“Then they built up the City of David with a high, strong wall and strong towers, and it became their citadel” (I Maccabees 1:33)

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Preface[1]

The issue of the fortifications in the City of David hill is always in the background of the extensive excavations carried out at the site.[2] Recently, a massive wall, from which only the foundations survived, came to light on the eastern, higher side of the excavation area. It is more than 3 m wide, its outer face is built of large fieldstones and its core is a conglomeration of medium-size and small fieldstones. Along its length, the wall was clearly made to conform to the hill's topography, situating it right before the point where the cliff plunges westward toward the Tyropoeon Valley. The width of the wall and the characteristics of its construction, together with an impressive tower found abutting its western side (see below) show that the wall should be regarded as part of the fortification system built at the top of the hill.

Fig. 1. The Hellenistic wall. In the background, a ritual purification bath dug into it in the Early Roman period; view to the southwest.

The fact that the wall was damaged by plastered water installations from the late Second Temple period (*miqwa'ot* and cisterns) provided a preliminary chronological anchor for its dating, that is, a *terminum ante quem* for its use – showing that the fortification was no longer in use in the first century CE (Fig. 1). Because the wall was discovered near the eastern boundary of the excavation area, at this point the inner side cannot be excavated to uncover the floors that abut it. Thus its date must be determined based on architectural

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and other elements connecting to it from the outside, which indeed provide unequivocal data on the date of its use.

Components of the Fortification System

The tower: The large and impressive tower discovered west of and abutting the wall is 4.5 m wide; so far, more than 18 m of its length has been uncovered (its northern portion has not yet been excavated). The tower's outer walls are built of large ashlars, some c. 1 m long, which were laid as headers and stretchers. The use of ashlars for the entire depth of the foundations shows that major effort was invested in its construction. The space bounded by these ashlar walls was filled with fieldstones of various sizes mixed with soil. These ashlar walls and the massive stone core created the strong foundations of the tower. Its western wall, facing the Tyropoeon Valley, was preserved to a height of 2.7 m, but it clearly was more than 10 m high (see below). The remains of a partition wall in the southern third of the tower suggest that it was subdivided into separate rooms. Noteworthy are the many finds of a military nature discovered at the base of the tower. Among them are typical metal arrowheads and lead sling stones. Like the wall, the tower was damaged by the cutting of a large cistern during the Early Roman period (Fig. 2).

Fig. 2. The Hellenistic tower. In the center, a plastered reservoir from the Early Roman period; view to the northeast.

The tower and the wall reveal clearly different construction characteristics – the tower is built of ashlars, while the wall is built of huge fieldstones. It is possible that the upper parts of the wall were also built of ashlars, which were robbed in antiquity. At this point, with the data we have so far, we cannot determine whether the difference

Fig. 3. The slanted layers of the glacis abutting the front of the tower; view to the east.

in construction technology between the wall and the tower is due to chronological differences (see below), or whether these were only constructional differences. Either way, all the components served in a single fortification system.

The glacis: West of the line of the wall and tower, layers of fill were excavated that slant sharply downward toward the Tyropoeon Valley. These layers, which are clearly distinguishable from each other, are stacked, with each one conforming to the angle of the one below (Fig. 3). Some of the layers consist of pebbles and gravel, purposely selected for their small size. Others include enormous quantities of pottery sherds. Some of the layers consist of burned organic material as can be seen by the dark, black traces they left behind. Others consist of soil only and still others include medium-size and large fieldstones. Some of the layers of fill were sealed by a well-compressed, chalk layer. Preliminary analysis by researchers from the Weizmann Institute shows that the material is indeed chalk and not plaster.[3] The purpose of the chalk layers was to seal the layer beneath them.

3 It is our pleasant duty to thank Elisabetta Boaretto and Johanna Regev of the Weizmann Institute for their cooperation and scientific oversight.

At the top of the hill these layers of fill abut the western face of the tower (their association to the city wall has not yet been determined by excavation) and it is clear that at least in this area, the layers were deposited directly from the top of the tower. This huge mass of fill – with its stones, soil, gravel, sherds and burned organic material – was supported from the west by a thick wall built at the bottom of the slope that ran parallel to the Tyropoeon streambed. This wall, which was excavated along more than 10 m, like the rest of the fortification's components, was found to have been sealed and damaged by cisterns and *miqwa'ot* that were built in the Early Roman period. The phenomenon of a wall in front of a glacis to support it on the one hand, and to serve as another defensive obstacle on the other, is known from similar, fortifications of even earlier date. One clear example is the Judahite fortress at Arad (Herzog 1997:163).

The data collected so far from the extensive area where the slanted layers of the glacis' fill were uncovered show that this was not a localized, limited phenomenon, but rather an intentional spill from the top of the hill all the way down to the Tyropoeon Valley. The fills were carefully selected, pouring thousands of cubic meters of material down the slope in a controlled manner. It can also be seen that the work was done over a relatively short period of time (see below) undoubtedly structured, organized and implemented as part of a central government initiative.

By tracing the angle of the outermost layers along the slope to the line of the tower it originally abutted, it is possible to determine the height of the part of the tower buried under the fills of the glacis. This resulting figure shows that the tower was at least 9 m higher than its current preserved height. A number of additional meters of superstructure should be also added. The fact that the ashlar wall of the tower was preserved in some places at a level lower than the preserved height of the glacis attests to the robbery of the stones, which were removed from it after the tower was no longer in use. It may be assumed that the high quality of these stones made them a target for massive robbery in antiquity.

Chronology: A preliminary typological analysis of the sherds that make up the "sherd layers" of the glacis reveal a homogeneous assemblage dating to the second century BCE. The number of sherds is almost inconceivable, reflecting a typologically monotone, limited assemblage of vessels types. Dozens of Rhodian handles, as well as the coins in the fills, have undergone preliminary reading and serve as a more solid chronological criterion by which to determine the absolute chronology of the glacis. It emerged that the coins found in the fills were mostly Seleucid. Their great number is very impressive

considering that few of these coins have so far been found in the City of David and moreover, that they were discovered in a clear archaeological context. In this vein, it should be mentioned that the late coins from the top of the glacis date to the time of the Seleucid King Antiochus VII Sidetes (138–129 BCE). These coins, which were discovered only in the top portions of the glacis, apparently reflect the time that the glacis went out of use. The coins found their way to the top of the glacis when the fortifications were intentionally dismantled (see above).

However, the coins discovered at the foundations of the glacis that can indicate the time of its construction with certainty. In addition to coins from the Persian period and Ptolemaic coins, the latest coins found at the base of the glacis date to the time of the Seleucid King Antiochus IV Epiphanes (175–164 BCE). This means that the glacis was built not before the time of the latter king, and went out of use no later than the time of Antiochus VII. This conclusion is bolstered by the results of the examination of dozens of stamped amphora handles discovered in the glacis' fills, dating from the Ptolemaic and Seleucid periods, before 170 BCE.[4]

Also noteworthy is the surprising results of the analysis of the layers of compressed chalk in the glacis. The great similarity between pollen particles isolated from two different layers of limestone support the conclusion that construction of the glacis was a single, brief architectural initiative. Control samples taken for palynological analysis from within the limestone layers and from sediments that had accumulated on top of them confirm that the pollen represents the time when the chalk dried and adhered, i.e., the time of construction.[5] Identification of the pollen securely determined that the glacis was built in the spring. Another interesting point emerging from the palynological study is the unique nature of the components: In addition to woodland species typical of the Judean Mountains, such as Aleppo pine, oak, olive, cypress and grain species, pollen from grapevines was also identified. As opposed to most Mediterranean woodland trees, whose pollen is windborne and therefore is carried great distances, grapevines self-pollenate and hence are almost completely unable to extensively spread their pollen. Thus, grapes must

4 All the handles from the Givati Parking Lot excavation have been sent for preliminary analysis. Only a few of the stamps were found to date later than 170 BCE, but those are not from the context under discussion. A thorough analysis of these handles and others that are sure to be discovered during excavation of the glacis will be undertaken in the future by Donald T. Ariel and will be published in the series of final reports on the Givati Parking Lot excavation.

5 Pollen analyses were carried out by Dafna Langgut of the Laboratory of Archaeobotany and Ancient Environments, Institute of Archaeology, Tel Aviv University.

have been grown close to the glacis. It may be assumed that the vines grew on the slopes of the Tyropoeon Valley.

Discussion

The discovery of the fortification line with its various components on the western side of the City of David hill is undoubtedly major archaeological news whose importance cannot be overestimated. The obvious question is – to which of the fortification lines on the eastern side of the hill should it be associated? Most of the excavations on the City of David hill have focused on the eastern side, mainly because that is where the Gihon Spring is located. The longitudinal section Kathleen Kenyon opened from the top of the hill to the Kidron at its foot (Section A, Kenyon 1974, Fig. 14) revealed the three fortification systems we know so far in the City of David. The two earliest of the three were built on the upper third of the slope. The earlier of those two is the one dated to the Middle Bronze Age (Kenyon 1974: 78–82; Reich 2011: 134–141); the wall from the Iron Age II was built nearby and in some places directly over it (Kenyon 1974: 130–131). The third and latest of the fortifications is the one built at the top of the hill, dated generally to the Second Temple period (Geva 2012 with further bibliography).

The newly discovered fortification line in the Givati Parking Lot can be associated chronologically only to the late fortification line at the top of the eastern slope. This basic assumption means there would have been very little space between the two fortification lines in this area at the top of the hill (about 60 m on average). It is clear that the builders intentionally situated the walls along the edge of cliff right before it plunges westward and eastward.

A similar picture emerges from the location of the wall on the eastern side. To this eastern fortification we must of course add the southern tower discovered by Macalister, whose foundations were excavated by Kenyon. Scholars widely concur that the southern tower "represents…the construction method of the portion of the first wall that protected the northern city of David from the east" (Geva 2015: 61) and thus the tower is an integral part of the wall's construction.

Clear support for the theory of simultaneous construction of these fortification lines can be found in the similarity of their components on both sides of the hill. Beyond the situating of the fortification line on the east at the top of the slope "on the rocky outcropping at the top of the eastern slope" (Shiloh 1984: 16), a glacis was also discovered there from the

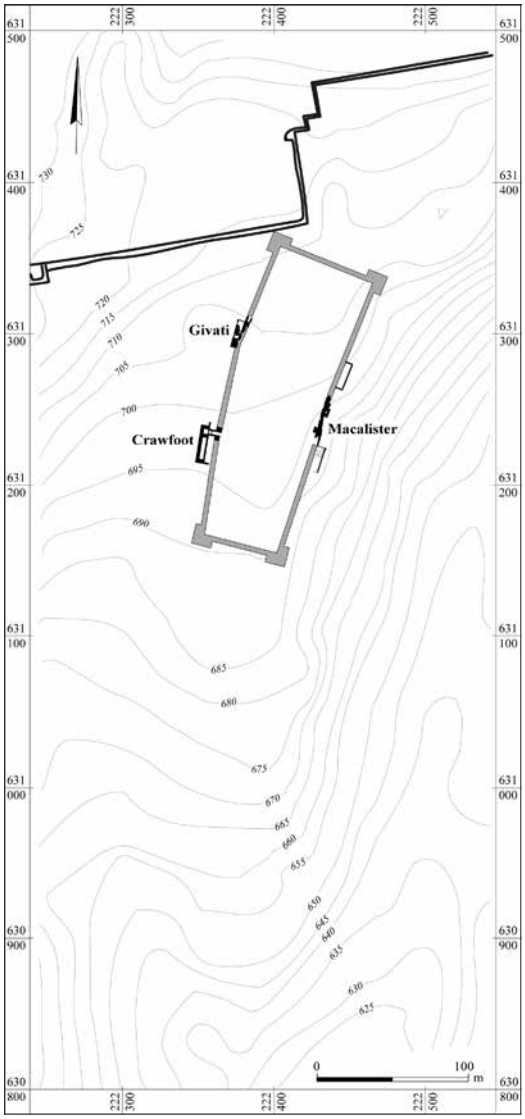

Fig. 4. Proposed reconstruction of the Seleucid Acra.

Hellenistic period. Shiloh's description of the components of the Hellenistic glacis, uncovered in Area G above the stepped stone structure from the Iron Age, indicates very great similarity between its components and those of the glacis uncovered in the Givati Parking Lot (Shiloh 1984: 16–17; 23–24; Pl. 1.26. 36; Figs. 27, 29). The wall from the Iron Age on the upper third of the slope was apparently altered to serve as a retaining wall for the glacis in exactly the same way a wall was built for this purpose on the western side of the hill (see above).

The question of the date of construction of the original wall and the impressive tower built with it to the top of the eastern slope of the hill, exceeds the boundaries of this discussion (for a recent summary see Geva 2012; 2015: 61–62). If indeed they form part of the fortifications recently discovered on the western side of the hill, we are able for the first time to ascribe the period of use of the wall on the eastern side, and of its associated tower, to the time of Seleucid rule in Jerusalem (see below).

A look at all components of the fortification system under discussion here on a single plan raises the obvious question of the relationship between the solid walls uncovered at the time by Crowfoot and Fitzgerald on the western side of the hill, just south of the fortifications uncovered in our excavations in the Givati Parking Lot (Fig. 4). Crowfoot and Fitzgerald's massive wall (the "gate structure") was found to follow the exact same

line as the continuation of the fortification line discovered in the north. Moreover, the massive walls abutting it on the west (Ussishkin called them "the additional walls"; see Ussishkin 2012: 109–115) create an elongated, rectangular space, which abuts the "gate structure" on the west. Interestingly, the length and width of this space are surprisingly similar to the dimensions of the tower from the Givati Parking Lot. This is not the place to present a stratigraphic and architectural analysis of these remains. But even at this stage we can determine that if the "gate structure" was indeed part of the fortification under discussion here (and see that theory in Geva 2015: 62), it will contribute another level of understanding of the extension southward of the fortified Seleucid compound on the City of David hill.[6] This theory is supported by the fact that remains of the "gate structure" and the tower (?) are situated exactly opposite the southern tower incorporated into the line of the eastern wall.

How then may we understand the sophisticated fortifications built at the top of the City of David hill? This narrow strip – as it indeed seems to be in light of the new archaeological evidence – is certainly illogical in terms of urban planning (Geva 2015: 61). However, the logic behind it becomes clear when we realize that it was not a planned city that was being constructed here. We find it helpful to quote Geva, who at the time also pondered the question of the essence of the Hellenistic fortification at the top of the eastern slope: "The possibility cannot be ruled out that said portions of the fortifications were built by the Seleucids during the reign of Antiochus IV, as part of the fortifications of the City of David, as written: 'Then they built up the City of David with a high, strong wall and strong towers, and it became their citadel'" (I Maccabees 1:33). It is therefore possible that these are remains of the Seleucid citadel whose location is unknown?" (Geva 2015: 62).

Due to the meager architectural remains uncovered in Jerusalem that have been dated to the second century BCE in general, especially those that can be securely associated with the Seleucid presence in the city, proposals for reconstructing the possible location of the Acra (the citadel), were based almost solely on historical sources and, in direct association with them, topographical data. The main historical sources that describe the Seleucid Acra and its possible location are the Book of Maccabees (especially I Maccabees) and Flavius Josephus. In both we read about its construction in the City of David, or by its other name, the "Lower City," near the Temple (see I Macc. 1: 33–35).

6 On various occasions we determined that the massive walls excavated by Crowfoot and Fitzgerald should not be considered part of the fortifications (Ben-Ami and Tchekhanovets 2011).

It seems that there is no place in the city that has not been suggested as the Acra's location (see a summary and discussion of the various proposals in Tsafrir 1980 and in Fig. 1 there). Tsafrir's analysis of the various sources indicated that it was very likely situated on the City of David hill. As he wrote: "the conclusion is apparent…that there is no other possibility but that the Acra was located in the Lower City…" (1980: 25). But it was undoubtedly the brilliant analysis by Bar-Kochva, who, by examining the historical sources together with the geographical and paleographical data, placed the Seleucid citadel at the top of the City of David hill (1989: 445–465). Bar-Kochva suggested that the Seleucid Acra was located in the area south of the Ophel on the one hand and north of Area G on the other, between contour lines 697 and 705 m above sea level. We consider this reconstruction particularly amazing in light of the fact that our excavation in the Givati Parking Lot is located in that very area. This location of the Seleucid Acra would mainly have afforded optimal observation of Jerusalem's Jewish inhabitants, but not a view of the ceremonies in the Temple. People congregating in the Temple area could be harassed by artillery (ibid., pp. 460–461). Thus we can clearly understand how in 164 BCE Judah Maccabee managed easily to take control of the Temple after his defeat at Beth-Zur. Bar-Kochva's research is for some reason missing from most discussions of the Acra's location, and we have the great privilege of according it its rightful place.

The new archaeological information from the Givati Parking Lot for the first time facilitates a reconstruction of the city's layout on the eve of the Hasmonean revolt. An impressive fortification system was built at the top of the City of David hill including a solid wall incorporating strong towers. The fortifications were built on a high cliff, right before the point where it plunges toward steep slopes. An elaborate glacis was constructed on all sides of the fortification line, which impeded any attempt to approach its foundations. All of these together created a towering, strongly fortified citadel at the top of the hill – the Seleucid Acra, which controlled access to the Temple Mount.

Sources of Illustrations

Fig. 1-3. Assaf Peretz, Israel Antiquities Authority.

Fig. 4. Vadim Asman and Natasha Zak, Israel Antiquities Authority.

Bibliography

Ben-Ami and Y. Tchekhanovets 2011

D. Ben-Ami and Y. Tchekhanovets, "The Lower City of Jerusalem on the Eve of Its Destruction, 70 C.E.: A View from Hanyon Givati," *BASOR* 364: 61–85.

Bar-Kochva 1989

B. Bar-Kochva, *Judas Maccabaeus: The Jewish Struggle against the Seleucids*, Appendix D: *The location and history of the Seleucid citadel (the Akra) in Jerusalem*. Cambridge.

Crowfoot and Fitzgerald 1927

J. W. Crowfoot and G. M. Fitzgerald, *Excavations in the Tyropoeon Valley, Jerusalem* (APEF 5). London.

Geva 2015

H. Geva, "Hasmonean Jerusalem in the Light of Archaeology: Notes on Urban Topography," *Eretz Israel* 31: 57–75 (Hebrew).

Geva 2012

H, Geva, "Notes on the Archaeology of Jerusalem in the Persian Period," pp. 66–79 in D. Amit, G.D. Steibel, O. Peleg-Barkat and D. Ben-Ami (eds.), *New Studies in the Archaeology of Jerusalem and its Region* 6. Jerusalem (Hebrew).

Herzog 1997

Z. Herzog, "The Arad Fortresses," pp. 111–292, in R. Amiran, O. Ilan, M. Saban and Z Herzog, *Arad.* Tel Aviv (Hebrew).

Kenyon 1974

K. Kenyon, *Digging Up Jerusalem,* London.

Tsafrir 1980

Y. Tsafrir, "The Location of the Seleucid Akra in Jerusalem," *Cathedra* 14, pp. 17–40 (Hebrew).

Reich 2011

R. Reich, *Excavating the City of David: Where Jerusalem's History Began*. Jerusalem.

Shiloh 1984

Y. Shiloh, *Excavations at the City of David 1978–1982, Interim Report of the First Five Seasons* (Qedem 19). Jerusalem (Hebrew).

Ussishkin 2012

D. Ussishkin, "On Nehemiah's City Wall and the Size of Jerusalem during the Persian Period: An Archaeologist's View," pp.101–130. in I. Kalimi (ed.), *New Perspectives on Ezra–Nehemiah History and Historiography, Text, Literature, and Interpretation*. Winona Lake.