We cannot start seriously to discuss the music of the Christian church without first looking at what is known of the music of the ancient world, and particularly the music of ancient Israel. Just as, for Christians, the New Testament cannot be understood fully without a knowledge of the Old Testament, in the same way the music of Christianity and the church cannot properly be understood without at least some knowledge of the music of the ancient Jewish people.

We start with a major disadvantage. For obvious reasons, we possess no recorded music from two millennia ago; however, nor do we have any contemporary notated music that might give some indication of how ancient music sounded. The nineteenth-century German musicologist Ambros bewailed the fact that “we did not have the opportunity of listening to [ancient music] for even one minute in order to be able to judge its sound”. There are a few written records concerning music, but apart from these we are reliant on interpreting the evidence derived from stone, clay, metal, and bone artefacts discovered by archaeologists.

Before the Church: The Jewish Musical Tradition

Jubal... was the father of all such as handle the harp and organ.

Genesis 4:21, xiv

Left: Detail of King David playing his harp, from The Adoration of the Holy Trinity (1511), also known as the Landauer Altarpiece, by German artist Albrecht Dürer (1471–1528), now in the Kunsthistorisches Museum, Vienna, Austria. David’s harp is, of course, not depicted with historical accuracy.

Below: A nineteenth-century Bible illustrator’s conception of the silver trumpets (khatsotsrah) blown by Jewish priests in biblical times.
and incomplete. As one musicologist has pointed out, the problem is that not only do we have no means of reproducing acoustically the music of ancient Israel, but nor can we recreate with any accuracy the social and psychological situations of ancient times. In our world of aural contamination and abuse, where even in the depths of the countryside we can be assaulted by the roar of helicopters and jet planes and the dull rumble of road traffic, it is difficult to imagine a tranquil past where the blasting of a goat’s horn or the soft rustling of ornaments worn on a woman’s ankles could exert a significant musical impact on listeners.

As we have mentioned, until recently most scholars writing on the music of ancient Israel relied almost exclusively on the biblical texts. However, even at early stages, linguistic misunderstandings and misinterpretations were introduced – for example in the third or second century BC, when the Hebrew of the Jewish Scriptures qualify and interpret the evidence of the Old Testament (and the New).

Despite the researches of seekers after “authentic” performance, even for relatively recent composers such as Bach and Beethoven we are still far from confident in understanding exactly how their musical compositions were originally performed and how they might have sounded to, and been experienced by, contemporary listeners. How much more shaky is our knowledge of, for instance, the harmonies made by King David on his “harp” or the sound of the musicians in King Solomon’s famed Temple.

While musicologists generally agree that the ancient Jewish musical tradition lies somewhere at the roots of modern Jewish synagogue music, some ethnomusicologists have ventured to suggest that modern Jewish communities in Iraq (ancient Babylon) and Yemen may have preserved something of the actual ancient Jewish sounds, since they were relatively insulated both from non-Jewish communities and from the Western musical tradition. However, this seems unlikely, as these Jewish communities can hardly have failed to have been influenced over many succeeding centuries, for instance by Islamic music – not least by the all-pervasive voice of the muezzin, calling the faithful to prayer from the minaret of the mosque.

In any event, since much of the musical experience of the ancient world was never entrusted to writing but passed on solely by word of mouth, we must resign ourselves to the fact that our knowledge of ancient music will almost certainly remain fragmentary.
The early translators of the Bible into English made similar anachronistic and linguistic errors. John Wycliffe’s translation imported a “hurdy-gurdy” into Luke 15:25 (c. 1385); William Tyndale (1526) introduced the “fiddle”, the Geneva Bible (1560) mentions the “dulcimer”; and the Authorized (King James) Version (1611) names the “organ”, the “violin”, and other seventeenth-century musical instruments. Two Renaissance writers were the first in more modern times systematically to survey ancient Jewish music. A Jewish doctor, Avraham Portaleone (1547–1612), from Mantua in Italy, attempted to research the music of the ancient Jewish Temple in Jerusalem. However, like many of the early Old Testament translators, he introduced a chronological fallacy by translating a number of the ancient Hebrew words for instruments with the names of instruments from his own time. For instance, the Hebrew word meaning the “viola da gamba”. Unfortunately his flawed precedent was followed by most other writers on the subject for the next three centuries.

The second early modern writer on Jewish music, the German Protestant musician Michael Praetorius (c. 1571–1621), provided more accurate descriptions of musical instruments of Bible times, but reinforced the prevailing misplaced sole reliance on written sources by asserting that "in Palestine, Asia Minor and Greece, no more vestiges of older instruments exist" – a statement modern archaeologists have refuted. However, despite these problems of translating obscure Hebrew words for musical instruments (the Greek Septuagint, for instance, translates the single Hebrew word kinnor variously as kithara, kin’gra, psalterion, and organ), the Old Testament in its original Hebrew remains the single most important written source for music in ancient Israel. It provides, for example, vivid descriptions of the 288 musicians whom the chronicler mentions as leading King David’s processions to conduct the sacred Ark of the Covenant into the city of Jerusalem (1 Chronicles 15:16–28), and of the musicians – most importantly trumpeters – who performed at the dedication of King Solomon’s Temple (2 Chronicles 5:12–14). Other useful textual sources, interpreted carefully, include Jewish and Christian apocryphal texts and some writings of the early Church Fathers. Scholars have also been able usefully to compare evidence about music from parallel cultures such as Sumeria and Ugarit to throw light on the musical culture of ancient Israel and have utilized archaeological evidence gained from the numerous excavations in the Near East.

Musical Instruments of the Bible

There remain many difficulties in understanding the Hebrew terms for musical instruments mentioned in the Bible. For instance, it is still today unclear how to translate the word for the Hebrew instrument known as the ‘sibq’, while the ‘nebel’ is another instrument much argued over. Bearing in mind these difficulties, we will look at the main musical instruments mentioned in the Jewish Scriptures – the Christian “Old Testament”.

Khâlîl

The Hebrew word khâlîl means a type of pipe – not a laterally held flute-like instrument – and appears in the Old Testament in connection with celebrations surrounding the anointing of a new king and following a military victory. The khâlîl is also linked with prophetic ecstasy and was used during Jewish ritual lament, and featured both in the Jerusalem Temple “orchestra” – which was supposed to include between two and twelve of these instruments – and also at some animal sacrifices, on pilgrimages, and at burials. The khâlîl seems to have been an oboe-like instrument, made of reed or bone, or sometimes of bronze or copper, with a single or double reed (like the modern clarinet or oboe respectively). Some musicologists believe double-pipe, double-reed instruments were the most common wind instruments of the ancient Near East.

Khâtsôtsrah

This instrument is mentioned thirty-one times in the Old Testament, including Numbers 10:2–10, where God instructs the great Jewish leader Moses to “make two trumpets of hammered silver, and use them for calling the community together…” (v. 2, NIV). From this time the khâtsôtsrah was reserved for the sole use of priests and blown to summon the Jewish people together at religious festivals, during the transport of the sacred Ark of the Covenant, and in time of war. This trumpet-like instrument could produce a strong, sustained sound and also shorter, staccato blasts. The apocalyptic War Scroll, one of the Dead Sea Scrolls discovered at Qumran, originating between the last two centuries b.c and the first century a.d, gives detailed rules “for the trumpets of summons and the trumpets of alarm…”.

The description in Numbers 10 renders it indisputable that the khâtsôtsrah is a trumpet made of beaten or hammered silver, probably about 40 centimetres (1 cubit/15 inches) long, with a thin body and wide bell-like end. Its design may have been borrowed from the Egyptians, and it may have sounded similar to the celebrated trumpets discovered in the tomb of Tutankhamun (ruled c. 1333–1324 b.c.). It is important to...
Kinnôr
One of the most significant musical instruments of the ancient Jews, the *kinnôr* – a type of lyre – is mentioned forty-two times in the Old Testament. There is archaeological evidence for this instrument from as early as the mid-third millennium BC, and it is also mentioned in a letter dating to the eighteenth century BC found at Mari in Syria. The lyre soon became the dominant instrument of the ancient Near East in general, and of Israel/Palestine in particular, and retained this pre-eminence in the East in general, and of Israel/Palestine in particular, and retained this pre-eminence today to have been a form of lyre.

From the time of King Solomon the Jewish *kinnôr* was usually made of almag timber (red sandalwood, or possibly juniper) imported from Lebanon (2 Chronicles 2:8). With somewhere between six and ten strings (fewer than the nebel), it could be played either with a plectrum or by the hand alone.

Archaeologists have discovered more than thirty visual representations of the lyre in ancient Israel/Palestine, some symmetrical, others asymmetrical, some with diverging arms, others with parallel arms. One well-known representation of a lyre-player appears on a jar dating to 1150–1000 BC excavated at Megiddo in Israel, and a lyre-player is also pictured on the famous fresco from a nineteenth-century BC tomb at Beni-hasan in Egypt. This “Beni-hasan mural” depicts a relatively small instrument (around 50 x 30 centimetres) held horizontally by the performer so it could be played while simultaneously walking and singing. A seventh-century BC relief from Nineveh, showing prisoners taken from Lachish in Israel by the Assyrian king Sennacherib, depicts three captive Hebrew lyre-players. Sennacherib boasted that among the 200,150 people he expelled from Israel/Palestine, in two sizes: between 7 and 12 centimetres in diameter, and between 3 and 6 centimetres in diameter. It is suggested these two sizes represent the two types mentioned in Psalm 150. Some of the excavated cymbals which have survived intact have been tested and produce a broad, resonant sound.

Nebel
The precise meaning of the word nebel has still not been soundly established. Suggestions have varied as widely as the lyre, the lute, and the bagpipe! The Hebrew term nebel occurs twenty-eight times in the Old Testament (for example in Isaiah 5:12, Psalm 33:2, and 2 Chronicles 5:12).

**Msiltayim (or Zelzelim)**
This Hebrew word, translated *kymbala* and *cymbula* in the Septuagint and Vulgate respectively, is generally agreed to mean “cymbals”. These instruments were used (along with others) by the Levites officiating at the Jewish Temple (Ezra 3:10) – at the transfer of the Ark of the Covenant, at the dedication of King Solomon’s Temple and at the burnt- and sin-offerings made at the Temple (1 Chronicles 15:28; 2 Chronicles 5:13; 29:25). The *msiltayim* are described in 1 Chronicles 15:19 as bronze cymbals (NIV and other modern translations), with which the ancient Jewish historian Josephus agrees, stating that “the cymbals were broad and large instruments, and were made of bronze.”

The New Revised Standard Version (NRSV) translates Psalm 150:5: “Praise him with clanging cymbals; praise him with loud clashing cymbals!”, suggesting that the psalmist is referring here to both types of cymbal common in the region – cymbals held horizontally with a handle and struck lightly, and cymbals held vertically and struck forcibly. Archaeologists have discovered many ancient cymbals in ancient Israel/Palestine, in two sizes: between 7 and 12 centimetres in diameter, and between 3 and 6 centimetres in diameter. It is suggested these two sizes represent the two types mentioned in Psalm 150. Some of the excavated cymbals which have survived intact have been tested and produce a broad, resonant sound.

**Nevel**
Before the Church: the Jewish Musical Tradition

Left: This Palestinian lyre-player, part of a painting from a tomb at Beni Hasan, Egypt, dating back to 1530–1900 BC, affords rare visual evidence of musical practice in ancient Israel/Palestine.

Above: A Jewish coin minted during the Bar Kokhba (or Second Jewish) Revolt against the Romans (AD 132–135), depicting a five-stringed broad lyre.
twenty-two of which are also associated with the kinnor. Like the kinnor, the nebel was constructed from alnug-wood and plucked by hand (1 Kings 10:12; Amos 6:5). It was played by the Levites (assistants to the priests) and featured at the transfer of the Ark of the Covenant, the dedication of the rebuilt walls of Jerusalem following the Jewish Exile, Israelite victory celebrations, and in ecstatic prophesying (1 Chronicles 15:16; 2 Samuel 6:5; Nehemiah 12:27; 2 Chronicles 20:28; 1 Samuel 10:5).

Ancient sources offer little help in defining this instrument, though Josephus usefully distinguishes between the nebel, which had twelve strings and was played with the fingers, and the kinnor, with six to ten strings plucked with a plectrum. Although most scholars favour translating nebel as “harp”, archaeologists have as yet discovered no harps in this region dating to earlier than the Hellenistic period. For this reason it has been suggested the nebel is a form of lyre peculiar to the Near East, with more and thicker strings than the kinnor – giving it a louder sound – yet still played without a plectrum. With its thicker strings and deeper tone, the nebel was possibly deployed as a tenor or bass instrument in the Second Temple orchestra, from the late sixth century sc onwards.10

Palamim

This Hebrew term is found in only Exodus 28:33–34 and 39:25–26 and refers to the gold bells fastened to the bottom of the Temple high priest’s robe. Although the sound of these bells was said to be pleasant, their main purpose was as a warning: Aaron [the first high priest] will wear this robe whenever he enters the Holy Place to minister to the Lord, and the bells will tinkle as he goes in and out of the Lord’s presence. If he wears it, he will not die. (Exodus 28:35, nlt)

Such functional warning bells were not unique to the Jews: a depiction of a fifteenth-century bc Assyrian ambassador and a statue of an ancient high priest from Syria both depict similar bells worn near the hem.

Shophar

Mentioned as many as seventy-four times, the shophar is by far the most frequently referenced musical instrument in the Hebrew Scriptures. It is also the sole instrument from ancient Israel to have survived little changed in its usage in modern Jewish liturgy.

The shophar is the natural horn of a goat or ram (never a cow), though the generally more reliable Vulgate translators led many succeeding scholars astray by dubbing it a “tuba” (Latin for military trumpet). The Hebrew Scriptures give little further information about the shophar; however, the shophar – or ram’s horn – was used to mark the New Year and at New Year a straight horn, apparently untwisted after immersion in hot water. Such horns have been found in eighteenth-century bc images excavated at Mari in Syria and in depictions from ninth-century bc Carchemish (in modern eastern Turkey). The shophar is also unique among the instruments of ancient Israel as it was played as a solo instrument. It can produce only two or three tones – a “voice”, a “trumpet blast”, a “shout”, and even “moaning” – evidently used to give different signals in religious and military contexts. The shophar featured at the Jewish observance of Yom Kippur (Leviticus 25:9), as well as at the transfer of the Ark of the Covenant, in wartime, after military victories, and even at political coups (2 Samuel 6:15; Judges 6:34; 1 Samuel 13:3; 2 Samuel 15:10). The shophar was also blown on the feast of Rosh Hashanah (New Year), while every fifty years it announced the jubilee year. The sound of the shophar was so powerful that it could be experienced by its hearers as supernatural (Exodus 19:13).

After the destruction of Herod’s Temple by the Romans in ad 70, the blowing of the shophar on the Sabbath was restricted to wherever the Sanhedrin – the Jewish legislature and court between 191 bc and ad 358 – was located. In later times, its religious use increased because the Jews banned the playing of all other musical instruments as a sign of mourning for the destruction of the Jerusalem Temple.

Today the shophar is still blown in synagogues to announce the New Year and New Moon, to introduce the Sabbath, at particular occasions during the prayers on Rosh Hashanah, and at Yom Kippur to mark the end of the day of fasting.

Toph

The ancient instrument known in Hebrew as the toph – a type of drum – is mentioned sixteen times in the Old Testament, in five of which the player is a woman. Best known of these references is to Miriam, sister of Moses, following the Hebrews’ successful traversing of the Red Sea after the Exodus from Egypt (Exodus 15:20). Though not exclusively a woman’s instrument, only women seem to have played the toph as a solo instrument, and it does not appear to have featured in the Temple music (Judges 11:34). The toph was widely used in ancient Israel/Palestine. Most modern scholars agree the toph was a drum with a circular wooden frame about 25 to 30 centimetres in diameter, similar to the tambourine but without the metal jingles. The membrane, probably made of leather or ram’s hide, was struck with the hand.

‘ûgab

As with the nebel, there is considerable controversy about the precise meaning of the word ‘ûgab. It occurs only four times in the Old Testament, and the Septuagint translates it as the kitara, the organ, and the psalms. Even today interpretations vary from the pan-pipe or bagpipe to the lute or harp, while others regard the ‘ûgab as a purely symbolic instrument. The best supported suggestion is that the ‘ûgab was a type of long, transverse flute, such as was also found in ancient Egypt and Sumeria.
Instruments in Babylon

The fourth chapter of the Old Testament book of Daniel describes a much-discussed group of musical instruments from a non-Israelite musical culture, often referred to as the “orchestra of Nebuchadnezzar”: “… when you hear the sound of the horn, pipe, lyre, trigon, harp, drum, and entire musical ensemble, you are to fall down and worship the golden statue…” (Daniel 3:5, nssv).11 The “horn” is probably a clay or metal trumpet, and the “pipe” a reed instrument. The “lyre” would have been a small, symmetrically shaped instrument, about 50 by 25 centimetres in size, and the “trigon” a small, angular harp, held vertically, with its sound-box resting on the player’s shoulder. This contrasts with the “harp” of Daniel 3:5, which was probably a larger, angular harp, held horizontally and possibly beaten with sticks.12

Jewish Music in the Old Testament

The first book of Chronicles offers a rich account of the musicians deployed when King David transported the holy Ark of the Covenant to Jerusalem (1 Chronicles 15:16–28). Particularly fully described in the Old Testament are the music of David’s last years, the music at the coming of the Ark of the Covenant to King Solomon’s Temple (2 Chronicles 5:11–14), and that performed at Temple sacrifices during the later reign of King Hezekiah of Judah (1 Chronicles 23–25; 2 Chronicles 29:25). King Hezekiah apparently reformed the ritual of the Jerusalem Temple and its music, reorganizing the Levite musicians and incorporating instrumental – particularly stringed-instrument – music into the sung liturgy (2 Kings 18:4–5; 2 Chronicles 29:25–26; 30:21).

Following the Exile of the Jews in Babylon in 586 bc and the subsequent return to Judah of many deportees under the relatively benevolent rule of Cyrus II of Persia around 537 bc, the Second Temple was built and Temple worship recommenced. The lists of returning Jews in the books of Ezra and Nehemiah include huge choirs of singers and grand orchestras (Ezra 2:41, 65; Nehemiah 7:44, 67; 12:27–43).

Singing

Until now we have discussed almost exclusively instrumental music. However, singing is also frequently mentioned in the Old Testament, particularly of course in the Psalms. In the Hebrew vocabulary of the Old Testament, there are more than twelve terms for vocal music, outnumbering the terms for instrumental music. The Mishnah reports that the choir of the Jewish Temple consisted of a minimum of twelve male singers (women were excluded) aged between thirty and fifty, together with some Levite boys “to add sweetness to the song”. The singers evidently underwent a five-year training apprenticeship before being admitted to the choir.

One scholar has usefully summarized our knowledge of the Temple musicians:

Temple musicians served in groups not as individuals; there seemed to be a balance between instruments and voices in the music of the Temple; most of the accompanying instruments were string instruments; the musicians were ordinarily male, adults, well-trained and (at least in post-exilic times) Levites; the number 12 was an idealized quorum of Temple musicians.13

In the Jewish Mishnah we have an account of the musical routine at the Jerusalem Temple in the first century bc. Temple musicians stood on a platform that divided the Court of the Priests from the Court of Israel (Middoth, 2.6). After the day’s designated sacrifices, a priest sounded the mysterious magrephah (see p. 13), after which the priests entered the Temple sanctuary itself and prostrated themselves, while the Levites commenced their musical performance. Two priests stood at the altar and blew the shophar trumpets, a Levite cymbal-player sounded his instrument, and the Levites started to sing part of the day’s allotted psalm or a section from the Pentateuch (the Books of Moses). At the end of each section, a trumpet sounded and the assembled congregation prostrated themselves.14

One scholar has concluded that the canticles of the Old Testament provide evidence of the different ways in which songs were performed, broadly divided into responsorial and corporate singing. Such canticles include the “Song of the Sea” or “Song of Moses and Miriam”.15 Among other Old Testament canticles are the “Song of Deborah and Barak” (Judges), “David’s Lament” and “David’s Song of Thanksgiving” (2 Samuel), and Isaiah’s “Hymn of Praise” (Isaiah), as well as the Psalms themselves.

The call-and-response form was, of course, particularly suited to a context where the congregation had no written prayer-books from which to sing. It is suggested that in the Second Temple period there were five possible ways of performing responsorial canticles:

1. The congregation repeats each unit after the leader.
2. The congregation repeats a standard refrain after each verse by the leader. Psalm 136 gives evidence of this form:

- The Psalms were probably the main “lyric” of Jewish worship – and incidentally provide us with rich literary evidence about ancient Jewish music. The second half of Psalm 150, for instance, offers an evocative description of the “Temple orchestra” and of other contemporary musical instruments (Psalm 150:3-6, NRSV). The nineteenth-century Christian commentator Alexander Maclaren went as far as to suggest that this psalm embodies a form of “stage directions”, enumerating the order in which instruments entered the musical performance in the Temple, culminating with the entry of the human voice.27 The Mishnah records that certain psalms were sung on particular days in the Temple:

- The congregations are given indications of musical performance. The melody is to be intoned with due reverence, butthe threshold of the three is to be taken down with due reverence of the song.28

3. The same scholar also found evidence of two ways of performing corporately:

- The leader sings the entire first line, the congregation then repeats it.
- The leader sings a half-line at a time, the congregation then repeats what the leader has just sung.

4. The leader sings the incipit (opening words) of each unit; the congregation completes the unit.

5. The leader sings the whole song and the congregation then repeats it.

6. The leader sings a single verse, the congregation responds with the entire following part of the song.16

7. The leader sings the incipit (opening words) of each unit; the congregation completes the unit. Harmony was added afterwards.

8. The leader sings a single verse, the congregation responds with the entire following part of the song.16

The Psalms

The Psalms were probably the main “lyric” of Jewish worship – and incidentally provide us with rich literary evidence about ancient Jewish music. The second half of Psalm 150, for instance, offers an evocative description of the “Temple orchestra” and of other contemporary musical instruments (Psalm 150:3-6, NRSV). The nineteenth-century Christian commentator Alexander Maclaren went as far as to suggest that this psalm embodies a form of “stage directions”, enumerating the order in which instruments entered the musical performance in the Temple, culminating with the entry of the human voice.27 The Mishnah records that certain psalms were sung on particular days in the Temple:

- This was the singing which the Levites used to sing in the Temple. On the first day they sang “The earth is the Lord’s and all that dwell therein is the round world and they that dwell therein” (Psalm 24); on the second day they sang “Great is the Lord and highly to be praised in the city of our God, even upon his holy hill” (Psalm 48) “… On the Sabbath they sang “A Psalm: A Song for the Sabbath Day” (Psalm 92).

A number of Old Testament psalms commence with a title or description, such as “According to Alamoth” (Psalm 46), “According to The Gittith” (Psalm 8), “According to Lilies” [shoshannim] (Psalm 45), “According to Mahalah” (Psalm 55), and “A Song of Ascents” (Psalms 120-134). In many instances these subtitles are instructions as to how to perform the respective psalms: which tune or instruments should be used, the musical tempo and emotional context (praise or lament), as well as breathing instructions, pauses, and the like. For example, “According to Alamoth” (Psalm 46) probably indicates the psalm was to be accompanied by a flute in its upper register or by a high-pitched voice (“soprano voices”, NLT). Other psalm subtitles seem to indicate popular tunes to be used (just as today it might be suggested “The Lord’s My Shepherd” be sung to the tune “Crimond”). Titles such as “The Deer of the Dawn” (Psalm 22, NRSV; “Doe of the Dawn”, nlt), “The Dove on Far-off Terebinths” (Psalm 56, NRSV; “Dove on Distant Oaks”, nlt), and “Lily of the Covenant” (Psalms 60, 80, NRSV) seem to be the names of contemporary popular or “folk” tunes (now sadly unknown) to which the respective psalms should be sung. The subtitle “Do Not Destroy” (Psalms 57-59, 75) has been linked with a wine-harvesting song quoted in Isaiah 65:8. So it appears very likely that a number of psalms were intended to be sung using tunes or melodic formulae already familiar to the performers. The adoption of local popular tunes to liturgical texts is common throughout world cultures and (as we will see) throughout the history of Christian music.31 The ubiquitous – and puzzling – Hebrew word selah, which appears seventy-one times in the text of thirty-nine psalms, possibly indicates an “interlude” where the performers were to pause, or is perhaps a cue for the choir or a specific instrumentalist, such as the drummer, to stress the rhythm of, or a particular word in, the text: “… when they reached a break in the singing they blew upon the trumpet”.

The Psalms of Ascent (Psalms 120-134) may have been sung to accompany the Jewish high priest’s ritual ascent of the Temple Mount, or these psalms may have been chanted by pilgrims going up to Jerusalem (Zion) for the great Jewish festivals of Unleavened Bread, Harvest, and Ingathering (Exodus 23:14-17). The Psalms of Ascent were tetrachordal (four tones filling an interval of a perfect musical fourth) rather than pentatonic, and each theme had a range of less than a musical fifth, but included a leap of a third. The melodic theme was strictly observed, but freely embellished and ornamented. The interpretation and elaboration of the musician performing the piece was seen to be of paramount importance. Some of the psalm subtitles or instructions referred to earlier may have been intended to indicate the makam to be used in performance. Harmony was unknown to musicians of this period.

Instruments of the New Testament

In contrast to the Old Testament, which as we have seen boasts numerous references to a wide variety of musical instruments, the Christian New Testament includes only twenty-nine references to instruments, of which twelve are virtually repetitions in the book of Revelation, and only four distinct musical instruments are discernible. However, since these texts are relatively more recent, deriving from the first and second centuries AD, and were originally written in Greek, the Latin renderings in the Vulgate translation are generally consistent, so we can be much more confident in our interpretation of them than in the case of the instruments of the Old Testament.

Four specific musical instruments are mentioned in the New Testament texts:

Aulos

This refers to a single- or double-reeded pipe similar to the khali of the Old Testament. Archaeologists in Israel have found many such pipes dating to Roman times. A first-mosaic depiction of an aulos was discovered at a fifth-century AD synagogue excavated at the Hellenistic city of Sepphoris, near Lake Galilee. Such pipes were played at weddings and wakes (Matthew 9:23; 11:17).

Lyre

The lyre (Greek kithara) is mentioned eight times in the New Testament, and in the book of Revelation is referred to as “God’s harp” (Revelation 15:2). A lyre is depicted in a
mosaic at a synagogue dating to AD 244 at Dura-Europos in modern Syria. The lyre was considered by both Jews and Christians to symbolize spiritual and physical harmony.

Trumpet
In the main the trumpet (Greek salpinx) is also referred to symbolically in the New Testament, usually apocalyptically as “God’s trumpet” (1 Thessalonians 4:16, NRSV), and it is the signal for the resurrection and last judgment (1 Corinthians 15:52b; 1 Thessalonians 4:16). It is from such passages that the tuba mirum of the Latin text of the Christian requiem mass derives. "God’s trumpet" (1 Thessalonians 4:16, NRSV) is considered by both Jews and Christians to symbolize spiritual and physical harmony.

Cymbal
The "clanging cymbal" (Greek kymbalon) of 1 Corinthians 13:1, in the apostle Paul’s celebrated love/charity chapter, is now thought to be a resonating brass vase – used in Greek theatre to amplify voices – rather than a musical instrument in the strict sense. The "clanging cymbal" (Greek kymbalon) of 1 Corinthians 13:1, in the apostle Paul’s celebrated love/charity chapter, is now thought to be a resonating brass vase – used in Greek theatre to amplify voices – rather than a musical instrument in the strict sense.

Pictorial representations of musical instruments and musicians from this period. Greek and Roman figurative representations reveal close connections between music and the Dionysus cult, the god Pan, and erotic performances. However, music was not so easily suppressed. Almost inevitably a musical tradition survived – which rabbis were soon forced to acknowledge – as local synagogue rituals began to take the place of the central Temple liturgy. As early as the Babylonian Exile of the Jews (586–537 BC), the Jewish leader Ezra had pioneered the public chanting of the Torah (the five Books of Moses, or Books of the Law – Genesis, Exodus, Leviticus, Numbers, and Deuteronomy). The Talmud seems to indicate that reading the Torah “without chant” was considered a minor sacrilege. By the second century AD, Rabbi Akiba, who laid the foundations of Rabbinic Judaism and was devoted to the practice of the Torah, required its daily chanting as a means of study.

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The Arch of Titus in the ancient forum of Rome, dating to AD 72 and celebrating Rome’s triumph over the Jewish Revolt, depicts two long trumpets next to the Jewish seven-branched lamp-stand (menorah) plundered from Herod’s Temple, but it is unclear whether this accurately represents the trumpets from the actual Temple or is simply a representation of typical Roman trumpets (see p. 15).

Cymbal
The “clanging cymbal” (Greek kymbalon) of 1 Corinthians 13:1, in the apostle Paul’s celebrated love/charity chapter, is now thought to be a resonating brass vase – used in Greek theatre to amplify voices – rather than a musical instrument in the strict sense. The “clanging cymbal” (Greek kymbalon) of 1 Corinthians 13:1, in the apostle Paul’s celebrated love/charity chapter, is now thought to be a resonating brass vase – used in Greek theatre to amplify voices – rather than a musical instrument in the strict sense.

Trumpet
In the main the trumpet (Greek salpinx) is also referred to symbolically in the New Testament, usually apocalyptically as “God’s trumpet” (1 Thessalonians 4:16, NRSV), and it is the signal for the resurrection and last judgment (1 Corinthians 15:52b; 1 Thessalonians 4:16). It is from such passages that the tuba mirum of the Latin text of the Christian requiem mass derives. “God’s trumpet” (1 Thessalonians 4:16, NRSV) is considered by both Jews and Christians to symbolize spiritual and physical harmony.