Hasmonean Jerusalem in the Light of Archaeology
Notes on Urban Topography

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Introduction

The fortified area of late First Temple period Jerusalem encompassed the City of David, the Ophel and the Temple Mount on the eastern ridge, and for the first time the large area of the south-western hill as well[1]. During the Persian period the area of Jerusalem was once more reduced to its earlier boundaries and confined to the eastern ridge[2]. The city remained in these boundaries during the Early Hellenistic period[3]. In the 2nd century BCE, settlement began on the south-western hill. Only with the establishment Hasmonean rule in Jerusalem in the mid-2nd century BCE did conditions emerge to allow expansion to this hill, which was eventually fortified by the First Wall.

At the eve of the Hasmonean rebellion, Jerusalem was turned into a polis by Antiochus IV and named Antiochia in Jerusalem, and the Akra Fortress was constructed in order to control the city and supervise activities on the Temple Mount[4]. Identification of the location and size of the Akra is the key to reconstructing the appearance of Jerusalem during the early years following the Hasmonean rebellion. Remains of the Akra have not yet been located with certainty, despite indications in contemporary sources that it was a large and highly fortified structure that survived numerous attempts by the Hasmoneans to conquer it before finally being taken by Simon in 141 BCE (*1 Macc* 13, 49–50). Numerous proposals have been made concerning the location of the Akra, including in the City of David and the Ophel, north of the Temple Mount, and on the western hills of Jerusalem[5]. There are also proposals identifying

1 For summaries and opinions see Shiloh 1993; Reich 2000; Geva 2003b, 504–524.

2 See the minority opinion of Ussishkin (Ussishkin 2005; Ussishkin 2012), which includes the south-western hill in Persian- period Jerusalem, and Geva's response (Geva 2012, 73–76).

3 Geva 2003b, 524–526; Finkelstein 2008; De Groot 2012, 173–179.

4 The character of the polis Antiochia in Jerusalem is unclear from the description in *1 Macc* 13–14. Archaeological finds have not shed light on this question. For an explanation see Bar-Kochva 1980, 325–329; Levine 2002, 71–78; Rappaport 2004, 98–99. 111–109; Rappaport 2013, 98–106, with bibliography.

5 For a summary see Geva 1993, 723; Whitman 1989/1990, with bibliography. For a survey of sites proposed as the location of the Akra, see Levine 2002, 75–78 and Tsafrir 1975, who proposed that it stood in the south-eastern corner of the Temple Mount. On the proposal that the Akra stood in the northern part of the City of David, see Bar-Kochva 1980, 315–324. For the location of the Akra north of the Temple Mount, see Maoz 1987, 327–528. See also Rappaport's discussion (Rappaport 2004, 109–111). For remains recently found in the Givati Parking Lot and identified as part of the Akra, see Ben Ami – Tchekhanovets 2016).

surviving built remains with the Akra Fortress[6], however these lack definitive evidence. This article will not deal with the complex and controversial topic of the location of the Seleucid Akra in Jerusalem, despite its unquestionable importance in understanding the appearance of the city in the early Hasmonean period. It is a topic that deserves special attention.

There remain but few literary sources describing Jerusalem in the Hasmonean period. The historical source for the beginning of the Hasmonean period are the *Books of Maccabees*; *Flavius Josephus*' ›Antiquities‹ (*antiquitates Iudacae*) and ›War‹ (*de bello Iudaico*) offer a comprehensive historical description of the period[7]. While Jerusalem is frequently mentioned in these sources, they lack details concerning the appearance of the city, its fortifications and buildings. Consequently, they contribute little to our understanding of the appearance of the city during that period. They are certainly not comparable to *Josephus*' descriptions of Jerusalem at the eve of its destruction in 70 CE. It remains for the researcher of Jerusalem in the Hasmonean period to turn to the archaeological record in the hope that finds will attest to the course of urban development and enable us to reconstruct the city's appearance during that period. It appears that now, following decades of intensive archaeological research concerning Jerusalem's antiquities, we can summarize what is known about the remains of the Hasmonean city[8].

This article will deal with several aspects of Hasmonean Jerusalem's urban development based upon a variety of built remains and small finds. It should be noted that in contrast to Herod the Great's major architectural contribution to Jerusalem, the Hasmonean remains uncovered in Jerusalem are surprisingly few, poorly preserved and disappointing, despite the high expectations based upon the city's importance as the Hasmonean capital, and the relatively long period of Hasmonean rule. The reason for this may be the city's steep topography, which resulted in constant collapse and erosion of remains on its slopes. Later construction, particularly massive Herodian construction that obliterated much of the Hasmonean period remains, is also partly to blame[9]. Reich has addressed this question: »Summarizing the archaeology of Jerusalem during the time of Hasmonean rule is a difficult task since the archaeological data from this period of about 100 years are quite limited.«[10], and Rappaport writes: »In summary, the archaeological evidence from Hasmonean period Jerusalem is poor, and one of the reasons for this is the extensive construction in the city during Herodian times, which obliterated Hasmonean-period buildings«[11]. The paucity of archaeological finds from the Hasmonean period in Jerusalem is evident in the brief summaries of the period's archaeology, which focus primarily upon historical descriptions of Hasmonean Jerusalem. Among the few remains mentioned are mainly the city fortifications, primarily the First Wall[12]. Little is known about domestic dwellings in the city, the Citadel and the Hasmonean palace, or cemeteries of the period. We have no information concerning the Hasmonean Temple Mount,

6 For example, Tsafrir 1975, with bibliography; Ben-Dov 1981; Ben-Dov 1985, 61–71.

7 The Letter of Aristeas describes a situation earlier than the Hasmonean period, and the brief description by Timarchus is a kind of introduction to the siege of Jerusalem by Antiochus VII during the days of Hyrcanus I (Bar-Kochba 2008).

8 For a general description of Hasmonean Jerusalem see Levine 2002, 91–147; for a summary of Hasmonean-period remains in Jerusalem, see Reich 1995; for a discussion of various issues concerning the topography of Hasmonean Jerusalem, see Maoz 1985, 46–48; Maoz 1987. See also information on Hasmonean-period remains in the summary of archaeological remains in Jerusalem during the Second Temple period in Geva 1993.

9 For an explanation of the recurring problem in Jerusalem archaeology of destruction and disappearance of ancient remains as a result of later construction activities see Ben-Dov 1985, 64; De Groot 2012, 141.

10 Reich 1995, 219.

11 Rappaport 2013, 385.

12 Bahat 1997, 227–230; Bahat 2008; Zangenberg 2013, 24–26; Geva 1985; Geva 2003b, 529–534.

undoubtedly because its remains are buried beneath the expanded temenos constructed by Herod the Great[13].

Nonetheless, I maintain, with due caution, that considering the large number of excavations, many large in scale, conducted throughout the area of ancient Jerusalem, it may be assumed that the general picture emerging from the finds provides a highly probable view of the appearance of the Hasmonean city.

The Status and Urban Development of Jerusalem During the Hellenistic Period in Light of the Distribution of Seal mpressions

yhd and yršlm Seal Impressions

The growing importance of Jerusalem at the beginning of the Hasmonean period may be examined in light of the distribution and number of *yhd* and *yršlm* seal impressions on jar handles[14].

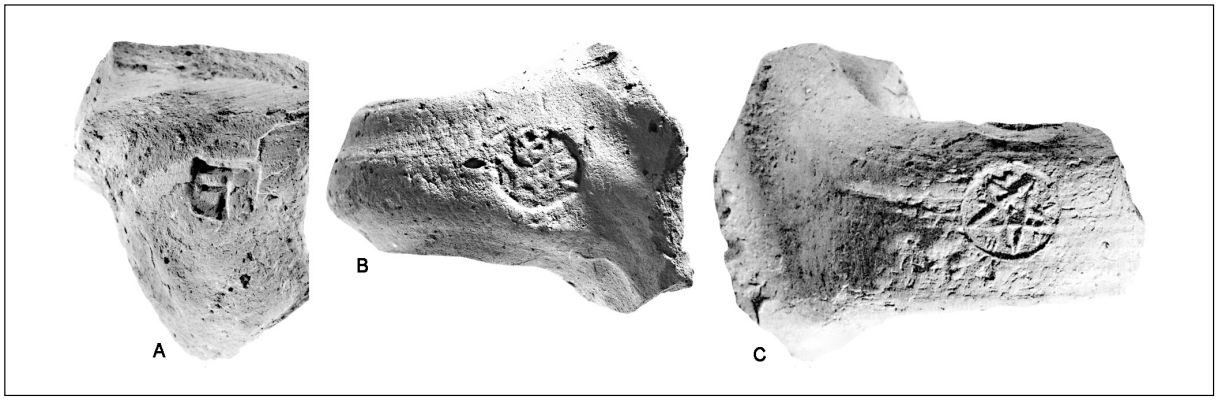

Fig. 1 : Examples of *yhd* and *yršlm* seal impressions of the beginning of the Hasmonean period from the Jewish Quarter excavations, Jerusalem.

In Lipschits' and Vanderhooft's typology[15] the corpus of *yhd* seals of the Persian and Hellenistic periods is divided into three groups distinguished by formula, paleography and date. The earliest group (types 1–12) includes seals with a variety of formulae in Aramaic script variously combining personal name, province, and *yhd*. These date to the end of the 6th and the 5th century BCE. The intermediate group (types 13–15) include seal impressions with an abbreviation of the province *yhd* alone in Aramaic script, and date to the 4th and 3rd century BCE. The late group (types 16–17), the most important for the purposes of this article, include seal impressions with an abbreviation of the name of the province *yhd* in Paleo-Hebrew script (type 16 = *yh*, **fig. 1, A**; type 17 = yhd + *ṭ*, **fig. 1, B**). Impressions of the late group replaced the two earlier groups that were in use during the Persian and Early Hellenistic

13 Ritmeyer identifies the construction north of the seam in the southern part of the eastern wall of the Temple Mount as part of the Hasmonean expansion (Ritmeyer 2006,102–105. 207–220), an idea also supported by Patrich and Edelkopp (Patrich – Edelkopp 2011, 24–26). In opposition, Tsafrir proposes that the construction north of the seam is a remnant of the Seleucid Akra (Tsafrir 1975). It is difficult to accept these views, which lack archaeological evidence and rely solely on analysis of historical sources, from which it is possible to understand a developmental series of the Temple Mount in First and Second Temple times. There is no parallel in known Hellenistic or Hasmonean construction remains for the type of construction north of the seam in the eastern wall of the Temple Mount. It appears that the closest parallel is the construction of the so-called Tower of David in David's Citadel south of Jaffa Gate. One may learn from this that it is an early building phase in the south-eastern corner of the Temple Mount, from the time of Herod prior to the phase of its expansion southward. Thanks to Shlomit Weksler-Bdolah for discussing this with me.

14 For a summary, see Lipschits – Vanderhooft 2007; Bocher – Lipschits 2013.

15 Lipschits – Vanderhooft 2011, with catalogue and summary.

periods[16]. The stratigraphic contexts in which the impressions of the late group were found show that they came into use during the 2nd century BCE, most likely during the early days of Hasmonean rule. The return to use of the Paleo-Hebrew script in the seals of the Hasmonean administration symbolized the renewal of national independence and the link and continuity with the glory of the days of the independent Kingdom of Judah of the First Temple period[17]. Aside from the two types of late *yhd* seals, during the Hasmonean period the *yršlm*-type seals also came into use (**fig. 1, C**; see also below).

Of 582 *yhd* seal impressions of various types included in Lipschits' and Vanderhooft's catalogue[18], the largest number of impressions was found at two sites: Ramat Rachel (307 impressions, 53 % of the total found) and in Jerusalem (163 impressions, 28 % of the total). A few impressions have also been found at several sites in Judah and Benjamin, including Tell en-Nasbeh, Jericho, Nebi Samuel and ʿEn Gedi, however these finds are not relevant to the discussion that follows. From a comparison of the number of impressions and the distribution of the three groups at Ramat Rachel and Jerusalem, one can learn about the relative political and economic importance of the two sites during the Persian and Hellenistic periods and even more important to the topic of this paper, the urban development of Jerusalem at the beginning of the Hasmonean period.

The number of impressions from the two earlier groups found at Ramat Rachel (276, 90 % of all the finds at Ramat Rachel) is clearly greater than the number found in Jerusalem (76, 47 % of the finds in Jerusalem)[19]. It appears that during the Persian and Early Hellenistic periods Ramat Rachel served as the main official administrative centre in Judaea. It was a centre for tax collection and storage of agricultural products for both internal and external purposes. For political and security considerations, and perhaps for the ease and convenience of storage and transport of products in sealed jars, the Persian and Hellenistic administrations preferred Ramat Rachel over Jerusalem as an administrative centre in Judaea[20]. The distance of Jerusalem from the main agricultural areas in Judaea, difficulty of access, the small area and the steep topography of the City of David, and perhaps also the concentration of a hostile Judaean population in the city, were undoubtedly factors leading to the preference of Ramat Rachel over Jerusalem. An additional advantage of Ramat Rachel was that it had served as a palace and centre of government and administration by the end of the First Temple period. The palace erected there during the Persian period was a natural continuation of the site's previous function. Indeed, in Jerusalem, the City of David at that time, there are only sparse finds from the Persian and Early Hellenistic periods[21].

It appears that the importance of Ramat Rachel declined sharply upon the establishment of the Hasmonean kingdom and its capital at Jerusalem. During this period, *yhd* seals of the late group were introduced. This group constitutes only 31 examples (10 % of the entire assemblage at the site) while in Jerusalem 87 examples belonging to this group were found

16 I believe that two types of yhd impressions of the late group served roughly contemporaneously, because they were found in the Jewish Quarter excavations in equal numbers in the same archaeological context (Geva 2007). Lipschitz and Vanderhooft believe that type 17 was in use before type 16 (Lipschitz – Vanderhooft 2011, 595. 601), while in Bocher – Lipschits 2013, 112, type 16 predates type 17.

17 Geva 2007.

18 Lipschits – Vanderhooft 2011. The number does not include the numerous impressions discovered in the recent excavations at Ramat Rachel (for instance, Lipschitz et al. 2010, and see also the relevant chapters in Lipschits et al. 2016 with details and bibliography).

19 Lipschits – Vanderhooft 2011, 11–22.

20 Lipschits – Vanderhooft 2011, 760–764.

21 Shiloh 1984, 29–30; Finkelstein 2008; De Groot 2012, 173–179.

(53 % of the assemblage at the site)[22]. Undoubtedly, this shows the rise in the political and economic importance of Hasmonean Jerusalem over the declining centre at Ramat Rachel[23].

No less interesting is a quantitative comparison of the distribution of *yhd* seal impressions throughout Jerusalem and in particular, in the City of David vs. the south-western hill, which was only significantly repopulated in the Hasmonean period[24]. In the City of David 76 seal impressions from the two early groups belonging to the Persian and Early Hellenistic period were found. Not a single seal impression from these groups was found on the south-western hill. It is noteworthy that over the entire south-western hill numerous archaeological excavations have been conducted over extensive areas. Thus, it is improbable that the total absence of seal impressions of the early two groups on the south-western hill is mere coincidence. Examples from the later of the two groups have indeed been found there (see below). Thus, Persian- and Hellenistic-period Jerusalem, up to the 2nd century BCE, was mainly confined to the eastern ridge and in particular, to the City of David. On the other hand, archaeological evidence indicates that actual settlement on the south-western hill only began with the establishment of the Hasmonean kingdom, from the mid-2nd century BCE[25]. Additional support for this are the 27 seal impressions from the late group found on the south-western hill, primarily in excavations in the Jewish Quarter[26], as well as in the Armenian Garden[27]. In the City of David 59 examples from the late group were found[28]. Apparently, from the beginning of Hasmonean rule in Jerusalem more than double the number of late group impressions have been found in the City of David than on the south-western hill[29]. This too contributes to understanding the urban development of Jerusalem at the beginning of the Hasmonean period (see below).

At the beginning of the Hasmonean period the *yršlm* seals, in which the name of the city appears in Paleo-Hebrew script between the rays of a 5-pointed star, also came into use (**fig. 1, C**)[30]. The transition to use of the name of Jerusalem by the Hasmonean administration was a clear political declaration regarding the city's status as the capital of the Hasmonean kingdom. In all, 104 handles bearing *yršlm* seal impressions are known, 58 of them found in Jerusalem and only 33 at Ramat Rachel. Once again, this is indicative of the rising status of Jerusalem[31].

In the City of David and the Ophel 43 *yršlm* seal impressions were found, while on the south-western hill, only 10; the remaining five come from other parts of Jerusalem and its surroundings[32]. Thus, as regards the *yršlm* seals, the same picture repeats itself — the political and economic centre of Jerusalem in the second half of the 2nd century BCE remained on the eastern ridge.

The *yhd* impressions from the late group and the *yršlm* impressions were found together in the same archaeological layers dated to the Hellenistic period. This makes it difficult to determine if they were used simultaneously or sequentially. The *yhd* seals of the late group are a continuation and development of the tradition established in the two early groups. The

22 Lipschits – Vanderhooft 2011, 11–22.

23 Lipschits 2011; Lipschits – Vanderhooft 2011, 595. 764.

24 Lipschits – Vanderhooft 2007, 111–112.

25 See below, Geva 2003b, 526–535.

26 Reich 2003a; Geva 2007.

27 Tushingham 1985, pl. 67, 27.

28 Lipschits – Vanderhooft 2011, 11–22.

29 The number of *yhd* impressions of all types and *yršlm* impressions uncovered in the Ophel is unclear, though finds of two impressions, one *yhd+ṭ* and the other *yršlm*, are mentioned (Ben-Dov 1985, 69 and illustration on p. 71).

30 For a summary of the finds, see Bocher – Lipschits 2013, and see also Bocher 2016.

31 Bocher – Lipschitz 2013, 109.

32 Ariel – Shoham 2000; Reich 2003a; Geva 2007; summarized in Bocher – Lipschits 2013.

yršlm seals are a new type, and therefore probably the latest in a series of administrative seals in Paleo-Hebrew script[33]. It appears that with the establishment of the Hasmonean kingdom and its consolidation, a change was made in adopting the *yršlm* seals. This likely occurred following the conquest of the Akra by Simon in 141 BCE, at which time the entire city came under Hasmonean control. This opened the way to urban development in Jerusalem, and one can speak of the city's special status as the capital of the Hasmonean kingdom.

The *yršlm* seals were in use for but a short time and apparently, toward the end of the 2nd century BCE, were no longer in use. This brought to an end hundreds of years of use of a series of administrative seals in Judaea. Probably the use of coins, which began during the reign of Hyrcanus I, replaced the above seal impressions in the Hasmonean administration.

Rhodian Stamped Amphora Handles

Approximately 2,000 stamped handles of imported amphorae dating to the Hellenistic period, most from Rhodes, were found in Jerusalem, primarily in the City of David[34]. A few of the stamps date to the Ptolemaic period and the majority to the Seleucid period, mainly between the years 170–160 BCE, apparently related to the foundation of the polis and construction of the Seleucid Akra in Jerusalem. The massive importation of amphorae to Jerusalem declined drastically after 145 BCE, which is undoubtedly related to the Hasmonean siege on the Akra. Afterward, during the Hasmonean period, very few imported amphorae reached Jerusalem[35].

In contrast to the large number of Rhodian stamped amphorae found in the City of David, only 56 such vessels were found in excavations on the south-western hill[36]. Here too, as we noted in the discussion of the yhd seal impressions, it cannot be maintained that this is due to a lack of archaeological activity in this area, where numerous excavations, some quite extensive, have been conducted. Ariel rightly maintains that the difference in numbers between the two areas in the 2nd century stems from the fact that settlement on the south-western hill was later in date and less dense than in the City of David[37]. Finkielsztejn, on the other hand, holds that the foreign and Hellenizing population that consumed the imported wine inhabited the City of David, while the Jewish population that supported the Maccabees and abstained from gentile wine were concentrated in the south-western hill[38]. However, it appears that no evidence exists for a prohibition on consumption of wine produced by gentiles (*yeyn nesekh*) at that time[39]. Thus, the difference in the number of stamped amphorae between these two areas clearly stems from the City of David being the centre of Hellenistic Jerusalem, while settlement of the south-western hill only began later in that period[40].

The large number of Rhodian amphorae in the City of David is undoubtedly connected with a foreign garrison and Hellenized population there. The dietary habits of these groups are reflected in the large-scale importation of amphorae to Jerusalem. It is likely that the central administration was responsible for the regular supply of provisions, including amphorae of wine, for the foreign garrison. After the mid-2nd century BCE, when there was no longer a population that consumed such imported products in Jerusalem, their importation ceased almost entirely. I would not attribute the paucity of imported amphorae during the Hasmonean period only to possible Jewish religious restrictions on consumption of wine produced by gentiles; scholars are not in agreement as to whether this *halacha* was already enforced at

33 Avigad 1974; Geva 2007; Lipschits – Vanderhooft 2011, 595; Bocher – Lipschits 2013, 100. 111.

34 Ariel 1990, with a map showing distribution, pl. 4; Ariel 2013, 327; Finkielsztejn 1999.

35 Finkielsztejn 1999, 24*.

36 Finkielsztejn 1999, 24*.

37 Ariel 1990, 24–25.

38 Finkielsztejn 1999, 30*.

39 Ariel 1990, 25; Ariel 2000, 276–280.

40 Avigad 1983, 63; Geva 2003b, 524–529.

that time. As indicated, amphorae continued to arrive in Jerusalem, though in small numbers, even later in the Hasmonean period. It is noteworthy that on the south-western hill most of the amphorae that arrived during the second half of the 2nd century BCE were from Kos rather than from Rhodes, as was the case in the past[41], which may be related to changes in maritime trade. In addition, during the Hasmonean period a small number of other foreign pottery vessels demonstrate that their use by Jews was permitted[42]. Importation of pottery vessels from several sources outside Judaea increased during the 2nd century BCE[43]. Thus, not only Jewish religious / nationalistic feelings prompting the breaking of economic ties led to a boycott of imported consumer goods. It is very likely that the decline in imports to Jerusalem was related to far-reaching geo-political permutations that occurred in the Land of Israel with the establishment of Hasmonean independence. Judaea broke its ties with the Seleucid administration, under which there was active trade and movement of a variety of goods in the Land of Israel, including the large quantity of Rhodian amphorae discussed here. Apparently, the Hasmonean kingdom broke ties with the Seleucid overlords, first economically and later politically. The frequent wars and political unrest in Judaea and the surroundings since the days of Antiochus IV and in the second half of the 2nd century BCE brought insecurity that was detrimental to trade. We learn from this that a combination of factors brought about a nearly complete halt in the import of amphorae to Jerusalem with the establishment of Hasmonean rule in the city.

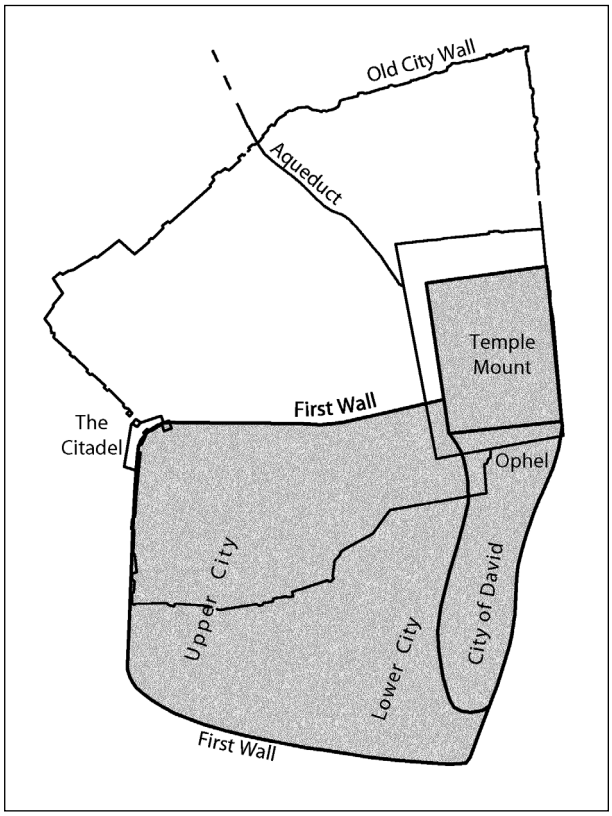

Fig. 2 : Map of Hasmonean period Jerusalem and the line of the First Wall (based upon Avigad 1983, fig. 38).

The First Wall: Between the City of David and the South-Western Hill

The First Wall, which surrounded the City of David and the Ophel on the east and the southern, western and northern sides of the south-western hill during the Second Temple period, marks the fortified boundary of Hasmonean-period Jerusalem (**fig. 2**). It was first constructed to surround the south-western hill at the end of the First Temple period. The line of the wall in the Second Temple period and the manner of its construction are known from *Josephus*' detailed description (*Ios. bell. Iud.* 5, 142–145) and from extensive remains excavated along its course[44]. The nature of the construction of the First Wall on the eastern side of the City of David is quite distinct from that of portion of the wall surrounding the south-western hill (see below). We shall focus here on the apparent difference in style of construction between these two portions of the First Wall, which is of importance in understanding the lengthy architectural

41 Ariel 2000, 268.

42 Kenyon 1974, 189; Geva 2003a, 115–116.

43 For details, see Appendix 2.

44 For a summary, see Avi-Yonah 1956, 306–311; Geva 1985; Geva 1993, 724–729; Whitman 1993, 87–157.

history of the wall and of Jerusalem's urban development during the Hasmonean period (see below concerning the Second Wall).

The First Wall in the City of David

Remains of several segments of the First Wall along the peak of the eastern slope of the City of David were uncovered in several places in various archaeological excavations conducted along its course[45]. Findings of Kenyon's excavations established that the ancient wall to the east of the City of David was erected along a lower topographical line on the eastern slope of the hill during the Middle Bronze Age[46]. Along this line and abutting the ancient wall, a new wall was constructed at the end of the First Temple period[47]. There is lack of agreement concerning the period when the early line of fortification on the lower part of the slope was first replaced by a more effective line atop the hill, which is the First Wall of *Josephus*' description. Some maintain that this occurred during the Persian period, in the time of Nehemiah, who restored the Jerusalem city wall. Others put this later, during the Hellenistic-Hasmonean period[48]. It appears likely that moving the wall westward to the top of the City of David hill was somehow connected with the beginning of Jerusalem's expansion to the south-western hill. If not, then the northern portion of the City of David would be reduced to a very narrow strip, illogical from the standpoint of urban planning and certainly significantly reducing the possibility of defence from the north.

The find that emphasizes more than any other the line of fortification atop the eastern slope of the City of David hill is a complex of remains excavated at the top of Area G in the Shiloh excavations. First to expose the remains of these fortifications, in the 1920s, were Macalister and Duncan, followed by Kenyon, Shiloh and A. Mazar[49].

The array of fortification atop the north-eastern side of the City of David hill includes the small Northern Tower and a large Southern Tower connected by a short span of wall. The thickness of that wall and of the wall of the Southern Tower were not clarified in the excavation[50]. The fortifications were partly built upon a Stepped Stone Structure that antedated them by quite a few hundred years[51]. Scholars disagree about the construction phases and dates of the elements of this complex of fortifications, in particular regarding the Northern Tower[52]. The large Southern Tower is the most important to our discussion, as it is widely accepted that its construction began in the Hellenistic (Hasmonean?) period, and thus represents the method of construction of the portion of the First Wall that protected the northern part of the City of David from the east.

The Southern Tower is constructed of recessed groups of courses. The corner of the tower consists of large stones, carefully trimmed square, while the walls are of courses of smaller

45 For a summary, see Simons 1952, 68–131; Geva 1993, 721–723; Whitman 1993, 87–109.

46 Kenyon 1974, 78–82; Steiner 2001, 10–12; De Groot 2012, 144–148; Reich 2011, 248–261.

47 Kenyon 1974, 130–131; Steiner 2001, 89–92; De Groot 2012, 158–159.

48 For a summary, see Geva 2012.

49 Macalister – Duncan 1926; Kenyon 1974, 191–193; Shiloh 1984, 15–17. 30; Mazar 2009a, 72–79. For a summary of the finds and views on the dating of the remains, see Whitman 1993, 87–94; Geva 2012.

50 Bahat 1998.

51 Researchers are divided over the dating of the Stepped Stone Structure—between the end of the Later Bronze Age, Iron Age I or Iron Age IIA (for summaries, see Cahill 2003; Mazar 2006; Mazar 2009a, 36–65). Kenyon's view, that the Stepped Stone Structure was constructed in Hasmonean times to support the foundations of the South Tower (Kenyon 1974, 192–193) is totally unfounded in view of the finds in more recent excavations.

52 Views are divided concerning the date of construction of the North Tower, but it is clear that this tower cannot date to the Persian period, as Mazar has proposed (Mazar 2009a, 72–79; Mazar 2009b), but dates to the Hasmonean period at the earliest (for a summary of views, see Steiner 2011; Geva 2012).

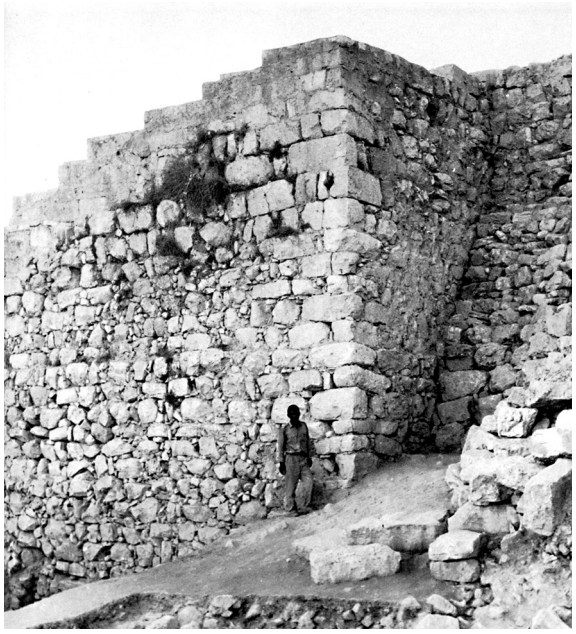

Fig. 3 : The great Southern Tower atop the north-eastern side of the City of David.

stones (**fig. 3**)[53]. The tower was dated by its first excavators to the Biblical period, beginning in the ›Jebusite‹ period and continuing in use with repairs in the time of David and Salomon[54]. Kenyon found evidence at the foundations of the tower for its construction in Hasmonean times, in her view apparently by Jonathan in 143 BCE[55]. Shiloh also believed that the complex of fortifications was erected in Hasmonean times and supported from the outside, to the east, by a thick earth glacis consisting of firmly packed layers. The association between them and the fortification was destroyed in previous excavations[56].

The nature of the construction of the Southern Tower is indicative of clearly Hellenistic construction characteristics. An exact parallel can be found in the construction of the Hellenistic citadel excavated by Harvard University at the summit of Samaria (**fig. 4**)[57]. Remains of the Samaria citadel are more precisely dated to the 2nd century BCE by the Joint Expedition[58]. Whitman reconstructed the plan of the southern tower in the City of David, which consists of walls creating a U-shaped structure, opening to the east, toward the interior of the city[59]. If this is accurate, then it is a plan of towers typical of Hellenistic military architecture, such as examples at Samaria[60] and in the Jewish Quarter of Jerusalem[61].

The archaeological finds do not allow us to determine if the Southern Tower in the City of David was erected in the pre-Hasmonean Hellenistic period or only during the time of Hasmonean rule, as Kenyon[62] and Shiloh[63] believed, and as is generally accepted today[64]. The various styles of construction observed in different segments of the First Wall in the City of David indicate that it was constructed in several phases. Is it possible that the tower was erected in the Hellenistic period at the eve of the Hasmonean rebellion? As we see in the similar fortification at Samaria, construction of the large Southern Tower is typical of Hellenistic military construction. The strength of the tower indicates the importance that its builders attributed to the fortification of even the eastern side of the City of David, which already enjoys the natural protection of a steep slope and the depth of the Kidron Valley below. Opposite this tower, on the western side of the City of David, is the gate of a massive fortified

53 Macalister – Duncan 1926, 50–57.

54 Macalister – Duncan 1926, 49–60.

55 Kenyon 1974, 191–193.

56 Shiloh 1984, 20. 30.

57 Reisner et al. 1924, 124–130, plan 6, sections 54–55.

58 Crowfoot – Kenyon 1942, 28–31.

59 Whitman 1993, fig. 18.

60 Reisner et al. 1924, plan 6.

61 Geva – Avigad 2000a, 165–171; Geva 2003b, 531–532, with further examples.

62 Kenyon 1974, 191–193.

63 Shiloh 1984, 20. 30.

64 Bahat 2000, fig. on p. 35.

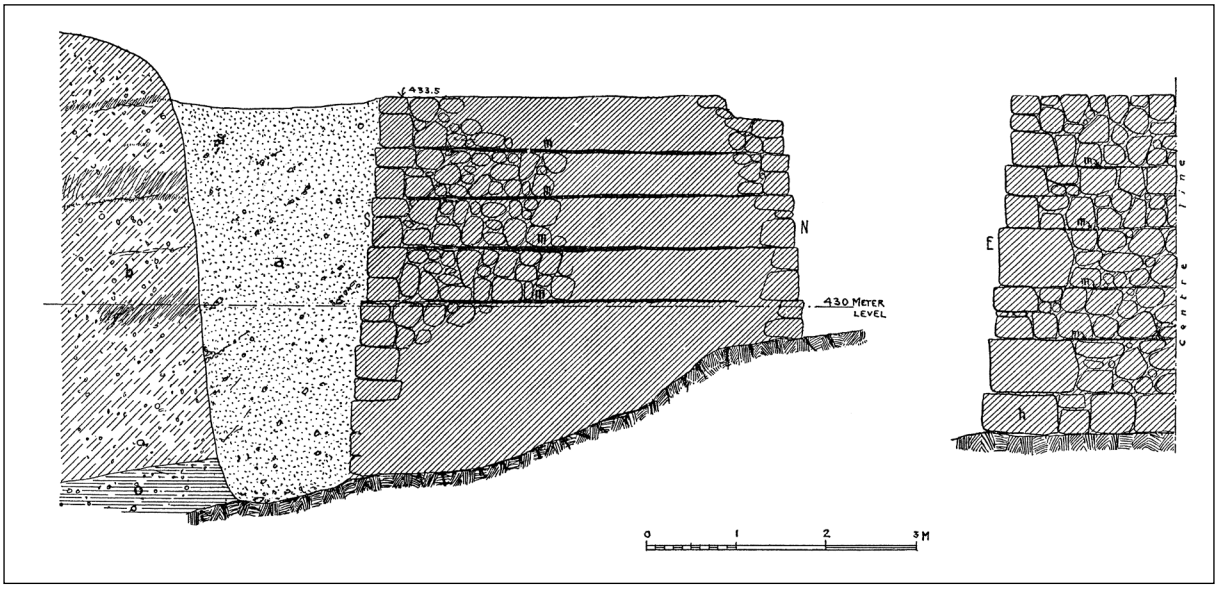

Fig. 4 : Section and view showing the nature of construction of the Hellenistic fortress at Samaria (Reisner et al. 1924, 127–128).

structure[65]. The date is apparently Hellenistic and it was clearly in use during the Hasmonean period as well[66]. In response to the explosive political situation, the Seleucid administration decided to strengthen its hold on Jerusalem. It is possible that the aforementioned segments of fortification were constructed by the Seleucids during the time of Antiochus IV, as part of the fortification of the City of David, as stated in *1 Macc* 1, 33: »Thereupon they fortified the City of David with a high strong wall and strong towers, so as to have a citadel, the Akra«[67]. Could these be the remains of the fortifications of the Seleucid Akra, the location of which is unknown[68]? Such a possibility is also supported by the fact that the First Wall surrounding the south-western hill was constructed in an entirely different architectural style (see below).

Recent excavations in the north-western part of the City of David (the Givati Parking Lot) have uncovered impressive built remains of a large structure of the 2nd century BCE[69]. These were buried toward the mid- 2nd century BCE under the fortification system identified as remains of the Akra[70]. The thick earth layers deposited here contain numerous artefacts from this period, showing human activity and intensive construction in the northern part of the City of David at that time. The remains in the Givati Parking Lot were just north of the remains of the gate excavated by Crowfoot and Fitzgerald. It is perhaps possible to link the beginning of the construction of these remains to Seleucid construction that remained in use with modifications at the beginning of the Hasmonean period.

65 Crowfoot – Fitzgerald 1929, 12–23.

66 According to Ussishkin, the remains are the substructure of a building dating to the 1st century BCE that has not survived (Ussishkin 2005, 154–159).

67 Goldstein 1976, 205.

68 For a summary of the events in Jerusalem during those years, see Gera 1998, 223–230. Regarding the possibility that the entire City of David was the Akra, see Simons 1952, 146–147. 157; Dequeker 1985. Rappaport also hints at this possibility (Rappaport 2004, 110, with a discussion there). According to Barkay, the Akra occupied only the southern part of the City of David (Barkay 2008, 49–50).

69 Ben-Ami 2013, 19–22; Ben-Ami – Tchekhanovets 2015.

70 Ben Ami – Tchekhanovets 2016. In recent ongoing excavations here by Y. Gadot and Y. Shalev, more Hellenistic period remains have been exposed.

The First Wall on the South-Western Hill

The most impressive built remains of the Hasmonean period in Jerusalem, and apparently throughout the Hasmonean kingdom, are without doubt those of the First Wall uncovered around the south-western hill. The course of this wall and its manner of construction are also the best known among the fortifications of Jerusalem in early periods (with the exception of the present wall of the Old City). Over decades of excavation, numerous portions of the remains of the First Wall have been uncovered, including towers and gates. Most of the excavations were conducted along the outer face of the wall and very little has been exposed of its inner face, rendering precise dating difficult. Remains of the northern portion of the wall were uncovered in Avigad's excavations in the Jewish Quarter[71]; its north-western corner, in the courtyard of the Tower of David Citadel (henceforth: David's Citadel), was exposed over many years in a series of excavations[72]. The array of fortifications here encompasses several Hasmonean construction phases, including thickening and the addition of towers along the line of the wall (**figs. 5. 6. 7**). Broshi exposed long portion along the western (outer) side of the wall[73], while Re'em exposed a short segment of its eastern (inner) side[74]. Its long southern portion was uncovered by Bliss and Dicky[75].

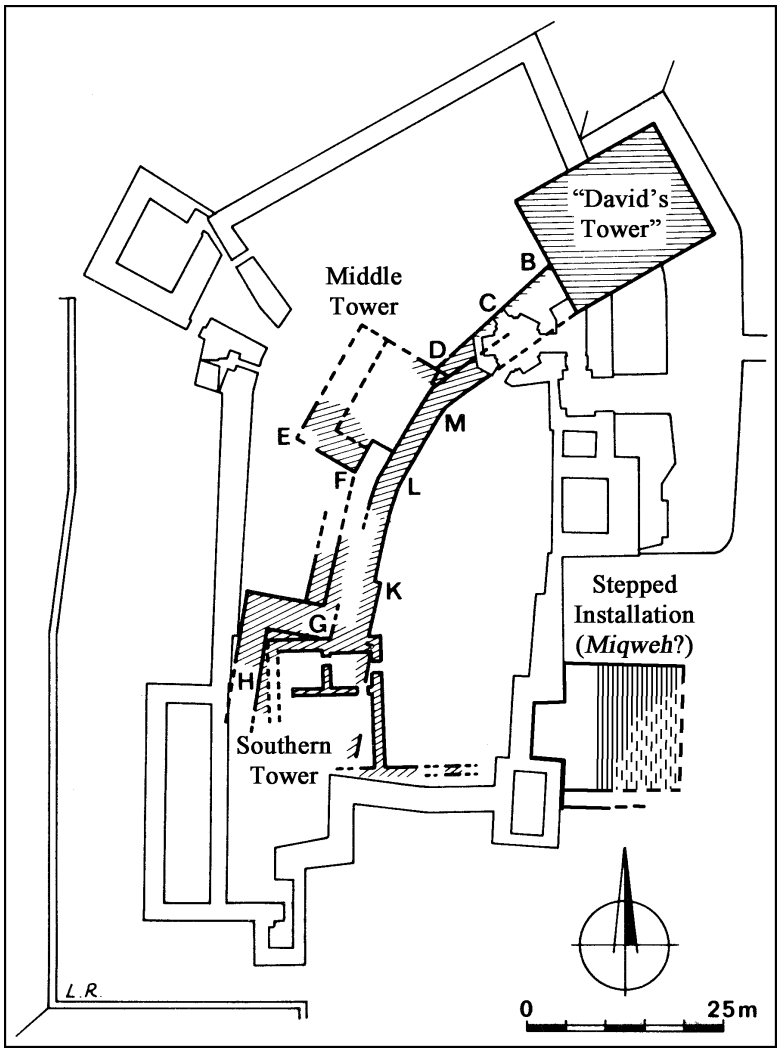

Fig. 5 : Plan of the remains of the First Wall in the courtyard of David's Citadel (based upon Geva 1992, 641).

It appears that the First Wall surrounding the south-western hill has a lengthy and varied architectural history[76]. Today it is known that the wall was first constructed at the end of the First Temple period (end of the 8th century BCE, during the time of Hezekiah). During the Hasmonean period, the wall was restored along exactly the same line, incorporating segments of remains of the

71 Avigad 1983, 65–74; Geva – Avigad 2000a; Geva – Avigad 2000b.

72 Jones 1950; Amiran – Eitan 1970; Geva 1983; Sivan – Solar 2000; and see also Shatzman 1991, 47–51.

73 Broshi – Gibson 2000.

74 Re'em 2018, 62–64.

75 Bliss – Dicky 1898. For a detailed description of the segments of fortification of the First Wall on the south-western hill, see Geva 1985. Recently, Zelinger has re-exposed one of the towers discovered by Bliss and Dickie in the southern section of the wall (Zelinger 2010).

76 For summaries, see Simons 1952, 226–281; Whitman 1993, 157; Geva 1985; Geva 2003b, 524–535.

Fig. 6 : The outer side of the Hasmonean-period First Wall in the courtyard of David's Citadel. On the right, section constructed with headers; on the left, section constructed with marginal stones and central protruding boss.

Fig. 7 : The Middle Tower in the Hasmonean-period First Wall in the courtyard of David's Citadel.

ancient fortifications. Along this line one notes several phases of repairs carried out during the Hasmonean period and afterward. Two styles are visible in the Hasmonean wall on the south-western hill, with parallels in Hellenistic military and civilian architecture elsewhere in the Land of Israel[77]. During the early phase the Hasmonean wall was constructed with trimmed square stones laid in courses of headers (**fig. 8, A**)[78] a construction technique known, for example, in the Hellenistic fortifications at Dor[79], at 'Akko[80] and at Samaria[81]. The most typical construction of the Hasmonean First Wall around the south-western hill is from the next phase, characterized by the use of ashlars with marginal dressing and protruding

77 Geva 1985; Tal 2006, 16–38; Eisenberg 2008, 72–81.

78 Geva 1985, 28–32. Sharon supports the possibility that the origin of header construction is in Phoenician Iron Age and Persian period construction techniques, given the absence of parallels in Greece (Sharon 1991, 111; and see Sharon 2009).

79 Stern 1987; Stern 2000, 204–208 fig. 136.

80 Dothan 1976.

81 Crowfoot – Kenyon 1942, 24–27.

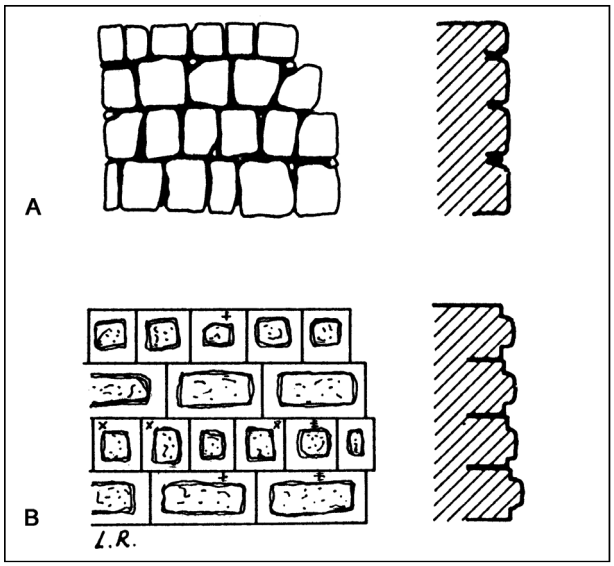

Fig. 8 : Schematic drawings of construction: A - with headers, B - with marginal stones and protruding boss.

central boss laid in alternating courses of headers and stretchers (**fig. 8, B**)[82]. This style is the outstanding one in the architecture of the First Wall, portions of which have been preserved to considerable height, as in David's Citadel[83]. Parallels for this type of construction can be found, for example, in the Hellenistic fortifications of Shaʿar ha-ʿAmakim[84] and in fortresses in the Golan[85].

Discussion of the First Wall on the south-western hill must also relate to the question of where and how it crossed the Tyropoeon Valley on its northward course from the vicinity of David's Citadel eastward to the Temple Mount. Remains of the First Wall on this side were uncovered in the northern part of the Jewish Quarter, and they continue atop the northern slope of the south-western hill, above the Transversal Valley[86]. This leads us to suppose that the wall extended directly eastward from the steep north eastern slope of the hill and crossed the Tyropoeon along the shortest line possible, roughly opposite the place where Wilson's Arch would later be constructed in the western wall of the Temple Mount. This is a dangerous segment in the line of the wall as it extends over a low-lying topographical area and creates a blockage for winter floodwaters in the valley. Construction of this segment of the wall requires finding a combined solution to opposing demands: on the one hand, a massive wall is required in this low-lying weak point on the line of the wall crossing the deep valley; on the other hand, passages to drain floodwaters had to be left at the base of the wall, though such passages made enemy penetration of the city easier[87]. The builders of the First Wall undoubtedly sought a solution to this problem. Moreover, the Low Aqueduct of the Hasmonean period apparently passed atop the wall, crossing the valley before reaching the Temple Mount[88].

82 Geva 1985, 32–34.

83 In Shatzman's opinion, the two methods of construction were in simultaneous use (Shatzman 1991, 51). Based upon the stratigraphy of the phases of construction of the fortification in the courtyard of the Citadel and in the Jewish Quarter, it is clear that the construction in courses of headers preceded construction with stones with trimmed margins laid in course of headers and stretchers (Geva – Avigad 2000a, 159–171; Geva 2003b, 529–534).

84 Segal et al. 2009 figs. 30. 35–38.

85 Maoz 2013, figs. 12–15. 36–38.

86 For summaries, see Geva 1985, 22–24; Geva 2003b, 529–532.

87 The same problem arises where the First Wall crosses the southern opening of the Tyropoeon Valley where it empties into the Kidron Valley (Maoz 1985, 48).

88 It is difficult to accept Weksler-Bdolah's proposal (Weksler-Bdolah 2011) that in Second Temple times the Low Aqueduct did not cross the Tyropoeon Valley here, but rather continued northward on a longer course, entering the Temple Mount from the northwest. The author arrived at this solution in view of the assumption that the low level of the remains of the dam in the Tyropoeon obviates the possibility that the aqueduct passed over it on its way to the Temple Mount. It should be noted that the level of the top of the remains of the dam uncovered in excavation is not necessarily its original height in Hasmonean times. It is likely that the dam was lowered as part of the changes carried out here when the Temple Mount was enlarged in Herodian times, and probably later changes as well. Onn and Weksler-Bdolah believe that the dam also functioned as bridge (Onn – Weksler-Bdolah 2010, 110–112; Weksler-Bdolah 2011, 30). Therefore, one can assume that originally, during Second Temple times, the dam was several meters higher and

In past and recent archaeological excavations conducted in this vicinity, remains of a very broad wall was found, dated to the Hasmonean period, constructed of stone faces filled with a mixture of cement and stones. It served as a dam in the valley[89]. At the time of this wall's initial discovery, at the end of the 19th century, it was proposed that it had served as the foundation of the First Wall[90]. It appears likely that it is the remains of a massive wall combining a broad dam and the First Wall that also supported the Low Aqueduct that crossed the Tyropoeon Valley, though the excavated remains do not offer definitive proof. Upon construction of the Second Wall to the north (see below), this segment of the First Wall lost some of its strategic importance.

Who Built the First Wall Around the South-Western Hill and When?

The chronological framework proposed for the construction of the First Wall on the south-western hill is during the 2nd century BCE, as became clear from the results of the excavations carried out along it during the 1970s and 80s. This date is based upon archaeological evidence and historical considerations presented below. It should be explained that the pottery finds stratigraphically associated with the wall only allow us to propose a broad chronological framework for its construction, given the limitations of pottery typology. Another obstacle is that most of the excavations were conducted outside the line of the wall, in a place where huge refuse accumulations cover its face. Comparative study of the wall's construction only allows proposal of a general date for its construction sometime during the Hellenistic period. Thus, we are lacking additional evidence in our efforts to propose a more precise date for the construction of the First Wall on the south-western hill.

In the excavations conducted in the courtyard of David's Citadel, along the outer face of the First Wall, on bedrock were found accumulations of ballista stones, sling stones and winged arrowheads of Hellenistic type[91]. It is understood that this is concrete evidence of the siege of Jerusalem in which these projectiles were fired toward the north-western corner of the First Wall. The finds are identified as evidence for the siege of Antiochus VII (Sidetes) against Jerusalem in 133 / 132 BCE, during the time of John Hyrcanus I. The Seleucid army did not succeed in penetrating the city walls and retreated only after the Hasmonean king signed his surrender (*Ios. ant. Iud.* 13, 236–248)[92]. If this identification is correct, and no evidence exists that contradicts it, it shows that during the siege Antiochus VII had already restored the wall around the south-western hill of Jerusalem. Moreover, the fortification was of the highest quality and did not disappoint when put to the test, despite the heavy artillery fired at it. The wall of Jerusalem was partially damaged during the Seleucid siege, or intentionally as part of the surrender agreement (*Ios. ant. Iud.* 13, 247), but Hyrcanus soon restored it (*1 Macc* 16, 23–24). This fortification, with the addition of towers and thickening, remained in use until the end of the Second Temple period and even later.

If we accept that the First Wall already existed in 133 / 132 BCE, it remains to attempt to clarify when it was erected. Is it possible that it was built by the Seleucids[93], or as generally accepted, was it only restored during Hasmonean times? The archaeological findings do not support the idea that the Seleucids re-fortified the south-western hill, prior to the Hasmonean

thus could have served as a dam / wall and bridge to the Temple Mount, which also supported the Low Aqueduct (Bahat 2007; Bahat 2013, 381. 389). The present bridge formed of arches, at least in large part, dates to a period later than the Second Temple period, though its precise date and phases of construction are disputed.

89 Onn – Weksler-Bdolah 2010, 110–113.

90 Hamilton 1933; and see references in Weksler-Bdolah 2011, 29 note 27.

91 Johns 1950, 130. 134–135 fig. 7, 2–4; Sivan – Solar 2000, 173–174.

92 Regarding this episode see Schürer 1973, 202–204; Stern 1980, 264–265; Bar-Kochva 2008; Barag 2009; Shatzman 2012, 32–35; Rappaport 2013, 250–252.

93 Mazar – Eshel 1998.

rebellion (contra Kenyon)[94]. This also is in contrast to all military logic, as the hill was virtually uninhabited under Seleucid rule[95]. On the other hand, findings in the City of David show that the population of the city was concentrated there during the Early Hellenistic period.

An extreme difficulty arises when we attempt to locate who among the Hasmonean rulers undertook this enormous project of restoration of the First Wall around the South-western hill. In this case, archaeology, given its limitations, is not helpful. We are left attempting to use historical reconstruction based upon analysis of the written sources describing events during that period in Jerusalem. Clearly, the proposal that follows is based upon assumptions only. The key to the discussion would appear to be the threatening presence of the Akra Citadel, whose precise location in Jerusalem remains uncertain. Based upon archaeological considerations it is clear that the citadel did not stand on the south-western hill[96].The literary description also connects it with the City of David (e.g. *1 Macc* 1, 33). The existence of the citadel in Jerusalem limited the Hasmonean hold upon the city and limited settlement activity on the south-western hill. The Seleucid garrison in the Akra would certainly not have accepted the fortification activities of its Hasmonean enemies, which would have directly endangered their control over the city and their security. *1 Macc* 4, 60 tells about Judah constructing a fortification in Jerusalem, however this probably referred to restoration of the wall surrounding the Temple. Fortifications of the Temple and the city were destroyed immediately afterwards by Lysias (*1 Macc* 6, 62), and were again damaged by Bacchides (*1 Macc* 9, 3, 54). Jonathan is also referred to among the builders of fortifications in Jerusalem (*1 Macc* 10, 10), and he even erected a high wall separating the city from the Akra (*1 Macc* 12, 36). It is difficult to understand from the sources where these construction activities were carried out—whether in the Temple precinct, in the Ophel or in the City of David itself. From the description of the events during that period, it appears that the control of the early Hasmonean rulers in Jerusalem was weak and apparently their construction activity was reduced to local fortification on a small scale aimed only at meeting pressing military needs. Their main stronghold was the Temple Mount and they focused upon safeguarding it to the best of their ability by erecting fortifications. At the same time, these rulers were engaged in clashes with the Seleucid army, in an effort to prevail against the latter's efforts to eliminate them and crush the rebellion. In addition, certainly lack of economic means, lack of construction skills and insufficient time prevented them from any large-scale fortification, such as surrounding the south-western hill[97]. In my opinion it would have been impossible for them to restore the fortifications of the south-western hill. Only with the conquest of the Akra by Simon in 141 BCE was it possible to populate the south-western hill, and only then did the need arise to fortify it. The Hasmonean rulers Simon and Hyrcanus I were aware of the danger of future Seleucid invasion aimed at once again subjecting Judaea to their authority. They believed that only an expanded Jerusalem, including the south-western hill, would be able to face the superior Seleucid war machine. The response was construction of massive fortifications on a long line surrounding the south-western hill.

Indeed, the Seleucid invasion was not long in coming. Antiochus VII besieged Jerusalem, but the First Wall met the expectations and saved the city from conquest. The probable

94 Kenyon 1974, 197–198.

95 Broshi exposed a lone tower that preceded the construction of the First Wall south of David's Citadel. In his view, it was probably erected as part of the Seleucid defences in Jerusalem, or perhaps by one of the early Hasmonean rulers (Broshi – Gibson 2000, 151). In the Jewish Quarter excavations column bases, drums and capitals of enormous columns, the date and source of which are subjects of debate (Avigad 1983, 151–165). Avi-Yonah proposed that they belong to the temple that Antiochus IV planned to erect in Jerusalem, perhaps on the south-western hill (Avi-Yonah 1976, 22); see the discussion of these finds in Reich 2003b, 271–274; Peleg-Barkat et al. 2017; Peleg-Barkat – Ben Haim 2017.

96 According to Kenyon, the Akra stood on the south-western hill (Kenyon 1974, 197–198).

97 Rappaport 2004, 86.

conclusion to be drawn is that the wall surrounding the south-western hill was built in the days of Simon or Hyrcanus I or both, between 141 and 133 / 132 BCE[98].

The Hasmonean-Period Settlement on the South-Western Hill

Only scattered and sparse remains, consisting primarily of sherds, from the Early Hellenistic period were found in excavations on the south-western hill. Avi-Yonah proposed that a temple to Zeus was constructed here by Antiochus IV[99], however this view has not been confirmed by finds here.

The remains uncovered in excavations on the South-western hill attest to the beginning of settlement here only since the time of Hasmonean rule[100]. Early in this period, the new residential quarter was surrounded by the First Wall. These are the remains of the early Second Temple period settlement layer that accumulated upon remains from the end of the First Temple period[101]. The finds show that between these two periods there was no settlement on the south-western hill[102].

Settlement from the 2nd century BCE is characterized by poorly built remains. Most of the buildings are essentially terrace walls, some of which may also represent boundaries between plots of land. There are a few cisterns coated with the light-coloured plaster typical of the Hellenistic period[103]. Occasionally, remains of this period consist of accumulations of pottery[104]. Also found scattered over the hill are a few *yhd* and yršlm seal impressions and stamped handles of imported Hellenistic amphorae (see above). We learn from this that at first this settlement was agricultural in nature, sparse and unplanned, developing next to agricultural plots. It is likely, though impossible to prove archaeologically, that settlement of the south-western hill began in the eastern portion, adjacent to the City of David and the Temple Mount, and later expanded westward over the entire hill. Real encouragement to populate the hill came when the hill was surrounded by the First Wall.

The various finds focus, as stated, upon the Hasmonean period as the beginning of settlement on the south-western hill[105]. Among the local ceramic vessels there are also a few imported vessels that are highly significant for more precise dating of the remains[106]. Glass vessels play an important role in our attempt to establish the beginning of actual settlement on the south-western hill. The earliest glass vessels from the Jewish Quarter are Hellenistic mould-made bowl types that were not in use before the mid-2nd century BCE[107]. In contrast to the abundance of such glass vessels, up to now only one isolated example of a more ancient

98 And see Lurie's opposing view, based upon his understanding of descriptions in historical sources, that the foundation of the First Wall was laid by Jonathan (Lurie 1982).

99 Avi-Yonah 1971, 169.

100 For a summary, see Geva 2003b, 526–534.

101 Geva 2003b, 524–529.

102 Avigad 1983, 61–63; Geva 2003b, 524–526.

103 Geva 2006, 14–24; Geva 2014b, 17.

104 Geva 2003a.

105 During the Hasmonean period, unlike the preceding Hellenistic period, the number of sites around Jerusalem increases considerably—140 vs. 40 (Kloner 2003, 30*–32* with Table 3 on p. 19*).

106 See for example, Geva 2003a. There is a problem in precisely dating the pottery and through them, dating remains to the Hasmonean period. Pottery typology for the Second Temple period is not, in most cases, precise enough to provide an exact date for finds within the 2nd century BCE or within the 1st century CE. Consequently, there is often a problem dating finds to the transition between the Early Hellenistic period and the beginning of the Hasmonean period; this is also true as regards the transition between the end of the Hasmonean period and the Herodian period.

107 Gorin-Rosen 2003; Gorin-Rosen 2006; Israeli – Katznelson 2006, 421; Tal 2006, 287–289.

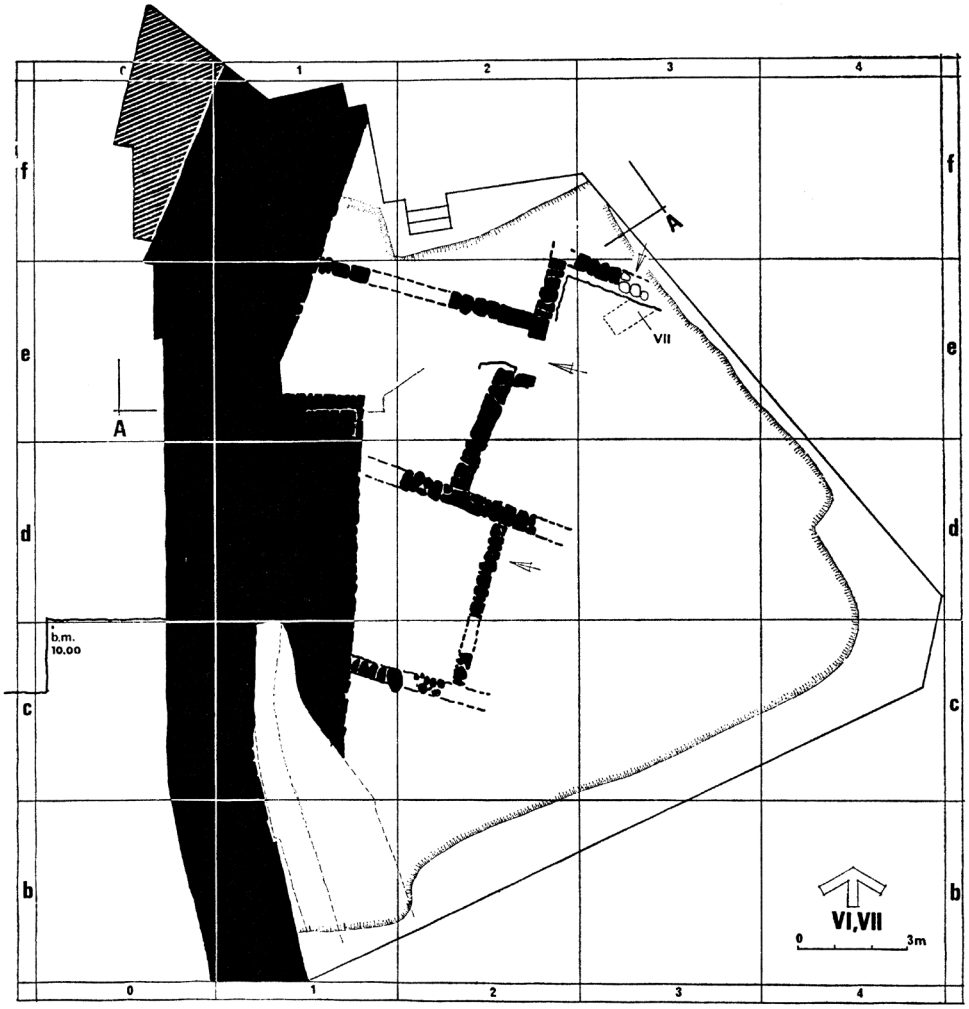

Fig. 9 : Plan of the Hasmonean-period remains in David's Citadel (Amiran – Eitan 1970, fig. 1).

Hellenistic core-formed vessel has been reported[108]. Hellenistic coins were also found on the south-western hill, some Ptolemaic, but most Seleucid, however since their use continued during the Hasmonean period (and until the 1st century CE), they do not help to establish the precise date of the beginning of settlement on the south-western hill during the Second Temple period[109].

Expansion of the settled and fortified area of Jerusalem to the south-western hill is connected with the national-religious awakening that accompanied the Hasmonean struggle for political independence, that culminated in the liberation of Jerusalem and reinstitution of the Temple cult. Settlement on the south-western hill was mainly a private initiative, undoubtedly actively encourage by the Hasmonean leadership. They even transferred Jewish refugees here from cities where they faced danger from their gentile neighbours (*1 Macc* 6, 53)[110], and some certainly settled on the south-western hill. The urban development that Jerusalem underwent as the capital of the Hasmonean kingdom drew inhabitants of Judaea, who found economic opportunities in the military, administration, and the Temple. These were the residents who

108 Gorin-Rosen 2003, no. G 20.

109 Ariel 1982.

110 For an interpretation of this passage, see Rappaport 2004.

settled on the south-western hill. Settlement on the hill served the political and military objectives of the Hasmoneans: on the one hand, Jerusalem returned to its dimensions under the Davidic dynasty, to which they saw themselves as successors; while on the other, only a significantly populated Jerusalem surrounded by a wall that included the south-western hill would be able to withstand siege. Thus, at the beginning of their reign, circumstances were created that required fortified defence of the south-western hill.

Fig. 10 : Hasmonean built remains in the courtyard of David's Citadel with blocked opening (Amiran – Eitan 1970, pl. 5, B).

The archaeological evidence for settlement on the south-western hill increases in the first half of the 1st century BCE. In effect, finds from this period have been encountered over the entire area of the hill, including segments of built remains, left fragmentary as a result of later construction. Toward the end of the Hasmonean period, settlement increased in the area of today's Jewish Quarter, organically developing into a dense residential zone with no signs of central planning[111]. This construction probably characterizes the entire area of the South-western hill, but since remains of this period are very fragmentary, this possibility remains likely but unproven. A planned and luxurious residential quarter, the Upper City, was constructed on the hill only during the Herodian period.

The Hasmonean Palace

The existence of the palace of the Hasmonean kings in Jerusalem is known from the description of Josephus. Scholars have understood that it stood in the north-eastern part of the south-western hill, since from it one could observe the goings on upon the Temple Mount (*Ios. ant. Iud.* 20, 189–195; *Ios. bell. Iud.* 1, 143). Archaeological research has failed to discover remains of the palace and as such, its precise location remains unknown.

In excavations in the courtyard of David's Citadel, impressively planned and constructed built remains dating to the Hasmonean period have been found[112]. These are remains of a structure consisting of several rooms abutting the inner tower in the First Wall (**fig. 9**). The building was well preserved, in places to a height of 3 m., including an entrance with a stone lintel that was blocked by construction when the podium of Herod's palace was built over it (**fig. 10**). This area is slightly higher topographically than the rest of the south-western hill and thus of strategic importance in defending the north-western corner of the First Wall. At the same time, that corner suffers from topographical weakness in the absence of a deep valley to protect it from the north. This location offers control over the south-western hill, the entire area of the city and even offers a view onto the Temple Mount (*Ios. ant. Iud.* 20, 189–195). Here Herod constructed his fortified palace and upon its remains, a long series of citadels were later constructed to defend and control Jerusalem. It is possible that remains of this construction mentioned above are part of the Hasmonean citadel (fortified palace?) that was erected in the north-eastern corner of the hill, protected by the First Wall. The Hasmoneans were aware of the topographical-strategic advantage here, as was Herod and later generations of the city's rulers. A further advantage was that it was located at the edge of the city, affording direct entry to and exit from the citadel/palace, without having to pass through the city. Indeed, a

111 Geva 2014b.

112 Amiran – Eitan 1970, 11–12.

lengthy series of repairs carried out in this portion of the First Wall, including the addition of towers and thickening of the fortification, attest to the considerable attention the Hasmonean rulers paid to strengthening the north-western corner of the wall that protected Jerusalem and the fortified compound that probably stood here[113]. In the eastern moat of David's Citadel was found a large quarried installation to which a wide staircase descended from the east (see **fig. 5**). The nature of the installation is unclear (a *mikveh*?), and its date according to the excavators—who proposed a possible relation to the Hasmonean palace[114]. The installation is quarried into a significantly lower level than the high podium of Herod's palace, remains of which were uncovered in the courtyard of the Citadel to the east[115]. This is another factor that allows us to support the view of Sivan and Solar[116] that the installation was related to the royal construction complex thought to have been constructed here by the Hasmoneans. On the other hand, Re'em, who excavated in the Qishle to the south of David's Citadel, argues that this water installation was connected to Herod's palace[117].

Summary

The aim of this article was to discuss some aspects of the archaeological finds from the Hasmonean period in Jerusalem and their implications for our understanding of the developments and topography of the city during that period. Despite the known limitations upon excavation in Jerusalem, sufficient finds have accumulated to allow us to now propose a relatively reliable summary of the state of archaeological research on the city relating to the Hasmonean period.

The typological breakdown of the yhd seal impressions and their distribution show that during the Early Hellenistic period Jerusalem was overshadowed by Ramat Rachel, which continued to serve as the main administrative and economic centre in Judaea, even after the Persian period. This changed with the foundation of the Hasmonean state. At that time, the importance of Jerusalem as a centre rose while Ramat Rachel faded into insignificance. In terms of the distribution and number of *yhd* and *yršlm* seal impressions in Paleo-Hebrew letters and Rhodian stamped amphorae from Jerusalem, it appears that during the early Hasmonean period (the second half of the 2nd century BCE), Jerusalem's political and economic centres were still in the City of David, as settlement of the south-western hill had only just started.

A clear difference is apparent between the architecture of the First Wall in the City of David and the wall surrounding the south-western hill. This is related to chronology: the segment of the wall in the City of David was constructed during the Hellenistic period, in the 2nd century BCE, and I raised the possibility that it may possibly be identified with the remains of the fortifications erected by the Seleucids in Jerusalem as part of their renewed preparations in the city at the eve of and during the early part of the Hasmonean rebellion. It is even possible that this was part of the eastern fortification of the Akra that extended over the entire City of David or only its high northern portion. On the other hand, the wall around the south-western hill was erected by the Hasmonean kings Simon and / or Hyrcanus I. I believe that this wall was built following the conquest of the Akra Fortress (141 BCE) and before Antiochus VII's siege of Jerusalem (133 / 132 BCE). Having learned a lesson from the Seleucid siege, during the Hasmonean period, a portion of the wall at David's Citadel underwent repairs aimed at strengthening this weak point in its line. The construction of the First Wall encompassing the

113 The south-western hill was already settled by the end of the First Temple period and therefore, one cannot rule out the presence of a fortified structure on the north-western corner of the hill during this period (Geva 1979). Barkay raised the possibility that the Hasmonean palace on the south-western hill replaced the palace of the last kings of Judah (Barkay 1995, 234).

114 Sivan – Solar 2000, 175–176.

115 Amiran – Eitan 1970, 13–15.

116 Sivan – Solar 2000, 176.

117 Re'em 2018, 242.

south-western hill was a strategic necessity for the Hasmoneans, essential for the protection of their capital. Seeing themselves as the inheritors and perpetuators of the House of David, it was a political statement, as Jerusalem at the end of the monarchic period extended over the south-western hill, which was fortified by a wall[118].

Remains of the impressive construction found in David's Citadel within the city wall buried beneath the podium of Herod's palace, perhaps belong to the Hasmonean citadel (a fortified palace?) that stood here. This was the first in a long series of citadels erected here in later generations, beginning with Herod's fortified palace, from the northern side of which protruded three towers. Support for this may be found in the numerous fortresses and fortified palaces built by the Hasmoneans in Judaea. This was a period of political and military upheaval and the Hasmoneans attempted to survive and secure their state. In light of these considerations, they invested effort and money in this field and less in urban development[119].

Very few and fragmentary remains from the Hasmonean period survived in the City of David[120] and in the Ophel[121], a situation that does not allow us to propose a more accurate reconstruction of the appearance of these urban areas during the period in question. The paucity of Hasmonean finds in the City of David and Ophel may be attributed to the destruction that they suffered from later construction. However, it is probable that the elimination of the Akra and the foreigners and Hellenizers from Jerusalem left, for a certain time, a hiatus in settlement. During the Hasmonean period the City of David and the Ophel were slowly and sparsely populated and the focus of urban construction became the south-western hill, which was once more surrounded by a wall.

The finds on the south-western hill attest to the beginning of urban settlement there only from the time of the establishment of the Hasmonean kingdom. Few finds date to the beginning of the Hasmonean period (second half of the 2nd century BCE), while most of the finds are from the latter part of the Hasmonean period (the first half of the 1st century BCE). During most of the Hasmonean period there was an unplanned residential neighbourhood here, with few buildings and sparsely populated. This made it possible to operate industrial installations such as a glass production workshop, evidence for which was found in the Jewish Quarter[122]. Transition of the political and economic heart of Jerusalem from the City of David to the south-western hill was completed only in the Herodian period, and mainly with the construction of the Upper City in lavish Roman style. Hasmonean Jerusalem underwent a slow process of urban consolidation. Supporting evidence for the relatively small population of the Hasmonean city comes from the extensive necropoleis of the Second Temple period surrounding Jerusalem. Very few of the tombs can be identified unequivocally as belonging to the Hasmonean period; most date to the end of the period[123]. The population of Hasmonean Jerusalem is estimated at approximately 8,000[124].

118 Barkay 1995.

119 Rappaport 2004, 86.

120 Shiloh 1984, 29–31; De Groot 2004, 68–69; De Groot 2012, 179–183; Reich 2011, 321–324; Mazar 2009b, 80–86.

121 Ben-Dov 1985, 57–72.

122 Israeli – Katznelson 2006. See Grossmark's article on ecological rules in Jerusalem during the Second Temple period (Grossmark 2006), which were apparently instated against the background of the thickening of settlement in the city.

123 Kloner – Zissu 2007, 71–72. This study lacks a separate discussion on the chronological division of the tombs, so that it is frequently unclear if the few tombs of the Hasmonean period are early or late. The typical pottery of the tombs presented in the book (Kloner – Zissu 2007, 123–129 figs. 38–43) date to the 1st century BCE and primarily to the 1st century CE. To the best of my understanding and my experience in publishing Second Temple period pottery from the Jewish Quarter, no 2nd century BCE vessels were found in the tombs.

124 Geva 2014a, 143–144.

In summary, the finds from the Hasmonean period are, disappointingly, few and fragmentary. Rappaport aptly summarized this situation: »It appears that the fruits of archaeology for interpreting *1 Maccabees* are few, though we do not know what remains to be uncovered«[125]. While he is referring to the beginning of the Hasmonean period, the statement can be applied to all or most of the Hasmonean period.

Appendix 1: Does the Second Wall Date to the Hasmonean Period?

The line of the Second Wall and the date of its construction are among the complex and yet unresolved problems in the study of Jerusalem's Second-Temple-period fortifications (**fig. 11**). The Second Wall surrounded a certain portion of the Tyropoeon Valley and its slopes north of the First Wall. It protected Jerusalem from the north until the construction of the Third Wall north of it during the time of Agrippa I between the years 41–44 CE. Several factors resulted in the lack of clarity regarding the line of the Second Wall and the date of its construction. *Josephus'* description of it is brief and lacking detail: it began at the Gennath Gate in the northern section of the First Wall and ended at the Antonia Fortress attached to the north-western corner of the Temple Mount precinct (*Ios. bell. Iud.* 5, 146). Only 14 towers were constructed along it (*Ios. bell. Iud.* 5, 158). From the descriptions we learn that the line of the wall was very short. In contrast to the description of the First and Third Walls, whose builders *Josephus* names explicitly, this information is lacking for the Second Wall. No clear remains of this wall have been found to date and the location of the Gennath Gate is unknown. We shall not deal here with the various ideas put forth concerning the line of the Second Wall—whether long or short—nor with the various proposals for where the wall extends northward from the line of the First Wall, but only with the question of the date of its construction[126].

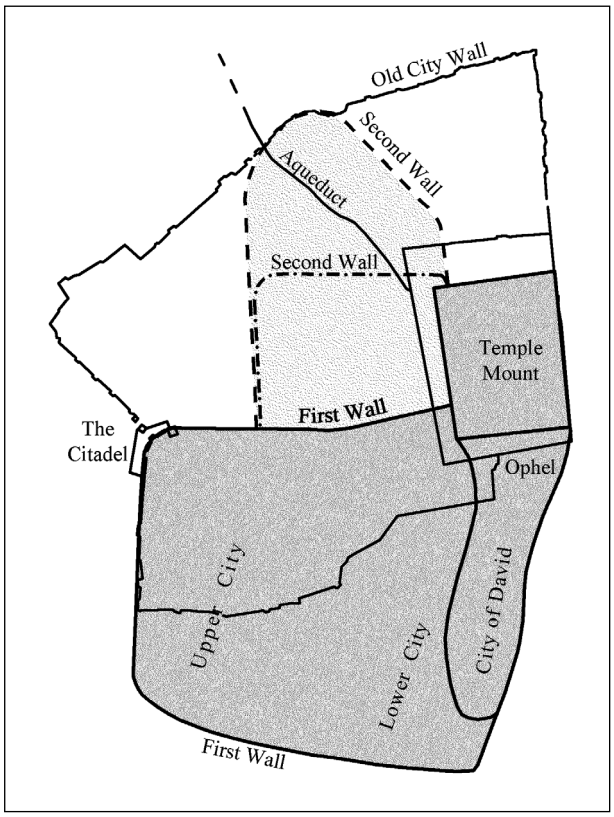

Fig. 11 : Map of Jerusalem at the end of the Hasmonean period with two possible lines for the Second Wall.

The scholars debate the question of whether the Second Wall was constructed in Hasmonean times or should be attributed to Herod the Great. Some understand from the description of the conquest of Jerusalem by Herod in 37 BCE that Jerusalem was already heavily protected by more than a single wall (*Ios. ant. Iud.* 14, 470–476; *Ios. bell. Iud.* 1, 347–353). On the other hand, it is equally probable that the failure to mention its construction among Herod's building projects means that it was not built by him. One might expect that such a major project would be described among his other

125 Rappaport 2004, 88.

126 For a summary of the presumed remains of the Second Wall and the various views on its line and date of construction, see Simons 1952, 282–343; Avi-Yonah 1956, 311–312; Avi-Yonah 1968; Geva 1993, 736; Whitman 1993, 181–184). Regarding possible remains of the Second Wall, see for example, Amiran's view concerning the antiquity of the wall, going back to the First Temple period (Amiran 1971), as well as Kloner's proposal (Kloner 1999). Today it is clear that the remains of the wall at the base of the Damascus Gate from the period of Aelia Capitolina, attributed by a few scholars to the Second Wall, are in fact the foundation of the gate itself (Kloner 2009).

construction projects in Jerusalem. Some scholars support the possibility that the Second Wall was constructed by the Hasmoneans, including Avi-Yonah[127], Shatzman[128], Barkay[129] and Kloner[130], and some support the possibility that it was built by Herod, such as Lux[131], Kenyon[132], Schein[133], Maoz[134], Tushingham[135], and Bahat[136]. Whitman's view that the wall constructed (or restored) by Antipater (*Ios. bell. Iud.* 1, 201) was the Second Wall is an exceptional view[137].

Based on circumstantial evidence, the view that the Second Wall was constructed at the end of the Hasmonean period seems probable. From the north-western corner of the Temple Mount precinct, the quarried Hasmonean aqueduct extended northward. It carried water from north to south toward the Temple Mount and perhaps to the Birah Fortress that protected it from the north[138]. In a survey of finds uncovered in the few excavations conducted in the upper part of the Tyropoeon Valley, north of the First Wall, it was found that pottery vessels dated to Hasmonean times, the 1st century BCE[139]. We learn from this that by the end of the Hasmonean period a certain amount of settlement occurred in the upper Tyropoeon, north of the First Wall. The small number of finds makes it difficult to establish the nature of this settlement. The main markets of Jerusalem were probably located here. The aqueduct here would have required permanent presence to protect and maintain it. The Second Wall thus was probably constructed at the end of Hasmonean rule, among other reasons, to keep the aqueduct within the fortified area of the city. Rabbinic literature may contain evidence supporting this view[140].

Appendix 2: A Note on Imported Fine Wares[141]

There is unambiguous archaeological evidence that the importation of pottery vessels to Jerusalem from several sources outside Judaea increased during the 2nd century BCE. Published finds of 2nd century BCE pottery at the Givati Parking Lot site (Area M1) contain, according to Sandhaus, a relatively large number of imported vessels, mainly various types of bowls and plates[142]. This is probably a general impression of the excavators or an impression given by the manner of publication, in which there is a preference for presentation of imported wares disproportionate with the number of local wares. Another possibility is that this is a local phenomenon that should be considered in light of the relatively large number of Rhodian amphora stamps found there, with the mid-2nd century cessation date of these imports related to the siege of the Akra by Jonathan[143]. Of particular interest is the import of fish plates,

127 Avi-Yonah 1968, 123.

128 Shatzman 1991, 51. 218–220 and note 5.

129 Barkay 1995, 234.

130 Kloner 1999.

131 Lux 1972, 200.

132 Kenyon 1974, 234.

133 Schein 1981, 26.

134 Maoz 1985, 51–53.

135 Tushingham 1978, 186–188.

136 Bahat 2008, 126.

137 Whitman 1993, 184.

138 Bahat 2013, 273–285. 303–328; Bahat 2015, 14–15. Even if it is earlier in date and perhaps even quarried in First Temple times (Meshel 2000), it is clear that it was also in use during the Hasmonean period (for a summary of views, see Weksler-Bdolah 2011, 38–43).

139 Geva 2011.

140 Grossberg 2008.

141 I thank Renate Rosenthal-Heginbottom for discussing the subject with me.

142 Sandhaus 2013, 84.

143 Ariel 2013, 327–328.

assigned to Attic workshops[144]. Retrieved from the upper and lower floors of a 2nd century BCE structure (Stratum VIII), the upper floor dated to the very end of the 2nd century[145]. Taking into consideration that fish plates were rare in Athens after 175 BCE, while at the same time the shape continued to be popular in the eastern Mediterranean throughout the 2nd century[146], the context evidence of Stratum VIII needs a new assessment. It is most likely that the Attic tableware is residual and should be correlated with the imports of Rhodian amphoras for the Seleucid garrison[147].

In Area E in the City of David few imports are recorded. They comprise imported unguentaria deposited in cist graves, probably of Seleucid soldiers[148], and sporadic imports lacking stratigraphic context[149]. Two platters of the ›Ivy Platter‹ Group, another group of tableware in West Slope Technique besides the products of Athens and Pergamon, belong to the Plate Type 2 with the grooved knob rim[150]. The ›Ivy Platter‹ Group is widespread in the Levant; the unidentified place of manufacture is looked for somewhere along the southern coast of Asia Minor or the Syrian-Lebanese coast, with southern Phoenicia a probable location. Rotroff suggested a mainly 3rd century BCE date, with finds in 2nd century BCE contexts probably residual[151]. However, the excavations at Dora indicate a continuation until around the mid-2nd century[152]. This date also applies to the amphora fragment in West Slope Technique, which came to light in Area W of the south-western hill[153]. Based on the external dating evidence the tableware of Attic origin and in West Slope Technique seems to imply that it was imported for the use of the Seleucid administration in the time-span between the foundation of the polis and the construction of the Akra ca. 170–160 BCE and the Hasmonean conquest in 141 BCE.

Several shapes and wares, popular in the late Hellenistic koine like Knidian cups and moldmade bowls, Eastern Sigillata ware and Phoenician Semi Fine ware, were occasionally imported to Jerusalem in Hasmonean times; they could have been the personal possessions of traveling foreigners and itinerant traders and random small-scale private acquisitions[154].

144 Sandhaus 2013, 94 – 96 figs. 4.3–4. 4.5:8–9. 4.8:31.

145 Sandhaus 2013, 98.

146 Rotroff 1997, 148.

147 Rosenthal-Heginbottom 2017, 193–194.

148 Berlin 2012, 16. 21 fig. 2.4:2–4.

149 De Groot – Bernick-Greenberg 2012, pls. 9.1–9.3.

150 Rotroff 2002, fig. 3, 5–7; De Groot – Bernick-Greenberg 2012, fig. 9.1:1–2.

151 Rotroff 2002, 101.

152 See for example Area C2, Phase 3(a?), L4520 dated to the first half of the 2nd century BCE, Guz-Zilberstein 1995, 333 and fig. 6.60:2.

153 Geva 2003, 147 photo 5.29.

154 Rosenthal-Heginbottom 2014, 383–389. 395–397.

Bibliography

Amiran 1971	R. Amiran, The First and the Second Walls of Jerusalem Reconsidered in Light of the New Wall, *IEJ* 21, 1971, 166–167
Amiran – Eitan 1970	R. Amiran – A. Eitan, Excavations in the Courtyard of the Citadel, Jerusalem, 1968–1969 (Preliminary Report), *IEJ* 20, 1970, 9–17
Ariel 1982	D. T. Ariel, A Survey of Coin Finds in Jerusalem (until the End of the Byzantine Period), LA 32, 1982, 273–326
Ariel 1990	D. T. Ariel, Imported Stamped Amphora Handles, in: D. T. Ariel, Excavations at the City of David 1978–1985 Directed by Yigal Shiloh 2. Imported Stamped Amphora Handles, Coins, Worked Bones and Ivory, and Glass, Qedem 30 (Jerusalem 1990) 13–98
Ariel 2000	D. T. Ariel, Imported Greek Stamped Amphora Handles, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 1. Architecture and Stratigraphy, Areas A, W and X-2. Final Report (Jerusalem 2000) 267–283
Ariel 2013	D. T. Ariel, The Stamped Amphora Handles, in: Ben-Ami 2013, 327–337
Ariel – Shoham 2000	D. T. Ariel – Y. Shoham, Locally Stamped Handles and Associated Body Fragments of the Persian and Hellenistic Periods, in: D. T. Ariel (ed.), Excavations at the City of David 1978–1985 Directed by Yigal Shiloh 6. Inscriptions, Qedem 41 (Jerusalem 2000) 137–171
Avigad 1974	N. Avigad, More Evidence on the Judean Post-Exilic Stamps, *IEJ* 24, 1974, 50–58
Avigad 1983	N. Avigad, Discovering Jerusalem (Nashville TN 1983)
Avi-Yonah 1956	M. Avi-Yonah, Archaeology and Topography, in: M. Avi-Yonah (ed.), Sepher Yerushalayim (The Book of Jerusalem). Jerusalem, Its Natural Conditions, History and Development from the Origins to the Present Day (Jerusalem 1956) 305–319 (Hebrew)
Avi-Yonah 1968	M. Avi-Yonah, The Third and the Second Walls of Jerusalem, *IEJ* 18, 1968, 98–125
Avi-Yonah 1971	M. Avi-Yonah, The Newly-Found Wall of Jerusalem and Its Topographical Significance, *IEJ* 21, 1971, 168–169
Avi-Yonah 1976	M. Avi-Yonah, Excavations in Jerusalem: Review and Evaluations, in: Y. Yadin (ed.), Jerusalem Revealed (Jerusalem 1976) 21–24
Bahat 1997	D. Bahat, Jerusalem, in: E. M. Meyers (ed.), The Oxford Encyclopedia of Archaeology in the Near East 3 (New York 1997) 224–238
Bahat 1998	D. Bahat, City of David Excavations 1998, in: E. Baruch (ed.), New Studies on Jerusalem 4 (Ramat Gan 1998) 22–26 (Hebrew)
Bahat 1999	D. Bahat, The Illustrated Atlas of Jerusalem (New York 1999)
Bahat 2000	D. Bahat, The Western Wall Tunnels, in: H. Geva (ed.), Ancient Jerusalem Revealed, Reprinted and Expanded Edition (Jerusalem 2000) 177–190
Bahat 2007	D. Bahat, New Discoveries in the Western Wall Tunnels, *Qadmoniot* 133, 2007, 41–47 (Hebrew)
Bahat 2008	D. Bahat, Jerusalem between the Hasmoneans and Herod the Great, in: R. Arav (ed.), Cities through the Looking Glass, Essays on the History and Archaeology of Biblical Urbanism (Winona Lake IN 2008) 117–128
Bahat 2013	D. Bahat, The Jerusalem Western Wall Tunnel (Jerusalem 2013)
Bahat 2015	D. Bahat, The Fortress Called Baris that Became the Antonia? *Eretz-Israel* 31, 2015, 12–19 (Hebrew with English Summary, 182*–183*)

Barag 2009	D. Barag, Antiochos VII Sidetes at Dor and Jerusalem, in: J. Geiger – H. M. Cotton – G. D. Stiebel (eds.), Israel's Land. Papers Presented to Israel Shatzman on His Jubilee (Raanana 2009) 75–83 (Hebrew)
Barkay 1995	G. Barkay, Yerushalayim shel ymey beyt hashmonay kehishtakfut shel ha'ir miyemey david, in: D. Amit – H. Eshel (eds.), Yemey beyt hashmonay (Idan 19) (Jerusalem 1995) 231–238 (Hebrew)
Barkay 2008	G. Barkay, The ›City of David‹, in: E. Meiron (ed.), City of David. Studies of Ancient Jerusalem 3 (Jerusalem 2008) 43–59 (Hebrew)
Bar-Kochva 1980	B. Bar-Kochva, The Battles of the Hasmoneans. The Times of Judas Maccabaeus (Jerusalem 1980) (Hebrew)
Bar-Kochva 2008	B. Bar-Kochva, Jerusalem and its Surroundings in the Seleucid Work from the Beginning of the Hasmonaean State, *Cathedra* 128, 2008, 5–18 (Hebrew)
Ben Ami 2013	D. Ben Ami, Jerusalem. Excavations in the Tyropoeon Valley (Giv'ati Parking Lot) 1, *IAA Report* 52 (Jerusalem 2013)
Ben Ami – Tchekhanovets 2015	D. Ben Ami – Y. Tchekhanovets, The Gaps Close – The Late Hellenistic Period in the City of David, *Eretz-Israel* 31, 2015, 30–37 (Hebrew with English Summary, 183*)
Ben Ami – Tchekhanovets 2016	D. Ben Ami – Y. Tchekhanovets, »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), in: E. Meiron (ed.), City of David. Studies of Ancient Jerusalem 11 (Jerusalem 2016) 17*–27*
Ben-Dov 1981	M. Ben-Dov, The Seleucid AKRA – South of the Temple, *Cathedra* 18, 1981, 22–35 (Hebrew)
Ben-Dov 1985	M. Ben-Dov, In the Shadow of the Temple. The Discovery of Ancient Jerusalem (Jerusalem 1985)
Berlin 2012	A. M. Berlin, The Pottery of Strata 8–7 (The Hellenistic Period), in: A. De Groot – H. Bernik-Greenberg, Excavations at the City of David 1978–1985 Directed by Yigal Shiloh 7B. Area E: The Finds, Qedem 54 (Jerusalem 2012) 5–31
Bliss – Dickie 1898	F. J. Bliss – A. C. Dickie, Excavations at Jerusalem 1894–1897 (London 1898)
Bocher 2016	E. Bocher, Yrslm Stamp Impressions, in: O. Lipschitz – Y. Gadot – L. Freud, Ramat Rahel 3. Final Publication of Yohanan Aharoni's Excavations (1954, 1959–1962) (Tel Aviv 2016) 447–457
Bocher – Lipschitz 2013	E. Bocher – O. Lipschitz, The yršlm Stamp Impressions on Jar Handles: Distribution, Chronology, Iconography and Function, *TelAvivJA* 40, 2016, 99–116
Broshi – Gibson 2000	M. Broshi – S. Gibson, Excavations along the Western and Southern Walls of the Old City of Jerusalem, in: H. Geva (ed.), Ancient Jerusalem Revealed, Reprinted and Expanded Edition (Jerusalem 2000) 147–155
Cahill 2003	J. M. Cahill, Jerusalem at the Time of the United Monarchy, the Archaeological Evidence, in: A. G. Vaughn – A. E. Killebrew (eds.), Jerusalem in the Bible and Archaeology, the First Temple Period (Atlanta GA 2003) 13–80
Crowfoot – Fitzgerald 1929	J. W. Crowfoot – G. M. Fitzgerald, Excavations in the Tyropoeon Valley, Jerusalem 1927, Palestine Exploration Fund. Annual 5 (London 1929)
Crowfoot et al. 1942	J. W. Crowfoot – K. M. Kenyon – E. L. Sukenik, The Buildings at Samaria, Samaria-Sebaste. Reports of Work of the Joint Expedition in 1931–1933 and of the British Expedition in 1935, 1 (London 1942)
De Groot 2004	A. De Groot, Jerusalem in the Early Hellenistic Period, in: E. Baruch – A. Faust (eds.), New Studies on Jerusalem 10 (Ramat Gan 2004) 67–69 (Hebrew with English Summary, 49*–50*)

De Groot 2012	A. De Groot, Discussion and Conclusions, in: A. De Groot – H. Bernick-Greenberg (eds.), Excavations at the City of David 1978–1985 Directed by Yigal Shiloh 7 A. Area E: Stratigraphy and Architecture, Qedem 53 (Jerusalem 2012) 141–184
De Groot – Bernick-Greenberg 2012	A. De Groot – H. Bernick-Greenberg, Miscellaneous Additional Pottery, in: A. De Groot – H. Bernick-Greenberg, Excavations at the City of David 1978–1985 Directed by Yigal Shiloh 7 B. Area E: The Finds, Qedem 54 (Jerusalem 2012) 331–344
Dequeker 1985	L. Dequeker, The City of David and the Seleucid Akra, in: E. Lipinski (ed.), The Land of Israel: Cross-roads of Civilizations, Proceedings of the Conference Held in Brussels from the 3rd to the 5th of December 1984 to Mark the Twenty-Fifth Anniversary of the Institute of Archaeology Queen Elisabeth of Belgium at the Hebrew University of Jerusalem, Orientalia Lovaniensia Analecta 19 (Leuven 1985) 193–210
Dothan 1976	M. Dothan, The Fortifications of Ptolemais, *Qadmoniot* 34-35, 1976, 71–74 (Hebrew)
Eisenberg 2008	M. Eisenberg, Military Architecture in the Region of the Decapolis during the Hellenistic and Roman Periods. Thesis Submitted for the Degree Doctor of Philosophy, University of Haifa (Haifa 2008) (Hebrew)
Finkelstein 2008	I. Finkelstein, Jerusalem in the Persian (and Early Hellenistic) Period and the Wall of Nehemiah, Journal for the Study of the Old Testament 32, 2008, 501–520
Finkielsztejn 1999	G. Finkielsztejn, Hellenistic Jerusalem: The Evidence of the Rhodian Amphora Stamps, in: A. Faust – E. Baruch (eds.), New Studies on Jerusalem 5. Proceedings of the Fifth Conference December 23rd 1999 (Ramat Gan 1999) 21*–36*
Gera 1998	D. Gera, Judea and the Mediterranean Politics, 219 to 161 B.C.E. (Leiden 1998)
Geva 1979	H. Geva, The Western Boundary of Jerusalem at the End of the Monarchy, *IEJ* 29, 1979, 84–91
Geva 1983	H. Geva, Excavations in the Citadel of Jerusalem, 1979–1980. Preliminary Report, *IEJ* 33, 1983, 55–71
Geva 1985	H. Geva, The ›First Wall‹ of Jerusalem during the Second Temple Period – An Architectural-Chronological Note, *Eretz-Israel* 18, 1985, 21–39 (Hebrew with English Summary, 65*–66*)
Geva 1993	H. Geva, Jerusalem, The Second Temple Period, in: E. Stern (ed.), The New Encyclopedia of Archaeological Excavations in the Holy Land (Jerusalem 1993) 717–747
Geva 2000	H. Geva, Twenty-five Years of Excavations in Jerusalem, 1968–1993: Achievements and Evaluation, in: H. Geva (ed.), Ancient Jerusalem Revealed, Reprinted and Expanded Edition (Jerusalem 2000) 1–28
Geva 2003a	H. Geva, Hellenistic Pottery from Areas W and X-2, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 2. The Finds from Areas A, W and X-2. Final Report (Jerusalem 2003) 113–175
Geva 2003b	H. Geva, Summary and Discussion of Findings from Areas A, W and X-2, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad 1969–1982, 2. The Finds from Areas A, W and X-2. Final Report (Jerusalem 2003) 501–552
Geva 2006	H. Geva, Stratigraphy and Architecture, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 3. Area E and Other Studies. Final Report (Jerusalem 2006) 1–78
Geva 2007	H. Geva, A Chronological Reevaluation of Yehud Stamp Impressions in Paleo-Hebrew Script, Based on Finds from Excavations in the Jewish Quarter of the Old City of Jerusalem, *TelAvivJA* 34, 2007, 92–103

Geva 2011	H. Geva, On the ›New City‹ of the Second Temple Period Jerusalem: The Archaeological Evidence, in: K. Galor – G. Avni (eds.), Unearthing Jerusalem. 150 Years of Archaeological Research in the Holy City (Winona Lake IN 2011) 299–312
Geva 2012	H. Geva, Remarks on the Archaeology of Jerusalem in the Persian Period, in: D. Amit – G. D. Stiebel – O. Peleg-Barkat – D. Ben-Ami (eds.), New Studies in the Archaeology of Jerusalem and Its Region 6 (Jerusalem 2012) 66–79 (Hebrew)
Geva 2014a	H. Geva, Jerusalem's Population in Antiquity: A Minimalist View, *TelAvivJA* 41, 2014, 131–153
Geva 2014b	H. Geva, Stratigraphy and Architecture, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 6. Areas J, N and Z and Other Studies. Final Report (Jerusalem 2014) 1–119
Geva – Avigad 2000a	H. Geva – N. Avigad, Area W – Stratigraphy and Architecture, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 1. Architecture and Stratigraphy: Areas A, W and X-2. Final Report (Jerusalem 2000) 131–198
Geva – Avigad 2000b	H. Geva – N. Avigad, Area X-2 – Stratigraphy and Architecture, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1: Architecture and Stratigraphy: Areas A, W and X-2. Final Report (Jerusalem 2000) 199–242
Goldstein 1976	J. A. Goldstein, I Maccabees. A New Translation with Introduction and Commentary, Anchor Bible (Garden City NJ 1976)
Gorin-Rosen 2003	Y. Gorin-Rosen, Glass Vessels from Area A, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 2. The Finds from Areas A, W and X-2. Final Report (Jerusalem 2003) 364–400
Gorin-Rosen 2006	Y. Gorin-Rosen, Glass Vessels, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 3. Area E and Other Studies. Final Report (Jerusalem 2006) 239–265
Grossberg 2008	A. Grossberg, The Southern Slope of the City of David in the Second Temple Period and the Boundaries of the Second Wall in Rabbinic Sources: The ›Lower‹ and the ›Upper‹, in: E. Meiron (ed.), City of David. Studies of Ancient Jerusalem 3 (Jerusalem 2008) 71–95 (Hebrew)
Grossmark 2006	T. Grossmark, Ten Things Were Said concerning Jerusalem (TB, Bava Kama 82b), in: E. Baruch – Z. Greenhut – A. Faust (eds.), New Studies on Jerusalem 11 (Ramat Gan 2006) 263–275 (Hebrew with English Summary, 46*)
Guz-Zilberstein 1995	B. Guz-Zilberstein, The Typology of the Hellenistic Coarse Ware and Selected Loci of the Hellenistic and Roman Periods, in: E. Stern, Excavations at Dor, Final Report 1 B. Areas A and C: The Finds, Qedem Reports 2 (Jerusalem 1995) 289–433
Hamilton 1933	R. W. Hamilton, Street Levels in the Tyropoeon Valley 2, *QDAP* 2, 1933, 34–40
Israeli – Katsnelson 2006	Y. Israeli – N. Katsnelson, Refuse of a Glass Workshop of the Second Temple Period from Area J, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 3. Area E and Other Studies. Final Report (Jerusalem 2006) 411–460
Johns 1950	C. N. Johns, The Citadel, Jerusalem: A Summary of Work since 1934, *QDAP* 14, 1950, 121–152
Kenyon 1974	K. M. Kenyon, Digging up Jerusalem (London 1974)

Kloner 1999	A. Kloner, Upon the Walls of Jerusalem: The Second Wall from the Second Temple Period, in: A. Faust – E. Baruch (eds.), New Studies on Jerusalem 5 (Ramat Gan 1999) 43–51 (Hebrew)
Kloner 2003	A. Kloner, Survey of Jerusalem, the Northwestern Sector. Introduction and Indices (Jerusalem 2003) (Hebrew)
Kloner 2009	A. Kloner, The Damascus Gate: A Fortification from the Second Temple Period? in: E. Baruch – A. Levy-Reifer – A. Faust (eds.), New Studies on Jerusalem 15 (Ramat-Gan 2009) 155–167 (Hebrew with English Summary, 14*–15*)
Kloner – Zissu 2007	A. Kloner – B. Zissu, The Necropolis of Jerusalem in the Second Temple Period (Leuven 2007)
Levine 2002	L. I. Levine, Jerusalem. Portrait of the City in the Second Temple Period (538 B.C.E.–70 C.E.) (Philadelphia 2002)
Lipschits 2011	O. Lipschits, Jerusalem between Two Periods of Greatness: The Size and Status of Jerusalem in the Babylonian, Persian and Early Hellenistic Periods, in: L. L. Grabbe – O. Lipschits (eds.), Judah between East and West. The Transition from Persian to Greek Rule (ca. 400–200 BCE) (London 2011) 163¬–175
Lipschits et al. 2010	O. Lipschits – D. S. Vanderhooft – Y. Gadot – M. Oeming, Twenty-Seven New Yehud Stamp Impressions from the 2008 Excavation Seasons at Ramat-Rachel, *Maarav* 16.1, 2010, 7–28
Lipschitz et al. 2016	O. Lipschitz – Y. Gadot – L. Freud, Ramat Rahel 3. Final Publication of Yohanan Aharoni's Excavations (1954, 1959–1962) (Tel Aviv 2016)
Lipschits – Vanderhooft 2007	O. Lipschits – D. S. Vanderhooft, Jerusalem in the Persian and Hellenistic Periods in Light of the Yehud Stamp Impressions, *Eretz-Israel* 28, 2007, 106–115 (Hebrew with English Summary, 12*–13*)
Lipschits – Vanderhooft 2011	O. Lipschits – D. S. Vanderhooft, The Yehud Stamp Impressions. A Corpus of Inscribed Impressions from the Persian and Hellenistic Periods in Judah (Winona Lake IN 2011)
Luria 1982	B. Luria, The Hasmonean Wall of Jerusalem, *BeitMikraJSBW* 93, 1982, 180–184 (Hebrew with English Summary, 204)
Lux 1972	U. Lux, Vorläufiger Bericht über die Ausgrabung unter der Erlöserkirche im Muristan in der Altstadt von Jerusalem in den Jahren 1970 und 1971, *ZDPV* 88, 1972, 185–201
Macalister – Duncan 1926	R. A. S. Macalister – J. D. Duncan, Excavations on the Hill of Ophel, Jerusalem, 1923–1925, Palestine Exploration Fund. Annual 4 (London 1926)
Maoz 1985	Z. U. Maoz, On the Hasmonean and Herodian Town-Plan of Jerusalem, *Eretz-Israel* 18, 1985, 46–57 (Hebrew with English Summary, 66*–67*)
Maoz 1987	Z. U. Maoz, More on the Town-Plan of Jerusalem in the Hasmonean Period, *Eretz-Israel* 19, 1987, 326–329 (Hebrew with English Summary, 83*)
Maoz 2013	Z. U. Maoz, Hellenistic and Roman Fortifications in the Golan, Archaostyle Scientific Research Series 13 (Qazrin 2013)
Mazar 2006	A. Mazar, Jerusalem in the 10th Century B.C.E.: The Glass Half Full, in: Y. Amit – E. Ben Zvi – I. Finkelstein – O. Lipschitz (eds.), Essays on Ancient Israel in Its Near Eastern Context. A Tribute to Nadav Na'aman (Winona Lake IN 2006) 255–272
Mazar 2009a	E. Mazar, The Palace of King David. Excavations at the Summit of the City of David. Preliminary Report of Seasons 2005–2007 (Jerusalem 2009)
Mazar 2009b	E. Mazar, The Wall that Nehemiah Built, *BibArchRev* 35.2, 2009, 24–33
Mazar – Eshel 1998	B. Mazar – H. Eshel, Who Built the First Wall of Jerusalem?, *IEJ* 48, 1998, 265–268

Meshel 2000	Z. Meshel, ›Aristeas to Philocrates‹ and the Dating of the ›Hasmonean‹ Conduit in Jerusalem, in: A. Faust – E. Baruch (eds.), New Studies on Jerusalem 6 (Ramat Gan 2000) 38–43 (Hebrew with English Summary, 7*)
Onn – Weksler-Bdolah 2010	A. Onn – S. Weksler-Bdolah, Wilson's Arch and the Great Causeway in the Second Temple and Roman Periods in Light of Recent Excavations, *Qadmoniot* 140, 2010, 109–144 (Hebrew)
Patrich – Edelcopp 2011	J. Patrich – M. Edelcopp, Four Stages of Development of the Temple Mount, in: D. Amit – G. D. Stiebel – O. Peleg-Barkat (eds.), New Studies in the Archaeology of Jerusalem and Its Region 5 (Jerusalem 2011) 17–37 (Hebrew)
Peleg-Barkat – Ben Haim 2017	O. Peleg-Barkat – A. Ben Haim, Monumental Ionic Columns from Areas Q and H, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 7. Areas Q, H, O-2 and Other Studies. Final Report (Jerusalem 2017) 68–95
Peleg-Barkat et al. 2017	O. Peleg-Barkat – H. Geva – R. Reich, A Monumental Herodian Ionic Capital from the Upper City of Jerusalem, *IsrMusStA* 8, 2016–2017, 74–95
Rappaport 2004	U. Rappaport, The First Book of Maccabees, Introduction, Hebrew Translation and Commentary (Jerusalem 2004) (Hebrew)
Rappaport 2013	U. Rappaport, The House of the Hasmoneans, the People of Israel in the Land of Israel in the Hasmonean Period (Jerusalem) (Hebrew)
Re'em 2018	A. Re'em, The Qishle Excavations in the Old City of Jerusalem (Jerusalem 2018)
Reich 1995	R. Reich, Ha-arkheologiya shel yerushalayim biyemey beyt hashmonay, in: D. Amit – H. Eshel (eds.), Yemey beyt hashmonay (Idan 19) (Jerusalem 1999) 230–219 (Hebrew)
Reich 2000	R. Reich, The Topography and Archaeology of Jerusalem in the First Temple Period, in: S. Ahituv – A. Mazar (eds.), The History of Jerusalem. The Biblical Period (Jerusalem 2000) 93–130 (Hebrew)
Reich 2003a	R. Reich, Local Seal Impressions of the Hellenistic Period, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 2. The Finds from Areas A, W and X-2. Final Report (Jerusalem 2003) 256–262
Reich 2003b	R. Reich, Stone Vessels, Weights and Architectural Fragments, in: H. Geva (ed.), Jewish Quarter Excavations in the Old City of Jerusalem Conducted by Nahman Avigad, 1969–1982, 2. The Finds from Areas A, W and X-2. Final Report (Jerusalem 2003) 263–291
Reich 2011	R. Reich, Excavating the City of David. Where Jerusalem's History Began (Jerusalem 2011)
Reisner et al. 1924	G. A. Reisner – C. S. Fisher – D. G. Lyon, Harvard Excavations at Samaria 1908–1910, 2, Harvard Semitic Series 1.2 (Cambridge, MA 1924)
Ritmeyer 2006	L. Ritmeyer, The Quest. Revealing the Temple Mount in Jerusalem (Jerusalem 2006)
Rotroff 1997	S. I. Rotroff, Hellenistic Pottery. Athenian and Imported Wheelmade Table Ware and Related Material, *Agora* 29 (Princeton NJ 1997)
Rotroff 2002	S. I. Rotroff, West Slope in the East, in F. Blondé – P. Ballet – J.-F. Salles, Céramiques hellénistiques et romaines. Productions et diffusion en Méditerranée orientale (Chypre, Égypte et côte syro-palestinienne), *TOM* 35 (Lyon 2002) 97–115
Rosenthal-Heginbottom 2014	R. Rosenthal-Heginbottom, Imported Hellenistic and Early Roman Pottery – An Overview of the Finds from the Jewish Quarter Excavations, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem, Conducted by Nahman Avigad, 1969–1982, 6. Areas J, N, Z and Other Studies. Final Report (Jerusalem 2014) 377–413

Rosenthal-Heginbottom 2017	R. Rosenthal-Heginbottom, Imported Pottery and Selected Locally Made Vessels of the Roman Period from Area H, in: H. Geva, Jewish Quarter Excavations in the Old City of Jerusalem, Conducted by Nahman Avigad, 1969–1982, 7. Areas Q, H, O-2 and Other Studies. Final Report (Jerusalem 2017) 192–205
Sandhaus 2013	D. Sandhaus, The Hellenistic Pottery, in: D. Ben Ami, Jerusalem. Excavations in the Tyropoeon Valley (Giv'ati Parking Lot) 1, *IAA Report* 52 (Jerusalem 2013) 83–108
Schein 1981	B. E. Schein, The Second Wall of Jerusalem, *BibAr* 44, 1981, 21–26
Schürer 1973	E. Schürer, The History of the Jewish People in the Age of Jesus Christ (175 B.C.–A.D. 135) 1. Revised and Edited by G. Vermes – F. Millar (Edinburgh 1973)
Segal et al. 2009	A. Segal – J. Mlynarczyk – M. Burdajewicz, Excavations of the Hellenistic Site in Kibbutz Sha'ar-Ha'Amakim (Gaba) 1984–1998. Final Report (Haifa 2009)
Sharon 1991	I. Sharon, The Fortifications of Dor and the Transition from the Israeli-Syrian Concept of Defence to the Greek Concept, *Qadmoniot* 95/96, 1991, 105–113 (Hebrew)
Sharon 2009	I. Sharon, Ashlar Construction at Dor. Four Comments on the State of Research, *Eretz-Israel* 29, 2009, 372–382 (Hebrew with English Summary, 294*–295*)
Shatzman 1991	I. Shatzman, The Armies of the Hasmonaeans and Herod. From Hellenistic to Roman Frameworks (Tübingen 1991)
Shatzman 1995	I. Shatzman, Ha-tzava ha-hashmonay, in: D. Amit – H. Eshel (eds.), Yemey beyt hashmonay (Idan 19) (Jerusalem 1995) 21–44 (Hebrew)
Shatzman 2012	I. Shatzman, The Expansion Policy of John Hyrcanus and His Relations with Rome, in: G. Urso (ed.), Iudaea Socia – Iudaea Capta, Atti del convegno internazionale, Cividale del Friuli, 22-24 settembre 2011, I convegni della Fondazione Niccolò Canussio 11 (Pisa 2012) 29–78
Shiloh 1984	Y. Shiloh, Excavations at the City of David 1. Interim Report of the First Five Seasons, 1978–1982, Qedem 19 (Jerusalem 1984)
Shiloh 1993	Y. Shiloh, Jerusalem. The Early Periods and the First Temple Period, in: E. Stern (ed.), The New Encyclopedia of Archaeological Excavations in the Holy Land (Jerusalem 1993) 701–712
Simons 1952	J. Simons, Jerusalem in the Old Testament. Researches and Theorie, Studia Francisci Scholten memoriae dicta 1 (Leiden 1952)
Sivan – Solar 2000	R. Sivan – G. Solar, Excavations in the Jerusalem Citadel, 1980–1988, in: H. Geva (ed.), Ancient Jerusalem Revealed, Reprinted and Expanded Edition (Jerusalem 2000) 168–176
Steiner 2001	M. L. Steiner, Excavations by Kathleen M. Kenyon in Jerusalem 1961–1967, 3. The Settlement in the Bronze and Iron Ages (London 2001)
Steiner 2011	M. Steiner, The Persian Period City Wall of Jerusalem, in: I. Finkelstein – N. Na'aman (eds.), The Fire Signals of Lachish. Studies in the Archaeology and History of Israel in the Late Bronze Age, Iron Age, and Persian Period in Honor of David Ussishkin (Winona Lake IN 2011) 307–317
Stern 1980	M. Stern, »Jerusalem, the Most Famous of the Cities of the East« (Pliny, Natural History V, 70), in: A. Oppenheimer – U. Rappaport – M. Stern (eds.), Jerusalem in the Second Temple Period, Abraham Schalit Memorial Volume (Jerusalem 1980) 257–270 (Hebrew)
Stern 1987	E. Stern, The Walls of Dor, *Eretz-Israel* 19, 1987, 153–159 (Hebrew with English Summary, 77*)
Stern 2000	E. Stern, Dor, Ruler of the Seas. Nineteen Years of Excavations at the Israelite-Phoenician Harbor Town on the Carmel Coast (Jerusalem 2000)

Tal 2006	O. Tal, The Archaeology of Hellenistic Palestine. Between Tradition and Renewal (Jerusalem 2006) (Hebrew)
Tsafrir 1975	Y. Tsafrir, The Location of the Seleucid Akra in Jerusalem, *RB* 82, 1975, 501–521
Tushingham 1978	A. D. Tushingham, Yerushalayim, in: P. R. S. Moorey – P. Parr (eds.), Archaeology in the Levant. Essays for Kathleen Kenyon (Warminster 1978) 183–193
Tushingham 1985	A. D. Tushingham, Excavations in Jerusalem 1961–1967, 1 (Toronto 1985)
Ussishkin 2005	D. Ussishkin, The Borders and De Facto Size of Jerusalem in the Persian Period, in: O. Lipschits – M. Oeming (eds.), Judah and Judeans in the Persian Period (Winona Lake IN 2005) 147–166
Ussishkin 2012	D. Ussishkin, On Nehemiah's City Wall and the Size of Jerusalem during the Persian Period: An Archaeologist's View, in: I. Kalimi (ed.), New Perspectives on Ezra-Nehemiah. History and Historiography, Text, Literature, and Interpretations (Winona Lake IN 2012) 101–130
Weksler-Bdolah 2011	S. Weksler-Bdolah, The Route of the Second Temple Period's Lower Aqueduct and Where It Entered the Temple Mount, *Cathedra* 140, 2011, 19–46 (Hebrew with English Summary, 1*)
Wightman 1989/1990	G. J. Wightman, Temple Fortresses in Jerusalem, 1. The Ptolemaic and Seleucid Akras, *BAIAS* 9, 1989/1990, 29–40
Wightman 1993	G. J. Wightman, The Walls of Jerusalem. From the Canaanites to the Mamluks, *MedA* Suppl. 4 (Sydney 1993)
Zangenberg 2013	J. K. Zangenberg, Jerusalem, Hellenistic and Roman, in: D. M. Master (ed.), The Oxford Encyclopedia of Bible and Archaeology 2 (Oxford 2013) 23–37
Zelinger 2010	Y. Zelinger, The Line of Jerusalem's Southern Wall in Antiquity, *Qadmoniot* 140, 2010, 102–108 (Hebrew)