

Excavations at Kiriath-jearim, 2019: Preliminary Report

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In this article we report the results of the second season of excavations at Kiriath-jearim (Deir el-ʿAzar). The following topics are emphasized: layout and date of the supposed monumental Iron IIB summit compound; nature of the Iron IIC settlement; date of the Hellenistic fortification; characteristics of the Early Roman period activity. An archaeo-historical analysis follows the presentation of the new data, including updates on past interpretations.

KEYWORDS Kiriath-jearim, Deir el-ʿAzar, Northern Kingdom, Jeroboam II, Ark Narrative, Ptolemaic period, Seleucid period, Roman Legion

The first preliminary report on the excavations at Kiriath-jearim (Deir el-ʿAzar) was published three years ago in the journal *Semitica*. In that article we presented the site and its topography, discussed its identification, reviewed the biblical materials on Kiriath-jearim, summarized past research, presented the results of the first season and discussed the history of the site in the Iron II, Hellenistic and Roman periods (Finkelstein *et al.* 2018, *KJ 1* below). The most important discoveries were:

- A system of massive walls, which we interpreted as support for a ca. 150 × 110 summit compound (also described as ‘summit platform’) and which we suggested to date to the early Iron IIB, in the first half of the 8th century BCE.
- Settlement activity on the slope in the Iron IIC.
- Evidence for restoration of the support walls in the Hellenistic period and strong activity (a military camp?) in the Roman period.

In this report we present the results of the second season of excavations, which took place during four weeks in August 2019.¹ We continued excavations in the same areas that were explored in 2017 (Figs. 1–2):

In Area A, located immediately to the north of the hostel of the modern convent, we continued working only in the upper of the two terraces, where we expanded the dig to the south, west and east (Fig. 3). The goal here was to better understand massive Wall 17/A/5, which was exposed in the first season, and check if there was another monumental wall immediately to the south; clues for the existence of such a wall appeared already in 2017, and an old terrace/piles of stones can be seen along this line in the aerial photograph taken by the Bavarian Air Force in 1918 (*KJ I*: Fig. 3).

In Area B we expanded the dig in Sub-Area B1 to the south and opened two small additional sub-areas, each about one square in size, to the west (Fig. 8). The main goal in Sub-Area B1 was to better explore the massive wall (17/B/28–17/B/10) which was excavated in 2017 and interpreted as a support for the summit compound. It was also important to see where this wall ended, and whether a similar wall could be detected along the southern terrace of the same plot (and be interpreted as the southern support wall of the summit compound).

In Area C we continued the work in the squares dug in 2017, expanded northward and opened two new squares still further to the north (Fig. 13). The goal here was to continue the dig down to bedrock and explore the first settlement activity on the slope.

RESULTS²

Area A

Massive Wall 17/A/5, running in an east–west direction, was the most prominent feature detected in this area in the 2017 season. Towards the end of the season, we encountered the remains of another well-built wall (17/A/10) to the south and parallel to Wall 17/A/5, in the narrow probe dug in Square R/14. The 2019 campaign was dedicated to gathering more information on the date and extent of these features. Overall, an area of ca. 120 sq m was excavated (Fig. 3).

¹ The Shmunis Family Excavations at Kiriath-jearim is a joint project of Tel Aviv University and the Collège de France, funded by Sana and Vlad Shmunis (USA). Israel Finkelstein of Tel Aviv University and Thomas Römer and Christophe Nicolle of the Collège de France direct the project. Staff of the second season consisted of Margaret Cohen (coordinator of the expedition), Sabine Kleiman and Joelle Cohen-Finkelstein (registration and administration), Assaf Kleiman, Zachary C. Dunseth, Naama Walzer and Juliette Mas (supervisors of Areas A, B and C respectively), and Yana Kirilov, Hadar Azrad and Eythan Levy (field archaeologists). About 50 students from Israel, France, Switzerland and other countries participated in the dig. Members of the expedition were lodged in the hostel of the local Ark of the Covenant convent; we are grateful to the nuns and staff of the convent for their congeniality.

² Observations regarding the Hellenistic and Roman pottery were made with the assistance of Debora Sandhaus (see also Sandhaus forthcoming) and Tehillah Lieberman. We are grateful to them both. This pottery will be discussed in detail in the final report.



FIGURE 1 Orthophoto of Kiriath-jearim before the 2017 excavations, combined with orthophotos of Areas A (top left) and B (bottom right) after the 2019 season, looking north.



FIGURE 2 Aerial photo at the end of the 2019 season, looking southwest.



FIGURE 3 Aerial view of Area A, combined picture, showing the features unearthed in both the 2017 and the 2019 seasons, looking north.

The exposure of Wall 19/A/1 along ca. 22 m in Squares P-T/14, parallel to and to the south of Wall 17/A/5, was the highlight of the 2019 season (Figs. 4–5, 16). The best-preserved section of this well-built wall was found in Squares Q–R/14 (maximal preservation of ca. 1.6 m); the wall extends to the west and east, in Squares P/14, S/14 and T/14. In Squares P-R/14, the northern face of Wall 19/A/1 features an offset-inset pattern (Figs. 4–5). Wall 19/A/1 runs along the southern edge of the area, with its southern face buried under a modern terrace wall which supports the garden of the convent (Fig. 4). The maximal width of the sections of Wall 19/A/1 that have been exposed is 3.5 m. Wall 19/A/1's northern face was built of medium-sized and semi-drafted stones, and its inner fill consists of layers of large and medium-sized stones. At the end of the season one segment of the wall, in Square Q/14, was dismantled in order to collect sherds from within its courses (Locus 19/A/66). Most of these sherds date to the Iron I and Iron IIA; the latest in this collection—a single item—dates to the Iron IIB. A seal dating to the Iron I/IIA (B. Sass, personal communication) was also found here.

In one place (Squares Q/14–15), Wall 19/A/1 was reinforced by glaxis-like earth Debris 19/A/31 and retaining Wall 19/A/19. As these elements were found only in one place, they should probably be interpreted as a local solution for a problem with the stability of the wall. Locus 19/A/31 is a one-m-thick debris of light brown earth that yielded much pottery. Deposited on bedrock, it was retained by Wall 19/A/19 in the south (Fig. 5), and was sealed by a stone collapse. In the western section of Squares Q/14–15 (Fig. 6), the deposit can be seen laid against Wall 19/A/1, sloping down towards Wall 19/A/19 that retained it, with no trace of a foundation trench for either of these walls. The pottery from this deposit consists of a large number of Iron IIB sherds with a few (probably two) Iron IIC items.

Wall 17/A/10 is ca. 2.5 m in width and its inner part was filled with medium-sized fieldstones and debris. The latest sherds extracted from the wall when it was removed date to the Early Roman period. Therefore, this wall should be seen as an attempt to support old Wall 19/A/1 as part of a broader construction project in the area at that time.

In the 2019 campaign, we unearthed new segments of Wall 17/A/5 in Squares S-T/15 (Fig. 4). In all places it was constructed directly on bedrock. Wall 19/A/12 was found 15 m to the west of the main part of Area A, running in a northeast–southwest direction (Fig. 3). Its size and construction method are similar to those of Wall 17/A/5. The two

walls belong to the same fortification, making a ca. 120-degree angle in the northwestern point of the summit (Fig. 3).

In Square S/15 we dismantled part of Wall 17/A/5 in order to extract pottery from within the courses (Locus 19/A/67). The latest (in fact, most) items here date to the Early Roman period and point to repair of the wall, which seems to have been originally built

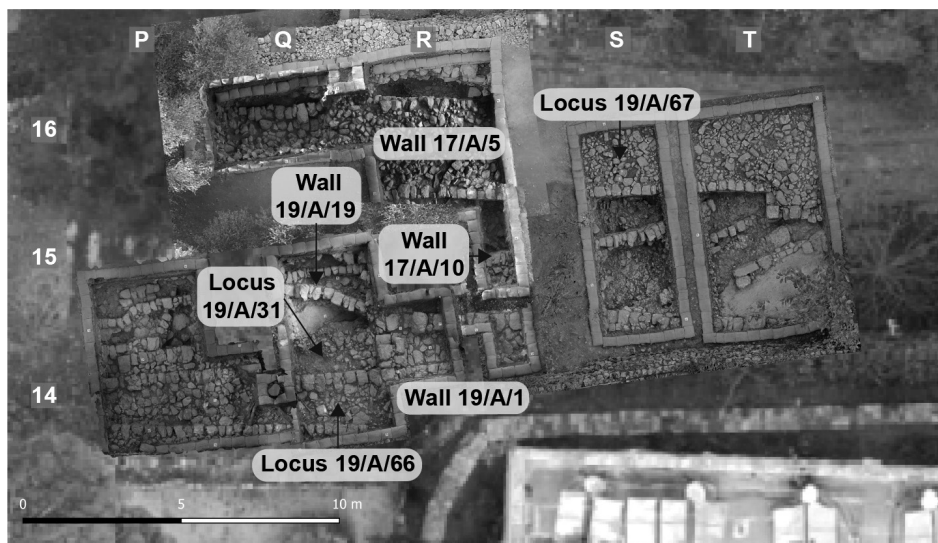


FIGURE 4 Aerial photo of the main part of Area A, combined picture, showing the features unearthed in both the 2017 and the 2019 seasons, looking north.



FIGURE 5 The northern face of Wall 19/A/1 in Square Q/14.



FIGURE 6 The western section of Square Q/14, with the glaci-like material of Locus 19/A/31, looking west; Wall 19/A/1 is visible on the left.

in the Hellenistic period (see below). Debris in Squares S-T/15 (Locus 19/A/37), revealed ca. 20 cm below surface, contained a large quantity of pottery embedded in soft yellowish earth and small stones. This deposit abuts Wall 17/A/5 and goes over Wall 17/A/10's northern face. The latest pottery in the debris dates to the Early Roman period.

Area B

Area B is located on the southeastern slope of the mound (Fig. 7). During the 2019 season, excavations were conducted in three sub-areas (Fig. 8): B1, where work commenced in the 2017 season, and B5 and B6, which were opened in 2019. Attention concentrated mainly on Sub-Area B1 in order to further investigate the massive north–south wall, part of which was exposed in Squares Q/22–23 in the 2017 season. This wall was interpreted as having two phases: an original Iron IIB phase (17/B/28) and a Roman period reconstruction (17/B/10; see *KJ 1*).

Sub-Area B1

In 2019 Sub-Area B1 (Fig. 9) consisted of Squares Q/20–23, a small probe in Square P/23 and a long narrow trench dug along the eastern face of north–south massive Wall 17/B/28–17/B/10 (Figs. 7, 18). Bedrock slopes here from north to south and from west to east, that is, in a southeasterly direction; it was reached west of the massive wall in Square Q/22–23, in the probe in Square P/23 and in the narrow trench along the eastern face of Wall 17/B/28–17/B/10.

Wall 17/B/28–17/B/10 is the dominant feature here. Twenty m of its western line were exposed; in ten of them the entire face was unearthened down to bedrock (Squares Q/22–23). Over ten m of its eastern face were revealed in the narrow trench in Squares



FIGURE 7 Area B, looking north; note that the massive wall exposed in Sub-Area B1 continues under the big north–south terrace which delimits the summit of the mound in the east.



FIGURE 8 The three sub-areas of Area B excavated in 2019: B1 on the right, B5 in the centre and B6 at the top (note Sub-Area B2 dug in 2017 at the bottom of the photo, ca. 20 m south of Sub-Area B1 and along the same terrace).

R/21–23 (Figs. 7, 18). The wall is preserved up to ca. 2.9 m high and is 3–3.3 m wide, with the western face better preserved than the eastern one (in the direction of the slope; the deterioration of the wall in the east–west axis can be seen in Fig. 7). The 2019 season reinforces the notion that there are two phases in the wall:

- An older Wall 17/B/28, established on bedrock and built of large fieldstones (Fig. 17).
- Reconstruction of the old wall, labeled Wall 17/B/10. In some places it is built of roughly square cut, medium-sized stones (see, e.g., the upper course in Fig. 17). In another place, four large, well-cut stones with marginal drafting were reused in its western face (Square Q/22, Fig. 17). A similar block was found in 2017 out of context near the outer (eastern) side of the wall (*KJ I*: Fig. 26).

An attentive look at the western face of the wall in Squares Q/22–23 seems to reveal a pit-like damage in the original Wall 17/A/28, which was rebuilt as Wall 17/B/10 (Fig. 17, the line marking the boundary of the damaged part).

The outer (eastern) face of Wall 17/B/28–17/B/10 ends midway in Square R/21. Since the massive wall was not found in Sub-Area B2 in 2017 (*KJ I*: Fig. 20 and see Fig. 8 here), it is possible that a corner was located somewhere in Squares Q/21 or Q/22, from which the massive wall that supported the summit compound turned to the west. Also, as proposed in our first preliminary report (*KJ I*: 53), a gate to the summit compound could have been located here. The large stones thrown on the surface east of the massive wall (*KJ I*: Fig. 23) may have originated from the supposed corner/gate.

Wall 17/B/29 is located immediately to the west of Wall 17/B/28 and almost parallel to it (Fig. 9). If the line of stones seen in Square Q/20 is the continuation of the western face exposed in Square P/23, then Wall 17/B/29 should make an inset in Square P/21. Wall 17/B/29 has a well-built face only on its western side (Square P/23). The rubble core of this wall—which

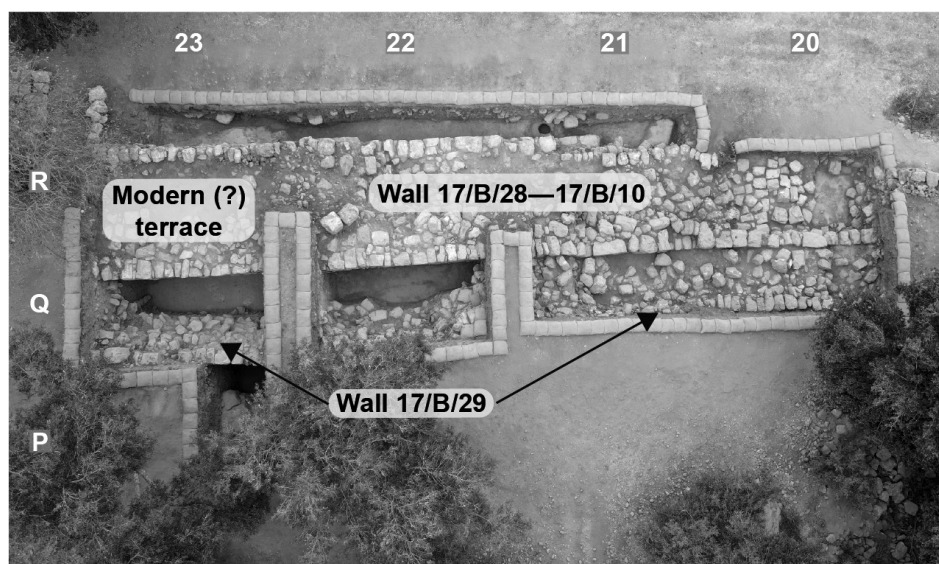


FIGURE 9 Aerial photo of Sub-Area B1, looking east.

was detected along all four squares (Fig. 9)—is made of poorly set medium-sized stones. In the southern part of Square Q/23 and the northern part of Square Q/22 a pit (17/B/50, wrongly described in *KJ I* as a foundation trench) cut into the core of Wall 17/B/29 (Fig. 10). In other places the core seems to be fully preserved, stretching all the way to the face of Wall 17/B/28. Note that while the western face of Wall 17/B/29 was founded on bedrock, the core was not set on bedrock (Fig. 11). The pottery extracted during the removal of the core in Squares Q/22–23 and under the core down to bedrock included Iron IIB and Iron IIC, as well as Early Roman items (*KJ I*: Fig. 16 for material extracted from Square Q/23 in 2017).

Sub-Area B5

Sub-Area B5 is a small trench located to the west of Sub-Area B1, along a massive agricultural terrace which runs here on an east–west axis (Fig. 8). This trench was opened in an attempt to locate the supposed southern support wall of the summit compound. Several elements were unearthed, but a large wall of the 17/B/28 type has not been found here; it may yet be located slightly to the south and still within the very high and broad east–west agricultural terrace (more below).

Sub-Area B6

Sub-Area B6 consisted of a single square located ca. 15 m to the northwest of Sub-Area B1, on a slightly higher terrace (Fig. 8). The goal here was to explore the remains near the summit of the mound. Immediately below the surface several walls probably dating to the Byzantine period were found. This is not surprising, considering that this location is close to the Byzantine church (and probably monastery) located under the modern church, not far to the north. Excavation here ceased due to lack of manpower.



FIGURE 10 Square Q/22 looking north, showing Pit 17/B/50 cut into the core of Wall 17/B/29.



FIGURE 11 Southern section of Square Q/22; note that the core of Wall 17/B/29 is not established on bedrock.

Area C

Area C is located on the eastern slope of the tell (Fig. 2). In 2017, remains dating mainly to the Iron IIC were uncovered in four squares. In 2019 work continued in the squares already excavated during the 2017 season and two more squares were opened immediately to the north of the formerly excavated squares (Squares M-N/7; Fig. 12). Toward the end of the season a test trench ca. 15 m to the north of the main part of Area C was opened (Fig. 13). Four phases of occupation were defined during the 2017 season. The results of the 2019 excavations allow us to assign the remains to three phases only (Levels C-4 and C-3 of 2017 are unified in Level C-3 here). In the main sector of Area C bedrock was reached in almost every spot.

Level C-3

Level C-3, dating to the Iron IIC, is the earliest and best-documented occupational phase in Area C. Almost all floors unearthed during the two seasons belong to it. The Level C-3 architectural remains indicate the existence of several phases of walls and small repairs. The earliest loci—close to bedrock—yielded Iron IIC sherds and sherds which can be dated to the Iron IIB, but these may be considered residual items which originated from

fills. Or, they indicate that activity here started in the Iron IIB and continued uninterrupted into the Iron IIC. The Level C-3 loci produced several Judahite stamped handles, which will be published in the final report.

Level C-3 features at least eight units. The eastern part of the structure is eroded because of the slope. The earliest floors—most of them made of beaten earth—were set up directly on bedrock. Floor 17/C/89 in Squares N/6-7 has a cobble paving which was covered with plaster.

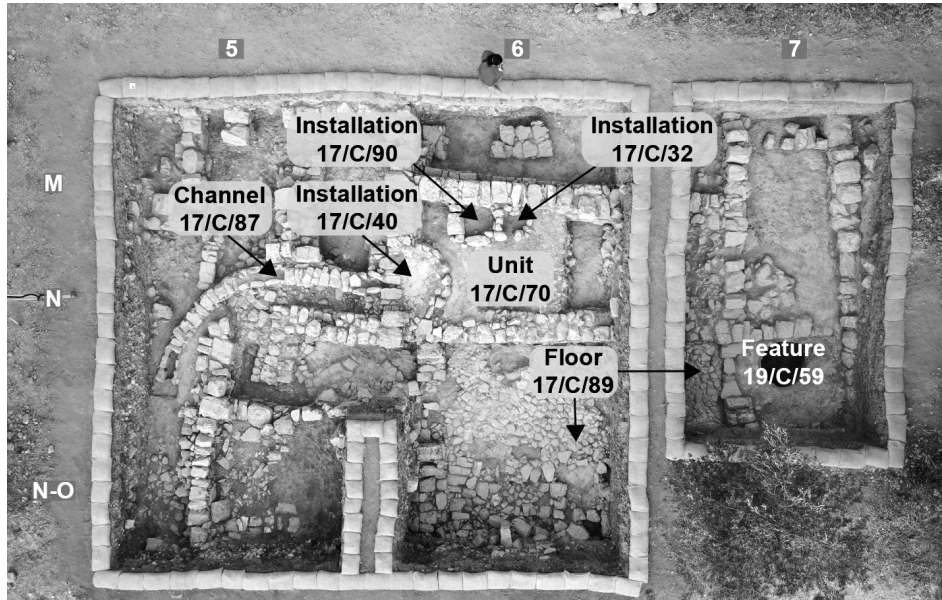


FIGURE 12 Main sector of Area C, looking west, with remains of Level C-3.



FIGURE 13 Area C, looking west; note trench with an additional drain on the right.

The central and seemingly most important unit of the building (17/C/70) has a trapezoidal shape and was slightly elevated (Fig. 12). Its beaten earth floor was set up along a moderate north–south slope. It was furnished with two rounded installations made of stones (17/C/90 and 19/C/32) and a semi-circular platform (17/C/40). Traces of burning and ashes were identified on Floor 17/C/70 next to Installation 19/C/32; *tabun* fragments were found here. Installation 17/C/40 was made of earth, bounded by stones and completely plastered—on both the surface and below the stones (Fig. 14). It is drained by slab-covered Channel 17/C/87, which runs along a curved trajectory and empties out to the slope. The Level C-3 building was equipped with other installations, among them Pit 17/C/59, which was dug into bedrock in Square N/7

The purpose of the Level C-3 structure remains enigmatic. Its size and careful construction may hint at a public function. The archaeo-zoological evidence shows that cattle were prepared and consumed on site; caprines were prepared here, but were apparently consumed elsewhere. This may hint at a cultic function of this place—slaughter of animals here and the better parts taken to other sectors of the settlement (Sapir-Hen forthcoming). The similar drain unearthed in the trench to the north of the main sector (below) seems to strengthen the possibility of a public function of this sector of the settlement, perhaps related to cult.

Level C-2

Level C-2 is represented by several walls, all uncovered in 2017. No new element which can be associated with this layer could be added following the 2019 season. At the end of the 2017 excavation, we attributed Phase C-2 to the Iron IIC. Analysis of the material allows us to redate it to the Hellenistic period.



FIGURE 14 Installation 17/C/40; note the plaster both on top of and below the stones.

Level C-1

Level C-1 is represented by terracing near the slope and by pits. No floor can be associated with these features. Judging from the surface or close to surface pottery, tiles, *tesserae*, coins and Roman iron nails, Level C-1 should probably be dated to the Roman/Byzantine period and later.

Squares M-N/10

A 6 × 3 m trench, ca. 15 m to the north of the main sector of Area C, was excavated at the end of the 2019 season (Fig. 13, right). A curved drain similar to the one unearthened in the main sector was uncovered close to the surface, associated with a few wall-remains. The dig here ended before it was possible to associate this drain with a broader architectural unit, and being close to the surface the pottery here was mixed. Still, the shape and building technique of the remains seem to indicate that they belong to Level C-3, and emphasize the possible public (cultic?) function of this sector of the mound in the Iron IIB(?)–C. The slight change of orientation is probably due to the round (curved) shape of the hill.

DATING THE MAIN ARCHITECTURAL FEATURES IN AREAS A AND B

The main challenge of the excavation at Kiriath-jearim is the dating of the monumental walls uncovered in Areas A and B. Only a few clean contexts exist in the former and no such context is available in the latter; in both areas the current surface is below the floors which must have connected to the inner sides of the walls. In view of these difficulties, dating was achieved according to the following considerations:

1. The latest pottery extracted from Walls 19/A/01, 17/A/05 and 17/A/10.
2. The settlement history of the site. Construction of monumental walls such as Walls 19/A/1, 17/A/5, 17/B/28 and 17/B/10 was surely undertaken in periods of strong activity at Kiriath-jearim. Our excavations, as well as a previous salvage excavation (McKinny *et al.* 2018) and two detailed surveys, have shown that the site flourished in the Iron IIB-C, Hellenistic and Early Roman periods (*KJ I*: 40). Activity in the Bronze and early phases of the Iron Age, as well as the Persian period, was weak (in some phases within this time-span the site could have been deserted).
3. Layout of the site, which enables linking Wall 19/A/1 to Wall 17/B/28. These walls run in exactly east–west (19/A/1) and north–south orientations (17/B/28), meaning that they met in a right angle in the northeast of the site. Also noteworthy is the large south–north terrace in the west (*KJ I*: Fig. 8), which runs parallel to Wall 17/B/28. This layout fits either a summit platform of the type known in Israel (the Northern Kingdom) in the Iron II (Finkelstein 2013: 85–105) or a Roman military camp. The pottery extracted from Wall 19/A/1 and Debris 19/A/31 rules out the latter possibility.
4. The seismic-geodetic work carried out at the site in 2017 points to thick fills on the slope of the summit, which could not have survived without large retaining walls (*KJ I*: Fig. 6; Darvasi and Agnon forthcoming a). This means that Walls 19/A/1 and 17/B/28, as well as the supposed wall cached under the western terrace, supported a summit compound. Based on architectural comparisons, this too points to an Iron Age rather than later construction.

In addition, with no clean contexts for extracting samples for radiocarbon dating (and with the Iron IIB-C falling in the Hallstatt plateau of the calibration curve), we turned to Optically Stimulated Luminescence (OSL) in order to add another consideration regarding the chronology of the main monumental walls.

Results of 10 OSL samples were published in the first preliminary report (*KJ I*: 55–56). Here we present an additional date for a sample taken in 2017 and 14 new results of samples taken at the end of the 2019 season; the entire set of data is summarized in Table 1. To avoid non-related sediments, all sediment samples were extracted from between the stones of the walls.

Two introductory notes are in place before discussing the OSL results in relation to the archaeological evidence:

1. OSL samples for dating stone walls are extracted from sediments between the stones, sediments which were probably prepared to serve as mortar. If the quartz particles were not exposed (or were incompletely exposed) to light in the preparation process, the result would introduce an old sediment effect. In other words, when results are inconsistent, the later ones provide the most reliable date (note that in the case of Kiriath-jearim, no sample gives clear results which are too late vis-à-vis the archaeological information).
2. OSL results are influenced by the sediment/stones ratio in the environment of the sample. We are reporting two dates for each sample: Ages calculated with dose rates from bulk sediment ('sediment only' below) and ages calculated with modified gamma dose rates of 2/3 contribution from sediment and 1/3 contribution from building stones ('sediment and stones' below). As entering stones factor makes the result older, changing the ratio to a larger or smaller share of stones would result in older and younger dates respectively. Different calculations of the moisture contents and depth of the sample may also introduce changes in the dates.

These comments expose the fragility of OSL dating in cases in which the difference between historical scenarios are a few decades apart and hence emphasize the need to balance the results with the archaeological information noted above.

Area A

Wall 19/A/1 (Fig. 16)

Considering the settlement history of the site, the 'sediment only' OSL results allow dating the wall to the Iron IIB (No. 33) or the Iron IIB–early Iron IIC (No. 35; No. 36 introduces an old sediment effect). Two 'sediment and stones' results introduce old sediment effect (Nos. 33, 36). No. 35 allows a date in the Iron IIA/IIB transition or the very beginning of the Iron IIB. A section of this wall was dismantled at the end of the 2019 season (Locus 19/A/66). The pottery extracted from between the courses date to the Iron I–Iron IIA, with a single item from the Iron IIB. Much pottery found in glacial-like Debris 19/A/31, which supports Wall 19/A/1, dates to the Iron IIB, with two items belonging to the Iron IIC. Radiocarbon studies put the Iron IIA/IIB transition at the

TABLE 1
OSL results*

Sample**	Wall	Location	Age (years before 2020)***	Range, calendar years	Age (years before 2020)****	Range, calendar years
KYR-1	17/A/5	Outer face bottom	2200±100	280 BCE-80 CE	2330±120	430 BCE-190 BCE
KYR-2	17/A/5	Outer face bottom	2070±110	150 BCE-50 CE	2210±120	320 BCE-70 BCE
KYR-3	17/A/5	Outer face bottom	2460±110	560 BCE-330 BCE	2590±130	710 BCE-440 BCE
KYR-7	17/B/10	Outer face bottom	2110±110	200 BCE-20 CE	2260±130	370 BCE-110 BCE
KYR-11	17/B/28	Inner face, bottom	2660±140	780 BCE-510 BCE	2840±160	990 BCE-660 BCE
KYR-12	17/B/28	Inner face bottom	3030±140	1150 BCE-870 BCE	3200±170	1350 BCE-1020 BCE
KYR-13	17/B/28	Inner face bottom	2710±150	850 BCE-550 BCE	2890±170	1040 BCE-690 BCE
KYR-19	17/A/5	Inner face bottom	1770±70	180 CE-320 CE	1880±90	50 CE-230 CE
KYR-20	17/A/5	Inner face bottom	1870±80	80 CE-230 CE	2000±100	80 BCE-120 CE
KYR-21	17/A/10	Outer face bottom	2150±100	240 BCE-30 BCE	2290±130	400 BCE-150 BCE
KYR-24	17/B/29	Outer face low	2450±100	530 BCE-330 BCE	2580±120	680 BCE-430 BCE
KYR-33	19/A/1	Outer face bottom	2820±110	920 BCE-680 BCE	3040±150	1170 BCE-870 BCE
KYR-35	19/A/1	Outer face bottom	2780±130	890 BCE-630 BCE	2960±150	1090 BCE-790 BCE
KYR-36	19/A/1	Outer face bottom	3120±140	1240 BCE-960 BCE	3340±170	1490 BCE-1150 BCE
KYR-41	17/B/10	Inner face	2260±110	340 BCE-130 BCE	2420±130	530 BCE-270 BCE
KYR-42	17/B/10	Inner face	2980±140	1100 BCE-820 BCE	3140±160	1280 BCE-960 BCE
KYR-43	17/B/28 or 17/B/10	Inner face	3330±140	1450 BCE-1170 BCE	3530±170	1680 BCE-1330 BCE
KYR-44	17/B/28 or 17/B/10	Inner face	2790±140	920 BCE-630 BCE	2940±170	1080 BCE-750 BCE
KYR-45	17/B/28 or 17/B/10	Inner face	2490±140	600 BCE-330 BCE	2660±160	800 BCE-480 BCE
KYR-47	17/B/29	Outer face bottom	2960±130	1070 BCE-800 BCE	3110±160	1250 BCE-930 BCE

KYR-48	17/B/29	Outer face bottom	2410±110	500 BCE-280 BCE	2580±140	690 BCE-420 BCE
KYR-54	17/A/5	Inner face bottom	2370±120	460 BCE-230 BCE	2510±140	630 BCE-350 BCE
KYR-55	17/A/5	Inner face bottom	2640±130	750 BCE-490 BCE	2790±150	920 BCE-620 BCE
KYR-56	17/B/28 or 17/B/10	Outer face or bottom	3480±190	1660 BCE- 1270 BCE	3610±220	1800 BCE- 1370 BCE
KYR-57	17/B/28 or 17/B/10	Outer face or bottom	3580±170	1730 BCE- 1390 BCE	3730±200	1900 BCE- 1510 BCE

* Ten of the first 11 samples in Table 1 were taken in 2017 and published in KJ 1: 55–56. The small differences in the OSL ages of the 2017 samples published here versus those published in the first preliminary report—KJ 1: Table 2—are due to a change in moisture contents used for dose rate calculations. Instead of 10% we now use a more realistic value of 15%. This made the 2017 ages older by a few dozen years. The other 14 samples, taken in 2019, plus KYR 20 taken in 2017, are published here for the first time. The age ranges were derived from the raw OSL ages and errors, and then rounded to the nearest 10 years. The calendar years were calculated by subtracting 2017 or 2020 from the raw ages, according to the sampling year, adding or subtracting the raw errors, and then rounding to the nearest 10 years.

** KYR=Kiriath Yearim (modern Hebrew, to differ from Kiriath-jearim in the NRSV of the Bible); more samples were taken in the field, only the ones reported here were processed.

*** Ages calculated with dose rates from bulk sediment ('sediment only').

**** Ages calculated with modified gamma dose rates—2/3 contribution from sediment and 1/3 contribution from building stones (average of four different stones; 'sediment and stones').

beginning of the 8th century BCE (Finkelstein and Piasezky 2009) and archaeological considerations (e.g., Lipschits, Sergi and Koch 2010) put the Iron IIB/C transition in the early decades of the 7th century BCE.

Evaluating all pieces of information, the construction of Wall 19/A/1 should be placed in the Iron IIB, probably early in the period, in the first half of the 8th century BCE; had the wall been built later in the Iron IIB, more sherds of this period could be expected within the courses. The layout of the summit compound (Points 3–4 listed above) also supports this date. The wall was supported by Debris 19/A/31 sometime in the early days of the Iron IIC, in the middle of the 7th century; had the debris been laid later, it would undoubtedly have contained more Iron IIC items. The different profiles of the pottery assemblages from within Wall 19/A/1 and Debris 19/A/31 do not allow interpreting them as belonging to a single construction event.

Wall 17/A/10 (Fig. 15)

This is a support which was added to Wall 19/A/1. The single result points to the Hellenistic period. Yet, the latest pottery extracted from the wall when it was removed dates to the Early Roman period. It is possible, then, that the wall was constructed in the Hellenistic period and renovated in the Early Roman period.

Wall 17/A/5 (Fig. 15)

All seven results for this wall were taken close to its foundations—three on the outer side and four on the inner side. Three of the results introduce old sediment effect (Nos. 3, 54, 55). The remaining samples provide dates in the Hellenistic and Roman periods.

The layout of the fortification—a ca. 120° corner in the west—seems to attest to construction in the Hellenistic period, as this is typical of this era (see different parts in Tal 2006; also the Hasmonean forts, such as Alexandrion and Hyrcania). The exact date within the Hellenistic period will be discussed below in view of the archaeological evidence. Wall 17/A/5 was later renovated/reconstructed. The latest pottery which was extracted from between the courses of the wall when a section of it (Locus 19/A/67 in Square S/15) was removed point to the early phase of the Roman period.

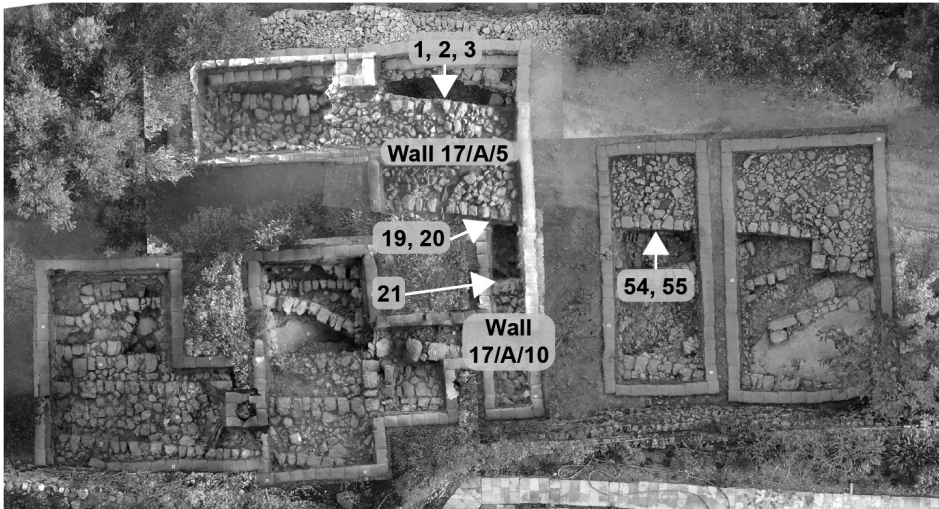


FIGURE 15 Location of OSL samples taken from the Hellenistic/Roman walls in Area A.

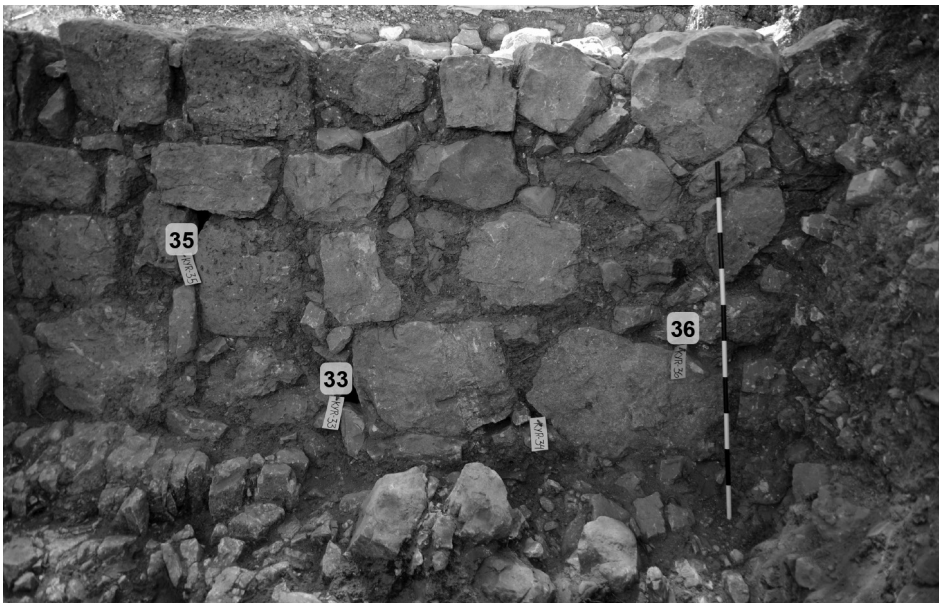


FIGURE 16 Location of OSL samples for Wall 19/A/1 in Square Q/14.

To summarize the most probable sequence of construction in Area A:

- Early Iron IIB, first half of the 8th century BCE, construction of Wall 19/A/1.
- Iron IIC, middle of the 7th century BCE, reinforcement of Wall 19/A/1 with glacial-like Debris 19/A/31.
- Hellenistic period, construction of Wall 17/A/5.
- Early Roman period, 1st century CE, reconstruction of Wall 17/A/5.

Area B

Wall 17/B/28–Wall 17/B/10

A reminder: Wall 17/B/28 is the lower part, built of large fieldstones; it was damaged and then rebuilt as Wall 17/B/10 using smaller, square-cut stones and reused large, well-cut stones with marginal drafting (see Fig. 17, with the line marking the boundary between the two). They are discussed here together.

The inner face (Fig. 17): Considering the settlement history of the site, for the original wall (under the line in Fig. 17), the results (both ‘sediment only’ and ‘sediment and stones’) fall in the Iron IIB–IIC (except for No. 12, which introduces the old sediment effect). For the renovated part (above the line in Fig. 17), all three results introduce the old sediment effect (No. 41 falls in the Hellenistic period, but the sample was extracted from a spot which seems to belong to the Roman reconstruction of the wall).

Outer face (Fig. 18): Samples 56 and 57 exhibit the old sediment effect. Sample 7 falls in the Hellenistic period.

Archaeological considerations point to construction of Wall 17/B/28 in the early Iron IIB and reconstruction in the Early Roman period (Wall 17/B/10). The OSL results may hint at certain reconstruction in the Hellenistic period. Because Wall 17/B/28–17/B/10 is eroded from west to east (in the direction of the slope; Fig. 7), it is not surprising that the old wall is preserved on the inner side, while the outer side is mainly reconstructed.

Wall 17/B/29 (Fig. 19)

The latest pottery sherds found in the core of the wall in Squares Q/22–23, below this core down to bedrock, and to the west of its western face, date to the Early Roman period. This means that all three OSL samples exhibit old sediment effect.

Overview

Considering the archaeological information and the OSL results, there seems to be only one way to interpret the remains in Sub-Area B1:

- Wall 17/B/28 is the southern end of the summit compound’s eastern support wall (Fig. 20). Another small sector of this support wall seems to have been found in 2017 in Sub-Area B4 slightly farther to the north (*KJ I*: 48 and Fig. 19). Wall 19/A/1 is now understood as the northern support wall of the compound (instead of 17/A/5 in the 2017 season). Based on the pottery evidence for Wall 19/A/1 (above), the broader factors and the OSL results for both walls, Wall 17/B/28 should best be dated to the early Iron IIB in the early 8th century BCE.

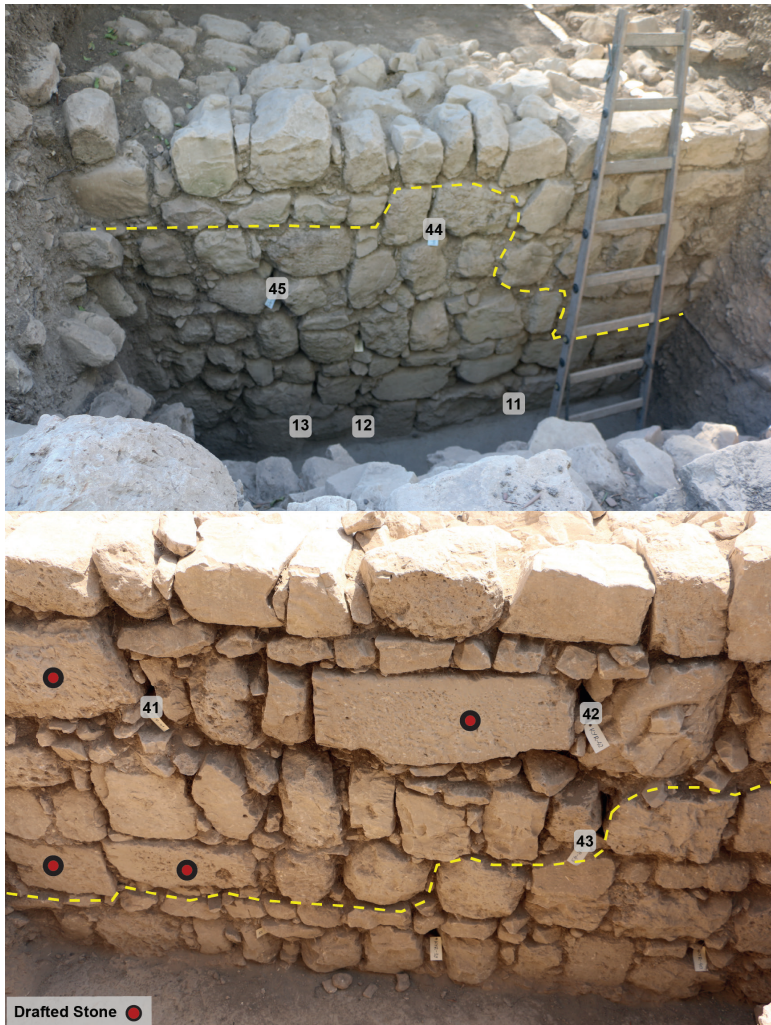


FIGURE 17 Location of OSL samples for the inner face of Wall 17/B/28–17/B/10, Squares Q/23 (top) and Q/22 (bottom). The line marks the boundary between Wall 17/B/28 and the reconstruction—Wall 17/B/10—based on architectural considerations.

- In a later period, Wall 17/B/28 was damaged, either by erosion in the direction of the slope or robbery of stones. The line of the damaged part can be detected in its western face in Squares Q/22–23 (Fig. 17). The first attempt to restore the wall could have taken place as early as the Hellenistic period.
- In the Early Roman period Wall 17/B/28 was restored as Wall 17/B/10, using square-cut medium sized stones and reused, well-cut stones with marginal drafting. To restore the wall, a broad trench was cut along its western face down to bedrock. And in order to relieve pressure from the massive wall in this sensitive place—the lowest in the summit compound (that is, where the fill behind the support wall was deepest and ‘heaviest’)—Wall 17/B/29 was built, with an orderly face only in the west and a core of poorly set stones between this face



FIGURE 18 Location of OSL samples for the outer face of Wall 17/B/28–17/B/10 (the stones at the top right belong to a modern terrace).

and Wall 17/B/10. This operation—cutting of a foundation trench, reconstruction of the massive wall (as Wall 17/B/10), filling the lower part of the foundation trench and construction of Wall 17/B/29—introduced Iron IIC, Hellenistic and Early Roman sherds as deep down as bedrock along the western face of Wall 17/B/10 and west of Wall 17/B/29.

- Part of Wall 17/B/29's core in the north of Square Q/22 and the south of Square Q/23 was robbed in a later phase, probably in the Byzantine period (Pit 17/B/50).³

Discussion

The Kiriath-jearim project has been discussed in a series of articles—on the results of the first season (*KJ I*), the geographical history of the site (Finkelstein and Römer 2019a; 2019b) and the Ark Narrative in 1 Samuel (Finkelstein and Römer 2020). In order to avoid

³ Looking solely at the architectural and ceramic evidence from Sub-Area B1, one can argue that all elements here (Wall 17/B/28–17/B/10 and Wall 17/B/29) were constructed in the Early Roman period. This scenario should be dismissed for the following reasons: 1) The consistent early OSL dates for the samples from the western face of Wall 17/B/28 in Square Q/23. 2) The different construction style of Wall 17/B/10 and especially the fact that incorporation of stones with marginal drafting is restricted to one segment, in Square Q/22. 3) The large quantity of Iron IIB pottery in the debris west of Wall 17/B/28. 4) The layout of the massive wall in relation to Wall 19/A/1, which dates to the Iron IIB. 5) All the evidence fits together, in the sense that the sequence of construction in Areas A and B seem to be similar: Building of the monumental support wall in the Iron IIB, possible repair in the late Hellenistic period and massive reconstruction in the Early Roman period.



FIGURE 19 Location of OSL samples for the outer (western) face of Wall 17/B/29.

repetitions, in what follows we limit the discussion to a brief update on the archaeology and history of the site.

The Iron IIB

The interpretation of the massive walls unearthed in Areas A and B as support for a monumental summit compound has now been strengthened by two pieces of information. First, the exposure of monumental Iron Age Wall 19/A/1 in the north. Second, ground penetrating radar work carried out in 2019 by Yaniv Darvasi and Amotz Agnon of the Institute of Earth Sciences at the Hebrew University in Jerusalem seems to have traced the southern wall of the compound under the parking lot of the convent (Darvasi and Agnon forthcoming b). This means that the southeastern corner of the compound must have been located in the south of Sub-Area B1. The size of the summit compound remains as previously estimated—ca. 150 × 110 m (Fig. 20). The topography of the hill dictates that the gate to the compound should be sought in its southeastern sector, and as suggested in our first preliminary report, large stones thrown on the surface near Sub-Area B1 (*KJ I*: 53, Fig. 23) may have originally belonged to a nearby corner tower or a gate.

We propose that the summit compound dates to the early Iron IIB, in the first half of the 8th century BCE. This date has been established according to the following pieces of information (all described above):

1. Pottery retrieved between the courses when a section of Wall 19/A/1 was dismantled.
2. The OSL results for Wall 19/A/1 and Wall 17/B/28 in Square Q/23.
3. Evidence from Area A, according to which the early Iron IIB Wall 19/A/1 already needed support in the early Iron IIC.
4. The massive quantity of Iron IIB pottery adjacent to the western face of Wall 17/B/28 in Squares Q/22–23.
5. The layout of the summit compound.

Dating the summit compound to the early 8th century makes it relatively easy to identify its territorial association. At that time Judah had neither economic nor demographic resources to engage in such a monumental building endeavour, not to mention that it was probably dominated by Israel after Joash's defeat of Amaziah at Beth-shemesh (2 Kings 14:13). Assyria is not a fitting candidate in this phase of its history; Assyrian kings got involved in this area only towards the end of the 8th century BCE. Therefore, the building of the wall should be associated with the kingdom Israel. Indeed, elevated compounds of this type are known in the Northern Kingdom starting in the 9th century BCE (Finkelstein 2013: 85–105).⁴

In a recent article two of us (Finkelstein and Römer 2020) suggested that the summit compound was built at Kiriath-jearim—on the border between Israel and Judah—in the days of Jeroboam II as an expression of a 'United Monarchy' ideology and as a way of controlling Judah and its capital Jerusalem. Noteworthy is the extraordinary dominating position of the site—overlooking great distances to the west, south and east and guarding one of the main ancient roads to Jerusalem (Fischer, Isaac and Roll 1996); this strategic position vis-à-vis Jerusalem is also manifested in the two later periods of prosperity at the site—in the Hellenistic and Early Roman periods (below). We also suggested to read the original, Israelite Ark Narrative in 1 Samuel 4:1–7:1* against the background of the geographical and historical realities of the first half of the 8th century, and link it to the construction of the summit compound at Kiriath-jearim. We proposed that the story was created in order to provide a *hieros logos* for the sanctuary of the ark at Kiriath-jearim (Finkelstein and Römer 2020).

Had there been a temple at Kiriath-jearim (as part of a larger administrative centre), as clearly hinted at in the Ark Narrative (cf. the consecration of a priest in 1 Sam 7:1), it would have been located in the summit compound. Needless to say, the existence of a modern convent makes excavation there impossible. Moreover, a dig there would probably reveal little information on this matter. First, in highlands sites the summit is usually eroded and bedrock is exposed on the surface; indeed, salvage excavation which was carried out on the summit in the 1990s reached bedrock very close to the surface, with evidence for activity in later periods and mixed pottery (McKinny *et al.* 2018). Second, the unusual flat nature of the summit is probably the result of a large filling operation on the upper slopes

⁴ And are not known in any site outside of Israel, except possibly for Buseira in Edom.



FIGURE 20 Updated reconstruction of the early Iron IIB summit compound.

as part of the construction of the summit compound in the Iron IIB (see *KJ I*: Fig. 6 and Darvasi and Agnon forthcoming a); these fills would make excavations on the upper slopes (e.g., to the north of the church or west of the hostel) difficult. Third, the construction of the Byzantine monastery/church, as well as the building of the modern convent and church in the early 20th century, must have damaged early remains on the summit. The construction of a Byzantine shrine at the same place is however a supplementary argument for the existence of an older sanctuary related to the Ark. This *longue durée* perspective is reflected in the name of the modern church—Notre Dame de l’Arche d’Alliance.

Still, one piece of information may shed light on monumental building activity on the summit of Kiriath-jearim in the early Iron Age IIB. We refer to the ashlar blocks with marginal drafting which were reused in the construction of Wall 17/B/10 (*KJ I*: Fig. 23; Fig. 17 here) in the Early Roman period, in the 1st century CE. In the highlands, this masonry is known in three early periods: the Iron II, mainly in the Northern Kingdom, the Hellenistic (Hasmonean) period and the Herodian period. Attempts to establish stylistic differences between ashlar blocks with marginal drafting of these periods did not produce convincing conclusions, hence we need to turn to other considerations. The Herodian option is less likely, first and foremost because there is no indication of importance of the site at his time—neither in the writings of Josephus nor in the archaeology of the site (Early Roman period prosperity is limited to the 1st century CE). The Hellenistic period is a possibility: At least in the highlands, this masonry is typical of late 2nd century and early 1st century BCE Hasmonian masonry (e.g., in Jerusalem and Alexandria). The pottery and numismatic

evidence from the site (Sandhaus forthcoming; Farhi forthcoming) allow a date in the days of Alexander Jannaeus, though one could have expected an important early 1st century BCE site in the vicinity of Jerusalem to be mentioned by Josephus. Another possibility is to date these blocks to the early Iron IIB based on the similarity to masonry at Northern Iron IIA-B sites such as Samaria, Megiddo and Dan (see, e.g., Shiloh 1979). Unfortunately, the affiliation of the blocks in Area B with a monumental Iron IIB building in the summit compound remains a possibility which cannot be proven with the data at hand.

The Iron IIC

The pottery evidence from the entire site and the results in Area C indicate that strong activity at Kiriath-jearim continued in the Iron IIC. In Area A, the massive support wall of the summit compound was reinforced. Area C supplied evidence for the large size of the site at that time and for public activity, possibly related to slaughter of animals as part of cult activity. Had there been an Ark shrine at Kiriath-jearim, did it continue to function in the Iron IIC? The reference to Uriah son of Shemaiah the prophet from Kiriath-jearim in Jeremiah 26:20, who came (at the time of Josiah?) to Jerusalem, may point in this direction. Römer suggests reading the second part of the Ark Narrative (2 Sam 6) against the background of Josianic times. Josiah could have initiated the transfer of the sacred object (together with the cultic staff) from Kiriath-jearim to Jerusalem in the late 7th century. Finkelstein prefers to read this against the background of the days of Hezekiah, after the fall of the Northern Kingdom (for both, see Finkelstein and Römer 2020).

In the fall of 2017 inspectors of the Israel Antiquities Authority observed that a rock-cut burial cave located a few hundred metres to the southwest of the summit of the mound was being robbed. The IAA immediately carried out a salvage excavation of what was left and the finds were then handed over to our team. A large number of vessels retrieved during this operation date the cave to the later phase of the Iron IIB and the early days of the Iron IIC, that is, ca. 750–650 BCE (Freud forthcoming). Other details regarding this find, including the results of an ancient DNA study of human remains from the cave, will be published in the final report.

The Hellenistic period

Three pieces of evidence indicate strong activity at the site in the Hellenistic period:

- Large quantity of Hellenistic pottery in the mixed loci from the entire site.
- OSL results for Wall 17/A/5.
- The typically Hellenistic layout of the fortification in Area A—a 120° angle at the western end of the east–west line (see above).

Strong activity at Kiriath-jearim in the Early Roman period is also evident (below), which generates two questions:

1. Was the fortification in Area A built in the Hellenistic period and renovated in the Early Roman period, or was it constructed in the Early Roman period (and the OSL results pointing to Hellenistic times then considered as exhibiting old sediment effect)?
2. If Hellenistic, when exactly during the period was this fortification system built?

Several lines of evidence should be considered:

OSL: All four options—Ptolemaic, Seleucid, Hasmonean and Early Roman periods—fall within the possible time-ranges.

Pottery: Typologically, the Hellenistic pottery scattered at the site dates to two slots: the 3rd and first half of the 2nd century BCE (the Ptolemaic and Seleucid phases of the period) and the first half of the 1st century BCE (the late Hasmonean phase) (Sandhaus forthcoming).

Stamped Amphorae: These vessels, which are popular mainly in the 2nd century BCE, are missing at Kiriath-jearim; this is not a matter of location far from the coast, as they do appear in highlands sites, such as Bethel and Beth-zur (Kelso 1968: Pl. 47b; Sellers 1933: 53–55; Sellers *et al.* 1968: 81, Pl. 40 respectively).

Architecture: The layout mentioned above seemingly appears in all phases of the Hellenistic period, but hardly in plans of Roman forts and camps.

Coins: The assemblage from the site is limited (47 items). It includes a Ptolemaic coin, several coins of Alexander Jannaeus and Roman period and later coins. Seleucid coins are missing (Farhi forthcoming). The latter may be accidental, but note that Seleucid coins are popular, including at sites in the highlands, such as Beth-zur (Sellers 1933: 83ff; Sellers *et al.* 1968: 80–81, Pl. 39).

All in all, these factors seem to support construction of the fortification in Area A in the Hellenistic period and renovation in the Early Roman period. Turning to the second question raised above (when during the Hellenistic period?), though none of the above-listed considerations is rock-solid, the two more viable options are the Ptolemaic and Hasmonean (time of Alexander Jannaeus). The former seems to fit the OSL results better. Also, had the site been a prominent late Hasmonean stronghold, it would be reasonable to expect it to appear in the writings of Josephus Flavius.

To summarize: None of the above options can be dismissed, including the Seleucid period (Finkelstein and Römer 2019b) and the time of Alexander Jannaeus. But the more viable option is the Ptolemaic period. We cannot say more with the data at hand.

The Early Roman period

There is strong evidence that Kiriath-jearim served as a Roman camp or fort in the 1st century CE, during the First Jewish Revolt. First, inscriptions found at the site (and kept in the church of the convent) and in nearby Abu Gosh (Fischer, Isaac and Roll 1996: 119; Cotton *et al.* 2012: 11, 25–26, 38–39). Second, the evidence for major renovation of the massive walls (17/A/5 and 17/B/10) in the Early Roman period; the pottery associated with this endeavour dates to the 1st century CE. Third, the possibility that the rectangular Iron Age summit compound was extended to the south in order to create a square camp/fort, 150 × 150 m in size (*KJ I*: 63; Fig. 20). Fourth, small finds, such as Roman army boot nails.

Kiriath-jearim is an ideal place to guard the approach to Jerusalem, with domination of areas far to the west. The Roman pottery found at the site seems to indicate that a while after the suppression of the revolt the Roman camp was relocated, probably to Jerusalem. This topic—of Roman Kiriath-jearim—will be dealt with elsewhere.⁵

⁵ Yana Kirilov, staff member of the Kiriath-jearim expedition, is writing an MA thesis on this subject.

References

- Cotton, H.M., Di Segni, L., Eck, E., Isaac, B., Kushnir-Stein, A., Misgav, H., Price, J. and Yardeni, A., eds. 2012. *Corpus Inscriptionum Iudaeae/Palaestinae, Vol. I*. Berlin.
- Darvasi, Y. and Agnon, A. Forthcoming a. A Seismic and Geodetic Investigation of the Summit. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*.
- Darvasi, Y. and Agnon, A. Forthcoming b. Ground Penetrating Radar (GPR) Survey. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*. Farhi, Y. Forthcoming. The Coins. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*.
- Finkelstein, I. 2013. *The Forgotten Kingdom: The Archaeology and History of Northern Israel*. Atlanta.
- Finkelstein, I. and Piasezky, E. 2009. Radiocarbon-Dated Destruction Layers: A Skeleton for Iron Age Chronology in the Levant. *OJA* 28: 255–274.
- Finkelstein, I. and Römer, T. 2019a. Kiriath-jearim, Kiriath-baal/Baalah, Gibeah: A Geographical-History Challenge. In: Koch, I., Römer, T. and Sergi, O., eds. *Writing, Rewriting and Overwriting in the Books of Deuteronomy and the Former Prophets: Essays in Honour of Cynthia Edenburg*. Leuven: 211–222.
- Finkelstein, I. and Römer, T. 2019b. Kiriath-jearim and the List of Bacchides Forts in 1 Maccabees 9:50–52. *New Studies in the Archaeology of Jerusalem and Its Vicinity* 13: 7*–17*.
- Finkelstein, I. and Römer, T. 2020. The Historical and Archaeological Background behind the Old Israelite Ark Narrative. *Biblica* 101: 161–185.
- Fischer, M., Isaac, B. and Roll, I. 1996. *Roman Roads in Judaea II: The Jaffa–Jerusalem Roads* (BAR International Series 628). Oxford.
- Freud, L. Forthcoming. Pottery Assemblage from a Burial Cave on the Southwestern Slope of the Hill. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*.
- Kelso, J.L. 1968. *The Excavation of Bethel (1934–1960)* (AASOR 39). Cambridge, MA.
- KJ I. Finkelstein, I., Römer, T., Nicolle, C., Dunseth, Z.C., Kleiman, A., Mas, J. and Porat, N. 2018. Excavations at Kiriath-jearim Near Jerusalem, 2017: Preliminary Report. *Semitica* 60: 31–83.
- Lipschits, O., Sergi, O. and Koch, I. 2010. Royal Judahite Jar Handles: Reconsidering the Chronology of the *lmlk* Stamp Impressions. *Tel Aviv* 37: 3–32.
- McKinny, C., Schwartz, O., Barkay, G., Fantalkin, A. and Zissu, B. 2018. Kiriath-Jearim (Deir el ʿAzar): Archaeological Investigations of a Biblical Town in the Judaeon Hill Country. *IEJ* 68: 30–49.
- Sandhaus, D. Forthcoming. Areas A and B: The Hellenistic Pottery. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*.
- Sapir-Hen, L. Forthcoming. An Archaeo-zoological Assemblage from Area C. In: Finkelstein, I., Römer, T. and Nicolle, C., eds. *The Shmunis Family Foundation Excavations at Kiriath-jearim (Deir el-ʿAzar)*.
- Sellers, O.R. 1933. *The Citadel of Beth-zur*. Philadelphia.
- Sellers, O.R., Funk, R.W., McKenzie, J.L., Lapp, N. and Lapp, P. 1968. *The 1957 Excavation at Beth-zur* (AASOR 38). Cambridge, MA.
- Shiloh, Y. 1979. *The Proto-Aeolic Capital and Israelite Ashlar Masonry* (Qedem 11). Jerusalem.
- Tal, O. 2006. *The Archaeology of Hellenistic Palestine: Between Tradition and Renewal*. Jerusalem.