
FROM ROMAN TO ROMANESQUE LUTES. AN ARCHAEOLOGICAL RESEARCH ON THE HISTORY OF WESTERN LUTES BEFORE THE 13TH CENTURY

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Résumé

Partant d'une étude iconographique comparée allant jusqu'à l'expérimentation musicale, cet article se propose de caractériser d'un point de vue organologique les instruments de type "luth" que l'iconographie musicale ouest-européenne du Moyen Âge donne à voir avant l'introduction du luth de tradition arabo-andalouse en Europe au XIII^e siècle. La recherche de traits communs avec les luths représentés dans l'iconographie grecque et romaine permet de dégager une filiation organologique entre les luths antiques et les luths figurés à l'époque romane. Plus avant, l'observation de la répartition géographique des représentations des luths du Haut Moyen Âge permet de réfléchir aux relations culturelles entre l'Empire carolingien et l'Empire Byzantin en tant qu'elles ont pu favoriser la diffusion de ces instruments méconnus. Ces instruments informent également sur les relations qu'ils ont pu entretenir avec les vièles lors de l'introduction de l'archet ainsi que sur la route parcourue par celui-ci.

Mots-clés: Archéomusicologie, organologie, luth, Roi David, Théophanie

Abstract

On the basis of iconographical studies and musical experiments, this paper aims to give an organological description of the necked plucked musical instruments that can be observed in Western medieval sources before the diffusion of the arabo-andalousian lute in 13th-century Europe. Underlining common traits with lutes represented in greek and roman iconography allows to draw an organological filiation between ancient and romanic lutes. Furthermore, the observation of the geographic distribution of the representations of lutes in the Early Middle Ages gives reason to reflect on the cultural relationships between the Carolingian and Byzantine empires in so far as they both could have encourage the diffusion of these not well-known instruments. Theses lutes also give information about their ties with the fiddles during the introduction of the bow and about its route to Europe.

Key Words: Archaeomusicology, organology, lute, King David, Theophany

From the 7th century to the dawn of the Renaissance, western musical iconography of the Middle Ages depicts numerous chordophones with necks and plucked strings that contemporary organology classifies as lutes.¹ But if we compare the pictorial evidence from the early Middle Ages and the lute that was played around 1500, one cannot say categorically that they are the same instrument. There is evidence of a definite break in the western musical iconography in the 13th century, when the first lutes appeared in the shape with which we are familiar today: a wide oval soundbox with a relatively short neck protruding from it, a pegbox that is bent backwards and into which the pegs are inserted laterally, and strings arranged in courses of two strings attached to a bridge that is glued directly on to a soundboard with circular roses carved out of it. This description matches those mentioned in Arab manuscripts prior to the earliest Christian depictions. The majority of these images showing the instrument from the front do not reveal the shape of the back of its soundbox. But it is safe to assume that at the time of the earliest western depictions, it was always hemispherical and composed of ribs glued together, as was the case when the instrument first made its appearance in the Christian West. This was certainly the instrument that was played thereafter in all the European courts until the 18th century and whose name, *luth*, was the French equivalent of the Arabic term *al-ud* for this same instrument—the main modifications to which it was subjected in Europe over the centuries concern the number and length of the strings.

Earlier representations depict various chordophones, with the earliest discovered examples dating back to the 7th century and the latest to the 13th century. These display few strictly-defining characteristics in common, making it difficult to categorise them into a single, exclusive organological type: the soundbox can be naviform or very elongated, the length of the neck varies, the pegbox is not always clearly depicted, nor the number of strings (whenever these can be seen, there are usually three of them), nor even the type of bridge. One common point remains the pegbox with frontal pegs. Moreover, it is impossible to identify the shape of the back of the soundbox, as the instrument is always depicted from the front. In any event, in the iconography, these types of lute do not coincide chronologically with the ‘*ud*’-type lute.

Even if one could concede that, in the early Middle Ages, lute-type instruments remained associated with the Carolingian period and disappeared in the Romanesque era in favour of the *vielle*, reappearing only in the 13th century with the Arabian lute,² the gittern and the citole, the few examples from the 10th, 11th and 12th centuries lead one to the conclusion that chordophones with plucked strings and a neck were used in the Christian West before the ‘*ud*’ of *Al Andalus*

¹ In this article, the term “lute” shall be used in the current organological sense established by the Sachs-Hornbostel system (HORNBOSTEL 1914), to denote any necked, plucked-string chordophone, irrespective of the Arabic etymology of the term and the frequent ensuing confusion.

² DIEU 2006

was adopted there—and with the greatest of ease. The idea that the illuminators were able to continue depicting an instrument that was unfamiliar to them by imitating earlier manuscripts cannot account for their organological diversity nor the observation that the morphology of the instrument evolved towards an organology that was clearly identifiable in the images of the 11th and 12th centuries. Beyond their scant iconography, we know nothing of these instruments, which we cannot call lutes since they cannot be linked to the *'ud*.

In the absence of physical models to reproduce, the work of restoring the instrument, along with the task of building up the expertise, requires a variety of approaches and sources to be taken into account. It is this multidisciplinaryity that defines archaeomusicology, which falls within the joint scope of history, musicology and archaeology, and encompasses a set of fields including dendrochronology, iconography, technical history, the history of art, sociology, ethnomusicology, philology, organology and even musical experimentation (HOMO-LECHNER 2002). Halfway between the image and the musical instrument, this set of approaches constitutes what amounts to a veritable investigation.

Based on this approach, this article aims to characterise these Carolingian-Romanesque lutes, firstly by examining their iconography, and secondly by outlining experimental work on the practical aspect of making music. Given the scant documentation and the difficulties this entails, it will be a matter of demonstrating how experimental archaeomusicology can help deepen our knowledge and retrace the evolutionary path of these little-known instruments. We shall see how an iconographic examination enables us to establish organological and historic links between these instruments and the lutes of Greco-Roman antiquity, and even to propound a hypothesis on the role played by the influence of Byzantine culture in the diffusion of these instruments in the late Middle Ages. This article is therefore an opportunity to observe how the processes of appropriation and westernization of Eastern instruments culturally shape their organological features, according to diverse and often linked motives including: acoustic, musical, cultural, social, religious, and political or even geopolitical.

1. Historical and iconographic evolution

Contrary to much that has already been written, lute-type instruments were known and used in Greek and Roman antiquity. Publications purporting to set out a history of the instrument called the *lute* often state that it is strictly of Eastern origin. For example, we find this discussion in the work by Douglas Alton Smith (2002), who sets out in the first chapter with the assertion that, although the Renaissance humanists sought to claim that their choice of instrument as the poet's icon had ancient origins, the lute was not known to the Greeks and Romans. If indeed we agree that the lute as we know it, and as described in our introduction, was not known in Europe before the first 13th-century depictions produced in the al-Andalus reconquered by the Christians—the earliest

and most famous examples of which are the miniatures of the chansonnier of the “*Cantigas de Santa Maria*”, compiled by Alfonso X el Sabio—it is inaccurate to claim that lute-type instruments were hitherto unknown to Europeans. Where numerous papers on the history of instruments fall down is in seeking a linear history and evolutionary path, from both the historical and technical points of view. This failing is ultimately related to the ambiguity of the term itself: are we talking about the instrument called the “lute” or about the chordophone with a neck and plucked strings? To assume that the Western history of lute-type instruments remains compartmentalised between the Arabic origins of the lute and the Spanish origins of the guitar is to ignore the rich diversity of chordophones known throughout the Middle Ages and which have played a part in the history of European musical culture. Falling within the province of evolutionism, this viewpoint sees the history of the lute as evolving from primitive to sophisticated: from the monoxyle (made from a single trunk or piece of timber) to the techniques of bending and gluing wood. This was indeed the technical progression followed by the ‘*ud*’ lute after the Persian *barbat*³ (or *barbud*) was adopted by the Arabic culture, using its technical expertise to gradually perfect its own lute. For luthier and researcher Carlos Paniagua, the construction of the soundbox out of ribs joined together could date back to the time of Al-Kindi (874); he states in his treatise that “the wood used for the body of the lute must be thin, and uniformly so.”⁴

But let us leave the ‘*ud*’ lute for now to run a course that will not reach the West until the end of the Middle Ages, and turn instead to the lutes that were used over a period that was to last longer than the entire Middle Ages. If we do not seek to create a linear tree-like structure from a strictly organological point of view, but instead consider the matter in terms of instrumental practice, we realise that the history of lutes in the West begins with the Roman presence in the western provinces. At this point of the paper, the term “lute” will henceforth be used in its organological sense to designate any chordophone with a neck and plucked strings.

Antiquity

Lute-type instruments were not popular in Hellenistic Greece, and non-existent in the Etruscan civilisation, but were far more widespread in Roman iconography. As in Greece, the Romans considered the lute—along with the harp—to have Eastern origins (Vendries 1999). In the Hellenistic world, the musical iconography of the 5th - 3rd century BC depicts a number of instruments, mostly held by female figures.⁵ Organologically, these lutes are of various types. The one depicted on a terracotta statuette from Tanagra (Greece), dating back to the 3rd century BC, (fig. 1) is a very fine example. This lute could be the one that Elien calls *skindapsos*, which he

³ The *barbat*/*barboud* is often considered the precursor of short-necked lutes. We presume, with good reason, that it was constructed from a single block of wood, so it is natural to describe it as a natural descendant of lutes such as the Japanese *biwa*, the oldest preserved examples of which date to the 8th century (Alton Smith 2002: 13).

⁴ PANIAGUA 2016.

⁵ On lutes in Ancient Greece, see Higgins & Winnington-Ingram 1966: 62-71.

describes as being used in India for charming elephants⁶ and which Athene terms a *tetrachord*.⁷ One of the most striking aspects is the similarity—in both shape and playing position (held high on the chest)—between this instrument and the medieval gittern (which reached Christian society from the East at the same time as the ‘ud). Although in Europe its impact was diluted due to the presence of other instruments such as the mandolin and the guitar, this type of lute spreads today over a vast area stretching from Yemen (*qanbūs*) to Tibet (*dranyen*). Although these two traditional instruments are characterized by a soundboard made of skin, there is nothing to say that this was not also true of the ancient Greek instrument. However, the morphological continuity between the body and the neck, along with the rounded shape that is visible on the back of the instrument from Tanagra, do lead one to conclude, with a degree of certainty, that it was constructed from a single piece of hollowed-out wood.

Another type depicted is a lute with a naviform body and a long, more detached neck, very closely resembling the lute still played in Egypt in the same period (fig. 2), as one can clearly distinguish the neck crossing the soundboard that is without any doubt made of animal skin. Dating to the 5th century BC, the entire scene depicted on a bas-relief is itself an illustration of Egyptian influence. We can identify a third type, with a long neck that is relatively detached from the body, a fine example of which can be seen on a bas-relief attributed to the studio of the sculptor Praxiteles (fig. 3). The absence of significant detail in these depictions prevents us from providing a precise description of the organological structure of these instruments (fixing of the strings, arrangement of the pegs,...).

According to Christophe Vendries (1999), it is likely that this is “a type of lute that Pollux refers to as τριχορδον (*trichordon*), according to a terminology based on the number of strings, similar to that used by the Japanese to denote their trichord lute (*shamisen*), or in line with the Persian name of *setâr*, meaning ‘three strings’. Pollux adds that the lute is termed πανδοῦρα (*pandoura*) by the Assyrians whereas Clement of Alexandria ascribes a Phrygian origin to it.”⁸ Although the term *pandura*—alluding to a geographic origin that could be Mesopotamia—is certainly not Greek, the Latin language did adopt it. It seems that its discovery by Roman society was the result not of Greek influence but Egyptian, via the Roman province of Africa Proconsularis, as suggested by Martianus Capella, who states that the *pandura* was enjoyed by the Egyptians.⁹ For the Romans, the lute was therefore an “exotic” colonial instrument. The musical iconography of Roman society reveals numerous examples of lutes played by a variety of personalities: we find it in the hands of Cupids, and male or female musicians. What is interesting is that this iconography is not restricted to the *pars orientalis* of the Roman empire, but appears in Rome as well as in the western provinces.

⁶ ELIEN 1999: 132.

⁷ Ibid.

⁸ Pollux, IV, 60 and Clément d’Alexandrie *Stromates*, 16, 76, 5. In Vendries 1999: 118

⁹ Ibid.

One of the most priceless examples of these lutes from Roman Egypt is not iconographic but well and truly archaeological. This is the famous lute found in 1906 in a tomb from the imperial times and said to be that of “the Prophetess of the images of Osiris-Antinoüs”, in the necropolis of Antinopolis (fig. 4). According to Christophe Vendries, this relic probably represents the proof that modifications were carried out on the lute in Egypt under the Roman occupation: “lute makers in the Roman period were able to apply the craftsmanship acquired through the production of *citharae* for, unlike Egyptian lutes of the New Empire, from that time on lutes will include a wooden soundboard, a bridge and long tuning pegs. Typical of the Greco-Roman *citharae*, these features blended with local crafting traditions such as the narrowness of the neck, the semi-almond shape of the body or the dovetail pattern placed at the top of the neck, which was well known to the Egyptians and featured on five of the “Coptic” lutes.¹⁰ Dating to between the 3rd and 7th centuries, seven examples of these lutes survive today.

The lute that the Romans called “*pandura*” is of the same type and displays a comparable organology, with a long neck protruding from a rounded, comparatively small body, ending with an ornamental protrusion and possessing three frontal pegs and three strings,¹¹ a form relatively close to that of the lute on the Mantinea base (fig. 3). The earliest representation is the funeral stele of Lutatia Lupata from Emerita Augusta in Lusitania, dating from the end of the 1st century or the beginning of the 2nd century AD (fig. 5). A fine example of this type of lute is a small bronze discovered a few years ago at Banasa in Morocco (fig. 6). This is the same instrument that we find, for example, in Naples on a sarcophagus from Pozzuoli and dating from the 3rd century (fig. 7). Thus, we ascertain that lute representations cover a vast area at any one time.

The soundbox of these lutes was made from the shell of a tortoise. The form and the size are clearly recognisable in the representations, some even depicting the scales, thereby following the lyre-making tradition.¹² It should be mentioned that the use of the shell of a tortoise can still be seen in certain Mediterranean organological traditions for the manufacture of small lutes (*gimbrì* in Morocco, and *Baglamas* in Greece). This all leads to the conclusion that the soundboard was made of animal skin, as seen in the example of the Moroccan *gimbris*, and as the continuation of the neck over the soundboard in certain Roman representations would suggest.

The crafting of the lute appears to have followed the same evolutionary path as that of the lyre, with the substitution of the skin soundboard with a wooden one, and its natural tortoise shell by a soundbox carved out of wood in such a way as to retain the morphological similarity. The imitative

¹⁰ Ibid. p. 125.

¹¹ The lute depicted on the lid of a sarcophagus in the Capitoline museum in the “Palace of the Conservators” in Rome possesses 6 strings and 6 pegs, although only 3 holes can be seen on the lower part of the neck (Ibid. p. 129). It is reasonable to infer that this could entail 3 pairs of strings.

¹² A body of an Egyptian lute made from the shell of a tortoise and dating to the New Kingdom is conserved in the British Museum.

aspect of the body is notably illustrated by one of the rare examples depicting the lute in profile: this is a bas-relief that appears on the sarcophagus of Iulia Tyrania, which was discovered and preserved in Arles (fig. 8). Although the shell shape is clearly identifiable, the perfect roundness and exaggerated size of the body suggest that this is a carved soundbox.¹³ However, the assembly of the neck and the body seems to be the same as it would with a genuine tortoise shell. We can also see that the pegs are attached frontally to the top of the neck. This wooden construction is certainly that of the Antinoopolis lute, with its noticeable indentations on the sides of the body, which do not appear to have spread beyond Egypt. Christophe Vendries points out that these indentations on the body once again reveal the close link between the lute and the *cithara*. The purely ornamental aspect of these indentations on the sides of the body cannot but remind one of those seen on certain plucked-string mediaval *vihuelas* appearing in Spain in the 14th and 15th centuries, where the cultural influence from North Africa is irrefutable (fig. 9).

Although a recurrent motif in a large part of Roman Europe, the lute remained confined mainly to funerary and feminine themes depicted on sarcophagi or steles. During later Antiquity, according to Christophe Vendries (VENDRIES 1999: 130), the success of the lute was certainly confirmed in Christian Egypt as early as the 5th century AD. Short-necked lutes seen in the Hellenistic iconography left the Mediterranean shores, reappearing later in the oriental regions following the trail of the Silk Road: “the old route from the West and from Central Asia to the Far East is traced better by the lute than by any other object”, states Curt Sachs.¹⁴ It is found in India, Central Asia, and even the Far East in the form of the Japanese *Biwa* lute. Although, according to Carlos Paniagua (PANIAGUA 2016), lutes with short necks and wide bodies depicted on the Hellenistic sculptures from Gandhâra (N.W. India, 1st-3rd century AD) are a variant of the famous Persian “barbat”, there is as yet no way of determining for certain either precisely which culture developed this type of lute or which route it followed from the West. If we take a leap over a gap of over 1500 years, we can see that the pyriform type of lute depicted on a bas-relief from Xanthos in Lycia—a region currently situated in southern Turkey which became integrated into the eastern Roman empire in the 4th century (fig. 10)—reappears on a fresco dating to the 11th century and located in the Saint Sophia cathedral in Kiev (Ukraine), where Vladimir the Great, Prince of Novgorod and then of Kiev in 980, imposed the Byzantine rite in 988 (fig. 11). It is therefore quite conceivable that this type of Middle-Eastern lute could have been spreading to the West through the Byzantine influence and presence since the latter days of Antiquity. We shall see later, in the case of the Monte Cassino manuscript, how this Byzantine influence succeeded in playing a role, albeit only an iconic one, in medieval Italy and in the dissemination of lutes in general.

The following is an organological analysis of the lute as it was known and played in Greco-Roman society around the Mediterranean: we can distinguish two main types of lute (short-necked or long-necked), the construction using a single piece of wood became widespread

¹³ VENDRIES 1999: 128

¹⁴ SACHS, Curt, *History of the Musical Instruments*, New York, 1940, p. 191 (in VENDRIES 1999: 133)

during late antiquity, most examples display three strings attached to pegs that are arranged vertically (either to the front or underneath) on a neck with a dovetailed terminal protrusion, which Christophe Vendries (VENDRIES 1999) attributes to the Egyptian influence. The pegbox is simply a linear continuation of the neck, as can still be seen on the Turkish saz for example. It is these organological features that can be found in western lutes from the early Middle Ages.

The Middle Ages

Chordophones were introduced into the Gallo-Roman society of the western regions of Europe via the Roman occupation, and it is so much so that the lute is not traditionally present in those places where roman tradition was not deeply rooted. In both the Byzantine and the Carolingian empires, the values and forms of Antiquity played a major role in a campaign for claiming a Roman heritage. The musical iconography of the early Middle Ages therefore relates mainly to late Antiquity. The type of chordophone that prevailed at the time remains the cithara. With the development of the theme of David the Musician, the Carolingian musical iconography reveals a rich instrumentarium wherein plucked strings feature prominently, and with citharas or Roman-style lyres at the centre in most cases, pointing to an organological appropriation. Among the earliest musical iconographies of the Carolingian era, the Stuttgart and the Utrecht Psalters both reveal a strong influence of models from the western and eastern Roman Empire of late antiquity (SEEBASS 2011: 110).

It is during the 8th century that the lute reappears in western iconography. The first referenced example appears on an ivory plaque binding from the Dagulf Psalter (School of the palace of Charlemagne, between 783 and 795) preserved in the Louvre museum (fig. 12). This depicts a small pyriform lute with a short neck extending from the body, with three strings attached to frontal pegs on a pegbox that is a continuation of the neck, and which simply ends in a diamond-shaped tip. At the bottom of the body can be seen a protrusion for attaching the strings, similar to that on the Antinoopolis lute. This morphology clearly implies a construction using a single piece of hollowed wood, like those seen on the vielles discovered in the digs at Novgorod.¹⁵

In the Carolingian iconography, the lute usually occupies a place of honour. It can be considered as a representation of music, as in a miniature of the *Institutio arithmetica* by Boethius, created in 840,¹⁶ depicting the personification of music holding a lute as an accessory. Produced during the same period (between 840 and 855), the Lothaire Psalter contains a magnificent full-page miniature depicting David the musician (fig. 13). Whereas the only instruments mentioned in the

¹⁵ Instruments conserved at the Institute of Archaeology in the Russian Science Academy (VERTKOV 1975). See also BRISBANE 2007.

¹⁶ Staatsbibliothek, Bamberg Class. 5, f.9v. The miniature was created by the École de Tours, one of the major *scriptoria* for the Carolingian miniature (SEEBASS 2011: 34)

text of Psalm 150 on the facing page are citharae and cymbals, it is nevertheless a lute that we see in the hands of the musician king, denoting the cultural place accorded to this instrument. Due to its large size, this miniature provides us with precise organological information: the neck is relatively short and its pegbox amounts to a continuation of the neck, ending in a rounded shape; the pear shape of the body is inverted, with the widest part closest to the neck. The three clearly-depicted strings are attached to frontal pegs and lie over a moveable bridge placed on the first quarter of a soundbox that is pierced with small round holes. The strings are fixed to a small protrusion on the bottom of the body. This inverted-egg-shaped body appears on a trichord lute with frontal pegs (fig. 14) depicted on the portal of Burgos cathedral in Spain (13th century). The body of this lute is highly reminiscent of those of traditional Georgian trichord lutes such as the *pánduri* (fig. 15). Since we know that the Byzantine culture spread thus far, the number of strings, along with the reference to *pandoura*, are noteworthy insofar as this could feed the hypothesis of a Byzantine dissemination of this type of lute. It should be noted that this is the same shape of body—enlarged towards the top and flattened at the base—as that of the instruments held by the elders of the Apocalypse in a miniature of a manuscript of the Commentary on the Apocalypse (*Commentaria In Apocalypsin*) written by Beatus of Liébana (Hh 58, 10th century), and considered to be one of the oldest western representations of a bow (BACHMANN 1963). In the numerous other extant Beati, it is a lute-type instrument that appears in the hands of the 24 elders. Although we assume that “the illuminators did not create the images but probably worked from illuminated copies of the Apocalypse from the 6th or 7th century (...)”¹⁷ the profile of these lutes varies appreciably from one manuscript to the next. With these variations being echoed in other iconographic or organological contexts, it is likely that these instruments attest to a veritable organology. Furthermore, as Spain had not taken part in the so-called Carolingian Renaissance, the style of these miniatures is dominated by Islamic art (SEEBASS 2011: 110). The ubiquity of lutes in the iconography of the elders in the Beati of the 10th and 11th centuries, and the fact that their soundboards appear to be made of animal skin, would therefore point very strongly to an influence from the Islamic or Berber culture. These instruments can be compared to the Moroccan *hajhouj* played today by the Gnawa community.

Still in the 9th century, we note in certain miniatures a permeation of the lute by the lyre similar to that described by Christophe Vendries (VENDRIES 1999) for the Roman *pandoura* and the *cithara*. The lute sometimes adopts the characteristics of the lyre, evoking its body after the disappearance of its two arms, as in the Utrecht psalter,¹⁸ produced between 813 and 835 in the Rheims scriptorium. The length of the neck reminds us of the lutes in the Roman iconography.

¹⁷ Alexandra Acconci, cited in SEEBASS 2011: 110

¹⁸ Utrecht, university library, MS Bibl. Rhenotriactinae I Nr 32. Online on the website: URL : <http://www.utrechtpsalter.nl/> [Consulted 10/10/2016]

Furthermore, the terminal protrusion at the bottom of the body also reminds us of the Antinoopolis lute. Its flared shape appears on several images of so-called “figure-of-eight” vielles. Tilman Seebass (SEEBASS 2011: 110) considers that the various instruments depicted in the Utrecht Psalter are representations inspired by Roman Antiquity of instruments “that had often belonged to the past” and which, like the Roman lute, were obsolete. The diversity of the Carolingian iconography does, however, tend to lead us to the conclusion that the lute had not simply been a reference to Antiquity. This combining of the lute and the lyre goes as far as melding one into the other with the addition of the neck with two arms joined by an ornamental yoke in Charles the Bald’s First Bible¹⁹ (Tours, 845-846). The lyre/lute ambiguity reappears in references to instruments identical to those portrayed in Roman iconography, such as a full-page miniature in the Golden Psalter of St-Gall²⁰ (9th century) depicting an instrument similar to that seen on the side of an Attican sarcophagus preserved in the Louvre museum.²¹

Another type of long-necked lute appears in the Carolingian iconography. We see several examples of this in the manuscript commonly called the “Stuttgart Psalter”, which was probably written and illuminated in the abbey at St-Germain-des Près around 820 or 830 (fig. 16).²² The sloping angular shoulders, forming a clear demarcation between the body and neck, are—with the exception of the considerably elongated body—reminiscent of the shape of the citole, which did not appear in the iconography until the 13th century. Once again, this body shape is comparable with traditional instruments from the regions formerly under Byzantine influence, such as the Georgian *panduri*²³ and *dála-fandýr* (fig. 17) from the republic of Southern Ossetia (seceded from Georgia in 1990). It also appears on a short-necked trichord lute held by Ethan, one of King David’s musicians, depicted in an Italian bible from the 12th century (fig. 18).²⁴ It would be tempting to see the shoulders at right angles to the neck and the semi-circular pegbox as morphological reminders of a lyre that had lost its arms after the addition of the lute neck.²⁵ But the antiquity of this evocation of the lyre had by that period become so outdated that it is more apt to see it as a stylistic trait. One could also see in the angular shoulders of the long-necked lute an echo of the so-called “Coptic” lutes, whose morphology appears to have been specifically developed in Christian Egypt (VENDRIES 1999). It is noteworthy that similar bichord or trichord square-shouldered lutes appear in the Fatimid iconography in 11th-century Egypt,²⁶ as well as in the 12th century on the frescoes of the Palatine Chapel in Palermo.

¹⁹ Paris, Bibliothèque nationale de France, MS lat. 1. Online, on the Gallica website, URL: <http://gallica.bnf.fr/ark:/12148/btv1b8455903b> [Consulted 10/10/2016]

²⁰ St. Gallen, Stiftsbibliothek, Cod. Sang. 22

²¹ Manuscript MA 2120. Cited in VENDRIES 1999.

²² Württembergische Landesbibliothek, Stuttgart (Germany) Cod. Bibl. Fol. 23, 108r.

²³ The instrument bears the same name as the Georgian *panduri* cited earlier: whilst also possessing three strings, the box is longer.

²⁴ MS Barb. Lat. 587, f.194. Rome, Biblioteca Apostolica Vaticana.

²⁵ This theory on the evolution of the bowed vielle in the West via bowed lyres was developed by the musician and thinker John Wright.

²⁶ For example in an ivory plaque kept in the Museum für Islamic Kunst.

However, instruments should also be considered in terms not only of their morphology but also of their playing position. The playing position of lutes in the Stuttgart Psalter—held high on the chest and resting on the right forearm—is reminiscent of that of certain lutenists in the Hellenistic iconography. This was also the position later adopted by players of gitterns and citoles. The history of lutes is one of constant borrowings and appropriations, and that is why following the course of playing positions provides a better idea of the dissemination of the instruments. Musical traditions provide us with considerable information on the subject. We see, for example, that the same posture is used in Yemen to play the qanbûs—a pyriform lute with a skin soundboard. Considering that there is little chance that the playing positions were not introduced into the medieval West along with their instruments, one could reasonably suppose that this also applied to the gittern, since this is a westernised version of the qanbûs, which the Christians doubtless appropriated through their links with Arabic culture (MOKRANI 2007). As for the long-necked lutes in the Stuttgart Psalter, the pictorial evidence of these is insufficient to warrant any suppositions regarding their provenance. Even if certain structural attributes such as the length of the neck and the angular shoulders may place it in the category of a borrowing from late Roman Antiquity, the lengthening of the body most certainly resulted from another, as yet unidentified, cultural exchange. It would be useful to devote a study to this topic, taking into account the existence of the Georgian instruments already mentioned and a possible indirect Byzantine influence.

Since the 10th century, the iconography has delivered depictions of lutes whose morphology can be grouped into a common type: a short neck extending from a pear-shaped body, with three strings attached to frontal pegboxes, and a soundboard without a rose but which sometimes has small perforations. These are the same characteristics as those defining a great many bowed vielles of the same period. In the absence of any depiction of a bow, it is most often the presence of the tailpiece that enables us to distinguish them. This lute can be seen in the hands of Asaph, one of King David's musicians, in a miniature from the Psalter annotated for Angers usage (11th century). A detailed study of the instrument clearly reveals three pegs, but the strings seem to have disappeared. Although the neck has no frets, we note the protrusion at the bottom of the body (fig. 19). In his right hand, the musician is holding a small stick used for stroking the strings.

In this pyriform instrument, we have been able to see a vielle—labelled “Byzantine” owing to its pear shape—rather than a lute-type instrument. Bachmann devotes a paragraph to it, wherein he discusses the possibility that this is less of a plectrum than a drumstick hitting all the strings simultaneously, thereby propounding the theory that the bow could have naturally been substituted by this technique when it arrived during that period (1969, p. 59). This instrument could therefore be called a “prospective” vielle. Bachmann notes that the iconography shows the use of the plectrum becoming more widespread after the 10th century, the strings having previously been plucked with the fingers. Now, in an earlier Italian psalter dating to the end of

the 10th century,²⁷ a lute of this type is depicted in the playing position, with its frets clearly visible (fig. 20). The musician is holding a similar small stick, but with a pointed shape and whose end is detached from the sleeve, clearly identifying it as a plectrum. This type of plectrum, consisting of a sleeve into which the plectrum itself is inserted, is the one seen in the hands of cithar players of antiquity. With its bevelled tip, the small stick held by Asaph in the Angers Psalter brings to mind a quill section rather than a drumstick, so is more akin to a plectrum. These depictions of “antique” plectrums in the 11th-century iconography support the theory of the lute having a line of transmission in the West that draws on Antiquity, however tortuous that line might be. In the latter centuries of the Middle Ages, it was the folded quill plectrum that took over. One of the earliest Christian illustrations of this appears in *De Rerum Naturis* by Raban Maur (Monte Cassino, 1023). The introduction of the folded-quill plectrum to the continent is attributed to the famous musician Zyriâb, who supposedly brought it into Al-Andalus in the 8th century, along with other innovations related to the ‘ud lute. Another Italian miniature, dating to the 11th century and illustrating the chapter entitled *Figuris instrumentorum musicalium et musicorum* preceding a *De institutione musica* by Boethius, portrays two musicians, each playing a pyriform lute (fig. 21). We find the same organological characteristics (pyriform body, frontal pegs, three strings, use of the plectrum but without frets depicted), the difference here being that the neck is longer. Here again, the lute takes its place amongst a group of cultivated stringed instruments that represent music: the two lutenists are situated below the lyre and rote players.

As we have already mentioned, the lute is an instrument of choice for the elders of the Apocalypse in the Iberian iconography of the 10th-12th centuries. On a little-known fresco from the end of the 11th century (fig. 22), originally from the church of Sant Quirze de Pedret in Catalonia and preserved in the Solsona archaeological museum,²⁸ the elders are each holding an instrument with the characteristics of 11th-century necked chordophones: a pyriform body tapering into a short neck ending in a round pegbox, frontal pegs, three strings that are attached to a protrusion at the bottom of the body, and circular holes in the soundboard. Since the strings are attached directly to the bottom of the body, we can deduce that the bridge is mobile, even though this is not depicted. The absence of plectrums could lead one to wonder whether these are vielles or lutes, which were organologically similar at that time. The elders depicted in the iconography are only able to hold the instruments in one hand, as the other is otherwise engaged in pointing at Christ or in holding a perfume flask. Instruments of worship are rarely depicted in their playing position, so that in order to distinguish an instrument as a vielle, the bow is sometimes depicted alongside it, as on the door of the cathedral of Sainte-Marie d’Oloron. Given the ample presence of lutes in the Spanish iconography of the elders during that period and the absence of depictions of bows

²⁷ *Libri Psalmorum ex hebraico caractere et sermone in latinum eloquium a Beato Geronimo presbytero editus*. Ivrea, Biblioteca Capitolare, Cod. LXXXV, fol. 23v. Attributed to Warmund, bishop of Ivrea from 966 to 1011.

²⁸ My warm thanks to Laura de Castellet for enabling me to discover this fresco, as well as to the Solsona museum for allowing me to photograph it.

or tailpieces, one could reasonably conclude that the instruments in the Sant Quirze de Pedret fresco are indeed lutes. Although the fresco is incomplete, eight instruments can be identified. An elder appears to be holding one of these in profile (fig. 23). If this is the case (none of the other elders is holding a perfume flask), the rarity of such a depiction is noteworthy compared to the great majority of instruments depicted from the front. This profile calls to mind the one on the Sarcophagus of Iulia Tyrania, dating to the 2nd or 3rd century (fig. 8). This convergence could constitute a further argument in favour of an organological continuity between Roman and Romanesque lutes. A second Spanish iconographical instance of the short-necked pyriform lute can be seen on a stone capital located in Jaca, in northern Spain. This instrument displays the same characteristics as our Roman pyriform lutes, with the difference that only one string is depicted and the neck extends further from the body.

Still in the 11th century, we find a short-necked trichord pyriform lute in an Italian miniature of *De Rerum Naturis* by Raban Maur (780-856), depicting David's musicians (fig. 24) and produced in 1023 in Monte Cassino, where it is still preserved. The organological attributes are the same, its identification as a lute being substantiated by the playing position and the presence of a plectrum that is easily identified as a folded quill. Although it has three pegs, a careful inspection of the instrument reveals that the two lines depicting the two strings at the bottom appear to be doubled. In addition to the lute player, two musicians are depicted in playing positions: a cithara player—an instrument that is hard to identify as a rote or dulcimer—and a cymbals player. The two stringed-instrument players are shown seated, whereas the cymbals player is on his feet and performing a dance step. A fourth instrument is depicted below: a hexachord with a rectangular frame and two circular shapes beneath the strings that could be identified as sound holes.

This miniature has the distinction of raising the question of the instrument's lexical classification. Indeed, Carolingian and Romanesque lutes are unfortunately among those instruments to which we are as yet unable to assign a denomination, either in Latin or the vernacular. Since the term "lute" derives from the Arabic *al-ūd*, this cannot apply from an etymological point of view. Since the vernacular terms do not appear in the literature until the end of the Middle Ages, it remains unlikely that we shall discover the instrument's name. The terms designating the stringed instruments therefore remain the Latin ones, which—in the absence of a clear link between the name and the image—makes it difficult to identify the instruments precisely.²⁹ Now, each of the three stringed instruments of the *De Rerum Naturis* bears an inscription below that is written in a different hand to that of the main body of the text, which is in Beneventan characters whereas the inscriptions are in the Caroline script: "cithara" and "musica" are inscribed beneath the cithara and the hexachord respectively. The latter designates the hexachord as an educational instrument

²⁹ Although the Germanic root *fidula* is clearly linked to bowed string instruments, providing *vièle* in French (*vielle* in English) (Bec 1992), *cithara* or *lyra* remain largely polysemic.

symbolising music and musical skill, in a similar fashion to the *tintinnabulum* (carillon) or the monochord. The lute also bears an inscription that might reasonably be assumed to be the name of the instrument, but alas, it is damaged beyond recognition. This is all the more regrettable as, thus far, it is the only known lexical reference linked explicitly to a lute-type instrument. The *De Rerum Naturis* by Rabanus constitutes an invaluable encyclopaedia of the knowledge of his time. The text that this miniature illustrates is the *De musica et partibus eius* chapter, a musical treatise listing a certain number of instruments known at that time, even though these can be clearly traced to late Antiquity. Although the text is in Latin, some instrument names derive from Greek terminology, thereby exacerbating the difficulty in identifying the instruments with certainty. Take *sambuca*, for example, which, although it designates the harp in Greek and Roman Antiquity (VENDRIES 1999), there is nothing to identify it as such, nor even as a stringed instrument. In the paragraph dedicated to the second classification of musical sounds to be distinguished from the voice, the term “*pandoria*” appears in an instrumental series along with “*tubae*” (trumpets?), “*calami*” (instruments or reeds?), “*fistulae*” (flutes), and “*organa*” (organs?). Its close resemblance to *pandura* makes it tempting to view *pandoria* as a variant of *pandoura*, the only term that could be associated with a lute-type instrument. This hypothesis could be borne out by the fact that “the art of the Monte-Cassino manuscripts fits in perfectly at the heart of this sort of diaspora of Italo-Greek (or Byzantine) art that was so prevalent in central and southern Italy at that time and even later” (PALAZZO 2004), as the Greek language had been conveyed by the Byzantine empire into the region where the manuscript was produced. On this regard, Bachmann (BACHMANN 1969: 35) states that “Greek antiquity (...) transmitted the prosperity of the organ, as well as the names of several instruments of ancient Greece, later applied to new instruments. This is the case of *lyra*, which was re-used to designate an instrument of the *vielle* type.” The word *pandoria* appears, in a context of dissimilarities with the human voice, within a list of wind instruments, which makes it impossible to confidently associate a cordophone with it. Unfortunately, this again distances us from the possibility of associating a name with the instrument.

Now, the word *pandoria* appears among a series of wind instruments in a context where it is being distinguished from the human voice, which means we cannot link it with any certitude to a chordophone. Unfortunately, this makes the possibility of linking a name with the instrument even more remote. Nevertheless, this failed attempt to find a term for the lute from the Roman period does not detract from what this miniature does tell us. The interest of images such as those in the Angers Psalter and other Roman depictions of David’s musicians lies in the fact that the illuminators had to model the psalmists on musicians and instruments, who until the Reformation, could neither take part in Mass nor play on sacred ground, but who were ubiquitous in the secular musical landscape (SEEBASS 2011: 111). Thus, in contrast to cultivated instruments such as lyres/citharas—which often imitate the style of classical Antiquity and symbolise musical learnedness—these images show more ordinary instruments, attesting to vernacular musical practices that the illuminators were able to observe among itinerant minstrels. This is true of

the lute, whose image attests to its use in the Monte Cassino region in the 11th century. On this basis, we can therefore establish that the lute spread over an area as vast as the Carolingian and Byzantine empires put together, along with the Iberian Peninsula.

In the 12th century, it is in northern Spain that we find one of the last-known representations of the short-necked trichord lute made from a single-block of timber: a miniature in the MS Barb. Lat. 587 (fig. 17). Later on, we find also the elder on the portal of Burgos cathedral (fig. 13), dating to the 13th century. Sculpted between 1168-1188 under the direction of Maestro Mateo, the *Portico de la Gloria* (Portal of Glory) in the Santiago de Compostela cathedral, featuring the twenty-four Elders of the Apocalypse, is one of the most realistic representations of musical instruments in medieval iconography. Two lutes are depicted in a playing position, enabling us to identify them as such with certainty (fig. 25). The short neck surmounted by an inverted diamond-shaped pegbox is clearly distinguishable from the oval body resembling that of the vielles depicted on the same portico. There being no openings on the soundboards of these two instruments, it has been suggested that they are made of animal skin (TAYLOR 1994). The position of the thumb and index finger perpendicular to the strings indicates that a plectrum is being used, even though this is not actually visible. Apart from the fact that the *Portico de la Gloria* constitutes a rare representation of 12th-century lutes, what stands out is the oval body compared to depictions of lutes of the preceding century, wherein the bodies were pear shaped. This distinctive feature enables us to establish that the monoxyle (single-block) lute appears to have followed the vielle in a progression that saw it transformed from a pyriform monoxyle construction to an oval fretted lute. However, the absence of concave sides on the bodies of both lutes—which can be seen on the vielles—does not rule out the possibility of a hollowed-out single-block construction.³⁰ This parallel trajectory, manifesting a great affinity between the two instruments, came to an end the following century, in Spain, with the adoption of the Arabic ‘*ud* and its technically sophisticated construction that cannot be dissociated from its morphology. The meteoric dissemination that the ‘*ud* underwent throughout Europe left no place for the earlier lutes, which suddenly stopped appearing in the iconography. In the same period, other lutes such as the citole and the gittern, with double strings like the ‘*ud*—a stringing method that also became widespread for the vielle—saw a parallel dissemination under the influence of the Arabic instrumentarium. One of the last instances of a short-necked pyriform lute with frontal pegs can be seen on the façade of the church of Saint Gervais de Falaise in Normandy. Although the church dates to the 12th century, the musical angels depicted on the portal appear to have been sculpted during works carried out in the 15th century (BRASSY 2007), as both the sculptural style and the other instruments suggest. The presence of this organological type at such a late period remains a mystery.

³⁰ This was proposed during the first restoration projects carried out during the collective instrumental restoration project that took place in 1989-1990 at Santiago de Compostela (LOPEZ 1994)

This common trajectory shared by the lute and the vielle for over 200 years, in the midst of a pivotal period in European cultural history, gives us a better idea of the process of adoption of the bow, and the way in which this became integrated with the lutes that it encountered on its way, as well as the diversity of the morphology of the vielles that is revealed in the European iconography of the first centuries after the year 1000AD. Before the advent of the bow in the West, at around the 10th century, the soundscape of musical practice consisted mainly of plucked strings. Within this soundscape, the lute was the only melodic chordophone with a neck, sharing the space with the citharas, which had for some time been undergoing a process of appropriation following their introduction by the Romans. In this respect, the lute is likely to have been more widely played in the last centuries of the first millennium than we tend to think. Although it has been considered a minor instrument due to the scarcity of iconographic evidence, we could also turn the question round by considering that those few representations place the lute/lutes in pride of place, such as in the hands of the musician David or his musicians, or even in those of the personification of music. The morphological diversity, along with certain realistic organological details, excludes the only classical reference, in the sense that it needs to be more than a mere imitation of images of disappeared instruments. As Bachmann (BACHMANN 1969: 59) points out: “identical in shape and structure but used as plucked instruments, the various types of bowed instruments depicted in western representations after the 10th century certainly already existed in Europe”. In other words, it was definitely the bow that was imported from the East, and not pre-existing bow/instrument sets, as the bow had already been applied to the plucked chordophones then in use, which, depending on the region concerned, could have been the lyre or various types of lute. To the extent that, moving from an organological to a historical point of view, vielles could be considered to be bowed lutes.

With every organological revolution resulting from the appearance of new instruments or new playing or manufacturing techniques, the musical iconography frequently reveals a structural ambiguity between two instruments that thereby find themselves either in competition or in an exchange of identity attributes. This ambiguity is seen mainly between bowed and plucked instruments: between lute and vielle in the early days of the introduction of the bow, as seen in certain miniatures of the Beatus of Saint-Sever (f. 29 and ff.121v-122r, verse 1060)³¹ wherein the instrument would not differ from the other Beatus lutes were it not for two D-shaped soundholes that make it resemble a vielle. Another notable ambiguity is the one between the “vihuela de arco” (bowed vihuela) and “vihuela de mano” (hand vihuela) in the second half of the 15th century, where the bow, sometimes associated with the plucked *vihuela*, continues to puzzle the specialists (GRIFFITHS 2010). The iconography of the elders of the Apocalypse is thought provoking regarding the plausible concurrence of citharas and lutes during the first millennium, and of lutes and vielles after the year 1000 AD. Although the biblical text mentions that the

³¹ Since there are no depictions of bows, the uncertainty remains.

worshipping of the Elders is accompanied by the sound of citharas—with the familiar ambiguity of the Latin term *cithara*—what is actually depicted in most Spanish iconographies is a lute. After the year 1000, we see the addition of the bow associated with instruments that remain structurally identical to lutes. This is particularly obvious in the iconography of the various versions of the *Commentaria In Apocalypsin* by Beatus of Liébana.

Empires and crossing paths

The presence of lutes in the West before the surge of the Arabic *'ud*, in such diverse regions as the northern Carolingian empire, Spain and Italy, (fig. 26) could be explained by two major factors: firstly, musical practices anchored in various cultural influences (Spain and the Arabic-Berber presence) and, secondly, questions of identity and other cultural issues. We should therefore take into consideration: on a small scale, regional cultural practices, and, on a larger scale, the geopolitical issues. Without making any claims that would require an in-depth study, one could put forward the idea, simply through iconographic observation, that some lutes were disseminated in Western Europe through the influence of the Byzantine culture and the impetus of geopolitical issues beyond the actual performing tradition of the instrument. It remains difficult to separate specific stylistic features, to the point that we observe a variety of organological types in regions remote from each other. The difficulty in following the traces of these instruments is also linked to that in determining for certain where the miniature was created. And even if one were to succeed in locating the scriptorium where the manuscripts originated, determining the cultural origin of the illuminator remains an even greater challenge. The information can sometimes be found, but only rarely. To ascertain some of the origins of lutes in the West, we must determine the cultures with which western Christendom could have had close cultural links and in which this type of instrument was most valued.

Although it is difficult to determine exactly which cultural presence introduced lutes to the Iberian peninsula prior to the Arab-Andalusian lute, it is, however, likely that, in the case of Italy, they spread under the influence of the Byzantine empire, which occupied the whole of the Italian peninsula during the reign of Justinian I (527-565) and still covered the southern area in 1025, at the time of the writing of *De Rerum Naturis*. The lutes depicted in the Spanish iconography, particularly in the various manuscripts of Beatus, fall within an organological type often associated with cultural influences from North Africa, there being only three examples of short-necked lutes with frontal pegboxes discovered over a period of two centuries. It is highly likely that the lute did not exist in the Visigoth culture before the Berber conquests in the early 8th century, under the reign of Rodrigo. The instruments in the early manuscripts of Beatus' Commentary on the Apocalypse were therefore recent introductions, and their iconographic

omnipresence could testify to the rapid success they enjoyed in the multicultural context. The fact that three short-necked pyriform lutes appear in the area surrounding the route to Santiago de Compostela leads one to surmise an exogenous introduction of the instrument rather than an appropriation of the Arab-Berber instruments.

A set of ties with the ancient imagery on one hand, and with the Byzantine society on the other, crystallised within the Carolingian society. The diversity in the shapes of lutes renders the study challenging if one has to bear in mind the complexity of the cultural exchanges at work over several centuries. Given that these depictions constitute one-off occurrences, the lutes depicted in the Stuttgart and Utrecht Psalters raise a number of questions. The three distinctive features—the length of the neck, frontal pegboxes and angular shoulders—tend to establish a closer link with the Roman pandoura and especially with the so-called “Coptic” lutes. Even if we can see a certain organological continuity between the 7th-century Egyptian exemplars and the instruments depicted in the Fatimid iconography, how can we envisage links with the representations produced at Aix-la-Chapelle? There is nothing to help us distinguish between the evidence of real practice—whether popular or learned—and an iconographic influence aimed at featuring a classical Roman reference. However, one does not exclude the other. In the same way that the lyre, which survived longer in northern Europe, was linked to the nobility in Germanic society,³² the lute could have represented a symbolic link with Roman society. On the other hand, we should also consider the cultural rivalry between the Carolingian and the Byzantine empires—before the year 1000—over the claim to the ancient Roman heritage. The influence of the Byzantine culture has played a major role in cultural relations between East and West, and consequently in the dissemination of musical instruments (SEEBASS 2011, p. 54). As Werner Bachmann points out, “Byzantine musical instruments display a striking oriental influence, along with a marked change in comparison to the Greek instruments of classical antiquity.³³ Some of these were still in use in the Middle Ages. Amongst the stringed instruments, the lyre (...) saw a significant loss in popularity during the Byzantine period, to be replaced by new plucked or bowed instruments like lutes or vielles, (...)”³⁴

From an organological point of view, pyriform lutes and the study of their diffusion cannot be viewed simply in terms of body shape and length of the neck. The dichotomy of long-necked/short-necked lutes is insufficient to account for the diversity of the instruments or for their geocultural spread. In most studies on the history of instruments in this category, this type of approach tends to ascribe the origins of all short-necked lutes to the Persian *barbat* lute. A distinctive feature such as the structure of the pegbox is perhaps not so much a minor detail as telling evidence. Throughout the history of the *barbat*, from the Gandhara sculptures in Pakistan

³² THEUNE-GROBKOPF 2010

³³ BACHMANN 1969: 34 The aulos for example was replaced by the transverse flute, which was very popular in eastern Asia.

³⁴ Ibid.

to the Japanese biwa, the pegbox is always bent, with its pegs attached laterally. In the Greco-Roman and Byzantine iconography, all pear-shaped lutes seem to be equipped with frontal pegs attached onto a pegbox that forms a continuation of the neck. This is an organological feature found today on lutes such as the Turkish *saz* or the *dotara* played in Iran and Central Asia. Clearly, the processes of cultural influence and appropriations leading to structural modifications of musical instruments are sufficiently complex to forestall any account in terms of a linear history that can simply be traced down the iconographic line. This is but one blatant example in the long and tortuous story of the lute. As things stand, all we can say for certain concerning the lutes represented in the Carolingian and Byzantine society is that:

- like Greek and Roman lutes, they possess frontal pegs attached to a diamond-shaped or circular pegbox that tends gradually to become detached from the neck;
- like Greco-Roman lutes, they are mostly trichords;
- there are more representations of short-necked lutes than long-necked ones, which appear to be confined to a limited period and geographical region;
- the short-necked pear-shaped type appears from the beginning of the Carolingian empire and seems to have spread from Italy to Spain.

The musical iconography from Hellenistic Greece constitutes the most westerly representation of the single-block pear-shaped lute before the earliest Carolingian and Byzantine instances. Even if, as an oriental borrowing, it was already rarely used in Greece, its popularity has been confirmed in Byzantine society, for whom the lute was also a borrowing from the empire's eastern cultural regions. We know the extent to which music and musical instruments could have played a major role in the strategies of recognition and promotion of political power, notably for the Byzantine Emperor Theodosius (SEEBASS 2011: 54). Similarly, to explain the presence of a short-necked pear-shaped lute on the ivory binding of the Dagulf Psalter made during Charlemagne's lifetime, it could be suggested that this little instrument could have acquired its iconographic role in a burgeoning Carolingian society by representing a way of asserting a dual geopolitical claim that was both synchronic and diachronic: a geographical expansion towards the East whilst also a historical connection with classical antiquity. This little instrument would thereby, in its own way, have played a part in the setting up of the Carolingian Empire, or at least in the construction of its image. In this respect, its presence and iconographic place may also attest to actual practice, in the sense that it could have been one of the instruments used in the vast empire, thereby representing the instruments played in the frontier regions of the Byzantine Empire. We also know the role played by music in the assertion of Carolingian imperial power (RUINI 2011). Thus, just as the organ had reached the court of Pepin the Short from the Byzantine Court in 757,³⁵ bringing with it all the pomp surrounding it in Byzantium, the lute's popularity and status in the

³⁵ HOMO-LECHNER 1996.

Byzantine Empire might have prompted a similar response among the Carolingians, thereby playing a part in its spread into other provinces. Once again, it is hard to say whether this was due to an ideological and iconographic dissemination via the *scriptoria* or to the instrument's concrete success among musicians. Byzantine culture spread far beyond the political frontiers of the empire, as seen for example in the influence it exerted on the arts at the court of Otto and in his study centres in the 10th and 11th centuries (GOZZA 2011: 29). The example of the lute in the Monte Cassino manuscript could confirm a link between the instrument and the spreading influence of Byzantium, since the instrument shows clear signs of Byzantine artistic influence, and there is evidence of Byzantine cultural presence in the region. Similarly, the Lothair Psalter, depicting David on the throne holding a short-necked pyriform lute in folio 5r—apparently in response to the portrait of Lothair in folio 4r—contains a reference to the Byzantine embassy in 842, thereby evoking an additional cultural proximity between Byzantium, the lute, and the Carolingian world.

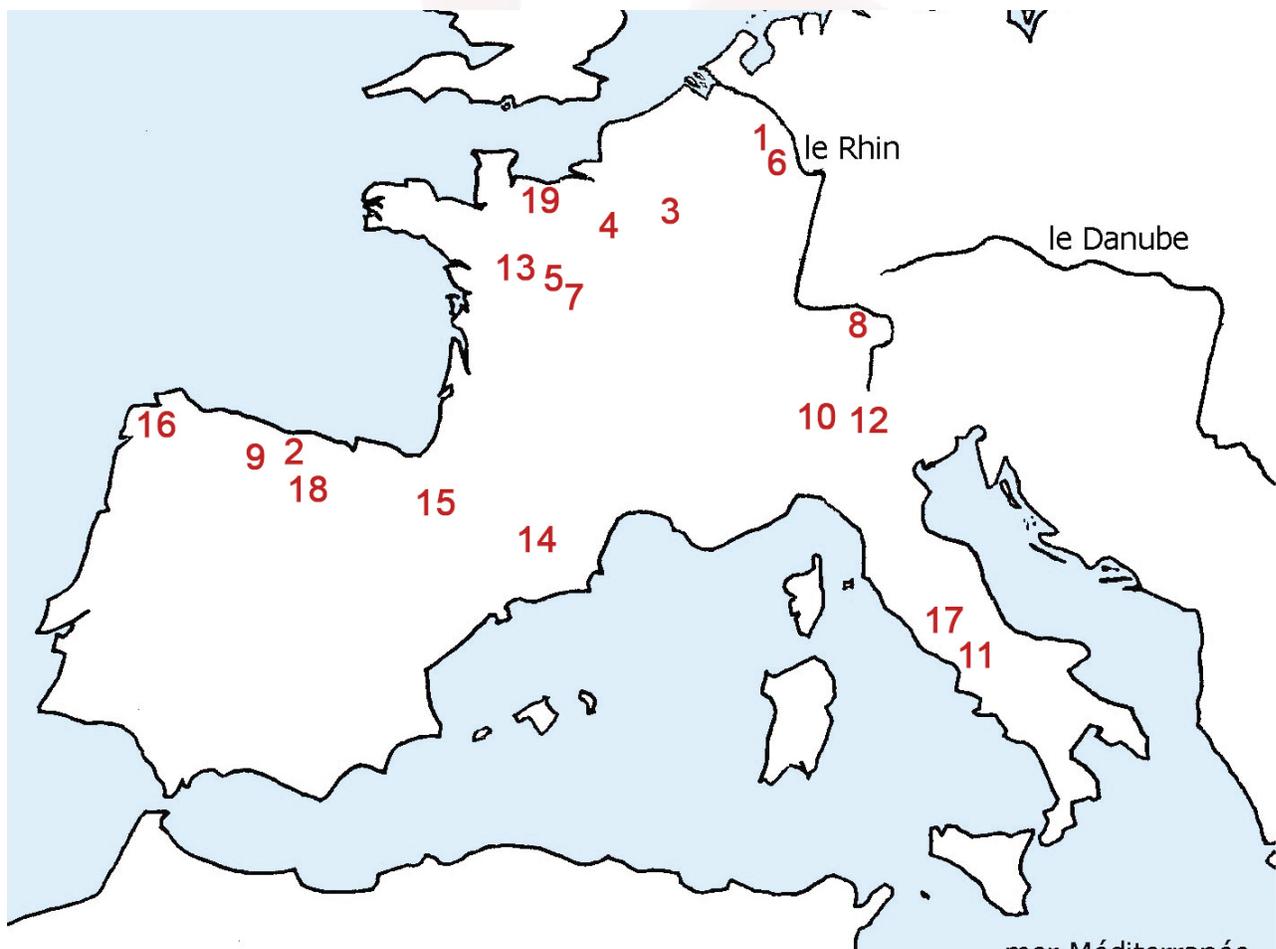


Fig. 26 Geographical distribution of medieval representations of single-block lutes in Western Europe from the 8th century onwards.

Table of medieval representations of single-block lutes in Western Europe from the 8th century onwards.

no.	century	date	origin	iconographic source	instrument
1	8th	783-795	Aix-la-Chapelle	Dagulf Psalter	short-necked pyriform lute
2	8th	786	Monastery of Santo Toribio de Liébana. Northern Spain	<i>Commentary on the Apocalypse</i> , Beatus de Liébana	long-necked pyriform lute with bent pegbox
3	9th	813-835	Reims	Utrecht Psalter	long-necked 'lyriform' lute
4	9th	820-830	Abbey of St Germain-des-Prés, Paris	Stuttgart Psalter	long-necked pyriform lute with angular shoulders
5	9th	840	School of Tours	Institutio arithmetica, Boethius Class. 5, f. 9v, Bamberg	short-necked lute with angular shoulders
6	9th	840-855	Aix-la-Chapelle	Lothar Psalter	short-necked pyriform lute
7	9th.	845-856	scriptorium of the Abbey of St-Martin de Tours	First Bible of Charles the Bald	short-necked 'lyriform' lute
8	9th.	ca. 890	Abbey of Saint-Gall	Golden Psalter of St. Gallen	short-necked 'lyriform' lute
9	10th.	962	<i>Northern Spain</i>	<i>Beatus</i> of San Miguel de Escalda	long-necked pyriform lute with bent pegbox
10	end of 10th		Ivrea, Italy	Psalter	short-necked pyriform lute
11	11th.	1023	Abbey de Monte Cassino	<i>De Rerum Naturis</i> , Rabanus Maurus Magnentius	short-necked pyriform lute
12	end of 11th		Milan, Italy	Boethius, <i>De institutione musica</i> Milan, Bibl. Amb., C 128 Inf., f. 46r	long-necked pyriform lute
13	end of 11th		Angers	Psalter Annotated for Angers Usage	short-necked pyriform lute
14	end of 11th		Church of Sant Quirze de Pedret, Catalonia	Fresco	short-necked pyriform lute
15	end of 11th		Cathedral of Jaca, Aragon	Capital of David and his musicians	short-necked pyriform monochord lute
16	12th	1168-1188	Cathedral of Santiago de Compostela	Portico de la Gloria	short-necked oval lute
17	12th		Rome, Italy	Bible of St. Cecilia Barb. Lat. 587, f194	short-necked lute with angular shoulders
18	13th		Cathedral of Burgos, Spain	portal	short-necked lute
19	15th		Church of Saint Gervais de Falaise (Normandy)	portal	4-stringed short-necked pyriform lute

2. Experiments in the 'Archaeolutherie'

The first published work on the reconstruction of a monoxyle lute dating to Roman times was part of the joint project carried out in Santiago de Compostela between 1989-1990.³⁶ Bringing together luthiers and researchers, this multidisciplinary project was seminal to the organological research in that it enabled us to set up solid knowledge bases for the musical instruments of the Roman era. The lute has remained a minor instrument and has not aroused the interest of luthiers, researchers or musicians, owing to the scarcity of documentation on the subject and to the belief that it has been superseded by the vielle. It was in 2005 that I undertook to study this type of lute through a work of reconstruction. The benchmark model was initially the Monte Cassino miniature (fig. 24), which, in my view, confirmed the true place of the lute in the Roman *instrumentarium*. Uninterrupted thus far, this research has gone on to enable me to discover a far richer iconography than was expected. This study has focussed mainly on the short-necked pyriform lute, aiming at examining the organological and musical links it might have had with the vielle since its introduction.

The Monte Cassino miniature is at once precise and vague. On the one hand, it delivers precise information: a profile that is in proportion and can be adjusted by means of a compass, three pegs with clearly-defined ears, and a folded-quill plectrum. On the other hand, the image leaves much to the imagination: although the three lines representing the strings are clearly depicted, two of them seem to be double lines, the visible face of the instrument is merely a flat surface revealing neither a bridge, nor openings on the soundboard, nor any separation between the soundboard and any potential attached or built-in fingerboard. Furthermore, as is the case with almost all of the lute iconography, the instrument is shown from the front, preventing one from determining the exact shape of the body of the instrument along with its type of construction. These problems are typical of a reconstruction work that has just one iconographic document to rely on. The only two full-relief sculpted representations are not much help in determining the shape of the pyriform lute, since, in the case of the lute on the stone capital in Jaca, the instrument is shown from the front and is more like a bas-relief, and, in the case of the *Portico de la Gloria* in Santiago de Compostela, the lute is an oval one. Faced with these huge gaps in one's knowledge, a certain number of assumptions are then required for fleshing out the images. The ethics of this guesswork resides entirely in respecting the knowledge available on the history of the technology as well as in a comparison with contemporary instruments, whose construction techniques are better known.

For this first reconstruction project (fig. 27), it was not a matter of reproducing just one model. Faced with the vagueness of the miniature, the project was to design an instrument in the light of all the defining organological attributes of what a pyriform-type of Roman lute could have been. It

³⁶ This project was the subject of a very well-documented publication containing in-depth articles and reports by lute-makers (LOPEZ 1994)

was therefore a matter of identifying a certain number of distinctive features. The extrapolations relating to the basic model resulted from borrowings from other depictions of lutes that were contemporaries of the Monte Cassino miniature. The organological choices are as follows:

- the main material used for the soundboards of necked chordophones is wood. The use of animal skin seems to be confined to regions known to have been influenced by Arab-Berber culture. Crafted from a single block, it tends to be asymmetrical. The softwood, still preferred today, is evident in the archaeological relics, just as it is in the traditional instruments of this type;
- a rounded body was the shape chosen for the back of the instrument. This shape can be seen on long-necked lutes with hollowed-out bodies played in the Middle East, such as the *saz* or the *dotara*, along with the central ridge, whose purpose remains aesthetic;
- the diamond-shaped pegbox was widespread amongst western-European necked chordophones from early Roman times. Here, it is more marked than on the model, due to the narrowing of the neck, whose section has been reduced in order to suit the number of strings;
- the mobile bridge has been made of bone, as can be seen on traditional instruments such as the Iranian *dotara*;
- the tailpiece is reduced to a simple gut binding to which the strings are attached. These can also be attached to the terminal protrusion, sculpted in this case into an anthropomorphic face;
- gut frets have been tied around the neck. This choice is based on the iconography from Ivrea (fig. 19).

Two orders received from the *Sequentia* ensemble (directed by Benjamin Bagby) and the *Ligeriana* ensemble (directed by Guy Robert) for their Carolingian Chant programmes—orders received in 2010 and in 2012, respectively—were the springboard for the reconstruction project (fig. 28). The organological features remain the same apart from the following two differences:

- the soundbox has been enlarged in order to boost the fundamental frequency of the harmonic spectrum of the low notes.
- with this in mind, the neck has also been lengthened in accordance with the precepts described in medieval Arabic treatises on the '*ud* lute',³⁷ wherein the pitch of the instruments is explained primarily by the length of the strings;
- always hollowed from a single block of wood (in this case, cherry wood), the body is given the shape seen on Roman *vielles* (Portail Royal on Chartres Cathedral, for example): the instrument is chiselled out of a solid piece of wood but the base remains a one-piece structure and vaulted;
- at the musicians' request, in order to facilitate string changes, a tailpiece was added (this one is made of bone and adorned with the signature of Charlemagne).

³⁷ See, for example: *La perfection des connaissances musicales* by theorist Al-Katib (SHILOAH 1972)

The process is dominated by the sculpting work (fig. 29). The art of crafting a medieval one-piece instrument therefore requires expertise in both sculpting and lute-making. In contrast to assembling pre-bent pieces, single-block craftsmanship consists above all of contouring the shape and volume of the instrument by gouging out material. Like the marble block of a sculptor, the tree that donated its wood potentially contains the instrument, so that the craft lies, to a great extent, in the choice of the piece of wood and its unique qualities.

Both ensembles were pleased with the sound of both instruments: “this is exactly the sound we required for our Carolingian Chants” (Guy Robert, email in 2012). Both rounded and dry, this tone favours the deep sounds, and stems from construction choices such as the free and solid structure of an asymmetric flat-sawn soundboard and the low tension of thick strings that have been made according to a historical process. The sound of an instrument resulting from a reconstruction work remains both arbitrary and determined by choices that remain a combination of scientific views and musical imagination. Here, it was not a matter of seeking to imitate either the tone of the *‘ud* lute or that of the Renaissance lute, or even that of the gittern, whose bright character is structurally enshrined in its organology. The tones tending towards the deep and that “dry roundness” are also inspired by those emanating from traditional lyres and stemming from the instrumental reconstruction, with the idea of corresponding to a musical soundscape once again borrowed from these tones. We have yet to define what could really have constituted a “Carolingian sound”. Here again, knowledge cannot but defer to the imagery...

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Fig. 1 Muse playing a lute (detail), terracotta figurine, 3rd century BC, Tanagra, Greece (Musée du Louvre).



Fig. 2 Greek bas-relief, 5th century BC. (cited in Buchner, Alexander, Colour Encyclopedia of Musical Instruments, Prague, 1980).



Fig. 3 Muse playing a lute. Bas-relief from Mantinea, attributed to Praxiteles or his workshop. National Archaeological Museum of Athens



Fig. 4 Lute from Antinoopolis, 3rd century.



Fig. 5 Funeral stele of Lutatia Lupata from Emerita Augusta (Lusitania). Late 1st century or early 2nd century. Museo Arqueológico de Mérida. Inv. 8. 241.



Fig. 6 Bronze depicting a pandura found at Banasa, 2nd or 3rd century. Musée archéologique de Rabat, Maroc.



Fig. 7 Bas-relief on a sarcophagus from Pozzuoli, 3rd century. Museo Archeologico nazionale di Napoli (picture : O. Féraud).



Fig. 8 Sarcophagus of Iulia Tyrania, Arles, 2nd or 3rd century.



Fig. 9 Fresco in the Chapel of St. Martin (aka Oil chapel), old Cathedral of Salamanca, 14th century.

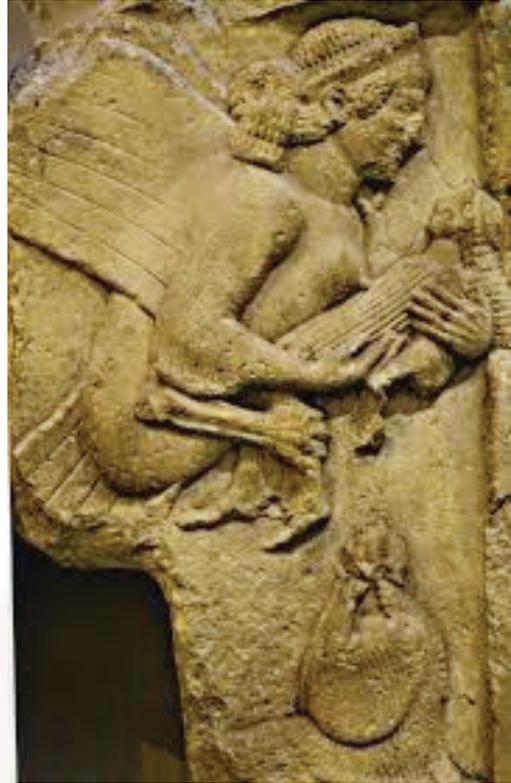


Fig. 10 Bas-relief from Xanthos, Lycia, 500 BC. British Museum, London.



Fig. 11 Fresco in the Saint Sophia's Cathedral, Kiev, 11th century.



Fig. 12 Ivory plaque from the Dagulf Psalter, school of the Palace of Charlemagne (between 783 and 795). Musée du Louvre.



Fig. 13 David playing the lute. Lothar Psalter, Add. 37768, f. 5. British Museum.



Fig. 14 Portal of the Cathedral of Burgos, 13th century (picture: Christian Brassy).

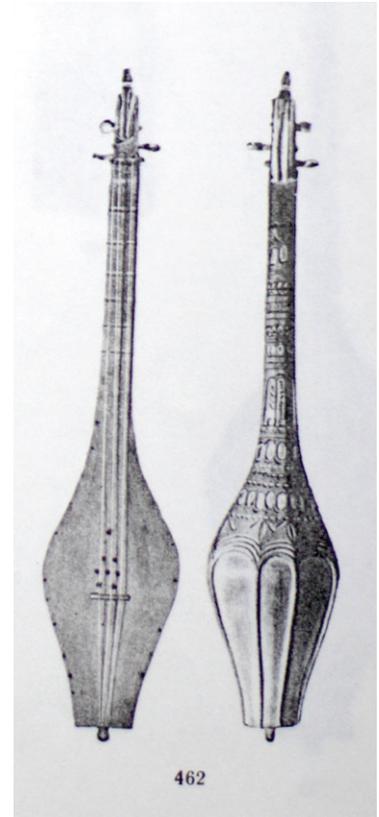


Fig. 15 Pánduri from Georgia. In VERTKOV (1975).



Fig. 16 Cod. Bibl. ff. 23,108r. Württembergische Landesbibliothek, Stuttgart. 9th century.

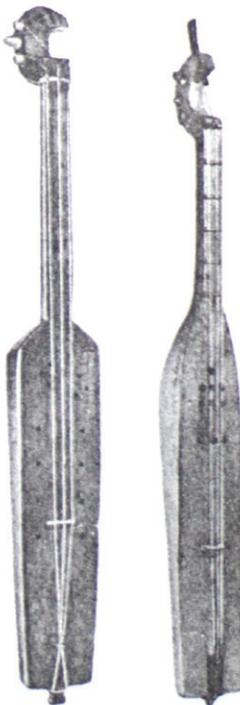


Fig. 17 Two dála-fandýr lutes from South Ossetia. In VERTKOV (1975).



Fig. 18 Italian Bible, Rome, Vatican Library, MS Barb. Lat. 587, f.194. Mid-12th century



Fig. 19 Asaph holding a lute. Amiens, Bibl. mun., ms. Lescalopier 002, f. 011.



Fig. 20 Ivrea, Biblioteca Capitolare, Cod. LXXXV, f. 23v.



Fig. 21 Boethius, *De institutione musica*. Milan, Bibl. Amb., C 128 Inf., f. 46r.



Fig. 22 fresco from the church of Sant Quirze de Pedret, late 11th century, Museu Arqueològic de Solsona, Catalonia.

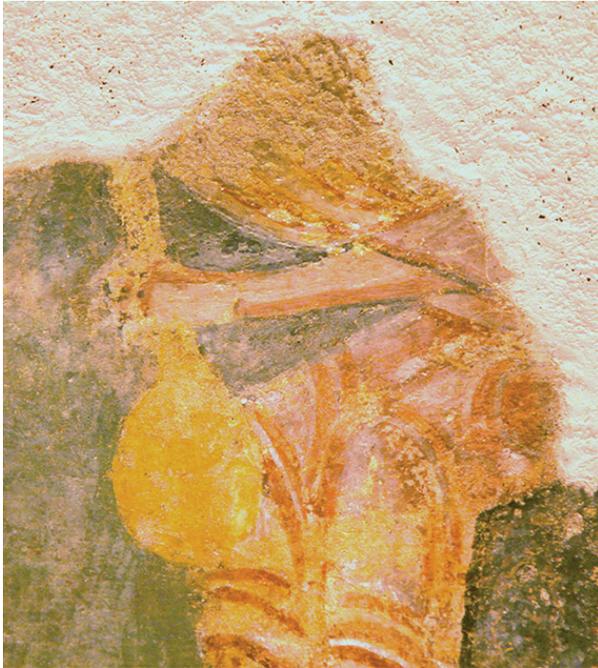


Fig. 23 Church of Sant Quirze de Pedret, late 11th century, Museu Arqueològic de Solsona, Catalonia.



Fig. 24 Miniature from the chapter devoted to music in the *De Rerum Naturis* by Rabanus Maurus Magnentius, Montecassino, 1023 (Cod. Casin. 132).Catalonia.



Fig. 25 Portico de la Gloria, Santiago de Compostela, 1168-1188.



Fig. 27 Reconstruction project of a Roman lute carried out in 2005 (picture: O. Féraud).



Fig. 28 Reconstruction project of a Roman lute carried out in 2010 for Norbert Rodenkirchen, member of the Sequentia ensemble (picture : O. Feraud).



Fig. 29 The body of the instrument is cut out, hollowed out with an adze, finished with a gouge, carved and smoothed out with a scraper (picture: O. Feraud).