

9<sup>TH</sup> SYMPOSIUM  
OF THE  
INTERNATIONAL STUDY GROUP ON MUSIC ARCHAEOLOGY

SOUND  
OBJECT  
CULTURE  
HISTORY

TUESDAY 9<sup>TH</sup> - FRIDAY 12<sup>TH</sup>  
SEPTEMBER 2014

Ethnologisches Museum  
Lansstr. 8, 14195 Berlin, Germany

[WWW.MUSICARCHAEOLOGY.ORG](http://WWW.MUSICARCHAEOLOGY.ORG)

Organizer

-  Deutsches Archäologisches Institut, Orient-Abteilung
-  Ethnologisches Museum, Abteilung Musikethnologie,  
Medien-Technik und Berliner Phonogramm-Archiv

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# IMPRINT

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*as well as members of the International Study Group on Music Archaeology*

## Organisation for the International Study Group on Music Archaeology



Deutsches Archäologisches Institut

Orient-Abteilung

(Prof. Dr. Ricardo Eichmann)

Podbielskiallee 69–71

14195 Berlin

In cooperation with:



Staatliche Museen zu Berlin

Ethnologisches Museum

Abteilung Musikethnologie,

Medien-Technik und Berliner Phonogramm-Archiv

(Prof. Dr. Lars-Christian Koch)

Arnimallee 27

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# PROGRAMME

## 9<sup>th</sup> Symposium of the International Study Group on Music Archaeology

Tuesday 9<sup>th</sup> – Friday 12<sup>th</sup> September 2014

Ethnologisches Museum  
Lansstraße 8, 14195 Berlin, Germany  
Main Entrance



## TUESDAY, 9<sup>TH</sup> SEPTEMBER 2014

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09:00–10:00 Registration

10:00–10:30 Addresses of Welcome  
*Lars-Christian Koch – Ricardo Eichmann*

Musical Opening by *Steev Kindwald*

10:30–11:00 Introduction  
*Ricardo Eichmann – Lars-Christian Koch*

**11:00–12:30** Chair: *Lars-Christian Koch*

The Revision of the Hornbostel Sachs Classification by the MIMO Project Consortium  
*Margaret Birley*

Organological Work of Franjo Ksaver Kuhač and His Classification of the Sound Sources of 1877–82  
*Zdravko Blažeković*

Animal Luring Calls, Their Organological Variety and Classification  
*Annemies Tamboer*

Synopsis and Discussion

12:30–14:00 LUNCH BREAK

**14:00–15:30** Chair: *Stefan Hagel*

The Classification of Ancient Greek Musical and Sound Instruments in Antiquity and Its Reception in Modern Times (Texts and Artefacts)  
*Sylvain Perrot*

Rhythm and Melody: Behind the Visual Narrative – Representation of Melographers in Ancient Greek Art. Anthropological Analysis of Ancient Greek Musical Records  
*Anna K. Boshnakova*

Pleasant and Unpleasant Music: Patterns of Classification of Sounds in Greek Antiquity  
*Eleonora Rocconi*

Synopsis and Discussion

15:30–16:00 COFFEE BREAK

**16:00–17:30** Chair: *Gretel Schwörer-Kohl*

A Case Study of Maya Avian Ocarinas from Pook's Hill, Belize  
*Kristina Nielsen – Christophe Helmke*

Identification of Sound Artifacts Played in Cheek Piercing Rituals in Pre Columbian  
Western Mexico  
*Abraham Elías López*

Some Enigmatic Native American Artifacts: Audio Devices?  
*Mark Howell*

Synopsis and Discussion

## WEDNESDAY, 10<sup>TH</sup> SEPTEMBER 2014

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**09:00–10:30** Chair: *Ricardo Eichmann*

Celebration of Death/Reaffirmation of Life: Emphasizing the Cosmic Totality. An Analysis of the Dong Son Bronze Drums in Relation to the Secondary Mortuary Ritual of the Jarai People of Central Vietnam

*Vincenzo della Ratta*

The Harps from Dra Abu el-Naga: New Organological Evidences

*Sibylle Emerit – Daniel Polz*

Typological Analysis of the Chinese Qin Zither in the Late Bronze Age

*Yang Yuanzheng*

Synopsis and Discussion

**10:30–11:00** COFFEE BREAK

**11:00–12:30** Chair: *Graeme Lawson*

Musiqualia and Vultural Adaptation

*Simon Wyatt*

A Study of the Decorations that Occur on the Late Bronze Age Horns of Ireland and Britain

*Simon O'Dwyer*

Visible vs. Audible – How to Present an “Acoustic Past”? Dos and Don'ts for Museum, Exhibitions and Linked Media

*Susanne Rühling*

Synopsis and Discussion

**12:30–14:00** LUNCH BREAK

**14:00–16:00** **European Music Archaeology Project (EMAP) – Panel I**

Chair: *Arnd Adje Both*

Brief Introduction to the European Music Archaeology Project

*Emiliano Li Castro*

Representing Ancient Brass Instruments in EMAP: The Scope and Spread of Brass Instruments in Ancient Europe

*Peter Holmes*

The Voice of Salpinx. Bronze Trumpets and Horns in the Greek World: Sound and Symbolology

*Stefano De Angeli*

Clay Drums as Reflection of Ritual Behaviours in al-Andalus  
*Raquel Jiménez Pasalodos – Alexandra Bill – Enrique Cámara de Landa – Grazia Tuzi*

Mediterranean Routes of the Frame Drum  
*Emiliano Li Castro – Roberta Tucci*

The Medieval Musical Scales on the Example of Wooden Pipes Found in Poland  
*Dorota Popławska – Stanisław Mazurek*

Synopsis and Discussion

16:00–16:30 COFFEE BREAK

**16:30–18:00 European Music Archaeology Project (EMAP) – Panel II**

Chair: *Emiliano Li Castro*

The Aerophonic Instruments from Paleolithic to Bronze Age in Europe  
*Gian Maria Di Nocera – Francesco Marano*

Oldest Musical Instruments from Three Caves in the Swabian Jura, Southwestern Germany. The Archaeological Background and State of Research  
*Susanne C. Münzel – Nicholas J. Conard*

Bone Flutes in Archaeological Excavations in Northern Europe. Problems and Non-problems  
*Cajsa S. Lund*

On the Reconstruction Process of the Imperial Tibia Based upon a Find from the Roman City of Poetovio  
*Olga Sutkowska*

Jingle in the City and the Backwoods: Manufacture, Distribution and Use of the Zoomorphic Bronze Ornaments in Novgorod the Great (Russia) and Its Karelian Hinterland (Eastern Finland)  
*Riitta Rainio – Aleksey Kossykh*

Synopsis and Discussion

**20:00–22:00 CONCERT DEMONSTRATIONS**

Introduction: *Lars-Christian Koch – Ricardo Eichmann*

VentOs – Contemporary Music for Paleolithic Flutes and Percussion  
*Anna Friederike Potengowski – Georg Wieland Wagner*

Memory and the Future of Human Sound – Weaving Breath, Harmonics, Rhythm and Melody  
*Steev Kindwald*

La Vihuela Marianita de Quito  
*Carlos González – accompanied by: Mabel Ruiz*

Mood Music: Personal Songs from a Singing Archaeologist  
*Sander Macquoy*

## THURSDAY, 11<sup>TH</sup> SEPTEMBER 2014

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09:00–09:30 Introduction to the Workshop Day  
*Lars-Christian Koch*

### 09:30–13:00 Workshops

**Workshop 1:** Digitalisation of Historical and Contemporary Musical Instruments in Extended Visualisations  
*Andreas Richter – Verena Höhn*

**Workshop 2:** Constructing and Playing a String Activated Bamboo/Sago Palm Stemwood Jawharp  
*Steev Kindwald*

**Workshop 3:** Whistle Down the Wind: Playing Palaeolithic Bird Bone Aerophones  
*Simon Wyatt – Carlos García Benito*

Including Contributions by *Anna Friederike Potengowski – Wulf Hein – Susanne Schietzel – Frances Gill – Susanne C. Münzel*

**Workshop 4:** Ancient Pop Academy  
*Susanne Rühling – Ralf Gehler – Merit Zloch*

**Workshop 5:** Doppelflöten, Tripelflöten, Quadrupelflöten Rekonstruktion und Spielpraxis altamerikanischer Blasinstrumente aus Ton  
*Friedemann Schmidt*

13:00–14:30 LUNCH BREAK

### 14:30–16:00 Poster Presentations

The Living Musikarkeologi: Anachronisms and The Body in Experiment  
*Frances Gill*

Sounding Images: The Auditive Dimensions of Pre-Colonial Mixtec Pictorial Manuscripts  
*Sander Macquoy*

Sucked Trumpets of Northern Europe (3000–2000 BC) and North America (6000– BC): Unclassified Sounds and Musical Instruments?  
*Riitta Rainio*

Advantages of CT-Analysis – Joints in Wooden Construction of Egyptian Box Lyre and Experimental Archaeology: Bending Wood vs. Crooked Wood  
*Susanna Schulz*

Decor and Sculptural Structures of the Surface of Bronze Age Lurs  
*Joachim Schween*

16:00–18:00 Presentation of the Results of the Workshops 1–5

**19:30–21:30** CONCERT DEMONSTRATIONS

Introduction: *Lars-Christian Koch – Ricardo Eichmann*

A Comparative Concert on Non-fretted Musical Instruments of Sarod Family  
*Somjit DasGupta*

Ancient Music Ireland and Guests – Featuring Three Compositions Playing the Horns  
and Trumpets of Bronze Age Europe  
*Simon O’Dwyer – Maria O’Dwyer – Joachim Schween – John Purser*

Adventures in a Geometric ‘Few-pitch’ Style  
*Barnaby Brown*

Living Jew’s Harp Traditions from Europe and Beyond  
*Deirdre Morgan*

Multiple Flutes from Mesoamerica  
*Abraham Elías López*

The Sound of Emperors and Games – the Organ of the Ancients  
*Ensemble for Early Music “Musica Romana”*  
*Susanne Rühling – Merit Zloch – special guest: Ralf Gehler*

## FRIDAY, 12<sup>TH</sup> SEPTEMBER 2014

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**09:00–10:30** Chair: *Eleonora Rocconi*

Continuity of Pitch and Fingerhole Disposition in Ancient Double Pipes  
*Barnaby Brown*

'Leading Notes' in Ancient Greek Music and Their Relation to Instrument Design  
*Stefan Hagel*

The Role of Music in Ancient Greek Processions. An Iconographical Analysis of Greek Pottery  
*Jana Kubatzki*

Synopsis and Discussion

10:30–11:00 COFFEE BREAK

**11:00–12:30** Chair: *Annemies Tamboer*

Ancient Musical Instruments of Asia Minor  
*Zeynep Helvaci*

Jew's Harps of Bone, Wood and Metal: How to Understand Construction, Classification and Chronology  
*Gjermund Kolltveit*

Excavating Heritage: The Jew's Harp Revivals of Norway, Austria, and Sicily  
*Deirdre Morgan*

Synopsis and Discussion

12:30–14:00 LUNCH BREAK

**14:00–15:30** Chair: *Cajsa S. Lund*

Sound Archaeology, Acoustics and Cave Art  
*Rupert Till*

Beyond the Hesperides: an Iron Age Acoustical Site and Assemblage, Including a Wooden Lyre Bridge of the 4<sup>th</sup> Century BC, from Uamh an Ard Achadh (High Pasture Cave) on the Island of Skye, Northwest Scotland,

1: Assemblage, Organology, Acoustics and the European Context  
*Graeme Lawson*

2: Environment, Culture and Tradition  
*John Purser*

Synopsis and Discussion

15:30–16:00 COFFEE BREAK

**16:00–17:30 Final Discussion**

Chair: *Ricardo Eichmann – Lars-Christian Koch*

# ABSTRACTS

## 9<sup>th</sup> Symposium of the International Study Group on Music Archaeology

Tuesday 9<sup>th</sup> – Friday 12<sup>th</sup> September 2014

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9<sup>th</sup> Symposium of the International Study Group on Music Archaeology

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# Abstracts of the PAPERS

(in alphabetical order)

MARGARET BIRLEY

*The Revision of the Hornbostel Sachs Classification by the MIMO Project Consortium*

The MIMO (Musical Instrument Museums Online) project enabled a consortium of European museums to make information about the musical instruments in their collections available through a single website. Co-funded by the European Union, the MIMO project also facilitated a revision of the Hornbostel Sachs classification of musical instruments that included the classification of instruments invented since the publication of the 'Systematik der Musikinstrumente' in 1914 by Erich M. von Hornbostel and Curt Sachs, and addressed some of the issues that were subsequently raised by other scholars. My paper will discuss these revisions, and their informing principles.

ZDRAVKO BLAŽEKOVIĆ

*Organological Work of Franjo Ksaver Kuhač and His Classification of the Sound Sources of 1877–82*

Among Hornbostel's and Sachs's 19<sup>th</sup>-century predecessors working on the organology and classification of instruments belongs the Croatian music historian, folklorist and organologist Franjo Ksaver Kuhač (1834–1911), whose work on instruments Sachs repeatedly cited. Based on his fieldwork among the South Slavs done from 1857 to 1870, as well as his own collection of traditional instruments, Kuhač wrote a 370-page systematic survey of instruments, *Prilog za povijest glasbe južnoslovenske: Kulturno-historijska studija* (A contribution to the music history of the South Slavs: Cultural and historical study; 1877–82). Here he developed his own classification of sound sources based on the principles of sound production: 1: chordophones (a. bowed; b. plucked; c. hammered); 2: aerophones (a. end-blown flutes; b. side-blown flutes; c. single and double reeds; d. horns and trumpets; e. instruments with a bag or bellows); 3: (free-)reed instruments; 4: membranophones; 5: idiophones; and 6: bells.

ANNA K. BOSHPAKOVA

*Rhythm and Melody: Behind the Visual Narrative – Representation of Melographers in Ancient Greek Art. Anthropological Analysis of Ancient Greek Musical Records*

Music is both a universal human phenomenon and a data-set of cultural specifics through musical performance, techniques and production. Musical artifacts are visual projection of the human cultural memory that keeps the particular cultural and historical atmosphere and channels various social behaviours. The aim of this paper is to discuss the methodological possibilities in the discipline of anthropology to reconstruct some aspects of Ancient Greek musical reality, which are not very well preserved in primary sources. The study will examine rare textual and visual records that reflect human experience in terms of the unique amalgamation between musical sound, cultural heritage and history.

BARNABY BROWN

*Continuity of Pitch and Fingerhole Disposition in Ancient Double Pipes*

Comparing instruments produced according to measurements published by Lawergren (2000) on silver pipes from Ur and Hagel (2014) on an aulos from the Graeco-Roman period, remarkable correspondences surfaced. I will discuss these correspondences in detail and ponder possible approaches to the question of whether or not they ought to be viewed as coincidental.

ABRAHAM ELÍAS LÓPEZ

*Identification of Sound Artifacts Played in Cheek Piercing Rituals in Pre Columbian Western Mexico*

The purpose of this work was to identify what kind of musical instruments were played during cheek piercing rituals. These rituals were part of funerary ceremonies. Based on iconographic analysis of clay scale models and sculptures belonging to the Ixtlán del Río Period (c. 200 BCE – 600 CE), we analyzed the relationship between musical iconography and a deep organological evaluation. We were able to reconstruct certain parts of this funerary ceremony where drilling cheeks was performed. We found that the performance of musical instruments during the ceremony climax, and the use of psychotropic substances, helped participants to come into a state of ecstasy, presumed to make such penance as an integral part of the ritual.

SIBYLLE EMERIT – DANIEL POLZ

*The Harps from Dra Abu el-Naga: New Organological Evidences*

The exceptional discovery of three wooden harps on the west bank of Luxor allows us to consider again the organology of egyptian cordophones on the basis of solid archaeological data. Their remains were found in three shaft-tombs located in the area around the pyramid of king Nub-Kheper-Ra Intef during the DAI's excavations of the years 2002–2005 in the necropolis Dra' Abu el-Naga. The lecture will be preceded by a short introduction by PD Dr. Daniel Polz (DAI) on the archeological context. Then Dr. Sibylle Emerit (IFAÖ) will report on her musico-archaeological studies and a comparison with iconography and others harps preserved in museums will be done.

STEFAN HAGEL

*'Leading Notes' in Ancient Greek Music and Their Relation to Instrument Design*

Does it make sense to talk of 'leading notes' in ancient music? The question will be approached on the basis of the extant ancient melodies, following classifications of their tonality as outlined by M. L. West, Ch. Cosgrove and myself. Potential evidence for such a melodic feature will be set in relation to what we know about the tunings, scales and fingering systems employed on contemporary instruments that formed the material basis of exactly those types of music that were notated, and which are therefore expected to take an important role in a process of mutual shaping, much as has been shown for the Berlin *aulos* and the melody on Papyrus Mich. 1205.

ZEYNEP HELVACI

*Ancient Musical Instruments of Asia Minor*

This paper presents the results of the research conducted for the Ph.D. thesis with the same title. The dissertation consists of two bands, the first of which is a catalogue of music related artefacts found in today's Turkey. During the research, more than 40 museums and excavation sites were visited to collect the relevant data first-hand, and possibly to discover hitherto unpublished findings. Although the catalogue cannot claim to be complete since not all the relevant sites and storages of museums are covered, some unpublished artefacts, including a relatively well preserved musical instrument were discovered. Besides cataloguing, the study seeks to place the findings within its culture historical context.

MARK HOWELL

*Some Enigmatic Native American Artifacts: Audio Devices?*

Before European colonization, Amerindians living in what is now the eastern half of the United States made and used many objects whose function(s) have not yet been determined. Although many of these objects undoubtedly served an as yet undetermined utilitarian function, some may have functioned as audio devices. My presentation reviews the audio potential for such objects, including uses for those with soundmaking or sound limiting capability. In keeping with the theme of this conference, appraisals of audio function raises new questions for organological classification systems, particularly as pertains material culture.

GJERMUND KOLLTVEIT

*Jew's Harps of Bone, Wood and Metal: How to Understand Construction, Classification and Chronology*

Musical instrument classification, including the system of Hornbostel and Sachs, has always had difficulties with the anomalous jew's harp. This is a complex and diverse musical instrument, technologically and culturally. The variety of shapes and materials within its original distribution area Eurasia, raises questions about the nature and early history of the jew's harp. How can we understand the connection between the various forms, and their chronological significance? How do earlier theories match modern archaeological research? These questions concern both organology and archaeology.

JANA KUBATZKI

*The Role of Music in Ancient Greek Processions. An Iconographical Analysis of Greek Pottery*

Music is a common performance of almost every procession in Antiquity and nowadays. It creates a festive atmosphere, marks a *sacred space* wherein rituals take place and strengthen identity of participants. In my paper I will display roles that music in ancient Greek processions could have played by asking depictions and texts. Also, I will compare circular dances and sacrifices scenes for both have some iconographical similarities with procession scenes. The role of music was different in all those parts of rituals and I would like to discuss the interdependence of rituals and the musical instruments *aulos* and lyre.

GRAEME LAWSON

*Beyond the Hesperides: an Iron Age Acoustical Site and Assemblage, Including a Wooden Lyre Bridge of the 4<sup>th</sup> Century BC, from Uamh an Ard Achadh (High Pasture Cave) on the Island of Skye, Northwest Scotland, 1: Assemblage, Organology, Acoustics and the European Context*

Archaeological excavation on Scotland's Atlantic seaboard has produced Western Europe's earliest physical remnant of a stringed musical instrument outside Italy. Dated to around 350 BC, contemporary with Classical Greek and Etruscan civilization, it is the bridge for a finely made instrument of seven or eight strings, probably a lyre. One of many pieces of burnt wood from the site, it is delicately worked from native oak and incorporates several subtle adaptations which indicate its orientation and place on the instrument. The site is unusual: situated in a dry limestone valley bed with a staircase leading down to a noisy subterranean watercourse. From around 650 to 50 BC there was much industrial activity with evidence of feasting, inhumation, animal burial and fire debris from a long succession of hearths, among which lay the bridge. It is the oldest bridge yet found anywhere in Europe and the oldest piece of any stringed instrument north or west of the Alps. Examining later organological comparanda, such as Bremen-Habenhausen and Trossingen, we ask: what is such a bridge, and by implication such a lyre, doing here, in the Hebridean islands, at this time?

*See also the accompanying paper part 2 "Environment, Culture and Tradition" by John Purser*

DEIRDRE MORGAN

*Excavating Heritage: The Jew's Harp Revivals of Norway, Austria, and Sicily*

Since the late 20<sup>th</sup> century, the popularity of the Jew's harp has been on the rise. Using ethnographic case studies of established Jew's harp communities and their music (Norway, Austria, and Sicily), I will use the international Jew's harp revival to explore contemporary issues including the safeguarding of cultural heritage, the redefinition of musical styles and canons in response to globalization, and the negotiation of identity and community in the digital age.

KRISTINA NIELSEN – CHRISTOPHE HELMKE

*A Case Study of Maya Avian Ocarinas from Pook's Hill, Belize*

At the Maya site of Pook's Hill, in Belize, a diverse collection of Terminal Classic (AD 830–950) ocarinas have been unearthed. These instruments are rendered as diminutive effigies representing supernatural dwarves and animals, including owls, turkeys, crested birds such as guans, and the nocturnal cacomistle. In this paper we intend to explore the relationship between the sounding capability of the ocarinas, the animals they represent and their relationship with the local bird life of the Belize River Valley. We hope that an exploration of the instrument's capacity for symbolism and mimicry may shed light on the intended functions of these instruments at Pook's Hill.

SIMON O'DWYER

*A Study of the Decorations that Occur on the Late Bronze Age Horns of Ireland and Britain*

The majority of the known 107 Irish/British bronze horns from the Late Bronze Age are adorned with visual decorations. Some examples from the North (class 1) consist of parallel or concentric lines interspaced with zig zags. The more Southern horns (class 2) feature raised cones along the length of and around the bell end of the horns. Most conform to a common numerical law involving multiples of the numbers 2 and 3. To date there has been no investigation into interpreting these decorations. The proposed paper for the 9<sup>th</sup> Symposium of the ISGMA will correlate the designs on as many of the instruments as possible with the object of identifying any relationships, geographical, musical or anthropological that may be manifest. It is intended to present this research in conjunction with Joachim Schween who will conduct a similar study on the other great European bronze horn family of Baltic lurs.

SYLVAIN PERROT

*The Classification of Ancient Greek Musical and Sound Instruments in Antiquity and Its Reception in Modern Times (Texts and Artefacts)*

The purpose of this paper is to examine the relevance of Hornbostel-Sachs' classification for the ancient Greek instrumentarium. Indeed, it is interesting to consider how ancient Greek themselves classified their sound and music instruments. The texts we have at our disposal are related to Aristoteles' habit of classification, which is based on philosophical theories that can be better understood thanks to B. Sève's recent philosophical study on music instruments. Ancient Greek classifications are to be considered in an ontological, epistemological and anthropological point of view, for they belong to the theory of the "organon", which may be the main limit of Hornbostel-Sachs' classification for Greek artifacts.

JOHN PURSER

*Beyond the Hesperides: an Iron Age Acoustical Site and Assemblage, Including a Wooden Lyre Bridge of the 4<sup>th</sup> Century BC, from Uamh an Ard Achadh (High Pasture Cave) on the Island of Skye, Northwest Scotland, 2: Environment, Culture and Tradition*

Archaeological, legendary and historical evidence combine to show that music was highly valued in the Iron Age communities of the western Atlantic seaboard, and that its status was sustained through millennia. The broad valley in which the discovery site is located marks the contact between early limestone formations and tertiary igneous intrusions; environmentally, it is fertile on one side, more barren on the other. In its immediate vicinity are several archaeological sites of significance, and the landscape forms, natural features of the cave, and inhumations have strong fertility associations. The valley is strategically placed between the north and south coasts of the island, and offers a short-cut and even a portage avoiding the long and potentially hazardous boat trip around the Point of Sleat. The Christian context follows on naturally from the prehistoric material and both lead us into a considerable body of relevant organological and early written evidence, suggesting that music and musicians had held high status through many centuries, a suggestion now supported by this fascinating discovery.

*See also the accompanying paper part 1 "Assemblage, Organology, Acoustics and the European Context" by Graeme Lawson*

VINCENZO DELLA RATTA

*Celebration of Death/Reaffirmation of Life: Emphasizing the Cosmic Totality. An Analysis of the Dong Son Bronze Drums in Relation to the Secondary Mortuary Ritual of the Jarai People of Central Vietnam*

The bronze drums – some of the most significant artefacts created by the Dong Son culture – have led to much controversy regarding the interpretation of the mysterious scenes represented upon them. This paper attempts to interpret these scenes by comparing a ritual celebrated by the Jarai – an Austronesian speaking ethnic group inhabiting the Central Highlands of Vietnam – with the scenes depicted on the “Ngoc Lu” bronze drum, chosen as a paradigmatic example of the Heger I type bronze drums. This analysis concludes that the scenes depicted on the bronze drums represent a secondary mortuary ritual, the purpose of which is to celebrate death and reaffirm life, so as to emphasise the concept of Cosmic totality.

ELEONORA ROCCONI

*Pleasant and Unpleasant Music: Patterns of Classification of Sounds in Greek Antiquity*

In ancient Greece, the concept of musical ‘pleasure’ and its opposite were continually constructed and reshaped over time through an interplay between what people heard and perceived, and the categories by means of which they conceptualized their experience. Since classification is an artificial activity based on cultural patterns, the categories used by the Greeks to evaluate and judge the sounds in terms of ‘pleasantness’ obviously changed over time and place, depending on various factors. This paper aims at exploring the most important patterns of classification of musical sounds in ancient Greek culture, trying to identify their most appreciated qualities in different environments.

SUSANNE RÜHLING

*Visible vs. Audible – How to Present an “Acoustic Past”? Dos and Don’ts for Museum, Exhibitions and Linked Media*

Acoustic and visual impressions decide significantly, both in perception and in relation to their reflection and subsequent stamping. Therefore a presentation in a museal context must be set differently – especially since it is never the original found but an artistic interpretation of it. An increasingly event-oriented audience and the present claim of holistic learning makes it necessary to open new dimensions of the past – a variety of multimedia products offer a variety of options. But not every implementation is useful and fits with the visitor’s embossing and expectation. As an example, especially the idea of a – in our past so important – functional music has almost disappeared through the influence of modern media. Here, the visitor must be encouraged to rethink. Considering nearly 10 years of dealing with the acoustic past in lectures, exhibitions, the media and different events I reflect my experience of Dos and Don’ts.

ANNEMIES TAMBOER

*Animal Luring Calls, Their Organological Variety and Classification*

Bird and game luring instruments or calls come in a large variety. In the first printed Western European music treatise that mentions a number of them, published 1511, they are categorised as foolish instruments, not worthy of any serious description. Hunters however value their calls. In their world these instruments are classified as to their function, after the animal that can be lured, not by their organological features. When trying to classify them according to the system of Erich M. von Hornbostel and Curt Sachs, published 1914, the variety and ingenuity of these animal calls emerges. In some cases new categories have to be created in order to give them a place in this system.

RUPERT TILL

*Sound Archaeology, Acoustics and Cave Art*

Existing research into acoustics and prehistoric cave art has lacked published scientific methodology, and their relationships have remained suggested rather than proven. This paper explores the relationships of sound and art in Spanish caves in antiquity. It discusses methodology, including acoustic testing and musical performance. It presents the results of statistical testing for correlations between positioning of visual motifs and acoustic metrics. Results have suggested the opposite of that found in earlier research in France. The paper discusses the dangers of generalisations related to archaeoacoustic or sound archaeology research.

SIMON WYATT

*Musiqualia and Vultural Adaptation*

The power of musical instruments is often ascribed to spirits, hence their sway in ritual contexts and notions that music enables supernatural communication. If a sound making device has this power perhaps anthropological models of agency may explain why, throughout the Palaeolithic, people made sound with vulture bones? Exploring the brain's response to music, and ideas about death we may examine why vultures were crucial to prehistoric music and culture, and that agency was not solely bound to the object but to sound itself.

YANG YUANZHENG

*Typological Analysis of the Chinese Qin Zither in the Late Bronze Age*

The *qin*, a type of horizontal zither, has been long regarded as China's foremost musical instrument. It is one of the world's longest living instrumental music traditions, handed down from the late Bronze Age. Archaeologically speaking, however, very little is known about the morphology of the *qin* in the Chinese Bronze Age, until the excavation, in 1978, of the tomb of Marquis Yi dated 433 B.C. in north Hubei province. Slightly later instruments of the same kind were first excavated in 1973 from Mawangdui, then in 1980 from Wulipai, both from the Hunan province; and most recently in 1993 from Guodian, and in 2003 from Jiuliandun, both from the Hubei province. Their architectonic feature, that is, the division of the length of the instrument into five registers, is in high agreement to one another. Such kind of practice of *qin* making differs tremendously from that of the medieval China. This paper aims to carry out a tentative typological analysis of *qin* zither in the Chinese Bronze Age based on these excavated instruments.

# Abstracts of the EMAP PAPERS

(in alphabetical order)

STEFANO DE ANGELI

*The Voice of Salpinx. Bronze Trumpets and Horns in the Greek World: Sound and Symbology*

Through a careful review of the literary, iconographic and archaeological sources relating to the Greek salpinx, the authoritative character of the specific acoustic pattern of Greek bronze trumpets and horns will be highlighted. Thanks to the expressiveness of its solemn sound, comparable to the voice of gods, heroes, or specific authorities, the salpinx and its symbolic value (related also to the bronze employed for its construction) will be investigated in light of the different contexts of use (military, sacred, ceremonial, agonistic), emphasizing also the specificity and “otherness” of this musical instrument compared to the others inside of the Greek culture.

PETER HOLMES

*Representing Ancient Brass Instruments in EMAP: The Scope and Spread of Brass Instruments in Ancient Europe*

This paper will describe how the decisions were made as to which instruments would be chosen for the exhibition, workshops and performances in the EMAP Project. Decisions had to be made not only on a basis of academic interest but also from the perspective of creating an exhibition, activities and performances which will interest, engage educate and entertain the potential audience for the project. Choices needed to be made on basis of the major cultural groups which individual instruments represent, the geographic spread of instruments and the physical form of the instruments themselves. In addition, the materials from which instruments were made were a factor as one theme of the display will be that of sources of materials and the inspiration which they generate. In addition to the material from the period of EMAP, material will be included to consider the precursors and descendants of the EMAP material.

RAQUEL JIMÉNEZ PASALODOS – ALEXANDRA BILL – ENRIQUE CÁMARA DE LANDA – GRAZIA TUZI

*Clay Drums as Reflection of Ritual Behaviours in al-Andalus*

Clay drums from al-Andalus represent the largest corpus of archaeological musical instruments found so far in the Iberian Peninsula (8<sup>th</sup> to 15<sup>th</sup> centuries AD). However, while these instruments disappeared from the archaeological record and the ethnographic musical traditions after 1492 within the Peninsula, they are still extremely popular and widely used in Moroccan musical practices. Through the study of the archaeological artefacts, iconographical and textual sources and support of ethnomusicological fieldwork in Morocco, we propose an interpretation of these instruments, which we believe are closely linked to popular ritual practices of the Islamic population over a period of 800 years, until the eventual Christianisation of the territory.

EMILIANO LI CASTRO – ROBERTA TUCCI

*Mediterranean Routes of the Frame Drum*

Taking into account the lack of actual finds, the first evidence indicating the presence of the frame drum close to the Mediterranean area can be found at the end of the third millennium BC in Near Eastern civilizations and, at least from the sixth century BC onward, this instrument is documented in nearly all the southern European regions. Gathering iconographic evidence in parallel with sources drawn from the ancient literature can lead to a clearer understanding of the development and diffusion of the frame drum in classic age, mainly in connection with the cults of Cybele and Dionysus. A further survey based on the ethnographic research carried out in South Italy during the past century shows that some of the ancient features of the instrument still survive.

CAJSA S. LUND

*Bone Flutes in Archaeological Excavations in Northern Europe. Problems and Non-problems*

This paper will deal with a selection of archaeological finds of bone flutes in northern Europe, although with focus on the Nordic countries and prehistoric times. Questions and problems concern interpretations of possible flutes, reconstructions and replicas of both fragmentary and intact finds, find contexts, use and functions.

SUSANNE C. MÜNDEL – NICHOLAS J. CONARD

*Oldest Musical Instruments from Three Caves in the Swabian Jura, Southwestern Germany. The Archaeological Background and State of Research*

The oldest material evidence for music and musical tradition was found in the caves of the Swabian Jura. In three caves, namely Geißenklösterle and Hohle Fels in the Ach Valley between Blaubeuren and Schelklingen and Vogelherd cave in the Lone Valley near Niederstotzingen, remains of bird bone and ivory flutes have been found in layers of the Aurignacian culture, 40–35,000 years old. The most complete flutes are the two bird bone flutes made from a swan's and a vulture's radius, and the flute made from mammoth ivory. The fact that they have been found in both valleys very strongly suggests that music was very common and that for people starting no later than 40,000 years ago music played an important role in their lives.

GIAN MARIA DI NOCERA – FRANCESCO MARANO

*The Aerophonic Instruments from Paleolithic to Bronze Age in Europe*

The existence of music in the prehistoric communities is well known by some remarkable findings, among all the bone and ivory flutes of Hohle Fels and Geißenklösterle. The aim of the study is to identify the development of music in Europe, from Paleolithic to Bronze Age, through the analysis of aerophonic instruments in known contexts. Some significant Paleolithic findings allow us to trace the origins of human music. Finally, this contribution is intended to present the distribution of aerophonies in European context, during the main chronological stages of prehistory.

DOROTA POPŁAWSKA – STANISŁAW MAZUREK

*The Medieval Musical Scales on the Example of Wooden Pipes Found in Poland*

Several wooden pipes can be found in the Polish archaeological record. While only a group of pipes has been described in the literature, none of the pipes have been analyzed according to its musical scales. This work aims to fill this gap. The comparison of established scales with the scales of some of the medieval European wooden and bone pipes allows determining the common as well distinctive characteristics of the secular musical scales. It also provides the analysis of the direction of cultural and musical influences in Europe during the Medieval times.

RIITTA RAINIO – ALEKSEY KOSSYKH

*Jingle in the City and the Backwoods: Manufacture, Distribution and Use of the Zoomorphic Bronze Ornaments in Novgorod the Great (Russia) and Its Karelian Hinterland (Eastern Finland)*

More than a hundred jingling zoomorphic bronze ornaments have been excavated in the 13<sup>th</sup>–14<sup>th</sup> century layers of the city of Novgorod, Russia. These portable ornaments, with a row of high-frequency bells in their lower part, were made with so-called wax filigree technique, which required outstanding skill and professional bronze smiths. Around twenty similar ornaments have also been found in eastern Finland, the Karelian hinterland of medieval Novgorod. These Karelian finds were worn out, recycled and carefully laid to graves. This paper aims to explore the manufacture, distribution and use of the jingling zoomorphic ornaments with a special emphasis on the changing meanings of the sound in urban and rural contexts. The methods to be used include contextual study, artefact and sound analysis, as well as experiments with the wax filigree technique.

OLGA SUTKOWSKA

*On the Reconstruction Process of the Imperial Tibia Based upon a Find from the Roman City of Poetovio*

Several tube fragments comprising large parts of two tibia pipes were excavated in the territories of the former Roman Poetovio (modern Ptuj in Slovenia) in 1988. The instrument is dated by association to the 2<sup>nd</sup> or 3<sup>rd</sup> century AD and its construction is to a large extent similar to the other tibia finds from the Roman period. As it was the case in e. g. the Pompeii or Meroë finds, the Poetovian pipes are made of bone or ivory which is enclosed by a bronze tube and one or more thin metal rotating rings around this. Additionally, the Slovenian instrument is provided with several side-tubes. This enigmatic organological feature has frequently been shown on Roman Imperial iconographic representations, but is so far extremely rarely testified by archaeological evidence. A thorough organological examination of the Poetovio Tibia including 3D-scanning aims to increase our understanding of the instrument's construction and to enable the reassembly of its fragments in original order. The reconstruction process also involves an iconographic study and comparison with similar tibia finds, and should cast new light on the mechanisms utilized in the Roman Imperial double pipes.

# Abstracts of the WORKSHOPS

ANDREAS RICHTER – VERENA HÖHN

## **Workshop 1:** *Digitalisation of Historical and Contemporary Musical Instruments in Extended Visualisations*

The aim of the project is the digitisation of historical and contemporary South Asian musical instruments – with a focus on the collection of Sourindo Mohan Tagore (1840–1914 Kolkata) – in extended visualisations and enlarged metadata structures as basis for the development of a reconstruction research. Two different technologies are applied for digitizing: structured light scanning and computed tomography. The acquired data will allow studies on chronology, material properties, cultural determined applications (patina, traces of usage), aesthetical principles and craftsmanship; studies that would usually require elaborated research in the field. The workshop will inform about the ongoing research. Examples of preliminary results will be presented. In addition a live demonstration of the 3D-scanner will illustrate the digitisation procedure.

STEEV KINDWALD

## **Workshop 2:** *Constructing and Playing a String Activated Bamboo/Sago Palm Stemwood Jawharp*

This workshop will be a step by step demonstration of how to carve and play a length of well dried bamboo or sago palm stemwood into a Jawharp full of overtones. Steev Kindwald draws upon the last 30 years playing and the last 15 years carving Jawharps from Bamboo, Sago Palm stemwood and Brass sheet. He incorporates designs from his studies and travels in Gypsy/Tribal India, ethnic Himalaya, highland Southeast Asia, various Indonesian islands and his own original ideas. Steev Kindwald has studied carving and playing Jawharps in India, Nepal, Thailand, Burma, Laos, Vietnam, Cambodia and Indonesia as a personal pleasure, a method of reinspiring local traditions, record endangered traditions and to inspire his own creative art music.

SIMON WYATT – CARLOS GARCÍA BENITO

## **Workshop 3:** *Whistle Down the Wind: Playing Palaeolithic Bird Bone Aerophones*

In the past the first label often given to a bird bone with more than a couple of man-made holes has invariably been ‘flute’, and in some cases this may indeed be the case. This workshop, which will bring together key researchers on this subject, and will weigh up the pros and cons of such a blanket interpretation and offer alternative representations of how these ancient sound-making devices may have been used. This workshop will consider the archaeological background for the recent high-profile German discoveries and move on to discuss, and demonstrate, issues of sounding-techniques and use-wear of instruments including the Isturitz and Hohlefelds artefacts which appear to have the most complete playing/embouchure end. It is clear that more than one technique may work, although this sometimes requires the hypothesis that some perishable material was attached to voice the devices.

*Including contributions by:*

ANNA FRIEDERIKE POTENGOWSKI – WULF HEIN – SUSANNE SCHIETZEL –  
FRANCES GILL – SUSANNE C. MÜNZEL

*Oldest Musical Instruments from the Caves of the Swabian Jura, Southwestern Germany. Possibilities of Sound, Frequency Analysis and Tonality*

Constructions of flutes based on artefacts from the Swabian Jura and Isturitz have been tested without mouthpieces to get closer to the way that they might have been played. The objective was to formulate possible acoustic vocabularies, in relation to fingering combinations, for each of the most intact examples and to compare results. From criteria, a frame of reference from which the instruments were constructed is given, as is a description of the voicing technique. In our lecture we will present a practical analysis of reconstructions (Hein/Seeberger) of the Palaeolithic swan, ivory and vulture flutes from the Swabian Jura and the vulture flute from Isturitz.

CARLOS GARCÍA BENITO

*Experimental Reproduction and Archaeomusicological Analysis of the Aerophone of Isturitz*

The archaeological remains known as flutes of the prehistoric Cave of Isturitz, are they really flutes or another type of aerophones? This paper describes the first results of the research work that is being carried out on the experimental reproduction of the most famous and complete aerophone of Isturitz and explores their possible uses as a musical instrument. This experiment has been made using replicas of prehistoric flint tools (blades, burins and drills) and a bone of griffon vulture (*Gyps fulvus*). A use-wear study of this experimental reproduction and of the tools used has also been done. Finally, the archaeomusicological analysis of this study demonstrate that their manufacture process is very simple and sonorously suggests that this archaeological object can be up to three different kinds of aerophone: end-blow instrument (*ney flute*), reed instrument (*clarinet*) or lip reed instrument (*brass*).

SUSANNE RÜHLING – RALF GEHLER – MERIT ZLOCH

#### **Workshop 4: Ancient Pop Academy**

In der Regel nähern sich viele Wissenschaftler den Rekonstruktionen archäologischer musikrelevanter Funde auf sehr theoretisch-intellektueller Ebene, aber wenig auf die Art und Weise, wie der Musiker der damaligen Zeit – nämlich: Was kann ich, wo komme ich musikalisch her, was geht auf dem Instrument? Die untrennbare Einheit von Instrument und Musiker wird dabei häufig vernachlässigt.

Um das zu ändern, würden wir uns mit den Teilnehmern – wie die damaligen Musiker auch – auf Basis von deren Hörgewohnheiten und der Art und Weise, wie sie – aufgrund ihres kulturellen Hintergrundes – musikalisch verankert sind, den Instrumenten nähern wollen. Die Hörmentalität historischer Musiker nachzuvollziehen ist nämlich unseres Erachtens trotz noch so vieler musiktheoretischer Traktate und Abhandlungen von Zeitgenossen aufgrund der großen Komplexität des Phänomens „Klang“ schwer möglich.

Der Workshop gibt den Teilnehmern die Möglichkeit mit Klang performativ zu arbeiten und ihre Fähigkeiten unter Anleitung zu erweitern – quasi Anregungen von Ideen „aus dem Elfenbeinturm auf die Bühne“. Als Beispiele seien hier heraus gegriffen:

- Wie stimme ich mein Instrument, um sein „klangliches Potential“ auszuschöpfen?
- Wie stelle ich Instrumente zusammen, um einen bestimmten „Ensembleklang“ zu erreichen?
- Welche Funktion lasse ich meinem Instrument im Ensemble zukommen (Rhythmus, Begleitung, Melodie)?

- Wie erreiche ich den „normalen Museumsbesucher“ mit meiner Performance?
- Wie vermeide ich es, mein Instrument in seinen Möglichkeiten zu überfordern?
- Welche Medien wähle ich für meine individuelle Darbietung?

Am Ende steht eine gemeinsame kleine Aufführung sowie einige gemeinsame Tonaufnahmen zur Verwendung für die ISGMA.

FRIEDEMANN SCHMIDT

**Workshop 5:** *Doppelflöten, Tripelflöten, Quadrupelflöten Rekonstruktion und Spielpraxis altamerikanischer Blasinstrumente aus Ton*

1. Einführung in die Akustik von Blasinstrumenten.

Erläuterungen zur bevorzugten Klangfarbe der gedackten Blasinstrumente, zum Phänomen der Schwebungen, zum ungelösten Problem der Skalen.

2. Unter musikarchäologischen Gesichtspunkten steht die akustische Rekonstruktion der Instrumente im Vordergrund.

Voraussetzungen sind Kenntnisse über die Akustik und große Fertigkeiten im Umgang mit Ton zur korrekten Realisierung der häufig sehr komplexen Konstruktion der Klangerzeuger wie z. B. Pfeifgefäße und Quadrupelflöten.

3. Erkundung der Klänge altamerikanischer Klangwerkzeuge durch das Spielen auf Repliken aus meiner Werkstatt.

Einführung in Spieltechniken und gemeinsame Versuche zur Rekonstruktion altamerikanischer Klangwelten auf der Basis relevanter Bemerkungen spanischer Chronisten.

# Abstracts of the POSTERS

(in alphabetical order)

FRANCES GILL

## *The Living Musikarkeologi: Anachronisms and The Body in Experiment*

We take the bus to work, we listen to the radio and we buy takeout coffee; all 21<sup>st</sup> century phenomena. Can we really take this ‘present’ out of our research regarding the past and ‘ourselves’ out of the experiment? In support of a *conscious use of anachronisms*, and perusing *the integration of technical, sensory and emotional understandings of the past* (Narmo & Petersson, 2011), data is collected in the research of three ‘flute’ artefacts from the Swabian Alb in relation to the construction of these artefacts as musical instruments, techniques in the voicing of them and as music makers. The Living Musikarkeologi, where the Swedish is used to allude to Scandinavian contextual-experimental archaeology, aims to set out a stall. It asks how and to what extent contextual experimentation in archaeology aids our enquiries in the current climate of organology; a climate ever more occupied with morphology and cultural analysis than solely taxonomic systems (Ternhag, 2007 a & b). A metal ‘Stone Age flute’ and other ideas are brought to the forum as a singular aspect for comment and discussion where anachronisms and the body are profiled.

Narmo, L. E., & Petersson, B., 2011: A Journey in Time, p. 27–48. Found in *Experimental Archaeology: Between Enlightenment and Experience*, eds. Petersson, Bodil & Narmo, Lars Erik, Lund University, Department of Archaeology and Ancient History, in cooperation with Lofotr Viking Museum, Norway, 2011.

Ternhag, G., 2007, a & b: Musikinstrumentforskning på Nytt (a), p. 9–17 and Organologi: systematik, morfologi och kulturanalys (b), p. 18–52. Both a & b found in *Musikinstrument berättar: Instrumentforskning idag*, eds. Stefan Bohman, Dan Lundberg & Gunnar Ternhag, Gidlunds Förlag, 2007.

SANDER MACQUOY

## *Sounding Images: The Auditive Dimensions of Pre-Colonial Mixtec Pictorial Manuscripts*

Music (i.e. performance) as an archaeological topic offers many opportunities for exploration. As an example of its relevance, public performances including music play(ed) an important role in network-forming and in the construction of corporate identity. In this presentation I will explore the auditive dimensions of Mixtec pictorial manuscripts. These so-called codices were utilised in an intertwined fashion with performance, and as such also contain numerous representations of performance-related practices. Hence, I will examine the original function of Mixtec codices as well as images and scenes in these codices depicting such practices. By doing so, I expect to contribute to a better knowledge of the social significance of music and sound in Mesoamerican society.

RIITTA RAINIO

*Sucked Trumpets of Northern Europe (3000–2000 BC) and North America (6000– BC): Unclassified Sounds and Musical Instruments?*

In the Hornbostel-Sachs system of musical instrument classification, aerophones proper are presumed to be blown instruments. Several animal calls from northern Eurasia and North America, however, have traditionally been played in the opposite way, by inhaling. Otherwise these calls, also used for music making, count among lip vibrated instruments, that is, trumpets. This paper presents prehistoric bone artefacts from Ajvide, Gotland, Sweden (3000–2000 BC) and Eva, Benton county, Tennessee (6000– BC), and discusses whether they could be regarded as early examples of sucked trumpets. The two-pieced artefacts are made from swan (*Cygnus* sp.) and turkey (*Meleagris gallopavo*) ulnae and radii by cutting, scraping and filing the bones and fitting them together. The copies, modelled after the original artefacts at Gotland Museum and Frank H. McClung Museum, produce a variety of sounds from hoarse clucks and yelps to trumpeting tones with harmonic structure.

SUSANNA SCHULZ

*Advantages of CT-Analysis – Joints in Wooden Construction of Egyptian Box Lyre and Experimental Archaeology: Bending Wood vs. Crooked Wood*

Parts of ancient plucked instruments often have to be reconstructed through experimental work, for example, by reproduction of bent woods. The harp of Dra Abu el-Naga and the harp from Western Mongolian Žhargalant Chajrchan Mountains are shaped similarly: neck and body are made from one-piece, the neck is bent upwards. Reconstructing them meant to consider 2 methods of bending woods. The Egyptian box lyre is made from wooden plates which are bent 2-dimensionally.

JOACHIM SCHWEEN

*Decor and Sculptural Structures of the Surface of Bronze Age Lurs*

The lurs, spread in parts of northern Europe during the late Bronze Age, are a remarkable phenomenon. When viewed from a distance, these wind instruments, mostly played in pairs and apparently in religious ceremonies, have the shape of oversized cattle horns. In case of closer consideration, however, other important signs appear. The surface of the instruments is structured in different ways. There are traces of the production and of the use, typological rudiments of their development and symbols of religious and cosmological significance, that reveal their cultic use. In the poster presentation a systematization of detectable structures on the surface of the lurs shall be made.

# Abstracts of the CONCERTS

*(in alphabetical order)*

BARNABY BROWN

## *Adventures in a Geometric 'Few-pitch' Style*

In this demonstration, I share results from ongoing experimentation informed by a range of living piping traditions and sixteen four-pitch compositions of epic complexity transcribed in Gaelic Scotland, c. 1797. I will play new works on reproductions of: (1) a pair of silver pipes from Ur, (2) the 'Louvre' aulos, and (3) the 'Sutton Hoo' lyre with the 'High Pasture Cave' bridge. On each instrument, I weave geometric sonic patterns using two contrasting harmonic domains. In addition to this binary tonal dynamism, settling on pitches one scale degree apart, these compositions apply the principle of keeping pitches in reserve – sometimes for several minutes. In these few-pitch experiments, I explore symmetrical patterns: the binary cycles of Gaelic pipers had two halves, equal and opposite. I will end with a composition for 'northern' triplepipe built on the asymmetric cycle 'Korsgoloff' with eleven units: 11011001011. In the 1500s, Welsh harpers believed this cycle was 'drawn out from music' by master musicians at a council summoned by the Irish King, Muirchertach Ua Briain (d. 1119).

Articles and recordings relating to these experiments are available at [www.barnabybrown.info/publications](http://www.barnabybrown.info/publications).

SOMJIT DASGUPTA

## *A Comparative Concert on Non-fretted Musical Instruments of Sarod Family*

The concert will be presented with performances on one or two of the instruments in a comparative way. Taking the work done with the Ethnological Museum Berlin, the release of a DVD on the making process and recitals of five instruments namely, SAROD, DHRUPADI RABAB, SUR-SHRINGAR, MOHAN VEENA & SUR-RABAB, the musical instruments produced can be played. 'Sound – Object – Culture – History' has musical compositions and improvisations that has been practiced and played since the last three Centuries with changing styles, the mode of singing and an overall musical atmosphere, with diversity will come into the context. The items and the Ragas (musical moods) will be announced during the concert.

ABRAHAM ELÍAS LÓPEZ

## *Multiple Flutes from Mesoamerica*

The present demonstration is based on the exploration of double flutes from Western Mexico and Quadruple Flutes of Teotihuacan culture, these improvisations are directed in two ways of the sound perception, first the quest of the fundamental sound production and secondly the result of the sound clashes of the multiple pipes. What emotions can produce those ancient sounds in the present time?

CARLOS GONZÁLEZ – accompanied by: MABEL RUIZ

*La Vihuela Marianita de Quito*

In November 2010 and October 2012, I travelled to Quito to study the vihuela preserved in the Church of the Company of Jesus in Quito, Ecuador. This Instrument, according to tradition, belonged to the family Paredes y Flores and it was played by Mariana de Jesus Paredes y Flores (1618–1645) and preserved as a relic. Although this is a private project, I want to thank the collaboration of the Musée de la Musique in Paris, and especially Joël Dugot, who have analyzed the wood samples we took from different parts of the instrument. This instrument, well known by the religious ecuatorian people until 1912, did not come to the attention of the music community until 1976, when the Chilean musicologist Oscar Ohlsen introduced it in two Journals of the Lute Society: 1976 (note by Diana Pouton) and 1978 (note by Donald Gill). Since then, few articles have been published about the instrument and its history, the most extensive and documented, published in the Journal of Musicology by the Colombian musicologist Egberto Bermudez in 1992, to celebrate the bicentenary of the discovery of America. In March 2012 we published the plans of the Quito Vihuela (I like to call it Vihuela Marianita, as this is what it was called in Quito) and we are working on a monograph on the instrument and its historical circumstances in direct collaboration with the Foundation of the Church of the Society of Jesus. The study of this vihuela, one of three preserved until now, has allowed us to better understand the structure and the construction techniques used by Spanish makers in their vihuelas and four courses guitars, very different from those of the of European lute makers.

*During the presentation about the Vihuela Marianita de Quito by Carlos González, Mabel Ruiz will perform a selection of s. XVI original works for vihuela from composers Mudarra, Milan, Fuenllana, Narvaez, Pisador and Daza, in order to recreate the music that once was interpreted in the original instrument.*

STEEV KINDWALD

*Memory and the Future of Human Sound – Weaving Breath, Harmonics, Rhythm and Melody*

From prehistory to the unknown future: using the earliest known prehistoric flute reproductions, rare/unknown Jawharps, plus other surprises, as tools on a sound voyage – from the memories of the ancients into the future.

SANDER MACQUOY

*Mood Music: Personal Songs from a Singing Archaeologist*

Sander Macquoy is a student researcher at the Faculty of Archaeology in Leiden. Besides this, he spends most of his free time singing his self composed songs and writing new ones. As a self-titled 'singing archaeologist' he combines his passions for both (music) archaeology and songwriting. Although not specifically scientific, this sometimes leads to interesting results (e.g., a song written in Nahautl language). In his music Sander blends personal experiences with remarkable daily life events to create sensitive folk songs. With his straight-to-the-heart-lyrics, which always arise from personal feelings, he often manages to move his audience.

DEIRDRE MORGAN

*Living Jew's Harp Traditions from Europe and Beyond*

This performance will present some of the melodic jew's harp traditions of Europe, as well as styles from further afield. I will demonstrate the unique playing techniques and repertoires of various regions, using artisanal jew's harps made by master craftsmen.

Ensemble for Early Music "Musica Romana"

SUSANNE RÜHLING – MERIT ZLOCH – special guest: RALF GEHLER

*The Sound of Emperors and Games – the Organ of the Ancients*

Die Musiker erwecken Klänge längst vergangener Epochen wieder zum Leben. Das Wissen, die Erfahrung und die musikalischen Sprachen der Mitglieder ermöglichen eine Annäherung an vergessene musikalische Traditionen. Gespielt werden überlieferte und nachempfundene Kompositionen aus der Antike und dem Mittelalter. Musiziert wird neben einer rekonstruierten Orgel auch auf Nachbauten historischer Instrumente: Harfe, Laute, Leier, Panflöte, Knochenflöte, Rohrblattinstrumente, Perkussion und Trommeln.

SIMON O'DWYER – MARIA O'DWYER – JOACHIM SCHWEEN – JOHN PURSER

*Ancient Music Ireland and Guests – Featuring Three Compositions Playing the Horns and Trumpets of Bronze Age Europe*

Instruments include a pair of horns from Southern Ireland, a pair of horns from Northern Ireland, an English bronze horn, a German lur and an Irish bodhrán (frame drum). Musicians include John Purser (Scotland), Joachim Schween (Germany), Maria Cullen O'Dwyer (Ireland) and Simon O'Dwyer (Ireland). The audience will be brought on a sonic journey with a particular emphasis on overtone.

ANNA FRIEDERIKE POTENGOWSKI – GEORG WIELAND WAGNER

*VentOs – Contemporary Music for Paleolithic Flutes and Percussion*

There are some things that go beyond results of research about the Palaeolithic flutes from the Swabian Jura. Their very existence builds a bridge that links our present culture with its past roots. The Arts act as a mirror to the time period in which they operate. One product of The Arts is works of contemporary music which can be interpreted as a reflection of aspects of being human today. This might be one aspect of what music today has in common with the music that might have existed 40 000 years ago. A. F. Potengowski and G. W. Wagner seized the opportunity given by these musical instruments and commissioned composers to write for Paleolithic flutes and percussion in order to make a journey about human beings then as today.