

# Jerusalem Archaeology



***Exposing the Biblical City***

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## Learn More about Jerusalem

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The fully illustrated versions of the articles found in this eBook are available from the BAS Library online, along with 38 years of articles by the world's foremost scholars of Biblical archaeology and related fields. In addition to the articles in this eBook, many other articles on the archaeology of Jerusalem are available in *Biblical Archaeology Review*, including the following:

Peretz Reuven. "Wooden Beams from Herod's Temple Mount: Do They Still Exist?." **BAR**, May/Jun 2013, 40-47.

Hershel Shanks. "Sifting the Temple Mount Dump." **BAR**, Jul/Aug 2005, 14-15.

Jane M Cahill. "Jerusalem in David and Solomon's Time." **BAR**, Nov/Dec 2004, 20-29, 31, 62-63.

Hershel Shanks. "Jerusalem Update: The Missing Millennium in Jerusalem's Archaeology." **BAR**, Sep/Oct 2000, 34-37.

Lawrence E Stager. "Jerusalem as Eden." **BAR**, May/Jun 2000, 36-47, 66.

Bargil Pixner. "Jerusalem's Essene Gateway." **BAR**, May/Jun 1997, 22-31, 64, 66.

Dan Bahat. "Jerusalem 3,000: Jerusalem Down Under: Tunneling Along Herod's Temple Mount Wall." **BAR**, Nov/Dec 1995, 30-47.

Bargil Pixner. "Church of the Apostles Found on Mt. Zion." **BAR**, May/Jun 1990, 16-17, 20-31, 34-35, 60.

Rivka Gonen. "Visualizing First Temple Jerusalem." **BAR**, May/Jun 1989, 52-55.

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## Table of Contents

- V Introduction  
by Noah Wiener
- 1 Jerusalem Roundup  
by Hershel Shanks
  - 1 The Temple Mount Sifting Project
  - 5 Wall of Solomon's Royal City Identified
  - 10 Sifting Project Reveals City's Earliest Writing
  - 12 Where Was Solomon's Palace?
- 15 Layers of Ancient Jerusalem  
by Shlomit Weksler-Bdolah, Alexander Onn, Shua Kisilevitz and Brigitte Ouahnouna
- 33 Authors
- 34 Notes

## Introduction

“To walk the streets of Jerusalem is to walk through history. You encounter a well-built corner of a first century B.C. Herodian tower which stands not far from a complete Crusader church of the 12th century A.D. A street paved by fourth century A.D. Romans leads you to the Temple Mount and the dazzling beauty of the Moslem shrines built in the seventh century A.D. You can gaze into an excavation uncovering the city walls built by the Canaanites in the 19th century B.C. You can ascend wet and shivering from a water tunnel cut under the City of David by King Hezekiah when the Assyrians besieged Jerusalem in 701 B.C.”

—Rivka Gonen, “Keeping Jerusalem’s Past Alive,” **BAR**, July/August 1981.

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The storied city of Jerusalem has been continuously inhabited for thousands of years. Sacred to three great monotheistic religions, it is a Biblical archaeologist’s dream—and nightmare. Jerusalem is the most-excavated city in the world; archaeologists have worked with everything from a bulldozer to a toothbrush. As Hershel Shanks writes in “Jerusalem Roundup,” “almost every time someone digs in the Holy City, some new and exciting clue about the world of ancient Israel or the origins of Judaism and Christianity is revealed.”

Constructing a history of Jerusalem is a monumental task. Jerusalem’s story takes place in countless sites built over the course of millennia. And each of the city’s historical puzzle pieces carries with it myriad interpretations and debates.

In the first chapter of this eBook, *Biblical Archaeology Review* editor Hershel Shanks presents dramatic recent discoveries from the city’s early history, as well as the projects and scholars who have brought them to light. Sift through hidden treasures from the Temple Mount, read the fragmented text of the city’s oldest known writing and explore evidence of Solomon’s Jerusalem—from the city walls to his royal residence.

Jerusalem’s sacred history developed over the span of millennia. A new excavation located a mere hundred yards from the Western Wall reveals Jerusalem’s layered ancient history—from the building blocks of Solomon’s city to the bustling thoroughfare of Roman and Byzantine Aelia Capitolina. In this eBook’s second chapter, Israel Antiquities Authority archaeologists Shlomit Weksler-Bdolah, Alexander Onn, Shua Kisilevitz and Brigitte Ouahnouna shine a spotlight on a single site containing more than a thousand years of the city’s dynamic history.

These two articles open the door to the endlessly alluring history of Jerusalem, a city that lies at the heart of Biblical archaeology.

Noah Wiener  
Web Editor, Biblical Archaeology Society  
2013

## Jerusalem Roundup

By Hershel Shanks

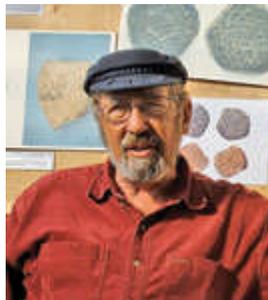


**Jerusalem** *Photo by Garo Nalbandian*

Jerusalem is the epicenter of Biblical archaeology. As **BAR** readers know, almost every time someone digs in the Holy City, some new and exciting clue about the world of ancient Israel or the origins of Judaism and Christianity is revealed.

In this roundup of recent discoveries from Jerusalem, we highlight the dramatic new finds that are reshaping our understanding of the city's ancient history, including its earliest inscription and the monumental walls that protected its people during the time of King Solomon. We also explore compelling new evidence for where Solomon built his palace on the Temple Mount. But our story begins with an update on the Temple Mount Sifting Project and its expanding efforts to recover ancient artifacts from the city's most revered and contested location.

### The Temple Mount Sifting Project



**Barkay** *Todd Bolen/bibleplaces.com*

Gaby Barkay and Zachi Zweig have gone into business. Bring your excavated dirt to them for “wet sifting” and they will take care of it for you. Business is good.



**Zweig** *Todd Bolen/bibleplaces.com*

Gaby (actually Gabriel) is one of the most prominent archaeologists in Jerusalem. Zachi, now his colleague, was his student at Bar-Ilan University.

It all started when the Israel Antiquities Authority (IAA) had Zachi arrested. The Muslim religious authority known as the Waqf, which controls the Temple Mount, had dug an enormous hole on the Temple platform to create a monumental staircase leading down to the area known as Solomon's Stables in order to turn it into a mosque. During this operation, the Waqf dumped hundreds of truckloads of unscientifically (and illegally) excavated earth into the adjacent Kidron Valley. Zachi was caught rummaging around in this mound of earth to see if it contained anything archaeologically valuable. According to the IAA, he was illegally excavating without a permit.

Zachi was soon released, and his teacher Gaby obtained a permit from the IAA to “excavate” this artificial mound of earth that had been simply dumped there.



*Hershel Shanks*

**SACRED SIFTING.** Housed under shade tents set up less than a mile from the walls of the Old City and the iconic Dome of the Rock, the Temple Mount Sifting Project continues to produce startling new discoveries from Jerusalem’s holiest site. Since 2004, the project, directed by renowned Jerusalem archaeologist Gabriel Barkay and his former student Zachi Zweig, has been tasked with sifting through countless truckloads of earth and debris that were illegally and recklessly removed from the Temple Mount by Muslim religious authorities to accommodate steps to the underground Marwani Mosque in 1999.

Thus was born the “sifting project.”<sup>3</sup> Gaby and Zachi obtained a site on the slope of Mt. Scopus in view of the golden Dome of the Rock, put up a tent, began trucking bags of earth from the Kidron Valley to their site and started to sift. They and their staff and volunteers have been

enormously successful, having found thousands of artifacts dating from the Middle and Late Bronze Ages to modern times in this archaeologically rich dirt. In addition to millions of pottery sherds and thousands of bone fragments, the finds include Egyptian scarabs, Israelite seals, countless coins from the Second Temple period and numerous architectural fragments from Herod's Temple Mount complex.



*Todd Bolen/bibleplaces.com*

**PUTTING SIFTERS TO WORK.** Since it began in 2004, the sifting project has grown exponentially. More than 20,000 volunteers a year visit the project's ever-expanding facility to spend a few hours sifting through the soil of one of the world's most sacred and historic sites, Jerusalem's Temple Mount. Volunteers stationed at more than a dozen wet sifting stations use sieves and high-pressure hoses to sort through the bags of dirt and rubble recovered from the Temple Mount dump (shown here). Their meticulous sifting has revealed invaluable artifacts from ancient Jerusalem, including Egyptian scarabs, Israelite seals and even pieces of the buildings that sat atop Herod's Temple Mount.

Since its rather humble beginnings in 2004, when Gaby and Zachi were simply trying to sift as much of the Temple Mount debris as they could with a limited staff and an even more limited budget, the sifting operation has grown exponentially. With increased publicity and financial support, as many as 20,000 volunteers a year participate in the project, and the number of visitors is even larger. To handle that many volunteers, and the resulting flow of sifted material, the project has expanded by setting up several rows of sifting stations and building new facilities, including a processing lab and training and storage rooms. They also have a trained staff that oversees the work of the scores of volunteers that come to the site every day to sift the ancient soil from the Temple Mount.

Through its success, the project has confirmed the value of sifting, which has long been practiced on professional digs, but even more so of wet sifting, which has been used much more rarely. In wet sifting, excavated buckets of rubble, debris and soil are first soaked in water to loosen and dissolve the dirt that tends to encrust buried archaeological material. After soaking, the murky mixture is then dumped into sieving screens where pressurized water hoses are used to wash off and drain any dirt that may still cling to objects in the sift. Once the dirt has been

washed away, important archaeological artifacts such as bones, coins and inscriptions can be more easily distinguished.

The operation has been working so well that Gaby and Zachi decided to offer their services to other excavations in and around Jerusalem. They can do the sifting less expensively, more efficiently and more thoroughly than archaeologists working in the field, with the added assurance that all material would be handled and sifted not by volunteers, but by the project's trained, professional staff. Loads of bagged dirt could simply be trucked to their site from nearby professional excavations, just as they had done with the dirt from the Temple Mount dumped in the Kidron Valley.



*Hershel Shanks*

**The sifting project has been so successful that other Jerusalem archaeologists, including Eilat Mazar who excavates just south of the Temple Mount, are now sending bags of their own excavated soil to the Mt. Scopus facility to be sifted. In Jerusalem, where space for doing archaeological work is at a premium, the project's spacious facility and streamlined operation can handle the sifting more efficiently and inexpensively than archaeologists working in the field.**

This was the obvious solution for archaeologist Eilat Mazar, another prominent Jerusalem archaeologist, who was excavating just south of the Temple Mount. She works in a very sensitive area and in a confined location where there is no room for a sifting operation. "Contracting out" the sifting of the soil seemed like the perfect solution. So she began shipping large bags of dirt about a mile up the hill to Mt. Scopus. It worked well, and one of her last bags of excavated dirt produced one of the more dramatic finds to be discovered in Jerusalem in recent years.

But before we get to Eilat Mazar's new find, you should know a little more about her exciting dig south of the Temple Mount and the dirt she had shipped to Gaby and Zachi for sifting. Mazar contends that her excavations have exposed a city wall and fortified gate complex originally constructed by none other than King Solomon.

## Wall of Solomon's Royal City Identified



*The Ophel Excavations, Courtesy Eilat Mazar*  
**THE FAMILY THAT DIGS TOGETHER. Benjamin Mazar and Eilat Mazar**

Mazar's excavation is actually part of a larger excavation that had been directed by her grand-father Benjamin Mazar, once president of the Hebrew University and a leading Biblical scholar, historian and archaeologist. He excavated south of the southern wall of the Temple Mount for ten years beginning in 1968, but then passed away in 1995, leaving most of the excavation results unpublished.

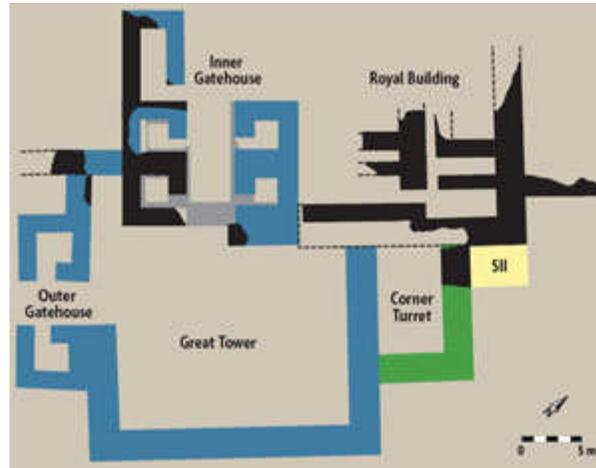
Eilat Mazar, herself an experienced archaeologist on the university staff, was appointed as her grandfather's literary executor, charged with completing the publication of the dig led by her grandfather. She has already published several volumes of excavation reports. In addition, in 1986–1987 she undertook some excavations of her own to clarify and confirm certain aspects of the earlier excavation.



**Professor Eilat Mazar is dwarfed by the massive blocks of the eastern wall of the Corner Turret she uncovered during her excavations south of the Temple Mount. Based on pottery found below the wall's foundations, Mazar dates the fortification to the tenth century B.C.E., the time of King Solomon.**

Near the southeast corner of the Temple Mount, with a striking view dominating the Kidron Valley, are impressive remains of a gate complex, elements of which were first identified in

1867 by the great English explorer and engineer Charles Warren. Tunneling underground, which was his method of excavation, Warren identified two towers. The larger one, preserved to a height of 40 feet, he called the “Great Tower,” and the smaller adjacent one he called the “Corner Turret.” These are now largely underneath the modern road that rings the southern wall of the Temple Mount. However, Eilat Mazar’s excavations in the 1980s exposed part of this gate complex closer to the Temple Mount wall. They also exposed a small part of Warren’s Corner Turret north of the modern road.



**EILAT MAZAR’S PLAN OF SOLOMON’S FORTIFIED GATE COMPLEX.** The black walls were exposed in the Hebrew University excavations led by Benjamin Mazar and, later, by his granddaughter Eilat Mazar. The gray areas represent foundation walls. The blue and green walls are based on descriptions and drawings from Charles Warren’s explorations in 1867. These structures now lie beneath a modern road, except for a small piece of the Corner Turret, shaded in black, which was discovered during Eilat Mazar’s earlier excavations. Kathleen Kenyon’s SII excavation is shown in yellow, while the plans’s dashed lines indicate reconstructed wall lines.



*Warren Palestine Exploration Fund, London*

In the 1960s, British archaeologist Kathleen Kenyon opened a single, now-famous excavation square known as “SII” (pronounced “S2”) outside and adjacent to the Corner Turret. Based on pottery sherds from the fill, Kenyon dated the complex to the eighth century B.C.E.,<sup>1</sup> probably to

King Hezekiah, who presumably would have built this defensive complex as part of his preparations for the Assyrian siege that came with devastating force in 701 B.C.E.



*Hershel Shanks*

**PROTECTING KING SOLOMON'S JERUSALEM.** In the foreground is an 8-foot-wide wall that extends northeast toward the southeast corner of the Temple Mount, seen at the very top of the photograph. This wall is part of the fortified gate complex that archaeologist Eilat Mazar contends protected the city in Solomon's time. The two edges of the wall are clearly visible in the photograph as it proceeds northeast, although the wall is obscured somewhat by later construction, destruction and debris.

Adjacent to this wall is Square SII, initially excavated by British archaeologist Kathleen Kenyon. Based on pottery she found, she dated the complex to the eighth century B.C.E. Eilat Mazar now says she has new evidence that the complex was constructed earlier—in King Solomon's time.

On the upper right edge of the photograph are the tops of two buses on a modern road south of the excavations. Under this road lie the remains of two towers observed in 1867 by British engineer and explorer Charles Warren. He called them the Great Tower and the Corner Turret. A portion of the wall of the Corner Turret was uncovered in Eilat Mazar's excavation.



**Kenyon** *Bettmann Corbis*

In 1986, Eilat Mazar reexcavated Kenyon's SII square, as well as a small area on the other side of the Corner Turret wall and adjacent structures and gates that were part of this critical First Temple period gate and fortification complex. Here, "immediately below a foundation stone," Eilat Mazar found a black juglet that "appears to be characteristic of the tenth century B.C.E.," the time of King Solomon. On this basis, she tentatively suggested that the fortification complex, which was part of a wall surrounding Jerusalem, was built earlier—by King Solomon.<sup>b 2</sup>



**In 1986, when Eilat Mazar had just begun reexcavating some of the same areas of the Ophel where her grandfather Benjamin Mazar had dug, she discovered this small black juglet (above) dated to the tenth century B.C.E. immediately below the foundations of the monumental gate complex. At the time, the juglet was one of the few pieces of evidence that could date the complex to the reign of King Solomon. As she has continued to dig below the complex's foundations, Mazar has identified more tenth-century B.C.E. pottery, confirming that these impressive fortifications were indeed built by Solomon, as suggested in the Bible (1 Kings 9:15)**

*The Ophel Excavations, Courtesy Eilat Mazar*

This, she says, tends to confirm the historicity of the Biblical reference to Solomon's building activities, which included "the wall of Jerusalem" (1 Kings 9:15).

Mazar's conclusion has been vigorously attacked by, among others, Tel Aviv University archaeologist David Ussishkin, who says that Solomonic Jerusalem was "not protected by a city wall"; the fortification complex "uncovered near the southeast corner of the Haram esh-Sharif [the Arabic name of the Temple Mount] dates to the eighth and seventh centuries B.C.E. and not earlier."<sup>3</sup> As for Eilat Mazar's pottery evidence, Ussishkin says, "Only a few pottery pieces earlier than the eighth century B.C.E. were recovered here [and these] were out of stratigraphical context."

But that's not the end of the story. Eilat Mazar kept digging. Now, she says, she has found more tenth-century B.C.E. pottery below the complex's foundation stones, buttressing her contention that the wall is Solomonic. In her latest report, Mazar says that these "excavations revealed a section of the city wall 70 m[eters] [more than 200 feet] long and preserved 6 m[eters] [approximately 20 feet] high, dated to the Iron Age IIA [the time of David and Solomon]."<sup>4</sup>

Warren's Great Tower was built on a "massive construction fill ... needed to reinforce its stability," Mazar explains. This fill, she continues, was "most probably" brought from the City of David just south of the gate complex. The latest potsherds in the fill dated to the time of David and Solomon.

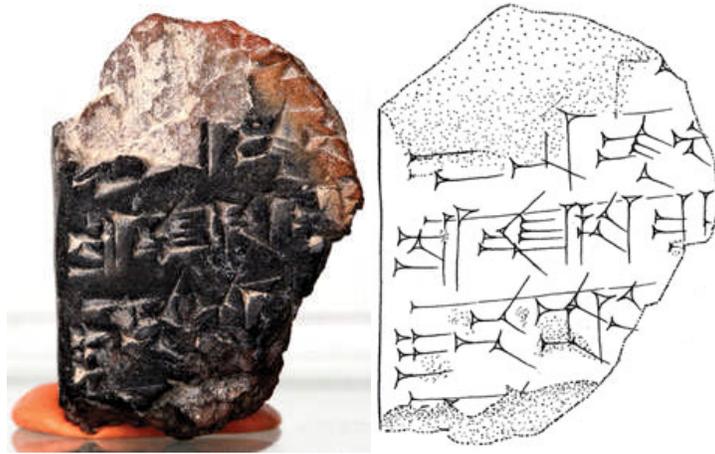
Mazar has not yet published this new pottery, however. That will come, she says. Other Jerusalem archaeologists who have seen the pottery confirm Mazar's dating.

Which brings us back to the bags of excavated dirt Mazar sent to Gaby Barkay for wet sifting. The wet sifting increased by 95 percent the number of small finds from Mazar's excavation and included beads, amulets, ivory figurines, bullae, scarabs, olive pits and fauna (including fish bones).

Much of this dirt came from the fill described above. While the latest pottery fragments from the fill date to Iron Age IIA, the fill also included an array of finds dating from the Early Bronze Age (c. 3300–2300 B.C.E.) to the tenth century B.C.E.

As 27-year-old Ephrat Greenwald, a longtime archaeology enthusiast and veteran sifter, poured the contents of a bag onto the sieve and meticulously sifted through its contents, she came across a tiny piece of fired clay, no larger than the size of a postage stamp. As she carefully inspected the piece, Ephrat noticed strange wedge-shaped markings, markings that would prove upon further analysis to be cuneiform signs—the earliest evidence of writing ever found in Jerusalem.

## Sifting Project Reveals City's Earliest Writing



Courtesy Eilat Mazar/Photo by Sasson Tiram Takayashi Oshim/Israel Exploration Society

**JERUSALEM'S EARLIEST INSCRIPTION.** This small piece of fired, blackened clay, measuring less than 1 inch square, features the oldest inscription ever found in Jerusalem. The fragmentary cuneiform inscription (the front of the inscription is shown here) was part of a letter written on a clay tablet and preserves nine partial lines of wedge-shaped signs, with five lines on one side and four on the other. Although the fragment does not preserve any names or titles, Assyriologists have identified the Akkadian words “you,” “you were,” “to do” and “they” and, based on the shape and sophistication of the surviving signs, believe it was likely part of a letter written in the 14th century B.C.E. from a Canaanite king of Jerusalem to a pharaoh of Egypt. The find provides further evidence that Jerusalem was already a thriving city-state more than three centuries before David conquered the city.

The small piece of inscribed clay has now been studied by leading Assyriologists Wayne Horowitz and Takayoshi Oshima, who report that it is a fragment of a 14th-century B.C.E. tablet, making it the oldest writing ever discovered in Jerusalem, predating the previous contender, the famous Siloam Tunnel inscription, by at least 600 years!<sup>5</sup>

The fragment preserves only traces of nine lines, five on one side and four on the other. It was originally part of a larger tablet written in the Akkadian language (the diplomatic *lingua franca* of the time), but this is all that has survived. The preserved signs include “you,” “you were,” “to do” and “they.” With so little to work with, the scholars admit, they cannot restore even a single full phrase with any certainty. The fragment is thought to be part of an archived copy of an official letter written from a Canaanite king of Jerusalem to a pharaoh of Egypt. Although the fragment does not preserve any names or titles, the scholars believe its finely formed wedge-shaped characters could have been produced only by someone with considerable scribal training in cuneiform and knowledge of Akkadian: “The scribe of the Jerusalem fragment seems capable of producing high-quality international-standard scribal work,” the scholars note.

As analyzed by Tel Aviv University clay petrologist Yuval Goren, the clay from which the tablet was made came from Jerusalem, not a far-off city in Egypt or Mesopotamia.

This indicates that the letter was written in Jerusalem, most likely by a royal scribe, perhaps even one of the personal scribes of Abdi-Heba, the king of Jerusalem whose pleading letters to the pharaoh Akhenaten are famously preserved in the 14th-century B.C.E. archive found at el-Amarna in Egypt.<sup>c</sup> In fact, given the close similarity between the cuneiform signs from the new fragment and those of Abdi-Heba's letters, and the fact that the new fragment was found so close to Jerusalem's Late Bronze Age citadel, the scholars believe the fragment may be part of a copy of one of Abdi-Heba's letters to Pharaoh that was stored in the Jerusalem king's archive.



*Bildarchiv Preussischer Kulturbesitz/Art Resource, NY*

**The newly discovered Jerusalem tablet, which was made from local clays, may well have been an archival copy of one of the letters that Abdi-Heba, king of Canaanite Jerusalem, sent to the Egyptian pharaoh Akhenaten (1353–1337 B.C.E.). Several of Abdi-Heba's letters to the pharaoh, including this one, were found among a cache of more than 300 cuneiform letters of diplomatic correspondence discovered at el-Amarna (Akhenaten's capital city of Akhetaten) in Egypt in the late 1800s. In the surviving letters, the ever-loyal Canaanite king implores Pharaoh to send more troops to Jerusalem so that he can defend the city against the machinations and plots of neighboring Canaanite kings.**

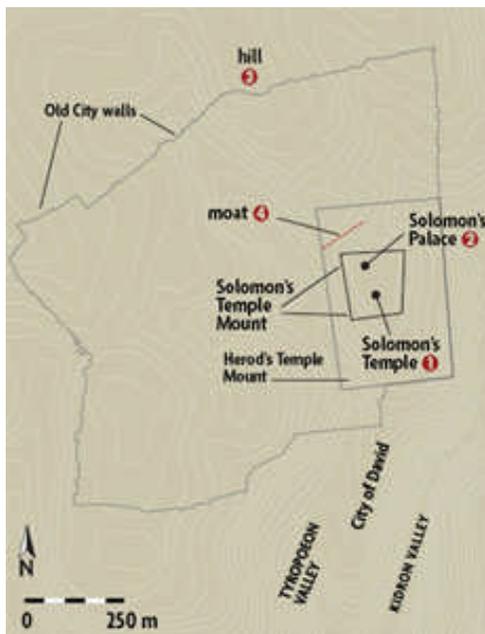
**Leading Assyriologists Wayne Horowitz and Takayoshi Oshima, who compared the cuneiform signs from the Jerusalem fragment with those from Abdi-Heba's letters, found that the signs are not only similar, but also share the same degree of skill and sophistication. This similarity suggests that the fragment was likely produced by the same school of 14th-century royal scribes that crafted Abdi-Heba's letters to the pharaoh in Amarna.**

This tiny, fragmentary inscription from which we cannot really extract any literal meaning nevertheless has a broader significance. It confirms evidence from the Amarna letters that Jerusalem was a thriving city in the Late Bronze Age, with scribes capable of writing cuneiform

and with the governmental organization to employ them. This must be our conclusion despite the fact that archaeologists have found little of surviving structures from this period.

This is similar to the situation in the tenth century B.C.E. when David and Solomon ruled. Little from this time has been archaeologically recovered. But, as the Amarna letters suggest and this little cuneiform inscription confirms, Jerusalem could have been an important city at that time, even though structurally little has survived.

## Where Was Solomon's Palace?



**USSISHKIN MAKES A MOAT POINT.** According to Tel Aviv University archaeologist David Ussishkin, King Solomon would have built his palace not south of the Temple, as scholars have long suggested, but in a more open, spacious area of the mount just north of the Temple, well removed from the constant foot traffic and noise of people moving between the City of David and the Temple Mount. As seen on this reconstructed plan of the Solomonic Temple Mount, both the Temple [1] and Solomon's palace [2] were strategically vulnerable from the northwest, where a narrow rock saddle connects the Temple Mount with an adjacent hill [3]. To prevent incursions from this direction, Ussishkin postulates, Solomon had a moat [4] cut across the saddle, leaving his palace and the Temple isolated and secure from attack from this direction.

We know where King David's city was. It was on the little 10–12-acre ridge south of the Temple Mount, just outside the Old City walls. On this all are agreed. This little ridge is still called the City of David.

Then King Solomon extended the city northward to the Temple Mount, where he built the Temple.

We know he had a palace—or at least a royal residence. As Israel Finkelstein has noted in **BAR**, “When you have a dynasty ruling in the capital of a territorial entity, you always have a palace and a royal shrine near the palace.”<sup>d</sup> And, for what it's worth (*pace*, Israel F.), the Bible also indicates Solomon had a palace. It is described in some detail in 1 Kings 7:1–12. It took 13

years to build. Cedar from Lebanon was used throughout. The foundations were of costly stone. The structure was 30 cubits high with three tiers of windows facing each other. One portico of the building was known as the Hall of Judgment, where the king pronounced his decisions, also called the Throne Room. The whole place was surrounded with courtyards, including the Great Courtyard. Behind one of these courtyards was the king's private residence.

But where was this palace?

Until now, the universal answer to this question has been that Solomon's palace was located between the northern edge of the City of David and the Temple—perhaps on the southern end of the Temple Mount itself.

This seems to be confirmed by the Bible. As you go from the City of David northward to the Temple Mount, you ascend nearly 200 feet to a height of 2,415 feet above sea level. From the Temple Mount, you look down on the City of David. The Bible tells us that when King Josiah sent his scribe (presumably from the palace) to the high priest in the Temple, Josiah tells him to “go up” (*aleh*) to the House of the Lord (2 Kings 22:3–4). When some court officials visit the Temple gate for a meeting, the Bible records that “they went up from the king's palace to the House of the Lord” (Jeremiah 26:10).



**Ussishkin**

Tel Aviv University archaeologist David Ussishkin concedes that “All scholars reconstruct the royal palace to the south of the Temple.” But he has a different answer. Ussishkin agrees that Solomon's palace was on the Temple Mount, but argues that it was north, not south, of the Temple.<sup>6</sup>

For Ussishkin, this makes much more sense. To the north of the Temple was an area spacious enough to accommodate a large palatial complex. Equally important, placing the palace south of the Temple would mean everyone approaching the Temple from the City of David would have to pass by or through the palace complex, hardly the most secure or private location. Placing the palace north of the Temple would provide isolation and security.

Ussishkin also supports his argument with additional topographical and archaeological considerations.

Northwest of the Temple Mount is a hill that is connected to the Temple Mount by a rock saddle. Topographically, this is Jerusalem's weakest point of defense. At the time, the other sides of the ancient city were (and still are) protected by steep slopes. Ussishkin postulates that a deep moat was cut across the rock saddle to protect the palace, the Temple and the city below from attack across this vulnerable path.

Ussishkin is not the first to suggest the existence of a moat in this saddle, if only to protect the Temple. Others have also suggested this, beginning with Charles Wilson and Charles Warren in 1871. They, too, said that a deep ditch must have been cut across this rock saddle. Other more recent scholars have continued to support this suggestion. One wonders why, with modern tools like ground-penetrating radar, this supposition cannot be tested.

Ussishkin's unique contribution, however, is to call our attention to archaeological examples of such ancient moats cut into hard rock. Ussishkin has found a rock-cut moat at Jezreel, a site in northern Israel that he excavated.<sup>6</sup> Additional examples come from Anatolia—at the central fortress of the kings of Urartu, as well as at a site called Cavustepe.

Ussishkin also weighs in on the shape of the Solomonic Temple Mount. All agree that Solomon's Temple Mount would have been considerably smaller than the Herodian (Second) Temple Mount that we see today. Nahman Avigad, the revered archaeological scholar of Jerusalem, reconstructed the Solomonic Temple Mount with curved walls.<sup>7</sup> Ussishkin disagrees. He believes the earlier Temple Mount, though smaller than the later one, was nevertheless rectangular, with straight walls. In this he agrees with two other prominent Jerusalem archaeologists, Kathleen Kenyon<sup>8</sup> and Leen Ritmeyer.<sup>9</sup>

Right or wrong, Ussishkin's ideas are always provocative.

## Layers of Ancient Jerusalem

By Shlomit Weksler-Bdolah, Alexander Onn, Shua Kisilevitz  
and Brigitte Ouahnouna



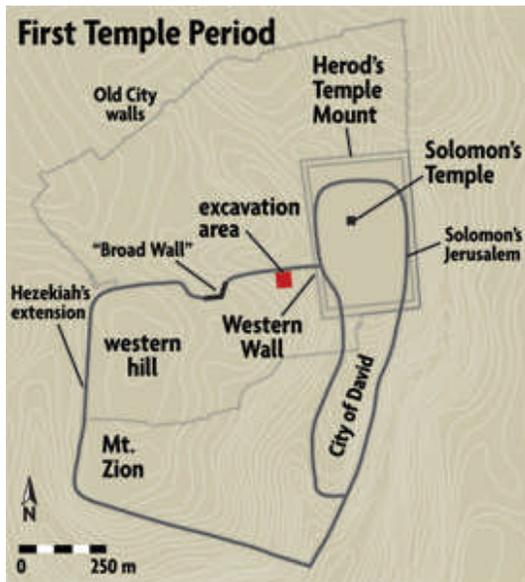
*Shlomit Weksler-Bdolah*

**Within view of the golden Dome of the Rock and just across the plaza from the Western Wall, Judaism’s holiest site, a new excavation in the heart of Jerusalem’s Old City is shedding light on the city’s long history that spans from stone quarries to a monumental colonnaded street.**

If you go to the famous Western Wall in Jerusalem, which is actually the western retaining wall of Herod’s Temple Mount and Judaism’s holiest prayer site, and then turn around, you will see at the other side of the plaza an area of less than half an acre that has recently been excavated. Large-scale archaeological excavations were conducted here between 2005 and 2010 on behalf of the Israel Antiquities Authority, initiated and underwritten by the Western Wall Heritage Foundation and directed by the authors of this article.<sup>1</sup> What we have found sheds light on important transitional phases in Jerusalem’s history, but it also raises fascinating new questions.

Actually, the site of the excavation was outside the city until the eighth century B.C.E. It is located on the northeastern slope of the so-called “western hill.” In King David’s time, Jerusalem was confined to the 10–12-acre ridge south of the Old City known even today as the City of David. Then Solomon extended the city northward, where he built the Temple on a much smaller

enclosure than the one built by Herod the Great a thousand years later. Not until King Hezekiah's time, in the eighth century B.C.E., was the city extended west to the western hill—the present area of Mount Zion, the Armenian Quarter and the Jewish Quarter of the Old City. We know all about this western extension because excavations in the Jewish Quarter, directed by the late Professor Nahman Avigad in the 1970s and 1980s, have unearthed the imposing “Broad Wall,” as it is known, built by King Hezekiah when he extended the boundary of the city to the western hill. Our site was most probably enclosed within the Broad Wall, although the exact course of the wall between today's Jewish Quarter and the Temple enclosure is not yet known.



**THE FIRST TEMPLE PHASE.** The excavation site was a quarry situated outside the city on the slopes of the Western Hill until King Hezekiah expanded the walls in the late eighth century B.C.E. to include this area west of the City of David. (The later Herodian Temple Mount and current Old City wall are depicted in light gray for reference.)



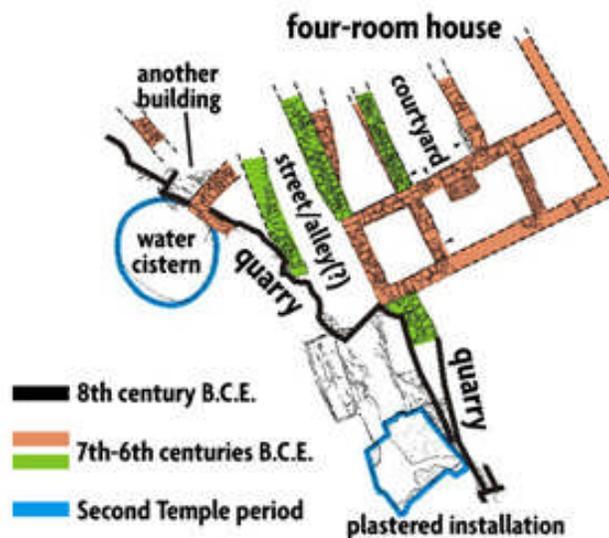
Earliest evidence of human activity at the site, a stone quarry was found at the bottom of the excavation. The chisel marks and separation trenches that the stonecutters used to quarry the blocks are still visible. The lines of quarries that zigzag across the western hill provided the hard *meleke* limestone blocks from which Jerusalem was built, until the site was enclosed inside the city in the eighth century B.C.E.

*Shlomit Weksler-Bdolah*

Since our site was outside the city until the eighth century B.C.E., it is not surprising that at the very bottom of our excavation, we found a stone quarry, the earliest evidence of human activity at the site. It had been used to create building blocks of *meleke*, the hard limestone for which Jerusalem is still famous.

The zigzagging line of quarries cuts across the slope of the hill. The quarrying also left upright stone walls as high as 12 feet. In the smaller hewn steps are separation trenches used to remove the quarried stones. We can still see the diagonal chisel marks of the stone cutters.

In the seventh century B.C.E., not long after this area was enclosed within the city wall, an impressively large structure was erected on top of the old quarry. Although we have not excavated it completely, the part of the building that has been exposed suggests it is a so-called “four-room house,” the typical architecture of an Israelite house during the First Temple period, consisting of three long rooms and a fourth, broad room extending across the other three. Each of these rooms could be further subdivided. The outside walls of the structure we revealed are about 25 feet long, much of which is preserved to a height of more than 15 feet. The base of the walls was founded on the quarry, and the floors were then laid on an 8-foot-high fill of dirt and stone, abutting the walls.



The drawing shows the excavated southern portion of the four-room house; the central area was probably a courtyard with an entrance from the outside, surrounded by the “three” rooms (the broad southern room is further subdivided).



*Shlomit Weksler-Bdolah*

**GO WEST, YOUNG MAN.** After the city expanded to the Western Hill, building construction began here in the seventh century B.C.E. This structure is laid out in the typical Israelite style of a “four-room house” with three long parallel rooms and a fourth room (in this case further subdivided) across the end. The outer walls are about 25 feet long, and much of the structure is preserved to a height of 15 feet or more. In the west-facing photo, the walls are visibly stepped at different levels to accommodate the paving stones for the later *cardo* that was built directly on top of the four-room house in the Roman period. Excavations also revealed a narrow street that separated the four-room house from another building to the west. The house was destroyed by a sudden, violent event, probably in the early sixth century B.C.E., either by invading Babylonians or an earthquake.

This house continued to stand until at least the early sixth century B.C.E. Then it was destroyed. A great pile of fallen stones in one of the rooms evidences collapse of a second floor. The domino effect of the fallen stones indicates that the collapse was a one-time event, the outcome of a sudden, violent destruction. After the destruction, a dirt fill gradually accumulated in the structure to the height of the walls; this fill probably slid down naturally from other buildings farther up the slope that had been destroyed by the Babylonians. In this fill we found much pottery from the last centuries of the First Temple period (eighth–sixth centuries B.C.E.).

Now we come to a major mystery: Who or what destroyed the building?



**READY, AIM ...** This phosphorite seal bearing an elegant image of an Assyrian-style archer prepared to shoot is one of several First Temple period seals that were found in the rubble of the four-room house. Despite the Assyrian artistry, the inscription is in Hebrew and identifies its owner: *l’Hagav*, or “[belonging] to Hagav.”

*Clara Amit/Courtesy Israel Antiquities Authority*

Theoretically there are at least two possibilities: (1) an earthquake or (2) the Babylonians, when they burned Solomon's Temple and destroyed Jerusalem in 586 B.C.E. The absence of any pottery vessels in the destruction collapse weighs heavily in favor of the second possibility. This indicates that the building was abandoned in an orderly fashion before its destruction and that its occupants took their household goods and personal belongings with them (probably as the Babylonians drew near).

Yet we found in this structure several personal seals bearing Hebrew names (all studied by Tallay Ornan, Benjamin Sass, Yuval Goren, Baruch Brandl and Othmar Keel). Perhaps the most intriguing one is a black elliptical phosphorite seal engraved with the image of an Assyrian-style archer and the Hebrew inscription *l'Hagav* (לְהַגָּב), “[belonging] to Hagav.” The lettering indicates that this was a local Judahite seal, but the image of the archer identifies the owner as someone of Assyrian cultural background or inspiration and of military status. How to explain it? We know of nothing comparable that contains all these features.<sup>2</sup>



**Another seal is adorned with a chain of four pomegranates on top while the lower two registers—separated by two sets of horizontal lines—read (in Hebrew): “[belonging] to Netanyahu son of Yaush.”**

*Clara Amit/Courtesy Israel Antiquities Authority*

Another scarab-like limestone seal is elliptical and measures 0.4 by 0.5 inches. The surface of the seal is divided into three registers separated by double lines: In the upper register is a chain decoration of four pomegranates; in the two lower registers is the name of the owner of the seal, engraved in ancient Hebrew script (the kind used before the Babylonian destruction). It reads: “[belonging] to Netanyahu ben Yaush” (שֵׂאִי נָב וְהִינְתָּנִל). Each of these names is known from ancient sources: The name Netanyahu (וְהִינְתָּנִל), or Nethaniah in English, is mentioned in the Bible a number of times (Jeremiah 40–41; 2 Kings 25; 1 Chronicles 25; 2 Chronicles 17), and Yaush is mentioned in the Lachish letters.<sup>a</sup> However, this combination of names—Netanyahu the son of Yaush—was not known previously.

Yet another seal, this one made of bone, was incised “[belonging] to Yeda’ayahu Usha” (אשוא והינתנל). Still another well-worn seal was decorated with the image of a roaring lion and, beneath it, the owner’s name: N’wa or N’ra (אונל/ארנל) “[belonging] to N’ra.”<sup>3</sup>



*Clara Amit/Courtesy Israel Antiquities Authority*  
**A third seal belonged to “Yeda’ayahu Usha.”**



*Clara Amit/Courtesy Israel Antiquities Authority*  
**A roaring lion marks the seal of “N’ra” (or “N’wa”), which is one of only a few seals with a lion motif from Judah—the rest all uninscribed.**

Even more surprising—and puzzling—is a seal or amulet of pink limestone decorated with the image of a winged snake, a cobra-like hybrid, possibly to be identified with the Biblical *saraf* (the “fiery serpent” of Isaiah 30:6). It is being studied by Tallay Ornan.<sup>4</sup> And a broken Egyptian scarab of the 22nd Egyptian dynasty (945–713 B.C.E.) is being studied by Othmar Keel.<sup>5</sup> What is it doing here?



*Benjamin Sass*

The pink limestone seal or amulet with a winged snake recalls the *saraf*, or fiery serpent, of Isaiah 30:6. Were these seals left behind by their owners, or did they wash down from higher up the slope after the building's destruction?

Only the scarab and the N'ra seal were found outside the building; all the others were found inside. The question arises: If the inhabitants took everything with them before abandoning the structure, why didn't they take these seals? There is no easy answer. Perhaps the owners lost them; they are quite tiny. The largest is only 0.6 by 0.5 by 0.3 inches; the smallest, 0.5 by 0.4 by 0.2 inches. Another possibility is that some of the seals were deposited at the site following its destruction, by erosion from the houses farther upslope.

While the likelihood does seem to be that the building was destroyed by the Babylonians, there is another strange fact that suggests caution: We found no evidence of fire, as might be expected if the building was destroyed by the Babylonians. It is not clear, then, that the building was a casualty of the Babylonian destruction. Was it perhaps destroyed in an earthquake after all?

Among the other finds from the First Temple period were ten so-called *l'melekh* handles from the eighth century B.C.E. *L'melekh* means "[belonging] to the king" in Hebrew, and these handles identify large storage jars presumably certified by the government with this impression concerning the contents. Three of the handles carried city names—one from Hebron and two from Soccoth. Others were too damaged to determine whether they carried any inscription at all. These *l'melekh* handles are usually associated with Hezekiah's preparations for the Assyrian onslaught that came to Judah at the end of the eighth century B.C.E. Eleven other jar handles feature two small concentric circles as was used in the late eighth century B.C.E.

Other potsherds were inscribed with a few Hebrew letters, and one had a palm tree, a common symbol of Judah.

In the dirt fill that accumulated under and on top of the floors of the building, we found hundreds of fragments of clay zoomorphic and anthropomorphic figurines. Some were of women, which we interpreted as fertility figurines; others, featuring men riders and animals (horses, bulls), were also found. All of the figurines were broken, probably due to the poor quality of local industrial manufacture. Such figurines are common finds in Judah in the late Iron Age (eighth to sixth centuries B.C.E.) and must have been part of the Judahite household. Their use—whether as objects of a religious ritual or as personal amulets—is not known.



*Clara Amit/Courtesy Israel Antiquities Authority*

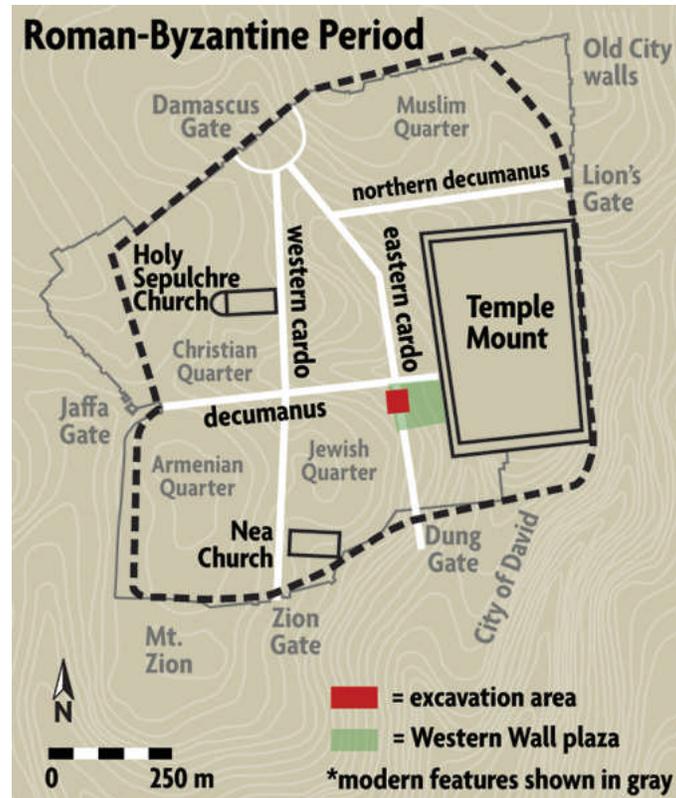
**Fragmentary figures of man and beast dating to the First Temple period were uncovered in the dirt fill that accumulated in and on top of the four-room house. Male riders, female fertility figures, horses and bulls were all found—and all broken, probably due in part to the poor, local quality of their manufacture.**

We believe that this four-room house and/or the neighboring buildings were inhabited by members of Judah's social elite, as reflected in the seals. Perhaps they were members of the ruling class in Judah's capital. The seals also hint at a cultural connection between the kingdom of Judah and the kingdoms of Assyria and Egypt at the end of the First Temple period.

After the Babylonian destruction, this part of Jerusalem was uninhabited for centuries. Even when some of the Babylonian exiles began returning in the late sixth century B.C.E., Jerusalem was a much smaller place, occupying mainly the City of David area. We did not find anything from the early part of the Second Temple period, and the reason is clear: There was probably very little, if anything, built here.

Eventually, however, the settled area of Jerusalem expanded, culminating in the prosperous city of the Hasmonean (167–37 B.C.E.) and Herodian periods (37 B.C.E.–70 C.E.).

Even so, we found almost nothing in our excavation between the end of the First Temple period (586 B.C.E.) and the beginning of the Late Roman period (early second century C.E.). The only significant exception was a 35-foot section of the Lower Aqueduct on top of the rock cliff, to the west, that carried water from the so-called “Solomon’s Pools” south of Bethlehem to the Temple Mount in the latter part of the Second Temple period. From this period we also discovered part of a small *mikveh*, or ritual bath, suggesting that at one time there were other buildings here. But that’s all.



**HERE COME THE ROMANS.** Although Jerusalem eventually recovered from the Babylonian destruction to grow and prosper later in the Second Temple period, there is virtually no evidence of this period at the site, except for parts of an aqueduct and a small *mikveh*, or ritual bath. This dearth of remains is thanks to the Romans, who razed everything above the First Temple house to build the eastern cardo of their city. The new thoroughfare ran south from the Damascus Gate in the north, parallel to the western cardo and the Western Wall of Herod’s Temple Mount. It was connected to the latter by at least two perpendicular streets.

Directly on top of the First Temple period fill were paving stones of the Roman colonnaded street, commonly known as the eastern cardo (one of the city’s two main north-south thoroughfares). When the Romans laid the cardo in the second century C.E., they sealed and preserved the four-room house below until our own time, but they shaved off everything else that may have been built during the Second Temple period, forever destroying this history of the site.



The common street design in Roman cities of the eastern part of the Roman Empire featured two main thoroughfares—the north-south *cardo* and the east-west *decumanus*—that formed the basis for an orthogonal plan, a square grid of streets set at right angles. This layout is well known at Jerash/Gerasa in Jordan, Hippos/Sussita overlooking the Sea of Galilee and at sites such as Beth-Shean/Scythopolis and Sepphoris/Diocaesarea in Israel, to name just a few. However, the square grid of these cities was forced uncomfortably on the steep topography of Jerusalem. In order to retain the overall north-south/east-west network of more or less level streets, Jerusalem’s eastern cardo cut its way through the slope of the western hill while pointing south. It thus created a high vertical, rocky cliff (35 ft high) along the western side of the street. This manmade cliff revealed in our excavation runs north to south, separating the current Jewish Quarter of the Old City from the Western Wall plaza.



*Shlomit Weksler-Bdolah*

**STICKING TO THE GRID.** To maintain a relatively level road and the orthogonal north-south/east-west street plan of a proper Roman city, the Roman engineers were forced to cut the eastern cardo into the bedrock of the Western Hill's slope, creating a manmade 35-foot vertical cliff. This rocky cliff, seen next to the remains of medieval walls that were built on top of the cardo shops, separates the current Jewish Quarter of the Old City from the Western Wall plaza.

What was this thoroughfare like? In the center was the street itself, 26 feet wide, paved with large, hard *mizi-hilu* limestone slabs set diagonally across the street, creating a handsome pattern. On both sides were open sidewalks, each 5 feet wide, paved with the same sort of flagstones, laid in a parallel direction to the street, and raised one or two stair heights above the street's surface.



*Shlomit Weksler-Bdolah*

**MAIN STREET, JERUSLEM.** As one of two major north-south thoroughfares in Aelia Capitolina (the renamed Roman city), the eastern cardo is a fine example of Roman street construction. Running down the center, with an open sidewalk on both sides, was the 26-foot-wide street, paved diagonally with smooth limestone slabs, each about 5 feet by 3 feet by 1 foot thick.



**MAIN STREET, JERUSLEM.** A sophisticated drainage system carried sewage away beneath the eastern cardo's limestone slabs.

*Shlomit Weksler-Bdolah*

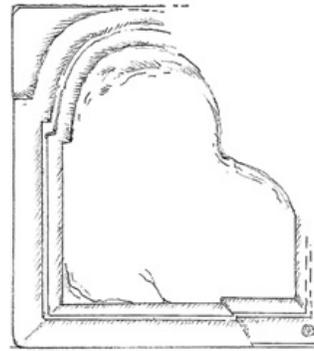
Although they varied somewhat in size, each flagstone was about 5 feet long, 3 feet wide and a foot thick. These street flagstones were smoothed from many years of use and were on occasion rutted with parallel grooves, probably meant to prevent slipping. Beneath the paving stones was a well-developed drainage system with deep channels to carry sewage.



**MAIN STREET, JERUSLEM.** Back up at street level, colonnaded walkways spread 20 feet wide on either side of the street. Many of the columns and bases were reused in later Islamic construction. Only one column base from the western colonnade was discovered *in situ*; on it was placed an upside-down broken column shaft, which was then embedded in a square pilaster in the late Islamic period. The “meter stick” is 8-year-old Yonatan (12 years old at the time of publication), son of excavator Shlomit Weksler-Bdolah.

*Shlomit Weksler-Bdolah*

On either side of the street was a row of columns that served as part of a pedestrian colonnade (20 ft wide, including the columns). Only one column base from the western colonnade was found *in situ* in our excavation. We reconstruct the colonnades on the basis of the many columns and bases that were incorporated in secondary use in the Islamic buildings that were built on top of the cardo in the late seventh or early eighth centuries C.E. For example, on top of the column base that was found *in situ*, a broken shaft of an original Roman cardo column (about 6.5 ft long and 2 ft in diameter) was set in the Early Islamic period and was later embedded in a Late Islamic square pilaster. Two Corinthian capitals were reused in Early Islamic walls, but they probably originated in buildings adjacent to the cardo and not in the colonnade itself.

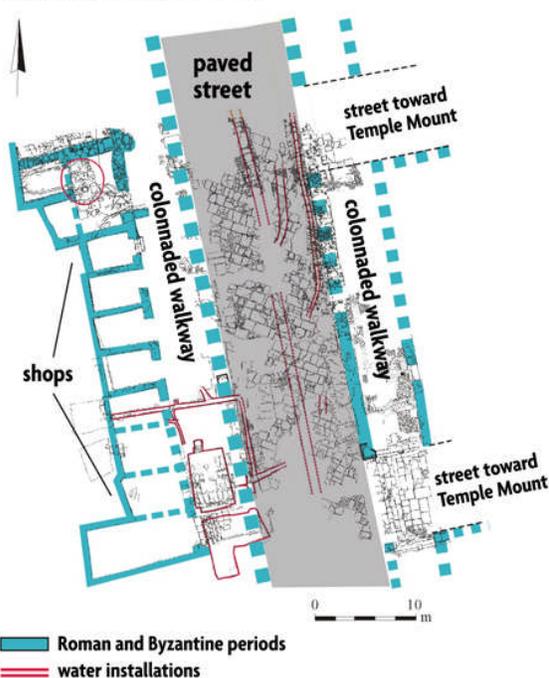


*Shlomit Weksler-Bdolah*

**MAIN STREET, JERUSLEM. A heart-shaped column base (where two columns came together in a corner to form the heart shape) stood at the junction of the cardo and one of the perpendicular streets leading east.**

Adjacent to the western side of the western colonnade, a row of eight shops was hewn from the bedrock at the foot of the rocky manmade cliff. Seven were identical, measuring about 11 by 15 feet with walls up to 14 feet high. The southernmost shop was longer and wider than the others and its ceiling was cut into the rock. One shop had a ceiling of wooden beams, indicated by square niches in the walls. Three adjacent shops north of the southern shop were later joined to this one to form a single space, perhaps presaging the modern tendency to combine smaller establishments into increasingly larger ones.

### Roman Eastern Cardo



**MAIN STREET, JERUSLEM. Excavations revealed eight shops hewn from the bedrock at the base of the manmade cliff—seven were identical, but the southernmost one was longer and wider. The original carved entries to two of the shops were partially preserved. At the top of one are the remains of a lintel with a relieving arch above it. Two small streets led east from the eastern cardo toward the Western Wall of the Temple Mount.**

We date the construction of the eastern cardo according to the date of the latest finds discovered under the paving stones. A rich assemblage of small finds (potsherds, glass vessels, bones and coins) was found within dirt and dump fills that accumulated in the ancient quarries that were sealed under the cardo's flagstones. The latest coin in this fill was minted in Antioch during the reign of the Roman emperor Hadrian (117–138 C.E.). So the cardo above must have been built during or after that time.

The Hadrianic date of the cardo is further supported by a unique assemblage of clay vessels (studied by Renate Rosenthal-Heginbottom) that can safely be dated to the late first–early second centuries (c. 70–130 C.E.). Three types of oil lamps coexist within this assemblage: Roman moldmade lamps produced in the Levant as copies of imperial prototypes and imported into Jerusalem mainly in the first century C.E.; Levantine lamps with a round nozzle and decorated discus that replaced the imperial lamps in the late first century; and wheel-made lamps with spatulate nozzle, characteristic of the Jewish population of the Jerusalem area in the Second Temple period and produced in the vicinity of Jerusalem until the Bar-Kokhba Revolt (132–135 C.E.). Another special group of vessels reflects the Roman pagan culture typical of the Roman army: relief-decorated drinking vessels and jugs, imitating silver and bronze tableware, depicting deities and their attributes, for example, Eros, the god of love, holding a hare, as well as a seated god identified as Neptune.



**SERVING IN STYLE.** Several remains from the Roman period suggest the presence of the well-heeled Roman military at the site. Fragments of decorated drinking vessels depict pagan scenes, such as the one above of a capped Eros holding a hare.

*Clara Amit/Courtesy Israel Antiquities Authority*

The fill under the street of the cardo also included dozens of ceramic roof tiles. Oddly, however, none of these was stamped with the Latin abbreviation LXF (*Legio X Fretensis*), which is so common in archaeological layers of the second–fourth centuries, identifying the Tenth Roman Legion that was stationed in the city, then called Aelia Capitolina. The absence of these

LXF tiles in our excavation may be simply accidental or it may be chronologically significant. Perhaps the Tenth Roman Legion workshop did not stamp its products prior to the foundation of Aelia Capitolina c. 130 C.E. and started doing so in connection with that event.



*Clara Amit/Courtesy Israel Antiquities Authority*

**Three bread stamps used by Roman soldiers were also found, each one inscribed (in reverse, so the writing would appear correct when stamped on the bread) with the symbol for a Roman military century (<), the centurion's name and the name of the soldier in charge of baking for this unit. The limestone example is translated "[Century] of Casperius, [work] of Caninius."**

Another special find, clearly of a military nature, are three bread stamps used by the Roman soldiers. Two were complete and another one was broken. All were inscribed with: (1) the symbol for a Roman military century followed by (2) the centurion's name and then (3) the name of the soldier in charge of baking for this particular army unit. Here is the text of one such bread stamp (studied by Leah Di Segni):

< CASPE CANIN

*(Centuria) Caspe(rii) (Opus) Canin(ii)*

"(Century) of Casperius, (Work) of Caninius"

Quantities of animal bones (studied by Liora Kolska-Horwitz) were also recovered from the dump beneath the cardo's eastern colonnade. Pigs constitute the most common species, representing over 60 percent of the bones. This, of course, is quite unusual for Jerusalem, especially if compared with Second Temple period Judean sites (pre-70 C.E.), where no pig bones have been found. Kolska-Horwitz concludes that this high frequency of pig bones may thus be considered a hallmark of the Roman army's dietary debris.

In addition to the wheel-made oil lamps with spatulate nozzle mentioned above, the dirt and dump fills contained other Jewish artifacts from the Second Temple period (together with the Roman, military artifacts) such as chalk vessels, which are not subject to impurity.<sup>b</sup> These

remains either come from the rich Jewish culture before 70 C.E. or they reflect the life of Jews who continued to live in the city until the Romans expelled them after the Second Jewish Revolt (132–135 C.E.), the so-called Bar-Kokhba Revolt.

In 130 C.E. the emperor Hadrian visited the eastern part of the Roman Empire on a royal tour. Around the time of this visit, Hadrian gave Jerusalem a new name, Aelia Capitolina. (Aelius was one of Hadrian's own names; Capitolina refers to the triad of gods of the Capitolium, the main temple of a Roman city: Jupiter, Juno and Minerva.) With this renaming of the city, it attained the status of a Roman colony. Exactly when this occurred is a matter of scholarly disagreement. Some (relying on the writings of the Roman historian Dio Cassius) contend that the name change, and the beginning of the construction of Aelia Capitolina, occurred in connection with Hadrian's visit in 130 C.E., perhaps even setting off the Second Jewish Revolt. Others (relying on the writings of the church father Eusebius) say this name change occurred only after the Second Jewish Revolt was suppressed in 135 C.E.

Our conclusion is somewhat different. Based on finds beneath the *cardo*, we can date the eastern thoroughfares of Aelia Capitolina to the early years of Hadrian's reign, probably in the 120s, long before his famous visit to the east in 130 and the "official" founding of Aelia Capitolina. Whether Hadrian did this to restore the city to its previous splendor after the Roman destruction of 70 C.E. or due to some other reason is a question that remains to be explored, but it is clear to us that when he was appointed emperor, or soon after that, he had already begun the planning and rebuilding of Jerusalem as a Roman city.

The eastern *cardo* continued in use with no significant changes in the Late Roman and Byzantine periods (second–sixth centuries C.E.). The width and level of the street remained the same despite occasional repairs. One such repair is a sixth-century pavement of the eastern colonnade with a white mosaic floor decorated with small flowers.



*Garó Nalbandian*

**MARGINALIZED AT MADABA.** The eastern cardo continued in use in the Byzantine period much as it had before. In the ovoid depiction of Jerusalem on the sixth-century C.E. Madaba map mosaic, the eastern cardo is represented as a line of white and yellow tiles next to a red-roofed colonnade near the top (the eastern side) of the city. The colonnade is only on one side. The western cardo runs from the Damascus Gate in the north (at left) through the center of the city, flanked by colonnades on both sides. The western colonnade, which led past the Church of the Holy Sepulchre (depicted upside down at the center of the mosaic) to the Nea Church (the large red-roofed building at far right), was given greater prominence in this Christian depiction of the city. The recent excavations now show, however, that the eastern cardo was of equal width to the western cardo in the Byzantine period; both were approximately 60 feet wide and both had two colonnades.

The famous Madaba mosaic map of the sixth century (located in a church in Madaba, Jordan) pictures two colonnaded streets across the city of Jerusalem. Both start from a plaza inside the northern, Damascus Gate. The western cardo is shown with a pillared colonnade on both sides of this straight north-south route, while the eastern cardo is shown narrower, with a colonnade on only its eastern side. In the Byzantine period, when the city was Christian, the western cardo was no doubt the most important thoroughfare in the city, passing in front of the Holy Sepulchre Church (the most prominent building on the map, marking the tomb of Jesus) and extending to the Nea Church in the south. By this time, the eastern cardo (the one we excavated) had most likely become less important. Nevertheless, the eastern cardo was just as wide as the western cardo, as we know by a comparison of our results with a long section of the western cardo revealed in Nahman Avigad's excavation in the Jewish Quarter.<sup>c</sup>

One final observation: the direction of the eastern cardo is aligned quite precisely with the western wall of Herod's Temple Mount, today's Western Wall. This wall is generally thought to proceed in a north-south direction. But it actually runs in a slight north-northwest to south-southeast direction, and so does the Roman eastern cardo, 300 feet to the west. Moreover, two side streets run from the eastern cardo toward the Temple Mount. This street layout suggests that the Temple Mount formed an integral part of Aelia Capitolina.

Until now, scholars have questioned the role of the Temple Mount in the Roman city: Was there a Temple to Jupiter there in the Roman period? Did statues of the Capitoline deities—Jupiter, Juno and Minerva—adorn the former Temple Mount? Or was it left empty to demonstrate Roman might? The fact that this main street was exactly aligned with the Temple Mount suggests that there must have been something on the Temple Mount in the Roman period—but what?

It is often supposed that the Temple Mount was empty in the Byzantine period, based largely on the fact that Byzantine pilgrim texts do not record Christian visits to the Temple Mount. And it is not portrayed on the Madaba mosaic map either. Our finds, however, suggest that the area *around* the Temple Mount did not change much when Christians controlled the city. Perhaps, as one text has it, it served as a garbage dump in Christian times.<sup>6</sup> What, if anything, was on the Temple Mount in the Byzantine period remains a puzzle.

Gradually, at various stages during the subsequent Islamic period, the level of the street rose by more than 12 feet above the Roman *cardo*. And its overall width narrowed—from 35 feet in the Roman and Byzantine periods to 16 feet in the Early Islamic period. Then, as structures continued to be built along the street, it narrowed further to 13 feet. In the Ottoman period, the street became even narrower—as little as 8 feet in places.

Nevertheless Rehov Ha-Gāy/El-Wad (“the valley street” in Hebrew and Arabic) still follows the line of the eastern *cardo*. It remains one of the principal arteries in the Old City of Jerusalem, leading from Damascus Gate in the north to the Dung Gate in the south.

## Authors

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## Notes

### Jerusalem Roundup

- a. See Hershel Shanks, "Sifting the Temple Mount Dump," **BAR** 31:04.
  - b. Eilat Mazar, "Royal Gateway to Jerusalem Uncovered," **BAR** 15:03.
  - c. For the Amarna letters, see Nadav Na'aman, "The Trowel vs. the Text," **BAR**, 35:01.
  - d. "The Devil Is Not So Black as He Is Painted: **BAR** Interviews Israel Finkelstein," **BAR** 36:03.
  - e. See David Ussishkin, "Jezreel—Where Jezebel Was Thrown to the Dogs," **BAR** 36:04.
1. However, she believes there was a Solomonic wall here: "The date of these earliest walls [SII], on the basis of the deposits against them, is, on the field estimate of the pottery, eighth century B.C. or *earlier* [emphasis supplied]. The interesting point is that these walls were constructed of re-used stones of the character identified as Phoenician at Samaria ... Solomon's use of Phoenician masons is undoubted and it is a reasonable inference that, close at hand, there was a wall of the time of Solomon, from which the builders of the eighth century B.C. derived their stones. The combined evidence of the various sites therefore indicates that on the east side Solomon joined the town to which he succeeded to the platform of his new Temple by a wall along the eastern crest of the eastern ridge." Kathleen M. Kenyon, *Digging Up Jerusalem* (New York: Praeger, 1975), pp. 115–116. For a photograph of the wall Kenyon excavated in SII, see plate 38.
  2. Eilat Mazar, "The Solomonic Wall in Jerusalem," in Aren M. Maeir and P. de Mroschedji, eds., *"I Will Speak the Riddles of Ancient Times"*, vol. 2 (Winona Lake, IN: Eisenbrauns, 2006), p. 775. See also Eilat Mazar, *The Complete Guide to the Temple Mount Excavations* (Jerusalem: Shoham Academic Research and Publication, 2002), p. 5.
  3. David Ussishkin, "The Temple Mount in Jerusalem During the First Temple Period: An Archaeologist's View," in J. David Schloen, ed., *Exploring the Longue Durée* (Winona Lake, IN: Eisenbrauns, 2009), p. 480.
  4. In Eilat Mazar, Wayne Horowitz, Takayoshi Oshima and Yuval Goren, "A Cuneiform Tablet from the Ophel in Jerusalem," *Israel Exploration Journal* 60 (2010), p. 5.
  5. For the initial publication of the cuneiform tablet, see Mazar, Horowitz, Oshima and Goren, "A Cuneiform Tablet from the Ophel in Jerusalem," pp. 4–21.
  6. Ussishkin, "The Temple Mount in Jerusalem," pp. 473–483.
  7. See Nahman Avigad, *Discovering Jerusalem* (Nashville, TN: Thomas Nelson, 1980), p. 28.
  8. Kenyon, *Digging Up Jerusalem*, p. 117.
  9. Leen Ritmeyer, *The Quest* (Jerusalem: Carta, 2006), p. 168.

## Layers of Ancient Jerusalem

- a. On the Lachish letters, see Philip J. King, "Why Lachish Matters," **BAR** 31:04; Steven Feldman, "Return to Lachish," **BAR** 28:03; Oded Borowski, Scholar's Corner: "Yadin Presents New Interpretation of the Famous Lachish Letters," **BAR** 10:02.
  - b. See Yitzhak Magen, "Ancient Israel's Stone Age," **BAR** 24:05; Mark Chancey, "How Jewish Was Jesus' Galilee?" **BAR** 24:05.
  - c. See Suzanne F. Singer, "The Ancient Cardo Is Discovered in Jerusalem," **BAR** 02:04. For more about Avigad's excavations, see "Without Avigad's Pictures—Is the Jerusalem Cardo Roman After All?" **BAR** 03:04; Nitza Rosovsky, "A Thousand Years of History in Jerusalem's Jewish Quarter," **BAR** 18:03.
1. The finds of the Roman and Byzantine periods were studied by our colleagues and will be presented in the Final Report (Vol. 1). We wish to thank them for their help in refining the following text: Orit Peleg-Barkat (The Architectural Decoration), Renate Rosenthal-Heginbottom (The Ceramic Finds), Gabriela Bijovsky (Numismatics), Leah Di Segni (Bread Stamps), Liorah Kolska Horwitz (Faunal remains), Yael Gorin-Rosen (Glass Finds), Guy Stiebel (Metal Finds), Dan Gill (Geology). Volume I of the final report of the excavations has been submitted: Shlomit Weksler-Bdolah and Alexander Onn, *The Western Wall Plaza Excavations: The Roman and Byzantine Periods, Volume I*, IAA Reports (forthcoming). The finds of the Biblical (First Temple) period are being studied by Tallay Ornan, Benjamin Sass, Othmar Keel, Baruch Brandl and Yuval Goren (Personal Seals), Daniel Veinstub (Iron Age incisions and inscriptions), Zvi Greenhut and Shua Kisilevitz (the ceramic finds), Raz Kletter (figurines). The finds of the Islamic period are being studied by many researchers. The works of Miriam Avissar (ceramic finds) and Robert Kool (Numismatics) are cited here.

For preliminary reports regarding the excavations in the Western Wall plaza, see: Shlomit Weksler-Bdolah, Alexander Onn, Brigitte Ouahnouna and Miriam Avissar, "The Eastern Cardo of Roman Jerusalem and Its Later Phases in Light of the Excavations in the Western Wall Plaza," in J. Patrich and D. Amit, eds., *New Studies in the Archaeology of Jerusalem and Its Region*, vol. 1, Jerusalem (2007), pp. 75–84 (Hebrew); Shlomit Weksler-Bdolah, Zvi Greenhut, Alexander Onn, Shua Kisilevitz and Brigitte Ouahnouna, "An Impressive Building of the Late Iron Age in the Western Wall Plaza," in D. Amit and G. Stiebel, eds., *New Studies in the Archaeology of Jerusalem and Its Region*, vol. 2, Jerusalem (2008), pp. 35–43 (Hebrew); Shlomit Weksler-Bdolah, Alexander Onn, Brigitte Ouahnouna and Shua Kisilevitz, "Jerusalem, the Western Wall Plaza Excavations, 2005–2009, Preliminary Report," *Hadashot Arkheologiyot, Excavations and Surveys in Israel* 121 (2009; [http://www.hadashot-esi.org.il/report\\_detail\\_eng.asp?id=1219&mag\\_id=115](http://www.hadashot-esi.org.il/report_detail_eng.asp?id=1219&mag_id=115)); Shlomit Weksler-Bdolah, "The Relations Between the Eastern Cardo of Jerusalem and the Tenth Roman Legion, in light of the Western Wall Plaza Excavations," in D. Amit, G.D. Stiebel, O. Peleg-Barkat, eds., *New Studies in the Archaeology of Jerusalem and Its Region*, vol. 3, Jerusalem (2009), pp. 19–27 (Hebrew); Shlomit Weksler-Bdolah and Alexander Onn, "Remains of the Roman Eastern Cardo in the Western Wall Plaza," *Qadmoniot* 140 (2010), pp. 123–132 (Hebrew).

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Hillel Geva has contributed a lot to our Qadmoniot paper, which this article is based upon, and to this version. We thank him greatly for his most helpful comments.

2. See Tallay Ornan, Shlomit Weksler-Bdolah, Zvi Greenhut, Benjamin Sass and Yuval Goren, "Four Hebrew Seals, One Depicting an Assyrian-like Archer, from the Western Wall Plaza Excavations, Jerusalem," *Atiqot* 60 (2008), pp. 115–129.
3. This is the first time that a seal, decorated with an image of a lion together with a Hebrew name, was found at Jerusalem, recalling the famous seal of Shema Servant of Jeroboam, king of Israel from Megiddo. See Tallay Ornan, Shlomit Weksler-Bdolah, Shua Kisilevitz and Benjamin Sass, "Two Hebrew Seals and a Bulla, One of the Seals Depicting a Roaring Lion, from the Western Wall Plaza Excavations, Jerusalem," *Atiqot* (in press).
4. See Tallay Ornan, "Member in the Entourage of Yahweh: An Uraeus Seal from the Western Wall Plaza Excavation, Jerusalem," *Atiqot* (in press).
5. See Othmar Keel, "A Scarab from the Western Wall Plaza Excavations, Jerusalem," *Atiqot* (in press).
6. See Hershel Shanks, *Jerusalem's Temple Mount—From Solomon to the Golden Dome* (London: Continuum, 2007), pp. 47, 52, 109 nn. 14 and 25.