The Riddle of Ramat Rahel: The Archaeology of a Royal Persian Period Edifice

O. Lipschits, Y. Gadot and D. Langgut

Résumé: Depuis que les premiers archéologues ont commencé à fouiller Ramat Rahel, il semblait que le tell était une «énigme» archéologique et historique. D’une part, le complexe palatial découvert dans le site était daté de l’Âge du Fer. D’autre part, la présence de centaines d’estampilles YHWD sur les anses d’amphores et beaucoup d’autres découvertes de l’époque perse ne provenaient pas d’un contexte architectural clair. Le Niveau IVb, daté par Aharoni des périodes perses et hellénistiques, comprenait seulement des murs pauvrement construits et quelques installations qui ne pouvaient pas expliquer les nombreuses anses estampillées. Les nouvelles fouilles dans le site et la publication finale de l’architecture et des trouvailles des fouilles d’Aharoni ont permis de réévaluer l’archéologie du site et sa signification vis-à-vis de l’histoire politique de la Judée comme province de l’Empire achéménide. Cet article présente pour la première fois l’architecture et les trouvailles associées à l’époque perse (5e-3e siècle av. J.-C.) à Ramat Rahel. L’étude montre comment Ramat Rahel a atteint son apogée pendant l’époque perse, servant de centre administratif impérial, et de résidence d’un gouverneur perse. Elle montre aussi que le site a décliné vers la fin de l’époque perse seulement pour regagner quelque importance vers la dernière partie de la période hellénistique.

The Problem of the Persian Period in the Archaeology of Judah

Archaeologists are keenly aware that only scant architectural finds in Judah can be ascribed to the Persian period, and that there is not even a single, distinct stratum in Judah with a well-defined pottery assemblage.
from this period.\footnote{A survey of the known sites in Judah shows just how little has been found. In Jerusalem, the main finds from the narrow inhabited area in the Persian and Early Hellenistic periods in the City of David consist of scattered pottery sherds and other small finds (especially stamp impressions) typical of this period. The finds from Persian period Stratum 9 do not appear in all the excavated areas of the City of David, and only in Area E, three different stages attributed to this period were discovered. E. Sellin and C. Watzinger uncovered vestiges of a small village at Tell es-Sultan (Jericho), dated to the 5th and 4th centuries BCE. In Bi-}


5. The pottery finds from Tell es-Sultan consisted of imported Attic vessels and fragments of vessels decorated with wedge-shaped and reed impressions, 10 yhwd and one lion stamp impression (E. Sellin and C. Watzinger, Jericho: Die Ergebnisse Der Ausgrabungen, Leipzig 1913, pp. 79-82, 147-148; fig. 186; pl. 1, 3, 42). The excavations conducted by J. Garstang (1930-1936), as those by
blical Mizpah - Tell en-Nasbeh (Stratum I), too, finds from the Persian period were excavated, but most of them uncovered in pits scattered throughout the site. Persian period pottery vessels and stamp impressions were found at Bethany, mainly in the fill level that was apparently created in the Middle Ages, not associated with specific architectural elements or with any archaeological context.\(^6\)

At most other sites in Judah the Persian period is hardly represented. Even at el-Jib (Gibeon), where there are indications of 6th century activity,\(^7\) no typical Persian-period pottery and no yhwd stamped handles were found. The site at Tell el-Fül, too, was probably deserted at the end of the 6th or at the beginning of the 5th century\(^8\) and remained desolate until the beginning of the Hellenistic period. Bethel, or at least part of the site, probably continued to be inhabited during the 6th century.\(^9\) No yhwd stamp impressions and no other clear evidence for a Persian-period occupation level were found there either.\(^10\) The conclusion from the archaeological data presented above is that the settlements during the Persian period were relatively small and rural in nature.\(^11\) Large and dense settlements did not exist in the province of Yehud, and no traces of administrative centers have been located within the borders of the province.

This is the background against which the case of Ramat Rahel has to be evaluated and understood. Ramat Rahel projected an exceptional image. Just the sheer numbers of stamped jar handles found there from the Persian period underscores that it functioned as the main Judahite admi-
nistrative and collection center for agricultural products—mainly jars filled with wine and oil. No other Judahite site, not even Jerusalem, can challenge Ramat Rahel’s record: over 300 stamped handles from the late Iron Age have been found at the site,\textsuperscript{12} including lmlk and “private” stamp impressions (late 8th and early 7th centuries);\textsuperscript{13} concentric circle incisions (mid-7th century),\textsuperscript{14} and rosette stamp impressions (late 7th–early 6th centuries).\textsuperscript{15} In the Babylonian, Persian and Hellenistic periods Ramat Rahel was the main center of stamped jar handles, with about 77 lion stamped handles dated to the 6th century,\textsuperscript{16} more than 300 yhw d stamp impressions dated to the late 6th to mid–2nd centuries,\textsuperscript{17} and 33 yršlm stamp impressions dated to the 2nd century.\textsuperscript{18} All in all, the phenomenon of stamped jar handles collected and stored in Ramat Rahel continued for more than half a millennium of constant, systemized administrative system.

However, until the excavations of the renewed project of the Ramat Rahel expedition began, no architectural remains from this period had been discovered; the abundant stamped jar handles and other artifacts from the Persian period were out of context with any architectural finds. This was the Persian period “Riddle of Ramat Rahel”.

The renewed excavations at Ramat Rahel\textsuperscript{19} and the final publication of the architecture and finds from Aharoni’s excavations,\textsuperscript{20} made it possible to reevaluate the archaeology of the site and its significance vis-a-vis the political history of Judah as a province in the Achaemenid empire. In this


\textsuperscript{13} O. Lipschits, O. Sergi and I. Koch, "The Date of the lmlk and ‘Private’ Stamp Impressions: A Fresh Look", \textit{Tel-Aviv} 37/1, 2010, pp. 3-32.

\textsuperscript{14} \textit{Id.}, "Judaheit Stamped and Incised Jar Handles: A Tool for the Study of the History of Late Monarchic Judah", \textit{Tel-Aviv} 38/1, 2011, pp. 7-8.

\textsuperscript{15} I. Koch and O. Lipschits, “The Kingdom of Judah at the End of the First Temple Period in Light of the Rosette Stamped Jar Handles”, \textit{Cathedra} 137, 2010, pp. 7-26 [Hebrew].

\textsuperscript{16} O. Lipschits, “Further Thoughts on the Lion Stamp Impression System”, in O. Lipschits and I. Koch eds, \textit{New Studies on the Lion Stamp Impressions from Judah} (Abstracts of a Symposium, 14 January 2010, Tel Aviv University), Tel Aviv 2010, pp. 17-19 [Hebrew].

\textsuperscript{17} D.S. Vanderhooft and O. Lipschits, “A New Typology of the Yehud Stamp Impressions", \textit{Tel-Aviv} 34/1, 2007, pp. 12-37; Lipschits-Vanderhooft, \textit{op. cit.} (n. 5).


\textsuperscript{19} Lipschits et. al., \textit{loc. cit.} (n. 12).

\textsuperscript{20} O. Lipschits and Y. Gadot, \textit{Ramat Rahel III: Final Publication of Aharoni’s Excavations}, The Emery and Claire Yass Publications in Archaeology - Monograph Series of the Institute of Archaeology of Tel Aviv University, Tel Aviv (forthcoming).
paper we present the architecture and all the associated finds from the Persian period (5th-3rd century), as excavated at Ramat Rahel. Our research demonstrates how Ramat Rahel reached its zenith during the Persian period, serving as an imperial administrative center, and as suggested here, also as the residence and palace of the governor of the province. The site declined towards the end of the Persian period, only to regain for a short period some importance toward the second part of the Hellenistic period.

**Ramat Rahel – The Site and Its Location**

The ancient tell of Ramat Rahel is located on a prominent summit, 818 m above sea level, half way between Jerusalem and Bethlehem (4 km from each). It is one of the highest peaks in the area south of Jerusalem, an ideal location for a fortress and watchtower, in direct control of the road that leads to Jerusalem from the south (from Beersheba, through Hebron and Bethlehem), as well as of the road leading to Jerusalem from Beth-Shemesh in the west, through the Rephaim Valley. This location offers a superb view to the north (Mount Zion and modern-day western Jerusalem), to the west (the Rephaim Valley), and to the south (Mount Giloh, Bethlehem and the northern Judean Hills). Its only strategic weakness is its lack of control on the outskirts of the Judean Desert in the east.

Ramat Rahel has complete command of the Rephaim Valley, with its rich alluvium soil and moderately terraced slopes. As demonstrated by Y. Gadot and O. Lipschits, this area has historically been one of the prosperous agricultural districts in the Jerusalem landscape, vital to the economy of the city. The many agricultural installations and small farmsteads found in the valley confirms that those periods during which the Rephaim Valley flourished agriculturally are the same periods during which there was construction at Ramat Rahel. The site’s location on a prominent peak above the Rephaim catchment not only gives it an imposing view but also turns its construction into a projecting landmark that is visible all across the Jerusalem landscape.

Interestingly, Ramat Rahel could not be seen from the City of David and the Temple Mount, since visual contact between the two centers was blocked by the ridge of the High Commissioner’s Residence, which controlled the City of David and the Temple Mount from the south. Thus, when choosing the hilltop for Ramat Rahel, the architects of the project were undoubtedly cognizant of the presence it would command in the landscape and concerned with its spatial communication with the surroun-

ding settlements, above all Jerusalem, the capital city of the Kingdom of Judah, the traditional seat of the Judean monarchs and the site of the Temple.

History of the Excavations and “The Riddle of Ramat Rahel”

The first excavations at the site of Ramat Rahel were conducted in 1930 by B. Maisler and M. Stekelis, under the auspices of the Jewish Palestine Exploration Society.22 Architectural remains and pottery dated from the Iron Age to the Byzantine period were discovered during these excavations, together with a Jewish burial cave that contained ten Herodian ossuaries with ancient human remains.23 The most interesting find was a volute stone capital (“Proto-Aeolic” or “Proto Ionic”), which was discovered in secondary use.

Between August and November 1954, Y. Aharoni was sent to the summit of Tell Ramat Rahel itself by the Department of Antiquities and the Israel Exploration Society, in order to conduct salvage excavations at a location designated for the kibbutz’s water reservoir. The excavation exposed remains of structures from different periods, but the most important find was a 35m-long segment of a casemate wall, oriented from east to west, with a central section composed of high quality ashlers. An ornamental volute stone capital found close to the built section of the casemate wall and an additional capital, found close by, facilitated Y. Aharoni’s understanding of the grandeur and importance of the site. Sixty-nine jar handles with stamp impressions, dating to the Iron Age as well as the Persian and Hellenistic periods, were found and recorded in this first season—evidence of Ramat Rahel’s importance and administrative status. Y. Aharoni emphasized the significance of the site during the Iron Age, to which he related the royal architecture, but already in this salvage operation he noted finding pottery and stamp impressions from the Persian period.

The findings of the 1954 salvage excavation led him to set up an archaeological expedition under the joint auspices of the Hebrew University and the Sapienza–Università di Roma. Four large-scale excavation seasons were conducted between 1959 and 1962, and the results of these excavations were published in two volumes,24 defined as preliminary re-

ports. While summarizing each season Y. Aharoni noted the many finds from the Persian period but expressed frustration at his inability to relate these finds to any notable architecture.25 In his final conclusions he stated: “This latter citadel and its date are still extremely problematic. The main evidence for its existence is the unusually high number of seal-impressions from this period, including stamps of the governors of the province of Yehud. It is clear that the original inner citadel was left in ruins and was apparently used as a dump for the refuse from the Persian citadel. This seems to have been built further to the south, but we were not able to come to any certain conclusions about it”26

At the same time, he realized that the royal edifice and the palatial architecture, that he attributed to Stratum Va, must be dated to the end of the Iron Age. He finally concluded that the Stratum Va palace was built in 612 by King Jehoiakim. He also insisted that the palace, being Judahite, was destroyed in 586 by the Babylonians, leaving it in existence for only three decades.

It is clear that his stratigraphical and chronological schema for the site was problematic: on the one hand, he dated the palatial compound to the last three decades of the Iron Age. On the other hand, the presence of hundreds of yhwd stamped handles and many other finds from the Persian period remained with no apparent architectural context.27 Y. Aharoni dated Stratum IVb to both the Persian and Late Hellenistic periods; it included segmented and poorly built walls as well as some installations (Fig. 1).28 It is clear that the walls of Stratum IVb cannot be related to such vivid administrative activity. Thus, from the outset—from the very first excavations at Ramat Rahel, and from the earliest publications written about the site—“the riddle of Ramat Rahel” was always there, lurking in the background. No one, however, verbalised the actual riddle and hence, no solutions were ever posited. Only the renewed study of Y. Aharoni’s excavations and the new excavations project at the site have given voice to the actual question.

In 2004 Tel Aviv University, supported by the Shelby White–Leon Levy Program for Archaeological Publications, undertook the preparation of a final comprehensive publication of Y. Aharoni’s excavations. The project traced the whereabouts of most of the documentation and retrieved most of the finds from his excavations, and by 2011, had scanned, computerized, and fully catalogued all the data. By now the project has comple-

26. Id., ibid. 1964, p. 120.
27. Ibid., 120.
28. Ibid., Fig. 2.
tied the process of amalgamating Y. Aharoni’s material with an enhanced stratigraphic and architectural analysis of the excavations. This material is now in the process of publication, and the Final Report of his excavations at Ramat Rahel is scheduled for publication in 2012.29

The Renewed Expedition began excavating at Ramat Rahel in 2004 as a joint effort of the Institute of Archeology of Tel Aviv University and the Theological Seminary (Wissenschaftlich-Theologisches Seminar) and the Faculty for Jewish Studies (Hochschule für jüdische Studien) at Heidelberg University. After a preliminary underground survey (2004), six extensive excavation seasons were conducted at the site (2005–2010).30 With the assistance of students and volunteers from around the world, large areas of the site and its surroundings were excavated. In some parts, areas that were excavated by Y. Aharoni were expanded and deepened (Areas C2, D3, D4, D5, and D6), and other areas that had never been excavated were opened (Areas A1, B1, B2, B3, C1, C4, D1, and D2). In addition, a comprehensive survey of underground spaces, a survey of agricultural installations in the immediate vicinity, and a comprehensive study of the agricultural terraces on the slopes of the mound were carried out.

Building Phase I - The Early Building Phase at Ramat Rahel

The chronological and stratigraphic picture exposed by the excavations of the Renewed Expedition at Ramat Rahel includes nine separate phases of construction and development and additional phases of destruction and desolation.

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>Stratum by Aharoni</th>
<th>Period</th>
<th>Date</th>
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<tr>
<td>Building Phase I: Royal Administrative Center under Imperial Hegemony</td>
<td>Vb</td>
<td>Iron Age II</td>
<td>The end of the 8th or the Beginning of the 7th Century BCE</td>
</tr>
<tr>
<td>Building Phase II: Royal Administrative Center under Imperial Hegemony</td>
<td>Va</td>
<td>Iron Age II - Persian</td>
<td>Second Half of the 7th</td>
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29. Lipschits-Gadot, op. cit. (n. 20).
30. For a preliminary summary of the excavations, see Lipschits et. al., loc. cit. (n. 12).
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<th>Building Phase III: Expanding Construction</th>
<th>Period</th>
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<th>BCE</th>
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<tr>
<td></td>
<td>Persian Period</td>
<td>End of the 6th or the Beginning of the 5th Century BCE</td>
<td>The End of the 4th Century BCE</td>
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**Destruction and Robbery of the Walls**

<table>
<thead>
<tr>
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<th>Ivb</th>
<th>Hellenistic Period</th>
<th>The 2nd Century BCE</th>
<th>The 2nd Century BCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Phase V: Village</td>
<td>Iva</td>
<td>Late Hellenistic Herodian Period</td>
<td>End of the 2nd or the Beginning of the 1st Century BCE</td>
<td>The 1st Century CE (The Great Revolt)</td>
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**Destruction (?)**

<table>
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<tr>
<th>Building Phase VI: Village</th>
<th>III</th>
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<td>Building Phase VII: Village</td>
<td>IIb</td>
<td>Early Byzantine Period</td>
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<td>Building Phase VIII: Village. Construction of the Church</td>
<td>IIa</td>
<td>Late Byzantine-Ummayad Period</td>
<td>The 6th Century CE</td>
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<tr>
<td>Building Phase IX: Farm with agricultural Installations</td>
<td>I</td>
<td>Abbasid Period</td>
<td>The 9th Century CE</td>
<td>The 11th Century CE</td>
</tr>
</tbody>
</table>
Agricultural zone with Installations | Fatimied-Othman Period | The 12th Century CE | The 19th Century CE
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Summarizing table of the main phases of construction and development at Ramat Rahel

The earliest building phase at Ramat Rahel should be dated to the late 8th, or better yet, the early 7th century. The "Western Tower" is the main architectural structure assigned to this early phase. It was built in the technique common in Iron Age Judah: wide walls constructed of mixed fieldstones of varying sizes, all uncut or cut only partially and crudely, with foundations that are sometimes integrated into the bedrock outcrops and sometimes into shallow foundation trenches. This structure probably functioned in building phase I as a tower fortress, situated at the top of the hill for all to see, controlling the main roads leading to Jerusalem. To the east of the tower, other structures from the early phase were built, but they were later integrated in the complex of buildings that composed the edifice of the second building phase, or were dismantled to their foundations.

The profusion of pottery sherds discovered in the fill levels beneath the second phase floors date mostly to the 7th century. These sherds were found together with 19 private and 225 lmlk jar handles, a third of which come from clear stratigraphic contexts beneath the floors of the second building phase. The stamp impressions include representations of all the known varieties and therefore represent the entire chronological span of the administrative system of which these stamp impressions were part, at least until the middle, or even until the last third of the 7th century.

A number of the architectural features found are unique to Ramat Rahel, indicating that already in this early phase, the site served as an administrative and governmental center. The many volute capitals (the so-called "Proto-Aeolic" capitals), as well as a series of small carved stone columns with tiny palmette capitals that had been part of a window balus-

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32. Ibid., pp. 10-20.
33. Lipschits-Sergi-Koch, loc. cit. (n. 13).
trade, similar to those that appear in the reliefs known as "the woman in the window," are all be part of the same architectural assemblage.\textsuperscript{35}

Even at this early stage, the edifice at Ramat Rahel was unparalleled by any other in the Kingdom of Judah. It included a fortress tower in the west and several ashlar stone buildings with ornamental volute capitals, small stone columns that decorated a window or windows, and other stone ornaments. The profusion of stamp impressions on jar handles found at the site testifies to its role as the Judahite administrative center for the collection of agricultural produce, probably paid as tax to the Assyrian empire. This administrative role would grow in importance in subsequent stages of its existence.

**Building Phase II – Iron Age and Persian Period**

In the second building phase, dated to the last third of the 7th and continuing to the 6th century, an imposing edifice was built atop the mound.\textsuperscript{36} We have evidence that contrary to the accepted reconstruction, this edifice was not destroyed at the end of the Iron age and was in continuous use during the 6th-5th centuries, and was even expanded during the Persian period.

The palatial compound of building phase II contained the most impressive structure in Judah, built of ashlar blocks, decorated with volute capitals, with magnificent window balustrades, small limestone stepped, pyramid-shaped stones, and other stone ornaments, most of them reused from the earlier building phase. It was surrounded by a magnificent garden, well built on artificially flattened bedrock, with large pools, tunnels, channels, gutters and other water installations.\textsuperscript{37} This building phase gave the site its current monumental plan and provided it with a grandeur unknown elsewhere in Judah. Its monumental appearance at this stage was a result of an expression of the general concept of planning a complex and extensive assemblage, of the uniform outline of the plan and the relationship and balance between its different parts, and of the quality of building and its extensive complementary infrastructure.

To implement the comprehensive planning concept at this stage, significant logistical and operational groundwork was required that altered the shape of the natural hill. The new plan landscaped the palace with a royal garden on the west and extended the palace, including its courtyards and walls along the sloping eastern side of the hill, all the way to the fortress tower that already dominated that part of the summit. The large quantity

36. Lipschits et al., loc. cit. (n. 31), pp. 64-70; Lipschits et al., loc. cit. (n. 12), pp. 20-34.
37. Lipschits et al., loc. cit. (n. 12), pp. 20-34, and see below.
of material extracted from the quarrying of the natural hill and the material removed in the creation of a garden sunk into the bedrock on the western side, were intended for use as fill and were poured over the eastern slope. This fill created a large level base upon which the palace units and courtyards were constructed. The tower fortress of the first phase was integrated into the new, enlarged plan. At the time of the construction of the sunken garden, the fortress was isolated on three sides – south, west, and north – and stood upon a prominent rock cube projecting westward out of the palace complex. The extent of the energy required to adjust the natural outline of the extension to the satisfaction of the architects/engineers of the new design is testimony to the grandeur and might of the state involved in the investment, planning, and construction of the second phase palace at Ramat Raḥel.

The garden extended around the western tower on its northern, western and southern sides, on a lowered, leveled surface covering 5 dunams and possibly more. In creating the sunken garden in relation to the palace, the planners wanted to set apart the tower as a fortified wing isolated on three sides by an approximately 3 m-high artificial cliff, and to accentuate it further in the general westward landscape, towards the main road that passes at the foot of the hill. The quarrying and removal of nari rock from the natural surface enabled the creation of a leveled and unified rock surface. This surface was covered by a 45 cm-deep layer of unified brown garden soil. This layer of soil was discovered in our extended surface examinations around the western part of the palace. The soil was free of stones and sherds, and although it appears that it was an original part of the hill, its placement upon the leveled limestone surfaces was artificial. Other features besides the brown - chocolate-like colored soil found incorporated into the flattened area are related to water. At least two, possibly three plastered pools with two rock-cut and roofed tunnels were found. Two exceptionally well-built drains conducted water from Pool 2 westwards. Additional features were found to the north of the tower. They include Pool 6, which connects with a third roofed tunnel and a large underground well-plastered water reservoir.

There are clear indications that although the garden was first created during the later decades of the 7th century, it was still in bloom during the Persian period (see below), and hence, understanding the chronology of building phase II is crucial for a correct reconstruction of Ramat Raḥel in the Persian period. In order to determine the time frame in which the palace of building phase II existed – from its construction until its ruin, or when it went out of use – we must utilize, on the one hand, datable finds unearthed in the foundations of the buildings, and on the other, finds above the floors of the buildings. As described above, beneath the floors
of the rooms, and especially within the fill beneath the courtyards, we found an abundance of pottery sherds, figurines, jar handles with stamp impressions, most of them from assemblages common to the late 8th and the early 7th centuries. In relation to this it is also important to point out what was not found in these assemblages. There were no rosette stamp impressions, that didn't come into circulation before the last third of the 7th century. This is a particularly obvious and significant fact that enables us to narrow the time frame for the construction of the second building phase and determine that construction began not later than the early last third of the 7th century. As for the transition between the second and third phases, Aharoni attributed the end of his Strata Va (building phase II in the new terminology) to the Babylonian occupation of 587/6. He based this assumption on what he called a destruction layer found in two locations:

1. Room 477 with abundant pottery vessels which he understood to be laying on the floor of the room.
2. An ash layer resting on the pavement of the inner gate.

Our reexaminations of Aharoni's field records have shown that the pottery assemblage of Room 477 was not on the floor of the room but beneath it and is actually a favisa. At the same time, the paving of the gate and the fire above it belong to the Late Hellenistic or Early Roman period. Apparently there is no evidence that the edifice of phase II was destroyed and in contrast to Aharoni's hypothesis, it seems that the continued use of the edifice rooms during the Persian period, expansion of the western sector in building phase III and the continued function of the central courtyard are evidence that there was no destruction. A more accurate determination of the date of abandonment or destruction of the complex needs to be based on the time of construction and abandonment of the next phase and on the degree of architectural continuity between the two phases.

**Building Phase III: The Persian Period**

The main addition in building phase III was a large and sturdy new structure. Rectangular in shape, it was built on the northwestern side of the second phase of the palace complex. Its walls were about 20 x 30 m,
and it covered an area of about 600 sq m. This area was taken from the royal garden when the garden soil was removed and deep and wide foundation trenches were cut into the flattened bedrock (Fig. 2). This building was not planned as an independent structure but was rather built as a new wing added to the existing complex—an expansion northward of the fortress tower that extends west of the line of the palace. The garden was still thriving while this building was erected and used, although its layout had changed.

The new building was constructed on a level lower than the tower, and would have been as high as the tower, which explains the digging of the foundation trenches to so great a depth. Since the building was dismantled and removed from its foundations in the following phase, it is only possible to discern the enormity of the construction project from the deep foundation trenches of its outer walls. After the building was dismantled these foundation trenches became robbers' trenches and can be distinguished by their deliberate sealing with large amounts of fill made up of soil, construction debris, ash and pottery sherds. These foundation trenches are outlined with a square arch open to the south and were dug deeply into the chalk rock that surrounded the already sunken garden. They reach 2.5–3 m deep and their average width is about 2.5 m. Inside the foundation trenches sturdy walls of the structure were built, first as supporting walls against the inner rock face of the foundation trench and then as a free standing superstructure.

The sections of the walls preserved at the bottom of the foundation trenches show a unique building technique that was unknown in the region before the Roman period. In this building technique, which could be called “half casting,” the large nari stones are placed in front of the wall in high and equal courses. The face of the stone is cut smoothly while the rest of the stone is turned toward the inside of the wall. The mass of masonry inside of the wall turned into a strong, solid unit onto which a grey bonding mixture, rich with ash and quicklime, was poured, which gave it an unusual strength and the qualities of concrete casting.

Leaning against and surrounding the walls of the structure was a plastered water channel 30 cm wide and a maximum depth of 2 m. It was installed in the gap left between the inner face of the foundation trench and the stones composing the walls of the building. The channel begins on the western side of the third phase addition, a little south of the joint between the building and the northwestern corner of the protruding cliff on which the Iron Age tower fortress stands. It was constructed here with two well-built walls inside its own wide construction channel that was cut into the cliff rock. At this point the water channel slopes down to the depth of the foundation trench and after a short way clings to the western, northern
and eastern walls of the new building that forms its inner wall, up to the point where the wall meets the northern cliff rock of the Iron Age tower fortress. Here the channel veers from the building and turns sharply eastwards along the northern cliff face of the complex towards a destination that has yet to be determined. At the turning point eastward, the channel is joined from the west by a covered water channel ("tunnel"), ca. 4.5 m long. The origin of this "tunnel" from inside the building is not yet clear.

As stated above, the building was dismantled to its foundations and very little of it has survived. Thus far, only a section of the floor close to the northeast corner has been uncovered. This floor is unique in its construction; it is built on a thick coating of up to 15 cm of grey cement over an infrastructure of thick-cut nari slabs. In addition, a wall has been exposed that divides the inner space of the building. It is 4 m long with a north-south trajectory and was constructed in a similar "half casting" technique.

The Persian Period Garden – Its Flora and Function

The excavations at the site exposed the layout and installations of a magnificent garden, built already as part of building level II, dated to the last third of the 7th century. The function of the garden, however, remained a mystery as there was no knowledge of the flora that had grown there and the function it had served. Cutting-edge pollen research conducted at the site over the past months has given us a window into the garden's past that was heretofore unavailable.44 Two plaster phases from pool number 2, located in the garden, were sampled for pollen analysis. These plaster layers are part of the later phases of the pool and the garden, probably dated to the Persian period, and they were not exposed to pollen from later periods since the pool went out of use in the Early Hellenistic period and was covered by a fill of slaked lime. The working hypothesis was that if the plaster on the walls of the pool was renewed when the garden's plants were in bloom, the wet plaster's surface would trap pollen grains. Therefore, the outer part of each of the two plaster phases was analyzed. The results were that, beside pollen of native Mediterranean maquis/forest taxa, the inner plaster phase also included pollen of fruit trees and ornamentals, which were certainly planted specifically for aesthetic and symbolic reasons.

The most surprising fossil pollen find was the citron (Citrus medica, named etrog in Hebrew, a word with a Persian precursor), which is the earliest botanical evidence of this tree in the southern Levant; it apparent-

ly arrived from India via Persia.\textsuperscript{45} Other imported trees identified in the pollen assemblages of Ramat Rahel are Persian walnut (\textit{Juglans regia}), cedar of Lebanon (\textit{Cedrus libani}) and birch (\textit{Betula} spp.). The \textit{Juglans regia} originated in northern Iran, northeastern Turkey and the Caucasus,\textsuperscript{46} its Hebrew name (\textit{ṣēgōz}, again a word with a Persian precursor) appears only once in the Old Testament (Song of Solomon 6:11). The majestic conifer, the cedar of Lebanon, was never a native forest-tree in Israel. Scattered cedar trees are still found in the mountains of Lebanon, northwestern Syria and in southern Turkey.\textsuperscript{47} The genus \textit{Betula} is widespread in the temperate zone and its nearest occurrence is in inner and northeast Anatolia.\textsuperscript{48} The pollen evidence of these exotic trees in the Ramat Rahel palatial garden suggests that they were brought by the ruling Persian authorities from remote parts of the empire, as a royal extravagancy. The presence of local garden plants like myrtle (\textit{Myrtus communis}), grape vine (\textit{Vitis vinifera}) and the common fig (\textit{Ficus carica}) can just complete the picture of the garden. Willow (\textit{Salix}) and poplar (\textit{Populus}), which were also identified, are common to river bank vegetation and therefore probably required irrigation, and to these one can add the presence of pollen belongs to the water lily (\textit{Nymphaea}).

The flora species mentioned above and their origin point to close ties to and influence by the Persians. This is an important indication that although the garden was first created during the later decades of the 7th century, it was still in bloom during the Persian period. The well-watered imperial Persian garden must have left a lasting impression on the viewers in this relatively arid environment. Its imported trees from far-off lands, aromatic plants and impressive fruit trees, together with its aesthetic architectural features, symbolized the power and affluence of the Persian-period rulers.

Ramat Rahel is unparalleled to any other known Persian period center across the land. If anything can be compared to this site, with its edifice and garden, it is the Persian period center at Samaria, of which not much is known. In Samaria, which was one of the largest Persian period urban centers in Palestine,\textsuperscript{49} a very similar garden was discovered, even if not well understood by its excavators. As in Ramat Rahel, the \textit{nari} rock was removed from large areas of the summit, which enabled the creation of a leveled and unified rock surface. This surface was covered by a layer of unified brown chocolate-colored soil, standing out in striking contrast to

\textsuperscript{46} \textit{Ibid.}
\textsuperscript{48} \textit{Id., Geobotanical Foundations of the Middle East}, Stuttgart-Amsterdam 1973, p. 366.
\textsuperscript{49} Stern, op. cit. (n. 7) 2001, p. 424.
the light colored rock above and below. Enclosure boundary walls were built by the quarrying lines in order to create a close and defined area, and the complex was dated to the 6th century.\textsuperscript{50} The location of the garden inside the city was probably due to the fact that unlike Jerusalem, Samaria continued to exist without interruption from the late 8th to the 4th centuries as the political and administrative center of the province of Samaria, and its 8th century fortifications continued to exist until the end of the Persian period and probably even during the Hellenistic and the Roman periods.\textsuperscript{51}

The well planned garden at Samaria, which probably continued to function from the Late Iron Age, probably to the "post-Assyrian phase" at the site to the Persian period, is the only other indication we have in the hill country of Israel, beside Ramat Rahel, of a central imperial and administrative center. Since at Samaria the site served as the residency of the governor of the province, it is one of the indications we have on the role of Ramat Rahel during the Persian period.

The abandonment of the edifice

Another sub-phase of building activity that took place during the Persian period was found in Area C1, within the garden enclosure and south of the western tower. This building operation marks the decline of the edifice and possibly the takeover of parts of the garden for other more "functional" purposes. It includes building 824 of an architectural unit in the southeastern part of the enclosure. In constructing this unit, the eastern and southern escarpments were used as walls. Large ashlers were robbed from nearby structures and placed against the escarpment to prevent its collapse. The northern and western walls of the unit were built of similar ashlers, in secondary use. The floor of the unit covered Channel E. We noted that the floor of the architectural unit was laid after the cover stones of Channel E had been robbed and concluded that the channel was out of use at the time this unit was constructed. It is also significant that the northern wall cuts through the "garden soil" and is therefore later. The archi-


tectural unit was violently destroyed, and a few pottery vessels, dated to the end of the Persian and the beginning of the Hellenistic period, were found on the floor (Pl. I). This pottery assemblage helped to date the construction of this architectural unit to the later part of the Persian period, and features such as the garden and the channels to an earlier chronological stage—from the late 7th to the 5th century (building phases II and III).

6th Century Stamped Storage Jars and pottery assemblages

The excavations at Ramat Raḥel yielded a profusion of artifacts that demonstrate a significant presence at the site at the beginning of the Second Temple period. Out of a total of about 640 yhwd stamped jar handles from the Persian and Hellenistic periods (6th–2nd centuries) known to us to date, 365 (60%) were found at Ramat Raḥel. Of the 495 yhwd stamped jar handles from the early and middle types,52 dated to the Persian and the beginning of the Hellenistic period (6th–4th centuries), 332 stamped handles were discovered at Ramat Raḥel (67%). This data is a clear indication that during the Persian and Early Hellenistic periods the edifice at Ramat Raḥel was used in an administrative/governmental capacity for collecting wine and oil jars in Judah, probably as a levy.

During the renewed excavations at Ramat Raḥel, two well contextualized pottery assemblages from the Persian period were excavated. All the pottery sherds belonging to these assemblages were carefully collected, studied, and restored. The earliest pottery assemblage was excavated in a discard pit that dates mostly to the 6th century (the Babylonian and the Early Persian periods). The second pottery assemblage was excavated in the collapse of Building 824, which dates to the late 4th century (the end of the Persian or the Early Hellenistic periods, and see above). The two assemblages provide a rare opportunity to study the changes in the typology of pottery in this period, but even more importantly to date both the zenith of administrative activities at Ramat Raḥel as well as its decline.

The earliest assemblage came from the southeastern corner of the site, where a huge pit was excavated. It contained hundreds of broken pottery vessels, among them more than 10 restorable jars, some of them bearing stamp impressions from the early yhwd types, and some with 6th century “private” stamp impressions together with lion stamp impressions on body sherds (Pl. II).

These finds, together with hundreds of stamp impressions on jar handles dated to the Persian and Hellenistic occupation periods at the site, are the best indication that Ramat Raḥel was the main center of the yhwd sys-

52. Lipschits-Vanderhooft, op. cit. (n. 5); Vanderhooft-Lipschits, loc. cit. (n. 17).
tem in which the jars circulated. This Persian period system of stamping jar handles continued the *lmk* and rosette systems of stamped handles from the late Iron Age and the lion stamped handles from the Babylonian period.

In this regard, the place of the lion stamp impressions on the body or the handles of jars deserve special attention. Seventy-seven lion stamped jar handles were excavated at Ramat Rahel, out of a total of about 110 stamped handles known to us to date. Furthermore, a modified typological classification demonstrates that two out of 10 types were found solely at Ramat Rahel, one additional type was found at Ramat Rahel and Nebi Samwil only, and that all the other types are represented mainly at Ramat Rahel (*ibid.*).

The lion stamp impressions can no longer be dated to the very beginning of the Persian period. A new study of the iconography of this type hints at the connection of these objects with the Assyrian-Babylonian world and interpret this “object” as a human head in profile, just as it is well known from the Babylonian world. Furthermore, petrographic analysis of the lion stamped handles shows a resemblance of the rosette jar handles to Iron Age patterns (pottery production in the Shephelah of Judah and in the area of Jerusalem) rather than to Persian-period patterns of the *yhwd* jars (pottery production solely in the area of Jerusalem).

The conclusion is that the lion stamp impression system belongs to an earlier and wider 6th century administrative system, and that it should be placed in the Babylonian period. This is the “missing link” in the administrative continuity in Judah between the later Iron Age and the Persian period systems; it was part of the Babylonian administration that lasted until


54. The reason for dating the lion stamp impressions to the early Persian period is the absence of these stamped handles from the “classic” Persian period strata on the one hand, and the historical assumption that they cannot be dated to the pre-Persian period (i.e., to the “Exilic period”) on the other. Besides, E. Stern (op. cit. [n. 7] 1982, pp. 209-210; id., *op. cit.* [n. 7] 2001, p. 541; cf. D.T. Ariel and 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. Vol. VI, Inscriptions*, Jerusalem 2001, p. 141) interpreted the “object” or “indistinct signs”, which is part of a scene depicting a lion standing on his hind legs, with the two front legs stretched out wide, as an Achaemenid “fire altar”.

55. T. Ornan, “The Origin of the Lion in the Judahite Stamp Impressions”, in Lipschits-Koch, *op. cit.* (n. 16), pp. 15-16 [Hebrew]; B. Sass, “The Lion Stamp Impressions from Sixth Century BCE Babylon and their Connection to the Lion Stamp Impressions from Judah”, in *ibid.*, pp. 13-14 [Hebrew].

56. B. Gross and Y. Goren, “Technological Study of the Lion Stamp impressions – First Results”, in *ibid.*, pp. 11-12 [Hebrew].
the beginning of the Persian period, at which point it was replaced by the \textit{yhw\textipa{d}} stamp impression system.

The prominence of the lion stamp impressions is another indication that Ramat Rahel continued to have a prominent administrative role during the 6th century, while its second building phase continued to exist. The fact that only one \textit{mw\textipa{s}h} stamp impression, which probably also dates to the mid-6th century,\textsuperscript{57} came from Ramat Rahel, whereas 30 \textit{mw\textipa{s}h} stamp impressions were excavated at Tell en-Na\textasciiacute{\textipa{s}}beh – the new capital of Judah after the destruction of Jerusalem\textsuperscript{58} – is another indication of the different role and status of the capital (be it Jerusalem or Mizpah) and the administrative center that continued to exist at Ramat Rahel.

The newly discovered, and not yet published, pottery assemblage from Ramat Rahel, stands as the clear marker for this group of 6th century pottery assemblage. Especially remarkable is the resemblance of the newly found \textit{yhw\textipa{d}} store jars and their predecessors – Rosette store jars (Fig. 4). It is the first proof of the theory that characteristics of the well-known local pottery assemblages dating to the end of the Iron Age and to the Persian period exhibit continuity, and therefore attest to the existence of an unbroken tradition of pottery production in Judah from the end of the 7th to the 5th and 4th centuries. The new pottery assemblage from Ramat Rahel is one of the few known thus far that clearly fills this gap, and thus supports the assumption that the local traditions of pottery production continued throughout the 6th century. This group of store jars, with the stamped impressions found on them, is to be connected to activities conducted at the site during the second and third building phases.

The second pottery assemblage, discussed above, is from construction that was built into the southern part of the garden (Building 824). A destruction debris layer was exposed, and it had sealed a pottery assemblage of three restorable jars, a jug, and some other pottery vessels on the floor of the building. This assemblage shows that the building had been destroyed and abandoned in the late Persian or the Early Hellenistic period (4th century), thus, supplying a small but clear and well dated late Persian–Early Hellenistic pottery assemblage that supplements the one from the Babylonian and early Persian period.

\textbf{Conclusions}

The new interpretation of the stratigraphy and chronology of Ramat Rahel offers a clear and coherent answer to the "riddle of Ramat Rahel" in


\textsuperscript{58} Lipschits, \textit{op. cit.} (n. 7) 2005, pp. 179-181.
the Persian period. The edifice of building phase II was not destroyed by the Babylonians in the early 6th century, the architecture was never razed and the administrative and other activities continued during the 6th century as it had before. The assemblage of 6th century pottery, together with 6th century lion and private stamp impressions, represent the continued functioning of the site during the Babylonian period.

The addition of a northwestern wing during the Persian period, and the hundreds of stamped jar handles discovered at the site, are a clear indication that Ramat Rahel reached the zenith of its activity during the 5th-4th centuries. It seems that the hallmark of royal architecture and grandeur was the unique garden. This well-watered imperial garden and its original flora originated in the Persian homeland and surrounding areas, and its magnificence location in this relatively arid environment, must have left a lasting indelible impression on visitors to the royal site. Its imported trees from far-off lands, aromatic plants and impressive fruit trees, together with its aesthetic architectural features, symbolized the power and affluence of the local rulers who represented the Persian Empire.

It seems that with this combination of magnificent edifice and luxurious garden, there is no reason to continue to doubt that during the Persian period Ramat Rahel served as the edifice of the imperial governor in the province. We may carefully suggest that the site was built under Assyrian rule during the late 8th or early 7th century as an administrative center and possibly also as the place where the Assyrian kepu could inspect the vassal kingdom and supervise its loyalty and the payment of taxes. Under Babylonian rule, the duality between the palace of the local governor (in Mizpah) and the administrative center (at Ramat Rahel) continued, even though Judah had already become a province. This duality is also reflected by the duality between the mwšš stamped jar handles, most of them discovered in Mizpah, probably marking agricultural products from the governor's estate in mwšš,59 and the lion stamped handles, most of them discovered in Ramat Rahel, probably serving as part of the province's taxes, as all the other systems of jar handles discovered at this site.

Only during the Persian period, when Mizpah was deserted and Jerusalem renewed its status as the lone cultic site, the location of the Temple and the seat of the priests, did Ramat Rahel become both the palace of the governor and the main administrative center for collecting taxes. Against this background, many opposing historical reconstructions can be hypothesized on the priests – governors relations in the Persian period, the role of the governor in Jerusalem and his place among the people living in Jerusalem - but these are subjects for a different study.

59. Ibid., pp. 150-152.
Fig. 1: Plan of Stratum IVa-b according to Y. Aharoni 1964
Fig. 2: General Plan of Ramat Rahel – Building Levels 1-3