

How did music sound in ancient Greece?

Greece, its temples, its statues, its museums... A hurried tourist, even with a superficial look and having not thought about the history of Athenian democracy, its philosophers, its scholars and its great authors, soon will ask the question: but how did sound the music played by countless characters painted on vases, sculptures as bas-relief or statues, which hold in their hands strange instruments? Orpheus and his lyre, Pan and his flute, Apollo and his zither, statues or legends: music is everywhere.



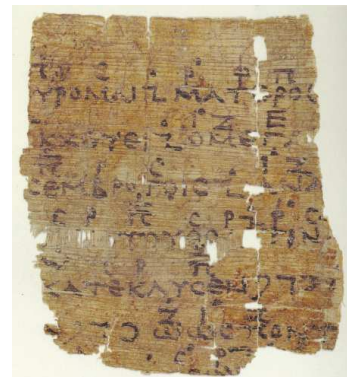
We may have a pretty good idea of **musical instruments**, so often depicted on vases, frescoes or sculptures. But still we must consider that the Greek history spreads over a long period, and the musicians of Cycladic statuettes (2700-2500 BC) have probably little in common with the ones of the classical and Roman times. Some rare archaeological finds – taking into account the fragility of the material – were discovered, and complement - and sometimes correct - this knowledge. Indirectly, quotes and comments on tragedies, comedies, poems and various literary texts also provide valuable elements.

But the reconstruction of ancient music requires also the availability of music scores, and this is the most problematic point. Put it all together, in total, only about sixty musical documents were found, many of them being torn, creased, written on delicate papyrus. The few texts engraved on stone steles, more complete, are of utmost interest.

Researchers soon realized that the little signs written above the lines of texts should correspond to a musical notation. But how to transpose these signs on the five-line staff we use today, with bars, notes, rests and other symbols that seem so familiar to us?

Fortunately, the musical theories developed by the Greeks are well known, which may seem surprising. And yet, we have entire treatises on this topic and we know even that Pythagoras and Ptolemy designed stringed instruments for the sole purpose of studying sounds, musical intervals and the physical rules of harmony.

Regarding the musical theories and notations, we may refer to the work of Aristoxenus of Tarentum, Aristotle or Nicomachus of Gerasa whose works were abundantly transcribed and published, and are all available today. But still, the notation system is very complex, especially since it is different for sung music or music played on an instrument. In total, nearly 1070 different signs, placed above the syllables of words, indicate how the music should be played



If these theories allow to know quite well the sequence of notes which make a melody, the rhythm, the duration of each note or rest, and the tempo (speed at which the music was played) are more complicated to reconstruct, and many researchers have worked on this point. And fortunately, some of them have tried to reconstruct both the instruments and the ancient melodies, and perform today on stage.

Of course, some performers, less scientific or simply seeking for a popularization result, sacrificed historical truth to the pleasure of our modern ears, but after all, our great classical composers were also adapted to our time, sometimes with success. At least, we can have this way a pretty good idea of some ancient known melodies.

Do you want to know more and listen this music?

Many publications, but also records and - thank you internet - podcasts, are now easily accessible. We propose below a selection that should arouse your curiosity... Because since the number of available music scores is small, the most complete ones were taken over by all the scientific musicians. Comparing the different versions may thus be interesting too!

Several orchestras perform on stage and publish records. In France, note the Kerylos group, led by Annie Belis, a leading French specialist in ancient music (www.kerylos.fr). Arkeomusica presents also conferences with demonstration of reconstructed ancient Greek instruments (flyer: www.anticopedie.fr/dossiers/arkeomusica.pdf).

The Atrium Musicae of Madrid is also well known, as well as Terpandros and the prolific Greek group Melos Archaion led by Petros Tabouris. Others names are LyrAvlos, De Organographia, etc. We mention most of them below, indicating links that allow listening to all or part of these records online.

Musical instruments of Ancient Greece

Let's first briefly review the instruments of ancient Greece, which all prefigure more or less the ones we know today.

The pictures below have been reproduced with the kind permission of:

- the group **Terpandros** which also displays on its website <http://terpandros.com> short musical illustrations that give a good idea of the sound of the instruments,
- the **Museum of ancient Greek musical instruments, toys & games** www.kotsanas.com (for these pictures, the name of the museum appears on the image watermark).

1. String instruments

Among the oldest instruments are the harp, the lyre and their variants, where the number of strings varied greatly from one model to another and over time.



The harmony of the harp is due to the variable length of its strings. It was known from the period called "early Cycladic" (2800 to 2700 BC).

The lyre has an almost symmetrical shape, and its sound depends on the tension applied to the strings. It counts some variants like the phorminx of the Homeric poems, and the barbiton which has a deeper sound. The zither is very close to the lyre except that its arms also act as a sound box, but both names are often confused. These instruments are those of the gods, Hermes and Apollo...

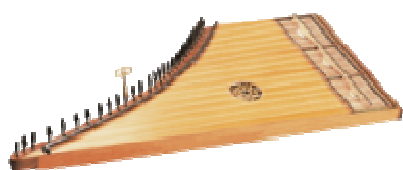
1.1. Harps

These harps are called trigone, epigone, magadis or pectis



The triangle harp (left)

The magadis or peektis of Sappho (right)



The epigonion is closer to what we call a zither nowadays.



The sambyke is not a lute; its curved neck makes it more a kind of harp.

1.2. Lutes

With their long neck, they are the ancestors of most of our current string instruments. Several variants exist (pandura, trichordon ...)



The pandoura

1.3. Lyres and zithers



This lyre was widely used as an educational instrument for young people.



7-string lyres



8-string lyres

Right: baritone lyre





The barbitos is larger, and thus has a deeper pitch.



8-string barbitos



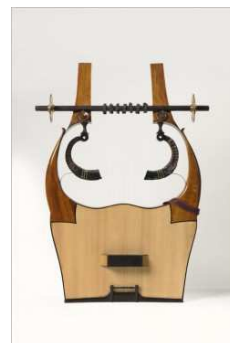
The archaic 4-string zither



Homer's phorminx



The zither of Orpheus (left)
Apollo's zither (right)



1.4. Instruments for research and studies

Pythagoras, Ptolemy and some other have studied harmony in its physical form: influence of the string's length and tension, etc.



The monochord of Pythagoras was the first scientific musical instrument in history



The Pythagorean 4-string helicon



The Pythagorean 6-string syntonon



Ptolemy's 8-string helicon



Ptolemy's 15-string canon

2. Wind instruments



The aulos is the most famous of these instruments. Though often erroneously translated as "flute", it had a reed like the oboe.



The diaulos was made of two auloi blown simultaneously: one plays the melody, the other the accompaniment.



Rarely mentioned, the ascaule was an aulos equipped with an inflated bag, like our bagpipes. The plagiaulos is another rare instrument known by some findings, a kind of transverse flute.



The common flute was rarely used. It was more the shepherd's instrument.



The famous panpipes, or syrinx, had several tubes of stepped or equal length (in this case, they were partially filled with wax).



The ancestor of the contemporary organ, the hydraulis (hydraulic organ) invented by Ctesibius belongs also to this family.



Some instruments are closer to our brass instruments. They are made of

natural horn (keras), shells (conch) or metal (salpinx), but are mostly used to transmit signals and not for their musical quality...



The oriental salpinx (left)
The greek salpinx (right)



The conch (cochlos)



The horn



3. Percussion instruments

3.1. Idiophones



The cymbals (kymbalas)



Clapper (krotala)



The sistrum, known from ancient Egypt, is made of pottery, metal...



...or snail shells!



The kroupezion (clapper) accompanied the chorus movements with rhythmical beats.



The xylophone (psithyra) looks like a small ladder, each rung having a different mass.



The oxyvafoi is made of clay pots displayed on wooden bases.



These cymbals, having the same diameter but different thickness, were used by Hippasus of Metapuntum to study the musical intervals.



Musical chime bells (kodones).

3.2. Membranophones



The drum (tympanon)



The instrument (roptre) looks quite like today's tambourine, and is fitted with pairs of small metal jingles.

Selected websites

http://terpandros.com/index.php?option=com_zoo&view=frontpage&Itemid=5&lang=en

<http://jpchorier.perso.sfr.fr/introductionalamusique/lagrece2.html>

http://jfbradu.free.fr/GRECEANTIQUE/GRECE%20CONTINENTALE/PAGES%20THEMATIQUES/musique/la_musique_en_grece_antique2.php3

<http://francoib.chez-alice.fr/dora/dora1/>

<http://hinkosan.unblog.fr/files/2010/02/972003amlie.doc?>

http://en.wikipedia.org/wiki/Greek_musical_instruments

<http://etc.usf.edu/clipart/galleries/242-ancient-greek-musical-instruments>

<http://www.lyravlos.gr/authentic-ancient-instruments-en.asp>

<http://www.aug.edu/~cshotwel/2001.Greeks.htm>

http://fr.wikipedia.org/wiki/Lyre#Les_variantes_de_la_lyre

<http://fr.wikipedia.org/wiki/Lyre#Phorminx>

Bibliography, discography...

A conference

- « Réécouter la musique grecque antique », Conference by Annie Bélis at ENS, may 2010
http://www.dailymotion.com/video/xe0gxi_annie-belis-reecouter-la-musique-gr_music

Greek music and its place in ancient civilization

- http://fr.wikipedia.org/wiki/Musique_grecque_ancienne
- <http://www.ecoles.cfwb.be/argattidegamond/cartable%20musical/Antiquit%C3%A9/gr%C3%A8ce.htm>

Musical instruments

- <http://www.kerylos.fr/instruments.php>
- http://www.terpandros.com/index.php?option=com_zoo&view=frontpage&Itemid=5&lang=en
- <http://www.kotsanas.com/fr/cat.php?category=21>
- http://www.actu-histoireantique.com/pages/Archeologie_experimentale_la_musique_grecque_antique_retrouvee-4174307.html
- <http://jpchorier.perso.sfr.fr/introductionalamusique/lagrece2.html>
- http://bildbasis.de/index.php?main_page=product_info&products_id=3045
- http://en.wikipedia.org/wiki/Greek_musical_instruments
- http://www.musikarchaeologie.de/altgriechische_musikinstrumente.html
- <http://www.gutefrage.net/frage/musikinstrumente-der-griechischen-antike>

Musical theory and notation

- <http://jpchorier.perso.sfr.fr/introductionalamusique/lagrece2.html>
- http://fr.wikipedia.org/wiki/Musique_grecque_ancienne
- <http://www.ecoles.cfwb.be/argattidegamond/cartable%20musical/Antiquit%C3%A9/gr%C3%A8ce.htm>
- http://www.larousse.fr/encyclopedie/musdico/notation_musicale/169355
- <http://www.cosmovisions.com/musiNotation.htm>
- http://www.academia.edu/4153947/Approche_chronologique_de_la_notation_musicale

Exhibitions and museums

- **Museo Nazionale degli Strumenti Musicali di Roma, Italy**
<http://www.museostrumentimusicali.it/index.asp>
- **museum of Ancient Greek Musical Instruments and Toys & Games, Katakolo, Greece**
<http://www.kotsanas.com>
- **Museum of Greek Musical Instruments, Athens, Greece**
<http://www.athensinfoguide.com/wtsmuseums/museumofgreekinstruments.htm>
- **Exhibition :**
Martin von Wagner Museum, Würzburg, Germany, 13 dec.2001 to 20 march 2002
<http://www.museum.uni-wuerzburg.de/Musikausstellung.html>

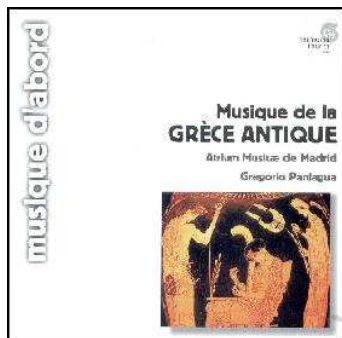
Sound recordings



De la pierre au son - Musiques de l'Antiquité Grecque

The Kerylos group, dir. Annie Bélis (K617-069). A reconstruction of ancient music based on the decryption of papyri, inscriptions and medieval documents, played on instruments reconstructed from ancient models. Excerpts from the CD are available on the site of Kerylos. CD K617

http://www.cd-baroque.com/index.php/cdbaroque/accueil/disques_k617/catalogue/les_raretes_de_k617/musiques_de_l_antiquite_grecque



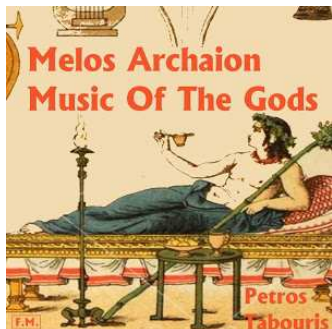
Musique de la Grèce Antique

Atrium Musicae of Madrid directed by Gregorio Paniagua

Harmonia Mundi **HMA 1951015**

http://www.harmoniamundi.com/musiquedabord/pdf/PDF_1951015_F_E_D.pdf

<http://www.youtube.com/watch?v=a1z0zaGDzIQ>

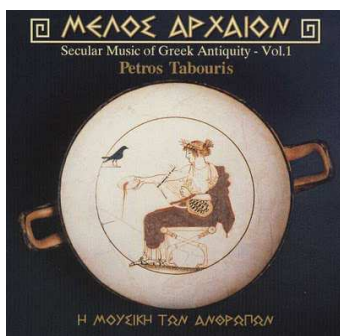


Melos Archaion – directed by Petros Tabouris

2012 FM - Records

<https://play.google.com/store/music/album?id=Bdlhfafszej5cenc5slmwoc yewa&tid=song-Tc7quafr5nblzqgjehaosl2d7yi&rdot=1&rid=song-Tc7quafr5nblzqgjehaosl2d7yi&partner=ytctb>

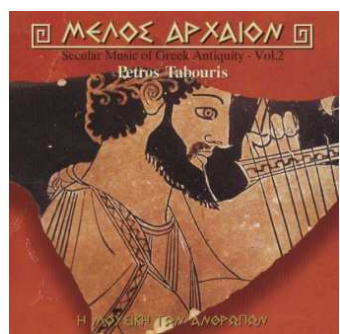
<http://www.virginmega.fr/musique/album/music-of-the-gods-melos-archaion-petros-tabouris-115499266,page1.htm>



Melos Archaion – directed by Petros Tabouris

Melos Archaion vol. 1

Secular music of greek Antiquity



Melos Archaion – directed by Petros Tabouris

Melos Archaion vol. 2

Secular music of Greek Antiquity

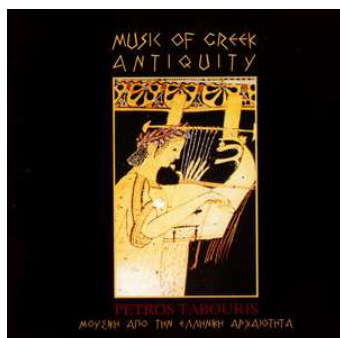
<http://melitainsula.blogspot.fr/2010/07/melos-archaion-ii.html>



Petros Tabouris – Tasos Aloupis

Ancient Greek melodies

FM Records

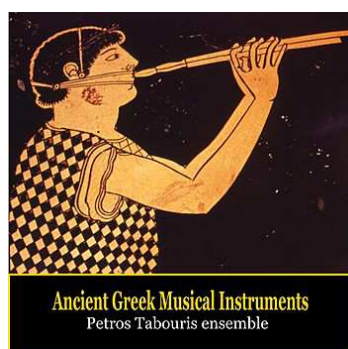


Melos Archaion – directed by Petros Tabouris

FM Records

2 may 2011

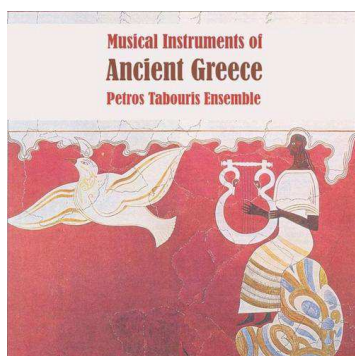
Music Of Ancient Greece & Music Of Greek Antiquity



Melos Archaion – directed by Petros Tabouris

OLYMPUS

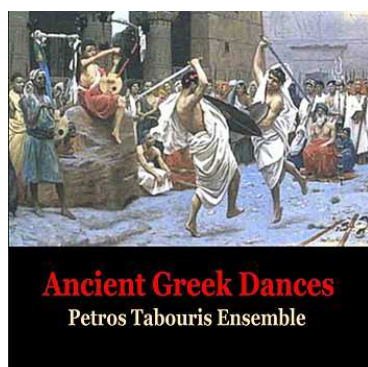
23 jan. 2009



Melos Archaion – directed by Petros Tabouris

Collector Records

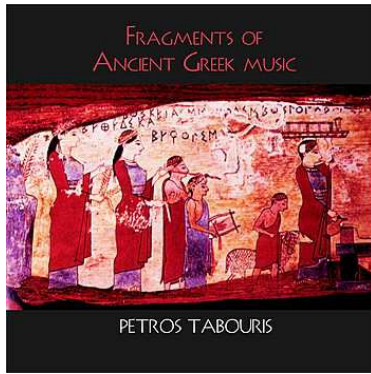
3 march 2011



Melos Archaion – directed by Petros Tabouris

OLYMPUS

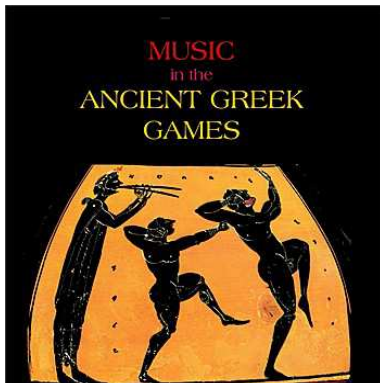
22 jan. 2003



Melos Archaion – directed by Petros Tabouris

HELLENICRECORD

8 april 2008



Melos Archaion – directed by Petros Tabouris

HELLENICRECORD

8 april 2008

Sound and video recordings on the web

Seikilos epitaph

Seikilos, son of Euterpe, 1st century AD.

Engraved on a tombstone from Tralles, near Ephesus, it was discovered and published by Ramsay in 1883. The musical signs were recognized by Wessely in 1891. The stone itself, long preserved in the Young collection in Boudja, had disappeared during the fire of Smyrna (September 1923). It is currently exhibited in the Museum of Copenhagen, Inv. NR. 14897

<http://www.youtube.com/watch?v=8eVPUBQy5Hg>

<http://www.youtube.com/watch?v=9RjBePQV4xE>

<http://www.youtube.com/watch?v=xERitvFYpAk>

<http://www.youtube.com/watch?v=ZV6QDQOw4S4>

<http://www.youtube.com/watch?v=WeCMiSrOK6w>

http://www.dailymotion.com/video/x9gdcb_musique-de-la-grece-antique-epitaph_music

<http://www.youtube.com/watch?v=w4BSYCUX6ss>

<http://www.youtube.com/watch?v=BWyXPpf7Vjo>

<http://www.youtube.com/watch?v=Q3ZEzGtO18l>

<http://www.youtube.com/watch?v=mmeUE3HNNuc>

http://www.youtube.com/watch?v=P4_iWkP24Ww

<http://www.youtube.com/watch?v=U6hhI6N-hMc>

<http://www.youtube.com/watch?v=hpt2tV2yzjc>

http://www.youtube.com/watch?v=O_rpURXImBY

Orestes stasimo - Fragment of stasimon of Orestes by Euripides (480-406 BC)

Kerylos group in Delphi

<http://www.youtube.com/watch?v=wUrnDTCbcQI>

First Delphic Hymn to Apollo

C. 138 BC. by an Athenian composer

Marble slab discovered in may 1893 in the ruins of the Athenian Treasury at Delphi. Currently in the Museum of Delphi: Delphi Inv. NR. 517, 526, 494, 499. Vocal notation.

<http://www.ecoles.cfwb.be/argattidegamond/cartable%20musical/Machault/machault.aif>

http://www.dailymotion.com/video/x9dg9c_musique-de-la-grece-antique-hymne-d_music

<http://www.youtube.com/watch?v=6yhmYbulEPM> (Atrium Musicae)

Second Delphic Hymn to Apollo

Limenios, son of Thoinos. Athenian, ca 128 BC

Marble slab broken into several fragments discovered in the Treasury of the Athenians at Delphi in 1893. Museum of Delphi – Delphi INV. NR. 489, 1461, 1591, 209, 212, 226, 225, 224, 215, 214.

Instrumental notation.

<http://www.youtube.com/watch?v=bydqNRYgbuc>

Hymn to Zeus

<http://www.youtube.com/watch?v=Sc109u7Zw8M>

Musique de la Grèce antique - Skolion (lamentation)

http://www.dailymotion.com/video/x8wcit_musique-de-la-grece-antique-skolion_music

Miscellaneous

<http://www.youtube.com/watch?v=p8yWpQfN-V8>

LyrAvlos group

http://www.youtube.com/watch?v=BNK5SU_sisc

Pythagorean Tone Generator : Music of the Spheres

<http://www.youtube.com/watch?v=BhqqOH0gDIc>

Michael Levy plays the lyre

<http://www.youtube.com/watch?v=eIERNFoEf3Y>

Sappho's Wedding Hymn (Epithalamion)

<http://www.youtube.com/watch?v=5sZMUReQqxs>

La Musica de la Antigua Grecia

<http://www.youtube.com/watch?v=CVBlstni6p0>

Ensemble De Organographia - Calliope et Apollon (Mesomedes)

<http://www.youtube.com/watch?v=BVhzDtWvhA4>

Ensemble De Organographia - Pean and processionnel

<http://www.youtube.com/watch?v=gGVeZj1gmLc>

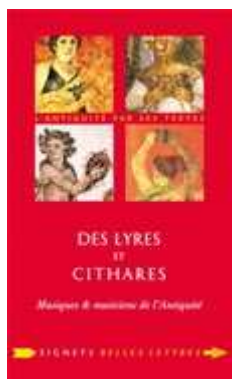
etc, etc.

<http://www.aug.edu/~cshotwel/2001.Greeks.htm>

<http://www.musiclodge.fr/article-la-musique-de-l-antiquite-119610329.html>

<http://www.lyravlos.gr/authentic-ancient-instruments-en.asp>

From the bookshelf



Séline Gülgönen

Des Lyres et cithares

Musique et musiciens de l'Antiquité

Précédé d'un entretien avec Annie Bélis

Ed. Les Belles Lettres, signets n°10 Support **Livre broché**

Nb de pages **300 p. Index** .

ISBN **978-2-251-03010-4**



Aristoxène de Tarente et Aristote : le Traité d'harmonique

Annie Bélis

Mai 1986

Klincksieck, Collection : Etudes et commentaires

ISBN : 2-86563-120-6



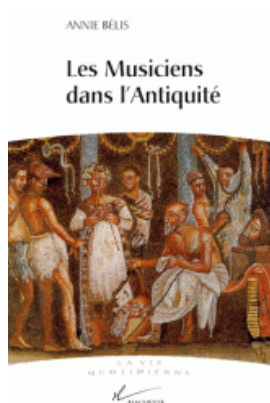
Dossiers d'Archéologie

La musique dans l'Antiquité

N°142, novembre 1989

ISSN : 1141-7137

- Son et musique paléolithiques
- Au temps des pharaons
- A la cour d'Akhenaton et de Nefertiti
- La musique du Proche-Orient ancien
- Les instruments de la Grèce antique
- La musique grecque, par E. Pöhlmann



Les musiciens dans l'Antiquité

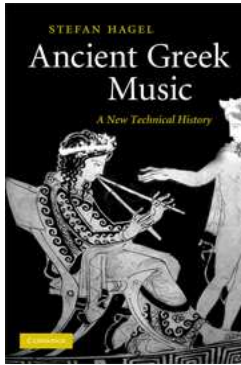
Annie Bélis

Mars 1999

Hachette, Collection : la vie quotidienne

ISBN : 2-01-235279-0

319 pages



**Ancient Greek Music
A New Technical History**

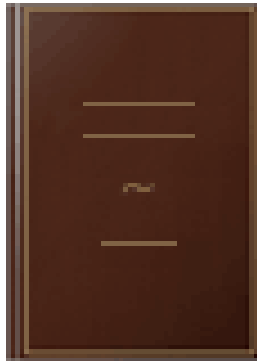
Stefan Hagel

Janvier 2010

Cambridge University Press

ISBN: 9780521517645

506 pages



L'instrument de musique dans la céramique de la Grèce antique: études d'organologie

Daniel Paquette

Bibliothèque Salomon Reinach, 1984

Volume 4 de Publications de la Bibliothèque Salomon Reinach

ISBN 2701800080, 9782701800080

262 pages

http://books.google.fr/books/about/L_instrument_de_musique_dans_la_c%C3%A9ramiq.html?id=isEZAQAIAAJ&redir_esc=y

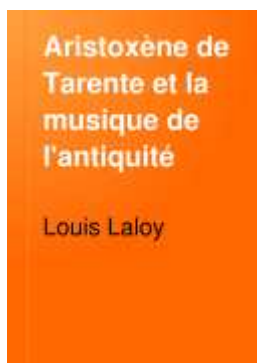


Histoire et théorie de la musique dans l'Antiquité

François Gevaert,

Anoot-Braeckmann, à Gand, 1875,

<http://gallica.bnf.fr/ark:/12148/bpt6k504010f>



Aristoxène de Tarente et la musique de l'antiquité

Louis Laloy,

Société française d'Imprimerie et de Librairie, 1904 – 371 pages

ET

Eléments harmoniques d'Aristoxène

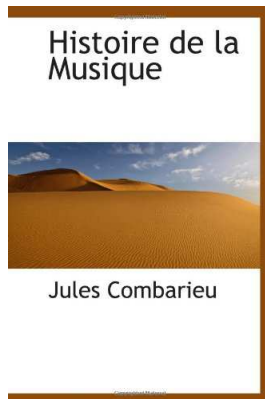
Pottier de Lalaine, 1871 - 128 pages



Manuel d'harmonique et autres textes relatifs à la musique

Nicomachus (of Gerasa.)

Baur, 1881 - 55 pages



Histoire de la musique des origines à la mort de Beethoven avec de nombreux thèmes musicaux

Jules Combarieu

Armand Collin

BiblioBazaar (30 septembre 2009)

668 pages

ISBN : 978-1113756121