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A Question of Economic Control during the Proto-Historical Era of Palestine/Transjordan

(c. 3500–2000 BC)

‘... Foreigners have become people everywhere ...’
Lament of Ipuwer (Wilson 1969)

The proto-historical era of Palestine and Transjordan may be defined as the time between the end of the Chalcolithic period and the beginning of the Middle Bronze Age. It includes the first general establishment of large fortified settlements. The early part is contemporary with developing complex economies in Egypt and southern Mesopotamia; the later with literate societies in both regions and in Syria whose economic structures are well-documented.

Virtually no evidence concerning early forms of writing has come from Palestine/Transjordan and when it does, it stems from external sources. Only a very limited *corpus* of stamp and roll seal impressions was known until recently, along with various incised ‘signs’ on pottery and other materials.¹ Many of these are of uncertain date or belong to EB II–III or later. This paper explores two sets of ‘signs’ in a preliminary way. They are dated in the more problematical periods of the proto-historical era: the so-called transition between the Chalcolithic period (i.e. Ghassul/Beersheba) and the Early Bronze Age (EB I/late Chalcolithic/Proto Urban) and the period between EB III and MB IIA (EB IV/EB–MB/EB IV–MB I etc.).

At the Oxford Conference in 1980, I summarized the excavations at Jawa in eastern Transjordan within what might be called the EB I/late Chalcolithic landscape of the southern Levant (FIGS. 1 and 2). The nature of the site—its steppic location, massive fortifications, complex water harvesting systems and early date (4th millennium)—led me to construct a catastrophe model. Further work in the sub-region and in adjacent areas has generated data which allowed me to introduce some alternative explanations. The proposed landscape includes the Levantine coast at least as far north as the ‘Homs Gap’, the Damascene and all of Cis- and Transjordan. In order to test various hypothetical constructs and models, I excavated at Tell Um Hammad in the Jordan Valley where a series of

stamp seal impressions was found. Some of these are precisely identical to those from Jawa.²

A cemetery of the EB IV/EB–MB period was discovered during the excavations at Tell Um Hammad. At the same time the occupation site (Um Hammad Gharbiyah) was tested, recovering a comprehensive pottery typology. In 1982 the Department of Antiquities and the American Center for Oriental Research conducted rescue excavations at another EB IV/EB–MB cemetery on the outskirts of Amman and I was able to study the pottery. Peculiarities of this material and the pottery typology from Um Hammad form the basis of the second half of this paper.³

Examination of the new evidence suggests that we may be dealing with economic controlling devices. This economic component may be set against various models concerning the two problematical proto-historical periods of the southern Levant.

An overview of early writing and numeration in Syria during the 4th millennium shows that these are rare. Evidence from Habuba Kabira, for example, comprises bullae and tokens as well as roll seal impressed clay tablets with number signs, both of southern Mesopotamian origin. Two pictographic tablets with number signs are now known from Tell Brak—likewise of the Uruk period—which have been cautiously ascribed to ‘the least-developed phase so far seen of the Uruk-type writing’. Alongside these proto-literate developments, however, there are stamp seals and these may be regarded as an international tradition going back to the Neolithic, both in their function—as separate from amulets—and their limited sign repertoire. The geographical extent of Uruk-type writing and numeration in the western regions is hard to define, but a southern boundary may have been about Hama. The northern,

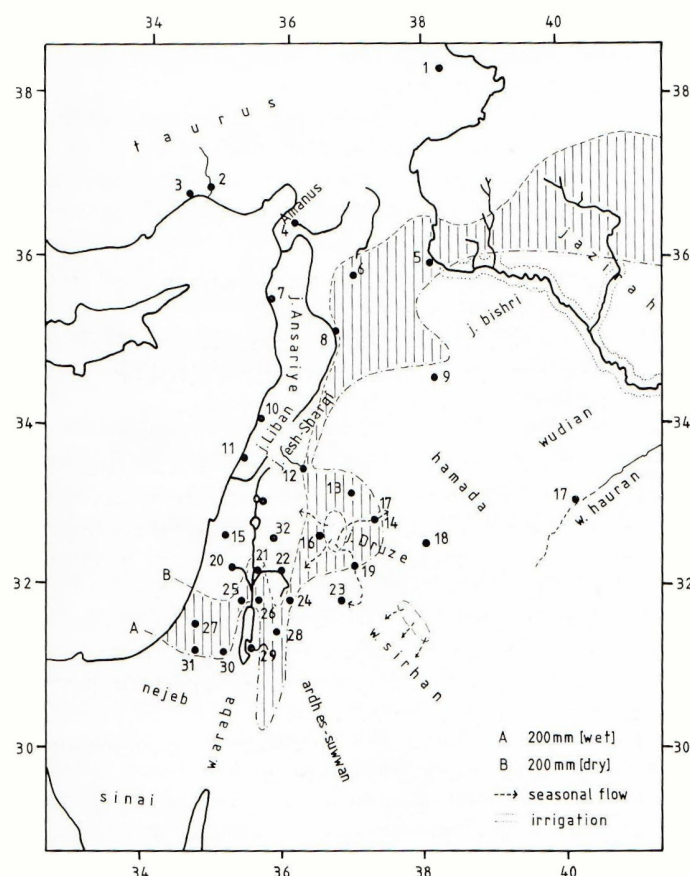
² See Helms 1982 and Schaub 1982, the latter on the ‘walled town culture’. Much of the work in the region is still unpublished or poorly documented, but see Ibrahim *et al.* 1976, Betts 1986 (ms), 1984 and Garrard *et al.* 1986. For Um Hammad and the Jordan Valley generally see Glueck 1951, Mellaart 1962, 1966 and de Contenson 1960. The landscape and various models are discussed in Helms 1981, 1984, 1986 and 1987.

³ See Helms 1983 for the cemetery at Um Hammad (Tiwal esh-Sharqi). For the Amman cemetery (Um Bighal) see Helms and McCreery in press.

¹ See Ben-Tor 1978.

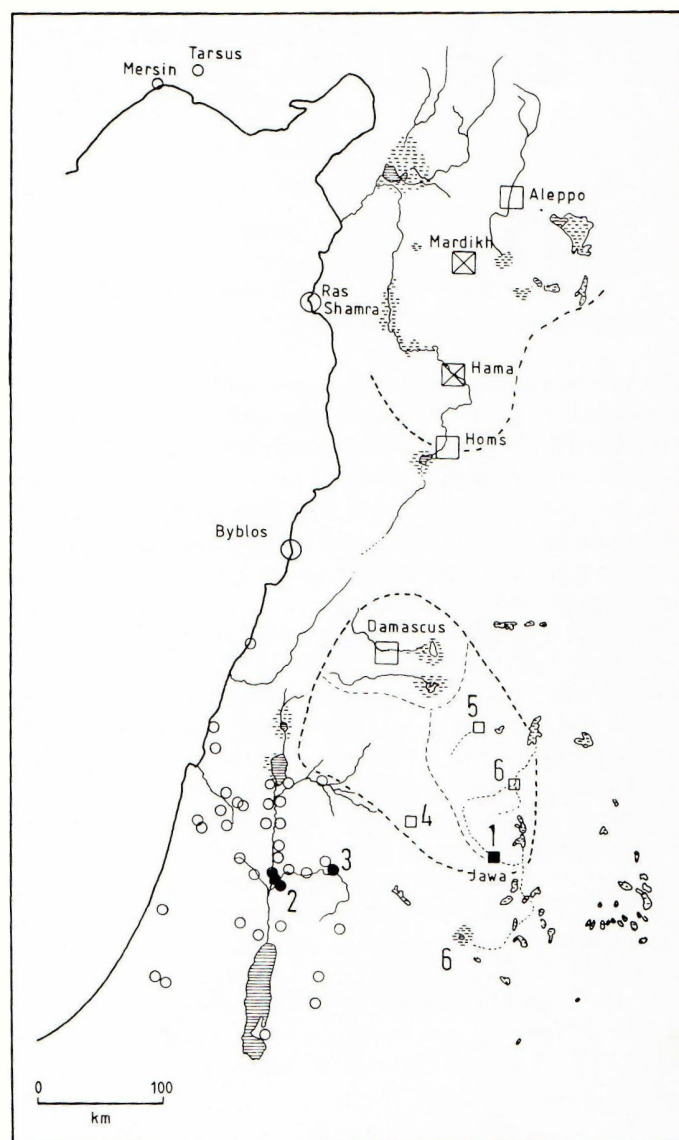
1. Southern Levant

- | | |
|--------------------|--------------------------|
| 1 Malatya | 17 Rutbah |
| 2 Tarsus | 18 Qasr Burqu' |
| 3 Mersin | 19 Jawa |
| 4 Amuq | 20 Tell el-Far'ah |
| 5 Habuba Kabira | 21 Tell Um Hammad |
| 6 Mardikh/Ebla | 22 Mutawwaq (Meghaniyeh) |
| 7 Ras Shamra | 23 Azraq |
| 8 Hama | 24 Sahab |
| 9 Palmyra | 25 Jericho (NT/OT) |
| 10 Byblos | 26 Ghassul |
| 11 Sidon | 27 T. Areyny |
| 12 Damascus | 28 Lehun |
| 13 Khirbet Umbachi | 29 Bab edh-Dhra' |
| 14 Nemara/Zelaf | 30 Arad |
| 15 Megiddo | 31 Beersheba |
| 16 Bostra | 32 Tell Qurs |



2. Southern Levant

- | |
|---------------------------------------|
| 1 Jawa |
| 2 Um Hammad, Mafluq, Kataret es-Samra |
| 3 Mutawwaq |
| 4 Bostra |
| 5 Khirbet Umbachi |
| 6 Nemara/Zelaf |
| 7 Oasis of el-Azraq |



coastal regions remain silent in this regard.⁴

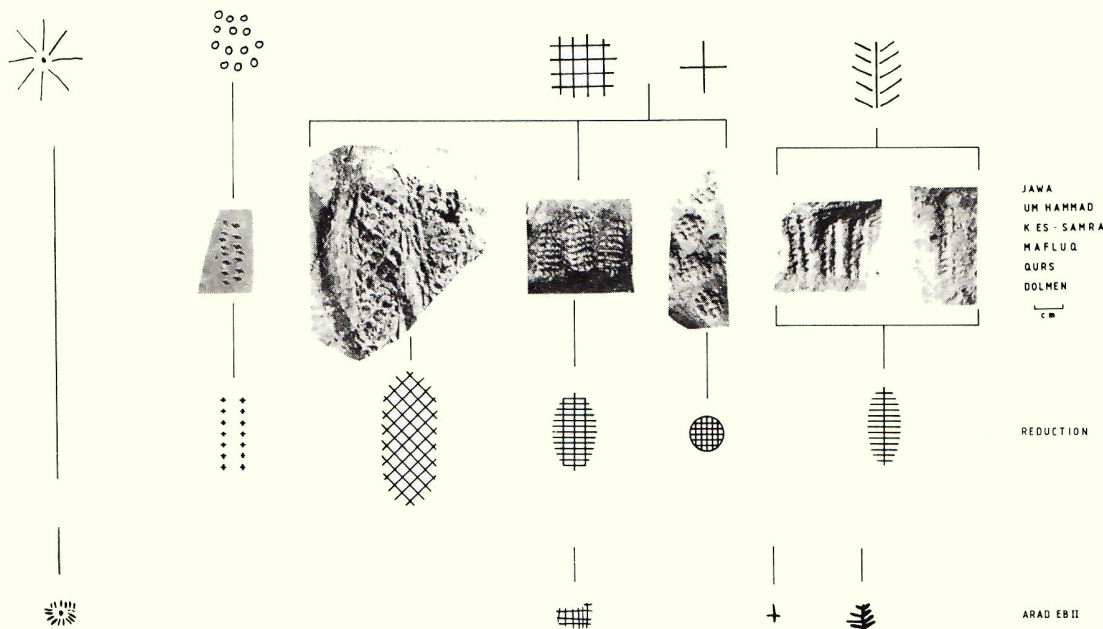
Our stamp seal impressions should be regarded as Syrian, although sharing a broader sign repertoire (FIG. 3). These signs were in use long before and at the same time as Uruk-type writing. The two systems—seals and rapidly developing writ-

ing—were quite separate in the 4th millennium; but they share a common function in that they are devices for storing information. 85 per cent of the Archaic texts from Uruk have now been shown to be economic in content, the rest being lexical texts.⁵ I would suggest that the deliberate use of stamp seals—

⁴ For Habuba Kabira see Strommenger 1979, 1980 and for bullae and tokens Schmandt-Besserat 1977, 1978. But see also Brandes 1980 for a critique of the latter. On Tell Brak see Finkel 1980. A summary of the stamp seal sign repertoire is given by Homès-Fredericq 1963.

⁵ I am indebted to Professor H. J. Nissen for advice and the term 'economic controlling devices'. See *idem* 1985, 'The Emergence of Writing in the Ancient Near East' *Interdisciplinary Science Reviews* 10.4: 349ff.

3. The seal impressions.



at Jawa and Tell Um Hammad—may indicate a similar striving for economic control, perhaps at a less complex stage of development and probably within a much smaller economic structure. When we can demonstrate a sudden introduction of such methods, we may plausibly suggest a significant economic change, either at the sites in question or elsewhere.

Various signs are known before the EB I/late Chalcolithic period of Palestine/Transjordan, but none has been arranged in any meaningful way. I am aware of only one Chalcolithic stamp seal impression which was found in the northern Negev area. It was evidently used as a deliberate sealing, since fabric impressions are visible on the reverse of the clay host.⁶

Remnants of the Syrian (international) stamp seal repertoire can be recognized in incised signs on Palestinian pottery from EB II onward (FIG. 3: Arad), although by then their meaning—if any—may no longer have been important, or even understood.⁷ A little earlier, from about EB IB onward, remnants of marking systems might be seen in circular and semi-circular impressions and incisions on pottery: these, however, can also be regarded as degenerated stamp seals whose use was no longer relevant. They may also have been purely decorative. In any case, by EB III roll seal impressions appear to have been preferred throughout the land.

The 4th millennium signs under discussion here may contain two meanings: their narrow meaning might be ownership ('property of X') but there can also be a connotation of 'contents' or 'produce', both perhaps referring to a specific locale. In the narrow sense then, they may simply be used to dis-

tinguish personal property; but their meaning may also be extended to economic control.

Given the new evidence to hand from Jawa and Um Hammad and its immediate neighbours in the alluvial fan of Wadi Zerqa, we must strive to explain the following:

- The precise correspondence of two types of seal impressions at Jawa and the sites at the mouth of the Zerqa, on related and volumetrically ranked (?) pottery vessels: i.e. the relationship between the steppic eastern foothills of Jebel Druze and the verdant Jordan Valley (FIGS. 3 and 4);
- The sudden appearance of these impressions as part of a broader repertoire in the Jordan Valley in EB IA: at Tell Um Hammad, Tell Mafluq, Kataret es-Samra and perhaps one of the Damiya dolmens⁸ (FIG. 3);
- The relation of the other impressions to examples from the east and the north of Um Hammad;⁹
- The absence of the impressions shared by Jawa and Um Hammad during the 4th millennium west of the Jordan River where contemporary and possibly related settlements are known with counterparts in Jordan, southern Syria and the coast, where roll seals appear at this time;¹⁰
- The absence of such seals in EB II/III (IV) and the introduction of other foreign seals.

Ownership/produce/origin and volumetric ranking in the production of containers may imply high level organization, craft

⁶ Gilead: public lecture in 1985 at the Institute of Archaeology, London University.

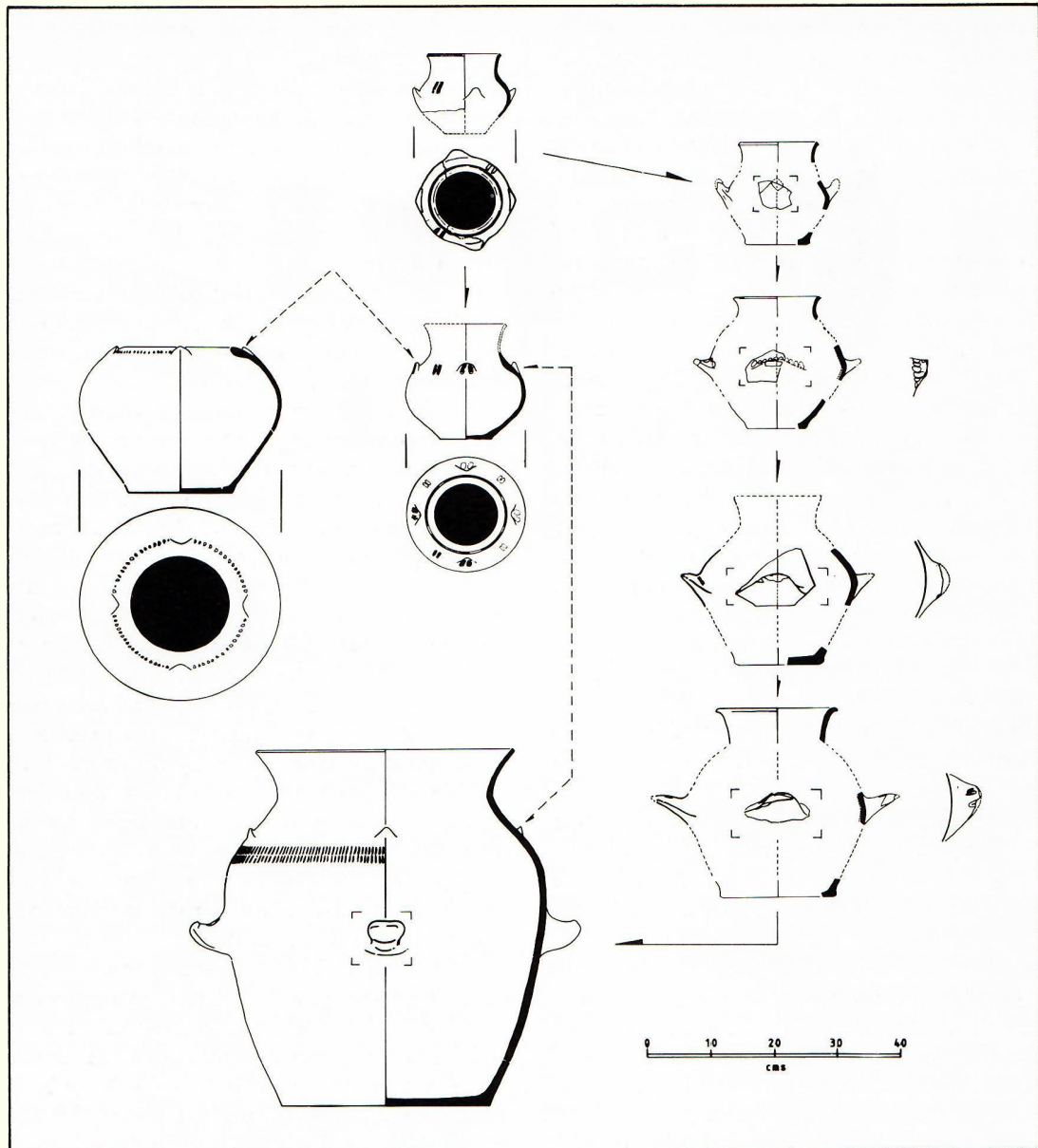
⁷ Good examples come from EB II Arad (Amiran 1978), some of them close to Homès-Fredericq's sign list (cf. n. 4 above and FIG. 3 here).

⁸ I am indebted to Mellaart and Leonard for showing me seal impressions from all three sites (cf. also Leonard 1981 (ms)).

⁹ Ben-Tor 1978.

¹⁰ See Braun 1984, 1985; also Dunand 1973 and Saidah 1979.

4. Ranked series of vessels from Jawa.



specialization, commerce, and perhaps also social stratification. These in turn may suggest a geo-political centre of gravity which necessarily must lie beyond Palestine/Transjordan and which may be sought within the Damascene (cf. FIG. 2). Given the massive fortifications of Jawa and its hydraulic achievements, it is possible to argue for a complex economic structure which required some form of control within its territories. Jawa itself could then be seen as an outpost on the steppic border, and its countryside east of Jebel Druze as extended grazing land. The countryside west of Jebel Druze and south of Damascus could have been the granary of this Damascene 'suzerainty', extending southwards as far as the Yarmouk river

by the second half of the 4th millennium. What we see at Um Hammad and elsewhere may then be interpreted either in terms of a direct commercial relationship or in terms of borrowing a practice, perhaps without fully understanding it, or at least without any long-range implications. In either case, the seals were used in a rural setting in the Jordan Valley.¹¹

¹¹ A relevant parallel may be the small agricultural station at Taşkun Mevkii in eastern Anatolia (c. Amuq G) which may have been a mill. Both roll and stamp seals, the former of Jemdet Nasr type, were found, suggesting the possibility that containers (for barley) were sealed on the spot, within a totally rural setting. See Helms 1971, 1972. It is not established whether the region was controlled from more complex settlement networks. Compare a similar use of roll seals at En-Shadud (Braun *op. cit.* n. 10 above): Braun cites parallels—including the pottery host vessel—with nearby Megiddo whose status in relation to its countryside and villages such as En-Shadud is not established.

Whatever significance one might attach to the stamp seal impressions, their abrupt appearance calls for demographic and socio-economic hypotheses. Seal impressions together with other new cultural features which are contemporary with indigenous cultural (artefactual) clusters, argue for a directional movement and not simply diffusion via exchange alone, or other mechanisms. It can be shown that the indigenous Chalcolithic population was heterogeneous. By EB I A/B we may be able to speak in terms of a plural society which was created by gradual as well as rapid population shifts; a plural society whose components could interact or coexist within the landscape in isolation, so far as the artefactual record might be concerned. It is becoming clearer that societal and even ethnic groupings within strictly sequential series may be false when these are based on typological grounds. The evidence from Um Hammad tends to favour rapid population increase in addition to normal indigenous propagation. One region of origin for such a movement may be the Hauran and behind that the Damascene, the relationship between Jawa and the Jordan Valley being an indirect one. A second region of origin—or route—may be the coastal strip along the Mediterranean, as has been variously assumed for many years. These two movements—and there may well be others—appear to merge at Um Hammad and to exist side by side with a continuing Chalcolithic population. It remains to be seen whether the distribution of stamp seal impressions is significantly different from that of roll seals: i.e. that the former stem from the northeast (the Damascene) and the latter from northern Syria via the coast.

If a form of commerce is assumed to lie behind the use of seals in the 4th millennium, the almost equally abrupt discontinuation of the practice might signify a disruption or reduction at the postulated geo-political centre of gravity concomitant with gradual merging of separate cultural traditions—although not necessarily erasing societal differences, but rather subordinating them to higher-level organization—within Palestine/Transjordan. To some extent, the suggested increase in population and accelerated sedentization would result in intensified competition for resources and real estate, particularly in the verdant areas of the landscape, an increasing probability of armed conflict leading to prescribed territorialism and fortified settlements as we know them from about EB II onwards. These settlements became larger and technically more complex during EB III, but ought to be regarded as walled villages at this time. More complex socio-economic structures cannot be proven with the evidence to hand, despite the presence of roll seals and specialized architecture.

The lack of any locally generated economic controlling devices and/or numeration set against attested foreign glyptic art may imply: (a) that there was no need for these at inter-settlement level since each territory, once defined, was self-sufficient—at least for a time—(b) that prevalent commerce which might have needed recording systems, was foreign-based and essentially unilateral, in either Syria or Egypt or both, or (c) that indicators such as roll seal impressions

(EB II/III) signified personal property of an elite.

If such foreign commerce had become important to the various EB II/III economic sub-systems, its disruption together with competition for land, growing militarism, competition from steppic areas, short-term climate fluctuations, crop failures, high-risk sanitary conditions within crowded settlements, overgrazing, soil exhaustion and other factors would plausibly lead to a relatively rapid, though perhaps not catastrophic, devolution. This has of course been recognized towards the end of the 3rd millennium in Palestine. It has been assumed in Transjordan.

A partial Egyptian market collapse is documented at Byblos where the latest Egyptian material belongs to the 6th dynasty. West of the Jordan River the last comparable material is a little earlier. On the Syrian side the evidence is more elusive. There the relative chronology of Mardikh/Ebla II B1 and the *State Archives* must first be resolved. It has been proposed that Ebla's commercial network was disrupted and then reorganized, possibly on different geo-political lines, after Naram Sin in about 2300–2250 BC. Two Egyptian inscriptions are relevant: Pepi I (mean date c. 2300 BC) and Kefren (mean date c. 2500 BC). These formed the basis for dating the stage between c. 2400—or now up to a century earlier?—and 2300 BC.¹² Ebla II B1 can therefore be partly contemporary with EB III of the southern Levant; but there are as yet no proven direct relations, either artefactual—except for Khirbet Kerak ware—or textual, and perhaps none should be expected. However, if the Damascene lay within the exchange network of Ebla (II B1) it may have served as a bi-directional market centre. If there were any commercial (or other) relations between Damascus and the EB III settlements of Palestine/Transjordan, the market reorientation about 2300 BC may have had a negative effect, perhaps parallel to Egyptian 'withdrawal' farther to the south.

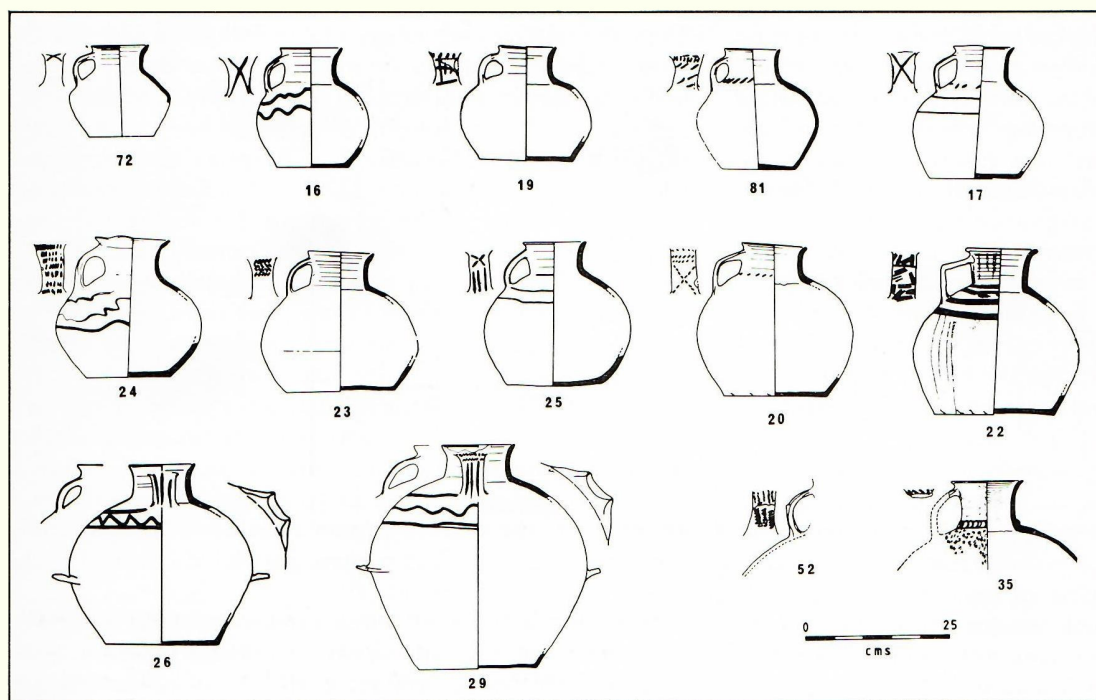
After about 2300 BC until about 2000 BC (MB IIA), researchers have generally agreed on a process of decentralization, although the 'current' reconstruction of cultural change and historical process within absolute chronological parameters was never tenable in terms of the published evidence.¹³ We now know that during this period (EB IV/EB–MB) large permanently settled communities based on mixed farming coexisted with more mobile ones; that there are indications of sub-regional population shifts; that there is increasing awareness among scholars of regionalism in terms of cultural preferences, resource procurement and related tactics and strategies; that there is some evidence for long-range exchange

¹² See Matthiae 1982 and also G. S. Matthiae 1979, 1981 and Mazzoni 1985. On its own, the early date (Kefren) is no problem and that of Pepi I fits the Naram Sin hypothesis admirably: however, the shape of the vessel—a quatrefoil lamp—is problematical. It is one of the hallmarks of the Palestinian EB IV/EB–MB period which is usually dated between 2300 and 2000 BC (cf. Dever 1980). How can a formal Egyptian imitation with a Pharaonic name be accommodated? The earliest known Syrian pottery form comes from Hama J8 (Fugmann 1958: FIG. 58, 3H372); but Saghih (1983: 109) cites the form as early as the 3rd–4th dynasty at Byblos. The relative chronological position of Khirbet Kerak ware is another aspect of the debate. At any rate, the possibility exists that both Syrian and Palestinian later Early Bronze Age chronologies and artefactual sequences must be revised before we can address the question of their correlation.

¹³ See Dever 1980 for the most comprehensive summary.

5. Pottery with symbols from Um Bighal

<i>reg</i>	<i>tomb</i>	<i>description</i>
72	4b	jug, strap handle
16	1	jug, strap handle, incised wavy lines
19	19	jug, strap handle
81	10	jug, strap handle, punctate band
17	3	jug, strap handle, punctate band, incised lines
24	3	jug, strap handle, recessed rim, incised wavy lines
23	6	jug, strap handle
25	3	jug, strap handle, incised lines
20	1	jug, strap handle, punctate band
22	1	jug, strap handle, incised lines, brown paint
26	1	jar, strap and ledge handles, incised wavy band
29	1	jar, strap and ledge handles, incised wavy band
52	11	jar, strap handle
35	?	jar, strap handle, pattern combing, moulded band



or, more simply, unilateral importation of foreign, notably Syrian goods.¹⁴ But until now there has been no evidence of any form of writing or numeration, or of any economic controlling devices, perhaps underlining the relative simplicity of these societies whose subsistence economies did not differ remarkably from those of the preceding period (EB III).

Syria played a role in the later proto-historical era of the landscape and it appears to have done so to the exclusion of Egypt. This is supported by evidence of Syrian imports and influence, including 'caliciform' pottery, luxury items such as the 'Ain-Samiyeh goblet, possibly cultic objects like the 'stick figurine' from Jebel Qa'aqir and some decorative attributes.¹⁵

¹⁴ See Prag 1971 (ms), Helms 1986, Falconer and Magness-Gardiner 1984, and Richard and Boraas 1984.

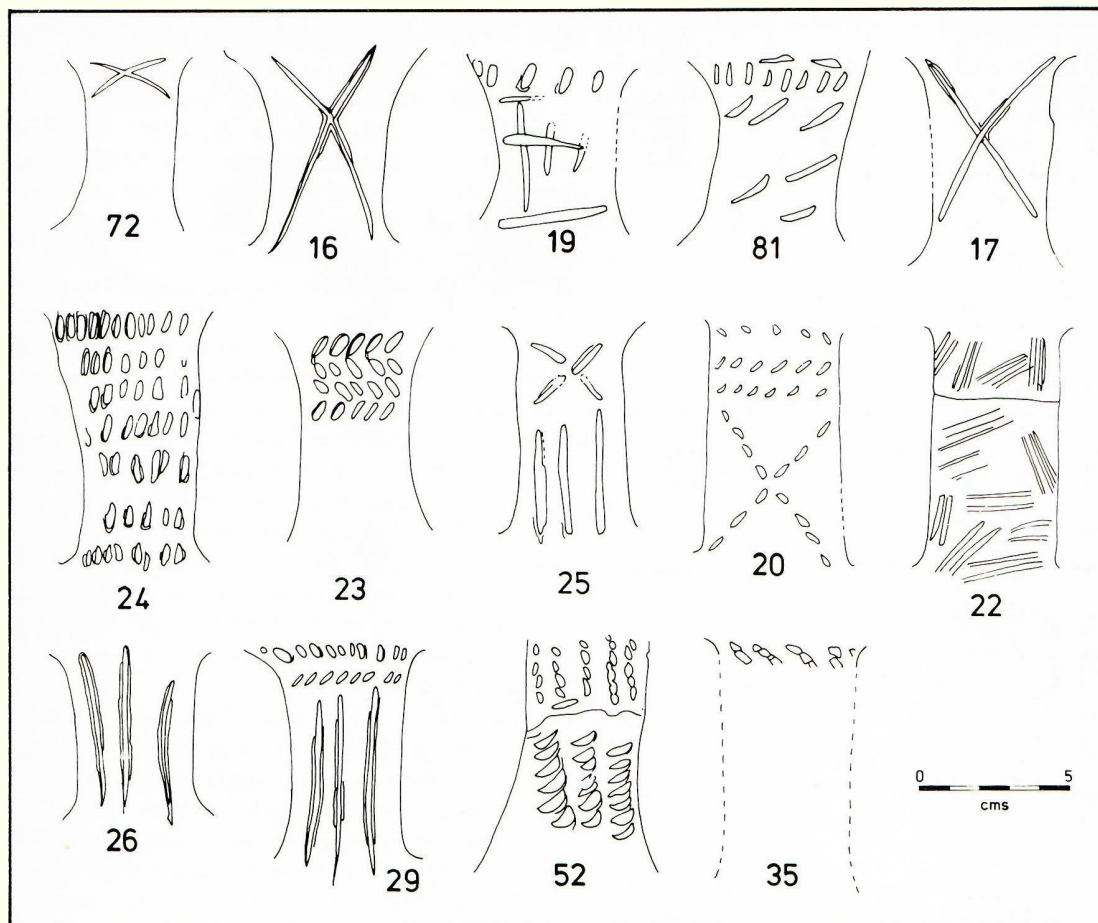
¹⁵ See Yeivin 1971 and Yadin 1971 as well as Dever 1980.

What the Syrian role may have been is not established at any point; nor can the various ethnic identifications embedded in catastrophe models be supported by any of the evidence presently to hand. However, some of the symbols on pottery vessels from Um Bighal may suggest something new.

As we noted above, symbols cut into pottery vessels prior to firing are known from Palestine/Transjordan throughout the proto-historical era. They are usually called 'potter's marks' and no meaningful combination of these has ever been arranged.

Several vessels of particular interest were found in the EB IV/EB-MB cemetery at Um Bighal, a few kilometres west of Amman (FIGS. 5, 9 and 10). The assemblage is identical to three others from cemeteries in the same area. Among these vessels, some strap-handled jugs and jars were incised with

6. The corpus of symbols.



symbols.¹⁶ When these were ranked according to the volume of the host vessel (FIG. 7), an apparently logical regression emerged. The following series was achieved by limiting analysis to repeated symbols.

There are two broad divisions: the smaller volumes appear to be marked with crossed strokes and the larger ones with three vertical strokes. Subdivisions seem to be made by combining the two basic signs (x and I) in an upper and lower register and superscribing a series of horizontal and vertical lines. Two additional examples may be related to this series. A jar from Tyre has a symbol which may be reduced to three vertical strokes. Its volume, plotted in the series from Um Bighal, corresponds to the vessels with the same symbol. A vessel from Qedesh shows a similar relationship.¹⁷ Three vessels which may be related in style, if not volume, come from Jericho and Khirbet Kirmil (cf. FIG. 8).

If the northern Palestinian and Lebanese pottery assemblages are examined more closely, a similar volumetric series might be constructed, with associated symbols. These are not as 'readable' as the ones from Um Bighal, but may nevertheless represent a parallel practice which may be called a 'familiar' differentiation system. Compare vessels and their symbols from Qedesh, Kibbutz Shamir, Ma'ayan Barukh and Tyre (FIGS. 8 and 9). All of these vessels are jugs—like some of those at Um Bighal—although in a different, regional style.¹⁸

Should this analysis be valid, then we may be dealing with rural 'familiar' measuring systems which are expressed in a variety of styles or perhaps 'handwriting' throughout the northern and central areas of Palestine/Transjordan and southern Lebanon during the latter part of the 3rd millennium. The discarded symbols in the Um Bighal series may represent further styles or 'handwriting'. The apparent correspondence of the three-stroke symbols over a wider geographical area may support the general argument. But why should such systems be introduced during a decentralized epoch which has

¹⁶ See Helms and McCreery in press. For the Amman groups see Dajani 1967–8, Hadidi 1982 and Zayadine 1978.

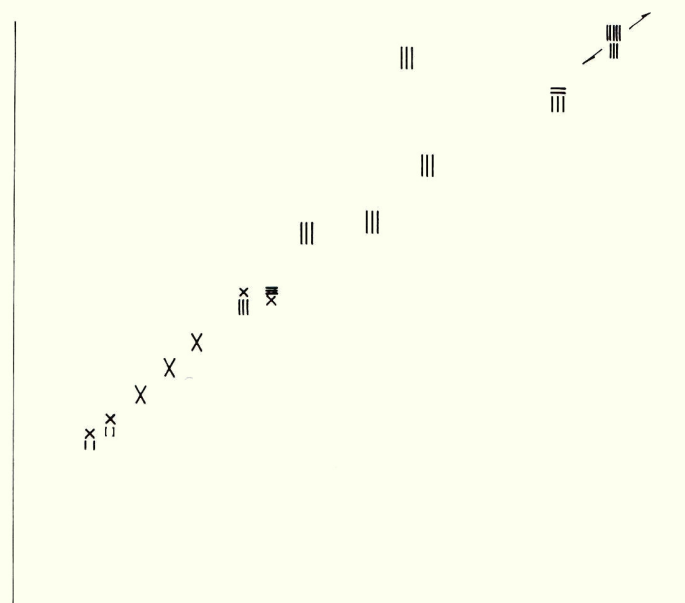
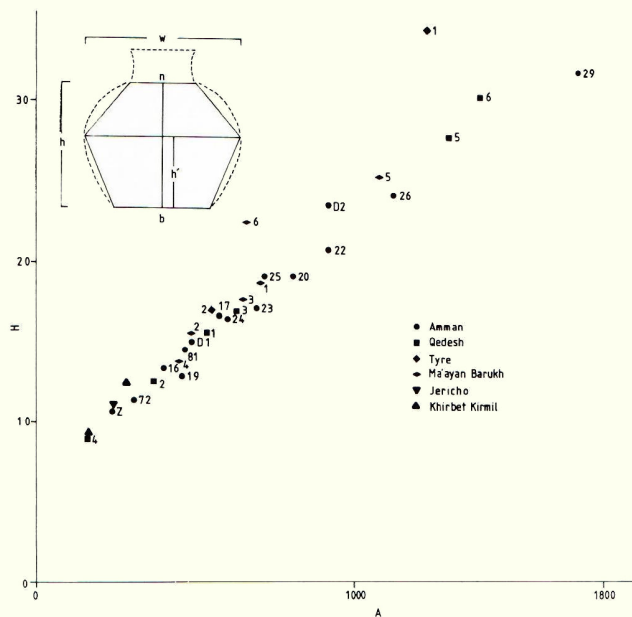
¹⁷ For Tyre see Bikai 1978; for Qedesh, Tadmor 1978.

¹⁸ For Kibbutz Shamir see Bahat 1972; Ma'ayan Barukh, Amiran 1961.

7. Regression: height (h)/area (A), i.e. $A = n(h - h') + w(h - h') + bh' + wh'$ (cms).

Sources:

Qadesh (Tadmor 1978) 1 70–413, 2 70–223, 3 70–486, 4 70–387, 5 70–500, 6 70–492; Tyre (Bikai 1978) 1 pl. LIV.1, 2 pl. LIV.2; Ma'ayah Barukh (Amiran 1961) 1 42, 2 39, 3 46, 4 40, 5 50, 6 6; Jericho (Kenyon 1960) FIG. 103.2; Khirbet Kirmil (Dever 1975) FIG. 5.9, 10; Jebel et-Taj (Dajani 1967/8) D1 FIG. 2.1, D2 FIG. 2.2 (= ? Hadidi 1982: pl. 80.5); 'Sports City' (Zayadine 1978) FIG. 3.2



been regarded as 'simple' in comparison with the 'complex' EB II–III period?

In the absence of recording systems and writing and with only the evidence of fortifications to support the argument, I would prefer to regard both periods as 'simple', or—better still—shelve such terminology so far as the later 3rd millennium is concerned, including perhaps the terms 'urban/non-urban', 'proto-urban' and even 'civilization'. Secondly, the only indicated behavioural change concerns relative mobility and even that may not be as pronounced throughout the landscape as our limited (Cis-Jordanian) record has led us to think. The now generally accepted idea that EB IV/EB–MB is in many ways a continuation of the previous periods coupled with an increase in mobility—perhaps no more than a shift in economic emphasis in favour of pastoralism—may suggest an answer.

The same population may have ranged over a wider area. This would have been particularly important in the north. As a result there would be an increased probability of contact at international level; and this in turn may have led to the diffusion of ideas regarding numeration. In the light of international events—i.e. Ebla about 2300 BC—other areas beyond the landscape might have experienced similar economic shifts, some of which resulted in greater mobility of a part of the erstwhile more sedentary population.

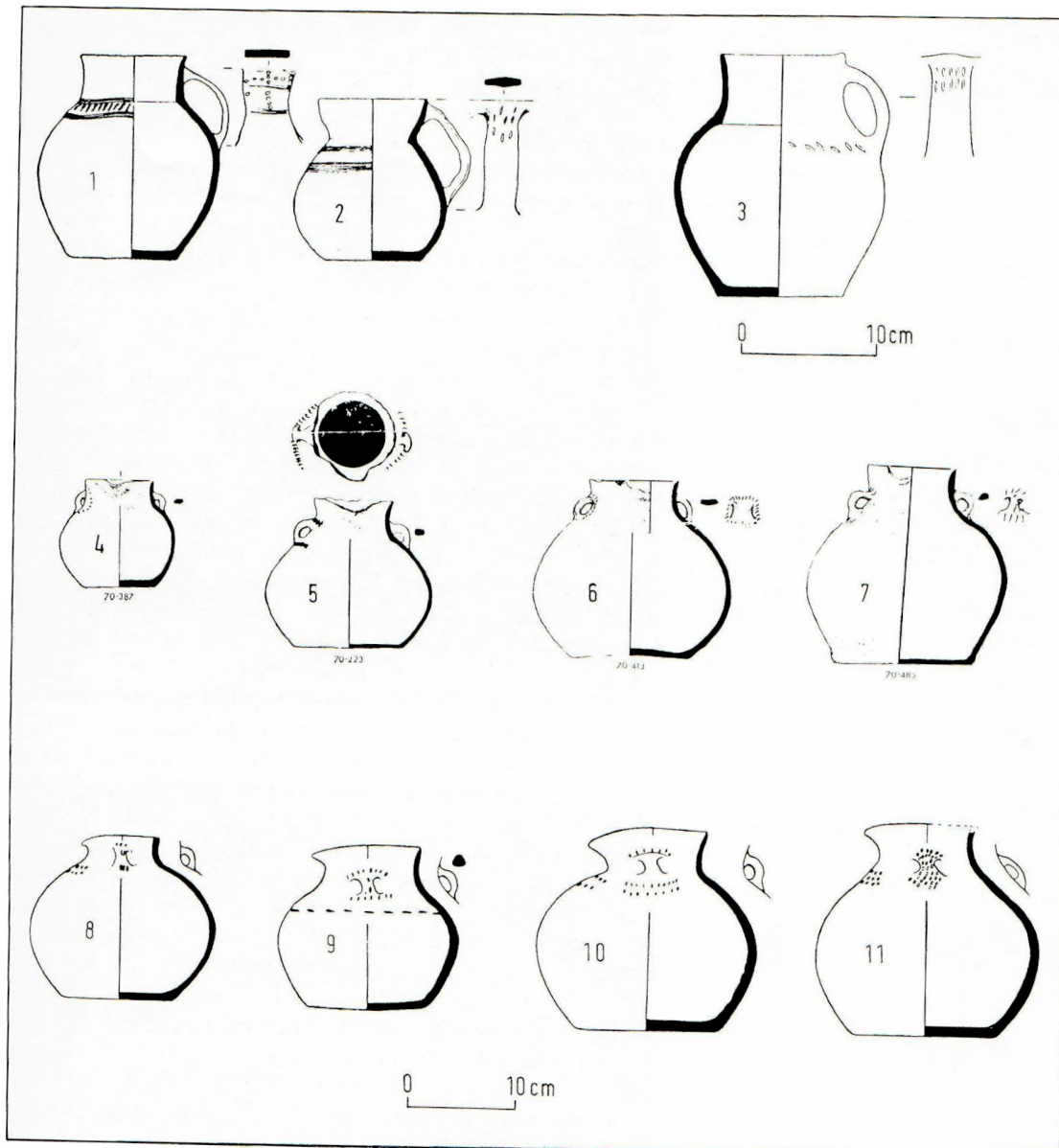
I suggest therefore that if there is any logical arrangement in the symbol sets discussed here, this was not a totally new invention; it may have been an adaptation from more sophisticated practices which we know existed at that time. This notion may be supported by other 'familiar' symbol sets. One such is known from Qatna, at about the same time. There, however, the symbols appear on a variety of vessels, not just jugs and jars. Similar evidence probably exists at most sites of this period throughout Syria.¹⁹ One such system, far from our landscape, has been described at Tepe Yahya in southeastern Iran: its floruit is dated between c. 2200 and 1800 BC.²⁰

In conclusion, the two sets of signs or symbols presented here may shed a little light on the remarkably long and problematical 'transition' periods of the proto-historical era. That of the 4th millennium—especially the link between Jawa and the Jordan Valley—may be regarded as an indication of economic control, and both stamp and roll seals of this time may point in two different directions. The use of roll seals may stem directly from northern Syria via the coast and the developing thalassocracies there; stamp seals may have come from the Damascene and may represent a specialized use of an ancient practice within a separately developing complex economy. Now that we are becoming aware of the relative length of what has been called EB IA (and B), before the so-called walled town culture—perhaps more than 500 years—the notion of economic control and the hypothetical construct of a geo-political centre of gravity in and about the Damascene

¹⁹ For Qatna see du Mesnil du Buisson 1935. See also Kampschulte and Orthmann 1984.

²⁰ See Potts 1981.

8. 1-2 Khirbet Kirmil (Dever 1975)
 3 Jericho (Kenyon 1960)
 4-7 Qedesh (Tadmor 1978)
 8-11 Ma'ayan Barukh (Amiran 1961)



may at long last resolve some of the questions concerning Palestine's social and economic transformation from the 4th millennium up to about 2000 BC. We may be able to do this in an international setting and thereby consolidate the foundations of subsequent history.

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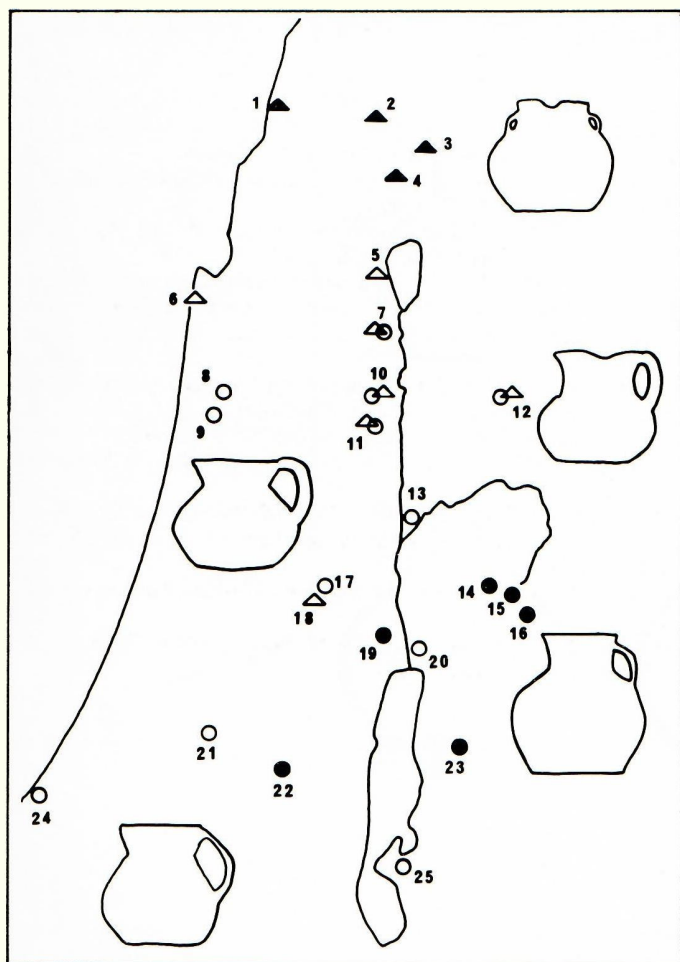
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9. Distribution of jugs and symbol sets (*)

- | | |
|--------------------|-------------------------------|
| 1 Tyre * | 14 Um Bighal * |
| 2 Qedesh * | 15 'Sports City' * |
| 3 Kibbutz Shamir * | 16 Jebel et-Taj/Jebel Jofeh * |
| 4 Ma'ayan Barukh * | 17 'Ain Samiyah |
| 5 'Tiberias' | 18 Wadi el-Daliyeh |
| 6 Geva'-Carmel | 19 Jericho * |
| 7 Menahemiya | 20 Tell Iktanu |
| 8 Barqai | 21 Tell ed-Duweir |
| 9 Ma'abarot | 22 Khirbet Kirmil * |
| 10 Beth Shan | 23 Khirbet Iskander * |
| 11 Kfar Rupin | 24 Tell Ajjul |
| 12 el-Husn | 25 Bab edh-Dhra' |
| 13 Tell Um Hammad | |

△ = northern pottery forms

○ = southern pottery forms



10. Um Bighal Nos. 16, 29.



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