson, C. eds. *Animal and Archaeology 3: Early Herders and their Flocks*. (BAR International Series 202.) Oxford: 207–212.

Harding, G.L. 1964. *Archaeology in the Aden Protectorates*. London.

Hart, S. 1988. Excavations at Ghrareh, 1986: Preliminary Report. *Levant* 20:89–99.

Hart, S. 1989. *The Archaeology of the Land of Edom*. (Ph.D. dissertation, Macquarie).

Hart, S. 1992. Iron Age settlement in the land of Edom. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan*. Sheffield: 93–98.

Hart, S. 1995a. The Pottery. In: Bennett, C.M. and Bienkowski, P. eds. *Excavations at Tawilan in southern Jordan*. Oxford: 53–66.

Hart, S. 1995b. Area D at Buseira and Edomite chronology. In: Bourke, S. and Descoeudres, J.P. eds. *Trade, Contact and the Movement of Peoples in the eastern Mediterranean*. Sydney: 241–264.

Hestrin, R. and M. Dayagi-Mendels. 1983. Another Pottery Group from Abu-Ruqeish. *The Israel Museum News* 2:49–57.

Herzog, Z. 1973. The Storehouses. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 23–30.

Herzog, Z. 1984. *Beer-Sheba II. The Early Iron Age Settlements.* Tel Aviv.

Herzog, Z. 1992. Settlement and fortification planning in the Iron Age. In: Kempinski, A. and Reich, R. eds. *The Architecture of Ancient Israel: from the Prehistoric to the Persian Periods.* Jerusalem: 231–274.

Herzog, Z. 1997a. *Archaeology of the City. Urban Planning in Ancient Israel and its Social Implications*. Tel Aviv.

Herzog, Z. 1997b. Phoenician Occupation at Tel Michal: the Problem of Identifying Ethnic-national Groups from Archaeological Assemblages. *Michmanim* 11:31–43. (Hebrew).

Hill, J. 1970. *Broken K Pueblo: Prehistoric Social Categorization in the American Southwest.* (Anthropological Papers of the University of Arizona. No. 18). Tucson.

Hirth, K.G. 1978. Interregional Trade and the Formation of Prehistoric Gateway Communities. *American Antiquity* 43:35–45.

Hodder, I.R. 1978. Social Organisation and Human Interaction: the Development of some Tentative Hypotheses in Terms of Material Culture. In: Hodder, I.R. ed. *The Spatial Organisation of Culture*. Pittsburgh: 199–269.

Ibrahim, K.J. 1986. *Pre-Islamic Settlement in Jazirah*. Baghdad.

Ingraham, M., Johnson, T., Rihani, B. and Shatla, I. 1981. Preliminary Report on a Reconnaissance Survey of N.W. Province (with a note on a brief survey of Northern Province). *Atlal* 5: 59–84.

Isma'il, K.B., Roaf, M. and Black, J.A. 1988. ʿAna in the Cuneiform Sources. In: Northedge, A., Bamber, A. and Roaf, M. eds. *Excavations at ʿAna.* Warminster: 1–5.

Jaussen, A.J. and Savignac, R. 1914. *Mission Archeologique en Arabie II.* Paris.

Kamp, K.A. and Yoffee, N. 1980. Ethnicity in ancient western Asia during the early Second Millennium B.C.: Archaeological Assessments and Ethnoarchaeological Perspectives. *BASOR* 237:85–104.

Keel, O. and Uehlinger, C. 1995. *Gottinnen, Gotter und Gottessymbole, Neue Erkenntnisse zur Religionsgeschichte Kanaans und Israels aufgrund bislang unerschlossener ikonographischen Quellen*. Freiburg.

Kelley, L.A. 1976. *The Pottery of ancient Egypt: Dynasty I to Roman Times.* Toronto.

Kelm, G.L. and Mazar, A. 1985. Tel Batash (Timnah) Excavations: Second Preliminary Report (1981–1982). *BASOR (Suppl.)* 23:93–120.

Kenyon, K.M. 1976. The Date of the Destruction of Iron Age Beer Sheba. *PEQ* 108:63–64.

Killick, R. 1988. Neo-Assyrian to Early Sasanian Pottery. In: Isma'il, K.B., Roaf, M. and Black, J.A. eds. *'Ana in the Cuneiform Sources.* Warminster: 54–75.

Kingery, W.D. ed. 1985. *Technology and Style: Ceramic and Civilization.* Vol. II. Columbus, Ohio.

Knauf, E.A. 1987. Camels in Late Bronze and Iron Age Jordan: the Archaeological Evidence. *Biblische Notizen* 40:20–22.

Knauf, E.A. 1992. The Cultural Impact of Secondary State Formation: the Cases of the Edomites and Moabites. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan.* Sheffield: 47–54.

Knauf-Belleri, E.A. 1995. Edom: the Social and Economic History. In: Edelman, D.V. ed. *You shall not Abhor an Edomite for He is your Brother: Edom and Seir in History and Tradition.* Atlanta: 93–118.

Kramer, C. 1977. Pots and People. In: Levine, L.D. and Young, T.C. eds. *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia.* Malibu: 91–112.

Kramer, C. 1985. Ceramic Ethnoarchaeology. *Annual Review of Anthropology* 14:77–102.

Kushnir-Stein, A. and Gitler, H. 1992–93. Numismatic Evidence from Tel Beer-Sheva and the Beginning of Nabatean Coinage. *Israel Numismatic Journal* 12:13–20.

Lapp, N.L. 1994. Who is this that comes from Edom? In: Coogan, M.D., Exum, J.C. and Stager, L.E. eds. *Scripture and other Artifacts: Essays on the Bible and Archaeology in Honor of Philip J. King.* Louisville, Kentucky: 216–229.

Larsen, M.T. 1979. The Tradition of Empire in Mesopotamia. In: Larsen, M.T. ed. *Power and Propaganda: a Symposium on Ancient Empires.* Copenhagen: 75–103.

Lindner, M. 1992. Edom Outside the Famous Excavations: Evidence from Surveys in the Greater Petra Area. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan.* Sheffield: 143–166.

Lindner, M. and Farajat, S. 1987. An Edomite Mountain Stronghold North of Petra (Ba'ja III). *ADAJ* 31:175–185.

Lindner, M., Farajat, S., Knauf, E.A. and Zeitler, J.P. 1990. Es-Sadeh–a Lithic–Early Bronze–Iron II (Edomite)–Nabatean site in southern Jordan: Report on the Second Exploratory Campaign, 1988. *ADAJ* 34:193–237.

Lines, J. 1954. Late Assyrian Pottery from Nimrud. *Iraq* 16:164–167.

Liverani, M. 1979. The Ideology of the Assyrian Empire. In: Larsen, M.T. ed. *Power and Propaganda: a Symposium on Ancient Empires*. Copenhagen: 297–317.

Liverani, M. 1992. Early caravan trade between South Arabia and Mesopotamia. *Yemen* 1:111–115.

Longacre, W.A. 1970. *Archaeology as Anthropology: a Case Study*. Tucson.

Mallowan, M.E.L. 1950. Excavations at Nimrud, 1949–1950. *Iraq* 12:147–183.

Mallowan, M.E.L. 1966. An Alabaster Head from Timna, South Arabia. *Iraq* 28:96–104.

Margueron, J. 1982. Le coffrets. In: Beyer, D. ed. *Meskene-Emar: dix ans des travaux 1972–1982*. Paris: 95–97.

Margueron, J. 1995. Emar, Capital of Ashtata in the fourteenth century B.C.E. *BA* 58:126–138.

Mazar, A. 1985. Between Judah and Philistia: Timnah (Tel Batash) in the Iron Age II. *EI* 18:300–324. (Hebrew).

Mazar, E. 1985. Edomite pottery at the end of the Iron Age. *IEJ* 35:253–269.

McClellan, T.L. 1975. *Quantitative Studies in the Iron Age Pottery of Palestine*. (Ph.D. dissertation). Michigan.

Meshel, Z. 1981. The history of 'Darb el-ʿGhaza' – The ancient Road to Eilat and southern Sinai. *EI* 15:358–371. (Hebrew).

Millard, A.R. 1984. The small Cuboid Incense Burners: a Note on their Age. *Levant* 16:172–173.

Mommsen, M., Perlman, M. and Yellin, J. 1984. The Provenance of the *lmlk* Jars. *IEJ* 34:89–113.

Na'aman, N. 1979a. Sennacherib's Campaign to Judah and the Date of the *lmlk* Stamps. *VT* 29:61–86.

Na'aman, N. 1979b. The Brook of Egypt and Assyrian Policy on the Border of Egypt. *Tel Aviv* 6:68–90.

Na`aman, N. 1980. The Inheritance of the Sons of Simeon. *ZDPV* 96:136–152.

Na`aman, N. 1986. Hezekiah`s Fortified Cities and the *lmlk* Stamps. *BASOR* 261:5–21.

Na'aman, N. 1987. Pastoral Nomads in the southwestern Periphery of the Kingdom of Judah in the 9th–8th centuries B.C.E. *Zion* 52:261–278. (Hebrew).

Na`aman, N. 1992. Israel, Edom and Egypt in the tenth century B.C.E. *Tel Aviv* 19:71–93.

Na'aman, N. 1995. Province System and Settlement Pattern in southern Syria and Palestine in Neo-Assyrian Period. In: Liverani, M. ed. *Neo-Assyrian Geography*. Rome: 103–115.

Naveh, J. 1962. The Excavations at Mesad Hashavyahu: Preliminary Report. *IEJ* 12:90–113.

Negev, A. 1966. The Date of the Petra-Gaza Road. *PEQ* 98:89–98.

Nicklin, K. 1979. The Location of Pottery Manufacture. *Man* 14:436–458.

Northedge, A., Bamber, A. and Roaf, M. 1988. *Excavations at 'Ana, Qal'a Island.* Warminster.

Oakeshott, M.F. 1978. A *Study of the Iron Age II Pottery of East Jordan with Special Reference to Unpublished Material from Edom.* (Ph.D. dissertation). London.

Oakeshott, M, F. 1983. The Edomite pottery. In: Sawyer, J.F.A. and Clines, D.J.A. eds. *Midian, Moab and Edom. The History and Archaeology of Late Bronze and Iron Age Jordan and Northwest Arabia.* Sheffield: 53–63.

Oates, J. 1959. Late Assyrian Pottery from Fort Shalmaneser. *Iraq* 21:130–146.

Oded, B. 1970. Observations on Methods of Assyrian Rule in Transjordan after the Palestinian Campaign of Tiglath-Pileser III. *JNES* 29:177–186.

Oded, B. 1974. The Phoenician Cities and the Assyrian Empire in the Time of Tiglath-Pileser III. *ZDPV* 90:38–49.

Oded, B. 1992. *War, Peace and Empire: Justification for War in Assyrian Royal Inscriptions.* Wiesbaden.

Oded, B. 1993. 'And I will give Peace in the Land' (Lev. 26:6) – Assyrian Perspective. *EI* 24:148–157. (Hebrew).

Ofer, A. 1993. *The Highland of Judah during the Biblical Period.* (Ph.D. dissertation, Tel Aviv University). Tel Aviv.

Orchard, J. 1982. Finding the Ancient Sites in southern Yemen. *JNES* 41:1–21.

Oren, E. D. 1993. Ethnicity and Regional Archaeology: the Western Negev under Assyrian Rule. In: Biran, A. and Aviram, J. eds. *Biblical Archaeology Today, 1990: Proceedings of the Second International Congress on Biblical Archaeology.* Jerusalem: 102–105.

Ornan, T. 1990. *A Study of the Glyptic Finds from the Land of Israel and the Transjordan: Assyrian, Babylonian and Achaemenian Cylinder Seals from the First Half of the First Millennium B.C.E.* (M.A. Thesis, Hebrew University). Jerusalem. (Hebrew).

Otzen, B. 1979. Israel under the Assyrians. In: Larsen, M.T. ed. *Power and Propaganda: a Symposium on Ancient Empires.* Copenhagen: 251–261.

Parr, P.J. 1982. Contacts between Northwest Arabia and Jordan in the Late Bronze and Iron Ages. In: Hadidi, A. ed. *Studies in the History and Archaeology of Jordan I.* Amman: 127–133.

Parr, P.J. 1987. Aspects of the Archaeology of Northwest Arabia in the First Millennium B.C. In: Fahd, T. ed. *L'Arabie preislamique et son environnment historique et culturel*. Strasbourg: 39–66.

Parr, P.J. 1992. Edom and the Hejaz. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan*. Sheffield: 41–46.

Parr, P.J. 1993. The early History of the Hejaz: a Response to Garth Bawden. *Arabian Archaeology and Epigraphy* 4:48–58.

Parr, P.J. 1996. Further Reflections on late Second Millennium Settlement in NorthWest Arabia. In: Seger, J.D. ed. *Retrieving the Past. Essays on Archaeological Research and Methodology in Honor of Gus W. Van Beek*. Winona Lake: 213–217.

Parr, P.J., Harding, G.L. and Dayton, J.E. 1970. Preliminary Survey in Northwest Arabia, 1968. *Bulletin of the Institute of Archaeology, University of London* 8–9:193–242.

Parr, P.J., Harding, G.L. and Dayton, J.E. 1972. Preliminary Survey in Northwest Arabia, 1968. *Bulletin of the Institute of Archaeology, University of London* 10:23–61.

Pecirkova, J. 1987. The Administrative Methods of Assyrian Imperialism. *ArOr* 55:162–175.

Petrie, W.M.F. 1928. *Gerar*. London.

Petrie, W.M.F. 1937. *Anthedon, Sinai*. London.

Philby, H.S.J.B. 1957. *The Land of Midian*. London.

Pirenne, J. 1987–1988. The Chronology of ancient South Arabia: Diversity of Opinion. In: Daum, W. ed. *Yemen, 3000 Years of Art and Civilization in Arabia Felix*. Innsbruck: 116–122.

Plog, S. 1995. Approaches to Style: Complement and Contrasts. In: Carr, C. and Neitzel, J.E. eds. *Style, Society and Person*. New York: 370–387.

Poplin, F., and Caubet, A. 1995. Le travail de l'os, de l'ivoire et de la coquille en Terre Sainte du 7e au 1er millenaires av. J.-C. In: 'Amr, K., Zayadine, F. and Zaghloul, M. eds. *Studies in the History and Archaeology of Jordan V*. Amman: 489–495.

Postgate, J.N. 1992. The Land of Assur and the Yoke of Assur. *World Archaeology* 23(3):247–263.

Potts, D.T. 1990. *The Arabian Gulf in Antiquity*. Oxford.

Potts, D.T. 1991. Tayma and the Assyrian Empire. *Arabian Archaeology and Epigraphy* 2:10–23.

Pratico, G.D. 1983. *Tell el-Kheleifeh 1937–1940: A Reappraisal of Nelson Glueck's Excavations with Special Attention to the Site's Architectural and Ceramic Traditions*. (PhD. dissertation, Cambridge).

Pratico, G.D. 1993. *Nelson Glueck's 1938–1940 Excavations at Tell el-Kheleifeh: a Reappraisal*. Atlanta.

Rainey, A.F. 1973. The Cuneiform Inscription on a Votive Cylinder from Beer-sheba. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 61–70.

Rainey, A.F. 1984. Early Historical Geography of the Negeb. In: Herzog, Z. ed. *Beer Sheba II: The Early Iron Age Settlements*. Tel Aviv: 88–104.

Rashid, A.S. 1974. Einige Denkmaler aus Tema und der babylonische Einfluss. *Baghdader Mitteilungen* 7:155–165.

Rashid, A.S. 1980. A study of Tayma pottery. *Sumer* 36:101–127 (Arabic).

Rathjens, C. 1955. *Sabaeica Bericht über die archaologischen Ergebnisse seiner zweiten, dritten und vierten Reise nach südarabien, Teil II: die unlokalisierten Funde*. Hamburg.

Rawson, P.S. 1954. Palace Wares from Nimrud: Technical Observations on Selected Examples. *Iraq* 16:168–172.

Reese, D.S. 1988. A new Engraved Tridacna Shell Disc from Kish. *JNES* 47:35–41.

Reese, D.S. 1995. Marine Invertebrates and Fossils. In: Bennett, C.M. and Bienkowski, P. eds. *Excavations at Tawilan in southern Jordan*. Oxford: 93–96.

Resto, J. 1991. The Domestication of the Camel and the Establishment of the Frankincense Road from South Arabia. *Orientalia Suecana* 40:187–219.

Reich, R. 1984. The Identification of the 'Sealed *karu* of Egypt'. *IEJ* 34:32–38.

Rothenberg, B. and Glass, J. 1983. The Midianite Pottery. In: Sawyer, J.F.A. and Clines, D.J.A. eds. *Midian, Moab and Edom. The History and Archaeology of Late Bronze and Iron Age Jordan and Northwest Arabia*. Sheffield: 65–124.

Russel, H.F. 1985. The Historical Geography of the Euphrates and Habur according to the Middle- and Neo-Assyrian Sources. *Iraq* 47:57–74.

Santley, R.S. and Alexander, R.T. 1992. The Political Economy of Core-periphery Systems. In: Schortman, E.M. and Urban, P.A. eds. *Resources, Power and International Interaction*. New York: 23–49.

Sass, B. 1991. *Studia Alphabetica: on the Origin and Early History of the Northwest Semitic, South Semitic and Greek Alphabets*. Freiburg-Göttingen.

Sauer, J.A. 1995. Artistic and Faunal Evidence for the Influence of the Domestication of Donkeys and Camels on the Archaeological History of Jordan and Arabia. In: 'Amr, K., Zayadine, F. and Zaghloul, M. eds. *Studies in the History and Archaeology of Jordan V*. Amman: 39–48.

Sauer, J.A. and Blakely, J.A. 1988. Archaeology along the Spice Route of Yemen. In: Potts, D.T. ed. *Araby the Blest*. Copenhagen: 91–115.

Schortman, E.M. and Urban, P.A. 1992. Current Trends in Interaction Research. In: Schortman, E.M. and Urban, P.A. eds. *Resources, Power and International Interaction*. New York: 235–255.

Seeden, H. 1991. A Tophet in Tyre? *Berytus* 39:39–87.

Segal, B. 1956. Problems of Copy and Adaptation in the Second Quarter of the First Millennium B.C.: some Syrian and Syro-Hittite Elements in the Art of Arabia and of the West. *AJA* 60:165–170.

Segal, B. 1957. Sculpture from Arabia Felix: the Earliest Phase. *Ars Orientalis* 2:35–42.

Shea, M.O. 1983. A small Cube-shaped Incense Burner from Tell Fara in southern Palestine. *Institute of Archaeology Bulletin* 23:161–169.

Singer-Avitz, L. 1996. Household Activities at Beersheba. *EI* 25:166–174. (Hebrew).

Stern, E. 1973. Limestone Incense Altars. In: Aharoni, Y. ed. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons*. Tel Aviv: 52–53.

Stern, E. 1982. *Material Culture of the Land of the Bible in the Persian Period 538–332 B.C.* Warminster.

Tadmor, H. 1966. Philistia under Assyrian Rule. *BA* 29:86–102.

Tadmor, H. and Tadmor, M. 1995. The Seal of Bel-Asharedu: a Case of "Migration". In: Von Lerberghe, K. and Schoors, A. eds. *Immigration and Emigration within the Ancient Near East: Festschrift E. Lipinski*. Leuven: 345–355.

Tufnell, O. 1953. *Lachish III: the Iron Age. Text and Plates*. London.

Turner, G. 1973. South Arabian Gold Jewellery. *Iraq* 35:127–139.

Van Beek, G.W. 1958. Marginally Drafted Pecked Masonry. In: Bowen, R.L. and Albright, F.P. eds. *Archaeological Discoveries in South Arabia*. Baltimore: 287–295.

Van Beek, G.W. 1960. Frankincense and Myrrh. *BA* 23:70–95.

Van Beek, G.W. 1969. *Hajar bin Humid*. Baltimore.

Wallerstein, I. 1974. *The Modern World-System I*. New York.

Wapnish, P.C. 1984. The Dromedary and Bactrian Camel in Levantine Historical Settings: the Evidence from Tell Jemmeh. In: Clutton-Brock, J. and Grigson, C. eds. *Animal and Archaeology 3: Early Herders and their Flocks*. (BAR International Series 202). Oxford: 171–200.

Weippert, M. 1987. The Relations of the States East of the Jordan with the Mesopotamian Powers during the First Millennium B.C. In: Hadidi, A. ed. *Studies in the History and Archaeology of Jordan III*. Amman: 97–105.

Wells, P.S. 1992. Tradition, Identity and Change beyond the Roman Frontier. In: Schortman, E.M. and Urban, P.A. eds. *Resources, Power and Interregional Interaction*. New York: 175–188.

Wengrow, D. 1996. Egyptian Taskmasters and Heavy Burdens: Highland Exploration and the Collared-rim Pithos of the Bronze/Iron Age Levant. *Oxford Journal of Archaeology* 15:307–326.

Winnett, F.V. and Reed, W.L. 1970. *Ancient Records from North Arabia*. Toronto.

Winter, I.J. 1977. Perspective on the "local style" of Hasanlu IVB: a Study in Receptivity. In: Levine, D.L., Young, T.C.Jr. and Buccellati, G. eds. *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia*. Malibu: 371–386.

Yadin, Y. and Geva, S. 1983. Cities of the Negev during the Days of Yirmiyahu. In: Hoffman, Y. ed. *Encyclopedia of the Biblical World* 11 (Yirmiyahu Book). Jerusalem-Ramat Gan: 247–255. (Hebrew).

Yule, P. and Kervran, M. 1993. More than Samad in Oman: Iron Age Pottery from Suhar and Khor Rori. *Arabian Archaeology and Epigraphy* 4:69–106.

Zaccagnini, C. 1987. Aspects of Ceremonial Exchange in the Near East during the late Second Millennium B.C. In: Rowlands, M.J., Larsen, M.T. and Kristiansen, K. eds. *Centre and Periphery in the Ancient World*. Cambridge: 13–24.

Zadok, R. 1981. Arabians in Mesopotamia during the Late-Assyrian, Chaldean, Achaemenian and Hellenistic Periods, chiefly according to Cuneiform Sources. *ZDMG* 131:57–68.

Zeitler, J.P. 1992. 'Edomite' Pottery from the Petra Region. In: Bienkowski, P. ed. *Early Edom and Moab: the Beginning of the Iron Age in Southern Jordan*. Sheffield: 167–176.

Ziegler, L. 1942. Tonkastschen aus Uruk, Babylon und Assur. *ZA* 47:224–240.

Zimhoni, O. 1983. The Pottery. In: Fritz, V. and Kempinski, A. eds. *Ergebnisse de Ausgrabungen auf der Hirbet el-Msas (Tel Masos) 1972–1975*. Wiesbaden: 127–130.

Zimhoni, O. 1990. Two Ceramic Assemblages from Lachish Levels III and II. *Tel Aviv* 17:3–52.

Zwickel, W. 1990. *Raucherkult und Rauchergerate*. Freiburg-Göttingen.

APPENDIX

MICROPALEONTOLOGICAL EXAMINATION OF A STONE OBJECT FROM BEERSHEBA

Yoram Eshet

A sample of a stone object bearing an inscription in the South Arabian script (above, pp. 51–52 and Fig. 15:1) was studied in order to determine the presence of calcareous nanofossils. Calcareous nanofossils are the remains of microscopic planktonic algae that live in the ocean. These fossils are known in the earth's history from Triassic times until the present.

The assemblage: The sample contained a well-preserved calcareous nanofossil assemblage that included the following taxa: *Archangelskeilla cymbiformis, Eiffelithus turriseiffelii, Parhabdolithus embergeri, Watznaueria barnesae, Prediscosphaera cretacea,* and *Lithraphidites quadratus.*

Age of sample: The assemblage contained only fossils of Late Cretaceous Age, most of them are common in Campanian and Maastrichtian times. The presence of *L. quadratus* indicates that the age is Late Maastrichtian. In southern Israel, rocks of this age belong to the Ghareb Formation.

Source of sample: Rock outcrops of the Ghareb Formation are common in the Beer Sheva area, as well as the entire Negev. Therefore, it is possible to assume that the sample originated in the area, and was not imported from far away places, although the latter possibility cannot be refuted from the fossil evidence, because rocks of Maastrichtian Age are common throughout the entire Middle East.