Decoding the Secrets of the Psalms

Has any book been set to music more often than the book of Psalms? For more than two thousand years, the lyrical songs in this collection have inspired the creation of glorious music: plainchant, polyphony, popular tunes, and symphonic masterworks. Inspired by the words of Psalm 96, "Sing unto the LORD a new song," musicians in every generation have reinterpreted these verses of prayer, lamentation, praise, and thanksgiving in the musical language of their own times. But what was the original music of the Psalms? Where and when did they originate? Who composed them? How were they performed? And how might the answers to these questions inform our contemporary performance practice?

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Who Composed the Psalms?

Tradition ascribes the origin of the Psalms to David, the famous musician-king in ancient Israel who lived about three thousand years ago.[1] The Bible establishes David's musical prowess. Following is the story of the teenage David playing the harp as recorded in 1 Samuel. It may be one of the earliest descriptions of music therapy.

> Now the spirit of the LORD had departed from [King] Saul, and an evil spirit from the LORD began to terrify him. Saul's courtiers said to him, "An evil spirit from God is terrifying you. Let our lord give the order [and] your attendants will look for someone who is skilled at playing the harp; whenever the evil spirit of God comes over you, he will play it and you will feel better." So Saul said to his attendants, "Find me a virtuoso and bring him to me." One of the attendants spoke up, "I have noticed a son of Jesse from Bethlehem who is skilled in music … and the LORD is with him." So whenever the [evil] spirit from God came upon Saul, David would take the harp and play it; Saul would find relief and feel better, and the evil spirit would leave him.[2]

This talented young harpist eventually became king over Israel, and King David reputedly supported and organized the performance of great music in Jerusalem. The following report was written about events three hundred years after King David's reign.

> When the Levites were in place with the instruments of David, and the priests with their trumpets, [King] Hezekiah gave the order to offer the sacrifice on the altar. When the sacrifice offering began, the song of the LORD and the trumpets began also, together with the instruments of King David of Israel. King Hezekiah and the officers ordered the Levites to praise the LORD in the words of David.[3]

The early Christians considered David the composer of at least some of the Psalms.

> It is You [God] who said by the Holy Spirit through our ancestor David, your servant [Psalm 2]: "Why did the nations rage, and the peoples imagine vain things? The kings of the earth took their stand, and the rulers have gathered together against the Lord and against his Messiah."[4]

Seventy three of the Psalms (nearly half) begin with the Hebrew words: "*Mizmor LeDavid,*" which have been traditionally translated as meaning "a Psalm of [i.e. composed by] David."[5] But *LeDavid* could also mean a Psalm dedicated to David or a Psalm about David or a Psalm in the style of David.[6]

Moreover, other Psalms begin with other attributions: twelve are attributed to Asaph, eleven to Korach, two to Solomon, one to Moses, one to Heman, and one to Ethan. Some of these names correspond to names of men who were leaders of the music in the Temple in ancient Jerusalem. Did they compose these Psalms, or was the indication that they and their clan would perform them?

Of course, the larger question is: did King David actually compose all (or any) of the Psalms? Some of the Psalms make reference to events that transpired hundreds of years after King David's reign. For example, Psalm 137 describes the anguish of the Temple musicians in exile in Babylon, some four hundred years after the reign of King David.

> By the rivers of Babylon, there we sat, indeed we wept, as we remembered Zion. There on the willows we hung up our harps, for our captors there asked us for songs, our tormentors, for amusement, "Sing us some of the songs of Zion."[7]

But the Davidic attribution stuck for many centuries. In the ancient world, ascribing a text to a biblical figure was a way of confirming divine inspiration and authority and insuring inclusion in the canon.

Beginning in the medieval period, scholars began to question Davidic authorship. Bible scholars now date various elements of the Psalm collection to a wide period of time, from the time of King David, roughly 950 b.c.e., to a *terminus ad quo* of 300 b.c.e.[8] Some scholars think that our Psalms may have been composed by guilds of sacred

musicians operating at various sanctuaries in Judea and Israel during the First Temple period.[9] Whatever its origins, the book of Psalms as we now know it is an anthology of spiritual songs, which at some point was organized into 150 chapters, anthologized, and, some time between 200 b.c.e. and 100 c.e., canonized as a book of the Hebrew Bible.

How Were the Psalms Performed in Ancient Israel?

In ancient Israel there was no musical notation and obviously there were no audio recordings. So in order to discover how the psalms were originally performed, we need to find informants who may have witnessed performances and left us written descriptions.

We can be certain that these Psalms were not spoken; they were sung. The evidence for that can be found in the lyrics:

Sing psalms to God, sing psalms:
Sing psalms unto our King, sing psalms.
For God is the King of all the earth:
Sing psalms with skill.[10]

Sing unto the LORD with a harp,
with a harp, and melodious song.[11]

From the Christian Bible, we have this witness to the singing of psalms in the early church, "Is any among you afflicted? let him pray. Is any merry? let him sing psalms."[12]

The Lyrics of the Psalms

While we have no recordings of the music of the psalms, we do have the lyrics. Is there any way that the structure of the lyrics can give us a hint as to their musical rendition?

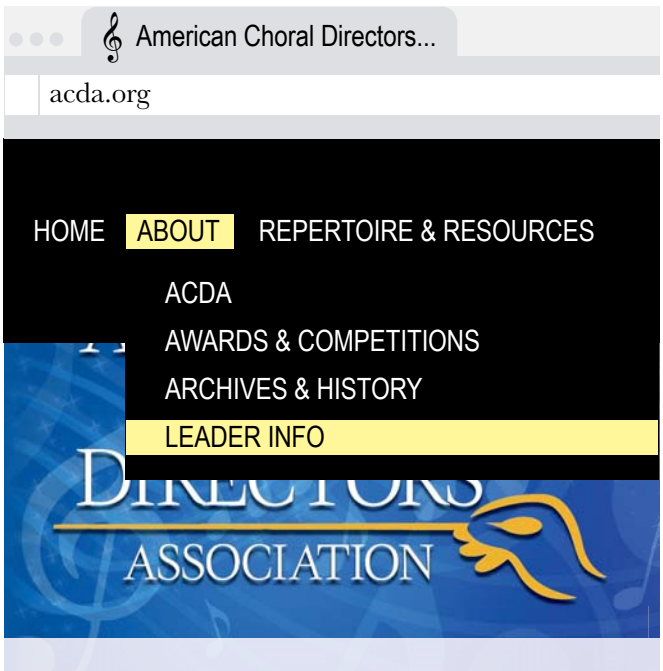
The Hebrew Psalms display a poetic meter of a sort but nothing like the regularity of an iambic pentameter. Most lines have three or four strong beats, with either one or two unaccented syllables in between.[13]

hash-sha-*ma*-yim me-sap-pe-*rim* ke-*vod el*,
u-ma-a-*sey* ya-*dav* ma-*gid* ha-ra-*ki*-a.

yom le-*yom* ya-*bi*-a *o*-mer,
ve-*lai*-la le-*lai*-la ye-kha-*ve da*-at.

eyn-*o*-mer ve-*eyn* de-va-*rim*,
be-*li* nish-*ma* ko-*lam*.

be-khol-ha-*a*-rets ya-*tsa* kav-*vam*,
u-vik-*tsey* te-*vel* mi-le-*hem*,
la-*she*-mesh sam-*o*-hel ba-*hem*.[14]



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There are a few musical implications of this kind of poetic meter. One possibility is a performance in "free meter," the flexible rhythm of chant, as we observe in Figure 1, a contemporary transcription of a traditional Syrian Jewish rendition of these lyrics.

Another way of performing poetry of this sort is in heterometer—similar to the lively rhythms that we hear in contemporary music from the Eastern Mediterranean. Think of the heterometric songs performed by Balkan choirs. Steve Reich's setting of this text in his 1981 work, *Tehilim,* also illustrates this style.

Parallelism and its Musical Implications

What is the semantic structure of a typical Psalm? How are the phrases and verses organized?

Here is an English translation of Psalm 114, which shows an example of how phrases and verses were organized

1. When Israel came out of Egypt,
   the house of Jacob from a foreign people,
2. Judah became God's sanctuary,
   Israel His dominion.
3. The sea looked and fled,
   the Jordan turned back;
4. the mountains skipped like rams,
   the hills like lambs.
5. Why was it, O sea, that you fled,
   O Jordan, that you turned back,
6. you mountains, that you skipped like rams,
   you hills, like lambs?
7. Tremble, O earth, at the presence of the Lord,
   at the presence of the God of Jacob,
8. who turned the rock into a pool,
   the hard rock into springs of water.

Notice that each verse is divided into two sections, called "hemistichs." Also notice the relationship of the second half of each verse to the first half. The second half is a variation on either all or some of the words in the first half. This structure, characteristic of much of the Hebrew Bible, is called "parallelism."[15]

What are the musical implications of this binary structure? We might anticipate a division into balancing antecedent and consequent phrases. We might expect a responsorial or antiphonal performance.[16] Indeed, traditional performance practice of Psalms in many contemporary synagogues and churches is based on this structure. In this practice, known as "psalmody," the entire Psalm is treated as a strophic composition, with the same musical pattern applied to each verse. Furthermore, each of the two hemistichs is allotted its own unique melodic pattern,

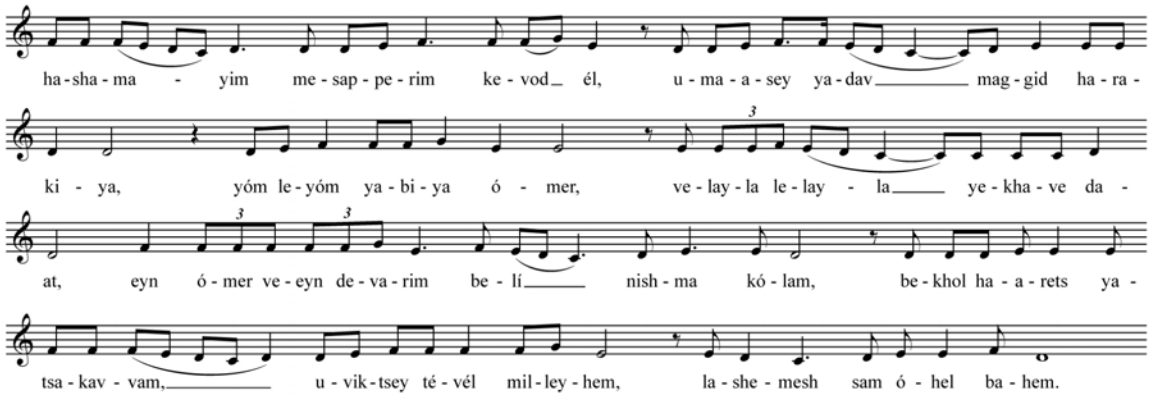


Figure 1. Syrian Jewish Cantillation of Psalm 19: 1–4.

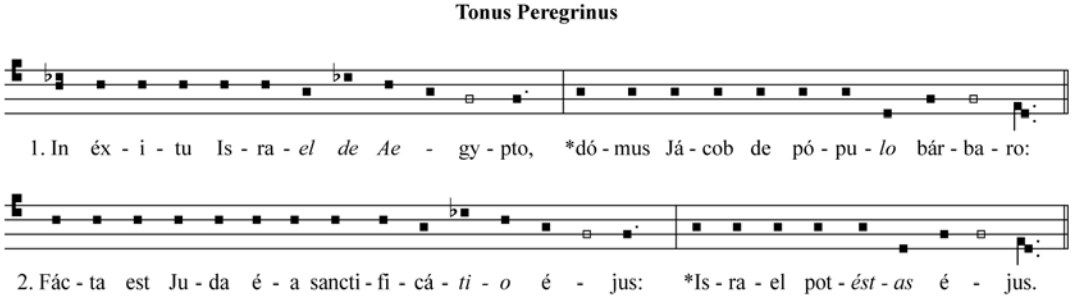
with a half cadence at the end of the first hemistich and a full cadence at the end of the second. Figure 2 illustrates antiphonal singing in the Jewish tradition. The first phrase, up to the first fermata, is sung by the soloist, and the congregation responds with the second half of each line. Figure 3 provides an example of antiphonal singing in the Christian tradition. The asterisk marks the point of antiphonal movement from soloist to choir (or from choir 1 to choir 2).

Notice that in both of these traditions, each hemistich begins with the "*initium*," the opening pitch, which then moves to the *tonus currens* ("running tone" or "tenor"), a pitch that is repeated as many times as is necessary to accommodate the syllables, and then through a brief melodic formula to the "mediant"—a half-cadence marking the end of the first hemistich. Then the second hemistich proceeds similarly and ends with a full cadence, the "*finalis*." This pattern is then applied to each verse of the Psalm.

Another structure is evident in Psalm 136.
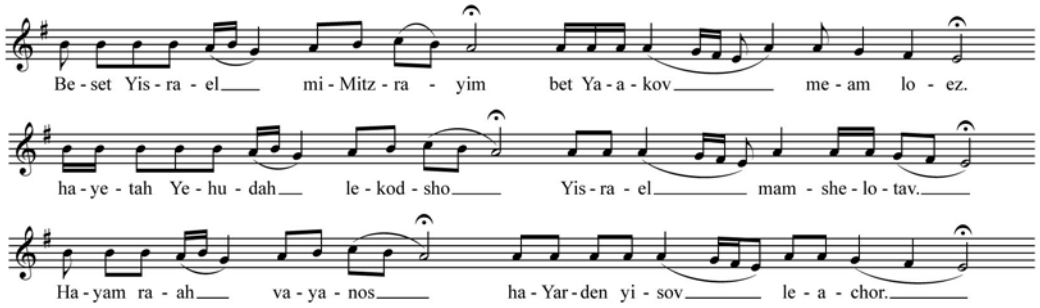


Figure 2. Traditional Jewish (Sephardi) Psalmody of Palm 114: 1–3.



3. Máre *vidit, et* fúgit: *Jordánis convérsus est *re*trórsum.
4. Móntes exsultavérunt *ut* arietes: *et cólles sicut ágni óvium.
5. Quid est tíbi máre *quod fu*gisti? *et tu Jordánis, quia convérsus es *re*trórsum?
6. Móntes exsultástis *sicut a*rietes, *et cólles sicut ágni óvium?
7. A fácie Dómini *móta est* térra, *a fácie Dé*i Jácob:
8. Qui convértit pétram in *stágna a*quárum, *et rúpem in fóntes a*quárum.

Figure 3. Psalm 114 from the *Liber Usualis*[18]

1. Give thanks to the LORD, for he is good.
   His love endures forever.
2. Give thanks to the God of gods.
   His love endures forever.
3. Give thanks to the Lord of lords:
   His love endures forever.
4. to Him who alone does great wonders,
   His love endures forever.
5. who by His understanding made the heavens,
   His love endures forever.[19]

Here the second half of each verse contains a refrain that is repeated throughout the Psalm. The presence of a refrain would suggest a responsorial format of some sort: either solo and chorus, or two choruses.

Psalm Superscriptions

Many Psalms begin with a superscription, a heading.[20] Some of the superscriptions seem to provide the name of the author. We've already seen that seventy-three of the Psalms begin with the word "*Le-David.*" For example, here is the first verse of Psalm 23: "A Psalm of David. The LORD is my shepherd; I lack nothing."[21] But other words found in the superscriptions are more enigmatic. Psalm 45 begins with the following Hebrew superscription: *La-menatse'ach al-shoshanim livney-korach maskil shir yedidot.* Here is how that superscription is translated in three Bibles: The New Jewish Publication Society (NJPS), The New Revised Standard Version (NRSV) and the King James Version (KJV).



(NJPS) For the leader; on shoshannim. Of the Korahites. A maskil. A love song.

(NRSV) To the leader: according to Lilies. Of the Korahites. A Maskil. A love song.

(KJV) To the chief Musician upon Shoshannim, for the sons of Korah, Maschil, A Song of loves.

Here is an analysis of each of the six words of the Hebrew superscription:

• The word *La-menatse'ach* in modern Hebrew means "for the conductor," and it seems to have that same meaning in the Hebrew Bible. It appears in Chronicles to describe the activity of the Levite musicians, "And the overseers of them were Jahath and Obadiah, the Levites, … to conduct, and other Levites, all who understood musical instruments."[22] In fact, throughout the Psalms, *La-menatse'ach* prefaces some performance instruction in the superscription.

• *Al-shoshannim.* Two of our Bibles simply present the Hebrew word in transliteration. But we do know that *shoshannim* means "flowers" of some sort. Ancient Syrian hymn-writers used superscriptions to indicate that the hymn was to be sung to the tune of a well-known song. Perhaps *shoshannim* was an indication to the conductor of the melody to which this Psalm was sung.

• *Livney-korach:* Of (or for) the Korahites. The Korahites were one of the Levite clans of Temple musicians. The conductor needed to know that this Psalm was either composed by them or was designated for them to perform.

• *Maskil.* None of the Bibles attempts to translate this word. It may be a form of the Hebrew word *sekhel,* which means wisdom, but we no longer know what the conductor would have done with that information.

• Our three Bibles are unanimous in translating *Shir yedidot* as "A love song." Perhaps this Psalm may have been used for wedding music.

Who Performed the Psalms?

Some of the Psalms were certainly quite popular and must have been sung by the general populace. But in time the Psalms became the hymnal of the professional musicians in the official sanctuary (Temple) in Jerusalem. One of the twelve tribes of ancient Israel, the tribe of Levi, was put in charge of everything relating to the sanctuary, including its music.

> The sons of Levi: Gershom, Kohath, and Merari. And these are the names of the sons of Gershom: Libni and Shimei.… These were appointed by David to be in charge of song in the House of the LORD, from the time the ark came to rest.[23]

The Book of Chronicles (probably composed in Jerusalem in the fourth century b.c.e.) relates that King David appointed several of the Levitic clans to be in charge of the liturgical music associated with the House of God. Keep in mind that these chroniclers are writing about events some six or seven hundred years in their past. King David, if he existed, most likely ruled *circa* 1,000 b.c.e. Even if it were not accurate history, it was the perfect mythology to attribute the establishment of these Levitic clans to Israel's most famous musician, King David.

> David ordered the officers of the Levites to install their kinsmen, the singers, with musical instruments, harps, lyres, and cymbals, joyfully making their voices heard. … Also the singers Heman, Asaph, and Ethan to sound the bronze cymbals, … also Chenaniah, officer of the Levites in song; he was in charge of the song because he had talent.[24]

The Mishnah (compiled c. 200 c.e.) describes the performance of the Psalms by the Levites standing on the steps of the Temple in Jerusalem.

> And countless Levites with harps, lyres, cymbals and trumpets and other musical instruments were there upon the fifteen steps leading down from the court of the Israelites to the court of the women, corresponding to the fifteen "Songs of

the Steps" in the Psalms.[25] It was upon these that the Levites stood with their musical instruments and sang their songs.[26]

What Instruments Accompanied the Psalms?

The Mishnaic passage cited above makes it clear that the Levites performed the Psalms with instrumental accompaniment. Musical instruments are mentioned in many of the Psalms and are alluded to in several references to performances by the Temple musicians. Our ability to identify these instruments has been immeasurably enhanced by archaeological findings, including depictions of the instruments and, in some cases, actual well-preserved relics.

Pipes

Eight or nine musical instruments are mentioned in Psalm 150. Verse four reads: "Praise Him with drum and dance; praise Him with strings and pipe." Figure 1 depicts a flute from c. 2,000 b.c.e. excavated in Megiddo, made out of a hollowed-out bone. (Photo 1)

Trumpets

In Psalm 98:6, we read, "With trumpets and the blast of the horn raise a shout before the LORD, the King." The historian Josephus Flavius in his *Antiquities of the Jews* (c. 94 c.e.) describes the trumpet as it was used by the Levites in the Jerusalem Temple.

> [A] trumpet, which was made of silver. …in length it was a little less than a cubit [21 inches]. It was composed of a narrow tube, somewhat thicker than a flute, but with so much breadth as was sufficient for the admission of the breath of a man's mouth: it ended in the form of a bell, like common [Roman] trumpets.[27]

In the year 82 c.e. an arch was erected in Rome with friezes depicting the victory of Emperor Titus over the Judean rebels and featuring spoils from the Jerusalem Temple, including the trumpets. (Photo 2)

Horns

"Praise Him with blasts of the horn; praise Him with harp and lyre."[28] Often linked with the trumpet, and mentioned more than any other instrument in the Bible, is the horn. Known as *shofar* in Hebrew, this instrument was made from the hollowed out horn of a ram. The ram's horn is the only instrument that has been in continuous use in Jewish worship. It is described in the Bible, and one can still hear it in contemporary synagogues on and leading up to the Jewish New Year. (Photo 3)

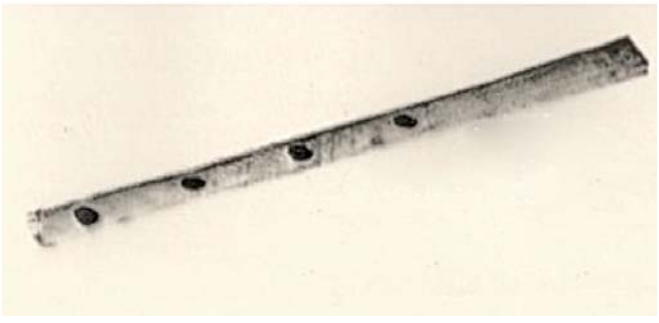


Photo 1. Bone flute from Megiddo.



Photo 2. The Arch of Titus



Photo 3. A modern ram's horn.

Percussion

Drums are mentioned throughout the Hebrew Bible, often in association with dancing and almost exclusively in the hands of women. The most prominent examples of women drummers are Miriam, the sister of Moses (Exod. 15:20), and Jephthah's (unnamed) daughter (Judg. 11:34). Drums are also mentioned four times in the Psalms. Here are two of them; note the association with dance and the attribution to female performers: "Praise Him with drum and dance."[29] "The processions of my God, my King, into the sanctuary. First come singers, then instrumentalists, amidst girls playing drums."[30] The two figurines depicted in figure 4 are typical of many thousands of small statues found throughout the Middle East dating around three thousand years ago. They all depict a woman (never a man) playing a hand drum. (Photo 4)

"Praise Him with resounding cymbals; praise Him with loud-clashing cymbals."[31] The well-known verse from Psalm 150 mentions cymbals of two different varieties (or perhaps in two distinct modes of performance). The historian Josephus Flavius describes the cymbals used in the Temple as "broad and large instruments, made of brass."[32]

Stringed Instruments

"Praise Him with *harp* and *lyre.*"[33] The English word "Psalm" is derived from the Latin Psalmus, derived in turn from the Greek *ψαλμός* (psalmós), a translation of the Hebrew *mizmor,* which originally meant "song to the accompaniment of a stringed instrument." The Greek word *psallein* means "to pluck a stringed instrument." Two types of stringed instruments are mentioned in the Psalms, often in tandem: the *nevel* and the *kinnor,* usually translated as harp or lyre. (Photos 5 and 6)

The Choir and Orchestra

In ancient Jerusalem a professional choir and orchestra performed the Psalms in the central sanctuary. Here are two descriptions: the first written probably in the fourth century b.c.e. and the second in the first century c.e.

> All the Levite singers, Asaph, Heman, Jeduthun, their sons and their brothers, dressed in fine linen, holding cymbals, harps, and lyres, were standing

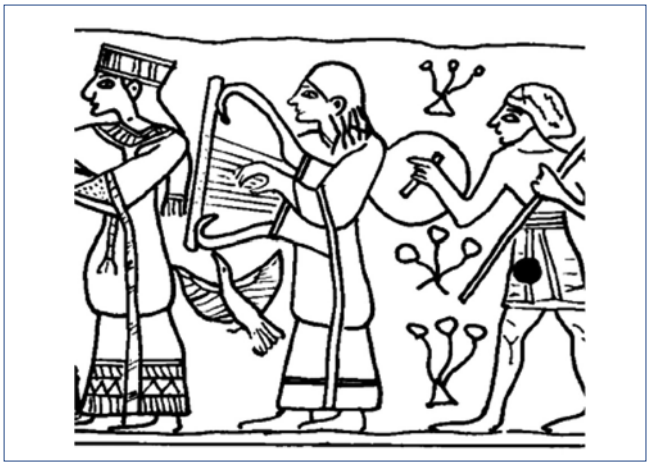


Photo 5. Ivory carving depicting a *kinnor* excavated at Megiddo, c. 1250 b.c.e..



Photo 4. Figurines depicting young women playing drums, Israel, c. 1,000 b.c.e.



Photo 6. Silver coin depicting a *nevel* from Judea, c. 135 c.e.

> to the east of the altar, and with them were 120 priests who blew trumpets. The trumpeters and the singers joined in unison to praise and extol the LORD; and as the sound of the trumpets, cymbals, and other musical instruments, and the praise of the LORD, "For He is good, for His steadfast love is eternal," [Psalm 136] grew louder, the House, the House of the LORD, was filled with a cloud.[34]
>
> They played never on fewer than two harps, or more than six, never less than two flutes, or more than twelve. … never fewer than two trumpets, but there was no upper limit. There were never fewer than nine lyres, but there was no upper limit. There was only one cymbal. There were never fewer than twelve Levites standing to sing on the platform, but there was no upper limit. No children could enter the court of the sanctuary to take part in the service, except when the Levites were standing to sing. Nor did they [the children] join the singing with harp and lyre, but with the voice alone, to add flavor to the music.[35]

Retrojecting from Contemporary Informants

Finally, we ask: can contemporary performances provide any insights into the ancient musical origins of the Psalms? Music in the oral tradition obviously changes with time, but music that was considered to have come from a divine source was preserved as carefully as possible by its practitioners. Regardless of what contemporary scholars today think, in earlier times it was believed that chants were dictated to Pope Gregory The First (c. 600) by the Holy Spirit, descending in the form of a dove. And in Judaism there is a tradition, articulated by the twelfth-century Rabbi Yehudah He-Hasid, that Moses heard God chanting the words of the Bible on Mount Sinai.[36] Therefore, generations of Jews did their best to preserve biblical chant from change. The chant itself was considered to have come from the mouth of God!

There is a remarkable similarity between the Jewish and Gregorian modes for psalmody, as illustrated in Figures 2 and 3. One explanation for that similarity is that the two chants have a common origin—evidence of an ancient tradition: the sound of a Psalm as it was chanted some 2,000 years ago, before Christianity had split off from Judaism.

Psalm One of These Days

We will probably never know what the Psalms sounded like when they were first composed and when they were performed by the musicians of ancient Israel? But investigating our familiar Psalms through the viewfinder of antiquity may give us fresh perspectives on their structure. Understanding origins offers insights into often mysterious lyrics. Knowledge of ancient performance practices may inspire contemporary composers. The deeper we delve into biblical texts, the greater our appreciation of their depth, their many levels of meaning, and their transcendent beauty. CJ

NOTES

[1] "David wrote the book of Psalms." Babylonian Talmud B.Bat. 14b.

[2] 1 Samuel 16:14-23.

[3] 2 Chronicles 29.26-30.

[4] Acts 4:25-26.

[5] The New JPS. NIV, ASV, and NRSV translate these words as "A Psalm of David." The King James and NSRVS omit this superscription altogether. The Vulgate translation has "Psalmus David."

[6] A. Cohen, *The Psalms* (London: Soncino Press, 1950), xi.

[7] Psalm 137:1-3.

[8] The initials b.c.e. indicate years before the common (Christian) era. The initials c.e. indicate years of the common (Christian) era, after the birth of Christ.

[9] Nahum Sarna, *Songs of the Heart: An Introduction to the Book of Psalms* (New York: Schocken Books, 1993), 20-22.

[10] Psalm 47.

[11] Psalm 98.

[12] James 5:13.

[13] We do not know exactly how these words were pronounced in ancient Israel. This transcription uses a modern Hebrew pronunciation.

[14] Psalm 19:1-4.

[15] Adele Berlin, *The Dynamics of Biblical Parallelsim* (Bloomington: Indiana University Press, 1985), 1.

[16] James Kugel, *The Idea of Biblical Poetry* (Baltimore: Johns Hopkins University Press, 1981), 116.

[17] Eric Werner, *The Sacred Bridge* (New York: Columbia University Press, 1959), 419.

[18] *Liber Usualis,* (Great Falls, Montana: St. Bonaventure Publication, 1997), 150.

[19] Psalm 136:1-5. All twenty-six verses of this Psalm end with the same refrain, "His love endures forever."

[20] We do not know when these headings were added or by whom. Most likely they were added onto an already existing psalm, but these headers are quite ancient.

[21] Psalm 23:1.

[22] 2 Chronicles 34:12.

[23] 1 Chronicles 6:1, 16

[24] 1 Chronicles 15:16-22. Note that the names Heman, Asaph, and Ethan also appear in the Psalm superscriptions.

[25] Fifteen Psalms (120-134) begin with the superscription *shir ha-ma'alot,* "A Song of Ascents" or "A Song of the Steps."

[26] Mishnah *Sukkah,* 5:1-5.

[27] Josephus *Antiquities of the Jews,* III/XII:6

[28] Psalm 150:3.

[29] Psalm 150:4.

[30] Psalm 68:25-26.

[31] Psalm 150:5.

[32] Josephus, *Antiquities of the Jews* VII:12:3 (c. 94 c.e.).

[33] Psalm 150:3.

[34] 2 Chronicles 5:12-13).

[35] Mishnah *Arakhin* 2:3-6. The children "added flavor to the music" most likely with their higher octave.

[36] "[Moses] transmitted to the Israelites the same melodies that he heard [from God]." *Sefer Ḥasidim* (in Hebrew). (Jerusalem: A. Bloom, 1992) 302, p. 241.

Recommended Reading List

Benzoor, Nina (ed.). *Musical Instruments in Biblical Israel.* Haifa: Haifa Museum of Music and Ethnology, 1991.

Braun, Joachim. "Biblical Instruments." *Grove Music Online.* Web. 3 August, 2015.

Braun, Joachim. *Music in Ancient Israel/Palestine: Archaeological, Written and Comparative Sources.* Grand Rapids, Michigan: Eerdmans, 2002.

Duchesne-Guillemin, Marcelle. "A Hurrian Musical Score from Ugarit." *Sources from the Ancient Near East,* 2/2 (1984): 65-94.

Jacobson, Joshua. "The Cantillation of the Psalms." *The Journal of Synagogue Music,* 39/1 (March, 2014): 17-34.

Meyers, Carol. "The Drum-Dance-Song Ensemble: Women's Performance in Biblical Israel." In *Rediscovering the Muses: Women's Musical Traditions,* ed. Kimberly Marshall. Boston: Northeastern University Press, 1993.

Meyers, Carol. "Mother to Muse: An Archaeomusicological Study of Women's performance in Ancient Israel." In *Recycling Biblical Figures,* ed. Athalya Brenner and Jan Willem Van Henten. Leiden: Deo Publishing, 1999.

Montagu, Jeremy. *Musical Instruments of the Bible.* Lanham, Maryland: Scarecrow Press, 2002.

Sarna, Nahum, et al. "Psalms, Book of." *Encyclopaedia Judaica Online.* Web. 3 August, 2015.

Sendrey, Alfred. *Music in Ancient Israel.* New York: Philosophical Library, 1969.

Werner, Eric. *The Sacred Bridge.* New York: Columbia University Press, 1963.