REDEFINING THE CENTRE: THE EMERGENCE OF STATE IN JUDAH

Ze'ev Herzog and Lily Singer-Avitz

Abstract

Analysis of settlement traits in Judah during the Iron Age IIA generates fresh insight into the process of state formation in the Kingdom of Judah. Our conclusions are based on observation of the settlement patterns, combined with detailed review of the pottery typology. Instead of assigning the Iron Age IIA to a single century (10th century BCE in traditional High Chronology or 9th in Finkelstein's Low Chronology), we maintain that the period covers about 150–200 years, from the mid 10th to the late 9th or mid 8th centuries BCE. The period is further divided into two sub-phases: the Early Iron Age IIA, characterized by rural settlements, mostly organized in an 'enclosed settlement' pattern, and Late Iron Age IIA, which presents the first introduction of fortifications and water supply systems. Such understanding reduces the gap between the debated low and high chronology. Furthermore, the process did not emerge in the Judean hill country but rather in the Shephelah and in the Beersheba Valley to the south. Our analysis points to a long and gradual process of socio-economic crystallization of the monarchy.

The archaeological material of the Iron Age IIA has not been fully evaluated, mainly due to the unfortunate delay in publication of numerous excavation reports. The current summary attempts to overcome this shortcoming by utilizing data recently processed from the excavations at Lachish (Zimhoni 1997; 2004a), Arad (Herzog 2002a; Singer-Avitz 2002) and Beersheba (in preparation by the authors). This new material, combined with results from other excavations, provides the basis for a new assessment of the archaeology and history of the Iron Age IIA (henceforth IAIIA) period in Judah.

The crucial point centres on the nature of the dividing line between Iron Age I and Iron Age II. Regarding pottery typology, the transition is usually connected to the introduction of new pottery types and to a new style of surface treatment of the (mostly open) vessels, characterized by red-slip and hand-burnished ware. There have been a number of proposals regarding the dating of this pottery, which serves as an important chronological tool. The traditional views attribute this ware to the 10th century and equate its duration with the so-called 'United Monarchy' (Holladay 1990; Mazar 1990; 1998). On the basis of her

observations of the pottery at Lachish Level IV, Zimhoni extended the duration of the red-slipped, hand-burnished ware well beyond the 10th century into the 9th and early 8th centuries BCE (Zimhoni 1985; 1997). The three sites that produced comprehensive pottery repertoires of the period in safe stratigraphy are Lachish (Zimhoni 1997; 2004a), Tel Arad (Singer-Avitz 2002), and Tel Beersheba. It seems clear that the red-slipped, hand-burnished technique had already begun in the IAI with relatively low percentages (Beersheba Strata IX–VIII) and reached a peak in sites such as Beersheba VII–IV, Arad XII–XI and Lachish V–IV. At these sites *ca*. 65 percent of the total bowl repertoire is hand-burnished.

The analysis of the pottery at Lachish, Tel Beersheba and Arad allows us to distinguish two sub-phases: The Early IAIIA is represented in the pottery forms from the unfortified settlements at Lachish V, Arad XII and Beersheba VII. The pottery forms of the following fortified occupations at Lachish IV, Arad XI and Beersheba VI–V–IV signify the Late IAIIA. Comparison of settlement patterns in the highland region of Judah, in both IAIIA sub-phases, with those of the lowlands suggests a reassessment of the location in which the emergence of state came about.

THE POTTERY OF IRON AGE IIA IN JUDAH

Although the Early IAIIA and the Late IAIIA assemblages are quite similar, there are several pottery types that enable us to differentiate between them. In the Early IAIIA there are a number of forms that continue IAI traditions, while in the Late IAIIA the vessels with early traditions disappear. New types that appear first in the Late IAII become prominent in IAIIB. Since the vessel repertoire is well known and many of the pottery types are represented in both sub-phases, we will emphasize only the differences between the two sub-phases.

Bowls and Kraters

Red-slip and hand-burnish are among the most characteristic features of bowls of this period. This is in sharp contrast to bowls of the following period (IAIIB), where the red-slip is not common and the wheel-burnish replaces the hand-burnish. Although this surface treatment appears on both open (bowls and kraters) and closed forms (jugs, juglets and amphoriskoi), it should be emphasized that it may serve as a chronological indicator only when it appears on bowls and kraters. In the IAIIB a vertical-line hand-burnish of irregular density occurs often on closed forms. It seems that using this surface treatment serves no functional purpose but is rather stylistic or ornamental. In the following type-description the surface treatment will not be detailed, since every bowl bears different combinations of slip and burnish/

Bowls with rounded-carinated, slightly everted walls are noteworthy (Fig. 3: 1–2). They have a horizontal, everted rim (sometimes the upper edge is slightly slanted). Some of the bowls are both red-slipped and hand-burnished, while others are only burnished. In the Early IAIIA, they are virtually absent while in Late IAIIA they are well represented. At Tel Arad they are not known in Stratum XII, but are common in Stratum XI (Singer-Avitz 2002: Figs. 6:5, 6; 8:1, 2). At Tel Beersheba they are found in Strata V and IV and are unknown in earlier strata. At Tel Lachish (Group V–IV: B12), few were found in Level V while in Level IV their number increases (Zimhoni 1997:91, Fig. 3.17).

An additional indication of the difference between the two IAIIA phases might be the steady decline of the occurrence of hand-burnish on the open vessels. At Lachish Level V, 74 percent of the bowls are hand-burnished; in Level IV, only 60 percent are thus treated (Zimhoni 1997:118). At Tel Beersheba the decline is even sharper: 77 percent of the bowls in Stratum VII are hand-burnished, but only 54 percent in Stratum V and 45 percent in Stratum IV are hand-burnished. A similar trend is evident in Arad. The reduced popularity of the hand-burnish from the Early IAIIA to the Late IAIIA contradicts the claim (Faust 2002) that this type of surface treatment is an indicator of the crystallization of a central government.

Cooking-Pots

Two types of cooking-pots make it possible to distinguish between the two subphases:

Cooking-Pots with Flattened Rim (Fig. 1:1)

Cooking-pots with smooth-inverted, sometimes virtually horizontal rims. These cooking-pots begin to appear in the IAI period. They are found in Early IAIIA and do not exist in the Late IAIIA. They are known at Arad Stratum XII (Singer-Avitz 2002: Fig. 1:4) but not in Stratum XI. At Lachish, these cooking-pots occur in Level V only, where they constitute 24 percent of all cooking-pots in the stratum (Zimhoni 1997:127, Group V–IV:CP-6, Fig. 3.42) and at Tel Beersheba they are found in Strata IX–VII (Brandfon 1984: Figs. 18:4; 22:1–3) and not later.

Cooking-Pots with Grooved Rim (Fig. 3:3)

Cooking-pots with thickened inverted rim with single or multiple grooves on it. There is a small ridge at the bottom of the rim. This group of cooking-pots is almost non-existent in the Early IAIIA and is dominant in the Late IAIIA. At Arad Stratum XII, only a single fragment of this cooking-pot type was found, while in Stratum XI it is well represented (Singer-Avitz 2002: Figs. 4:1, 2; 5:3; 6:8; 8:5, 6). This group

ofcooking-pots is the dominant one at Tel Beersheba in Strata V and IV but not earlier.¹ At Lachish, this type of cooking-pot (Group V–IV:CP-2) appears towards the end of Level V and constitutes 15 percent of all the cooking-pots in the stratum.² In Level IV, the percentage increases to 36 percent of all cooking-pots (Zimhoni 1997:122; Fig. 3.38).

Pithoi

Two types of pithoi are evident. Both types are found in Tel Masos Stratum II and the Negev settlements. The sites should be assigned to the Early IAIIA (see below).

Thick-Walled Elongated Pithos (Fig. 2:1)

Flaring short neck that ends in a thick rim. Four loop handles extend from the round shoulder carination (Fritz and Kempinski 1983: Pl.155:4).

Short-Body Pithos (Fig. 2:2)

Flat base and four loop handles. These vessels have no neck and the rim is grooved (Fritz and Kempinski 1983: Pls.137:13; 151:8–9).

Storage Jars

Some of the storage jars appear in both phases. In Late IAIIA a number of types not previously found appear for the first time, and it is to these that we relate. Most of them continue to appear with variations in the IAIIB.

Large Ovoid Storage Jar (pre-'lmlk' jar) (Fig. 4:1-2)

Storage jars with four loop handles drawn from the slight shoulder carination to the body. The truncated neck ends in a rounded rim that is thickened on the interior. This is probably the predecessor of the well-known *lmlk* jar so typical of late 8th century BCE Judah. In this early phase its handles are not stamped and it can be found at Beersheba Strata V and IV, probably at Lachish Level IV (Zimhoni 1997:137–138; Group V–IV:SJ-7), Tel Zafit at Temporary Stratum 4 (Shai and Maeir 2003) and probably at Arad Stratum XI (Singer-Avitz 2002: Fig. 9:5, with two handles only).

In Stratum VI there is only a single sherd (Brandfon 1984: Fig. 28:4). Since Stratum VI apparently constitutes a short phase in the establishment of Stratum V and as such reflects an extension of the Stratum V city, it has not been dealt with separately in this study.

The pottery sherds of these cooking-pots were found in fills of Level IV.

Carinated Shoulder Storage Jar (Fig. 4:3)

Storage jars with carinated shoulder and wide lower-body that narrows toward the base (Arad XI, Singer-Avitz 2002: Figs. 4:9; 7:10). This type continues to appear with variations until the end of the Iron Age (Zimhoni 1990: [Group IIIE]:27–29; [Group IIE]:36–41).

Grooved Neck Storage Jar (Fig. 4:4-5)

Storage jars with ovoid body. Two loop handles are drawn from the slightly carinated shoulder to the body. Below the rounded rim is an emphasized groove. Found in Arad Stratum XI (Singer-Avitz 2002: Figs. 5:8; 9:4, 6), and Beersheba Strata VI–IV.

Four Handled Holemouth Jar (Fig. 5:1)

Storage jars with swollen body, rounded base, and four loop handles drawn from the rounded shoulder to the body. The jar is neckless and has a thickened rim. It is probably the predecessor of the popular holemouth jar of the following period (Aharoni 1973: Pl. 58:33–36; Singer-Avitz 2002:145, Fig. 17:SJ11; Zimhoni 1990: Fig. 19:1–3, 5).

Spouted Storage Jar (Fig. 5:2)

Small storage jars with globular body, ring base, three loop handles drawn from the rim to the shoulder, and spout attached to the rim. This jar is very popular in the IAIIB, and the most significant difference between the early and late form is the way in which the spout is attached. In its early form, the spout is flush with the vessel wall (Arad XI, Singer-Avitz 2002: Figs. 5:7; 9:7), while later, the spout is made separately and joined to the rim at only one point (*ibid*.:146; Fig. 17:SJ13; Zimhoni 2004b: Figs. 26.22:1; 26.25:5; 26.34:9; 26.42:9).

Cylindrical Holemouth Jar (Fig. 5:3)

Cylindrical holemouth jars with rounded, sometimes slightly pointed base. The rim is thickened. This jar is smaller than all other storage vessels and has no handles (Lachish Level IV, Zimhoni 2004a: Fig. 25.23:22). In the following period, it becomes one of the most popular vessels in the Judean repertoire (Aharoni 1973: Pl. 58:17–28).

Amphoriskoi (Fig. 3:4)

Small jars with wide high neck and two loop handles drawn from the shoulder carination to the body. The base is rounded. Some are red-slipped, some are

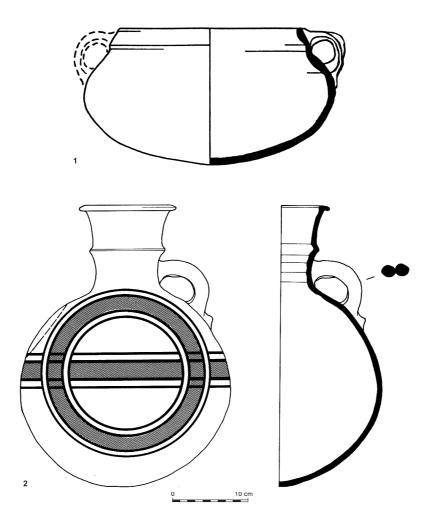


Fig. 1. Early IAIIA Pottery: (1) Cooking-pot, Horvat Rahava (after Cohen and Cohen-Amin 2004: Fig. 86:4); (2) Jug, Tel Masos Stratum II (after Fritz and Kempinski 1983:Taf.146:1).

decorated with red and black bands and some are plain. These amphoriskoi are found only at Late IAII at Arad XI (Singer-Avitz 2002: Fig. 7:4–6); at Tel Beersheba they are found in Stratum V. With some alterations, they are well known in the IAIIB (Aharoni 1973: Pls. 67:1; 72:17; 74:16).

Phoenician Imports (Fig. 1:2)

In the Early IAIIA phase, there are still a few Phoenician forms—'Bichrome Ware'

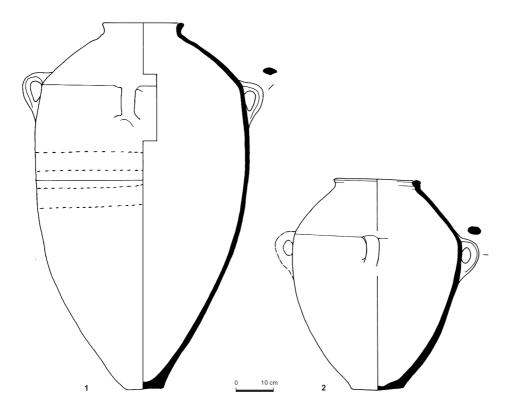


Fig. 2. Early IAIIA Pottery: (1–2) Pithoi, Tel Masos Stratum II (after Fritz and Kempinski 1983: Tafeln155.4; 151.9).

jugs—that were common in the IAI. The type appears at Tel Masos Stratum II (Fritz and Kempinski 1983:Taf. 146:1). At Tel Beersheba Stratum VII, some fragments are known. Although these vessels are known in Phoenicia where they originated as late as the 9th century BCE (Bikai 1978), at the Judean sites they probably do not appear after the Early IAIIA.

Cypriot Imports

Cypriot imported wheel-made vessels begin to appear in Judah only in the Late IAIIA, replacing the Phoenician forms of the Early IAIIA. Two main groups are known: The Black-on-Red ware and the Bichrome ware. This ware is not widespread in Judah.

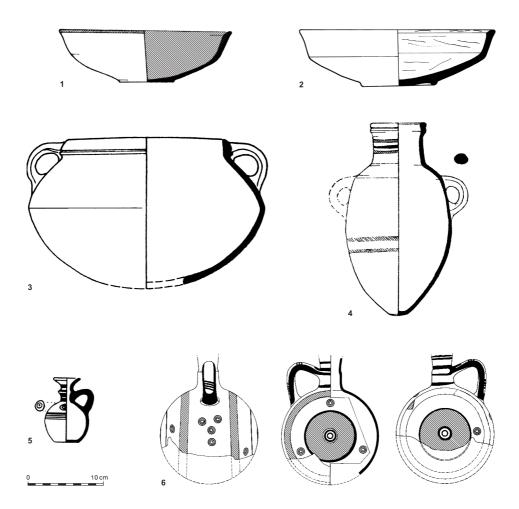


Fig. 3. Late IAIIA Pottery: (1) Bowl, Tel Beersheba, Stratum IV; (2) Bowl, Arad, Stratum XI (Singer-Avitz 2002: Fig. 8:1); (3) Cooking-pot, Tel Beersheba. Stratum V; (4) Amphoriskos, Tel Beersheba, Stratum V; (5) Juglet, Tell Beit Mirsim Stratum B (after Albright 1932: Fig. 51:9); (6) Juglet, Tel Beersheba, Stratum VI; (7) Jug, Tel Beersheba, Stratum V.

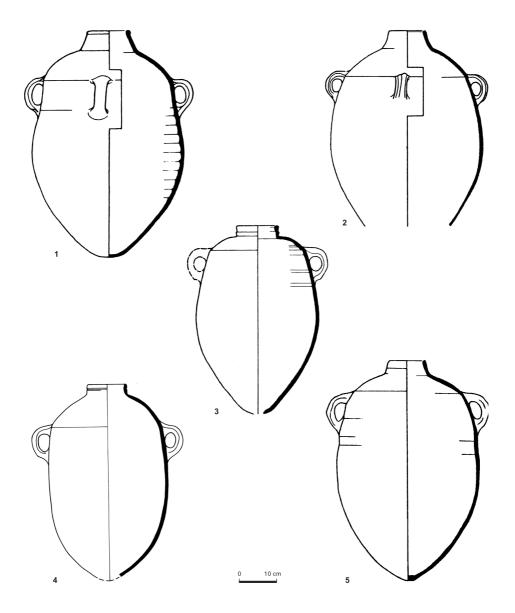


Fig. 4. Late IAIIA Pottery: (1)Storage jar, Tel Beersheba, Stratum V. (2) Storage jar, Tel Beersheba, Stratum IV. (3) Storage jar, Tel Beersheba, Stratum V. (4) Storage jar, Tel Arad, Stratum XI (Singer-Avitz 2002: Fig. 5:8); (5) Storage jar, Tel Beersheba, Stratum V.

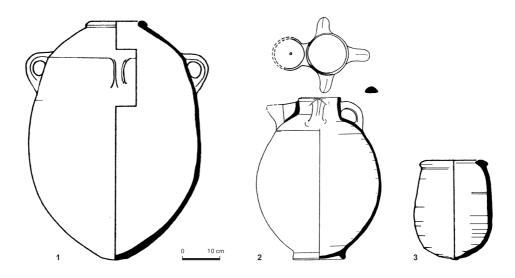


Fig. 5. Late IAIIA Pottery: (1) Storage jar, Tel Beersheba, Stratum V; (2–3). Storage jars, Tel Beersheba, Stratum IV.

Black-on-Red Ware (BoR) (Fig. 3:5)

So called because of its black decoration on a lustrous red background, this type is known in Judah mainly in the form of juglets. The juglets are made of well-levigated clay and are thin walled. The black decoration consists of bands and concentric circles. This ware is more widespread in the Northern Kingdom of Israel, where in addition to the juglets there are also bowls. Until recently, when chemical analysis showed that this ware was manufactured in Cyprus (Brodie and Steel 1996), the term 'Cypro-Phoenician' was used. These imports begin to appear in Judah in the later phase of the IAIIA and in the following period they decline.

Such juglets were found at Lachish Level IV (Zimhoni 2004a: Fig. 25.25:16) and at Beersheba Strata VI–IV.³

Bichrome Ware (Fig. 3:6)

This group of jugs is decorated with concentric circles in black and red on opposite sides of the body. In Cyprus this decoration appears on various types of vessels, but at Judean sites only a few examples, mainly jugs, are known (Beersheba Stratum V).

A fragment of a Black-on-Red juglet assigned to Stratum VII (Brandfon 1984: Fig. 24:7) does not belong to this stratum according to our renewed evaluation of the stratigraphy of the find spot.

SETTLEMENT PATTERNS IN JUDAH DURING THE IAIIA

The refined ceramic examination calls for re-evaluation of the occupational history and chronology of Judah in the first stage of the Iron Age II. Based on the observation of the two phases of the IAIIA we will re-assess the stratigraphy and the settlement patterns in Judah.

The Hill Country

Jerusalem

Data on the alleged capital city in the IAIIA is exceedingly scarce. In contrast to the abundant finds from the earlier MBII period, and later Iron Age IIBIIC, the poor material in the intermediate periods is noteworthy. The common attempt to explain the lack of remains as resulting from later occupational projects (Na²aman 1996, 1997; Cahill 1998), is refuted through a careful examination of the available data (Steiner 2001, 2003; Ussishkin 2003a).

The recent detailed summary of the IAIIA remains, although attempting to advocate the large scale city hypothesis (Cahill 2003) paradoxically verifies the most limited data. The factual evidence regarding this period exhibits the absence of a city wall and any other urban indicators in all excavation areas. The 'stepped stone structure' could have served as a retaining wall for the residency of a local ruler. However, its date must be relatively late since it contains red hand-burnished sherds (Steiner 2003:357–358; Finkelstein 2003a: 84–86). From the 12th down to the 9th century BCE Jerusalem was a minor settlement, an 'immature city' at best (Mazar 2003: 92). The most significant remains exposed by all the excavation projects are dated to the 8th and 7th centuries (Steiner 2001, 2003; Finkelstein 2003a; Killebrew 2003; Ussishkin 2003a). Consequently scholars began to question the factual role of the city against the biblical narrative (Herzog 2003; Killebrew 2003; Steiner 2003).

Hebron

Hebron, according to the biblical narrative (2 Sam. 2:11), was the first capital of David's kingdom. The excavations at Tell Rumeida uncovered an occupational sequence very similar to that of Jerusalem. A fortified city dominated the site in the EBIII and MBII. The next substantial occupation above it featured the four-room houses of the 8th century BCE. No cities were erected at Tel Rumeida in

Steiner describes Jerusalem of the 10th–9th century BCE "as a small town occupied mainly by public buildings" (2001:283), despite the absence of building remains and the fact that "...very little pottery from this period was found, and most of it came from unstratified deposits" (2001:281).

the Late Bronze Age, Iron Age I or IAIIA (Ofer 1986; Eisenberg and Nagorski 2002). The few sherds of 'collared-rim' jars and hand burnished vessels (Ofer 1986; Chadwick 1992) may indicate the presence of a small-scale occupation.

Other Hill Country Sites and Survey Data

No other site in the hill country exhibits a fully urban and fortified city during the IAIIA, as would be expected in a developed state. Excavations at Khirbet Rabud yielded a handful of Early IAIIA sherds (Kochavi 1974: Fig. 5:9-15). The review of data from additional excavated sites (Faust 1999) revealed a major decline in the number of settlements in the IAIIA. These results seem to contradict the survey conducted in the Judean Highlands by A. Ofer, who argued for a broad spread of occupation in this phase (Ofer 1993). But the chronological value of his conclusions must be considered with serious reservations. Ofer's IAIIA assemblages, which he dated to the 10th century BCE, contain material from diverse layers and a wide typological range. He included under this category Megiddo Strata VIA to VA-IVB and Beersheba Strata VIII to V. Moreover, he related both Levels V and IV at Lachish to the Iron Age IIB and equated them with Megiddo IVA (Ofer 1993: Table on p. 2:30). Such an affiliation of divergent types blurs the real settlement picture. This failure also diminishes the otherwise interesting attempt by G. Lehmann (2003) to explore the settlement pattern in the region, since his chronology relies on uncritical acceptance of Ofer's dating. It seems that the overall picture does comply with the situation in the excavated sites: the Judahite hill country was relatively empty (Finkelstein 2003a: 83).

The Shephelah

Lachish

Two distinct strata, Level V and Level IV, attributed to the IAIIA, were uncovered at Lachish (Ussishkin 2004; Zimhoni 2004a), corresponding to our Early IAII and Late IAIIA respectively. Level V consists of several domestic units erected at the perimeter of the site and might be reconstructed as an 'enclosed settlement' pattern. This method of protecting the site was possibly practiced in the LB Levels VII and VI, thus this concept was not unfamiliar to the inhabitants of the Shephelah. Architectural units like Palace A and the cult chamber, previously attributed to Level V (Aharoni 1975), are now assigned by D. Ussishkin to Level IV (Ussishkin 1996; 2003b). This leaves Level V with no monumental architectural structures during the first phase of the IAIIA. Level IV illustrates a different type of settlement. A strong, solid wall crowns the summit, which is reinforced by a glacis and mid-slope retaining wall. A formidable six-chambered gate, joined through a bent-axis to the

outer-gate, protected the single entrance into the city. The deep well that provided the city with a perennial water supply was apparently hewn into the rock concomitantly with the construction of the city. During this stage, too, the monumental palace with its spacious courtyard and administrative structures was erected.

Beth Shemesh

The characteristics of the settlement in Stratum IIA, assigned to the IAIIA, are vague. No clear occupation level could have been presented in the early excavations. In the renewed excavations report, a structure dubbed the 'North Gate' is attributed to the IAIIA. This structure is apparently a small, independent fort, since no city wall is attached on either of its sides (Bunimovitz and Lederman 2001). The dating of the structure to the IAIIA is based on sherds in fills and is rightly challenged (Finkelstein 2002b:121–122).

Tell Beit Mirsim

The stratigraphy of Tell Beit Mirsim in the IAIIA is no clearer than that of Beth Shemesh. Albright assigned a considerable amount of pottery to Stratum B3, attributed by him to the 10th century BCE (Albright 1932). However, no clear plan could have been presented for this stratum. It seems that the site was occupied continuously, and there was never total destruction from its early days as a village until the end of the 8th century BCE. The IAIIA pottery may stem from the early unfortified village. Accordingly, the casemate city-wall must have been imposed over the existing village during the Iron Age IIB (Herzog 1997). The published vessels and especially the Cypriot Black-on-Red juglet (Albright 1932: Pl.51:9) may date the assemblage to Late IAIIA.

Tel Batash

Stratum IV, built over Stratum V, is assigned to the IAIIA (Mazar 1997). Only a limited area of the site was exposed. The domestic units found at the edge of the mound indicate that the city had no fortification system. The pottery of Stratum IV resembles the assemblages of the Shephelah and Negev sites (Mazar and Panitz-Cohen 2001:154–156). The Most common cooking-pot is the one with the smooth-inverted rim (Mazar and Panitz-Cohen 2001:81–83; Type CP15) typical of the Early IAIIA. The absence of typical Late IAIIA vessels, like bowls with horizontal everted rims, the grooved cooking-pot or Cypriot juglets of the Black-on-Red Ware suggest that Stratum IV at Tel Batash should be attributed to the Early IAIIA phase. During the life span of Late IAIIA, Tel Batash was uninhabited and that accounts for the gap between Strata IV and III.

Tel Zafit (Tell es-Ṣafi)

A considerably large pottery assemblage from Tel Zafit 'Temporary Stratum 4' (Maeir 2001; 2003; Shai 2000) resembles the pottery in Level IV at Lachish (Shai and Maeir 2003:109). No clear architectural data is yet available.

Surveys

The IAIIA was a time of great prosperity in the foothills of Judah (Dagan 2004). The number of sites in the Shephelah tripled during the transition from Iron Age I to IAIIA (Lehmann 2003:133).

The Beersheba Valley and the Negev

Tel Masos

According to our pottery analysis, Stratum II may be safely assigned to the Early IAIIA. Tel Masos is the largest settlement in the Beersheba Valley during both the Iron Age I (Stratum III) and Early IAIIA. The site covered an area of *ca*. 6 hectares. The excavators' reconstruction of the site plan as wholly encircled by a belt of houses (Fritz and Kempinski 1983: Plan 1) is untenable since it places the doors of domestic units facing the outer side of the settlement, leaving the houses entirely unprotected. Alternative reconstruction suggests that the settlement was organized into several smaller 'enclosed settlements', with doors facing the centre of the compound (Herzog 1992; 1997). Although the site is comprised primarily of four-room houses, some units, such as Storehouse 1039 and Fort 480, indicate the emergence of an affluent stratum within the settlement. Building 314 may have served a ceremonial role. The architecture of these units, as well as the variegated pottery assemblage, point to the emergence of a social elite at the site.

The excavators dated the erection of the Stratum II settlement to the 12th–11th centuries BCE (Fritz and Kempinski 1983:78, 87). This early date was attributed to Stratum II because the excavators were misled by some early Stratum III sherds that were elevated into Stratum II fills (Yannai 1996). The stratigraphy at Tel Masos is complicated due to the continuity of occupation without major destruction layers. Part of the Stratum III buildings were also in use in Stratum II, and since the Stratum II floors were very close to Stratum III floors (Fritz and Kempinski 1983:37), such a mixture of early sherds in a later fill is quite likely. The early and misleading items attributed to Stratum II are limited. They consist of sherds only: three fragments of Philistine pottery (*ibid.*: Figs.135:16;156:6,12), two fragments of 'Midianite' pottery (*ibid.*: Figs. 142:10; 148:11) and two fragments of Egyptian pottery dated to the 20th Dynasty in Egypt (*ibid.*: Figs.134:4; 151:7). Allocating these early

sherds to Stratum III allows us to assign the pottery assemblage from Strata II and I to the Early IAIIA and not to the IAI (12th–11th centuries BCE) as advocated by the excavators. As a matter of fact, they, too, noticed the similarity between the assemblages of these strata and that of Arad XII (*ibid*.:231). Consequently, the pottery assemblages of both Strata III and II gain their coherent identity.

The Stratum III vessel assemblage is closely related to the Late Bronze pottery tradition. This is true of the kraters, cyma bowls (in some cases with a painted band on the rim), everted-triangular-rim cooking-pots and thickened-base storage jars. In addition, there are also a few Philistine fragments (for a typological discussion see *ibid*.:73–75). All these characteristic types are barely found in the Stratum II repertoire. In contrast, the red-slipped, hand-burnished bowls are dominant and characterize the assemblage of Stratum II. Here we find, for the first time, handled cooking-pots, medium-sized storage jars, neckless pithoi with thickened rim and a black juglet (*ibid*.:75–78, 81–87). All these vessels are known at Arad XII, Beersheba VII and Lachish V, i.e., Early IAIIA. The decorated jug of the 'Bichrome Ware' (*ibid*.: Fig. 146:1), which is well known in the IAI, is known also at the early stage of the IAIIA and is not exceptional to this assemblage.

The vessels that occur for the first time in the Late IAIIA and characterize this phase are nonexistent in Stratum II. The scant assemblage of Stratum I was assigned by the excavators to Iron Age IIA, although it is very similar to that of Stratum II (*ibid*.:80). We may thus attribute both Strata II and I to the same period, the Early IAIIA.

Tel Beersheba

The settlement at Tel Beersheba presents a sequence similar to that of Tel Masos in the early phases: At both sites the occupation began in the Iron Age I, Stratum III (with two sub-phases) at Tel Masos (*ibid*.:1983) and Strata IX–VIII at Tel Beersheba (Herzog 1984). However, unlike Tel Masos, which was abandoned at the end of Early IAIIA, Tel Beersheba was also occupied in the Late IAIIA, when the first city (Stratum V) was erected. Nevertheless, the destruction of most parts of Stratum VII, built on top of the hill, are a result of the construction of this first city. Only the remains on the southeastern slope survived the destruction.

The uncovered structures at Stratum VII consist of a line of attached dwellings of the four-room type, often furnished with stone pillars made of roughly-rounded flint drums. At the western end of the exposed area an entrance to the settlement was uncovered, protected by two projecting rooms that could serve as watchtowers. The area inside the dwellings seems to have been left open. The remains served as a basis for the reconstruction of an 'enclosed settlement' at the site, in line with similar occupations uncovered to the south and west of Beersheba (Herzog 1983).

The enclosed settlement of Stratum VII was dismantled by the local occupants to enable the construction of the Stratum V city. An intermediate phase (Stratum VI) that partially reused the previous structures was interpreted by the excavators as a workers' camp used during the construction of the new city (Herzog 1984: 84–85). The Stratum V city was surrounded by a solid city-wall that followed the contour of the natural hill and was reinforced by a glacis attached to its outer side. A large four-chambered gate adjoined by an outer gate protected the entrance into the city. The water system that stored reserves of water was hewn at the time of the construction of the first city (Stratum V) (Herzog 2002b). Water for daily use by city dwellers and passersby was drawn from a deep well hewn into the bedrock on the eastern slope of the mound. During the Late IAIIA, the city of Stratum V suffered a partial destruction and was later rebuilt (Stratum IV) according to the same layout but with raised floor levels.

The pottery assemblages at Tel Beersheba provide a sound basis for the identification of Early IAIIA (Stratum VII) and Late IAIIA (Strata VI–V–IV).

Tel Arad

The remains of the earliest Iron Age occupation at Tel Arad (Stratum XII) were badly damaged during the construction of the Stratum XI fortress (Herzog 2002a). The fragmentary remains of Stratum XII, preserved mainly beyond the western edge of the fortress of Stratum XI, consist of a few domestic units, apparently arranged according to the 'enclosed settlement' principle.

In line with this reconstruction (Herzog 2002a), the settlement contained about twenty residential units built around a central courtyard that was apparently utilized to pen flocks of sheep and goats. The alleged high place associated by the excavators with this stratum (Aharoni 1976: Fig. 7; Herzog *et al.* 1984:6, Fig. 4) appears to be totally imaginary (Herzog 2001a).

The Stratum XI fortress replaced the abandoned settlement of Stratum XII. The latter was found with no conflagration layer. The new fort was surrounded by casemate walls and was approached through a gate (protected by two towers) in the northeast corner. Rebuilding in later phases seriously affected our knowledge of the area within the fortress. The fragmentary remains indicate an administrative structure with more solid walls at the northern end of the fort, and residential units (made of thinner walls) on the southern side (Herzog 2002a). Strata XII and XI at Arad provide additional substantial data for the typology of Early and Late IAIA (Singer-Avitz 2002).

Tel 'Ira

The limited pottery found in Stratum VIII of the settlement as well as the finds from

one grave (No. 15) at Tel 'Ira (Freud 1999:193–194, Figs. 58, 73) are analogous to Late IAIIA assemblages. The presence of an early fortress in Stratum VIII, which was later incorporated into the city's fortifications of Stratum VII, cannot be excluded.

Tel Esdar, Nahal Yatir and other Sites in the Western Beersheba Valley

Iron Age IIA remains were uncovered in several additional sites in and around the Beersheba Valley. All these settlements were occupied in the Early IAIIA.

Tel Esdar: The small site comprises another example of an 'enclosed settlement' (Kochavi 1993). The excavator distinguished between Strata III and II and dated the earlier to the Iron Age I and the later to IAIIA. However, in our opinion the pottery assemblages of both strata should be assigned to the Early IAIIA. In both we find the smooth-inverted rim cooking-pot (Kochavi 1969: Fig. 5:6–7; 14:1–2). Stratum II contains a few red-slipped, hand-burnished bowls (*ibid*.: Fig. 5:1–2) while Stratum III includes a large group of storage jars (*ibid*.: Fig. 13:1–9).

Nahal Yatir: A group of four-room houses was uncovered at this site (Govrin 1991). The pottery dates to the Early IAIIA.

The Ḥaṣerim in the Western Beersheba Valley: The Ḥaṣerim are a group of short-lived sites found in the western Beersheba Valley (Gophna 1966; Gophna and Singer-Avitz 1984). Their pottery assemblages contain some earlier types, such as bell-shaped bowls in the Philistine tradition (*ibid*.: Figs. 41:3–4, 7–8; 42:3–4, 9). The majority of the vessels, however, should be associated with the Early IAIIA horizon: red-slipped and hand-burnished bowls and kraters (*ibid*.: Figs. 41:10; 42:2, 5, 12, 14) and smooth-inverted cooking-pots (*ibid*.: Fig. 41:11, 18). We may, therefore, conclude that the occupation of these sites (as at Tel Masos and Tel Beersheba) had already begun sometime during the IAI and continued into the Early IAIIA. They were not occupied in the Late IAIIA.

The Negev Highland Settlements

A considerably large group of settlements (mistakenly dubbed 'fortresses' [Herzog 1983]) was uncovered, and partly excavated in the wilderness regions to the south of the Beersheba Valley and in the Negev Highlands (Cohen 1970; 1976; 1986, Cohen and Cohen-Amin 2004; Haiman 1994; Meshel 1994). These settlements were part of an extensive wave of occupation that encroached upon the southern edges of Palestine. Two main types of settlements may be observed. The larger ones are of the enclosed settlements' type and include sites like Meṣad Ḥatira, Meṣad Refed, Ḥorvat Raḥba. The smaller sites consist of a few houses or even a single house, usually attached to a fenced-in animal enclosure.

The occupation of Negev Highland sites did not terminate in a total destruction. Most of the settlements seem to have been abandoned by their occupants, who left behind only a small amount of pottery. Some of the vessels are hand-made 'Negebite Ware', which is impossible to date precisely. Among the wheel-made vessels, the red-slipped, hand-burnished bowls are noteworthy; however, the bowls typical of Late IAIIA, with horizontal everted rim (Fig. 3:1-2) are absent. The cooking-pots with smooth-inverted rim (Fig. 1:1), which are present in the Early IAIIA, are dominant in the Negev Highland sites (see Cohen and Cohen-Amin 2004:125, Fig. 86:4). On the other hand, the cooking-pot with thickened, grooved rim (Fig. 3:3), dominant in the Late IAIIA, is absent in these settlements. Some pithoi forms from these sites find their best parallels at Tel Masos Stratum II. These pithoi are distinct from the early 'collared rim' pithoi and the later neckless pithoi. They consist of two types: (1)Pithoi with elongated body, short, flaring neck, thick rim and four loop handles (Fig. 2:1. ibid.:129, Fig. 88:3); (2) Short-body pithoi with a flat base and four loop handles. These vessels have no neck and the rim is grooved (Fig. 2:2. ibid.: Figs. 16:15; 59:6; 82:1). The repertoire of the Negev Highland pottery clearly dates them to the Early IAIIA.

Kadesh Barnea and 'Aharoni Fortress'

Both sites are located in the wide plains west of the Negev Highlands and seem to follow the pattern of occupation in the Beersheba Valley. Both sites were apparently of the 'enclosed settlement' type. The 'early fortress' at Kadesh Barnea (Cohen 1986) is definitely not a fortress but a residential settlement. The pottery assigned to this phase consists of vessels that belong to both Early and Late IAIIA. The full account documenting the pottery is not yet available. 'Aharoni Fortress' includes an early 'enclosed settlement' (Meshel 1994). The pottery seems to date to Early IAIIA.

To sum up, the archaeological picture presents a disparity between the hill region of Hebron and Jerusalem and that of the Shephelah foothills to the west and the Beersheba Valley to the south. While the higher elevated regions were sparsely populated in the IAIIA, the lower regions flourished with settlement and emerging administrative centres. The more we learn about the relative importance of the different regions during this period, the more it becomes clear that Jerusalem was not main city in the IAIIA. This role was achieved only in the 8th century BCE. This observation calls for redefinition of the centre: During the IAIIA, the demographic, economic, political and military centre of the emerging state must be sought in the Shephelah (Lachish) and Beersheba Valley (Beersheba and Arad), and not in the Judean Hills region (Jerusalem and Hebron).

TWO PHASES IN IRON AGE IIA IN JUDAH

The archaeological excavations of the Shephelah and the Beersheba Valley regions in the IAIIA present a rich and vital picture that justifies attributing a central role in the formation of statehood in Judah to these regions. The study of the pottery in the lowland sites allows us to distinguish both the continuity and the development within the assemblages that should, together with the shifts in settlement pattern, be divided into two stages (Singer-Avitz 2002, Herzog and Singer-Avitz Forthcoming):

Early IAIIA

The settlements of the early phase are characterized by rural occupations of a subsistence economy based on animal husbandry (sheep and goats) combined with dry-farming agriculture. The dominant settlement pattern consists of domestic units, often of the four-room house type, that form a belt of houses around the village and provide a measure of demarcation as well as security and control. Such protective measures were used in the Late Bronze Age sites of Megiddo (Herzog 1997: 165–169) and Lachish, Levels VII and VI (Ussishkin 1983). This concept of protection was applied also in many Iron Age I sites like Megiddo VIA, 'Ai, Shiloh and 'Izbet Sarta III (Herzog 1997:190–211). This model was adapted by the numerous 'enclosed settlements' erected during the Early IAIIA in the southern regions of Palestine (Herzog 1983). This settlement-wave spread to the more arid zone of the Negev Highlands, as well as to Kadesh Barnea and 'Aharoni Fortress' in the western Negev valleys. Farming communities in more fertile zones such as Lachish V and Tel Batash IV would have formed a denser type of occupation with houses that filled-up the central space of the settlement.

Tel Masos' prominent position in Early IAIIA apparently originates from its role in Iron Age I (Stratum III), when it already served as an important trading post for the copper mined in Feinan in the Arava (Knauf and Belleri 1995:112). It may also provide the only archaeological evidence for the emergence of a social elite. There are several indications of concentration of wealth there in Early IAIIA, for example, pillared House 1039, which may have served as a storage-house and House 480, the largest exposed unit, which was constructed in Egyptian style with recesses on the outer walls.

However, the lack of attributes of emerging administration such as fortifications or administrative buildings at all other Early IAIIA settlements points to un-stratified communities and indicates a low level of social complexity at this stage.

Late IAIIA

The second phase of IAIIA presents an utterly different occupational pattern in the Shephelah and the Beersheba Valley. It is characterized by the erection of fortified settlements that point to the emergence of a central government with a high degree of investment of resources in planning and in the construction of military and administrative structures (Herzog 1994; Finkelstein 2001). This phase is evident at Lachish Level IV, Arad Stratum XI and Beersheba Strata VI–IV (Stratum VI being a preparatory phase for the Stratum V city). Lesser information is available on this phase from Tel 'Ira VIII, Tell Beit Mirsim B2 and Beit Shemesh IIA.

At Lachish IV and Beersheba V the fortifications consisted of massive solid city walls reinforced by a sloping glacis. Large retaining walls protected the glacis, at mid-slope in Lachish and at the lower end of the glacis in Beersheba. The approach to both cities was protected by fort-like city-gates that were reinforced by outer gates arranged in a bent-axis shape. The main gate at Lachish was of a six-chambered type while the main gate at Beersheba was of a four-chambered type. The fortress at Arad (*ca.* 50 × 50 m.) was protected by the more economical casemate wall and reinforced by several projecting towers. The casemate rooms served for storage. Construction in Tel Beersheba of the elaborate water system that provided the city with large amounts of stored water and which could be approached from within the city itself is attributed to Stratum V (Herzog 2003). It may be suggested that, analogous to Tel Beersheba V, the initial phase of the hewn cisterns at Arad originated in Stratum XI, and that the channel that shortened the way for filling-up the cisterns was added only in Stratum X.⁵ Presumably the deep well at Lachish (Ussishkin 1982:43) might be assigned to this phase, too.

Besides the fortifications and measures of water supply some information is available on the elite residential and cultic structures. The construction of the impressive Palace A+B at Lachish is rightly attributed to Level IV (Ussishkin 1996; Herzog 1997:242). The palace, erected over a massive podium with extremely deep foundations, points to the central political role of the city. Remains of cultic vessels assigned by Aharoni to a sanctuary of Stratum V (Aharoni 1975) are now reassigned to a pit of Level IV (Ussishkin 2003b).

Regrettably, very little of the inner domestic space of the cities at Lachish and Beersheba was exposed down to these levels. The only significant remains at Beersheba are a number of pottery-rich dwellings exposed in the city centre. A nearby Stratum V street, located directly beneath the later streets of Strata III and II, indicates the continuity in the planning concept of the city from the first

The channel is incorporated into the solid wall of Stratum X and it cut through and destroyed one of Stratum XI's fortification towers.

phase in Stratum V. Stratum IV was rebuilt using the same fortifications and in the same plan as Stratum V, but at elevated floor levels. Inside the fortress at Arad XI poor remains of administrative structures were uncovered on the northern side, while domestic units were revealed in the southern section.

The characteristics of the new administrative centres demonstrate a remarkable concern for military protection. Solid walls were erected in Lachish and Beersheba, and a casemate wall at Arad. The considerable investment in constructing elaborate water systems also points to military considerations.

The two sub-phases of the period presented in this study thus provide us with unique insight into the process of state-formation in Iron Age II southern Palestine.

CHRONOLOGICAL CONSIDERATION

The reference to Arad in the Pharaoh Shishak I list is an important chronological clue. Following Zimhoni (1985) and Mazar and Netzer (1986), we associate Arad Stratum XII (the Early IAIIA Phase) with Shishak's campaign in the last quarter of the 10th century BCE (Herzog 2002a, Singer-Avitz 2002). ⁶ The corresponding strata at other sites in the Beersheba Valley and the Shephelah must therefore be dated in accordance with Arad. Accordingly, we may attribute the beginning of the Early IAIIA to the mid 10th century BCE. Due to the similarity of the pottery assemblages in the two sub-phases, the construction of the Late IAIIA settlement is assumed to follow shortly after the conclusion of the former (Singer-Avitz 2002: 114). The erection of the fortified settlements of Late IAIIA in Lachish IV, Arad XI, Beersheba V and probably at Tel 'Ira VIII, may thus be dated to the late 10th or early 9th century BCE, with a rounded date of 900 BCE.

Regarding the disagreement on the date of the termination of the Iron Age IIA, occurrence of Late IAIIA pottery down to the end of the 9th century BCE may be supported by the resemblance to the pottery exposed in 'Temporary Stratum 4' at Tel Zafit. The site, commonly identified with Philistine Gath (Rainey 1975; Schniedewind 1998), was assumingly destroyed by Hazael King of Aram-Damascus in the late 9th century BCE (Maeir 2003:244).

However, the transition from IAIIA to IAIIB in Judah, associated with wideranging shift of pottery types and drastic modification in settlement patterns,

Shishak's campaign apparently took place between 930-925 BCE (Na'aman 1998:267). In an attempt to revise the dates for the period of the New Kingdom and the 21st and 22nd Dynasties in Egypt, some scholars date Shishak 200 years later (James *et al.* 1991a; 1991b; 1992). This chronology has been strongly criticized (Kitchen 1991; 2003).

It should be noted, however, that some scholars oppose this identification. Stager advocates the location of Gath at Tel Haror (Stager 1998:162).

requires a more direct cause. It has been proposed that Level IV at Lachish ended as a result of an earthquake during the reign of Uzziah King of Judah, (Ussishkin 1977:52), and attributed by Dever (1992) and Austin, Franz and Frost (2000) to ca. 760 or 750 BCE. However, the archaeological and biblical data does not provide evidence for an absolute date, and any time between 780 and 740 is possible (Möller 2003). This hypothesis is supported by the enormous rebuilding projects carried out on the fortification system of Tel Beersheba (from IV to III) and in Arad (from XI to X). The solid Beersheba IV city-wall that stood to a considerable height was razed to its foundations, and subsequently replaced by a much weaker casemate wall. During the same rebuilding, the outer gate of Stratum IV was dismantled and was not rebuilt in Stratum III. Total demolition of the huge city walls and outer-gate should point to a major disaster, like an earthquake. These changes at Tel Beersheba would have been irrational had the city been destroyed by a military act. In such a case we would expect there to be a reinforcement of the fortification system. The evidence from Tel Beersheba thus presents a poignant example of a non-military consideration for the planning of a new city.

According to the proposed chronology both phases of the IAIIA cover a rather long period, from the second half of the 10th century BCE to the end of the 9th or early-8th century BCE – a period of 150 to 200 years. We believe that this chronology provides a solution that bridges between the conflicting opinions (Finkelstein 1996; Mazar 2003). The beginning of the Early IAIIA is assigned to the mid 10th century, in line with the high chronology. Yet the construction of administrative and military centres is assigned only to the Late IAIIA, in the late 10th and the entire 9th century, and possibly the early 8th century BCE, in line with the claims of the low chronology. The implication of our observation on the debate about the high or low chronology for traditional '10th century' assemblages is far-reaching. The chronological confusion resulted from the hitherto unnoticed subdivision of the pottery assemblages of the Early and Late IAIIA. Once these two pottery groups are acknowledged, and applied over the appropriate strata, the confusion is resolved.

The current proposal also solves the alleged contradiction between the low chronology and the pottery assemblages of Arad XII (Mazar 2003:60). Obviously, the Arad XII material belongs to Early IAIIA while most of the other assemblages mentioned by Mazar belong to the Late IAIIA and date to the 9th century.⁸

The comparative stratigraphy in the main sites in the lowlands indicates that the process was not uniform throughout the region. Some Iron Age I sites like Beit

It is noteworthy that Mazar abandons his previous 925 BCE date (Shishak's campaign) for the termination of the IAIIA (Mazar 1990:372–3, Table 7). Now he associates the red-slipped, hand-burnished pottery of Stratum IV at Tel Rehov with the IAIIA in the late 9th century, a date one hundred years after Shishak's campaign (Coldstream and Mazar 2003:41, Table 2).

Shemesh and Tell Beit Mirsim were probably discontinued in Early IAIIA. Other sites, like Tel Masos and Tel Beersheba, were settled in both Iron Age I and Early IAIIA. Tel Masos, the Negev Highlands and Tel Batash were discontinued in the Late IAIIA, while Lachish, Arad and Tel Beersheba were occupied continuously in both the Early and Late IAIIA. Finally, the shift from civilian farming communities into a more centralized polity occurred in the lowlands of the Shephelah and the Beersheba Valley. The centrality of Jerusalem was achieved only in the next IAIIB phase. This paper does not deal with the northern regions of Palestine. However, it seems that they provide a similar cultural sequence. While Early IAIIA correlates with Megiddo VB, the Late IAIIA is manifested in Megiddo VA–IVB.

TABLE 1. COMPARATIVE STRATIGRAPHY

Site / Period	Iron Age I	Early Iron Age IIA	Late Iron Age IIA	Iron Age IIB
Lachish	_	V	IV	III
Tel Masos	III	II–I	-	-
Tel Beersheba	IX-VIII	VII	VI-V-IV	III–II
Arad	-	XII	XI	X-IX-VIII
Tel ^e Ira	-	_	VIII	VII
Negev Settlements	-	Numerous	-	-
Beit Shemesh	III	-	IIA?	IIB
Tel Batash	V	IV	-	III
Tel Zafit	6?	5	4	3
Megiddo	VIB, VIA	VB	VA–IVB	IVA

STATE FORMATION IN JUDAH

State formation is a fascinating social process that has challenged scientists of varied disciplines (Cherry 1987; Johnson and Earle 2000; Maisels 1993; Routledge 2003). The subject of what generated the emergence of social complexity is the central issue in the debate on the origins of states and urban societies. One view explains the process as an outcome of prosperous conditions, resulting from the accumulation of agricultural surpluses that could have supported a ruling class (Childe 1950). Others note, conversely, that the evolution of complex societies stems from hardship and stress (Flannery 1972, Webster 1975). In earlier discussions on the origin of urban communities, the latter option was favoured, since the farming communities would have used agricultural surpluses to improve their standard of living, instead of supporting the ruling elite (Herzog 1997:7–13).

The above theories were also applied to the process of state formation in Iron Age Palestine. The more traditional view, following the biblical account, views the formation of state in ancient Israel as a decision made by organized tribes, along with the increase in population and agricultural production, and inter- and intra-regional trade (Frick 1985; Fritz 1996; Dever 1997).

The two diverse types of societal organization expressed by the data in each subphase of the IAIIA point to a complex non-evolutional process of social change. The settlements in the Shephelah and in the Beersheba Valley as well as those in the Negev Highlands enjoyed a peaceful and prosperous period during the Early IAIIA. This affluence probably stems from improved climatic conditions in the southern part of the country that enabled the cultivation of the vast farmlands in the valleys (Herzog 1994). Nonetheless, the flourishing Early IAIIA communities did not develop into an emerging state. The only exceptional sign of concentration of wealth, it now emerges, was at Tel Masos II. Rather than evolve into an administrative centre, Tel Masos was totally abandoned in the Late IAIIA.

Significantly, the settlements of this phase were not destroyed by conflagration; they were abandoned. In settlements where occupation was restored, such as at Lachish, Tel Beersheba or Tel Arad, the older structures were dismantled to allow for the rebuilding of the next phase.

The transition to Late IAIIA was associated with the disappearance of the large number of rural settlements that existed in the Early IAIIA in the Beersheba Valley, in the Negev Highlands and in the Shephelah. Instead of the settlement expansion that would be expected in an emerging urban period, we witness total devastation of the vast occupation of the Negev Highlands and reduction in the total size of occupied sites in the Beersheba Valley (Herzog 1994). This reality, combined with the fact that the next stage is characterized by elaborate fortifications, suggests that the cultural shift resulted from stressful conditions rather than from prosperity. The demographic decline of the settled population indicates that part of the rural occupants must have been forced to shift to a nomadic life, the common subsistence economy throughout most of the occupational history in this region.

What, possibly, were the circumstances of this process of social change illuminated by the archaeological record? We suggest that the combined effect of two factors generated the event: the political-military raid by the Egyptians and the fluctuations of environmental conditions.

Shishak (Shoshenq) campaign. Since we associate the vast occupation in southern Canaan in Early IAIIA with the numerous settlements mentioned in the Shishak campaign list, we have assigned the beginning of the period to the mid-10th century BCE.

Recently Finkelstein (2002a) attributed to the Shishak campaign the destruction

of several independent polities such as the Jezreel Valley polity around Megiddo, a Central Highland polity around Gibeon and a Desert Polity around Tell Masos. He associates these polities with the concept of the 'New Canaan' order implemented in the Iron Age I and dated to the 10th century (Finkelstein 2003b). Finkelstein favours assigning the cause for annihilation of these polities and termination of the Iron Age I to Shishak's campaign (2002a). We are inclined to accept Finkelstein's perception of regional polities and suggest that while Tel Masos could be the central place in the Early IAIIA, Lachish is a favoured centre in the Late IAIIA.

It is reasonable to assume that Shishak's interest was to bring Canaan back under Egyptian control (Ahlström 1993) in order to benefit from the economic rewards. Therefore, his campaign should be regarded as a demonstration of the resurrected Egyptian force rather than a drive to annihilate. The listing of names of captured cities in monumental inscriptions was justified even in cases where the terrified inhabitants willfully surrendered.

Recently, Clancy reassessed the identifications of the Egyptian names in the Shishak list. He argued that Shishak conducted a "large raid rather than a conquest" (Clancy 1999:19). Shishak's route, according to Clancy, passed through Sinai, the Negev, the Gibeon Hills and the Shephelah of Judah, aiming to secure the trade routes to and from Egypt. Jerusalem and Hebron were insignificant areas. Such reconstruction of Shishak's journey perfectly accords with our archaeological observations of the predominance of the Beersheba Valley and the Shephelah over the Highlands of Judah during the IAIIA.

As previously mentioned, Arad XII and contemporary settlements in Judah, such as Lachish V, Beersheba VII and Tel Masos II, were not destroyed by violence. However, even if the settlements were not wiped out, the campaign could definitely have triggered the breakdown of the civilian communities. Egyptian control of trade, combined with the taxation and labour levies they possibly imposed, placed additional stress on the settlers. The campaign might also have sufficiently alarmed the population in Palestine to generate the establishment of a managerial ruling class that attempted to respond to defence needs by initiating the construction of fortified settlements.

Environmental fluctuations. A second possible trigger for the cultural shift is associated with environmental instability. This factor may have been most dominant in the southern semi-arid regions. The effect of minor climatic fluctuations on dry-farming subsistence economy has been recognized since Huntington's pioneering study (1911), followed by more updated data (Baly 1957; Butzer 1982;

Ussishkin claimed that the presence of the Shoshenq I stele at Megiddo indicates that the city was not destroyed during the campaign (Ussishkin 1990:71–74).

Wilkinson 2003). Although these studies cannot provide chronologically pinpointed evidence, they demonstrate beyond doubt the very occurrence of the environmental fluctuations. It should be stressed that the impact on dry-farming could result not only from lack of rain. Freezing temperatures or strong and short rainy periods could result in a similarly devastating outcome. Substantial progress was made in determining the scale of such fluctuations by various independent methods. Goodfriend (1988) presented evidence for fluctuations in precipitation in the northern Negev, indicating a southward movement of the aridity front. More recent studies of the Dead Sea water levels (Frumkin *et al.* 1991), the Nahal Sorek cave (Bar-Matthews *et al.* 1998, 1999) and the bottom of the Mediterranean (Schilman *et al.* 2001) revealed definite indications of the occurrence of environmental fluctuations that could affect cultural habitation in marginal zones (cf. Issar 2003).

Direct archaeological evidence of large amounts of stored grain comes from the storage granaries exposed in the earliest layers at all the sites in the Beersheba Valley: Tel Masos IIIB, Tel Beersheba IX and Arad XII (Herzog 1994). Additional important testimony is found in the animal bones exposed in the Beersheba Valley. Cattle bones provide an important indicator for farming, as oxen were exploited for traction and plowing (Grigg 1974). The arid conditions in the Negev did not encourage raising cattle in this region. However, an outstandingly high percentage of cattle bones were detected in Strata III and II at Tel Masos. Cattle bones consist of 22% of Stratum III and 31.7% in Stratum II (Tchernov and Drori 1983). A high ratio of cattle is observed also at Tel Arad XII (17.8%) with a decline to 11.5% in Stratum XI and to only 5.1% in Stratum X (Sadeh 1988:93). A decline of cattle bones in layers associated with Late IAIIA should point to a slow deterioration of climatic conditions. Further support is available from pollen analyses at Tel Beersheba Stratum VII that indicate a less arid climate than exists at present (Horowitz 1984:118).

The evidence of environmental fluctuations, coupled with the political and economical outcomes of Shishak's campaign, provides the framework for the twofold process of state formation in Judah. At the end of Iron Age I and in Early IAIIA the rural communities that settled the Shephelah and the Beersheba Valley apparently took advantage of slightly improved climatic conditions that enabled them to earn a living by combining dry-farming and animal husbandry (Herzog 1994). The otherwise arid Negev Highlands apparently experienced greater precipitation that yielded enough natural vegetation to support dozens of small farmsteads. The resulting agricultural benefits could support the growing population as well as the exchange of products with neighbours. Tel Masos II could well have served as the

Tel Masos is unique in this period in many other aspects as well: its enormous size, its complex architecture and the wide diversity of objects imported from afar.

centre of 'desert polity' (Finkelstein 2002a) in Early IAIIA (Finkelstein's Iron Age I). This phase seems to fit well the rudimentary 'patrimonial' phase advocated by Stager (2003).

However, this prosperity was disrupted. Shishak's campaign, the economic burden that resulted from the renewed Egyptian dominance and a shortage of agricultural products due to climatic deterioration inevitably called for political rivalry and military conflicts between the neighbouring communities. Many of the settlements (in the more arid zones) were abandoned and the others were organized in a new social order, represented by the fortified settlements of the Late IAIIA phase. The establishment of a life-saving managerial elite came in response to these stressful conditions. The appointed leaders were expected to mobilize manpower and resources in order to erect fortified settlements that would protect the communities. This process was markedly initiated first in the lowlands of Judah, with Lachish playing the central role, and is evident in the Beersheba Valley at Beersheba V and Arad XI.

CONCLUSIONS

The current study offers a new view of the process of state formation in Judah in three spheres: location, chronology and causes of the process.

In contrast to prevailing common opinion, the process was not centered in the Highlands of southern Palestine, in the Hebron and Jerusalem area, as portrayed in the biblical tradition. While the sites of the hilly region present very poor evidence of occupation in the IAIIA, the archaeological manifestations of centralized authority is uncovered in the steppe and valley regions of the Shephelah and the Beersheba Valley. The administrative centres exposed at Lachish, Beersheba and Arad provide sound testimony for the emergence of a managerial elite that was capable of undertaking such large-scale projects as erecting planned cities and fortresses, constructing fortification systems and hewing water reservoirs.

The heart of the emerging monarchy in Judah should be relocated from the hill country to the lower land regions. Such redefining of the centre of the emerging Kingdom of Judah in the lowland should not surprise us, since a dominant role of the highland is quite anomalous. The hillside and lowland regions are pointedly more urbane than the highlands. This phenomenon was generalized by Braudel: "The mountains are as a rule a world apart from civilizations, which are an urban and lowland achievement" (Braudel 1995:34). Indeed, major urban centres in Bronze Age Palestine, as well as in the Iron Age I, developed in the lowlands: Hazor and Beth Yeraḥ in the Jordan Valley, Megiddo in the Jezreel Valley and Dor and Ashkelon on the Coastal Plain. The central role of the Shephelah is also not unique

to the IAIIA. The prime city of Tel Yarmuth enjoyed this status in the Early Bronze Age II–III (de Miroschedji 1999). Lachish apparently served in a similar capacity in the Middle Bronze Age IIB (Ussishkin 1993), and Ramla served as the Umayyad and Abbasid capital of the Province of Palestine (*Jund Filistin*).

The proposed chronology of the two phases of the IAIIA provides a satisfactory resolution for the disputed opinions. Instead of a single century allocated to the IAIIA we assign the Early IAIIA to the second half of the 10th century BCE, and the Late IAIIA to the 9th and possibly part of the 8th centuries BCE.

The twofold nature of the period indicates that the process of state formation in Judah was not a unidirectional evolution from tribal community to state society, but involved drastic revolution in occupational pattern and social organization. Unveiling the historical development in the early first millennium is slowly, but confidently, proceeding. The picture, biased for decades by the biblical historiography, is becoming more and more substantiated by hard archaeological data. Freed from the purported chronology and sequence of events of the biblical historiography we are now progressing into a new scientific era (Finkelstein and Silberman 2001; Herzog 2001b; Noll 2001; Skjeggestad, 2001; Garbini 2003).¹¹

REFERENCES

- Aharoni, Y., ed. 1973. *Beer-sheba I: Excavations at Tel Beer-sheba, 1969–1971 Seasons* (Publications of the Institute of Archaeology of Tel Aviv University 2). Tel Aviv.
- Aharoni, Y. 1975. *Investigations at Lachish: The Sanctuary and the Residency (Lachish V)*. (Publications of the Institute of Archaeology of Tel Aviv University 4). Tel Aviv.
- Aharoni, Y. 1976. Nothing Early Nothing Late: Rewriting Israel's Conquest. *Biblical Archaeologist* 39:55–76.
- Ahlström, G.W. 1993. Pharaoh Shoshenq's Campaign to Palestine. In: Lemaire, A. and Otzen, B., eds. *History and Traditions of Early Israel*. Leiden:1–16.
- Albright, W. F. 1932. The Excavation of Tell Beit Mirsim, Vol. 1: The Pottery of the First Three Campaigns (AASOR 12). New Haven.
- Austin, S. A., Franz, G., Wand, E. and Frost, G. 2000. Amos's Earthquake: An Extraordinary Middle East Seismic Event of 750 B.C. *International Geology Review* 12:657–671.

The authors wish to express their gratitude to Israel Finkelstein, Nadav Na'aman and David Ussishkin for their valuable remarks on an earlier draft of this paper.

- Baly, D. 1957. The Geography of the Bible: A Study in Historical Geography. New York.
- Bar-Matthews, M., Ayalon, A. and Kaufman, A. 1998. Middle to Late Holocene (6,500 Yr. Period) Paleoclimate in the Eastern Mediterranean Region from Stable Isotopic Composition of Speleothems from Soreq Cave, Israel. In: Issar, A, Brown, N. and Shilony, Z., eds. *Water, Environment and Society in Times of Climatic Change*. New York: 203–214.
- Bar-Matthews, M., Ayalon, A., Kaufman, A. and Wasserburg, G.J. 1999. The Eastern Mediterranean Paleoclimate as a Reflection of Regional Events: Soreq Cave, Israel. *Earth and Planetary Science Letters* 166:85–95.
- Bikai, P. M. 1978. The Pottery of Tyre. Warminster.
- Brandfon, F.R. 1984. The Pottery. In: Herzog, Z. Beer-Sheba II: The Early Iron Age Settlements (Publications of the Institute of Archaeology of Tel Aviv University 7). Tel Aviv: 37–69.
- Braudel, F. 1995. *The Mediterranean and the Mediterranean World in the Age of Philip II*. Berkeley and Los Angeles.
- Brodie, N.J. and Steel, L. 1996. Cypriot Black-on-Red Ware: Towards a Characterization. *Archaeometry* 38:263–278.
- Bunimovitz, S., and Lederman, Z. 2001. The Iron Age Fortifications of Tel Beth Shemesh: A 1990–2000 Perspective. *IEJ* 51:121–147.
- Butzer, K. W. 1982. Archaeology as Human Ecology: Method and Theory for a Contextual Approach. Cambridge.
- Cahill, J. M. 1998. David's Jerusalem: Fiction or Reality? It Is There: The Archaeological Evidence Proves It. *Biblical Archaeology Review* 24: 34–41, 63.
- Cahill, J. M. 2003. Jerusalem at the Time of the United Monarchy: The Archaeological Evidence. In: Vaughn, A.G. and Killebrew, A.E., eds. *The United Monarchy in the Countryside: Jerusalem, Judah and the Shephelah during the Tenth Century BCE*. Atlanta: 13–80.
- Chadwick, J.R. 1992. The Archaeology of Biblical Hebron in the Bronze and Iron Ages: An Examination of the Discoveries of the American Expedition to Hebron. (Ph.D. Dissertation, University of Utah.) Ann Arbor.
- Cherry, J. F. 1987. Power in Space: Archaeological and Geographical Studies of the State. In: Wagstaff, J.M., ed. *Landscapes and Cultures: Geographical and Archaeological Perspectives*. Oxford.
- Childe, V. G. 1950. The Urban Revolution. Town Planning Review 21:3-17.
- Clancy, F. 1999. Shishak/Shoshenq's Travels. *Journal for the Study of the Old Testament* 86:3–23.
- Cohen, R. 1970. Atar Haro'a. 'Atiqot 6 (Hebrew Series):6–24.

- Cohen, R. 1976. Excavations at Ḥorvat Ḥaluqim. 'Atiqot 11 (English Series): 34–50
- Cohen, R. 1986. *The Settlement of the Central Negev in the Light of Archaeological and Literary Sources During the 4th–1st Millennia B.C.E.* (Ph. D. Dissertation, Hebrew University) Jerusalem. (Hebrew).
- Cohen, R. and Cohen-Amin, R. 2004. *Ancient Settlement of the Negev Highlands*. Vol.II: *The Iron Age and the Persian Period* (IAA Reports, 20). Jerusalem. (Hebrew).
- Coldstream, N., and Mazar, A. 2003. Greek Pottery from Tel Rehov and Iron Age Chronology. *IEJ* 53:29–48.
- Dagan, Y. 2004. Results of the Survey: Settlement Patterns in the Lachish Region.
 In: Ussishkin, D., ed. *The Renewed Archaeological Excavations at Lachish* 1973–1994. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 22). Tel Aviv: 2672–2690.
- de Miroschedji, P. 1999. Yarmouth: The Dawn of City-States in Southern Canaan. *Near Eastern Archaeology* 62:2–19.
- Dever, W. G. 1992. A Case-Study in Biblical Archaeology: the Earthquake of ca. 760 B.C.E. *EI* 23:27*–35*.
- Dever, W. G. 1997. Archaeology, Urbanism, and the Rise of the Israelite State. In: Aufrecht, W. E., Mirau, N. A. and Gauley, S. W., eds. *Urbanism in Antiquity: From Mesopotamia to Crete* (Journal for the Study of the Old Testament, Supplement Series 244). Sheffield: 172–193.
- Eisenberg, E. and Nagorski, A. 2002. Tel Hevron (Er-Rumeidi). *Had. Arkh. Excavations and Surveys in Israel* 114:91*–92*.
- Faust, A. 1999. From Hamlets to Monarchy: A View from the Countryside on the Formation of the Israelite Monarchy. *Cathedra* 94:7–32. (Hebrew).
- Faust, A. 2002. Burnished Pottery and Gender Hierarchy in Iron Age Israelite Society. *Journal of Mediterranean Archaeology* 15:53–73.
- Finkelstein, I. 1996. The Archaeology of the United Monarchy: An Alternative View. *Levant* 28:177–187.
- Finkelstein, I. 2001. The Rise of Jerusalem and Judah: The Missing Link. *Levant* 33: 105–115.
- Finkelstein, I. 2002a. The Campaign of Shoshenq I to Palestine: A Guide to the 10th Century BCE Polity. *ZDPV* 118:109–135.
- Finkelstein, I. 2002b. Chronology Rejoinders. *PEQ* 134:118–129.
- Finkelstein, I. 2003a. The Rise of Jerusalem and Judah: The Missing Link. In: Vaughn, A.G. and Killebrew, A.E., eds. *Jerusalem in Bible and Archaeology. The First Temple Period.* Atlanta: 81–101.
- Finkelstein, I. 2003b. City-States to State: Polity Dynamics in the 10th–9th Centuries

- B.C.E. In: Dever, W.G. and Gitin, S., eds. *Symbiosis, Symbolism, and the Power of the Past*. Winona Lake, IN: 75–83.
- Finkelstein, I. and Silberman. N. A. 2001. *The Bible Unearthed: Archaeology's New Vision of Ancient Israel and the Origin of Its Sacred Texts*. New York.
- Flannery, K. V. 1972. The Cultural Evolution of Civilization. *Annual Review of Ecology and Systematics* 3:399–426.
- Freud, L. 1999. Iron Age. In: Beit-Arieh, I., ed. *Tel 'Ira: A Stronghold in the Biblical Negev*. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 15). Tel Aviv: 189–289.
- Frick, F. S. 1985. *The Formation of the State in Ancient Israel: A Survey of Models and Theories*. (The Social World of Biblical Antiquity 4). Sheffield.
- Fritz, V. 1996. Monarchy and Re-urbanization: A New Look at Solomon's Kingdom. In: Fritz, V. and Davies, P. R., eds. *The Origins of the Ancient Israelite States* (Journal for the Study of the Old Testament, Supplement Series 228). Sheffield: 187–195.
- Fritz, V. and Kempinski, A. 1983. *Ergebnisse der Ausgrabungen auf der Ḥirbet el-Mšāš (Tēl Māśōś) 1972–1975*. Wiesbaden.
- Frumkin, A., Magaritz, M., Carmi, I. and Zak, I. 1991. The Holocene Climatic Record of the Salt Caves of Mount Sedom, Israel. *The Holocene* 1:191–200.
- Garbini, G. 2003. *Myth and History in the Bible* (Journal for the Study of the Old Testament, Supplement Series 362). Sheffield.
- Goodfriend, G. A. 1988. Mid-Holocene Rainfall in the Negev Desert from 13C of Land Snail Shell Organic Matter. *Nature* 333:757–760.
- Gophna, R. 1966. Iron Age I *Ḥaṣerim* in Southern Philistia. 'Atiqot 3:44–51 (Hebrew; English summary 5*–6*).
- Gophna, R. and Singer-Avitz, L. 1984. Iron Age I Settlements to the West of Tel Beer-sheba. In: Herzog, Z. *Beer-sheba II: The Early Iron Age Settlements* (Publications of the Institute of Archaeology of Tel Aviv University No. 7). Tel Aviv: 125–131.
- Govrin, Y. 1991. Archaeological Survey of Israel: Map of Nahal Yattir(139). Jerusalem.
- Grigg, D. B. 1974. The Agricultural Systems of the World. London.
- Haiman, M. 1994. The Iron Age II Sites of the Western Negev Highlands. *IEJ* 44: 36–61.
- Herzog, Z. 1983. Enclosed Settlements in the Negeb and the Wilderness of Beer-Sheba. *BASOR* 250:41–49.
- Herzog, Z. 1984. *Beer-Sheba II: The Early Iron Age Settlements* (Publications of the Institute of Archaeology of Tel Aviv University No. 7). 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. 1994. The Beer-Sheba Valley: From Nomadism to Monarchy. In: Finkelstein, I. and Na'aman, N., eds. *From Nomadism to Monarchy: Archaeological and Historical Aspects of Early Israel*. Jerusalem: 122–149.
- Herzog, Z. 1997. *Archaeology of the City: Urban Planning in Ancient Israel and Its Social Implications*. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 13). Tel Aviv.
- Herzog, Z. 2001a. The Date of the Temple at Arad: Reassessment of the Stratigraphy and the Implications for the History of Religion in Judah. In: Mazar, A., ed. *Studies in the Archaeology of the Iron Age in Israel and Jordan* (Journal for the Study of the Old Testament, Supplement Series 331). Sheffield: 156–178.
- Herzog, Z. 2001b. The Scientific Revolution in the Archaeology of Eretz Israel. In: Levine, L.I. and Mazar, A., eds. *Controversy Over the Historicity of the Bible*. Jerusalem: 52–65. (Hebrew).
- Herzog, Z. 2002a. The Fortress Mound at Tel Arad: An Interim Report. *Tel Aviv* 29: 3–109.
- Herzog, Z. 2002b. Water Supply at Tel Beersheba in the 1st Millennium BCE. In: Ohlig, Ch., Peleg, Y. and Tsuk, T., eds. *Cura Aquarum in Israel, In Memoriam Dr. Ya'akov Eren.* Siegburg:15–22.
- Herzog, Z. 2003. The City Plan as a Source for Reconstructing the Process of State Formation in Judah. In: Amit, D. and Kletter, R., eds. *Cities and Urbanization in Ancient Eretz Israel and Its Neighbors*. Jerusalem: 10. (Hebrew).
- Herzog, Z., Aharoni, M., Rainey, A.F. and Moshkovitz, S. 1984. The Israelite Fortress at Arad. *BASOR* 254:1–34.
- Herzog, Z. and Singer-Avitz, L. Forthcoming. Pottery of Iron Age IIA-B in Judah. In: Gitin, S., ed. *The Pottery of Ancient Palestine*. Jerusalem.
- Holladay, J. S. J. 1990. Red Slip, Burnish, and the Solomonic Gateway at Gezer. *BASOR* 277/278:23–70.
- Horowitz, A. 1984. Pollen Analysis of an Early Iron Age Sample from Tel Beer-sheba. In: Herzog, Z. *Beer-sheba II: The Early Iron Age Settlements*. (Publication of the Institute of Archaeology of Tel Aviv University No. 7). Tel Aviv: 118–119.
- Huntington, E. 1911. Palestine and Its Transformation. London.
- Issar, A. S. 2003. Climate Changes during the Holocene and Their Impact on Hydrological Systems. (International Hydrology). Cambridge, UK and New York.
- James, P., Thorpe, I.J., Kokkinos, N., Morkot, R. and Frankish, J. 1991a. *Centuries of Darkness: A Challenge to the Conventional Chronology of the Old World Archaeology*. London.

- James, P., Thorpe, I.J., Kokkinos, N., Morkot, R. and Frankish, J. 1991b. Centuries of Darkness: Context, Methodology and Implications. *Cambridge Archaeological Journal* 1:227–235.
- James, P., Thorpe, I.J., Kokkinos, N., Morkot, R. and Frankish, J. 1992. Centuries of Darkness: A Reply to Critics. *Cambridge Archaeological Journal* 2(1): 127–130.
- Johnson, A.W. and Earle, T.K. 2000. *The Evolution of Human Societies: From Foraging Group to Agrarian State*, 2nd edition. Stanford, CA.
- Killebrew, A.E. 2003. Biblical Jerusalem: An Archaeological Assessment. In: Vaughn, G. and Killebrew, A.E., eds. *Jerusalem in Bible and Archaeology: The First Temple Period*. Atlanta: 329–345.
- Kitchen, K.A. 1991. Egyptian Chronology: Problem or Solution? *Cambridge Archaeological Journal* 1 (2):235–239.
- Kitchen, K. A. 2003. Egyptian Interventions in the Levant in Iron Age II. In: Dever, W.G. and Gitin, S., eds. *Symbiosis, Symbolism, and the Power of the Past*. Winona Lake, IN: 75–83.
- 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.
- Kochavi, M. 1969. Excavations at Tel Esdar. 'Atigot 5 (Hebrew series):14-48.
- Kochavi, M. 1974. Khirbet Rabud=Debir. Tel Aviv 1:2-33.
- Kochavi, M. 1993. Esdar, Tel. New Enc. Arch. Exc. 2:423.
- Lehmann, G. 2003. The United Monarchy in the Countryside: Jerusalem, Judah and the Shephelah during the Tenth Century BCE. In: Vaughn, G. and Killebrew, A.E., eds. *Jerusalem in Bible and Archaeology: The First Temple Period*. Atlanta: 117–162.
- Maeir, A. M. 2001. The Philistine Culture in Transformation: A Current Perspective Based on the Results of the First Seasons of Excavations at Tell es-Ṣafi/Gath. In: Maeir, A.M. and Baruch, E., eds. *Settlement, Civilization and Culture: Proceedings of the Conference in Memory of David Alon.* Ramat Gan: 111–129. (Hebrew).
- Maeir, A. 2003. Tell es-Safi/Gath, 1996–2002. IEJ 53:237–246.
- Maisels, C. K. 1993. *The Emergence of Civilization: From Hunting and Gathering to Agriculture* (Cities and the State of the Near East). London.
- Mazar, A. 1990. Archaeology of the Land of the Bible: 10,000–586 B.C.E. New York.
- Mazar, A. 1997. Timnah (Tel Batash) I. (Qedem 37). Jerusalem.
- Mazar, A. 1998. On the Appearance of Red Slip in the Iron Age I Period in Israel. In: Gitin, S., Mazar, A. and Stern, E., eds. *Mediterranean Peoples in Transition: Thirteenth to Early Tenth Centuries BCE*. Jerusalem: 368–378.

- Mazar, A. 2003. Does Amihai Mazar agree with Finkelstein's "Low Chronology"? *Biblical Archaeology Review* 29(2):60–61.
- Mazar, A. and Netzer, E. 1986. On the Israelite Fortress at Arad. BASOR 263:87–91.
- Mazar, A. and Panitz-Cohen, N. 2001. *Timnah (Tel Batash) II: The Finds from the First Millennium BCE* (Qedem 42). Jerusalem.
- Meshel, Z. 1994. The 'Aharoni Fortress' near Quseima and the 'Israelite Fortresses' in the Negev. *BASOR* 294:39–67.
- Möller, K. 2003. A Prophet in Debate: The Rhetoric of Persuasion in the Book of Amos (Journal for the Study of the Old Testament, Supplement Series 372). Sheffield.
- Na'aman, N. 1996. The Contribution of the Amarna Letters to the Debate on Jerusalem's Political Position in the Tenth Century B.C.E. *BASOR* 304:17–27.
- Na'aman, N. 1997. Cow Town or Royal Capital? Evidence for Iron Age Jerusalem. *Biblical Archaeology Review* 23:43–47, 67.
- Na'aman, N. 1998. Shishak's Campaign to Palestine as Reflected by the Epigraphic, Biblical and Archaeological Evidence. *Zion* 63:247–276. (Hebrew).
- Noll, K. L. 2001. Canaan and Israel in Antiquity: An Introduction. London.
- Ofer, A. 1986. Tell Rumeida (Hebron)-1985. Had. Arkh. 88:28. (Hebrew).
- Ofer, A. 1993. *The Highland of Judah during the Biblical Period*. (Ph.D. dissertation, Tel Aviv University) Tel Aviv. (Hebrew).
- Rainey, A.F. 1975. The Identification of Philistine Gath: A Problem in Source Analysis for Historical Geography. *EI* 12:63*–76*.
- Routledge, B. 2003. The Antiquity of the Nation? Critical Reflections from the Ancient Near East. *Nations and Nationalism* 9:213–233.
- Sadeh, M. 1988. Domestic Mammals in the Iron Age Economy of the Northern Negev. (M.A. thesis, Tel Aviv University) Tel Aviv. (Hebrew).
- Schilman, B., Bar-Matthews, M., Almogi-Labina, A. and Luzb, B. 2001. Global Climate Instability Reflected by Eastern Mediterranean Marine Records during the Late Holocene. *Palaeogeography, Palaeoclimatology, Palaeoecology* 176:157–176.
- Schniedewind, W. M. 1998. The Geopolitical History of Philistine Gath. *BASOR* 309:69–77.
- Shai, I. 2000. Philistia and Judaean Shephelah Between the Campaign of Shishak and the First Assyrian Campaigns to the Land of Israel: An Archaeological and Historical Review. (MA thesis, Bar Ilan University). Ramat Gan.
- Shai, I., and Maeir, A.M.. 2003. Pre-*lmlk* Jars: A New Class of Iron Age IIA Storage Jars. *Tel Aviv* 30:108–123.
- Singer-Avitz, L. 2002. Arad: The Iron Age Pottery Assemblages. *Tel Aviv* 29: 110–214.

- Skjeggestad, M. 2001. Facts in the Ground? Biblical History in Archaeological Interpretation of the Iron Age in Palestine (Series of dissertations submitted to the Faculty of Theology, University of Oslo 3). Oslo.
- Stager, L. E. 1998. Forging an Identity: The Emergence of Ancient Israel. In: Coogan, M.D., ed. *The Oxford History of the Biblical World*. New York: 123–175.
- Stager, L. E. 2003. The Patrimonial Kingdom of Solomon. In: Dever, W.G. and Gitin, S., eds. *Symbiosis, Symbolism, and the Power of the Past*. Winona Lake, IN: 63–74.
- Steiner, M. 2001. Jerusalem in the Tenth and Seventh Centuries BCE: From Administrative Town to Commercial City. In: Mazar, A., ed. *Studies in the Archaeology of the Iron Age in Israel and Jordan* (Journal for the Study of the Old Testament, Supplement Series 331). Sheffield: 280–288.
- Steiner, M. 2003. The Evidence from Kenyon's Excavations in Jerusalem: A Response Essay. In: Vaughn, A.G. and Killebrew, A.E., eds. *Jerusalem in Bible and Archaeology: The First Temple Period*. Atlanta: 347–363.
- Tchernov, E. and Drori., I. 1983. Economic Patterns and Environmental Conditions at Hirbet el-Masas during the Early Iron Age. In: Fritz, V. and Kempinski, A., eds. *Ergebnisse der Ausgrabungen auf der Ḥirbet el-Mšāš (Tēl Māśōś)* 1972–1975. Wiesbaden: 213–222.
- Ussishkin, D. 1977. The Destruction of Lachish By Sennacherib and the Dating of the Royal Judean Storage Jars. *Tel Aviv* 4:28–60.
- Ussishkin, D. 1982. *The Conquest of Lachish By Sennacherib*. (Publications of the Institute of Archaeology of Tel Aviv University 6.) Tel Aviv.
- Ussishkin, D. 1983. Excavations at Tel Lachish 1978–1983: Second Preliminary Report. *Tel Aviv* 10:97–175.
- Ussishkin, D. 1990. Notes on Megiddo, Gezer, Ashdod, and Tel Batash in Tenth to Ninth Centuries B.C. *BASOR* 277/278:71–91.
- Ussishkin, D. 1993. Lachish. New Enc. Arch. Exc. 3:897-911.
- Ussishkin, D. 1996. Excavations and Restoration at Tel Lachish 1985–1994: Third Preliminary Report. *Tel Aviv* 23:3–60.
- Ussishkin, D. 2003a. Solomon's Jerusalem: The Text and the Facts on the Ground. In: Vaughn, A.G. and Killebrew, A.E., eds. *Jerusalem in Bible and Archaeology: The First Temple Period*. Atlanta:103–115.
- Ussishkin, D. 2003b. The Level V 'Sanctuary' and 'High Place' at Lachish. A Stratigraphic Analysis. In: den Hertog, C.G., Hübner, U. and Münger, S., eds. Saxa Loquentur. Studien zur Archæologie Palæstinas/Israel: Festschrift für Volkmar Fritz zum 65. Geburtstag. Münster: 85–96.
- Ussishkin, D., ed. 2004. *The Renewed Archaeological Excavations at Lachish* 1973–1994. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 22). Tel Aviv.

- Webster, D. 1975. Warfare and the Evolution of the State: A Reconsideration. *American Antiquity* 40:464–470.
- Wilkinson, T. J. 2003. Archaeological Landscapes of the Near East. Tucson.
- Yannai, E. 1996. Aspects of the Material Culture of Canaan during the Egyptian 20th Dynasty (1200–1130 BCE). (Ph.D. dissertation, Tel Aviv University). Tel Aviv. (Hebrew).
- Zimhoni, O. 1985. The Iron Age Pottery of Tel Eton and Its Relation to the Lachish, Tell Beit Mirsim and Arad Assemblages. *Tel Aviv* 12:63–90.
- Zimhoni, O. 1990. Two Ceramic Assemblages from Lachish Levels III and II. *Tel Aviv* 17:3–52.
- Zimhoni, O. 1997. Studies in the Iron Age Pottery of Israel: Typological, Archaeological and Chronological Aspects. Tel Aviv.
- Zimhoni, O. 2004a. The Pottery of Levels V and IV and its Archaeological and Chronological Implications. In: Ussishkin, D., ed. *The Renewed Archaeological Excavations at Lachish 1973–1994*. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 22). Tel Aviv: 1643–1788.
- Zimhoni, O. 2004b. The Pottery of Levels III and II. In: Ussishkin, D., ed. *The Renewed Archaeological Excavations at Lachish 1973–1994*. (Monograph Series of the Institute of Archaeology of Tel Aviv University No. 22). Tel Aviv: 1789–1899.