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**Introduction**

This paper offers suggestions for fine-tuning chronological correlations between the southern Levant and Egypt at the end of the Early Bronze (EB) Age I and the transition to EB II, a time span that roughly corresponds with the end of Dynasty 0 and early Dynasty 1 (Braun 2001). Since there is little agreement in the literature concerning south Levantine periodization for this general time span (e.g., Wright 1937; 1971; Callaway 1972; 1980; de Miroschedji 1971; 1988, pls. 20–22; Esse 1984; Stager 1992; Paz and Paz 2007), it is first necessary to briefly define the parameters of these periods before discussing details of correlations with contemporary events in the Nile Valley.

**Definitions of South Levantine EB I and EB II**

Traditionally, following Petrie’s (1891) seminal ideas on ceramic sequencing, periodization of the Early Bronze Age of the southern Levant is primarily based on G. E. Wright’s (1936; 1937; 1971) and R. Amiran’s (1969) ceramic “fossiles directeurs.” Serious recognition of an EB I and an EB II period was first offered by Wright, who endeavored to make sense out of a rather restricted and poorly understood data set of ceramic styles known to him. Using comparanda, he attempted to define and periodize early pottery assemblages and then associate them with Egyptian ceramic types in order to ascertain contemporaneity and so develop a supra-regional chronological scheme (Wright 1937, 49–80). In his PhD thesis on the early pottery of the region he stated (Wright 1937, 59):

> The 1936 campaign at Jericho has given sufficient evidence to indicate that the pottery of EB I is to be divided into two clear-cut phases. As a matter of convenience, these will be labeled EB Ia and EB Ib, both of which are probably to be placed before the First Egyptian Dynasty.

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1 Dedicated to Ram Gophna on the occasion of his 80th birthday.

2 Virtually the entire range of ceramics illustrated for Tel Yarmouth, Area C, Stratum IV, attributed by de Miroschedji (1988; pl. 21.13) to EB II, with one glaring exception, a handle that clearly belongs to the earlier EB I, Erani C horizon (see below; Braun and van den Brink 1998), is directly paralleled at nearby Horvat ‘Illin Tahtit, dated to Late EB I (Braun 2008).

3 Much of the pottery derived from excavations of the town, which the excavators date to EB II, is identical to that excavated in EB I tombs in Tel Aviv and Palmahim Quarry (E. Braun, E.C.M. van den Brink, Y. Paz and R. Gophna, pers. obs.).

4 Duncan’s (1930) earlier attempt at producing a corpus of dated pottery has proven to be far off the mark.
The evidence for the synchronism of the First Dynasty with (cir.) the beginning of EB II is drawn mainly from the Syrian pottery found in First Dynasty tombs at Abydos and Bashkatib.

Although Wright’s, and later Amiran’s, EB I, EB II and EB III periods (based on the ‘pottery defines a period’ paradigm) remain in general use today, these decades old terminologies are outdated in their periodization of the Early Bronze Age. Wright’s EB I subdivisions are no longer valid, while his and Amiran’s distinctions between EB I and EB II are somewhat blurred, especially for the southern region. Neither of these scholars dealt with the fragmented regionalism now known to characterize EB I pottery; nor are their paradigms relevant to the levels of social development or historic events in the region and beyond (Braun 1996; in press B). New information from almost half a century of excavation and study suggests more detailed and revised correlations for the southern Levant with the Predynastic, Protodynastic and Early Dynastic periods and their Naqada equivalents in Egypt (Kaiser 1957; Dreyer 1998; Hendrickx 1996; 2006; Midant-Reynes 2003).

Ceramics that define EB II

Although there is a major rearrangement of settlement patterns at the end of EB I and the beginning of EB II, with many earlier sites abandoned in favor of fewer and larger concentrations of populations, there is no evidence of a sharp break between these periods in traditions of domestic architecture, ceramic production (Joffe 1993, 66–67; Braun in press B) and chipped stone industries. However, some few ceramic “fossiles directeurs” do mark the onset of EB II and are useful in determining Egyptian correlations. When present, in secure contexts and in situ, they are useful chronological guides for identifying or confirming an EB II date. The major, acknowledged categories of such ceramic indicators are as follows.

“Abydos Ware”

Wright’s “Syrian pottery” has since come to be generally identified5 by the misnomer “Abydos Ware” (Amiran 1969, 59,62, pl. 17), although it is neither a ‘ware’ in any true sense (e.g., Rice 1987, 5, 287) nor, as Wright noted, were vessels ascribed to it made at Abydos or uniquely associated with that site. The category actually includes imported Levantine pots (Figs. 1–2) found in the royal tombs of Dynasty 1 at Abydos (Petrie 1902, pl. 8), at contemporary sites in Egypt (e.g., Kantor 1992; Stager 1992, figs. 6, 8, 10; van den Brink 1988, fig. 19; Adams and Porat 1996; Kaplony 2002) and similar, local types found at coeval south Levantine sites (e.g., Fig. 7). Thus, “Abydos Ware” is actually a term for an eclectic collection of types easily identified by their very non-Egyptian attributes, applied to vessels including those from their likely region of origin.

5 Hendrickx and Bavay (2002, 70–73), who eschew this term and distinguish between different types of imported vessels, are a notable exception.

6 These vessels were first published under the heading “Aegean Pottery.”
Such vessels may have thin, vertical handles affixed to bodies at regular intervals (e.g., Fig. 1.2, 3; Petrie 1902, pl. 8.6, 8); similar, simple appliqués, probably decorative vestiges recalling such handles (e.g., Figs. 1.1, 9.3; Petrie 1902, pl. 8.7; Amiran 1969, photo 57); or be devoid of them. Some are slipped and polished or burnished, while others are combed (sometimes called “combed ware”; e.g., Fig. 1.2; Esse 1991, 109–115). Still others are painted in brown or reddish brown lines over pale fabrics or light colored slips (sometimes identified as “light faced painted ware”; Kantor 1965; Esse 1991, 107–109; Hendrickx and Bavay 2002, table 3.8). These lines form horizontal registers of triangles, zig-zags, wavy lines and rhombi, some of which are filled with dots (e.g., Figs. 1.5; 2). Most of the latter are fashioned from finely levigated fabrics, skillfully slipped and painted (e.g. Figs. 1.5; 2); however, other vessels of less well-levigated fabrics with broader and cruder lines, appear to be imitations of such prestige items (e.g., Fig. 7).

Jugs in this category tend to have oval-shaped, elongated bodies that narrow to flat bases (e.g., Figs. 1.1, 4–6) and are notably more streamlined than rounder jug forms of Late EB I (e.g., Fig. 9.4–7), from which they appear to have developed. “Abydos”-type jug handles tend to barely rise (or not at all) above the levels of rims (e.g., Figs. 1.5–7, 9.3) in contrast to ‘high loop handles’ typical of EB I vessels (e.g., Fig. 9.8–11). Some examples of “Abydos Ware” belong to a specialized fabric group of “Metallic Ware” (see below) that first appears in EB II.

In Egypt, the earliest manifestation of some vessels of this ware may be in the tomb of Djer at Abydos (e.g., Fig. 1.3, 4, 6, 7), the second king of Dynasty 1. However, the earliest examples of painted types definitively dated were recovered from the tomb of Djet (Petrie 1902, pl. 8), Djer’s successor. Thus, it is possible that the tardier appearance of the painted group has chronological significance, although that observation is derived only from proveniences in the royal cemetery of Abydos.

“Metallic Ware”

Easily recognizable because of the physical and chemical properties of its fabrics, “Metallic Ware” (Esse 1991; Greenberg and Porat 1996) appears to have been made in workshops located somewhere within the environs of Mt. Hermon. Its distribution was mostly confined to the northern Levant and the more northerly regions of the southern Levant, with some examples found in Egypt.7 Often this ware was decorated by combing (e.g., Fig. 1.3).

Platters

The appearance of this morphological type is a sure indicator of a post-EB I dating, i.e., within EB II–III. Examples are almost flat, very shallow vessels with thick, sharply profiled, nearly vertical rims (Fig. 3.2) and flat bottoms. They apparently developed from a somewhat shallow type of bowl with similar, but sharply incurving rim, which appeared at the end of EB I (Figs. 3.1, 3–4) and continued to be made in EB II. Platters may be of metallic ware or of other fabrics, slipped or otherwise; sometimes they are burnished. Their colors may vary from bright orange to dark red to gray or brown.

7 It is relatively rare at sites in the southern region of the southern Levant.
South Levantine EB I–II-Egyptian chronological correlations

Parameters marking the end of EB I and the onset of EB II are defined by Egyptian pottery found in the southern Levant and south Levantine ceramics found in tombs of Dynasty 1. The end of EB I is rather closely correlated with the presence of Egyptian pottery sherds bearing the name of Narmer, recovered at sites such as Small Tel Malhata (Amiran, Ilan and Arnon 1983; Amiran and Ilan 1993; Amiran and van den Brink 2001) and the Lahav Terrace (Levy et al. 1995; 1997) where there is no evidence of EB II occupation. Thus, it follows that the reign of this king should be dated to the end of EB I, prior to the first appearance of “Abydos Ware.” Unpainted specimens of “Abydos Ware” in the Tomb of Djer, the second king of Dynasty 1, places the end of his reign, *ipso facto*, within the chronological parameters of EB II, as there appears to be no likelihood of these objects having been placed there after the tomb was sealed. The absence of any “Abydos Ware” in the tomb of Aha, his predecessor, suggests two possibilities: either such pottery existed but was not imported as a royal grave offering; or it had not yet made its appearance in its place of origin.

Thus, the onset of EB II can be placed within a time frame correlated with the reigns of Egyptian kings. It must be dated within the following possibilities: a) extremely late in the reign of Narmer; b) sometime during the reign of Aha, his successor; or c) within the reign of Djer, prior to his burial, when unpainted EB II-type jugs imported from the Levant were placed in his tomb. The length of this time span and its absolute dating is obscure and is dependent upon interpretations of the evidence from Egypt for the lengths of these kings’ reigns (e.g., Emery 1961, 38–91; Hoffman 1984, 15–17; Midant-Reynes 2003, 385–87; Hendrickx 2006, 88–93), but it cannot be an inordinately lengthy period.

The contexts of two Narmer serekhs and their relationships to South Levantine-Egyptian chronological correlations

Two serekhs of Narmer discussed in this paper, preserved on fragments of imported Egyptian jars have, since their publication, been used as definitive chronological pegs for correlating south Levantine and Egyptian chronologies for the late 4th and early 3rd millennia BC. One derives from Tel Erani (e.g., Yeivin 1960; 1961; 1967; 1975; Brandl 1989; Yeivin and Kempinski 1993); the other from the Early Bronze Age site of Arad (Amiran 1974; 1976). However, careful examination of the chrono-stratigraphic interpretations suggested by the excavators indicates that each is problematic, and that neither is a reliable chronological benchmark. It further suggests an alternate interpretation of the evidence from Arad that would place the serekh found there in a different stratigraphic context and thus slightly alter Arad’s chronological correlations with Egypt.

8 The expedition was named “Tel Gat,” when it was believed that Tel Erani was the biblical Gath of the Philistines. The name was abandoned as a result of the excavation when nothing of the appropriate period was discovered there.
The Narmer serekhs from Tel Erani

In 1981 the author—as a student of the late Professor Yigael Yadin, and at his behest—undertook to investigate the precise stratigraphic provenience of the Narmer serekh from Tel Erani (Fig. 4.1). Yadin’s interest in it was particularly keen as he had published what he believed was collateral evidence for his interpretation that the Narmer palette from the Main Deposit at Hierakonpolis depicted Egyptian military penetration into the southern Levant during the reign of that king (Yadin 1955).

The author was permitted access by Zeev Yeivin, then Deputy Director of the Israel Department of Antiquities and Museums,9 to the field records of the Tel Erani Expedition. Perusal of them yielded only a modicum of somewhat bewildering information concerning the provenience of the serekh, the results of which were presented in a brief written report to the Deputy Director on 24 December 1981. They are discussed in public for the first time in this volume.

Available data and information

The author was able to examine several unpublished documents (Table 1) and consult an array of publications by Shmuel Yeivin (latterly cited by Brandl 1989, 360–61) concerning the sherd, its provenience and significance. The former documents, available to the writer at the time of the study, are no longer accessible. They are cited in the following discussion as listed in Table 1.

The serekh-bearing sherd is a single fragment, a small portion of a large jar. It has been marked in ink on its interior surface with a basket designation “117,” which is attributed to Area D excavated in the 1959 season. No absolute elevations for the basket were recorded, nor was any precise information on the parameters of the locus available. The basket lists of that same year attribute Basket 117 to Locus 3607. However, the daily field journal attributes the same basket to Locus 5605. According to the field diary, Locus 3607 is a wall assigned to Level IV, while Locus 5605 was indicated to be a surface or floor.

Locus 5605 is marked on a field plan (Document 6) at an elevation of 131.80 m asl10 and is near a wall, the top of which is marked at elevation 131.74 m on another plan (Document 7). Thus, the wall was preserved to a lesser height than the level of the floor, indicating that these two features were not built coevally and so are not of the same stratum. As understood by this writer, Locus 3607 was later assigned to Level IV and the floor (Locus 5605) was attributed to Level V. It seems that Yeivin (1960) assumed that the serekh was somehow associated with the floor, as is indicated by a published plan noting the find spot of the serekh (Fig. 5). The floor, bordered by Locus (wall) 6606 and an unnumbered wall abutting it (marked as UW on Fig. 5), is preserved in only one corner. The upper and lower elevations of wall UW are 131.74 m and 131.38 m respectively, while the contiguous surface of the floor is at 131.39 m, indicating that these features are in definitive association. Notably, no elevation is indicated for the find spot of the sherd, and although other locus numbers are marked, there is no indication of either Locus 5605 or

9 The statutory body that preceded the Israel Antiquities Authority (IAA), responsible for administration of the State’s antiquities.

10 Elevations are expressed in meters above sea level.
of Locus 3607 on Yeivin’s published plan. Presumably these last loci are to be found on an unpublished plan of Level IV.

Working on the theory that the field registry, having been made closest to the time of the actual excavation of the object, is immune from post-excavation mistakes and tampering, Locus 5605 appears to be a more likely ascription for Basket 117, if the basket list (as understood by this author) was a later document. This locus is variously described as a wall, a collapsed mudbrick wall (Document 3), and a floor (Document 6). Neither the wall nor the collapsed mudbrick wall appears on a field plan or section (Documents 6 and 7). However, a floor—presumably the one cited in Document 6—does appear on a field plan where it is ascribed to Stratum IV.

Since there is no further indication of where within this “wall/locus” the Narmer serekh might have been retrieved, its supposed association with any particular architectural feature or deposit cannot be reconstructed with confidence. Yeivin’s (1960) publication indicating that it was definitively not found on the floor, but rather near a wall (UW) that abuts Wall 6606 (Fig. 5) is probably accurate, but of no help in determining the serekh’s original stratigraphic association. Based on available data it is not difficult to understand how the floor was assigned to Level V, but the rationale for associating it with the nearby floor (given a lack of precise data concerning the find spot of the serekh) is difficult to understand. Not only is such an ascription thorny because the object was eventually ascribed to two different loci, but it is quite obvious that as a single small fragment of what must have been a large jar, the serekh was recovered in a non-primary deposition.

What motivated Yeivin to assign the serekh to Level V in his publications cannot be determined, although it may be guessed. This writer was able to interview a number of participants in the excavation of Tel Erani the year the serekh was unearthed and they indicated that the special significance of the sherd was not realized until a post-season phase, when pottery that had been collected was undergoing inspection and restoration. Apparently only then was the graffito discovered, after which, Yeivin—who was trained as an Egyptologist—deciphered it. It seems the object was re-registered at some point when its significance became known, and that historical and stratigraphic considerations led Yeivin to ascribe the serekh to Level V. Perhaps B. Brandl, to whom publication of the excavation has been entrusted since c. 1985, will shed more light on the findspot of this object at some time in the future, although he has previously noted (Brandl 1989) that the primary data available from this excavation are both insufficient and confused.

**Interpretation of available evidence**

What then may be said of the stratigraphic origins of the Narmer serekh from Tel Erani? It obviously belongs to an occupation that had very strong Egyptian associations and must be dated to late in EB I (Table 2). As suggested by later excavators of an adjacent area of the site (Kempinski and Gilead 1991; Kempinski 1993, 420–21), this places it somewhere within Yeivin’s Strata V-II, or Stratum B[^11] in their greatly revised and compressed (from 12 to 5 strata) stratigraphic sequence.

[^11]: This refers to some immediately post-Stratum C remains in the adjacent area excavated by Yeivin, as Stratum B was not encountered in Kempinski and Gilead’s excavation.
It cannot be earlier than Stratum B, because as Yekutieli (2006, 236–38) has convincingly demonstrated, at least the bulk, if not all Egyptian pottery derives from post-Stratum C deposits. Since Stratum C is dated by comparanda (Table 3) to the time span of Abydos Tomb U-j (Braun and van den Brink 1998), that precludes the ascription of the Narmer serekh to Stratum C, it must be assigned to a later occupation. This chrono-stratigraphic ascription is verified by work at nearby Horbat Petora (Baumgarten and Gorzalczany 2005), only 2.5 km distant from Tel Erani (over a flat plain), where more than one hundred 5 x 5 m squares were excavated to varying depths, yielding three successive levels of occupation associated with Erani C type pottery (Braun and van den Brink 1998), but not a single sherd of Egyptian origin (Milevski pers. comm.). Thus, it is certain that major Egyptian interaction with Tel Erani occurred in the post-Stratum C period, and that most Egyptian finds derived from earlier levels at Tel Erani are either intrusive or misidentified as Egyptian (Braun 2002, 175–76).

Unfortunately, no greater precision is possible for determining the stratigraphic origin of the Narmer serekh from Tel Erani. It does, however, provide a chronological framework for Egyptian interaction with the site beginning some time around the reign of Narmer. Since neither evidence of the painted type of “Abydos Ware,” nor any other positive evidence for an EB II occupation that has been published to date, it seems likely that relations between Tel Erani and Egypt were terminated very late in EB I, possibly at the end of Dynasty 0 or during the early years of Dynasty 1, when the site might even have been abandoned prior to its resettlement during EB III.

Notwithstanding the original impact of the discovery of the Narmer serekh on the chronology of late 4th millennium south Levantine archaeology, it must now be relegated to a place within an assemblage of more than a score of serekhs that bespeak Egyptian interaction with royal overtones (van den Brink and Braun 2002; Braun 2005, 150–51) during the reign of the last two kings of Dynasty 0, but which offer no precise chronological correlations.

The Narmer serekh from Arad

The second serekh chosen for discussion, from Arad (Fig. 4.2), is also claimed to be stratigraphically provenanced, and has been assigned by its excavator, R. Amiran (1976), to Stratum IV, a rather poorly preserved EB I village found below the lowest, “urbanized” (i.e., fortified) EB occupation of Stratum III. However, careful examination of the evidence suggests there are reasons this object may actually have derived from Stratum III.

Details of the serekh and its find spots

Restored from four separate sherds, it is a sizable, but not overly large fragment of a large, imported Egyptian jar, found in three separate loci (Amiran 1974). Two pieces are from adjacent loci assigned to Stratum II, while the remaining two sherds were recovered.

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12 Notably, Horbat Petora was unoccupied in the latest phases of EB I during the period of Erani B to which the serekh must be ascribed.
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in Locus 4219b, fill below a surface or floor level and above bedrock. The excavator’s
detailed description of this sondage is of particular import to this discussion (Amiran 1974,
4):

We first reached a stratum III floor (locus 4219a), and then through it locus 4219b,
which is a 10–15 cm layer of ashes and small stones lying upon a hard surface,
probably a floor. Both the layer of ashes and the hard surface are to be assigned to
stratum IV. The uneven surface of the bed-rock at this spot lies 5–15 cm beneath
the hard surface. We should bear in mind the possibility, which occurs at other spots
at Arad, that the hard surface is not a floor but a leveled fill—which we could assign
generally to the beginning of building operations in stratum III. Even if this were
the case, the material of locus 4219b would still belong to stratum IV. Extension
of the excavation around this locus in the coming season will clarify this point, and
may reveal additional fragments of the Egyptian jar.

Notably, the excavator’s primary tendency was to assign the fill to an early building phase
of Stratum III, but for some unstated reason she was prompted instead to assign it to
the previous occupation, Stratum IV. To date there has been no clarification in print of
this decision, while no further portions of the jar were recovered. Apparently renewed
excavation failed to further explicate the stratigraphic association of Locus 4219b, as no
additional publication was forthcoming from the excavator. Unfortunately, she has passed
on, but her meticulous description of the findspot allows for further discussion of the
stratigraphic provenience of the Narmer serekh. The following points are noteworthy
concerning the purported Stratum IV ascription of the findspot of two fragments of the
serekh:

1. Locus 4219b was excavated in a very restricted area and is not known to have been
   associated with any stratified structures.
2. The local stratigraphic sequence consists of a beaten earth floor of a Stratum II
courtyard, superimposed above an earlier “hard, yellow loess surface.” This lower
   surface, as noted by Amiran, was possibly man-made and may have been associated
   with the construction of Stratum III, as in other areas. To the west and not directly
   below this earlier surface and therefore not sealed by it, was a c. 30 cm thick layer of
   fill containing “yellow loess and patches of ash” (Amiran and Ilan 1996, 12, 34, pl. 4.1)
in which two sherds of the serekh were found.
3. Apparently, Locus 4219a (the upper Stratum II courtyard surface) covered the entire
depth probe, making it a terminus post quem for Locus 4219b and the deposition of those
   two serekh fragments.
4. The material making up Locus 4219b, designated an “accumulation,” could have
   been deposited there anytime during the lifetimes of Strata IV, III and prior to the
   construction of the courtyard surface in an early phase of Stratum II.

Amiran’s claim that Locus 4219b must be associated with Stratum IV does not appear
convincing based on the available evidence, which suggests this locus could as easily have

http://www.britishmuseum.org/research/online_journals/bmsaes/issue_13/braun.aspx
been laid down during the Stratum III occupation. A suggested ascription of the *serekh* to Stratum III is based on the following observations and further discussions of the evidence:

1. The probe into Locus 4219b was small and does not offer any objective information that makes the fill that yielded these objects definitively associated solely with Stratum IV activity.
2. The two *serekh* jar fragments in Locus 4219b were obviously not part of a broken vessel stratigraphically *in situ* and merely scattered over a large area; portions of the same jar were also found in Stratum II.¹³
3. The *serekh* jar, not old enough to have originated in Chalcolithic Stratum V, must have found its way to Arad either during Strata IV or III unless it arrived there as an heirloom during the time span of Stratum II, a highly unlikely scenario.
4. When Amiran published the *serekh*, fortifications at EB sites were all thought to be dated to the post-Narmer, EB II or EB III periods (Stager 1992, 36), thus precluding identification of Arad III as its original stratigraphic context. However, walled towns, now known to date to EB I (Braun 1996, 31–33; 2004a, 27; in press A; Getzov, Paz and Gophna 2001; Paz 2002), admit of the possibility of a fortified Arad III as a contemporary context for the *serekh*-bearing Egyptian vessel.
5. Published pottery of Stratum III includes many types (in regard to morphology, fabrics or modes of decoration) eminently comparable to those associated with Stratum IV (assigned to EB I), while only a few examples of EB II types belong to the same assemblage.
6. Stratum IV seems to have come into existence some considerable time before the reign of Narmer and may well have ended before its onset, especially if (as seems likely) the beginning of Stratum III is in EB I (see below).

On the chrono-cultural associations of Arad Strata IV and III

Arad IV apparently began its existence at least as early as the Erani C period, which is contemporary with the owner of Tomb U-j at Abydos, and considerably prior to the reign of Narmer (Kaiser 1957; Braun and van den Brink 1998). Notably, the Stratum IV settlement is typified by ephemeral architecture and the use of natural caves, which offer no evidence of long-term usage. Thus, it is highly unlikely that Arad IV lasted into the reign of Narmer, the earliest period when the *serekh* was introduced into the site.

Published evidence for dating the beginning of Stratum IV is clear, albeit notable in only two minute objects. One is a fragment of a decorated jar handle from Stratum IV (Fig. 6.3; Amiran et al. 1978, pl. 11.9) adorned with a typical, thin loop of clay associated with Erani C type pottery. The other is a diminutive spout from Stratum IV (Fig. 6.2; Amiran et al. 1978, pl. 11.8) similarly decorated (e.g., Fig. 6.4–5; Brandl 1989, fig. 5.2, 5; Braun 1996; in press B).

¹³ Chalcolithic and EB I pottery in Locus 4219b indicates the cumulative nature of the rubble fill it contained. Significantly, no other pottery from this locus was deemed worthy of publication, suggesting the likelihood that it contained only sherds and nothing that could be described as archaeologically *in situ*.
Additional objects are also likely to date to a pre-Narmer period within EB I. One is a fragment of an Egyptian cylindrical vessel, painted in a lattice pattern (Fig. 6.1; Amiran et al. 1978, pl. 113.1), of a type dating to Naqada IIIA2 (Hendrickx and Bavay 2002, fig. 3.1), and thus significantly earlier than unpainted types contemporary with the reign of Narmer (Naqada IIIIC). It was not found in Stratum IV, but is likely to have been in context either in that or in the succeeding level (Stratum III), unless it was imported as an heirloom. Vessels from Stratum IV decorated with white (“lime”) slips over which thin, red vertical stripes were painted (Amiran et al. 1978, pls. 9.2, 11.2, 3, 7, 10, 12–16), are a common feature of Erani C horizon pottery, but that type of decoration is also associated with later EB I in the southern region (Braun 1996; in press B).

Thus, the end of Stratum IV cannot be determined with any degree of confidence, but as noted above, it is likely to have been some time prior to the reign of Narmer. Accordingly, the original stratigraphic provenance of the fragmentary net-painted cylindrical vessel could be either Stratum IV, if indeed the stratum lasted that long, or early in Stratum III, the beginning of which should be dated to Late EB I on the basis of associated EB I pot types. Such types include high loop handles on jugs (e.g., Fig. 9.8–11; Amiran et al. 1978, pl. 14.1–5, 14) and juglets with rounded bodies (e.g., Fig. 9.1; Amiran et al. 1978, pl. 14.14–18, 23–30), pillar handled jars (e.g., Amiran et al. 1978, pl. 15.14, 17–19), selected jar rims (e.g., Amiran et al. 1978, pl. 17.110, 112–13) and holemouth rims adorned with horizontal bands of applied clay depressed at regular intervals to produce a rippling, rope-like, decorative effect in relief (e.g., Seger 1996, fig. 17b.18; Braun in press B: Late Southern EB I forms14).

There is also a modicum of evidence to indicate that Stratum III lasted into EB II. That includes a small juglet of an EB II “Abydos” type (Fig. 9.3) and several additional objects, which may or may not have been recovered in their original stratigraphic contexts. They are six, or possibly seven,15 diminutive sherds (the largest is only c. 11 cm long and each is only a small fragment of the vessel it represents) of the crudely painted type of so-called “Abydos Ware”16 (Fig. 7.1–7). However, considering their sizes, all or some of them could be intrusive in Stratum III. Notably, most examples of this painted style, including several complete or nearly complete vessels found in situ (e.g. Fig. 7.8; Amiran et al. 1978, pls. 28.2, 7, 29.4, 8, 30.4, 5, 7), derive from Stratum II contexts, suggesting that this level is contemporaneous with the reign of Djet or later Dynasty 1 kings. Additionally ascribed to Stratum III is one small platter fragment (Fig. 3.2) and another fragment that is either of this type or of a shallow bowl (Fig. 3.1). However, neither is large enough to be definitively associated with its stratigraphic context; possibly one or even both are intrusive (from Stratum II) in the manner in which two EB II platter fragments (Amiran et al. 1978, pl. 8.4, 5) recovered from Stratum IV contexts are intrusive. One small carinated bowl is related to a group that first appears in Late EB I, but which continues on into EB II (Fig. 9.1; Beck 1985). Similarly, some large shallow bowls (Amiran et al. 1978, pl.

14 This type of applied decoration on medium and large size vessels is typical of later EB I in the southern region (e.g., Amiran et al. 1978, pl. 12.1, 3).
15 One sherd of this type is ascribed to Strata III/II (Amiran et al. 1978, pl. 56.1–7).
16 The Arad examples are coarser and more crudely painted than the much more elegant and finely painted examples from Egypt, which they appear to imitate.
probable prototypes of EB II platters, remained in use during this transitional period.

Since there is no sharp break between EB I and EB II pot types in the southern region, it is difficult to assign Stratum III to one or the other horizon on the basis of available evidence. The paucity of EB II types suggests that the occupation lasted only into Early EB II. Accordingly, Stratum III should be dated to a Late EB I-EB II transitional period.

Corollary (albeit circumstantial) evidence for the chrono-cultural ascription of Stratum III to Late EB I exists in a large, nearly complete (its rim was not recovered) imported Egyptian jar (Fig. 8; Amiran et al. 1978, pl. 55.6, 114) from Stratum II, which suggests the jar bearing the Narmer serekh (its contemporary) was originally consigned to Stratum III. Clearly visible on the shoulder of the Stratum II jar are the remains of a typical wavy line decoration associated with a type that ceased to be made at the end of Dynasty 0, or about the time of Narmer’s reign (i.e., van den Brink’s [1996] Type II; Hendrickx 2006). By Stratum II this jar was an heirloom, indicating that it was probably originally consigned to Stratum III. Do the two fragments of the Narmer serekh jar found in Stratum II suggest a similar scenario of a jar consigned to Stratum III surviving into a later period, only to be broken and discarded then? That would explain how some pieces were found in contemporary debris, while others were buried in deeper, construction-related fills (i.e., Locus 4219b). Certainly there is considerably greater likelihood that complete or nearly complete jars survived the passage of time from the occupation of Stratum III than their having done so from Stratum IV.

Summary

Increased comprehension of the periodization of EB I indicates that older, and oft-cited ceramic paradigms utilizing the terms EB IA and EB IB (Early EB I and Late EB I respectively; e.g., Wright 1937; 1971; Getzov, Paz and Gophna 2001; Paz 2002) are oversimplified conceptualizations that do not fully explicate the chrono-cultural phases of EB I and the transition to EB II (Braun 1996; Braun and van den Brink 1998; Yekutieli 2000; 2001; Braun in press B). Close analysis of the pottery of Arad III, the first fortified settlement at the site, shows it to be post-Erani C in date and of a later southern, EB I regional phase that develops into EB II with no major break in ceramic traditions. That places Stratum III somewhere within the reigns of Ka or Narmer up to the reign of Djet or slightly later (Table 2).

With the loss of the Narmer serekh from Tel Erani as a major chronological peg, the serekh from Arad acquires greater importance for understanding correlations with Egypt. Although it is only a fragment and was not found in situ, there is a great deal of circumstantial evidence to indicate that the jar it adorned was originally consigned to Arad III and not the earlier EB I settlement of Stratum IV.

Arad, always far off the beaten path, seems especially so during the lifetime of Stratum IV, particularly as that poor village was an unlikely attraction for Egyptians presumably bent on establishing some form of economically-based relationship. However, Arad III—a Late EB I nascent fortified town—is a much more likely venue for the appearance
of Egyptian jars, one of them bearing a royal insignia, especially as it dates to a period which witnessed the most intense Egyptian interaction with the southern Levant (Braun 2003; 2004b; 2004c; van den Brink 2002; van den Brink and Braun 2002; 2004). Its significant population would have had considerably more to offer visitors from the Nile Valley, or perhaps Egyptian colonists from Tell es-Sakan (de Miroshedji 2001). Notably, significantly more substantial communities than Arad IV—such as Palmahim Quarry, Tel Dalit and Tel Aphek on the Mediterranean Littoral of the southern region—which saw the thrust of that interaction, have yielded little, if any evidence of Egyptian pottery (Braun 2002; 2004c). They date to the time span when sites such as Tell es-Sakan (de Miroshedji 2001), the Halif Terrace (Levy et al. 1995; 1997), Lod (van den Brink and Braun 2002; Braun 2004c) and Tel Erani (Brandl 1989) were immersed in Egyptian material culture and presumably populated by or in direct contact with Nilotic peoples.

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Fig. 1: Examples of “Abydos Ware” from Egypt.
2. Abydos; after Amiran 1969, pl. 17.16.
3. Abydos, Tomb of Djer; after Amiran 1969, pl. 17.4.
5. Saqqara; after Amiran 1969, pl. 17.10.
7. Abydos, Tomb of Djer; after Amiran 1969, pl. 17.5.

Fig. 2: Sherds of the painted style of “Abydos Ware” from the tombs of the kings of Dynasty 1 at Abydos; 1–6 after Petrie 1902: pls. 8.15, 16, 18, 17, 19 respectively.
Fig. 3: EB–IEB II pottery types from Arad Stratum III.

Fig. 4: Sherds inscribed with serekhs of Horus Narmer.
1. From Tel Erani; after Yeivin 1960, fig. 2.
2. From Arad; after Andelkovic 1995, fig. 2.7.
Fig. 5. Plan of findspot of serekh from Tel Erani; after Yeivin 1960, fig. 3.
Fig. 6: Early Bronze I Pottery from pre-Narmer times.

1. Rim fragment of a lattice-painted cylindrical vessel, dated to Naqada IIIA2, an early phase of Late EB I, prior to the period of Narmer; after Amiran et al. 1978, pl. 55.1.

2. Spout of a small jar of the Erani C horizon from Arad with a looped, plastic decoration around it; after Amiran et al. 1978, pl. 11.8.

3. Small handle of a small jar of the Erani C horizon from Arad with a looped, plastic decoration around it; after Amiran et al. 1978, pl. 11.9.

4. Pottery handle from Tel Erani, Level C, with looped plastic decoration; after Brandl 1985, fig. 5:2.

5. Pottery handle from Tel Erani, Level C, with looped plastic decoration; after Brandl 1985, fig. 5:5.
Fig. 7: Painted pottery in the “Abydos Ware” tradition from Arad.
1–7. Small fragments of vessels assigned to Stratum III; after Amiran et al. 1978, pl. 56.2, 5, 6, 3, 7, 4, 1.
8. One of several complete or nearly complete vessels recovered in Stratum II; after Amiran et al. 1978, pl. 59.

Fig. 8. The rim-less body of an Egyptian ‘wine jar’ dating approximately the reign of Narmer (i.e., Naqada IIIC); after Amiran et al. 1978, pl. 55.2.
Fig. 9: Late EB I and EB II pottery from Arad III:
1. After Amiran et al. 1978, pl. 13.31
Table 1: IAA, unpublished, archived “Tel Gat” Expedition documents consulted.

<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Field journal, Area D, dated 22/5/59 with excavator's comments</td>
</tr>
<tr>
<td>2</td>
<td>Field journal, Area D, dated 22/5/59, schematic plan of the excavation</td>
</tr>
<tr>
<td>3</td>
<td>Basket list description of Locus 5605</td>
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<tr>
<td>4</td>
<td>Basket list description of Locus 3607</td>
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<tr>
<td>5</td>
<td>Sherd descriptions</td>
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<tr>
<td>6</td>
<td>Schematic sections indicating strata</td>
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Table 2: Tel Erani and Arad: chronological correlations with Egypt.

<table>
<thead>
<tr>
<th>Site</th>
<th>Stratum / Strata</th>
<th>Period (Braun)</th>
<th>Period (Amiran 1996, I)</th>
<th>Egyptian Dynasty</th>
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<tr>
<td>Tel Erani</td>
<td>V-II</td>
<td>Late EB I</td>
<td>Dynasty 0, Early Dynasty 1, prior to reign of Djer</td>
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<tr>
<td>(Area D)</td>
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<td>Late EB I, earlier phase and possibly to very beginning of later phase</td>
<td>EB Ib</td>
<td>Dynasty 0 (Tomb U-j), possibly up to, or even including, reign of Ka</td>
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<tr>
<td>Arad</td>
<td>IV</td>
<td>End of Late EB I and transition to EB II (?)</td>
<td>Dynasties 1-3, possibly even including, reign of Ka</td>
<td></td>
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<tr>
<td>Arad</td>
<td>III</td>
<td>End of Late EB I and transition to EB II (?)</td>
<td>Dynasties 1-3, possibly even including, reign of Ka</td>
<td></td>
</tr>
<tr>
<td>Arad</td>
<td>II</td>
<td>Full-fledged EB II (“Abydos Ware”)</td>
<td>Reign of Djet and later Dynasty 1 king(s)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Tel Erani and Arad: chronological correlations with Egypt.