



12th ISGMA-Conference:
Artifacts – Images – Texts. Archaeology and the Historiography of Sound
 University of Würzburg, 25. –29.09.2023

Abstracts

Andrei Aioanei, Regine Hunziker-Rodewald: Drumming Figurines as Icons and Indexes: The Semiotics of Wailing

As death occurs, a soundscape becomes a space of mourning: songs become laments, groans resound, and drums lose their mirth – an insight from the Hebrew Bible (Am 8:10, Isa 24:7-8, Lam 5:15). The materiality of burial practices in Iron Age II Transjordan, however, contradicts the monovalent nature of drumming. Clay statuettes in an intact multiple-use tomb at Mount Nebo depict a hand drum-playing gesture that appears to prolong a rhythmical performance. Based on Northwest and South Semitic terminology and ethnographic records, wailing is perceived as accompanied by stylised body movements to and fro, clapping hands, stamping feet, and singing to the beat of drums (cf. Goswami & Kumar 2022; Plancke 2015). The focus of this paper is on the multivalence of drumming in relation to the stated (in)compatibility of mourning and rejoicing (Olyan 2004, but cf. Katsanevaki 2009.2017).

Nicolas Arsenio: Gongs in the archaeology of music in ancient Java and Cambodia, 14th to 16th century CE.

This paper aims to describe gongs in the bas reliefs in Angkor Wat (Cambodia) and several temples in Java, dating from the 14th to the 16th century CE. It will trace and identify links with references to other sites in Southeast Asia. References to selected musical terms for gongs in inscriptions and classical literary texts, almost all of which are dated, will then be corroborated with the archaeological excavations of these instruments in shipwrecks and inland sites. The continuity of these data to the present leads towards a conception of an archaeology of sound.

References:

Nicolas, Arsenio

- 2021a Musical Exchanges, Music Loss and Music Shifts in Asia .Flat Gongs in the Archaeological Records, 2nd century BCE to 16th century CE. In Advaitavadini Kaul, ed. Asian Aesthetic Theories and Art Forms. Delhi : Indira Gandhi National Centre for the Arts, pp .151-179.
- 2021b Musical Nomenclature for the Sanskrit term *kangsa* in Southeast Asia. In *The Archaeology of Knowledge Traditions in the Indian Ocean World*, Himanshu Prabha Ray, editor. Pages 212 -242. London and New York : Routledge.

- 2021c Musical Instruments on the 16th century bas reliefs in the North Gallery-East Wing of Angkor Wat : Dating and Significance. Proceedings. The 4th SEAMEO SPAFA International Conference on Southeast Asian Archaeology and Fine Arts (SPAFACON2021). Bangkok. December 13-17, 2021, pp. 324-365.
- 2017a *Musical Terms in Malay Classical Literature : The Early Period (14th–17th Century)*. Nalanda Sriwijaya Centre Working Paper No. 14 (January 2017). Singapore : Institute of Southeast Asian Studies - Yusof Ishak Institute.
- 2011 Early Musical Exchange between India and Southeast Asia. In P.Y. Manguin, A. Mani, and Geoff Wade, (eds). *Early Interactions between South and Southeast Asia: Reflections on Cross-Cultural Exchange*, pp. 343-365. Singapore : Institute of Southeast Asian Studies.
- 2009 Gongs, Bells and Cymbals: The Archaeological Record in Maritime Asia from the Ninth to the Seventeenth centuries. *Yearbook for Traditional Music* 2009, pp. 62-93.

Alexandre M. S. Bento: Medieval Clay Drums Recovered in the Portuguese Al Andalus. New Leads and Contributions to Music Archeology

While similar studies have been conducted for the Spanish territory, Music Archaeology concerning the Portuguese Islamic Medieval period is still in an emergent state. In fact, although the Archaeology of Portuguese Al-Andalus has provided invaluable studies relating to musical instruments, an in-depth articulation with Musicology is long due.

In this endeavour, the study of archaeologically recovered clay drums is of special significance. It is important to precisely quantify how many clay drums have been found in the Portuguese Al-Andalus, to ascertain their main common characteristics, and to hypothesise what new research lines they open. The archaeological record is sparse but invaluable, a crucial resource for answering these questions.

In this paper, apart from the description of the recovered drums, an articulation with coeval written, iconographic, and archaeological sources is essayed. This paper aims to contribute to the historiography of sound and music, and their influence on the Intangible Cultural Heritage.

Jia Bonan (online): Innovative Form and Conservative Music. On the Rites and Music of Eastern Zhou and Qin

At present, there is no detailed record of Qin rites and music in the literature. From the unearthed Musical Instruments, the shapes and patterns of Qin Musical Instruments are very local characteristics. In the early Spring and Autumn period, the number of Musical Instruments in Qin was relatively small, but in the middle Spring and Autumn period, it was the first, which reflected the strength of Qin and the decline of the power of the King of Zhou. The combination of Bo bells, Yong bells and Qings was the standard of rites and music of Qin in the early Spring and Autumn period, and the three Bo bells were the highest level of Qin at that time. The sound sequence of Yong Bells is unified and continues the tradition of a previous era of tetratonic scales without the shang sound. The conservative tone series and the pieced instruments all reflect that: during the Spring and Autumn Period, the attribute of rites and music in Qin was higher than that of instruments.

Jeffrey P Charest: Bringing the Greek *Pandoura* Lute out of the Shadows

Of all the musical instruments of ancient Greece, the pandoura lute is the least studied and perhaps the most obscure. Aside from Higgins and Winnington-Ingram's 1965 article, 'Lute Players in Greek Art', there has been no in-depth study of the instrument. Through an analysis of the term's scant attestations from between c. 200 BCE-c. 8th century CE, along with examples of contemporary lute iconography, this paper will discuss some major themes that this material reveals, particularly the lute's relationship with music in pagan, Manichaean, and early Christian practices, and its overlooked role in Pythagorean music theory. In addition, the paper will propose an original theory for an etymology for the instrument's name and challenge H. G. Farmer's semi-canonical conflation of pandoura and the Iranian tambura "through metathesis", and argue that in reality the two lutes were distinct and separate entities.

Luboš Chroustovský, Marie Ondříčková: Conch horns used as magical weather treatment tools in Bohemia until the first half of the 20th century

In this talk we focus on seashell horns and their roles in specific beliefs and customs related to ritual weather treatment in Central Europe, mainly in the nineteenth and the first half of the twentieth century. Their sound was believed to advert heavy rains or hailstorms away from field crops. Since the Early Medieval times, the Church had been trying to suppress these 'pagan' practices, however the ethnographic record from Bohemia reveals that they sustained until the first half of the twentieth century. Nonetheless, the trumpets as material things received little attention and it seems only a few specimens have been preserved in museum or private collections. The presented conches reveal unexpected details of their manufacture and usage and testify that they were capable for sound production in accordance with the ritual practices.

Monika Ciura: The experience of power – the representations of musical practices performed in the Maya palaces in the Classic Period

Sounds produced in the Maya palaces were most likely used for signaling the unique status of the ruler and people of the royal court to the various types of "recipients": the other elites, the supernatural forces, and the „outsiders” – the commoners.

My presentation is devoted to revealing the patterns of musical practice in the Maya palaces based on iconographic sources. I analyze the types of instruments depicted in the palace scenes, their arrangement, the social status of the musicians, the placement of the musicians in relation to other participants, and the basic context of the event.

These analyses aim to answer the questions: could the arrangement and placement of the instruments in the palace events be designed with the specific experience in mind? How did the access to performing and listening to the music shape different experiences of the participants?

Bi Congcong (online): Resonating the Ethnic Melodies: Exploring the Interplay of Archaeology, Philology, and Musicology in Dongqing Fang's Lin Chong

This research focuses on Dongqing Fang's composition, *Lin Chong* (2009), inspired by the character from the ancient Chinese novel, *Water Margin* (1524). *Water Margin* is a renowned Chinese novel, making it a highly esteemed work of literature.

This project explores the intersections of ethnic music, literary analysis, and history within the composition. Its objective is to uncover the narratives and cultural significance embedded in the work. By blending ancient Chinese music and literature with contemporary composition, it presents an innovative approach to understanding ethnic traditions, compositional techniques used to portray the novel, and performance practices. This analysis reveals a narrative of ancient histories, offering insights into past cultural and sensory experiences. Moreover, recognizing and performing Fang's compositions encourages composers from diverse backgrounds, fostering a more inclusive music community. This project aims to contribute to a culture of sensory immersion through music and sound exploration.

Gabriela Currie: “Unseen by Eye, unheard by Ear”: String Instruments and Steppe Burials

Recent archaeological excavations in the wider Altai regions document the presence of musical instruments in several Turkic burials from shortly after the middle of the first millennium CE. In the present paper, I will explore the morphology and the archeological context of these objects and their possible shamanistic function as implied by cranial trepanation on the interred individuals. Further, I will highlight the conceptual predicaments raised by the entanglement of object, nomenclature, and function in these specific cases as attested in textual and iconographic sources of the tenth to the fourteenth century. Specifically, I propose that, although often incommensurable, textual and visual representations together with the archeological objects themselves evince complex patterns of organological circulation across Eurasian networks of Turkic cultural transmission.

Ireneusz Czajka, Katarzyna Tatoń: Clay or metal, rattle or bell - sphere archaeoacoustics

Archaeoacoustics is a relatively young field of science, its research focuses on several areas. Most often it is the study of the phenomenon of resonance or reverberation in ancient structures, both natural and man-made. But archaeoacoustics also deals with much smaller objects, such as the eldest musical instruments and sound tools. These include not only analyzes of the signals produced by the original tools, but also use, giving hitherto unknown possibilities, numerical modeling and reconstruction. Such research covered, among others, two bronze, early medieval bell-shaped pendants from Czeremo in eastern Poland. They provided unexpected results. The spectra of sounds both bronze bell pendants are very similar to each other, but, what is much more surprising, they are also very similar to the sound spectrums of ceramic ball-shaped rattles.

Jianjun Fang: Objects and Methods: Music Iconography in Chinese Archaeological Context

In ancient China, real musical instruments as funeral objects were gradually absent in tombs after the Han dynasty (202 BCE-220 CE), instead, it was replaced by unplayable pseudo-instruments like pottery bells and clay zithers. On the other hand, more and more music iconographic remains

appeared from sites and tombs. So far, the representations related to ancient Chinese music can be divided into two parts: 1) Unearthed music image that is usually found in archaeological context, other than isolated image itself. 2) Music image retained on the ground, which is fall into fixed (e.g. rock art, cave painting or temple statue, etc.) and movable (handed down ancient art works) types. From a visual point of view, music images are divided into two categories: planar (2D) and three-dimensional (3D). The former includes all kinds of pictorial representations, such as various paintings (rock, ground, pottery, lacquer and textile), engravings, murals, inlaid bronzes, stone reliefs, portrait bricks, etc.; The latter refers to sculptural works, such as stone or brick carvings, musician or dancer figurines made of different materials (pottery, stone, wood, jade, copper, etc.) and so forth. The images and ornamentation on the surface of musical instruments are not only part of evolution of musical instruments, but also one of the contents of music iconography. In this paper, I will discuss the objects and research methods of music iconography in Chinese archaeological context.

Xueyang Fang: Chime Racks and Pictorial Bronzes: Performance position of Ancient Chinese Musical Bells and Stones and its Meaning in Ritual Activity

A certain number of chime bells, chime stones and their racks as well as related pictorial bronzes dating from Eastern Zhou (770-256 BCE) to the Han dynasty (202 BCE-220 CE) have been archaeologically found in China in recent years. Some Warring States period (475-221 BCE) bronze vessels like hu, jian and dou depicted figurative decorations showing scene of musical bells and stones and their performers in ritual activities. Such iconographical sources include musicians who are striking chime bells and stones using two mallets, they look as if they are playing and dancing. From these images, we can see different positions for playing chime bells and chime stones, such as standing, kneeling and beating them using two hands. However, the performance position, whether standing or kneeling, depends on the height of the racks. Archaeological evidence of chime racks and pictorial representations have supported these two playing ways and gestures.

From unearthed musical remains, we can find connections in between performance position and chime racks. Parts of excavated data show that the height of bells and stones racks from Eastern Zhou to the Han dynasty is around 1 meter on average; in a few cases they are less than 0.9 meter. Given this height, performers would need to have been kneeling to play the instruments, assuming the rack was placed on the ground. Some Warring States representations of musical performance also show the images of musicians playing in this way. Apart from a kneeling performance position, certain music iconographic sources also indicate a standing position for playing chime bells and chime stones. However, we still have less evidence to testify that most of the unearthed racks are high enough to be performed by standing, although Zenghouyi chime bells and a few other cases are the particular exception. In this paper, I will discuss the kneeling, standing and bending positions in playing chime bells and chime stones based upon pictorial bronzes and excavated chime racks, explore the meaning of different playing ways and gestures in ancient Chinese court music.

Sandra Fleury: The Tympanum: The Booming Sound of Ecstatic Cults and Gods

The progressive introduction of the tympanum to the Dionysian world starting in the first half of the 5th century BC suggests that Athenians appropriated the cult of the Great Mother and the instrument most commonly associated with it. This observation, based on contemporary accounts, corroborates the distinction Athenians made between an ancestral religion and an “additional”

multifaceted one (see R. Parker, 1996; 2011; E. Kearns, 2015). It also demonstrates that Dionysus, an ecstatic god, was naturally associated with the Phrygian Mother and her instrument. Ecstatic rituals established communication between the realms of mortals and the gods, and ecstatic music was described as booming, deep and loud resounding (βρόμος, βόμβος, βαρύβρομος; cf. Bromios)¹. In observing the place of the tympanum in Athenian sources, it is possible to reconstruct some history facts and religious ideas, as well as a cultural perception of sounds.

¹ *Homeric Hymn to the Mother of the Gods*, (14) 3; Diogenes *TrGF* 1; Euripides, *Helen*, 1308, 1346-1352; *Bacchae*, 126-129...

Eva Fock: From Kitchen midden to Orchestra pit

Out of curiosity for the sound of our prehistory, the use of sound tools and musical instruments in Denmark during stone- and iron age, the project 'Lyden af oldtiden' (the sound of the prehistory) was established in 2021. Musicians, archeologists, a sound researcher, me as ethnomusicologist, and later school teachers and pupils, interacted in an attempt to gain new knowledge, and discover potential trans-disciplinary cross overs.

As often before, the most interesting results were not what we initially looked for, but new questions arising along the road: The curiosity of modern children meeting unexpected materials, reflecting on our use of sound in an experimental space, became the key stone. Prehistory could generate contemporary creativity, pointing towards future education programs.

Sharing experiences with ISGMA would offer an opportunity to meet music archeologists, test ideas, gain new inspiration and be challenged.

Anna Gandossi-Boshnakova: The so-called non-sense inscriptions in a musical context: identification, analysis, and interpretation

Ancient Greek painters construct music realities through visual narratives observing the details of musicians' practices which would often go unnoticed by other people. Since they control many aspects of the depiction some of them would choose to pair the music-related images with inscriptions to emphasize the storyline, just like today, in modern comics, the captions provide the audience with more clear information about how the story unfolds.

However, some of these inscriptions in Greek vase painting, such as lettering on depicted papyrus scrolls or a string of letters around musical instruments, come to us as mind-bending riddles that require painstaking attention to detail.

In the current paper, the author takes the iconographic approach supported by literary evidence and archaeological material to identify, analyze, and interpret the so-called non-sense inscriptions in a musical context in vase paintings attributed to Douris as well the Athena, Adria, and Eretria Painters.

Georg Gerleigner, Marie Louise Herzfeld-Schild: Visualising sounds in Greek vase-painting

In the sixth century B.C.E., Greek vase-painters began to visualise sounds by the use of inscriptions. In our paper, we will present the various means which they employed and look at them from both archaeological-art historical and musicological perspectives.

One of the case studies we will focus on is a red-figure amphora made in Athens at the end of the sixth century B.C.E. (today in Berlin, Antikensammlung 1966.19). It shows a satyr playing the double aulos from which a letter-chain emerges which has been interpreted very differently by scholars since it became known. In particular, we will discuss the plausibility of the hypothesis suggested by scholars that the inscriptions alludes to the ancient musical term (documented only later) νήτη.

Laura Gianvittorio-Ungar: Static Elements in Ancient Greek Dance. Combining Literary and Archaeological Approaches

My paper cross-examines literary/archaeological evidence regarding embodied renderings of the Niobe motif, in order to understand how static elements —e.g., frozen poses, prolonged immobility— enriched ancient dance spectacles.

Plays dealing with the Niobe motif offer themselves as cases in point because static elements had to be conspicuous in representing Niobe's metamorphosis into a rock. The focus is on Aeschylus' Niobe, for which there is literary as well as archaeological evidence, and on same-subject spectacles by South Italian theatre-makers, for which there is archaeological evidence only. These documents offer glimpses into likely performance strategies regarding, e.g., the counterpoints between actor's rootedness and choral dancing, the expressivity of immobility and the use of stage costumes. From a dance-historical perspective, our findings encourage comparisons with the kinaesthetics of post-classical pantomime, a genre which emphasised the abeyance of movement, and with modern dance works that express grief by restraining movement and functionalising the costume.

Anna Gruszczyńska-Ziółkowska: The sound of sacredness. Medieval pilgrimage bells

The Archaeological Museum in Gdansk there is a group of small (2-4 cm high) medieval so-called pilgrimage bells made of tin-lead. Like the badges popular among pilgrims, they were mass-produced, including by European centers associated with the cult of St. Anthony the Abbot. The Antonites were specialized in infectious diseases, especially in bringing relief from "St. Anthony's fire" - a serious disease caused by a grain fungus - ergot - the epidemic of which peaked in the 12th and 13th centuries. The saint's participation and role in helping the sick is reflected in the iconography of his figure (he is equipped with a bell). A peculiarity of pilgrimage bells is the extremely high sound (about 8-10 kHz). So the question arises - what was the purpose of creating such instruments. Some researchers point out that a component of the fungus that causes ergot is chemically similar to LSD, which can induce sensations similar to visions of their patron in patients. Among the symptoms caused by ergot alkaloids, of interest in this context are hearing disorders manifested by the fact that hearing was particularly enhanced.

Divyanshi Gupta: Survey on the Trio-Drum: representations of the three-drum set in ancient Indian art

The trio-drum refers to a set of three drums which consists of two barrel-shaped drums and one cylindrical-shaped drum and is a part of the orchestra instruments in the artwork. My analysis of these drums is based on the shapes of the instruments. Around the 1st century BCE, there was a set of only two drums. It can be suggested that this set of two drums served as a prototype for the trio drums, which only appeared in the paintings and sculptures of Western India from the 5th century CE onwards.

This paper investigates the trio-drum and the occasions of using it portrayed in the wall paintings and reliefs in India. Moreover, it traces the ancient names given to this specific set of drums in the historical sources.

Jawaria Hamid: Tracing Gandhāran Archaeology of Music; depiction in art panels

This paper revolves around the Archeomusicological aspect in Gāndhāra. The research is about the contribution that archeology can make to the understanding of ancient Gāndhāran music. From an ancient historical and ancient musicological point of view, music archeology is essentially concerned with (1) the archaeological study of the remains of musical instruments and (2) the study of music-related finds or representations from a historic context. By examining the material legacies, the knowledge expands considerably compared to the written sources. As we know that music and musical instruments can be traced to the beginnings of the world and recorded history. Similarly we can see the traces of music and musical instruments in the Gāndhāra art, where they have been clearly observed in the excavated material i.e. the reliefs, panels, and fragments.

Typically and ideally, the interdisciplinary cross-fertilizations between musicology and archaeology will proceed equally in both directions and result in different accents at the most. This is the first reason for sticking to the more generic and open designation of “archaeology of music” here. It complies, moreover, with a fundamental element of profound ambiguity in that archaeology specialises in empirical study of material objects with cultural reference, while the product of music is intrinsically immaterial. In this connection, musical instruments are its most direct and widely preserved material tradition. The core activity in archaeology of music is hence revealed by the practice of excavating, identifying, dating, examining and classifying cultural remains and visual representations of ancient musical instruments. But the research can start with the discovery of any physical trace of musical behavior and it can lead all the way to investigating symbolism and cognition of music in specific geographic periods, or cross-culturally. It also includes other sources when available (i. e., texts) and it deals with issues of methodology, theory and ethnoarchaeology.

This paper contains the representation of musical events in the form of reliefs, panels or fragments. The categorisation of musical instruments and their significance in terms of gendered identities is highlighted here. Data is collected from different museums of Pakistan, i.e. from Swat Museum, Taxila Museum, Peshawar Museum, Lahore Museum, and Islamabad Museum as well. The paper will elaborate the Music- Archaeological perspective of Gandhara Civilization.

Sajal Maria Hamid: Exhibition: Gandharava

Gandharva- an exhibition of indigenous, and archaeological musical instruments of Gandhara and contemporary age. The exhibition comprised of major categories of instruments i.e. Idiophones, membranophones, aerophones, chordophones. The exhibition will highlight the musical perspective of ancient Gandhara and the modern. Exhibited instruments are the collection from Rung School archaeomusicological gallery.

Gottfried Heel, Michael Schick, Gerhard Tomedi, Ulrike Töchterle, Nancy Thym: Die rätische Winkelharfe von Fritzens-Pirchboden. Von der Entstehung eines archäologischen Fundes zu einem rekonstruierten und spielbaren Musikinstrument (Workshop)

Das bei archäologischen Untersuchungen der rätischen Höhensiedlung am Pirchboden bei Fritzens in Nordtirol (A) in unzähligen Fragmenten geborgene Fundobjekt wurde bereits im Jahre 2000 als Teil einer möglichen Harfe, einer sogenannten Winkelharfe, angesprochen. Intensive Dokumentationsarbeiten am Objekt selbst sowie archäologische und ethnologische Recherchen fanden in den Jahren 2018-2020 am Institut für Archäologien der Universität Innsbruck statt. Im Jahr 2021 erfolgte dann, basierend auf den erhobenen Daten, die Erstellung eines sogenannten „beispielbares Arbeits- und Experimentiermodells“. Im Verlauf dieser Arbeiten konnten detaillierte Daten zur Morphologie und Tektonik des Fundobjektes sowie zu seiner Einbindung in ein nicht mehr erhaltenes Musikinstrument (Winkelharfe) und zu seiner möglichen musikalischen Nutzung gewonnen werden. Auch wenn unser Kenntnisstand zur Praxis der „rätischen Musikausübung“, abgesehen vom ikonographischen Material und wenigen fragmentierten Musikinstrumentenfunden gering ist, war es durch den „Nachbau“ möglich, in einem „neuzeitlichen/modernen“ Rahmen Töne zu erzeugen und das Fundobjekt als Winkelharfe im 21. Jahrhundert erklingen zu lassen.

Mark Howell: Musicians and their Instruments in the Maya Murals in Chajul, Guatemala

I discuss musicians and instruments depicted in recently uncovered murals in three houses in Chajul, Guatemala. The paintings synthesize Maya and Spanish styles and show scenes of cultural activity during the colonial period. My focus will be on the European and Mayan origins and histories for the instruments depicted, drawing on archaeological, pictorial evidence, viewed through the “Highland Guatemalan Maya Instrument Dance-Play Classification System,” a locale specific method I developed to understand the roles of soundmakers used for Highland Guatemalan Maya dance-plays (bailes) and other cultural events. My research confirms some assumptions about the instrument types shown, but led to the discovery of unexpected musical practices, one being the continuation of a 16th century chordophone tuning system. This and other discoveries are conferred, with attention ultimately turned towards a holistic examination of how the musical components can help date the paintings, and decipher the other subject matter shown.

Ruoran Huang: On the Evolution of Handle of Chinese Instrument Chunyu from the Eastern Zhou Dynasty to the Han Dynasty

From the Eastern Zhou Dynasty to the Han Dynasty, Chunyu was distributed in many places along the Yangtze River and spread to the southwest, Southeast and northwest. Its handle underwent an

evolution process from nothing to existence, from simplicity to complexity, from non animal shape to animal shape, and developed bridge, arch, ring, tiger, dragon, horse, lion and other shapes. The addition of the handle is helpful to the percussion and migration, and its animal shape reflects the ecological civilization, belief culture and communication relations of various places. The tiger handle had its own characteristics in Jiangsu, Sichuan and Hubei. After the Warring States period, it influenced each other and spread to the Central Plains. As the result of the Eurasian cultural input since the the communication from Han dynasty to Serindia, the horse handle and the lion knob shows the process of cultural exchange and infiltration in the northwest, Central Plains and southwest regions.

Ruoxin Huang: The Image and Connotation of Small Statues on Bronze Drums in Southern China

Bronze drums were popular in Southern China during the Han to Tang dynasties (202BC-907AD), which has large-shape and with many small statues located on the face or foot of it. In addition to the fixed frog statues, there are horses, cows, birds, tigers, aquatic animals, and scenes of human-animal interaction like horseback riding, cattle plowing, children pushing turtles, watching frogs fighting, etc., symbolizing the totem worship, the reverence for the spirit of brave, and the pursuit of wealth. The position of the statues reflects the playing style of each type of bronze drum: the frog statues are all located on the edge of drum faces, which is influenced by the Zhuang's cosmology and the drum's sound generation principle. Other multifarious statues were located at the edge of drum faces or at drum feet, indicating the method of sitting on the ground or side-strike was likely to be used.

Raquel Jimenez Pasalodos, Susana de Luis Mariño: The aulos fragment from Azaila (Teruel) and double piping traditions on the Iberian Iron Age

The aulos was one of the most important instruments of the Mediterranean ancient world. Its use among Iberians (several non-Indo-European populations that lived in the East and South East of the Iberian Peninsula during Protohistory) was, until recently, only attested through iconographical representations and written sources. In this paper, we will discuss the recent re-evaluation of a polished perforated ovicaprid diaphysis with bronze or copper staining from the Iberian site of Cabezo de Alcalá (Azaila, Teruel). This revision has permitted to identify the fragment with an aulos section, which shows a typology closely related to that of other instruments dated to Hellenistic times in different areas of the Greek world. Unluckily, the finding lacks proper archaeological information as it comes from an excavation campaign dated to the first decades of the 20th century. In this paper, we will attempt to contextualize the fragment, and we will try to connect it with other iconographical and written evidence of double piping practices on Iberian sole.

Nevin Khairy El Malt: Musicians and dancers in the Old and Middle Kingdom – an iconographic comparison

Throughout the Ancient Egyptian history, various music and dance representations have been documented on various scenes, including those associated with religious rituals, military parades and victory ceremonies, funeral rites, daily life activities, public street festivals and private celebrations.

The Middle Kingdom witnesses noticeable changes in the music and dance scene compared to those from the Old Kingdom. Some of these changes may be related to a possible change in the musical customs and traditions, others to some political, demographic and economic conditions, and others by the presence of musicians and dancers from other ethnic groups with their musical instruments during certain times in Egypt.

This paper aims to analyze and compare these changes, in order to gain a deeper insight and better understanding into the music and dance scenes of the Old and Middle Kingdom in Egypt.

Sepideh Khaksar: Exploring Elamite Music Archaeology: A Focus on the Long-Necked Lute (LN) and Bowlegged Musicians of the Second Millennium BCE

In the realm of music archaeology, our understanding of ancient Mesopotamian and Egyptian music is well-established through texts and depictions. However, the musical heritage of the Elamites remains a lesser-known domain. This presentation delves into the intriguing world of Elamite musical instruments, with a particular focus on the long-necked lutes and their variations in the second millennium in Susa and other Elamite-related archaeological sites, in southwest Iran.

These Middle-Elamite bowlegged figurines enigmatically represent these instruments, presenting challenges and prompting paradoxical iconological studies. My journey through this scientific trajectory poster presentation seeks to unravel the complexities of this subject, culminating in the reconstruction of the Elamite long-necked lute, an instrument intimately connected to the specialized Mesopotamian-Elamite Lute known as 'Tigidla'.

Heidi Köpp-Junk: Experimental music archaeology on ancient Egyptian instruments: Do the pictorial and textual evidence provide valuable clues to the playing technique of a musical instrument from pharaonic times?

Already in the middle of the 3rd millennium BC, a great number of archaeological, textual and iconographic documents refer to music. It was not only an entertaining factor, but played a major role in ritual context in temples or tombs, and at the royal court. Depictions of musicians using instruments are attested since the 4th millennium BC. The earliest textual evidence for singing dates to 3000 BC, for harps, flutes and other instruments ca. 2600 BC.

The instruments used in experimental music archaeology are often based on the archaeological findings. Nevertheless, musical instruments are attested in iconographic and textual sources as well. The music scenes documented in tombs since Dynasty 4 show that the hand position of the harp players is rendered very differently. The question arises whether this circumstance was also taken into account in the texts or whether one can draw conclusions about the playing method from the references in the texts. Textual evidence appears in the texts accompanying musical scenes, on stelae, or in literature. The varying number of mentions is striking: while the harp is already often documented in Old Kingdom texts, the lutes, first attested in the New Kingdom, is almost not stated at all.

The lecture, showing the current research results of ancient Egyptian experimental music archaeology, deals with the instruments and musical activities and how they are attested in texts and in the iconographic evidence. The practical experience of playing replicas of ancient Egyptian musical

instruments (clappers, sistra, lute etc.) will be brought together with the textual and pictorial sources in order to find out whether both corresponds to practice.

Gjermund Kolltveit, Azilkhan Tazhekeyev: A 4th century stringed musical instrument from Bidayik-asar (Aral region, Kazakhstan)

Fragments of a wooden musical instrument were found in 1973 during the archaeological excavations of the Khorezm archaeological and ethnographic expedition, in the settlement of Bidayik-asar near the Aral Sea, Kazakhstan. The site belonged to the Zhetyasar culture, and the artifact was discovered in the ninth cultural layer of the settlement, dating back to the 4th century AD. It bears resemblance to the Kazakh double necked dombra (lute) kossaz, but also to early medieval lyres from Western Europe. There are further parallels, from iconographic and ethnographic sources. How should we understand the organology of this wooden instrument and its relation to other instruments, from Central Asia and connected regions? A multidisciplinary approach will help to uncover the stories and music-cultural significance of the instrument from Bidayik-asar.

Xu Kun: Ode of the War: Sound in Chinese and Western archives

Warfare has a significant role in medieval European chronicles, where sound emerges in the writings as an emotive symbol, representing spirituality and religious miracles, but sound appears in Chinese historical documents as a manifestation of public authority. We can see the disparities and attempt to explain them when the identical war events are described in both Chinese and Western sources. Images, texts, and multicultural viewpoints will be covered in this text.

Florian Leitmeir, Dahlia Shehata: Theories and Methods: Revising a Handbook of Music Archeology (Workshop)

In response to the urgent need to make the methods and research results accessible to both the individual disciplines and interested laypersons, there were concrete plans in 2010 to write a Concise ISGMA Handbook of Music Archeological Practice, which unfortunately did not get beyond the stage of an incomplete manuscript. The further development of music archaeological methods since then, as well as new research, necessitate an updated conception of the Handbook in terms of content, structure and form. Our goal is to resume work on the production of a "Handbook of Music Archaeology" and to realise the publication. Important planning steps, both in terms of content and organisation, will be taken with the workshop.

James Lloyd: Egyptian and Greek musical instruments: musical knowledge and exchange in the Mediterranean

Drawing on examples studied in the British Museum and in Athens, alongside published instruments, this paper compares Greek and Egyptian aerophones (production, materials, manufacturing methods, etc.) as a way to explore networks of musical exchange during the Archaic period (c. 25th-26th Dynasties).

The Archaic period (c. 750-480 BCE) was a time of Greek expansion into regions directly under Egyptian influence and control, such as Naukratis and Tell-Dafana. The period also saw Egyptian art inspire Greek craftspeople, contributing to the 'Orientalising Period' of Greek art.

Placed alongside examples of Egyptianizing Greek art and Egyptian imitations of Greek vases, this paper explores how a comparative study of musical instruments can help us to explore the extent to which an exchange of musical traditions forms part of the story of the movement of people, objects, and ideas between Egypt and Archaic Greece, while also contributing to reassessments of "Greek exceptionalism".

Mohamed Maged, Mohamed Mamdouh: Role of Ancient Egyptian Nai instrument on various occasions in ancient Egypt. Reconstructing of ancient Egyptian Nai instrument, Egyptian museum, Cairo

Nai instrument considered to be among the oldest musical instrument in ancient Egypt for more than seven thousand years, the ancient Egyptians called it in hieroglyphic SIBA,, and it is one of the three basic musical instruments that make up the pharaonic musical ensemble in old kingdom.

The first form was found in depictions of hunting scenes and other aspects of daily life produced in the old, middle and new kingdoms of ancient Egypt.

Nai instrument is used till now and played with different positions and standards.

Nai instrument participated in many different occasions and accompanied singing during the harvest.

The paper will present our experience in reconstructing such an instrument (93.2 cm long) preserved at the Egyptian Museum, Cairo, no. 46158.

José Pérez de Arce: The Collective 'Antaras': a methodological approach

Panpipes are one of the most important organological objects of pre-Hispanic and present day vernacular traditions of the South American continent. The playing of the instruments includes their use in a 'dual playing' technique that I will take as my object of study in this presentation. This instrument and this dual playing technique is known all over the South American continent, but most developed in central-south Andes, including Chile, Argentina, Bolivia and Peru. I will confront two different concepts of this 'dual playing' technique; the one based in the abundant present-day practice of pairing pan flutes, and the other based on archeological evidence that are increasingly appearing in Archeomusicology studies. For the archeo references, we have abundant studies mainly coming from Nazca panpipes, called 'antaras' by scholars such as Andres Saz, Arturo Rossell, Cesar Bolaños, Anna Gruszczyńska-Ziółkowska, Carlos Mansilla, Carlos Sanchez and also in Arica instruments by Andro Schampke and Alberto Diaz among others. Apart from the flutes, we have a great amount of iconography of groups of panpipes painted or modelled in pre-Hispanic ceramic objects. The sum of these evidences opens a new fields of understanding the playing techniques of the local panpipes. The comparison between these pre-Hispanic panpipes and the present-day ones gives support to a new interpretation on the paired playing technique.

In sum, this presentation aims to give an overview to the interpretation of one of the less studied aspects of pre-Hispanic music, that is its collective playing. The present-day collective flute practices

gives us some clues to interpret them in his own methodological terms, with their own concepts and categories. This evidence permits us to better understand the implicit acoustic or musical theories that explain the musical use of the instruments. The pre-Hispanic evidence seems to open these acoustic or musical understanding in multiple ways, that implies that in ancient times the musical development was much more complex and locally differentiated than today.

Sylvain Perrot: Reconstructing the Soundscape of Ancient Greek Mystery Cults: The Example of the Kabeiria

Among the mystery cults performed in ancient Greece, the cult of the Kabeiroi is well testified in the archaeological evidence, since two sanctuaries have been identified with certainty, in Lemnos (a North Aegean island) and in Thebes (Boeotia, Greek mainland). The Kabeiroi were non-Greek deities, probably of Anatolian origin, and were included into the Greek mythology as sons or grandsons of Hephaistos. Several fragments of *aulos* have been unearthed in Lemnos, while in Thebes bells were found, including a bronze one with the inscription “Pyrrhias dedicated me to the Kabeiros and to the Boy” (5th century BCE). Much more, many vases from this archaeological context have theatrical depictions including musical instruments, suggesting that the ritual involved such performances. Purpose of this paper is to gather all of the sources of the soundscape of both sanctuaries, while comparing and contextualizing the philological, iconographical and archaeological data from a methodological perspective.

Michael Praxmarer: Upper Palaeolithic Music(s) – the Melting Pot Theory

Good hunting conditions, larger groups of hunters, and the multi-cultural setup of the communities contribute to the creative artificial expressions in Upper Palaeolithic Europe.

Melodic instruments and narrative and figurative visual arts in modern-day hunter and gatherer ethnics do not reach the sophistication of European Ice Age arts. The doctoral thesis „Music(s) in Upper Palaeolithic Europe: The Melting Pot Theory” (Praxmarer, in print), offers an additional explanation to the question, why these arts did develop. Genetic studies show that humans from Europe, Africa, the Near and the Far East lived together in Europe between 45,000 and 25,000 years ago.

The multi-cultural setup of the communities catalyses the artificial expressions of the performing and visual arts in Upper Palaeolithic Europe. Foreign influences provide a source of inspiration for ancient and modern-day specialists engaging in music, visual arts, and culture.

Tommes Rute: Das römische Cornu im Kontext der barocken Meister - Ein praktischer Vergleich zur Praxis im Barock

Dank einiger ikonographischer Beispiele römischer Kunstmusik mit Hydraulis und Cornu weiß man von deren Existenz in der römischen Gesellschaft. Abseits weniger Rekonstruktionsversuche und wohl aufgrund einem weitgehenden Mangel an Quellen bleibt das Cornu aber zumeist unbeachtet in der praktischen Musikarchäologie. Ein Vergleich der wenigen literarischen Quellen mit den Lehrwerken frühbarocker Virtuosen offenbart nun breite Parallelen in der Blas- und Spieltechnik

zwischen den römischen Cornua und dessen barocken Gegenstücken, der lochlosen Langtrompete des 17. und 18 Jahrhunderts.

Ob es sich um einfache Signale, frühbarocke Sonaten oder bachsche Kantaten handeln, mithilfe praktischer Beispiele soll die Ähnlichkeit beider Instrumente erläutert und anschaulich gemacht werden.

Daniel Sánchez Muñoz: Drumhead-making in Ancient Mesopotamia from Philological, Ethnographic, and Experimental Perspectives

In Ancient Mesopotamia, there was a specific ritual to cover the kettledrum (lilissu) with its head and to make it playable for the cult. Three first-millennium accounts of said ritual (KAR 60: rev. 5–8, BaM Beih. 2, 5: rev. 10–11, and TCL 6, 44: obv. ii 20–25) describe the ingredients and steps to fashion a dyed-red drumhead of leather for the lilissu. However, their variants and unusual steps (e.g., drumheads are normally of rawhide, not leather) have led scholars to see these instructions in different ways so far. Hereby I present the results of my postdoctoral project between the HUJI and UGR to study these instructions from philology, but also from ethnography (with interviews to drum-makers, leather-workers, sofrei STAM, and experts on dyeing techniques in Israel/Palestine, Greece, and Iraq) and experimentation with real animal hides following these instructions and mounting them on different membranophones.

André Schlauch, Joachim Schween: Were the neolithic ceramic horns of Rouet and Vallabrix shamanistic instruments? An experience

In 1965 and 1980, two well-preserved clay horns from the Late Neolithic Chalcolithic were found during excavations in southern France under two projecting rock roofs, so-called abris. The special locations and the rarity of the horns, which were interpreted as wind instruments, aroused particular interest among the speakers and provoked questions about the original function of the objects. The speakers conducted sound experiments with almost true-to-original replicas of the clay horns in and around a stalactite cave on the Iberg in the Harz Mountains (Northern Germany). The results will be presented for discussion in the lecture.

Benjamin Spies: Reexamination of an old find - A Fragment of a Medieval Woodwind Instrument from Würzburg

In the winter of 1949, the fragment of a wooden wind instrument was recovered from a late-medieval well in Würzburg. Shortly after its excavation, the object was interpreted as the fragment of a recorder. The fragment has now been re-examined as part of an exhibition at the Museum für Franken. The research and its results will be briefly presented in this lecture, providing an exciting insight into everyday life in late medieval Würzburg.

Katarzyna Tatoń: Clay rattle making (Workshop)

The program of workshops will focus on the process of making rattles that will be copies – models of ceramic Lusatian rattles from the late Bronze Age and early Iron Age.

Part I:

- Presentation of various types of forms vessel rattles found in Poland,
- Presentation of already burnt and rattling models - different sounds,
- Discussion of the techniques of making Lusatian rattles: from a single piece of clay, from several assembled parts, using the coil pots or mixed technique.

Part II:

- Making rattles - each participant will make a spherical rattle and another of a different shape.

Lucy-Anne Taylor: Anglo-Saxon reed pipes from Ipswich and their wider contexts

A pair of crane tarsometatarsi discovered at Ipswich, Suffolk are unique from the British archaeological record for the Anglo-Saxon period. What makes these unique is that they are potentially a pair, something not otherwise evidenced from the archaeological record for this period, as well as them having more fingerholes than most other contemporary pipes. Was this due to the bone's natural morphology or were such bones chosen for the specific purpose, and was the tuning pattern something which was consciously aimed for? In discussing these concepts, this paper will explore the effect of the natural world on the instruments of the time and their sounds, as well as how the instruments potentially affected the natural world. With reference to other instruments, both wooden and bone from the period, this paper will explore the pair of pipes in their wider context, both of society of the time and the natural world.

Nancy Thym: Asinus lyra - the Donkey with the Harp

Images of donkeys playing the harp, harp psaltery or lyre are found frequently in medieval iconography, often as sculptures on cathedrals. The L-shaped wooden hooks on late medieval and early Renaissance harps that cause the strings to buzz were called bray pins, because the sound resembles that of a braying donkey. Why is there such a deep connection between harps and donkeys? Were harp players considered ignorant? Donkeys and other animals such as monkeys playing harps are found in the iconography of many cultures including that of ancient Egypt and Mesopotamia. This presentation examines figures, sculptures and paintings of animals playing the harp and explores possible symbolism of these representations. Because many of the depictions are sculptures, it is possible to build functional reproductions of the instruments, which will be demonstrated during the presentation.

Rupert Till: Virtual Reality and Sound Archaeology

Music and sound cannot be experienced through writing and numbers, writing freezes time onto paper, as a time-based medium sound cannot be heard without temporal motion, and acoustic

metrics are silent data; for an experience of music and sound to be complete it needs to engage our bodies. Digital multimedia technologies offer powerful approaches to understanding the acoustics of the past; this presentation will explore a number of those affordances.

This paper explores apps that illustrate music archaeology and archaeoacoustic effects, set digitally within visual and acoustic archaeological cultures. It will discuss ways of immersing audiences through projection, acoustic simulation, field and studio recordings, and musical performance. It explores use of VR headsets to create a sense of deep-flow and presence amongst audiences, total immersion in an experiential phenomenological understanding of interacting audio and visual fields, as well as setting such results within an appropriate context.

The paper will examine how acoustics results at caves in Northern Spain, in various phases of Stonehenge, and at Paphos Theatre (all World Heritage Sites) can be explored using VR and multimedia technologies, evaluating the comparative advantages of the use of different technologies. It proposes that such approaches are effective as non-representative theory (NRT) approaches to empirical studies, allowing understanding that goes beyond binary dialectics, and address the real-world complexities of acoustic ecologies.

Fabio Vergara Cerqueira: Music-playing Sirens in Magna Graecia

Funerary sculptures in the form of lyre-playing Sirens appear in Athens' necropolises between late 5th and early 4th century, as evidenced by the marble *semata* now preserved in Athens National Museum (e.g. tomb of the knight Dexilao, died 393, Athens, NM, 774). The Suda reports a tradition, according to which a Siren would have been placed next to Sophocles' tomb. (Suda, s.v. Σοφοκλέους γένος καὶ βίος, σ 815.15. HANINK, 2019, p. 239). The iconographic series of Sirens playing musical instruments, in funerary context and meaning, has already been extensively analyzed in terms of Attic vase-painting (Gropengiesser, 1977; Salmen, 1980; Vergara Cerqueira, 2014, 104-113.), and has recently received more attention in a broader Greek context (Carderaro, 2015; see discussion about the Sirens on a funerary stele of Chios in Perrot 2022). Our goal here is to systematically analyze the presence of the musician Siren on the remaining 4th-century Italiote iconography, based on evidence from an initial catalog estimated at about twenty visual testimonies, such as vases and funerary terracotta sculptures, architectonical figures in akroteria and column capitals, pinakes, bronze statues and earrings. In the images collected so far, Sirens are depicted associated with different instruments: *aulos* (7), Apulian rectangular cithara (4), the so-called Hellenistic cithara (2), *phorminx* (2), *chelys-lyra* (1), *tympanon* (3), *syrinx* (2) e singing (1). In this sense, the Apulian plate now in Würzburg (H5751) with an *aulos*-playing Siren, attributed to the Circle of the Underworld Painter, dated from 330-310 BC, is quite representative of the musical iconography of the Siren. It brings the most frequent association between the Siren and a musical instrument, since the *aulos* is not only the most present instrument quantitatively speaking, but also in terms of diversity of supports and regions, being present in the visual productions of different parts of Magna Graecia. The *aulos* is representend in the hands of a Siren on Apulian vases, on Tarentine capitals, as well as on a Locrian *pinax*. The recurrence of the instrument-playing Siren on the neck of the so-called Apulian *cratere a mascheroni* is quite significant. The same iconographical subject inspires somehow also a Paestan amphora. They are depicted playing either the Apulian rectangular cithara, the *aulos* or either the *tympanon*, on the painting of these very large vases often originally intended for the function of *sema*, to be laid out by the tomb, with a clearly funerary meaning, linked to an imaginary representation of and auspicious beyond (e.g. Madrid, Museu Arqueológico Nacional, 1998.92.1).

References:

Carderaro, L. C.. Do encanto à hubris: representações de seres mitológicos com atributo musical na pintura de vasos gregos. Dissertação de mestrado. Centro de Estudos Clássicos e Humanísticos. Coimbra: Universidade de Coimbra, 2015.

Gropengiesser, H. Sängers und Sirenen. *AA*, 582-610, 1977.

Hanink, Johanna. Pausanias' dead poets society. In: Goldschmidt, Nora & Graziosi, Barbara (eds.). *Tombs of the Ancient Poets: Between Literary Reception and Material Culture*. Oxford, University Press, 2018, 235-250.

Perrot, S. Citharodie et rhapsodie sur un pilier funéraire de Chios (III^e siècle av. J.-C.) : de l'image au contexte culturel. *Revista M. Estudos sobre a morte, os mortos e o morrer*, v. 7, n. 14, 375-399, 2022.

Salmen, W. Musizierende Sirenen. In: Krinzinger, F., Otto, B. & Walde-Psenner, E. (eds.). *Forschungen und Funde. Festschrift Bernhard Neutsch*. Innsbruck: Verlag des Instituts für Sprachwissenschaften der Universität Innsbruck, 1980.

Vergara Cerqueira, F. Abordagens mitológicas na iconografia funerária da cerâmica ática (510-450 A.C.): repensando a periodização. *Classica. Revista da Sociedade Brasileira de Estudos Clássicos*, v. 17, n. 1, 83-128, 2014.

Qinglei Wang (online): A Tentative Discussion on Ancient Chime-bells and Stone-chimes Test Performing. Illustrated by the Examples of Chime-bells and Stone-chimes from Tomb №.M1 in Liujiawa, Chengcheng and Knob-Bells from the Tomb of Marquis Liu He of Haihun

The article takes the Chime-bells and Stone-chimes from Tomb №.M1 in Liujiawa, Chengcheng, Shannxi and Knob-Bells from the Tomb of Marquis Liu He of Haihun in Jiangxi as examples and discusses some issues such as the heritage properties of the Chime-bells and Stone-chimes, the principles and academic value of test performing, the selection of music and the techniques of orchestration and the method of playing excavated instruments. The purpose of test performing is to examine the instrumental performance of excavated Chime-bells and Stone-chimes, which thus determines the test performing is in many ways widely divergent from the music performance of contemporary ceremonial music orchestra or ancient music orchestra.

Xidan Wang: Musical Exchange in the Perspective of the North Wei Dynasty's Barbarian Figurines

There are more than 30 tombs with graphic musical relics found in the period of the North Wei Dynasty (386-534 A.D.) up to 2022. These tombs distribute in Inner Mongolia, Ningxia, Shanxi, Shaanxi, Hebei and Henan Provinces, including murals, inner and outer coffins, stone plinth, figurines etc. The musical content from these tombs contains ritual music, dance, musical performance, and flying Apsaras. Musical Barbarian figurines appeared as the form of male combination, and female musical figurines with North Wei's customs also found in these tombs. This article analyses the Barbarian figurines' combinational form, musical instruments and culture characters to describe the history of multinational musical exchange in the north of China from 4th to 6th centuries.

Zichu Wang: Treasures Lost and Found: Discussion and Reflection on the research of Chinese Experimental Music Archaeology

The author's writing of *Treasures Lost and Found: A Study of the Replication and Restoration of Chinese Musical Relics* occurred on the process of the foundation of Chinese Musical Archaeology Institute (Zhengzhou University). The book covered almost all of important musical relics found in China. Discussion and reflection about the research methods are meaningful for our further works. Firstly, this article talks about the definition of "Replication" and "Reproduction" in the discipline of Chinese experimental music archaeology. In the second, it discusses on the processes and reproduce musical instruments from important Chinese musical archaeological excavations: (1) Bianzhongs in Marquis Yi of Zeng. (2) Jiahu Bone Flutes. (3) "Jade" Bianqings in Jiangdu King LiuFei's Tomb. (4) Biaoqiang Bianzhongs.

Kamila Wyslucha, Stefan Hagel: Via Vesuvio aulos find, Pompeii

On 13 July 2018, fragments of two pipes, possibly forming a pair, were excavated at Pompeii from insula 6, Regio 5, situated along the Via Vesuvio. Overall, the design of the instrument closely resembles that of other known Pompeian aulos finds: the tone holes are equipped with a mechanism of rotating sleeves operated by ring-shaped or globular 'buttons', and the reed socket appears to involve a tuning mechanism. Just as the fondo Prisco pipes, the via Vesuvio find features a bone core encased in two to three layers of bronze and a flaring "bell" at the distal ends. Although the pipes survive in fragments and the metal is substantially corroded, their general state of preservation is good, allowing us to perceive many details of their elaborate design. Furthermore, based on the excavation photos kindly provided to us by the principal excavator, it is possible to reconstruct the entire layout of at least one pipe.

The aim of this presentation will be to introduce the object, compare it with previously examined aulos finds from Pompeii and elsewhere, and assess the possible impact of this discovery on aulos research.