



An update on the Armstrong Institute of Biblical Archaeology

LET THE STONES SPEAK

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Our Growing Institute!

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FROM THE EDITOR | GERALD FLURRY

REAT AND EXCITING DEVELOPMENTS ARE HAPPENING at the Armstrong Institute of Biblical Archaeology. Before I share some of these with you, I want to say a BIG HELLO to the more than 3,000 subscribers who are receiving Let the Stones Speak for the first time!

This issue is being sent to 7,554 subscribers. This is more than double the number who received the January-February issue. And since we launched Let the Stones Speak in January 2022, circulation has grown by more than 500 percent.

I couldn't be more pleased with this growth. It's also encouraging because it shows there is a large audience of people around the world who have a strong interest in archaeology and the Bible. The field of biblical archaeology can sometimes experience controversy and tension. Scientists and scholars are divided about the role of the Bible in archaeology and whether it should even be used in excavation. Sadly, many today are inclined to ignore or reject the Bible as a historical document. Even the mainstream media both in Israel and abroad tend to be far too critical of the Bible and the history it relates.

But the growth and support we are experiencing shows that many people are interested in this crucial field of study.

This is what the Armstrong Institute of Biblical Archaeology (AIBA) is all about: Our mission is to showcase Israel's biblical archaeology.

AIBA has deep roots in Israel and in archaeology. Today we collaborate and work in partnership with some of Israel's most esteemed academic and archaeological institutions, including Hebrew University, the Israel Antiquities Authority (IAA), the Israel Exploration Society, and the City of David Foundation. Our institute is named after Herbert W. Armstrong, the prominent 20th-century Bible scholar and humanitarian—and a man whose work and legacy I admire and perpetuate.

Mr. Armstrong was a keen supporter of biblical archaeology in Israel. His partnership with Israel began in 1968, when he formed an "iron bridge" relationship with Hebrew University professor Benjamin Mazar and Hebrew University. Between 1968 and 1986, Mr. Armstrong and Ambassador College supported multiple excavations in Israel, most notably the "Big Dig," a massive excavation on the Temple Mount led by Professor Mazar.

When Mr. Armstrong died in 1986, the archaeology work he did in Israel through Ambassador College did too. Twenty years later, in 2006, the Armstrong-Mazar partnership was resurrected when the college I founded, Herbert W. Armstrong College, joined Dr. Eilat Mazar (Benjamin Mazar's granddaughter) on her excavation of the Palace of David in the northern tip of the City of David. Between 2006 and 2021, we supported Eilat on all of her excavations in the City of David and on the Ophel, as well as assisting her in the office with publications.

When Eilat died in May 2021, our work in Israel reached a crossroads. We had excavated alongside Dr. Mazar over the course of more than 15 years. Who would continue her legacy? Would we be able to dig alongside them too? During this time, I asked: What would Dr. Mazar want us to do? This was an easy question to answer. Eilat would want us to continue excavating Jerusalem and to share Israel's biblical archaeology with as many people as possible!

I realized that without Dr. Mazar, the field of biblical archaeology would be without one of its most talented archaeologists and strongest advocates. This helped me see that we needed to continue Eilat's legacy and expand our archaeological operations. In January 2022, we created the Armstrong Institute of Biblical Archaeology, an organization devoted to researching and publishing biblical archaeology and supporting archaeological excavations in Israel. On January 16 of that year, the anniversary of Herbert Armstrong's death, we launched our website ArmstrongInstitute.org. That same month, we published the first issue of *Let the Stones Speak*.

The following May, we initiated a three-year lease on a beautiful three-story building in the Jerusalem suburb of Talbiyeh. The building provides residential and office space, an area for small archaeological exhibits, and room for the combined libraries of Eilat and Benjamin Mazar, which we acquired following Eilat's death. The building is literally a four-minute walk from the residences of Israel's president and prime minister. After renovating the building, we opened our new office on Sept. 4, 2022.

Since then, the work of the institute has gained momentum. ArmstrongInstitute.org has had more than 1.2 million page views. It has had over 420,000 individual users, from 230 countries, territories and dependencies. The average user now spends more than three minutes at the site, which is excellent by industry standards. This website has had more than 236,000 unique visitors from the United States. The nation with the next highest number of unique visitors is Israel, with nearly 50,000. We have more than 17,000 unique users in both the United Kingdom and Canada, and over 12,000 in Australia. We have 4,000 visitors in Germany.

The majority of visitors to the website speak English. However, we have had nearly 16,000 Hebrew-speaking users visiting the website. We believe this figure will grow as we hope to begin publishing articles in Hebrew. In addition to English and Hebrew, we routinely have visitors who speak Spanish, German, Russian, French, Portuguese, Dutch, Swedish and Arabic.

Some of the most encouraging figures are those showing that our base of regular visitors is quickly growing. Last summer, ArmstrongInstitute.org received around 10,000 unique regular visitors each week. By January, that number had doubled to around 20,000. Right now, we routinely have 25,000 to 35,000 unique visitors each week.

We are grateful for the support and collaboration with esteemed scholars and scientists. We work closely with Prof. Yosef Garfinkel and Prof. Uzi Leibner from Hebrew University. Our network is growing and includes other world-class scientists, such as Dr. Scott Stripling, Dr. Ariel Winderbaum, Dr. Yoav Farhi, Dr. Orit Peleg-Barkat and Dr. Daniel Vainstub, as well as organizations such as the City of David Foundation. We are keen to interview other scholars and archaeologists too.

We have seen similar positive growth with our podcast Let the Stones Speak, hosted by assistant managing editor Brent Nagtegaal. Our YouTube channel received 93,074 views in 2022. In the first four months of this year, we have already had more than 600,000 views.

In February, Brent interviewed Ze'ev Orenstein, the director of international affairs for the City of David Foundation, to discuss the Siloam Pool excavation. If you haven't watched the program, I recommend you do: It's great. This podcast has over 154,000 YouTube views. The program before this one, in which Brent and institute researcher Christopher Eames discuss the top 10 archaeology finds of 2022, has 128,000. The program on the pharaoh of the Exodus has over 110,000 views. We have plans to further develop the podcast and to create more archaeology-related videos.

One of the most encouraging aspects about this growth is that it has happened virtually without advertising or marketing. The growth has been almost 100 percent organic. Again, I think this shows just how strong the appetite is for content on the Bible and archaeology and how large the potential audience is.

Sadly, biblical archaeology has become a niche field that few organizations want to showcase. AIBA is different: We are only going to expand our efforts to share and feature biblical archaeology. The feedback we have received has been overwhelmingly supportive. Several people have e-mailed to ask how they can contribute financially to our archaeological activities. This was an unexpected surprise. We are currently working with our accountants and lawyers to make this possible, and we will have more information about this in a future issue.

Our success is not limited to the website, podcast and magazine. When we launched the institute, I told the Jerusalem team that we need to give tours of the Ophel and the City of David. Israel has some excellent tour guides, and the standards to become an official

state-sanctioned tour guide are high. But our long history researching and excavating the Ophel and the City of David, and working side-by-side with Dr. Mazar, gives us unique insight and perspective into these areas. For these reasons, I sincerely believe we give the best tours of this part of Jerusalem.

The number of tours we are giving is steadily growing, thanks in large part to positive referrals. Till now, we have not advertised our tours, mostly because we don't yet have the manpower to give too many of them. Each

tour takes three to four hours and includes a walk through Hezekiah's Tunnel. Brent and Chris explain the history and archaeology of the site. We charge 300 shekels (about us\$80) for the tour. To accompany the tour, we created a brochure that provides a general overview of ancient Jerusalem. (To book a tour, visit ArmstrongInstitute.org and click the "Tour" button.)

I'll conclude by telling you about another exciting development. Right now we are gearing up for another large excavation in Jerusalem. On June 18, we will con-

tinue our excavation on the Ophel under the leadership of archaeologists Professor Leibner and Dr. Orit Peleg-Barkat. The dig last summer furnished some remarkable individual finds, including the sensational discovery of an extremely rare silver half shekel that was minted in Jerusalem just two years before the Romans destroyed the city. As Professor Leibner told our students, many archaeologists excavate all their lives and never uncover as much as we did on that one excavation.

This summer's excavation will be significantly larger and more extensive. It will include the removal of a number of large structures, further revealing the massive mikveh (ritual bath) and hopefully shedding more light on this complex associated with the temple. Last year, we supplied Professor Leibner with 8 to 10 volunteers. This year we will be sending 14. In addition to these volunteers, Brent Nagtegaal will help organize the dig alongside Leibner and Peleg-Barkat. Meanwhile, Chris will once again be an area supervisor.

The excavation will occur in three stages. The first will begin in early June, when the site will be cleaned up and paths, stairs and other infrastructure will be repaired and constructed. The second stage, the controlled archaeological excavation of the large Byzantine structures, will begin mid-June. The third stage begins in early July and involves the excavation of the material beneath the buildings. The dig will conclude early-to-mid

August. Once again, we will be financing this entire excavation. (To learn more about this summer's dig, read Brent's interview with Professor Leibner on page 13.)

Be sure to visit ArmstrongInstitute.org over the summer, as we hope to post regular updates, including photos and short videos, of the excavation.

Finally, I wanted to whet your appetite about another exciting development. Earlier this year, we received an e-mail from one of our friends at the Israel Antiquities Authority. The message came from the head of the

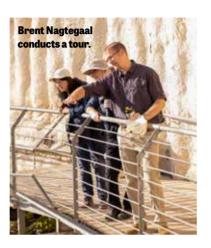
> department that facilitates international exhibitions. This lady requested a meeting to discuss another archaeological exhibit in Armstrong Auditorium, the impressive performing arts building on the campus of Herbert W. Armstrong College in Edmond, Oklahoma. She had heard positive reports about our previous exhibitions and wanted to encourage us to do another.

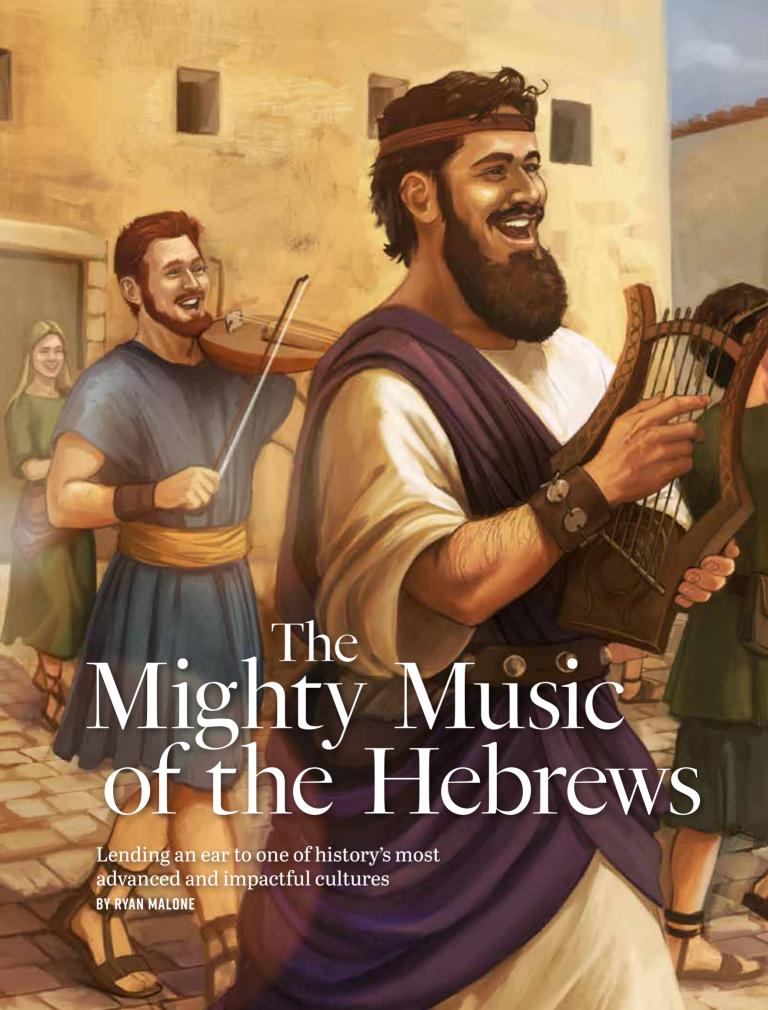
> With all that we have going on in Jerusalem, I hadn't thought much about doing another archaeological exhibit. But the meeting with the IAA was extremely positive, and we

have agreed to host another exhibit. This exhibit will feature the time period of King David, or perhaps the United Kingdom—David and Solomon. Right now, we plan to open it at the end of this year. As we did with the Hezekiah exhibit, we would like to open the exhibit with a musical concert, hopefully by an Israeli artist.

Thank you again for your interest in the work of Armstrong Institute and your ongoing support. While biblical archaeology doesn't generally receive the attention it deserves from the mainstream media, this is an exciting time for the field. The use of advanced technology and improved archaeological practices is helping scientists not only excavate more efficiently and thoroughly, it is giving them more detailed and specific insights into their finds. Meanwhile, the steady discovery of new sites and artifacts relating to biblical history is adding to the now significant bank of archaeological finds corroborating the Hebrew Bible.

Biblical archaeologists such as Dr. Eilat Mazar have uncovered some important and truly remarkable history over the past few decades. Yet, THERE ARE MANY BIBLICAL SITES IN ISRAEL WAITING TO BE FURTHER EXCAVATED OR EVEN DISCOVERED! The future for biblical archaeology is bright. Further great and wonderful discoveries are undoubtedly going to be made. And the Armstrong Institute of Biblical Archaeology will be there to share all of these with you!







s the music is, so are the people of the country," says a Turkish proverb. Confucius said, "If one should desire to know whether a kingdom is well governed, ... the quality of its music will furnish the answer."

One of the clearest lenses into any civilization is through an exploration of its musical culture. The ancient Hebrews—called by some "born musicians" are no exception. Yet few give this real consideration.

Because music is an aurally based art form, and much evaporates from consciousness if those sounds are not codified or recorded in any detailed way, we can resign to the fact that we'll never know much about ancient music.

Putting what the actual music sounded like aside, however, we see that music was highly valued by ancient Israel, from religious to secular spheres. It was not considered some diversion to merely gratify the senses but was believed to contain spiritual properties that elevated mankind to a higher plane and offered insight into physical and spiritual realms like nothing else could.

The art form was especially cherished by its biblical authors, many of whom possessed musical prowess and wrote of it intelligently—from Moses to Ezra. Its mention in the royal histories reinforces the commendation given righteous kings, and the sheer square footage and resources dedicated to the art form inside the temple is an obvious testament to its significance.

In terms of helping us understand ancient Israel through a musical perspective, two characteristics from the biblical record stand out. These reinforce the same virtues the nation as a whole possessed: Its music was both HIGHLY ADVANCED and had a PROFOUND IMPACT on surrounding nations.

Challenging Evolutionary Theory

We tend to view ancient music as "primitive," but this is a fundamentally evolutionary view. I'm reminded of my college music-history professor, who consistently challenged any student who wrote or said that music "advanced" throughout modern history—in the sense that Ludwig van Beethoven was more advanced than Frederic Handel or that Richard Strauss was more advanced than Wolfgang Amadeus Mozart. Change and development did not necessarily mean better or more sophisticated. After all, who could argue that a Johann Sebastian Bach cantata is somehow more primitive than a Gustav Mahler symphony?

Yes, instrumental craftsmanship improved over time, mainly in the sense that instruments had more range dynamically and pitch-wise. But the harmonic order of a composition 300 years ago would not necessarily

be more primitive than one of our day—just as the prime numbers in mathematics back then are the same numbers today.

An evolutionary view of music history leads us to believe that music originated clumsily and serendipitously from prehistoric brutes—vocal music coming from prolonged grunts of early human-like beings and instrumental music developing accidentally from a hunter becoming fascinated with how his bow twanged after an arrow was unleashed.

Even many professed Bible scholars, though they may reject evolutionists' happy-accident theory, believe music originated with a descendant of Cain named Jubal (Genesis 4:21), that humanity lived several centuries before we finally stumbled onto music, and that the Creator Himself didn't give the first humans any understanding of it. (In fact, what Jubal was doing was a clear MISUSE of music, per the original Hebrew.)

Man did not start with a one-, three- or five-note scale and slowly decide that seven tones work better mathematically. Same with, say, the strings on a harp.

Excavations in the 1920s at Megiddo lent support to this when 20 floor stones dating from 3300 to 3000 B.C.E. were uncovered. The carvings on one of them depicted a female harpist with a triangular-shaped instrument having eight or nine strings—quite an advanced instrument. Archaeologically, this harp appears out of nowhere, especially if it merely "evolved" from a one-stringed instrument.

Could something this advanced have existed in Eden? Isaiah 51:3 implies "the voice of melody" was in Eden, and the Hebrew word for melody comes from the root meaning "to pluck." Were there stringed instruments there? Psalm 92 is inscribed "A Psalm, a Song. For the sabbath day." The Targum reads: "A psalm and song which Adam uttered on the Sabbath day." This doesn't necessarily ascribe authorship to Adam, just the performance. This psalm also mentions stringed instruments.

Highly Advanced

Traveling chronologically through the Bible, we soon arrive at the nation of Israel. Moses said God had given them special wisdom, by virtue of them having His laws (Deuteronomy 4:5-8). The author of Psalm 119 uttered a similar sentiment (verses 98-100).

In the Anchor Bible, Hebrew poetry expert Mitchell Dahood discussed the "highly sophisticated" nature of the psalms and concluded, "The poets' consistency of metaphor and subtlety of wordplay bespeak a LITERARY SKILL SURPRISING IN A PEOPLE RECENTLY ARRIVED FROM THE DESERT AND SUPPOSEDLY POSSESSING ONLY A RUDIMENTARY CULTURE" (emphasis added throughout).

Truly, when we explore Israel's music in the biblical record, we find evidence that it was highly advanced melodically and harmonically.

One indication is found in the Hebrew word sheminith—a word that remained untranslated in both the Jewish Publication Society (JPS) Tanakh and the Authorized Version of the Bible. It is found in two of the musically enigmatic psalm inscriptions (Psalm 6 and 12). Some suggest sheminith was an eight-stringed instrument, but an instrument of this kind is noticeably absent from other passages of the Bible that list instruments of the Hebrew orchestra. Many scholars agree that this is a reference to the musically universal interval known as the OCTAVE.

In English, the word itself implies an interval (distance between two pitches) of an eighth. On a modern piano, if you find a C and call that "one," then white-key number "eight" (either higher or lower) is also a C-and played together, they sound a lot alike. The reason is that the frequency of the higher note's vibration is exactly twice as fast as the lower one.

The use of this interval in music is common and transcends all cultures. If a father and his young son sing the same melody in unison, the father is probably singing the same notes in a lower register whether they call it an octave or not.

1 Chronicles 15:21 uses this word to describe men who played "with harps on the Sheminith, to lead." The Hebrew likely implies that these men played their harps or sang the melody an octave higher or lower to make their pitches stand out among the other instruments in the ensemble—composers and arrangers know the power of doubling things with the octave. Their eighth would be the "lead" part of the aural texture.

What is interesting about the word sheminith is that it indicates something about the Hebrews' scale system: The fact that the first note and the eighth note were that perfect and common interval indicates that there were seven notes leading from the lower to the upper frequency. The Hebrews were using a seven-tone, or a heptatonic, scale.

Evolutionists would have us believe that mankind started as savages with a more primitive scale system perhaps the pentatonic scale (a series of five pitches). But many credible musicological sources contradict this idea. One of them, the New Oxford History of Music, states that the pentatonic scale cannot be considered older than the six- or seven-degree diatonic scale commonly used in Western music.

In his 1893 book Primitive Music, Richard Wallaschek wrote: "[A] succession of tones exactly corresponding to our diatonic scale (or part of it) occurs in instruments in the Stone Age, and ... we have no reason to conclude

that a period of pentatonic scales necessarily preceded the period of heptatonic ones."

In her argument that the Hebrews used a heptatonic scale, Suzanne Haïk-Vantoura established first how in 1968, Babylonian cuneiform was discovered that "unequivocally" attested to the "total similarity between the Babylonian scale ... and our own C-major scale." The facts "witness to a system (graphically confirmed) based upon diatonic modes of seven degrees ..." (The Music of the Bible Revealed).

In his book This Is Your Brain on Music, neuroscientist Daniel J. Levitin discusses experiments that have "shown that young children, as well as adults, are better able to learn and memorize melodies that are drawn from scales that contain unequal distances such as this" (i.e. the seven-tone scale based on its system of whole steps and half steps).

An innate feature of this scale system is something akin to a gravitational pull to one of the seven notes what musicians call the "tonic," or "home" (or, as Julie Andrews sang in The Sound of Music, something that "brings us back to 'do'").

What about the simultaneous use of more than one pitch—i.e. HARMONY? Evolutionary and primitivist theories would have us suppose that man stumbled around for thousands of years playing or singing one note at a time, and not until the "organum" of the Middle Ages were we to discover the richness that comes from the complex layering of pitches.

Though the Bible makes no explicit mention of "harmony," it must have existed in the Hebrew musical culture. The biblical record shows groups of people men and women (different vocal ranges)—singing together. It discusses assorted musical instruments playing together at the same time. That these musicians would play or sing together and never consider doing something different yet complementary to the melodic line is absurd. That a culture so exceptional in stringed instruments would never think to pluck more than one string at a time (a different, complementary string) is ludicrous.

2 Chronicles 5:12-14 describe the scene at the dedication of the first temple under King Solomon—Levites "with cymbals and psalteries and harps" plus "a hundred and twenty priests sounding with trumpets." The chronicler records that "the trumpeters and singers were as one, to make one sound to be heard in praising and thanking the Lord; and ... they lifted up their voice with the trumpets and cymbals and instruments of music"

Are we to believe that all those instrumentalists were playing the same notes at the same time? That everything was in unison? That the trumpeters, capable of

producing a series of pitches based on lip tension, all decided to play identical notes? Some may argue that "as one, to make one sound" implies monophony, but objective study shows that this is not a comment on the musical texture but high praise of its performance. The ensembles were truly together. Their performance was rhythmically precise and in tune. We would say the same about a fine symphony orchestra today: They were as one—despite all the different notes and parts, they played perfectly together and in tune!

One of the most pleasing harmonies to the human ear, and one upon which the majority of standard repertoire is based, is the third. On the piano, if you play a white note and call that "one," then count up or down to three, and you play note "one" along with note "three," that is an interval of a third.

Carl Engel wrote in 1864: "Harmony is not so artificial an invention as has often been asserted. The susceptibility for it is *innate in man*, and soon becomes manifest wherever music has been developed to any extent. Children of the tenderest age have been known to evince delight in hearing thirds and other consonant intervals struck on the pianoforte; and it is a well-ascertained fact that with several savage nations the occasional employment of similar intervals combined did not originate ... with European music, but was entirely their own invention" (The Music of the Most Ancient Nations, Particularly of the Assyrians).

If more primitive cultures were using the third, then certainly the musically adept Hebrews would have been too. Curt Sachs believed that secular music was using thirds and harmony throughout history, and that is why West European music flourished so rapidly after the yoke of plainchant was broken.

In Music in Western Civilization, Paul Henry Lang documented how Giraldus Cambrensis (1147-1220) discussed the harmonic practices of the British Isles. Harmony, he said, was so common that "even the children sang in the same fashion, and it was quite unusual to hear a single melody sung by one voice. ... The Anglo-Saxon Bishop Aldhelm, at the end of the seventh century, and Johannes Scotus Erigena (ninth century), seem to allude to 'harmony' as the simultaneous sounding of tones. Finally, the first records of actual music for more than one voice also come from England."

How fascinating that there exists a linguistic link between Britain and the Hebrews in this regard. The third letter of the Hebrew alphabet (and the numeral three) is gimel, or gymel. This word was actually the term used in England to describe singing in parts (the most common interval in such layering being the THIRD).

Haïk-Vantoura masterfully summed up the highly advanced nature of Hebrew music by saying that it was "just as solid," if not more so, than "that of the great and powerful neighboring peoples who were Israel's contemporaries; its musical resources effectively served the authentic and eminently human faith which made use of them." She wrote, "All this persuades us that there is no reason to imagine an ultra-primitive kind of music. ... The texts of the Psalms of David and the inspired singers have always been unanimously admired. Why then would the music to which they were sung not have been stirring and beautiful, and accessible, just as the text of the Psalms have remained?"

Impactful

A testament to the advanced and rich nature of ancient Hebrew music is seen in the impact it had on surrounding peoples. This is particularly evident in Scripture and secular sources when showing how attractive Hebrew music was to neighboring nations.

Moses's words of Deuteronomy 4:6 rang true: "[T]his is your wisdom and your understanding in the sight of the peoples, that, when they hear all these statutes, shall say: 'Surely this great nation is a wise and understanding people."

During the reign of King Saul, while David was on the run for his life, we see an interesting exchange in Philistine territory. Before we read this, consider the song uttered by "the women" in 1 Samuel 18. Not only was David a musician himself, he was the subject of a song honoring his triumph over Goliath: "And the women sang one to another in their play, and said: Saul hath slain his thousands, And David his ten thousands" (verse 7).

So when David "went to Achish the king of Gath," the chronicler records that "the servants of Achish said unto him: 'Is not this David the king of the land? Did they not sing one to another of him in dances, saying: Saul hath slain his thousands, And David his ten thousands?'" (1 Samuel 21:11-12).

The king of Gath knew the *lyrics* of the song, *how* it was sung ("one to another"), and how it was *performed* ("in dances"—compare 1 Samuel 18:6). The same question was asked later by the Philistines (1 Samuel 29:5). Part of David's renown to the neighboring peoples was a popular song about him! In our 21st-century world, it is difficult to appreciate HOW EXTRAORDINARY THIS IS, for a song to be known miles away in neighboring lands in a time without mass media. Music from Israel was somehow being exported to neighboring lands.

It stands to reason Israel's musical fame would have only increased when David was king, one known as the "sweet singer of Israel" (2 Samuel 23:1). Music played a prominent role in his reign, a time when he had the respect of neighboring rulers like Hiram of Tyre. For his procession to return the ark of the covenant to Jerusalem, 1 Chronicles 15 numbers 870 priests and Levites in the tuneful parade. By the end of his life, he proclaimed that 4,000 Levites played instruments HE HAD MADE (1 Chronicles 23:5). He composed the majority of the book of Psalms: 75 psalms have his name in the inscription, and by considering other passages (even some in the New Testament), it's clear he wrote at least a dozen more.

Like his father, Solomon was a composer-king whose influence was far-reaching. His coronation inspired a musical celebration recorded as having a seismic impact on the land (1 Kings 1:39-40). We already read about the unmatched musical performance at the dedication of the first temple. 1 Kings 5:12 (1 Kings 4:32 in the King James Version) says Solomon wrote 1,005 songs. In modern musicological terms, no music historian would ignore that prolific a composer: We study Antonio Vivaldi's 500 concerti, Domenico Scarlatti's 550 keyboard sonatas and Franz Schubert's 600 lieder. Not only did Solomon write the "song of songs" (Song of Solomon 1:1)—implying "the most beautiful song" music is a common topic throughout his proverbs and an ever more frequent subject in his reflective book of Ecclesiastes (e.g. Ecclesiastes 2:8; 3:4; 7:5; 10:11; 12:4). His vast trade networks brought many goods from Egypt (2 Chronicles 9:21-28); secular sources say this included over 1,000 musical instruments.

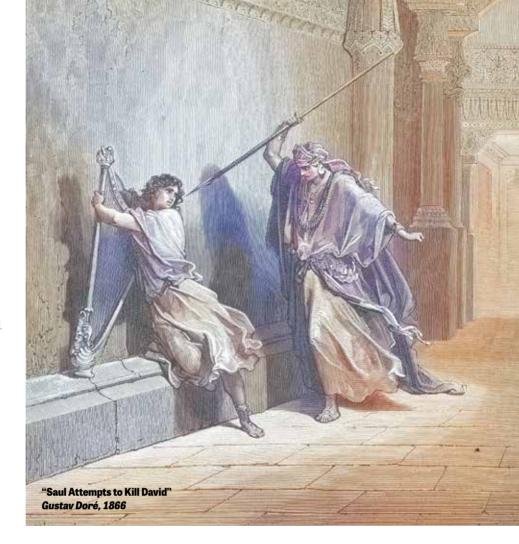
It was through the temple complex, however, that Solomon's culture had its greatest impact regionally. It fulfilled his father's desire that it be "of fame and of glory throughout all countries" (1 Chronicles 22:5).

The visit of the Queen of Sheba is a vivid illustration of how rulers of that day responded. 1 Kings 10:1-10 show her reaction was to not just the edifice itself but also its cultural activities. The result of this visit was a donation to the tune of roughly \$130 million by today's standards, plus spices and precious stones.

The verses that follow show another trade affiliation related to the musical culture: "And the king made of the sandal-wood pillars for the house of the LORD, and for the king's house, harps also and psalteries for the singers; there came no such sandal-wood, nor was seen, unto this day" (verse 12). He had instruments crafted out of this precious wood of his day. 2 Chronicles 9:11, in speaking about these instruments, adds, "and there were none such seen before in the land of Judah."

Another example of Israel's musical impact on surrounding cultures can be found by harmonizing secular and biblical history in the time of King Hezekiah. When this king feared an invasion by Sennacherib, he sent the Assyrian king treasures from the temple and treasures from the king's palace (see 2 Kings 18:14-16). Sennacherib's relief shows that this included some of

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his own *court musicians* as part of the tribute. Musicians were indeed considered "treasures" of the king's house!

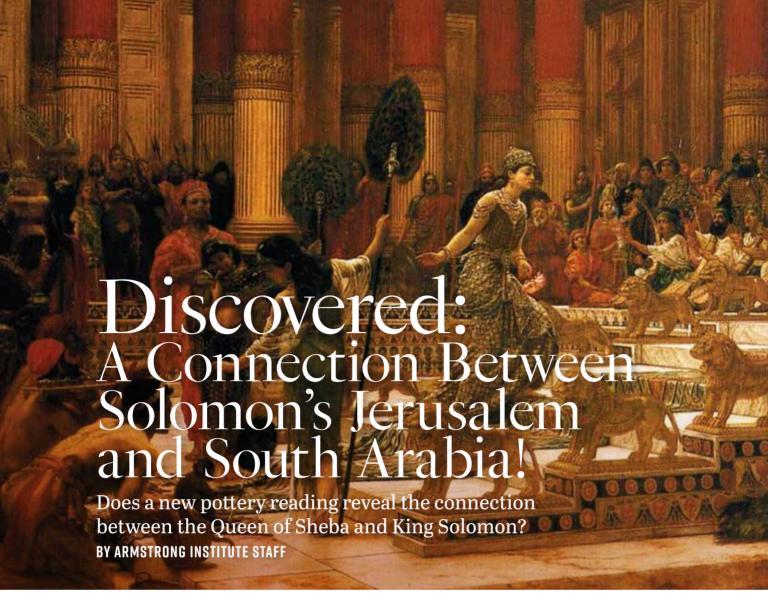
In *Music in Ancient Israel*, Alfred Sendrey wrote that the "artistry of these singers" must have been exquisite "if Sennacherib valued them higher than the pillage and plundering of the enemy's conquered capital city."

Later, after Jerusalem had been plundered and taken to Babylon, we read an interesting demand on the Jewish captives. A psalmist recounted this history "[b]y the rivers of Babylon" (Psalm 137:1), where they hung their harps on willows (verse 2). Verse 3 states: "For there they that led us captive asked of us words of song, And our tormentors asked of us mirth: 'Sing us one of the songs of Zion.'" These were a remarkable people. Not only did they claim to have "the Lord's song" (verse 4), the Babylonian captors wanted the Jews to sing Zion's songs. This nation was renowned for its musical achievements, and their music was an enviable commodity!

Resilient Traditions

Under the light of biblical music history, we see an incredible civilization. The ancient Hebrews not only valued music, the biblical record (corroborated by secular sources) shows they cultivated it for centuries in an incomparable way. It was so ensconced in Hebrew society that it survived through the darkest of periods—even the 70-year hanging-harps-on-the-willow hiatus in Babylon, as the books of Ezra and Nehemiah bear out.

Before that, rich musical instruction emerged in the days of Samuel after the dark centuries under the judges. There was David's rather prolific output while on the run from Saul. Later, the temple musical traditions thrived despite the six-year tyranny under the usurper Athaliah. Truly, the Hebrews were a people who reflected the characteristics of their great Creator and Artist. As Psalm 22:4 states, it was as though God Himself was "enthroned upon the praises of Israel."



HE BIBLICAL ACCOUNT OF THE QUEEN OF SHEBA'S visit to Jerusalem during the reign of Solomon is detailed and vivid. 1 Kings 10 says the famous queen was deeply moved by what she saw and experienced in the royal court of Israel's great king.

What does archaeology tell us about this significant event?

Archaeology has provided no real evidence of this event—until now. Thanks to the new reanalysis of an enigmatic Ophel pithos inscription by expert epigrapher Dr. Daniel Vainstub, there is some fascinating scientific evidence to support this history.

The Ophel inscription analyzed by Dr. Vainstub, a scholar from Ben Gurion University of the Negev, was first discovered in 2012. The artifact was uncovered by Herbert W. Armstrong College students participating in Dr. Eilat Mazar's Ophel excavation funded by Daniel Mintz and Meredith Berkman. The clay artifact was found among a number of large, broken pithoi (clay storage vessels) pieces embedded in a void in the bedrock.

Reviewing the pottery, we were stunned to discover that one of the sherds—part of the rim of one of the vessels—contained a comparatively large inscription. Given that the pottery dated to the 10th century B.C.E.—the time period of Israel's united monarchy—the discovery was hailed as the earliest alphabetical inscription ever found in Jerusalem and among the earliest found in Israel. (This dating was corroborated last year in a meticulous stratigraphic and ceramic analysis published by Dr. Ariel Winderbaum.)

Exactly what the inscription read though—and even the exact language it was written in—remained elusive. We knew the language was Semitic, but that's about it. The prevailing view was that it was a Proto-Canaanite inscription. Some claimed it was early Hebrew. Given the fragmentary nature of the inscription, however, there was no consensus about what it said exactly (some theories claimed it was a reference to "wine").

April brought a major development in the ongoing conversation about the elusive Ophel inscription.



In an article published in Hebrew University's *Jerusalem Journal of Archaeology*, Dr. Vainstub presented an entirely different conclusion—that the language of the inscription is actually Ancient South Arabian (ASA).

'The Visit of the Oueen of

"Sheba to King Solomon Edward Poynter, 1890

This territory, situated at the far western end of the Arabian Peninsula (in the area of modern-day Yemen) has been widely identified by scholars as the area of the kingdom of Sheba. That's not all. Dr. Vainstub also explained that the inscription refers specifically to a type of incense, called ladanum (*Cistus ladaniferus*).

According to the new interpretation, the inscription on the jar reads, "[]shy l'dn 5." The first three letters are a continuation of a previous word. However, "l'dn 5" means "five measures of *ladanum*." Dr. Vainstub's reading of the inscription differs from other readings, most of which suggest the text is Canaanite. According to Vainstub, two of the letters in the inscription pose a problem for the Canaanite theories. These two letters, he says, have much closer parallels in the South Arabian language than they do in the Canaanite.

Even the interpretation of the letter representing a quantity of "five," in South Arabian form, is a good fit. We know that this type of pithoi had a capacity of roughly 110 to 120 liters. The Judahite *ephah*, a common measure in the Bible, equates to about 20 to 24 liters. Therefore, the storage vessel would have logically been able to contain precisely this numeric quantity of product—*five* ephahs.

In an interview with Brent Nagtegaal on our *Let the Stones Speak* podcast in April, Dr. Vainstub noted that the word ladanum is not found in the Bible. Upon deeper investigation, however, Vainstub concluded that ladanum is described in the Bible using the word šəhēlet. He drew this conclusion after studying several sources from the Middle Ages that equate the biblical word šəhēlet with ladanum.

The word *šəḥēlet* refers to one of the four ingredients required for making the incense used in the tabernacle, and later the first and second temples. This recipe is documented in Exodus 30:23.

And the Lord said unto Moses: "Take unto thee sweet spices, stacte, and *onycha* [שחלת], and galbanum; sweet spices with pure frankincense; of each shall there be a like weight." EXODUS 30:34

Dr. Vainstub also explained that, until recently, our limited understanding of the Ancient South Arabian script has hampered the ability of scholars to interpret

inscriptions in this language. Because this field has "expanded enormously in recent decades," scholars are now able to gain further insights. "The discovery of the Ophel inscription marks a turning point in many fields," noted Vainstub. "Not only is this the first time an ASA inscription dated to the 10th century B.C.E. has been found in such a northern location, but it is also a locally engraved inscription, attesting to the presence of a Sabaean functionary entrusted with incense aromatics in Jerusalem."

In short, Dr. Vainstub believes the inscription to be a Sabaean trade liaison stationed in Jerusalem, as opposed to visiting.

He concludes that the pithos inscription is evidence of some sort of 10th-century B.C.E. trade highway between southern Arabia and Jerusalem (a distance of over 2,000 kilometers). The biblical account speaks to this in the description of the queen's visit.

And when the queen of Sheba heard of the fame of Solomon because of the name of the Lord, she came to prove him with hard questions. And she came to Jerusalem with a very great train, with camels that bore spices and gold very much, and precious stones; and when she was come to Solomon, she spoke with him of all that was in her heart.... And she gave the king a hundred and twenty talents of gold, and of spices very great store, and precious stones; there came no more such abundance of spices as these which the queen of Sheba gave to king Solomon. IKINGS 10:1-2, 10

During the 10th century B.C.E. and onward, the kingdom of Sheba "thrived as a result of the cultivation and marketing of perfume and incense plants, with Ma'rib as its capital. They developed advanced irrigation methods for the fields growing the plants used to make perfumes and incense," according to the article from the Jerusalem Journal of Archaeology. The perfumes and incense were then exported to the Levant.

Two later biblical prophets, Isaiah and Jeremiah, both drew attention to the spice and incense trade from the land of Sheba.

The caravan of camels shall cover thee, And of the young camels of Midian and Ephah, All coming from Sheba; They shall bring gold and incense, And shall proclaim the praises of the Lord. ISAIAH 60:6

To what purpose is to Me the frankincense that cometh from Sheba, And the sweet cane, from a far country? Your burnt-offerings are not acceptable, Nor your sacrifices pleasing unto Me. JEREMIAH 6:20

Dr. Vainstub believes the inscription was engraved by a native speaker of the southern Arabian language who was stationed in Jerusalem and involved in supplying the incense spices. This is because petrographic analysis of the jar shows it to have been made from Jerusalem-area clay. The writing was made before the vessel was fired. This would mean there were Sabaean speakers in Israel at the time of King Solomon who were involved in supplying the incense spices.

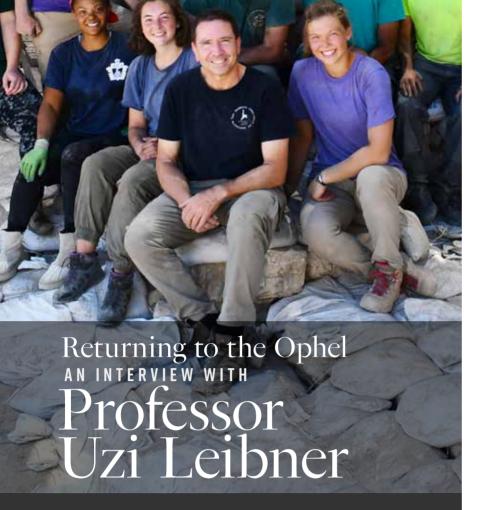
The findspot for the inscription—Jerusalem's Ophel is also a logical location for the presence of spices and incense. The Bible records that two centuries after King Solomon, King Hezekiah was storing expensive spices in his royal treasure house, which would have been located on the Ophel. In the narrative, King Hezekiah mistakenly showed a visiting entourage from Babylon all the wealth of his kingdom, including the spices.

At that time Berodach-baladan the son of Baladan, king of Babylon, sent a letter and a present unto Hezekiah; for he had heard that Hezekiah had been sick. And Hezekiah hearkened unto them, and showed THEM ALL HIS TREASURE-HOUSE, the silver, and the gold, AND THE SPICES, AND THE PRECIOUS OIL, and the house of his armour, and all that was found in his treasures; there was nothing in his house, nor in all his dominion, that Hezekiah showed them not, 2 KINGS 20:12-13

Most intriguingly, Dr. Vainstub's new reading is another piece of evidence to add to the sometimes fierce debate over the nature of 10th-century B.C.E. Jerusalem (and by extension, the entire kingdom of Israel). Was Jerusalem at this time the rich, powerful, well-fortified capital that we read about in the biblical text? Or was it a small, unimportant village, as some minimalists claim? The presence of an established trade route between South Arabia and Jerusalem would certainly bolster the former argument!

Finally, the 10th-century dating of the inscription and the archaeological context it was discovered in fit with the biblical chronology of the time period for the Queen of Sheba's visit to King Solomon's Jerusalem and its temple (not far, we might add, from the findspot location).

As Vainstub bluntly stated in April, "This inscription doesn't prove the visit of the Queen of Sheba to Jerusalem; her name is not written on the vessel. But it proves that there was a connection between the kingdom of Solomon and the kingdom of Sheba."



uring excavations on the Ophel last summer, the team from Hebrew University and the Armstrong Institute of Biblical Archaeology (AIBA) continued to uncover a Second Temple Period, 2,000-year-old monumental building at the foot of the southern wall of the Temple Mount. The building was first discovered by Dr. Eilat Mazar in 2018.

In June, AIBA and Hebrew University return to the Ophel to continue to reveal this impressive structure. This phase of the dig is larger than the last and will be codirected by Hebrew University archaeologists Prof. Uzi Leibner and Dr. Orit Peleg-Barkat. In this interview, Let the Stones Speak assistant managing editor Brent Nagtegaal speaks with Prof. Uzi Leibner, who is also the head of the Hebrew University's Institute of Archaeology, about the significance of the excavation this summer. The following interview has been edited for clarity.

BRENT NAGTEGAAL (BN): Thank you for your time. First, could you tell us about the general significance of the Ophel area?

PROF. UZI LEIBNER (UL): The Ophel is a public area situated right at the foot of the Temple Mount between the Temple Mount and the City of David. The main gates to the Temple Mount in the Second Temple Period were situated in the Southern Wall, right above the Ophel. We assume that most of the transit of pilgrims into the Temple Mount would come through this area. It's full of public structures, infrastructure, streets, staircases and so on, all designed to handle the masses coming up to the Temple Mount.

BN: And we are mainly focused on the Second Temple Period in these excavations?

UL: It's mainly the Second Temple Period. The area that we are excavating currently is covered with a very dense Byzantine-period neighborhood of a domestic nature, mainly from the fifth and sixth centuries c.E. What we started to do is to dismantle a few points in this neighborhood to reach down to the Second Temple Period. There is a gap of a few hundred years between the Second Temple Period layer, which ends abruptly in 70 c.E., and when settlement resumes in this area somewhere in the late fourth or early fifth century. Our goal is to excavate down to the Second Temple Period.

BN: This is your second season digging the Ophel. What were some of the key discoveries from your first season [in summer 2022]?

UL: First of all, we should note that we are continuing Dr. Eilat Mazar's huge project, which she handled for years, and she started excavating here almost a decade ago. In 2018, which was her last season before she passed away, she started uncovering (where we're working currently) the entrance to a very lavish and elaborate monumental building dated to the late Second Temple Period. We don't have the exact date yet, but it's probably dated to somewhere in the late first century B.C.E. or the early first century c.E. The building is located right at the bottom of the staircase leading up to the eastern Hulda Gate, which was one of the main entrances to the temple.

Last season, we started to excavate inside and underneath this well-preserved, beautiful structure. We don't vet have a clear sense of what is the function of this building. Two of the rooms have staircases descending inwards.

Our main conclusion last season was that in this area, the Second Temple Period layer, ended in a dramatic destruction in the year 70. One of the major finds last summer was numerous coins of the Jewish Revolt against Rome from the year 66 c.e. to 70 c.e. We have dozens of these coins, including a very rare silver half-shekel of the revolt. So it seems that this whole area was destroyed in the year 70 and then was abandoned for a few centuries, then resettled with mainly domestic dwellings.

Our main mission for this season in this area is to dismantle a Byzantine domestic structure that was built on top of this lavish Second Temple Period building, allowing us to get a better sense of the plan and function of this early structure.

BN: How rare is it in this area of the eastern part of the Ophel to find this 70 C.E. destruction sitting on top of a such a monumental building?

UL: It's very rare in this area of the Ophel to find a well-preserved Second Temple Period structure still standing to a significant height. The whole eastern part of the Ophel area was first uncovered in the major excavations of Prof. Benjamin Mazar 50 years ago, yet they did not descend down to the Second Temple Period here.

BN: So they didn't dig down deep enough in this area?

UL: Exactly. This means there is huge potential in this area to find similar discoveries that Mazar found on the southwest corner of the Temple Mount, where they found streets, staircases, reservoirs and shops. But we are really still at the beginning of this project.

BN: What are we focusing on in the dig this summer?

UL: We are going to be on a much larger scale this year compared to last season. We have a combination of the Armstrong College students coming from abroad, Hebrew University students and volunteers coming as well. We hope to have around 25 to 30 people on site on a daily basis.

This season we will have a new codirector, Dr. Orit Peleg-Barkat of Hebrew University. Orit is an expert on Second Temple Period Jerusalem. Together, we will focus on this monumental building (Area D and its sub-surface area, Area D₁). What we learned last season is that underneath this monumental building is a very sophisticated and complex subterranean world of tunnels and reservoirs. They mostly seem to be meant for water storage or channeling. We don't yet have a clear sense of where the water came from or where it went. We hope this season to continue excavating these underground tunnels to get a better understanding of their use.



We are also going to open two additional areas: one big area (Area E) and one smaller area.

Area E, the new big area, is by the southeastern corner of the southern wall of the Temple Mount. This means we'll be climbing up one terrace, getting closer to the Temple Mount. This area is also populated by Byzantine structures. However, we can already see a few walls below that, based on their orientation, seem to be Second Temple Period.

BN: We think there might be a building in Area E that is from the same period as the monumental building in Area D?

UL: Exactly. We have great expectations for this new area. Again, it's right opposite the corner of the eastern corner of the Temple Mount. The western corner of the Temple Mount was very rich with finds from the late Second Temple Period, so we hope that maybe



something similar will come up also in this area.

In the other new area for this season—the area right beneath the edge of the Hulda stairs—we are not planning to uncover or expose a building. Rather, we plan to do some sections to gain information on a building Benjamin Mazar uncovered. This was published as a monastery called the Monastery of the Virgins. When Eilat Mazar published the excavations, she said Benjamin Mazar wrote in his diaries that while the monastery was probably built in the fifth century, in it are incorporated segments of ashlar walls dated back to the Second Temple Period. These likely belonged to an important structure that stood right at the gate of the Temple Mount.

Benjamin Mazar found here a fragment of an Aramaic inscription, apparently mentioning "the elders," whereby he suggested that maybe there was some sort of a court situated at the entrance of the temple gate. This is something mentioned in rabbinic literature of later periods. Unfortunately, he did not leave any evidence for the dating of these segments of the walls back to the Second Temple Period. So we plan to excavate a few small sections to the foundations of these walls to check if, indeed, they should be dated to the Second Temple Period. Then we will try to figure out what can be said about what stood here in the first century C.E.

One of our main goals with these projects as a whole is to try to understand how this whole area was designed in order to accommodate the masses of people arriving three times a year. The sources talk about tens of thousands of people, even millions coming, which is probably exaggerated. But we can definitely talk about thousands and thousands of people visiting this area three times a year. We want to know how this area was organized in order

to handle this massive traffic, in terms of infrastructure, ritual baths, supplying water to all these pilgrims, shops, money changers, etc—whatever we can say about the organization of the pilgrimage to the temple in the late Second Temple Period.

BN: This season starts in June. Is there room for more volunteers?

UL: Unfortunately, it's too late for people to sign up. We are already fully booked up. This is going to be a very long season. We're planning seven weeks of excavations starting June 18. We'll start with two weeks of mainly dismantling modern and Byzantine walls before we reach the floors. Then five weeks of excavation going till the beginning of August.

BN: Can't wait! Thanks very much for giving us this preview.

UL: My pleasure.

MAY-JUNE 2023





WHAT IS THE OPENING OPENING

It's a commonly cited name for the area between the City of David and the Temple Mount. But what does this enigmatic word really mean?

BY CHRISTOPHER EAMES

HAT, EXACTLY, IS AN OPHEL? IT'S A TERM THAT we, as excavators of Jerusalem's Ophel, can easily take for granted. Broadly speaking, in the modern vernacular, the term is generally used to refer to the area between the City of David (to the south) and the Temple Mount (to the north). These two terms—City of David and Temple Mount—are, of course, simple and self-explanatory. The City of David refers to David's city, the original citadel that he conquered from the Jebusites (2 Samuel 5:7). The name Temple Mount simply implies a mount on which the temple was built.

But the word *ophel*, found several times throughout the Bible, is not such an easily understood term—certainly not in English and, to an extent, not in the modern Hebrew vernacular either.

What does the word mean? And what does this biblical geographic reference specifically refer to? The biblical word *ophel* is primarily used to describe a location within Jerusalem. But there are *other* regional "ophels" mentioned in the Bible and attested to by archaeology. In parsing the clues found in the biblical account, together with references in classical history





and now archaeology, we can arrive at a satisfactory explanation for the term, as well as the identification of the part of Jerusalem described as such—the *Ophel*.

Uses of the Term

The term *ophel*, in Hebrew, is made up of three (sometimes four) letters (עופל or עופל). In many Bible translations, the proper noun can be found transliterated five times, all referring to the same specific geographic location within Jerusalem. As below:

- 2 Chronicles 27:3: "He [Jotham] built the upper gate of the house of the Lord, and on the wall of *Ophel* he built much."
- 2 Chronicles 33:14: "... he [Manasseh] compassed [a wall] about Ophel, and raised it up a very great height
- Nehemiah 3:26: "Now the Nethinim dwelt in Ophel, unto the place over against the water gate toward the east"
- Nehemiah 3:27: "... the Tekoites repaired another portion, over against the great tower that standeth out, and unto the wall of Ophel."
- Nehemiah 11:21: "But the Nethinim dwelt in *Ophel*"

 These are the more obvious references to this tract of land. There are also several additional buried references to the Ophel, using exactly the same Hebrew word, but which some translations choose to render differently. For example, Isaiah 32:14 reads, "For the

palace shall be forsaken; The city with its stir shall be deserted; The *mound* [Ophel] and the tower shall be for dens for ever" In Micah 4:8, the prophet writes: "And thou, Migdal-eder, the *hill* [ophel] of the daughter of Zion"

These alternate translations for the term clearly refer to the *Ophel* as some sort of prominent mound or hill. But the meaning of this word encompasses more than just geography.

Of Hemorrhoids and Vanity

The Hebrew term for the Ophel also describes a medical condition.

1 Samuel 5-6 tell the story of the capture of the ark of the covenant by the Philistines during the time of the judges and the curses that befell them, including plagues of mice and "emerods"—otherwise translated as tumors or buboes. ("Emerods" is the archaic English term for hemorrhoids. Actually, this biblical account is almost akin to the image portrayed of the Bubonic plague in the Middle Ages—mice and buboes.) The Hebrew word for this disease is spelled in exactly the same way as our geographical Ophel (עפל), and however you prefer to translate it into English, it clearly refers to the same thing—a raised swelling, or a swollen mound.

Deuteronomy 28:27 also references such a disease in connection with Egypt, using the same terminology. When put into these terms of physical disease, the meaning of "ophel" becomes easy (if unpleasant) to conceptualize. Interpolating this onto a much larger

OPHEL PAGE 20 ▶

2023 Ophel Excavations

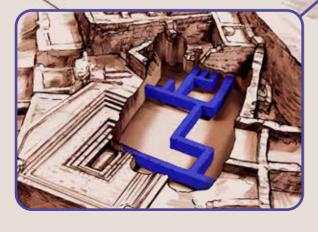
MIKVEH

The main goal for the excavation this summer is to uncover more of the Second Temple Period structures so we can understand their function. The dig will also shed light on the overall layout of the eastern Ophel area.

2022 AREA D ASHLA CTEPS

AREA D1 SUBTERRANEAN WATER TUNNEL SYSTEM

The subterranean water system related to the large mikveh and monumental building will continue to be excavated.

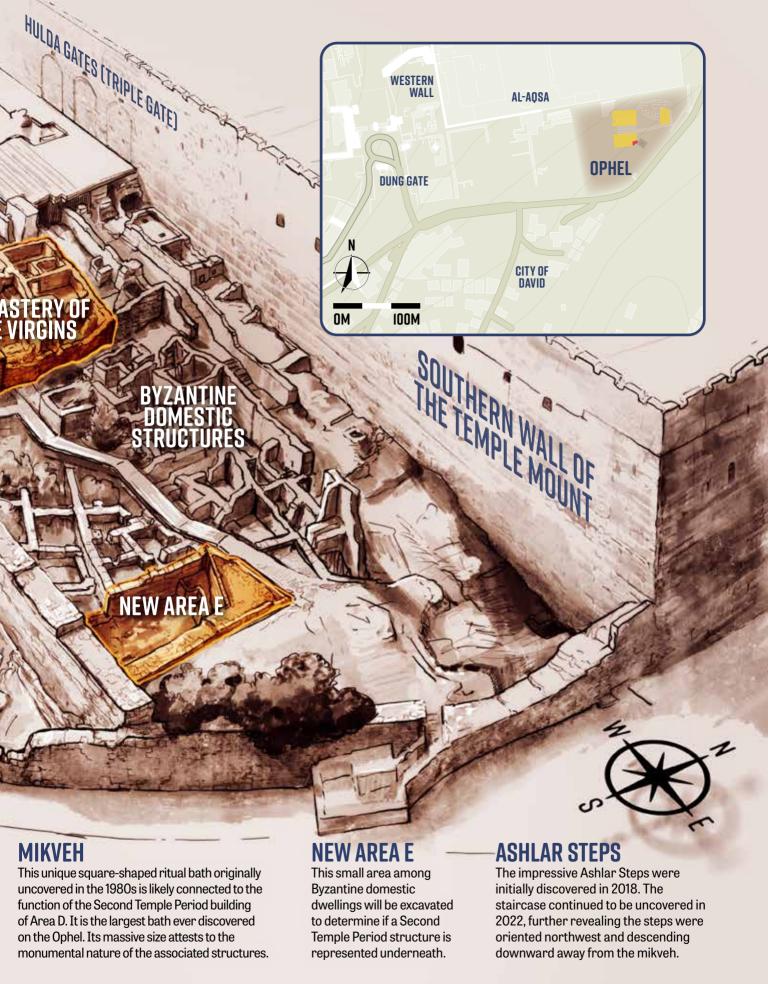


MONASTERY OF THE VIRGINS

A series of small cross sections will be excavated against the base of several walls to determine if the Second Temple Period walls were incorporated into the foundation of the Byzantine-period monastery.

AREA D

Domestic Byzantine-period dwellings will be partially removed to further expose the monumental Second Temple Period building underneath.



▶ OPHEL FROM PAGE 17

scale, an *ophel* logically refers to some form of a large, prominently raised mound or hill within a city—an upper, fortified area or acropolis.

Another case of slightly different, yet still conceptually related, illustrative terminology can be found in Habakkuk 2:4 (this time with the equivalent verb form of the word, *ophla*): "Behold, his soul is *puffed up* [ophla], it is not upright in him"

Again, this is apt imagery for a geographical equivalent—a raised, elevated, prominent part of Jerusalem. But not just Jerusalem.

Other Ophels?

While the majority of biblical references to an ophel relate directly to Jerusalem, this term is used in relation to sites beyond the capital. The account in 2 Kings 5, for example, describes the visit of a leprosy-riddled Syrian captain, Naaman, to Elisha and his servant Gehazi at Samaria (verse 3). Verse 24 contains the following tidbit: "And when he [Naaman] came to the *hill* [ophel]"

Now *this* is interesting. We have an ophel of Jerusalem and an ophel of Samaria. But there's more—this time, from an archaeological angle.

The Mesha Stele, now on display in Paris's Louvre Museum, is one of the most significant artifacts in the world of biblical archaeology. Discovered in the ancient Moabite capital of Dibon (modern-day Dhiban, Jordan) during the mid-19th century, this large basalt monument is a victory inscription belonging to the Moabite

King Mesha, the same individual

described in 2 Kings 3. The 34-line, ninth-century B.C.E. inscription

contains numerous parallels to the biblical account, including references to biblical kings Mesha of Moab and Omri of Israel, to the tribe of Gad, to various cities and events paralleling the biblical account, and even a reference to King David (something suspected for several decades and finally proved this year through advanced imaging; see our article at ArmstrongInstitute.org/310 for more information).

But there is another significant, yet often



overlooked, reference in the text. Mesha declares, in part: "I have built Karchoh[?], the wall of the woods and the wall of the *citadel* [ophel]"

The late archaeologist Dr. Eilat Mazar was one of the chief excavators of Jerusalem's Ophel. In *Discovering the Solomonic Wall in Jerusalem*, she explained both the meaning and significance of the term. Importantly, Mazar noted that the term refers specifically to territory within the *capital cities of their respective nation-states*.

"When we looked for other cities that used the term *ophel*, we found that this term was used for only two more capital cities ... the first is Samaria, capital of the kingdom of Israel (2 Kings 5:24); while the second comes from the Mesha Stele Among his other construction enterprises, Mesha described the construction of 'the wall of the Ophel' in Dibon, his capital, giving us the earliest recorded mention of *ophel* outside the Bible." she wrote.

"As we see, there were Ophels in at least three capital cities during approximately the same time period: Jerusalem, Samaria and Dibon," she continued. "IT SEEMS THAT THE TERM OPHEL WAS SPECIFIC TO CAPITAL CITIES AND THEIR ACROPOLISES, IN WHICH THE KING'S PALACE AND OTHER ROYAL BUILDINGS, ALONG WITH THE DWELLINGS OF THE ELITES, WOULD BE LOCATED" (emphasis added throughout).

Ophel = Acropolis

Dr. Mazar often referred to the "Ophel" in terms of a royal *acropolis*—a prominent, royal part of a city raised to a greater height than its surrounds. (Recall the statement in 2 Chronicles 33:14, which notes that King Manasseh "compassed [a wall] about Ophel, and *raised it up a very great height.*")

Naturally, the word "acropolis" vividly brings to mind the great Acropolis of Athens—a gigantic raised geographic "mound" (in this case, more like a *mountain*) containing the royal and religious precincts of the wider city below that it towered over.

Various researchers have actually compared the layout of the Acropolis in Athens to Jerusalem. But could there be a greater connection for the use of this terminology—"acropolis"? The Greek term is a conjunction of the words *akros* (meaning "highest") and polis (meaning "city"). The latter element, minus its Greek suffix, looks suspiciously like its Hebrew counterpart. And further, while "polis" *did* later come to be a more generic term for "city," that general appellation was not the case initially. As explained in Routledge's *Encyclopedia of the City:* "In ancient Greece, it defined the *administrative and religious city center* (polis—ACROPOLIS), as distinct from the rest of the city"

Thus, could it be more than coincidence, given many of the shared linguistic connections and derivations

in the Greek world from the Hebrew language (see ArmstrongInstitute.org/396 for more detail), that both similar root words were used in the ancient world to refer to the elevated royal, administrative and religious center of a city?

In summary, the biblical use of the term ophel describes a geographically raised royal acropolis area—and not just for any city within the nation, but in particular the capital city of a given state—a plot

that contained the administrative, royal and, in some cases, religious quarter of the city.

Armed with this knowledge, can we apply it accurately to the topography of Jerusalem to find out where exactly this biblical location was?

Locating Jerusalem's Ophel

Logically, Jerusalem's ancient Ophel should be found in or around an upper part of the original ancient city. In the case of Jerusalem's geography, this would best pertain to the northern end of the eastern hill, due north of the lower City of David ridge. This is the region in which the biblical King

Solomon expanded the city to the north following the rule of his father, King David. It is in this northern, raised part of the city that Solomon is described as constructing three major edifices: the temple, his own administrative palace and the enigmatic "house of the forest of Lebanon." (Interestingly, on the Mesha Stele, within the same sentence as Mesha's description of his construction of the Dibon Ophel, it also describes the construction of a "wall of the woods"—יער the very same word as that of Solomon's "house of the forest." As such, it is surely more than coincidence that such structures should be found in association with an ophel, or royal acropolis, and probably had some kind of parallel function.)

The Temple Mount complex, of course, is easily recognizable as a raised feature in contrast to the lower City of David. But so too is the area immediately to its south, along the southern wall of the Temple Mount. Today this area may not seem prominent, especially in relation to the Temple Mount; this is because this part of the city now lies destitute and in ruins. But even today, visitors to the area can get a sense of the natural, sharp elevation of the bedrock while touring along the eastern part of the southern wall of the Temple Mount.

It was over the course of excavations in this eastern area that Dr. Eilat Mazar uncovered the remains of what she termed the "Royal Quarter" of ancient Jerusalem,

> including a grand gatehouse, raised fortifications, inscriptions (including the seal stamps of King Hezekiah and Isaiah) and a royal bakery. This area she identified as the general location of the palace complex of Solomon and later kings—on this northeastern, raised upper portion of the city, overlooking the Kidron Valley and City of David below.

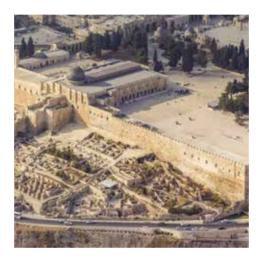
To this end, the first-century historian Josephus made two references to the location of the Ophel, or the "Ophla"/"Ophlas" (as he rendered it in the Greek language). In describing the area in the context of the Great Revolt, he wrote: "But John held the temple, and the parts thereto adjoining,

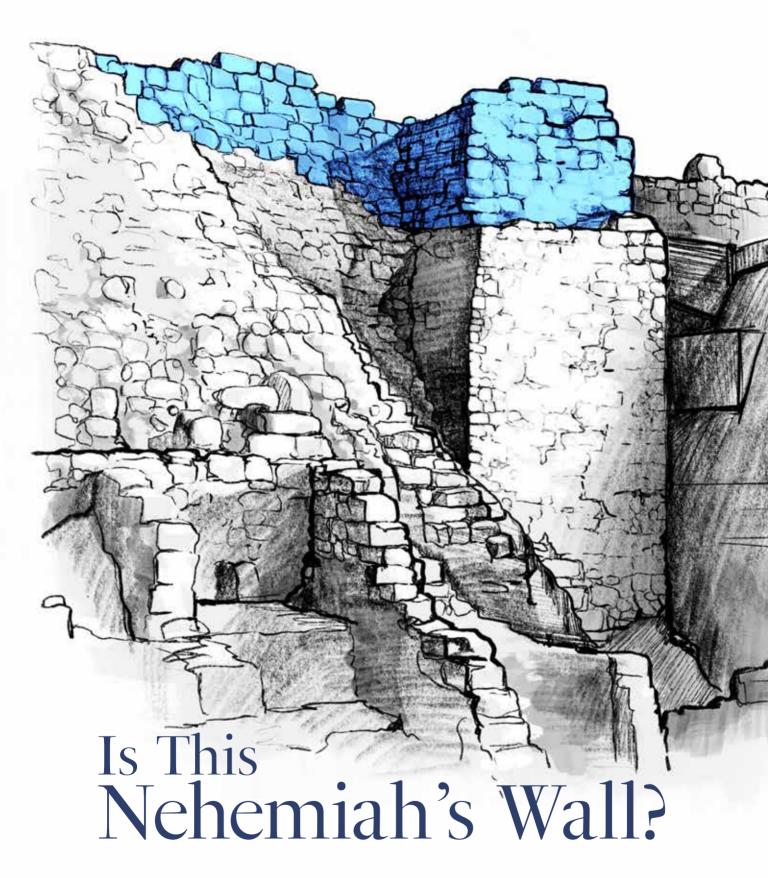
for a great way, as also Ophla, and the valley called the Valley of Cedron" (Wars of the Jews, 5.6.1).

He further described the defensive walls the Romans came up against, particularly the original inner one: "Now of these three walls, the old one was hard to be taken, both by reason of the valleys, and of that hill on which it was built [I]t was also built very strong; because David and Solomon, and the following kings, were very zealous about this work. Now that wall began on the north" Josephus continued to describe the directional winding of the wall, before writing: "[A] fter that it went southward, having its bending above the fountain Siloam, where it also bends again towards the east at Solomon's pool, and reaches as far as a certain place which they called Ophlas, where it was joined to the eastern cloister of the temple" (ibid, 5.4.2).

This aptly describes Jerusalem's Ophel, again, in this very location—the northeastern part of Jerusalem,







Archaeology proves the famous biblical account of a desperate attempt to fortify the Holy City. BY CHRISTOPHER EAMES



T WAS SUPPOSED TO BE A SIMPLE SALVAGE operation to repair a crumbling Hasmonean tower. But after late archaeologist Dr. Eilat Mazar and her team started excavating, they soon realized that this project would be far more. By the time they were done, they had made a sensational discovery.

Situated in the City of David, at the upper northern end of the Stepped Stone Structure, the Northern Tower was a poorly constructed fortified structure. It had the remains of a mikveh (ritual purification bath) on top. The Northern Tower was largely unearthed in the 1920s. Until 2007, archaeologists, including Dr. Mazar, generally assumed the tower dated to the Hasmonean period (second century B.C.E.).

By 2007, the Northern Tower was in a perilous condition, at risk of collapse. The structure had clearly been built quickly in antiquity, with its stones loosely cobbled together. Most significantly, nearly a century of nearby archaeological digs had compromised its structural integrity. Without immediate intervention, the tower would collapse. Early that year, the Israel Antiquities Authority (IAA) attempted to carry out restoration work, yet the soundness of the tower continued to deteriorate. Thus, the IAA approved Dr. Mazar to lead a salvage excavation to repair the tower.

The repair process was theoretically simple: Mazar and her team would dismantle the tower, carefully numbering each rock and noting its place in the wall. Then, using modern mortar, they would rebuild it. However, with an edifice this ancient, things are rarely simple. What transpired was an unexpected, intensive six-week excavation that ended in a radical redating of the Northern Tower—and the revival of some extraordinary biblical history.

Persian Fingerprints

Dr. Mazar's dismantling of the Northern Tower began in a straightforward manner. However, as the team got close to the bottom, it became clear that the foundation wasn't sufficiently stable to support the tower's reconstruction. After consulting with authorities and colleagues, Dr. Mazar began to excavate the strata under the tower to find a firm layer on which to rebuild. The material uncovered in this strata enabled a secure dating of the Northern Tower—and everyone was in for a surprise.

During the excavation it also became clear that the Northern Tower had been built at the same time as a straight section of wall atop the Stepped Stone Structure and that the tower and this section of wall were part of the *same* edifice.

Among the artifacts uncovered directly beneath the Northern Tower was a surprising discovery: two buried dogs. Studying the "epiphyseal closure" of the bones, as well as age-related wear, scientists determined that the dogs had died of old age. Comparing the finds with other excavations across Israel, Mazar noted that dog burials of this kind are characteristic of a specific historic setting: the Persian period. (The largest dog burial was found in Ashkelon; thousands of dogs were buried here, with a peak number during the Persian period. It appears that the Persian faith held dogs to have a holy status and linked them to health and medicine.) The manner of this burial and its location directly under the tower indicate they were buried immediately before the wall's construction.

A large amount of pottery fragments were also discovered under the dogs. These sherds dated unequivocally to the Persian period and supported the dating of the dogs to the late sixth and early fifth century B.C.E.

Finally, the *absence* of certain material helped Dr. Mazar date the tower and associated wall. *Yehud* seal impressions are very common during Persian-period Judah. *Yehud* was what Judah was called during Persian rule. During Yigal Shiloh's excavations in the City of David in the 1980s, many *Yehud* bullae had been found, all of which dated to the second half of the fifth century B.C.E. or later. But here, in this almost 1.5-meter-thick Persian layer beneath the Northern Tower, Dr. Mazar didn't find a single one. That meant this material must have been in place *before* the middle of the fifth century B.C.E.

Using pottery typology and the dog burials, Dr. Mazar concluded that the Northern Tower and wall were constructed around 450 B.C.E.

The Biblical Record

Though the discovery of the Persian wall and tower was unexpected, when considering the historical sources, it is entirely *unsurprising*. The Bible discusses just such a wall, *at length and in great detail*.

The biblical account of "Nehemiah's wall" is well known. Nehemiah was a Jew in Persian captivity. He was the cupbearer to the Persian King Artaxerxes. In 444 B.C.E., Nehemiah was granted permission to return to Judah and rebuild the dilapidated walls and gates of Jerusalem, which had been destroyed during the Babylonian invasions in the early sixth century.

The book of Nehemiah shows that Judah at the time was surrounded by enemies and under constant threat of attack. Nehemiah and his crew worked with great urgency and astonishing speed. Nehemiah 6:15 says the wall was built in just "fifty and two days."

Studying Nehemiah's account, Dr. Mazar noted that the construction of the Northern Tower and associated wall, which she had scientifically dated to circa 450 B.C.E., matched precisely with the biblical account. Not only did the dates match, so did the quality of construction. The tower and wall were not masterpieces of engineering. Their construction quality showed that they had been built hastily—just as Nehemiah recorded.

Nehemiah 3 describes the wall's construction in detail. It specifies various lengths of

Persian-period pottery found directly underneath Nehemiah's wall tion in



walls, towers and gates being rebuilt, along with names of the workmen. Comparing the section of wall Dr. Mazar discovered with the biblical description, one can even speculate as to the specific person who built it: Nehemiah,



Sanballat Bulla

son of Azbuk (verses 15-16; this is a different Nehemiah from the book's main figure).

There is another interesting tidbit regarding the wall. In verse 35, Tobiah the Ammonite, one of Nehemiah's adversaries, mocks the builders. He tells them, "Even that which they build, if a fox go up, he shall break down their stone wall." In other words, *Even a fox could knock down your wall!* Perhaps it is some poetic justice that directly underneath the excavated section of Nehemiah's wall were the crushed carcasses of two very dead canines?

Incidentally, the Bible records that Nehemiah had three primary enemies: Sanballat the Horonite, Tobiah the Ammonite and Geshem the Arabian. Two of these figures—Sanballat and Geshem—have been identified through archaeological discoveries. Tobiah has not, but archaeology has proved his name common for this period.

Related Discoveries

Beneath the 1.5-meter layer of early Persianperiod material, Dr. Mazar discovered a Babylonian layer. This clearly related to the earlier Babylonian period, circa 586 to 539 B.C.E. A number of significant finds appeared in this stratum.

Among them was a shiny black stone seal bearing the biblical Hebrew name *Shelomith.* The image above the name is Assyrian/Babylonian. It features two worshipers, an altar and the moon symbol of the Babylonian god Sin. Mazar postulated that the seal was made in Babylon and the Hebrew name incised later. She also referenced 1 Chronicles 3:19, which mentions a Shelomith, daughter of Zerubbabel, who was on the scene immediately after this Babylonian period.

Directly under the Babylonian stratum was the thick destruction layer corresponding to the fall of Jerusalem. This layer contained several small finds, including many bronze and iron arrowheads. This layer included the bulla of the biblical prince Gedaliah, son of Pashur (Jeremiah 38:1).

The preserved section of Nehemiah's wall uncovered by Dr. Mazar tapers out at the summit of the Stepped Stone Structure. Continuing south along the same line, however, a related section of wall appears (see map on the following page). Though no stratified material was present to be able to date this southern continuation of the wall, Dr. Mazar believed that, based on its relationship to the northern wall and tower, it too dates to the Persian period and is another part of Nehemiah's wall.

This southern continuation of wall abuts the Southern Tower. Like the Northern Tower,



Shelomith Seal

this large tower was originally assumed to have been Hasmonean. Unfortunately, excavations during the 1920s removed the earth layers abutting the tower. It appears that unless the tower itself is excavated, it cannot be dated properly. Again though, given the nature of the tower and

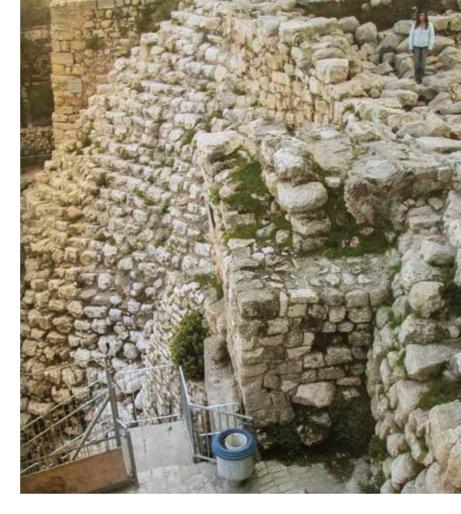
how it relates to the wall extending south of the Stepped Stone Structure, Dr. Mazar believed it too must be part of Nehemiah's wall. The fact that the Southern Tower was built on top of houses destroyed by the Babylonians (around 586 B.C.E.) and therefore dates to sometime *after* the sixth-century B.C.E. destruction, further points to this identification.

The most logical conclusion is that all three edifices—Southern Tower, Northern Tower and the wall connecting them over the Stepped Stone Structure—are part of Nehemiah's wall.

One final note: Nehemiah 3:16 says the tombs of the kings of Judah are situated alongside a massive stepped structure, at the end of the section of wall built by Nehemiah, son of Azbuk. These tombs have not yet been found—but surely they must be close to the portion of Nehemiah's wall discovered.

Enter the Critics

Before Dr. Mazar's salvage excavation, no finds existed relating to Nehemiah's reconstruction of Jerusalem's wall in this area. Bible skeptics pointed to the book of



Nehemiah's wall, in the foreground, was constructed on top of an older wall.

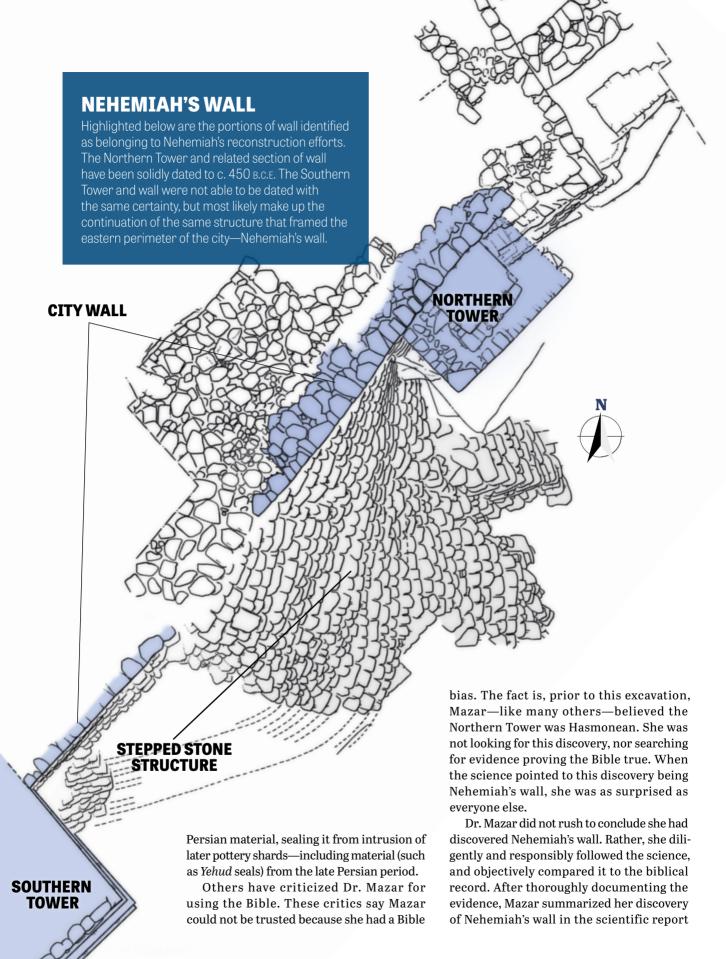
Nehemiah and its detailed description of the wall and asked why none of its remains had ever been discovered. Since 2007, they can no longer ask this question. But the skeptics have not retired.

Archaeologist and Bible minimalist Prof. Israel Finkelstein dismisses the discovery, arguing that because we only have *foundational* material dating to the Persian period, the structure itself could have been constructed at any later period. "The wall could have been built, theoretically, in the Ottoman period [circa 1300–1900 C.E.]," he stated.

This argument is spurious. Remember, the tower was capped with a *Hasmonean* mikveh, which means the structure was completed *no later* than the first century B.C.E.—the end of the Hasmonean period.

Consider too: If the structure had been built *this* late, more than 300 years *after* the Persian period, why were there no later Hasmonean remains under the tower? After all, a *wealth* of Hasmonean remains were scattered throughout surrounding earth strata.

Clearly the tower must have been built at the same time period as the foundational early





documenting the excavation, *The Summit of the City of David Excavations* 2005–2008, *Final Reports Vol.* 1.

She wrote: "In summary, the remains discovered ... well substantiate the biblical account. ... Taking into account the strong archaeological evidence on the one hand and the detailed biblical account on the other, we propose identifying the Northern Tower, and likely the Southern Tower as well, together with the segment of the city wall (W27), as all forming part of Nehemiah's fortifications."

Doesn't this conclusion make sense? You don't have to be a believer in the Bible to see what Dr. Mazar discovered actually matches up with the biblical account.

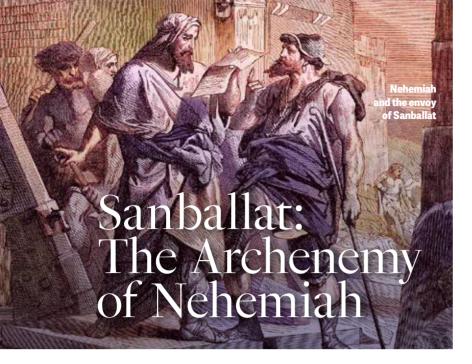
Weapon in One Hand, Spade in the Other

Watching the debate over the excavation of the Northern Tower, it's hard not to see parallels with events described in the book of Nehemiah. Anciently, Nehemiah and his helpers faced such stout resistance they required military protection. "They which builded on the wall, and they that bare burdens, with those that laded, every one with one of his hands wrought in the work, and with the other hand held a weapon" (Nehemiah 4:17; King James Version). Dr. Mazar also faced tough opposition, albeit more academic. There is no shortage of modern-day Sanballats and Tobiahs.

One year before she discovered the wall, Dr. Mazar, like a modern Nehemiah, described her approach to archaeology: "I work with the *Bible in one hand* and the tools of excavation in the other, and I try to consider everything." Perhaps it is fitting that her excavation and identification of the wall took about as long as it did for Nehemiah to build it.

Despite opposition, as Dr. Mazar had said, in the end, the stones speak for themselves. Nehemiah couldn't have said it any better himself.

"Nehemiah Views the Ruins of Jerusalem's Walls" Gustav Doré, 1866



Twenty-five hundred years after his reign, a handful of archaeological discoveries bring this biblical governor of Samaria back to life. BY MARIANNA BALA'A

E MOCKED THE JEWS AND LAUGHED THEM TO scorn. Governing the region just north of Yehud, this man had a full view of the work going on in Judah. Perhaps best known as Nehemiah's main adversary, he tried numerous times to stop Nehemiah in leading the nation to rebuild the wall around Jerusalem. And as if persecution during his lifetime wasn't enough, in an indirect way this governor also divided the high priest's line in Judah, creating a schism that plagued the Jews for centuries.

This man is only mentioned in one book of the Bible—Nehemiah. But within that relatively short book are several instances where this governor of Samaria caused tremendous grief and obstacles for the Jews of his time.

Sanballat was his name.

Yet his name is not exclusive to Nehemiah's account. Let's take a look at the ancient artifacts that bear his name and bring this ancient adversary to life—2,500 years later.

Sanballat—'Sin Has Begotten'

First, let's briefly cover the details surrounding this governor and the origin of his people, the Samaritans.

The name *Sanballat* comes from the Babylonian name *Sinuballit*, which means "sin has begotten." "Sin" was the Mesopotamian moon god of that time. This

Samarian governor lived and reigned in the mid-to-late fifth century B.C.E. In the book of Nehemiah, Sanballat is called "Sanballat the Horonite." Another possible translation of the word "Horonite" is Harranite. Harran was a prominent ancient city in Upper Mesopotamia, which today is located near the border between Turkey and Syria. The Horonites were likely among the series of different peoples transported to Samaria by the Assyrians around 718 B.C.E. to replace the deported Israelites.

In the century prior to Nehemiah's governorship, Zerubbabel arrived in Yehud to rebuild the temple. The Samaritan people sought to join Zerubbabel and the Jews in their rebuilding (Ezra 4:2). In the Samaritans' eyes, they had the same reli-

gion as the Jews. In reality, however, the Samaritans were ethnically separate, and their religion was a mixture of paganized Israelite and Babylonian teachings (2 Kings 17). This is why Zerubbabel told the Samaritans, "Ye have nothing to do with us to build a house unto our God; but we ourselves together will build unto the Lord, the God of Israel ..." (Ezra 4:3). This angered the Samaritans and the other surrounding districts, and they "weakened the hands of the people of Judah, and harried them while they were building, and hired counsellors against them, to frustrate their purpose ..." (verses 4-5). (For more information about the Samaritans, see our article "Uncovering the Bible's Buried Civilizations: The Samaritans" at *ArmstrongInstitute.org/*333.)

By the time of Nehemiah, Sanballat was governor of Samaria and a sworn enemy of the Jews.

In Nehemiah 2, Sanballat and two other governors laughed the Jews to scorn and derided their plan to build a wall (verse 19). Once construction began, Sanballat became "wroth, and took great indignation, and mocked the Jews" (Nehemiah 3:33). Sanballat's last attempts to frustrate the work as the wall neared completion are recorded in Nehemiah 6. He even went so far as to hire an insider to try to get Nehemiah to commit a sinful act in order to be banished by the Jews.

After governing Yehud for 12 years, Nehemiah returned to Persia in 433 B.C.E. to serve King Artaxerxes (Nehemiah 13:6). He eventually returned to Jerusalem after an unspecified amount of time, but the Bible doesn't state who ruled during this interlude in Nehemiah's terms as governor.

While Nehemiah was away, Sanballat arranged for his daughter to marry Manasseh, the high priest's grandson (verse 28). Once Nehemiah returned, he offered

Manasseh the chance to break off his relationship with his foreign wife—but Manasseh refused, so he was banished from Yehud and went to Samaria. This played a crucial role in the formation of the Samaritan priesthood, with its own holy mountain, holy book and high priest.

The Bible doesn't say what happened to Sanballat after the wall was built; however, we are able to fill in the details. A collection of 175 ancient documents, known as the Elephantine Papyri, contains one in particular—the Elephantine Papyrus No. 30—that calls Sanballat by name and fills in some of the missing information of this interlude in Nehemiah's account. Here's a look at what the scientific evidence says.

The Elephantine Papyri

On Nov. 25, 407 B.C.E., the Jewish community from Elephantine in Egypt wrote a letter to Bigvai, the governor of Yehud. This letter, or rather a draft or copy of it, was found among the collection of 175 documents in excavations in Elephantine in 1909. Papyrus No. 30 (also called the Elephantine Temple Papyrus) contains 30 lines of inked Aramaic text.

After asking for permission to rebuild the destroyed temple at Elephantine, the letter states: "Moreover, all things in a letter we sent in our name to Delaiah and Shelemiah, sons of Sanballat, governor of Samaria." The author apparently sent a copy of this letter to these two sons of Sanballat. The letter's mention of them seems to imply that they were acting on behalf of their aged father. However, since the letter says, "Sanballat, governor of Samaria" instead of "former governor," we can deduce that Sanballat was likely still alive at this time. Perhaps he was still ruling but his two sons were taking on part of his responsibilities.

Nehemiah mentions both a Delaiah and a Shelemiah in his account. Although these names cannot with certainty be linked to these two specific sons of Sanballat, they do attest to the prominence of such names during this time period.

In his publication *Aramaic Papyri of the Fifth Century B.C.*, A. E. Cowley wrote, "The fact that the Jews of Elephantine applied also to Delaiah and Shelemiah at Samaria and mention this to the authorities at Jerusalem shows that (at any rate as far as they knew) no religious schism had as yet taken place."

This matches the biblical account. Nehemiah records that the schism didn't happen until his second term as governor. Nehemiah finished his first term as governor and returned to Artaxerxes in 433 B.C.E. This letter was written 26 years after Nehemiah went back to serve Artaxerxes. The Bible doesn't indicate how long Nehemiah was away, so it's possible that Nehemiah served Artaxerxes for this entire time before returning

to Yehud—and the schism subsequently happened. However, if the letter was indeed written after the schism had already occurred, perhaps it was still recent enough that the full implications had not been felt yet, especially to this distant Jewish colony in Egypt.

Either way, the dating of this letter proves the veracity of Nehemiah's account and the far-reaching influence of Sanballat and his sons as governing historical characters and contemporaries of Nehemiah.

The Samaria Papyri

Similar documents to the Elephantine Papyri were found in a cave at Wadi Daliyeh, 14 kilometers north of Jericho. In this cave, archaeologists discovered at least 18 Aramaic documents, 128 clay seals, several coins and the skeletal remains of 205 people. The artifacts date from the early to late 300s B.C.E. Most of the papyri documents dealt with slave trades or other sales.

Based on the wealth discovered in the cave and the nature of the documents, some believe that these items belonged to the Samaritan governor's family who likely fled when Alexander the Great invaded in 332 B.C.E. It's likely that Alexander's army pursued after these fleeing elites and executed them in this cave at Wadi Daliyeh.

Most significant to our study are two artifacts from this collection that feature the name "Sanballat."

One artifact of special interest is a tiny clay bulla that reads: "[...]iah, son of [...]ballat, governor of Samar[ia]." Since the dating of the papyri is during Artaxerxes III's reign, it is possible that this bulla is referring to a later Sanballat. But it is also plausible that this name belongs to the same Sanballat of Nehemiah's account. The name ending "-iah" could fit with either of Sanballat's sons mentioned in the Elephantine papyri: Delaiah or Shelemiah.

This collection of papyri includes a fragment of a papyrus that references "[...]ua, son of Sanballat (and) Hanan, the prefect." The names Jeshua or Jaddua, later priestly figures listed in the book of Nehemiah, have been suggested as the missing name at the start of the inscription. The name Hanan, alongside Sanballat, is also found throughout the book of Nehemiah.

As the "archenemy" of Nehemiah, Sanballat caused the Jews a lot of grief during his reign. But conversely, his acts and prominence in the region serve as a *help* to the people of our day—providing artifacts that bear his name and prove his existence. Such artifacts continue to establish the veracity of the biblical account and help bring its pages back to vivid life.

For more information on the historicity of the book of Nehemiah, please read "Nehemiah: A Man and a Momentous Wall" as well as "Elephantine Papyrus: Proving the Book of Nehemiah" (*ArmstrongInstitute. org/*37 and /176).





The Instrume of the Bible

The Hebrews' rich musical culture was seen in the variety of instruments they employed.

BY RYAN MALONE



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OURING THE MUSICAL INSTRUMENT Museum in Phoenix, Arizona, is an epic experience. The approximately 18,500-square-meter (200,000-square-foot) facility displays and explains instruments from all over the world and from ages past to the present.

One thing struck me about every exhibit. No matter how diverse the colors, materials, shapes or sizes of the instruments were, there are still only three basic kinds of instrumental technology: Either you hit it, send air through it, or make a string vibrate. Percussion instruments have numerous varieties. In terms of sending air through an instrument, this can either be facilitated by blowing over a hole, buzzing the lips together into a mouthpiece (in the case of brass instruments), or blowing through a reed (the air either coming directly from the mouth or through an intermediary bag, as in the case of bagpipes—for which many varieties abound in several cultures). Strings can be made to vibrate by being plucked, bowed or struck in some way (e.g. pianos, dulcimers).

These are the basics of instrumental "technology," and since the dawn of our world this potential has always existed.

It is clear from the biblical record that ancient Israel employed all sorts of instruments—each one some sort of variation on one of these three major "themes." This variety, and the way they were used, bespeak a rich musical culture for the Hebrews who lived in "biblical" times.

The Levites, who must have believed their culture possessed a special musical insight, said these instruments were "for the songs of God" (1 Chronicles 16:42). 2 Chronicles 7:6 refers to "instruments of music of the Lord, which David the king had made, to give thanks unto the Lord"

Challenges in Translation

We do encounter difficulties in our study of these instruments. 2 Samuel 6:5 is a prime example. Joachim Braun considers "cypress wood" to refer to an instrument itself—to "clappers made of cypress," since archaeology has revealed clappers: "During the monarchy ... cypresses were still plentiful in Israel, and the people probably played clappers made of wood during the great cultic and paracultic festivals" (Music in Ancient Israel/Palestine).

Imagine how difficult it would be 4,000 years from now to try to uncover what our instruments were like purely based on their names. For example, even if you know our piano—which means "soft" in Italian—came from the pianoforte (named after its capability to play varying degrees of volume), it wouldn't describe anything about its construction or what family of instruments it belonged to.

Biblical writers included little detail about the construction and sound qualities of these instruments. "Here and there an adjective, such as 'sweet,' 'pleasant,' 'solemn' and the like, is all we learn about their sonorities," Alfred Sendrey wrote in Music of Ancient Israel. He shed more light on this dilemma: "The chroniclers restrict themselves mainly to mentioning the names of the instruments. But with the lapse of time even this primary knowledge was dimmed to such an extent that already the early rabbinic writers were in doubt whether some of the names referred to a stringed instrument or a wind instrument. The pictorial representations in Egyptian, Babylonian, Assyrian, and partly also in Greek and Roman antiquities, furnish us a working basis for drawing reasonable conclusions about the instruments of the ancient Hebrews. The etymology of the Hebrew names of instruments affords valuable information as to their origin, and sometimes also their sound quality."

Sendrey, Braun and other authors look at the archaeological finds of surrounding cultures, but little exists in Israel because of the sheer annihilation of the nations in that area on at least two occasions. We will examine what does exist; using the archaeological finds of other nations can be precarious since the Israelites were known to be *culturally* unique in many ways. After all, they were at one time ruled by a king who directed the creation of 4,000 instruments (1 Chronicles 23:5).



Affinity for Strings

Ezekiel 33:32 likens peoples' reactions to a watchman to one who "hath a pleasant voice, and can play well on an instrument; so they hear thy words, but they do them not."

To "play well" is from the Hebrew nagan, meaning to play or strike strings. Stringed instruments were central to the Hebrew musical culture—partly from its most utilized instrument (the harp, or kinnor) and also from the fact that words for playing instruments and even a word for singing praises come from the roots meaning "to pluck."

Psalm 150:4 declares: "... Praise Him with stringed instruments" The word for "stringed instruments" is men in the Hebrew, literally meaning string, portion or, as the Gesenius' Hebrew-Chaldee Lexicon states, "slender threads." This word is used in only one other place: "... Out of ivory palaces stringed instruments have made thee glad" (Psalm 45:9). Just like our modern strings, they served a variety of functions and moods, from the "glad" (as in Psalm 45) to more somber, even ominous, flavors.

As for the construction of the instruments, the Bible does not give many technical details, though it mentions "all manner of instruments made of cypress-wood ..." (2 Samuel 6:5). This attests to high quality. Solomon also had special wood imported for his musical instruments (1 Kings 10:11-12; 2 Chronicles 9:10-11). These arguably were the "Steinway" or "Stradivarius" instruments of their day.

Kinnor Varieties

The harp, Hebrew kinnor, is the star instrument of the Hebrew Bible. It is used 42 times in references that span many centuries. The Hebrew word is similar to the Syrian and Arabic-Persian words for "lotus," and archaeological discoveries confirm that harp-like instruments have been made of lotus wood.

The 19th-century German historian Johann Weiss asserted that the Semites brought the harp into Egypt. Weiss also felt that the harp would not have been a tiny instrument with only a few strings. He believed that the Hebrews would not have chosen that for their national instrument if it produced weak or thin sounds.

An interesting grave mural of Egypt's Khnumhotep II shows a nomadic group. This image dates to 1900 B.C.E., the time of Abraham, and depicts 37 Semitic men, women and children. They have weapons and animals, and the group's leader is called Abi-shar, "the ruler of a foreign country."

This mural shows a portable lyre that was "held horizontally so that it could even be played comfortably while walking ... while simultaneously allowing the musician to breathe more easily while singing" (Braun, op cit). Braun notes that musical activity at this time appears to be closely associated with the Chaldean or Babylonian culture of that time, from where Genesis 12 says Abraham

Some hypothesize this image (since it dates to roughly the same period) could even depict Abraham's journey into Egypt. The Jewish historian Josephus credited the patriarch for bringing arithmetic, astronomy and other types of learning "from the Chaldeans into Egypt" (Antiquities of the Jews, 1.8.2). At the very least, this inscription depicts the KIND of nomadic activity occurring at the time and how music may have accompanied Abraham's journey to Egypt. It certainly attests to the use of portable harps in Israel's pre-nationhood culture.

Some say the *kinnor* had seven strings, which makes musical and mathematical sense: Philo of Alexandria viewed "[t]he seven-stringed lyre ... as a reflection of the celestial harmony, and the soul itself [as] a well-tuned lyre" (Braun, op cit).

Abraham Portaleone (1542-1612), an Italian-Jewish physician, scholar and author, described the kinnor as a large harp with 47 strings. These harps, however, might have been too heavy to hang on willow trees (Psalm 137:2).

Most likely, the word kinnor implied a stringed instrument that varied in size depending on the context-much like we use the term piano today (whether spinets, uprights, or baby grands). Spanning such a range of Bible history, it is highly unlikely that it was one set design or even the same number of strings in each iteration.

Some Hebrew words translated as musical instruments simply mean "third" or "10th." Some have used those words to assume that there were three- or 10-stringed instruments. 1 Samuel 18:6 mentions "three-stringed

instruments." Psalm 33:2 and Psalm 144:9 render the word for "10th" as "psaltery of ten strings," and Psalm 92:4 translates the same word as "instrument of ten strings."

The *shaliysh*, or the "third," could be referring to a triangle, a triangular-shaped instrument or perhaps even a pleasing musical interval or harmony—after all, three strings would not be mathematically or acoustically practical UNLESS it was a *bowed* string instrument (our modern bowed instruments usually have four strings). Many depictions of ancient *bowed* instruments were, in fact, three-stringed mechanisms. One Medieval image illustrated a monarch with a three-stringed instrument, supposedly depicting King David.

As for the 10th, the Hebrew *asor* may have referred to a 10-stringed instrument. Josephus referred to a 10-stringed instrument "played upon with a bow," though most translations of Josephus say "struck with a plectrum."

Did the Hebrews employ a bowed string instrument? Certainly the "plectrum" pictured in various ancient drawings is too big to be a plucking device. Bowed instruments did not originate in modern history with the Italians but were known in antiquity, originating in Persia and Arabia, according to musicologist Carl Engel. Perhaps it is no coincidence that the Hindu word for this kind of instrument (from one of the originating cultures of the instrument) is *kinnere*, similar to the Hebrew *kinnor*.

Joseph Walker discussed the Celtic cionar cruit as an instrument of "10 strings ... played on with a bow or plectrum." He wrote, "As no drawing of this instrument has reached us, we can only suppose it resembled the hashur [or asor] of the Hebrews, of which such frequent mention is made in the Psalms, by the name of the 10-stringed instrument" (Historical Memoirs of the Irish Bards). Josephus called this instrument the kinyra, from which, perhaps, "cionar cruit" is derived.

Another interesting etymological connection is that the name for a certain bowed string instrument is the *geige*. The Swedes use the word *giga* to denote a Jew's harp, and Engel wonders if this word is the root of the English word jig.

Stringed instruments in ancient Israel probably had a similar amount of variety as



they have today. Ample evidence exists of plucked instruments, like our harps; some evidence suggests there may have been bowed string instruments anciently as well, like our fiddles; and archaeology confirms Israel had plucked string instruments held by a neck, much like our lutes or guitars.

A terra-cotta relief was found at Tel Dan in Israel's north, where the tribe of Dan settled early in the judges period. This artifact, known as the "Dan dancer," dates back to the 14th century B.C.E. Braun writes that "everything suggests that this figure is a folk musician": The raised leg indicates a dancer, and the "expressionless face might represent a mask worn during performance" (op cit). The relief was found on a paving stone in a courtyard where such performances took place.

Braun calls this find "one of the most remarkable representations of lute players we have" because none of the characteristics of this image share any parallel in this time and place: "[T]he combination of instrumental music, dance and theater in the Dan figurine suggests that a highly professional group of entertainers had developed whose activity was quite separate from the cult." In other words, this bespeaks a secular musical culture in addition to the well-documented religious one found in the Bible.





Nebel—String or Wind?

Despite the dearth of archaeological evidence, historians insist that the *nebel* is some kind of stringed instrument. Braun admits that the "historian has no real archaeological evidence of harps for any subsequent interpretation of the *nebel*." So what is it? Is it even a stringed instrument?

Bible translations vary wildly in how they render this word, even within the same translation. If only they had left it untranslated and let us see the definition for what it is: Nebel literally means "skin-bag," "skin-bottle," "inflate," "bulge" or something that collapses when empty. This may help support the idea that the nebel was an ancient form of bagpipe technology where air is sent into a bag and then squeezed through a reeded chanter. The Irish pipes are an example where air is not provided from the mouth, allowing the player to sing while playing the instrument—as some verses imply of the nebel.

Isaiah discussed their "noise" (Isaiah 14:11). Braun says this verse indicates the instrument was capable of a powerful DRONE.

Scholars say that it was *shaped* like a leather bag but that it literally was not, refusing any cultural connection between Jews and Celts (even though bagpipe-like instruments are present in many other cultures). Bagpipe enthusiasts point to the Hittite slab from 1000 B.C.E. found in Eyuk, Turkey, as the most ancient depiction of this instrument.

Musicologist and composer Abraham Idelsohn (1882–1938) believed *nebel al alamot* (as the Hebrew reads in 1 Chronicles 15:20) to be a bagpipe. He asserted that the *nebel* was the bag on which the pipes were fastened and the *alamot* was the double flute. The term *alamot* can mean "soprano" or "falsetto," which could describe the high-pitched sound of the instrument. The Mishnah refers to the bagpipe, using a more modern Hebrew term: *chamat chalalim*—literally, stomach pipes, the animal part from which ancient bagpipes were constructed.



Referenced more than any other, the *shofar* is the only instrument of ancient Israel that has survived the millenniums in its original form. No mystery surrounds its construction, sound or significance. It was used for a range of



purposes, from the frightening to the festive. Of its 72 references, the majority of them refer to the alarm of war, though the shofar was more versatile than that. It was also used as a general gathering device, as a precursor to major announcements, as part of coronations, and several times in the context of praise, joy or other sacred celebrations. Chroniclers used the word shofar to describe God's voice. In Joshua 6, God commanded seven priests to blow seven trumpets (shofar) of rams' horns. The term shofar describes the sounds of the ram's horn—the Hebrew yobel, from where we get our English word jubilee. The shofar was even blown on the Day of Atonement to announce the jubilee.

The ram's horn contained rich meaning to the Hebrews: Many still connect the horn's use to Abraham finding the ram to sacrifice in place of his son (Genesis 22:13).

Psalm 98:6 gives a joyous reference to the shofar and introduces us to another Hebrew trumpet: "With trumpets and sound of the horn Shout ye before the King, the Lord." Here the translators use the English "horn" for the shofar, probably to distinguish it in the English from the other "trumpets," the silver ones described in Numbers 10 (Hebrew chatsoserah). These trumpets are referred to 29 times and are the only instruments for which the Bible gives fairly detailed





information about their construction and material. It was made of one whole piece of silver and was for "the calling of the congregation, and for causing the camps to set forward" (verse 2). It would have been long and straight, with a bell at the end. Josephus corroborated this, as does the archaeological record of similar trumpets in neighboring cultures. The clarion and resonant tone of the silver metal would have given this instrument a sound both grand and piercing.

These trumpets, too, had both joyous and sobering functions (verses 4-9)—as an alarm of war, as an organization device and to mark the new moons. Rabbinic sources indicate they were also blown to announce the Sabbath.

Numbers 31:6 shows them functioning in warfare. In the Dead Sea Scrolls, the War Scroll of Qumran contains a document called "The Rule of Battle," which shows a similar usage. Sendrey commented: "This Rule of Battle intimates that the priests and Levites have been assigned quite an important role in the battle, namely to direct the operations of the troops in the midst of the combatants. In giving appropriate signals with trumpet and shofar blasts, they marked the different phases of the engagement. Priests and Levites as strategists—a peculiar role, though not entirely novel. It may be considered as a

mere elaboration, or even as a more detailed description, of the older practice, as found especially in 2 Chronicles 13:12, 14, but partly also in ... Joshua 6:3 and Judges 7:8, 16, 18-20, 22 [referencing Joshua's and Gideon's use of the *shofar*]. Looking into the purely musical spect [*sic*] of this detailed 'order of battle,' we realize that the priest-strategists had at their disposal seven different kinds of blasts for the assembly, the advance, the attack, the ambush, the pursuit, the reassembly and the recall. Such blasts must have had some conspicuous rhythmic or other characteristics, without which their specific purposes could not have been recognized by the fighting men."

Other Winds and Drums

The Hebrews also employed other wind instruments in their music. The Bible mentions the *chalil* (translated "pipe"), the root of which means to "hollow out" or "pierce."

The Septuagint and the Vulgate render it as a kind of reed instrument like a clarinet or oboe. Some suggest a flute. The only wind instrument that archaeologists are sure existed in Israel's Iron Age is the double pipe, like a double flute. Today, we are quite familiar with the sounds of the clarinet in Jewish music, and perhaps that sound had its roots in this biblical instrument. Whatever the instrument, it was quite common in Israel at the time of Solomon's coronation, when "the people piped with pipes, and rejoiced with great joy, so that the earth rent with the sound of them" (1 Kings 1:40).

This description may confirm Sendrey's assertion that the Hebrew terms for pipes referred more to *families* of instruments rather than specific, individual instruments.

The same may be true of *ugab*, another kind of "pipe." Musicologist Curt Sachs believed it was a long flute. Whatever the case, the references to this instrument are only found in the earlier writings (Genesis and Job), so it likely became extinct or was replaced by the *chalil* (with its first reference in Samuel's day).

In addition to the *tof* or "timbrel," of Psalm 81:3 for example, the Hebrews had other percussion instruments. One commonly mentioned in musical references is the CYMBALS: *Metseleth* is used 13 times and always in a particular Hebrew plural form signifying two of



an item; Gesenius' Lexicon notes that it is "dual" or as "a pair of cymbals." It comes from a root meaning" tingle" or "quiver." 1 Chronicles 15:19 tells us that they were made of nechosheth—a word used interchangeably for copper or bronze. This instrument is not introduced in the Hebrew text until David finally brought the ark of the covenant back to Jerusalem.

The other word translated "cymbal" is *tselatsel*, translated "cymbal" three times and "locust" once. The word means "whirring" or "buzzing," which is probably why it works as "locust," though it is not the common Hebrew word for locust. As an instrument, it probably served a different function than the metseleth. Psalm 150:5, which contains two of the three tselatsel references, states that they were "loud-sounding" and "clanging" the latter being the Hebrew teruwah, which is usually used for a loud trumpet blast. Tselatsel was used in David's first attempt to bring the ark back to Jerusalem. Along with that is another instrument, mentioned only once in the Old Testament. The "sistra" of 2 Samuel 6:5 is certainly the ancient instrument of the same name. The Hebrew word means "rattle," and its root means "shake," "tremble" or even "sift," which is indicative of how this instrument sounded.

The only remaining Hebrew instrument to define is tegowa (Ezekiel 7:14), translated as "horn": "They have blown the horn, and have made all ready, but none goeth to the battle; for My wrath is upon all the multitude thereof." Neither a shofar nor a chatsoserah, this word is only used here. Its root is taga, which is used for "blown" in this verse; so they, more literally, "blow the blowing implement ... but none goeth to battle."

A Babylonian Contrast

The one other substantial mention of instruments in the biblical record is in Daniel 3. Though not properly instruments of the Hebrews, they are worth considering in this context.

The scene is the golden image Nebuchadnezzar erected that was to be worshiped "at what time ye hear the sound of the horn, pipe, harp, trigon, psaltery, bagpipe, and all kinds of music ..." (Daniel 3:5). Verse 7 says the people did this when they heard this grouping of instruments, and the list is repeated.

The accusers of the three Jews who would not obey this reminded the king of his decree, and repeated the instrument list verbatim (verse 10). Verse 15 quotes Nebuchadnezzar to the three Jews, and he again lists the instruments.

Braun says "these enigmatic musical instruments—which the author introduces four times in his work almost like a threatening ostinato—evoke for the Jewish readers the presence of an alien, even hostile musical culture" (ibid). These instrument names are found only in Daniel 3, partly because this is the section of Daniel written in Aramaic—the lingua franca of the Near East at the time. Some words correspond to the Hebrew, but it poses the question: How different was the music of Babylon? Psalm 137 shows their interest in hearing Zion's music from their Jewish captors. Nebuchadnezzar's court was interested in learning from the Jewish captives (Daniel 1:3-4, 15-16, 18-20). The Aramaic words for these six instruments are: 1) the garna, similar to the Hebrew geren, and likely a metal or clay trumpet, as cylindrical instruments like these were known to be used in Babylon, and were about 70 to 90 centimeters in length; 2) the mashrotquita, some sort of wind instrument, possibly one with a reed; 3) the kiyatharos is something like a lyre or lute, and the word is where the English get the word guitar and the Arabs get their kuitra; 4) the sabbeka, likely another kind of stringed instrument that is perhaps more like the harp; 5) the pesanterin, which may have been a dulcimer-like instrument where the strings were struck; 6) the sumponeya is translated here as the "bagpipe," though the similarity to the Greek symphonia may mean this is when all the instruments were played together—after each had played its motif in the order that the decree said they would. Curt Sachs rendered it: "As soon as you hear the sound of the horn, the pipes, the lyre, the horizontal and vertical harp, the full consort and all kinds of instruments ..." (Rise of Music in the Ancient World).

Humanity's use of the varying forms of instrumental technology throughout history is evident in both the archaeological and biblical records. The details confirmed in the Hebrew Bible show Israel indeed stood out for its exemplary use of these instruments.

▶ OPHEL FROM PAGE 21

overlooking the Kidron Valley, against the eastern side of the temple compound.

Actually, it is quite possible that the original biblical term was used to *include* all or part of the temple area. In the Hebrew Bible, the terminology for *Temple Mount* (הר הבית) is almost nonexistent, and somewhat more general (found in Micah 3:12, Jeremiah 26:18 and Ezekiel 43:12). As such, and given that ancient royal acropolises included the religious compound, it is quite possible that the biblical use of the term ophel also designated the temple area as well. This would make sense based on 2 Chronicles 33:14's account of Manasseh building a fortification wall *around* the Ophel—certainly, such a wall would not have separated and isolated the temple structure outside the wall, to the north.

But we can get further locational information from the other biblical references as well. Repeatedly, the Ophel is referenced in proximity to the temple complex (e.g. 2 Chronicles 27:3). Nehemiah 3 is a key passage for the identification of landmarks around Jerusalem. It describes, in an counterclockwise manner from the north, the reconstruction of Jerusalem's wall. Verses 26-27 describe the northeastern part of the city wall. It is in this location that we find three separate mentions of the Ophel (verses 26 and 27, as well as Nehemiah 11:21). Not only that, but we read of this general area as being the location of the "king's high house" (Nehemiah 3:25; King James Version), a location of priests (verse 28), and specifically a dwelling place for the *Nethinim*, who played a key role in service to the kings of Judah and in worship service, with a particular focus on the altar (verses 26-27 and 11:21; see also: Joshua 9:27; 1 Chronicles 9:2; Ezra 2:58; 8:20; Nehemiah 7:60; 11:3).

Alongside the "royal quarter" nature of the Ophel excavated by Dr. Eilat Mazar, several further architectural features of this northeastern area were uncovered by her, including what she identified as the "water gate" in Nehemiah 3:26, the "tower that lieth out" (same verse; KJV), the "miktsoa" (a peculiar Hebrew word in verse 25), and Uzziah's "miktsoa tower" along the same stretch of wall (2 Chronicles 26:9).

In sum, while *ophel* is overall a more enigmatic term than certain other appellations for Jerusalem, biblical or otherwise, we nevertheless can reach a good understanding of it: an elevated, royal, administrative or religious acropolis of, specifically, a *capital city*. A designation that, when it comes to Jerusalem, refers to the upper northeastern side of the ancient city, proximate to the temple and including a palatial or administrative royal quarter.

FEEDBACK

IN RESPONSE TO A TOUR

I have been a tour guide in Israel for nearly 30 years, yet I needed to update my knowledge of the recent discoveries. I watched Brent Nagtegaal's YouTube videos and was impressed with his excellent knowledge. His experience supervising some of the Ophel archaeological digs and his close relationship with Dr. Eilat Mazar made him the perfect teacher I needed. I would highly recommend the tour to any group wanting to find the best possible guide for a tour of the City of David and the Ophel.

UNITED STATES

IN RESPONSE TO

ARTICLE: "IS IT WRONG TO USE THE BIBLE IN ARCHAEOLOGICAL EXCAVATION?"

Eilat's grandfather, the illustrious Prof. Benjamin Mazar, taught me an invaluable lesson: "Archaeology does not prove the Bible as it needs no proof; what archaeology does is help us understand the Bible."

ISRAEL

IN RESPONSE TO

ARTICLE: "WHO WAS THE PHARAOH OF THE EXODUS?"

Your article was top notch! I have read it twice now and I am amazed at how clear, concise and well worded it was. You guys' writing has come along so well over the years. Very well done indeed!

ANONYMOUS

Exceptionally interesting and deep article. And thank you so much for this magazine. Today, I received a copy you kindly sent me by mail. I am so pleased. Thank you!

ISRAEL

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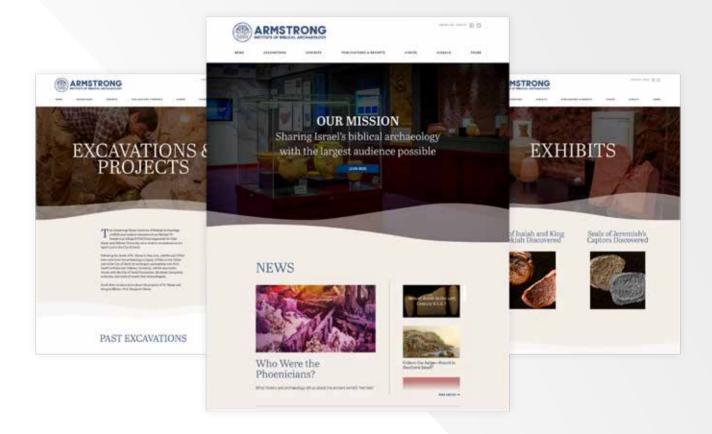
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