

Musical Perceptions – Past and Present On Ethnographic Analogy in Music Archaeology

6th Symposium of the *International Study Group on Music Archaeology*
Tuesday 9th – Saturday 13th September 2008

Venue: Ethnologisches Museum, Lansstraße 8, 14195 Berlin, Germany
Haupteingang / Main Entrance

- PROGRAM -

Tuesday, September 9, 2008

09:00-10:00 Inscription

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

10:30-11:00 *Perception and Concepts of Sounds: An Introduction*
Lars-Christian Koch

11:00-12:00 **Finds - New and Revisited**

Chair: Arnd Adje Both

Pottery Shell Trumpets: New Data from the Andes
Alexander Herrera

*Music and Rite: Musical Instruments in the Sanctuary of the Chthonic Divinities
in Akragas (6th century B.C.)*
Angela Bellia

12:00-14:00 Lunch Break

14:00-16:00 **Ethnomusicological and Ethnoarchaeological Implications in Music Archaeology: Approaches**

Chair: Graeme Lawson

*Music Archaeology at the Crossroads of Many Disciplines: A Discussion on
Theory and Methodology of Music Archaeology*
Zeynep Helvacı

The Problem of Ethnocentricity in Music Archaeology
Gjermund Kolltveit

*The Definition of 'Music' in Music Archaeology: The Contribution of
Historical Ethnomusicology*
Sam Mirelman

*Musicethnoarchaeology or The Fine Art of Selecting Fitting Analogies and
Correctly Pinpointing Survivals*
Alexandra von Lieven

Synopsis and Discussion

16:00-16:30 Break

16:30-17:30 Opening of the Poster Presentation

Introduction: Arnd Adje Both

Double Flute Organology from West Mexiko
Abraham Elias

Digital Documentation for Archaeological Music Instruments
Francisca Gili

Integrating Sources and Approaches in the Study of the Ancient Greek Aulos
Ellen van Keer

Traces of Ancient Musical Practice
Graeme Lawson

The Secret Beat of Etruria
Emiliano Li Castro

A Casual Finding of a Tibiae's Reed from Pompeii
Cristina Majnero

Music and Funerary Rites in the Classic World: Archaeological Remains
María Isabel Rodríguez López

Pugnate – Ancient Sounds of the Arena
Susanna Rühling

Whistling Vessel – Trumpet – Shell Horn
Friedemann Schmidt

Wednesday, September 10, 2008

09:00-10:00 Ethnomusicological and Ethnoarchaeological Implications in Music Archaeology: Greek and Roman Antiquity

Chair: Sam Mirelman

Sounds of War, Sounds of Peace: For an Ethnographic Survey of Ancient Greek Music in Platonic Writings
Eleonora Rocconi

The Music of "Peoples without Notes": Evidence of Musical Archaeology from Magna Graecia
Daniela Castaldo

Synopsis and Discussion

10:00-10:30 Break

10:30-12:00 Ethnomusicological and Ethnoarchaeological Implications in Music Archaeology: Music and Spirituality”

Chair: Sam Mirelman

Music in Ancient Near Eastern Magic-Rituals
Dahlia Shehata

*Psychopomp and Circumstances or Shamanism in Context:
An Interpretation of the Drums of the Southern TRB (Trichterbecher Kultur)*
Simon Wyatt

Synopsis and Discussion

12:00-14:00 Lunch Break

14:00-17:00 Workshops

14.00-15.00 *Prehispanic Music Workshop: The „Baile“ Flute Music of the Andes*
José Pérez de Arce/Claudio Mercado

15.00-16.00 Break

16.00-17.00 *Understanding the Greco-Egyptian Aulos Berlin Egyptian Museum 12461/2*
Stefan Hagel

Parallel Event:

Guided Tour: The Berlin Phonogram Archive

19:30-21:30 Concert Demonstrations
(Ethnologisches Museum, Lansstraße 8, Entrance Foyer)

Introduction: Lars-Christian Koch

The Gold Lyre of Ur: Music, Dance and Poetry
Andy Lowings

Traces of Ancient Musical Practice: The Silver Lyre of Ur
Graeme Lawson

Aulos and Cithara
Stefan Hagel

Tibiae Pares and Impares, Hypotheses of Roman Music
Cristina Majnero / Roberto Stanco

Thursday, September 11, 2008

09:00-10:30 Music Archaeology and Historical Ethnomusicology Continuity and Discontinuity of Musical Traditions: Stringed Instruments

Chair: Ricardo Eichmann

Analysis of an Archaeological Musical Instrument in Elam
Sepideh Khaksar

The Legacy of the Sumerian Lyre in Africa Today
Andy Lowings

*Continuity and Discontinuity of Musical Instruments or Sound Producing
Devices in Japan: Based on Music Archaeology and Historical
Ethnomusicology*
Chie Arayama

Synopsis and Discussion

10:30-11:00 Break

11:00-12:30 General Assembly at the Berlin Phonogram-Archive

Chair: Arnd Adje Both / Ricardo Eichmann / Lars-Christian Koch

Organization of the Study Group and Future Conferences

12:30-14:30 Lunch Break

Thursday Afternoon - Free Time

Suggested Activities:

Visit to the Exhibition "Babylon. Myth and Truth" at the Pergamonmuseum

Visit to the Musikinstrumenten-Museum ("Museum of Musical Instruments"),
Potsdamer Platz

Friday, September 12, 2008

09:00-10:00 Music Archaeology and Experimental Archaeology Construction and Reconstruction: Ancient China

Chair: Dahlia Shehata

*Scale, Tuning, and Spectrum of early Han Dynasty (ca. 187-180 B.C.): Chime
Stones and Bells Excavated at Luozhuang, China*
Fang Jianjun

*The Development and Evolution of Early Qin – Taking Cultural Relics in the
Research of the Qin History before the Tang Dynasty as the Angle of View*
Dai Wei

Synopsis and Discussion

10:00-10:30 Break

**10:30-12:00 Music Archaeology and Experimental Archaeology
Construction and Reconstruction: Ancient Egypt**

Chair: Dahlia Shehata

The Tambourine "Dof" Instrument in Ancient Egypt: Study Comparing the Past with the Present

Khairy El-Malt (joined paper with Mohamed Maged Ahmed, Reem Farouk Shakweer, Abdul Basset Hatab)

Frequency Analysis of Reconstructed Ancient Pharaonic Musical Instruments Tones

Mohamed Maged Ahmed

Postgraduate Studies of Ancient Egyptian Music

Khairy El-Malt

Synopsis and Discussion

12:00-14:00 Lunch Break

**14:00-17:30 Music Archaeology and Experimental Archaeology
Construction and Reconstruction: Prehistoric America**

Chair: José Pérez de Arce

The Sound of the Earth

Adrián Velázquez Castro / Arnd Adje Both

A Musical Nature: Pre-Columbian Ocarinas of Northeast Honduras

Carrie L. Dennett

A Hermeneutic Re-examination of Selected Sixteenth Century Commentaries on Aztec Music

Mark Howell

15:30-16:00 Break

Waylla Kepa Project: Musical Experimentation with Pre-Hispanic Sounds

Carlos Mansilla

How to Make a Ceramic Panpipe. New Archaeomusicological Discovery in Nasca (Peru)

Anna Gruszczyńska-Ziółkowska

Synopsis and Discussion

19:30-22:00 Concert Demonstrations
(Ethnologisches Museum, Lansstraße 8, Entrance Foyer)

Introduction: Lars-Christian Koch

The Norwegian Krogharpe – an Attempt at the Reconstruction of a Lost Playing Technique

16th Century Harp and Violin From the Burial Chapel of the Freiberg Cathedral

Nancy Thym / Thilo Vierig

The Qin

Dai Wei

The Tambourine "Dof" Instruments and some other Nubian Percussion Instruments

Khairy El-Malt / Mohamed Maged Ahmed / Reem Farouk Shakweer / Abdul Basset Hatab

La Chimuchina goes to Berlin

José Pérez de Arce / Claudio Mercato / Francisca Gili

Saturday, September 13, 2008

**09:00-10:00 Music Archaeology and Experimental Archaeology
Construction and Reconstruction: Prehistoric Europe**

Chair: Alexandra von Lieven

Bronze Axes – Used as Musical Instruments?

Christof Berends

Reproducing the Carnyx

Peter Holmes

Synopsis and Discussion

10:00-10:30 Break

10:30-11:30 Music Archaeology and the Media

Chair: Alexandra von Lieven

Science and Imagination: Music Archaeology and the Media

Graeme Lawson

Layers of Sound-Productions

Emiliano Li Castro

Synopsis and Discussion

11:30-13:00 Final Discussion

Chair: Arnd Adje Both / Ricardo Eichmann / Lars-Christian Koch

13:00 Lunch

Musical Perceptions – Past and Present On Ethnographic Analogy in Music Archaeology

Abstracts of the Papers presented at the
6th Symposium of the *International Study Group on Music Archaeology*
(in alphabetical order)

Chie Arayama [Japan]

Continuity and Discontinuity of Musical Instruments or Sound Producing Devices in Japan: Based on Music Archaeology and Historical Ethnomusicology

The *koto*, or Japanese zither, and the *taku* (*dotaku* and *shodotaku*), or bronze bell, were introduced to the Japanese Archipelago in the Yayoi period (about 5th century BC - 3rd century AD) from the Asian continent. However, after their introduction, these musical instruments followed very different tendencies. The *koto* were also used in posterior periods without fundamental changes, and even at the present time, we can see their principal characteristics in the *wagon*, or Japanese *koto*, a traditional stringed instrument used in the *gagaku*, or ancient court music. On the other hand, the *taku*, especially *dotaku*, were no longer used in the Kofun period (about 3rd century A.D. - 6th century A.D.). Although the *koto* and the *taku* were introduced almost at the same time, why were the *koto* used in posterior periods and the *taku* declined? This presentation attempts to compare the *koto* and the *taku*, considering the problem of their continuity and discontinuity from an archaeological and historical point of view.



Angela Bellia [Italy]

Music and Rite. Musical Instruments in the Sanctuary of the Chthonic Divinities in Akragas.

(6th century B.C.)

In the Sanctuary of Agrigento, a town in the central-south of Sicily, the ancient Akragas, they have brought to light a sacred deposit which is one of the richest of the Island.

Among the many findings that have been discovered, the ones that stand out most are musical instruments. The discovery, made in the 1980s, revealed, amongst many other things, fifteen bronze *kymbala*. Today they are kept in the Regional Archaeological Museum of Agrigento and in the Regional Museum “Antonino Salinas” of Palermo. These instruments can be put into two groups both of the 6th century B.C. They are about 4-6 cm high and 10-12 cm large.

In the Sanctuary, dedicated to Chthonic Divinities, Demeter and Kore, there were thesmophoric rites, where the protagonists were exclusively women: the musical instruments perhaps seem to evoke exact episodes of myth and the sorrowful search by the mother of Kore who had been abducted by Hades, King of the Underworld. Demeter is characterized as rattling with bronze and called “the noisy” from the noise of *kymbala* and *tympana* which was made in the searching for Kore.

Actually there are no studies that have tried to give an interpretation of presence of the *kymbala* in the Sanctuary. Many other places in Sicily have discovered this particular kind of musical instruments, especially sanctuaries that were dedicated to “chthonic” divinities. The *kymbala* seem to refer to female ceremonies. Music was the background in every moment of the sacred ritual of which the Sanctuary of Akragas seem to offer a rich and singular repertory.



Christof Berends [Deutschland]

Bronze Axes – Used as Musical Instruments?

While exploring Bronze Age music, scholars normally pay little attention to the sound qualities of “conventional” bronze artefacts like tools, weapons or components of costume, though a use of some of these forms as sound instruments has been discussed occasionally. An examination of 45 bronze axes from five Middle German hoard finds revealed, that especially Early Bronze Age flanged axes generally possess a beautiful and rich, acoustically appealing sound as well as a definite pitch – with occasional exceptions possibly indicating hidden defects. The mass finds of Schkopau and Gröbers-Bennewitz allow the construction of finely graded tone scales covering an area of up to more than one octave. Therefore even musical performances on many axes, just like prehistoric glockenspiels, could have taken place, maybe during certain ceremonies or rituals. Two decorated axes from Griefstedt, obviously local products derived from Anglo-Irish types, indicate quite different sound characteristics. Extremely thin and rich in tin, they possess a very low fundamental frequency and an apparently “chaotic” partial tone spectrum, sounding rather like vibrating plates than bars. The four Younger Bronze Age short-flanged axes from Freist-Reidewitz with their more bell-like sound show an unusual proportion between weight and pitch – just inverse to that of the flanged axes. When struck with wooden sticks, the small Late Bronze Age socketed axes from Klein Oschersleben produce a musically unattractive sound perceived as very high and thin, with a loud resonance of the striking material. Flint, bone and metal sticks yield more satisfying results.

Daniela Castaldo [Italy]

The Music of “Peoples Without Notes”: Evidence of Musical Archaeology from Magna Graecia

We would like to make some observations concerning the music of those ancient peoples who lived in Magna Graecia before the Roman conquest, by means of the archaeological findings coming from the chronological period between the 6th and the 3rd centuries B.C.

Music produced by the civilisations that developed in such remote times can not be either read or heard. In order to recreate the history of the musical activities of those “Peoples without notes”, scholars have various types of documents at their disposal: written ones reporting musical events and activities from different texts of Greek and Roman origin; epigraphic ones coming from funerary inscriptions reporting the musical activities of the departed; and finally archaeological ones, which are remains of ancient musical instruments and the artefacts decorated with musical scenes. By comparing and examining these different types of documents, we shall try to point out some aspects referring to the presence of music in the native populations of Campania and Apulia, especially just how the aristocratic class had come into contact with and assimilated many elements of Greek culture, including the music.

An approach of this kind can be useful both for Ethnomusicology, because it assures a historical basis with which we can compare the data now gathered in the field, and for the History of music, because it gives the historians of traditional western music a network of comparisons they can use to enrich and complete their research.



Dai Wei [China]

The Development and Evolution of Early Qin - Taking Cultural Relics in the Research of the Qin History before Tang Dynasty as the Angle of View

The Qin with a history of 3,000 years is a wonderful work in the treasure-house of Chinese traditional music, and it has been recorded in abundant historical documents including theories, treatises, repertoires, notations, etc. But even like this, because the one-sidedness always existed when historical data was recorded and documents constantly lost in the course of spreading. If only depending on those preserved so far, we can't restore the intact historical style and feature of Qin indeed, especially those appeared before Tang Dynasty, though documents on Qin far exceeded those on other Chinese ancient musical instruments. Then, with the rising and developing of Chinese Music Archaeology, we got more and more historical chips. Trying to piece them together in the assorted dish of historical documents, it can not only plug a gap, but

also make the historical original appearance of development of Qin music culture clear gradually. For this reason, through utilizing important achievements of Chinese Music Archaeology in recent years such as *Chinese Music Cultural Relic Big Series*, this paper will mainly discuss issues on Qin's structures, postures of playing, performance forms, cultural attributes and so on, especially prior to Tang Dynasty, and then attempt to seek how similarities and differences between Qins before and after Tang Dynasty formed gradually.



Carrie L. Dennett [Canada]

A Musical Nature: Pre-Columbian Ocarinas of Northeast Honduras

Archaeologists are currently striving to establish a basic culture history for Pre-Columbian northeast Honduras. Sporadic, often isolated research in this remote region of Central America has resulted in a limited understanding of basic material culture and evolution. At the time of European contact, however, this region was likely inhabited by aboriginal peoples with features linking them to both Mesoamerican (Maya) societies to the north and Isthmo-Colombian (Chibchan) cultures to the south, as in a cultural frontier. During the final prehistoric era, the Cocal Period (AD 1000-1530), the native population, likely the Paya-speaking Pech, produced small, hand-modeled ceramic wind instruments, including both ocarinas and flutes. In this paper we describe these aerophones, their variability (size, form, decoration), chronology, and spatial distribution. We also compare northeast Honduras examples with decorated specimens of aerophones from archaeological sites in southern Mesoamerica and Lower Central America. Finally, we speculate about the role and function of Pre-Columbian ocarinas in northeast Honduras.

Khairy El-Malt / Reem Farouk Shakweer / Abdul basset Mohamed Hatab /

Mohamed Maged Ahmed [Egypt]

The Tambourine "Dof" Instrument in Ancient Egypt.

Study Comparing the Past with the Present

There is no doubt that percussion instruments had played an important role in the musical life of ancient Egypt and this has carried over into contemporary music of today (especially in the Nubian heritage). Therefore, we incipited this joint research, which addresses the following:

1. The reconstruct of the ancient Egyptian tambourine "Dof" .
2. Comparing the ancient and the current Nubian rhythm.
3. Comparing the frequencies of the reconstructed ancient Egyptian tambourine "Dof" with those currently used.
4. Attempting to recreate the rhythm and melody used in antiquity using a music piece from Pharaonic context, which highlights the role of the rhythm.
5. A musical recital of a piece of music from Nubian heritage and comparing this to the recreated piece from ancient Egypt.



Khairy El-Malt [Egypt]

Academic Educational Project - Postgraduate Studies of Ancient Egyptian Music

This project aims at establishing a unique first & second postgraduate diploma (Master Degree). It is about the Ancient Egyptian Music. Its goal is to prepare researchers to take over reviving, spreading, and protecting this precious heritage from forfeiture or damage.

The first Diploma

Financing Institution.

Higher Education Enhancement Project Fund (HEEPF)

Implementing Institution:

Faculty of Music Education, Helwan University, Egypt.

Project duration: 30 month - The preparatory stage began in February 2005, the studies proper began in October 2006.

Registration Requirements:

Holders of Bachelors, Licentiate, or an equivalent in any fields relating to: music, anthropology, archeology, Egyptology, tourism, and linguistics are encouraged to apply for the GDAEM.

The study will be held in Arabic and English languages.

The registration began in August.2006, and the courses were offered from September 2006 as evening classes.

Courses:

The course will last for one scholastic year and will be divided in two semesters.

First Semester (Fall 2006)

1. Ancient Egyptian Society
2. Philosophy and Beliefs in Ancient Egypt
3. History of Music, Dancing, and Singing in Ancient Egypt
4. Hieroglyphics and Phonetics
5. An Introduction to Music
6. Computer Studies

Second Semester (Spring 2007)

1. Customs and Tradition in Ancient Egypt
2. Philosophy of Art and Aesthetic Consciousness
3. Music Dancing and Singing Scenes in Ancient Egypt
4. Musical Instruments in Ancient Egypt
5. Coptic Music
6. Music in Ancient Civilizations
7. Final Project

2. Electives:

(Offered only in the fall semester)

1. Fine Arts in Ancient Egypt
2. Musical Instruments Manufacturing Technology
3. Acoustic Analysis
4. Music Composition Inspired by Ancient Egyptian Heritage
5. Comparative Study of Music
6. Education in Ancient Egypt
7. Archeological Restoration
8. Ancient Egyptian Literature
9. Ancient Egyptian Arts and Aesthetics

The Second Diploma

The preparation of the study plan for the second Diploma has been started in May 2008

Founder of the Project

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Anna Gruszczyńska-Ziółkowska [Poland]

How to Make a Ceramic Panpipe. New Archaeomusicological Discovery in Nasca (Peru)

The archaeological excavation accomplished in 2006 in Nasca ceremonial center at Cahuachi gave a new extraordinary finding for archaeomusicological studies. It contains numerous fragments of Panpipes (*antaras*) dated for ca 5th century. The *antaras* were made of clay dried in the sun but not baked, they remained as an unfinished product. *Antara*, being a main Nasca musical instrument, served as an offering. In some cases only fragments of an antara played this role. The detailed studies on Nasca *antaras* continued up to now, gave a large amount of information about their musical / acoustical properties. This new finding probably opens a new view to studies and gives possibilities to reconstruct the process of the making of an *antara*. It also opens new chances for closer collaboration between the researchers and the contemporary Nasca producers of ceramics who, during last few years, are engaged in making copies of the famous old Nasca ceramic objects, mainly to be sold to tourists. They are good specialists, they also try to make copies of musical instruments, but – it must be stressed – there is a kind of secret still not known to them in the old *antara* production, which does not enable them to produce exactly the same instruments now. Both, the scientific researches and practical experience in the production of ceramics can be important for the development of archaeomusicological experimental studies and popularization of archaeomusicology.

Zeynep Helvacı [Turkey]

Music Archaeology at the Crossroads of Many Disciplines: A Discussion on Theory and Methodology of Music Archaeology

As music is “the mediator between the spiritual and sensual life”, so the science of music is bound to be at the crossroads of many disciplines. The very nature of the music forces the researchers to go deep into what is both objective and subjective.

Music is known to change usually slower than the other aspects of cultures. This characteristic of music makes it significant for the study of continuity and change, which is a fundamental concern for humanities and social sciences. When certain theoretical approaches are inquired comprehensively, it is striking to see that their views on continuity and change lie in the root of their basic conflicts. Music archaeology, by revealing the music of the past and making it available for comparison with the music of later times, provides an important basis for understanding continuity and discontinuity in musical traditions. The significance of such knowledge for understanding music is obvious, but the possibility it arises is no less significant: A better understanding of humankind and its history.

This paper aims to explore these possibilities, by discussing the current and -possible- future relationship of music archaeology with theoretical and methodological approaches of other disciplines of humanities and social sciences.



Alexander Herrera [Colombia]

Pottery Shell Trumpets: New Data from the Andes.

The recent excavation of three *Waylla Kepa* or *Pututo* pottery trumpets fashioned after tropical marine snails in a confined ceremonial *kancha* structure in the northern Andes of Peru offers new insights into their function and symbolism. Ceremonial horns made from tropical shell are among the earliest musical instruments in the Andes, yet the evolution of ceramic trumpets is poorly understood partly due to the lack of finds in context. Research has tended to concentrate on the material itself, evaluating its provenience in terms of complex exchange mechanisms. Drawing upon a long-term study of the archaeological landscape around the Huandoy glacier and excavations at the ceremonial centre of Keushu, this paper seeks to address the linkages between the emplacement of ceremonial architecture, water symbolism and mortuary ritual to raise new questions surrounding the uses to which these instruments were put, as well as their enduring symbolic power.

Peter Holmes [Great Britain]

Reproducing the Carnyx

Recent reconstructions - and in France new finds - of the Iron Age instrument we call *carnyx* have prompted the writer to undertake new experiments based on a review of two neglected bodies of evidence.

The first is the body of coins from various sources, which depict the *carnyx*. Small as these are, they contain a wealth of detail and many are capable of being fixed in time and space. The paper begins by describing the development of taxonomy of *carnyx* coins in order to provide a new body of comparative support for the reconstruction of a specific *carnyx*. This has involved the analysis of several hundred coins produced by Greek, Roman and other native peoples of Iron-Age Europe. They have been classified according to manufacturer, date and the nature of the iconography, enabling analysis to be carried out of the nature and potential organological significance of variation in standard depictions. It has also enabled the other scattered iconographical and physical material to be placed within the newly-created framework.

The second case is comprised of the remains of an almost complete instrument discovered in England at the end of the 18th century: the Tattershall *carnyx*. Although now lost, extensive records survive (including a fine pencil-and-watercolour drawing and a detailed scientific report). From these records, and in combination with the numismatic analysis, a new reconstruction can be designed and manufactured with reasonable certainty that the disparate elements may be applied. The surviving documentation offers particular insights into the method of manufacture of the instrument, which is further supported by the other extant physical evidence.

Experiments with the instrument, utilising a range of blowing devices, has enabled the envelope of performance to be defined and some conclusion proposed as to the range of possible uses of this *carnyx*. Its role alongside other musical instruments of the period is discussed and experimental work on these is also described.



Mark Howell [USA]

A Hermeneutic Re-examination of Selected Sixteenth Century Commentaries on Aztec Music

“A Hermeneutic Re-examination of Select Sixteenth Century Commentaries on Aztec Music,” takes another look at statements on Aztec music made by missionaries in the 16th century factoring in the worldview of the friars and other European intellectuals of the time, particularly

those involved in music. Geo-cultural music traits for historic and contemporary Amerindians, as established by ethnomusicology, are used for comparative purposes.



Fang Jianjun [China]

Scale, Tuning, and Spectrum of early Han Dynasty (ca. 187 – 180 B.C.): Chime Stones and Bells Excavated at Luozhuang, China

In 2001, 107 pieces of chime stones and 14 bronze bells were excavated from a pit near a large tomb at Shandong Luozhuang, China. The tomb can be dated to early Han dynasty (ca.187 – 180 B.C.). The instruments are well preserved with a good tone condition that brings the possibility of investigating the scales, tuning systems and the sound spectra.

What are the scales and vibrating modes of chime stones and bells? What is the relationship between them? How were the instruments tuned and what was their spectrum? In this paper, I examined these issues by means of conducting music-archaeological fieldwork and acoustical experimentation. I used a chromatic tuning machine to test the pitches of the instruments while actually playing, at the same time, using a digital tape-recorder to record the tones together with the standard fork, then analyzed the data through computing software the *General Music Analysis System* (GMAS 2.0). The acoustic experimentation will enable the sound of ancient instruments to be visible in the graphic form.

This study will provide reference for making playable replica of the chime stones and bells in order to enable performers to play these instruments in traditional Chinese ensemble or singing and dancing performance. The sound specimen of the instruments would be applied in both electronic and computer music creation. Also, this study will offer evidence to the reconstruction of musical history, especially the history of musical instruments.



Sepideh Khaksar [Iran]

Analysis of an Archaeological Musical Instrument in Elam

This research aims to present a study of ancient music from an archaeological point of view. The geographical and historical focus of this research is directed towards the music of elamite period in general and specifically stringed instruments and especially ancient lute. This study tries to answer questions such as:

1-What are the characteristics of ancient Lute in Elamite database?

2-How can typology, continuity and evolution of these Lutes be described?

3-And how the present types of musical instruments are influenced by an elamite Lute?

Statuettes, seals and rock relieves are rich sources of information about the music. of old elamite until Neo-elamite times. I am trying to show an overview of ancient Elamite musical instrument in general, between 4000 B.C. and 700 B.C. with archaeological finds in different places such as Susa, Haft tappe and other occupation of Elamite context.

I am trying to gather as many finds and to collect as much information about them as possible and put them into a data base. The important material for Elamite musical culture is:

1- Elamite terracotta seals representing a ceremony with real or mythological themes.

2- Musician terracotta statuette.

3- Some remain of musical instruments.

4- Elamian musician and musical instrument on the rock relieves.

5- Neo elamite Inscribed bowl.

6- Literary evidence in Elamite language.

Plurality, Diversity and Variation of musical instrument can help us to give a full account of the role of this Art in culture of ancient Elam. Through this analysis we can try to find the lost clues which can connect the ancient music in Iran to its present traditional and local music.

At last I will take into consideration the situation of contemporary Iranian Lute-like instruments within the limits of present's Iranian border.



Gjermund Kolltveit [Norway]

The Problem of Ethnocentricity in Music Archaeology

"Music" is a surprisingly new invention. Most of the languages of the world lack a concept of music, yet in all known cultures people play, sing and dance. Historical musicologists too often employ an ethnocentric understanding of music, arisen from the western art music tradition.

Does music archaeology represent an alternative voice that challenges ethnocentric approaches to music? Since the field consists of individual researchers with different interests and views, there is no easy answer to this question. But the fact that music archaeologists use material culture as their primary point of departure means that they arrive at other perspectives and approaches to musical activities than historical musicologists using written sources. Most music archaeologists will probably understand music in the widest sense, and - for instance - regard a bone flute without finger holes just as much musical than one with finger holes.

On the other hand, does our discipline need "music" at all? Some music archaeologists tend to abandon the concept of music, in favour of "intentional sound" or similar, and some prefer to label their field of study "archaeomusicology" or "archaeo-organology". Such strategies could be seen as a response to an unwanted ethnocentric perspective.

The paper will discuss questions related to ethnocentricity, with special emphasis on music-archaeological work with lithophones in Norway. In what way can we benefit from ethnomusicological theory to deal with this problem? The matter not only concerns research, but also outward oriented activities. Better clarity within a basic theoretical and methodological issue like this also means that our scientific results will become more accessible to the media and among the general public.



Graeme Lawson [Great Britain]

Science and Imagination: Music Archaeology and the Media

Time and again, scholars hold their heads in disbelief at the liberties taken by film and television producers. Music-archaeology is no exception. We see (and hear) frightful atrocities committed against our subject - either because producers have misunderstood our results or because they have ignored them altogether. Such occasions highlight an important question: can we, as scholars, turn media interest into a beneficial force, enabling us to bring our results and our ideas - and our music - before the general public *without compromising our integrity*?

The paper adopts a musician's perspective as well as an archaeologist's, to explore some of the challenges, ethical and practical, which face us in attempting to translate music-archaeological data and opinion into musical forms appropriate to film, television and theatre. It proposes that the essential requirement is *clarity*. Since the 1970s when music-archaeologists such as Cajsa Lund began to demand clearer distinctions between kinds of technological experiment (distinguishing scientifically accurate *facsimiles* and *replicas* from interpretive *reconstructions* and *working models*) we have begun also to recognize the need for similar discrimination in performance, devising genres which enable us to distinguish between, at one extreme, attempts at 'authentic' recreative performance of notated texts and, at the other, improvised demonstrations and imaginative explorations which seek to exploit the capabilities - and reveal some of the latent beauty - of instruments of pre-literate cultures.

Whilst we blur such definitions at our peril, with proper clarity and transparency all manner of things become not only possible but worthwhile. Absences of written music need be no barrier to musical exploration. Indeed there is no reason to limit our imaginations in any way - so long as we and our audiences are clear about what it is that we are doing. The paper looks

at some recent case-studies and offers some practical proposals for discussion.

For some of the background and issues see *Studien zur Musikarchäologie passim* and especially J. C. Franklin and J. Pérez de Arce in *Studien zur Musikarchäologie VI (forthcoming)*; also S. Hagel & C. Harrauer (Hrsg.) 2005, *Ancient Greek Music in Performance* (Proceedings of the symposium *Performing Ancient Greek Music Today*, held by the Austrian Academy of Sciences Commission for Ancient Literature, Vienna 29 September - 1 October 2003.) Wien: Der Österreichischen Akademie der Wissenschaften (ISBN 3-7001-3475-4).



Emiliano Li Castro [Italy]

Layers of Sound-Productions

The production of workshops, live performances and recording sessions featuring ancient instruments and/or ancient music is suitable to increase the public awareness of Music-Archaeology topics and it could be greatly improved by the support of specific commercial and artistic partners, identified and co-ordinated by an ISGMA's committee. A Festival on Music-Archaeology ought to be planned; it should be repeated in different locations, including archaeological sites, along with some "special project" produced for each occasion and site specific. A selection of these projects, presenting music and/or "sound-scapes" from ancient cultures, ought to be published in collaboration with a qualified record company as a proper series of CDs. Workshops on reconstructed instruments should be organized both for experienced musicians and for people lacking in musical education, not too much moulded by the academical customs and conventions.



Alexandra von Lieven [Germany]

Musicethnoarchaeology or The Fine Art of Selecting Fitting Analogies and Correctly Pinpointing Survivals

Music is more than any other expression of antique cultures performance-centered. Therefore the possibilities to archaeologically document it are limited to the necessary paraphernalia like instruments rather than to deal with actual music. As this situation is somewhat frustrating it is understandable that scholars are desperate for modern ethnographic analogies from other

cultures and ideally even for possible survivals in the modern culture of the respective place. However, this ground is slippery and potential pitfalls are lurking. This paper is to look at the methodological issues involved and tries to highlight some of the more, but also some of the less bright perspectives of the subject.



Andy Lowings [Großbritannien]

The Legacy of the Sumerian Lyre in Africa Today

A Winston Churchill Travelling Fellowship in 2007 enabled me to investigate lyre playing in the Middle East and East Africa.

The ancient lyres of Sumer, such as the Gold Lyre of Ur which our group has re-created, we have found seem to re-appear in other adjacent cultures. They are recorded in Greece to the west, and have bodies of researchers looking at a large history in the Northern European countries. Yet the lyre seems have gone south too. Speculation that the lyre crossed to Egypt and then was transported along the Nile to other African countries, into Sudan, Uganda and Kenya, contrasts with some modern day players who insist that the instrument derives from the sea and is associated only with ships and trading.

Inspired by Dr Artur Simon's enthralling lecture in Berlin in 2004 I felt compelled to investigate for myself.

The legacy of an ancient civilisation, thousands of years on, may now be long gone, subsumed into other peoples and cultures. Yet tiny vestigial similarities, uncanny coincidences and undoubted geographical evidence remain, and may point to a continuity and connection to this very day. As a result of spending time in some of these countries, I looked at similar instruments which still exist in these areas today and now present this paper with photographs about a continuing musical journey of discovery.

With recently-made live sound-recordings.

Mohamed Maged [Egypt]

Frequency Analysis of Reconstructed Pharaonic Musical Instruments Tones

In this study we attempted to find the true colors and characteristics of reconstructed Pharaonic musical instruments. Using these Instruments some Experiments were carried out to analyze the frequencies of the instruments scales, then the distances between successive musical intervals ("cents") were measured. Electronic simulation ("sampling") of the instruments tones were recorded and put in an audio database. This was then used to compose melodies inspired by Pharaonic heritage.



Carlos Mansilla [Peru]

Waylla Kepa Project: Musical Experimentation with Pre-Hispanic Sounds

Since 2004, the *Waylla Kepa Project, Scientific Research and Artistic Experimentation*, is cataloguing, recording and researching 2000 sonorous objects of the National Museum of Archaeology, Anthropology and History of Peru. Through this project we propose –in one of its stages– to develop sound experimentation workshops from all perspectives of contemporary musical practice: traditional, popular and academic. Until today we have recorded rich and diverse pre-Hispanic sounds: scales, timbres, frequencies and sound possibilities of ceramic panpipes, organic and ceramic trumpets, organic flutes (quenas) and whistling bottles. We believe it is important to make the rich pre-Hispanic organology available to the contemporary Peruvian music culture.



Sam Mirelman [Great Britain]

The Definition of 'Music' in Music Archaeology: The Contribution of Historical Ethnomusicology

On the most basic level, music as it is commonly understood has something to do with sound. The type of sound, the intention behind the production of a sound, and its social context, are all important aspects which contribute towards the relative value of that sound within a specific culture, and therefore whether we should call it 'music'. Music as such has a very wide spectrum of definitions, which vary among different cultures and historical periods.

One of the methodological aims of music archaeology must be to examine past cultures, and their use of sound, on their own terms. Therefore, the first step of music archaeology is to define the parameters of ‘music’ for the specific culture under investigation. However, this is far from straightforward. Without access to the people being studied, it is difficult to determine how that particular culture treated and valued sound.

In general, historical ethnomusicology proceeds from the present to the past. Contrastingly, the ethnographic approach within music archaeology generally proceeds from the past to the present. Music archaeology can benefit from a consideration of historical ethnomusicological approaches, which stress the importance of sound in its cultural context.



Eleonora Rocconi [Italy]

Sounds of War, Sounds of Peace: for an Ethnographic Survey of Ancient Greek Music in Platonic Writings

In the classical world, the ethnic characterization of many musical forms and performances reveals the massive importance of local and regional traditions in what it is generically defined the ‘Greek’ culture of *mousikē*. Specific musical idioms, such as tunings (the ‘Dorian’, ‘Phrygian’ or ‘Lydian’ *harmoniai*) or instruments (the ‘Thracian’ *kithara*, the ‘Phrygian’ *aulos*, etc.), were often associated with particular geographical regions and traditions, strictly interlaced with the construction of local social identities, despite of their general contribution to the ‘Hellenic’ self-image.

The reconstruction of these musical practices in order to sketch an ethnographic map of local musical traditions and customs is not very easy because of the penury of direct evidence, and can be attempted only analyzing the occasional pieces of sources through a combination of methodologies proper to different disciplines (including the ethnomusicological and the ethnoarcheological approaches). An example of this kind of enquiry will be given through the analyses of some passages in Platonic writings which, despite of the intention of the writer to describe an imaginary society adherent to his philosophical ideas, contains numerous references to musical forms and genres actually performed in Plato’s contemporary world. A special attention will be reserved to Platonic distinction of ‘war’ and ‘peace’ music, recurrent in the *Republic* and, most extensively, in the *Laws*.

Dahlia Shehata [Germany]

Music in Ancient Near Eastern Magic-Rituals

As generally known for every antique and modern culture, music is an integral part of religious acts. It is part of regular cults and festivities at the temples and resounds in order to please the gods deciding over mankind's life and fate.

On the other hand, music was also played for private matters dealing with transcendental powers. As to Ancient Near Eastern beliefs, man was able to avoid and repel misfortune and evil beings through magic-rituals and incantations.

My paper deals with music as part of healing and protective rituals. Who is part of these acts? What sorts of musical instruments are used? What is the function of the music played? Based on this analysis, further discussion will deal with the position of music as part of magic acts in regards of ethnomusicological data.



Adrián Velázquez Castro / Arnd Adje Both [Mexico / Germany]

The Sound of the Earth

In the excavations of the offerings of the Great Temple of the Aztecs and its surrounding structures more than 700 *Oliva* shell pendants have been unearthed. These finds formed part of ritual garment and were important symbols of earth and fertility as well as attributes of war, maybe representing the fertilizing character of warriors in Aztec thought. One conspicuous aspect of these objects, reported by the Spanish chroniclers, is that they produced a sound when hitting against each other. On the basis of replications produced experimentally in the Templo Mayor Museum, recordings of the characteristic sound were made and analyzed. In the present paper the archaeomusicological results and the possible significance of the sound of the *Oliva* shell pendants in Aztec temple cult are discussed.

Simon Wyatt [Great Britain]

Psychopomp and Circumstance or Shamanism in Context:

An Interpretation of the Drums of the Southern TRB (Trichterbecher Kultur)

This paper has two themes: the first briefly summarizes the new classification of the TRB drums (Wyatt, S. in press) and examines the distribution of the drum types, decoration and their contexts briefly exploring the parallel distribution patterns of other significant artefacts (Wyatt forthcoming). The conclusions suggest that the different drum types had different functions linked with ideas of transformation and social organization (Wyatt 2007).

The second theme of this paper critically examines the decoration of the drums in light of the shamanistic model (Winkelman 2002) and neuropsychological model (Lewis-Williams and Dowson 1988; Dronfield 1995, Bahn 2001) for the interpretation of rock art. After presenting an academic definition of key features of shamanisms and their relationships with neurology, we explore the validity of the neuropsychological model as a means to interpret art. While the conclusions of this section do not support the notion that the neuropsychological model may be used as a diagnostic key for interpreting drum decoration, it is clear that there are some overwhelming similarities, suggesting the approach may touch upon important points (Wyatt 2001; 2007).

Drawing together the two themes we combine the primary contextual evidence with the results of our appraisal of the rock-art models, and highlight the relationship of the drum with auditory driving and brain chemistry and the altering of perception (Maxfield 1994). This case combined with ethnographic and prehistoric analogy allows a synthesis which supports the interpretation of some of the TRB drums as having a shamanistic function, linked to ideas of transformation, and their use as symbols of the society's beliefs and a reflection of social organization.

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**Abstracts of the workshops presented at the
6th Symposium of the *International Study Group on Music Archaeology*
(in alphabetical order)**

Stefan Hagel [Austria]

Understanding the Greco-Egyptian Aulos Berlin Egyptian Museum 12461/2

Two pipes of the aulos type, acquired at the antiquity market in 1894, were never given the attention they deserve. Were they played together as one double-pipe instrument? Did they belong to the better known music of Hellenistic culture, or rather to a native Egyptian stratum? Is the metal ring found on one of them really an ancient repair? A careful evaluation of the instrument(s) helps understanding their position within ancient music, eventually leading to the surprising insight that they constitute a kind of ‘missing link’ between otherwise unrelated data. A replica of the instrument will be demonstrated, with discussion of the problems involved in its production.



José Pérez de Arce / Claudio Mercado [Chile]

Prehispanic Music Workshop: The “Baile“ Flute Music of the Andes

The workshop is based on ancient prehispanic type of flute orchestras of the southern Andes, such as *sikuris* and *pincullos*. These orchestras use flutes plus movement in a tapestry type of knowledge to bring their complex music to life. The workshop aims to recreate some music based on these concepts using specially made look-like tapestry partitures.

People are encouraged to bring their own flutes; four tones are needed to be used in this kind of experimental music. We bring our flutes as well, and using some basic musical techniques, as the “dialogo musical“ (hoquetus), the use of movement as rhythmic unit, and others, we deal with the forming of an Andean orchestra type of music. We work with different kind of flutes on special drawings used as scores. To learn to use these drawings motivates people (musical and non-musical ones) to think of music in a different way as of the traditional western scores. No training is needed to join this workshop, and the primal objective is to use the different ways people can play simple music on flutes to have a complex musical result.

**Abstracts of the poster contributions presented at the
6th Symposium of the *International Study Group on Music Archaeology*
(in alphabetical order)**

Abraham Elias [Mexico]

Double Flute Organology from West Mexico

A significant amount of double flutes from the Comala period (100 BCE. to 500 CE.) has been preserved in shaft tombs and survived to our day in Western Mexico. These flutes have gone mainly unnoticed by specialists and the general public alike due to a lack of evidence about their repertoire and because the oral tradition related to them has been lost.

This study is focused on one original double flute and the methodology is based on the principles of organology. The flute and its characteristics are described and analysed from the moment it was recovered by archaeologists, and related iconography, the process of construction, spectral analysis, and the ways in which these relate to playing, are discussed. The flute in question is a clay flute with a whistle mouth piece that responds to all tonguing techniques. It has two independent pipes with four finger holes in the lower third of each pipe, a positioning which creates small tonal distances between its different sounds. X-ray technology was used to analyse the internal structure of this flute, such as for example the fine wind-ways which are similar to those found in European recorders from the eighteenth century. As a result of these analyses it has been possible to make replicas which approach the original sound. Spectral analysis provides a theoretical picture of the physical components of the sounds of this flute as well as of its sound potential. The technical and sound possibilities of the flute will be demonstrated as a performance proposal, in the form of a recording. The two pipes of this multiple flute cause frequency clashes to occur, in which dissonance prevails. The flute has three registers but no discernible scale patterns. Flutes with these characteristics have only been found in Western Mexico.



Francisca Gili [Chile]

Digital Documentation for Archaeological Music Instruments

It is very important that researchers have a correct tool for documentation of the information, in order to organize patrimonial knowledge for its further spread in society.

When facing a collection of archeological musical instruments, you might be in front of hundreds or thousands of pieces. The interest in this research can create the need of

simultaneous organization of a lot of text, photographs, diagrams, and recordings. Without a system that allows the organization and the accessibility to this information, there is the risk of problems in the research and diffusion of this information.

I had created a project of a digital documentation system for archaeological music instruments. (Based on Museo Chileno de Arte Precolombino collection) The proposal was to create a database that includes different aspects that can describe this kind of patrimony. This methodology tool was proved on a representative sample of this museum collection.

The documentation system is built up in an Access programmed database. This program provides a support that allows the compilation, systematization and diffusion of the generated information. It is contemplated to archive both text (general information and organological fields special designed for archaeological musical instruments) and audiovisual information (images and sounds that can be linked). It also makes the access to information easy, and allows establishment of statistics relations between specific information of the different pieces included.

It is a good tool for spreading information because it opens the possibility of creating printable reports with the information of an object. Also, it facilitates the action of up loading the information to digital online catalogues. This gives a comfortable access for other investigators in the same area and increase public awareness of music-archaeology topics.

Ordered research information, in a planed technological support, is nowadays the first step to improve facilities for museographical actions that intend to incorporate audiovisual information for the instruments exhibitions.



Ellen van Keer [Belgium]

Integrating Sources and Approaches in the Study of the Ancient Greek Aulos

In accordance with the research trends in archaeology, study in the field of music archaeology may in principle start with any type of musically related object and lead all the way to musical thought and cognition. We take as a central subject the *aulos* and focus on the (classical and modern) perceptions associated with it.

The ancient Greek *aulos* is the subject of various misconceptions in classical scholarship. One is to translate it as 'double flutes' and another is to identify it as the quintessential 'barbarian' and 'Dionysian' instrument. We can qualify this perception, which is heavily text-dependent, by studying its equally significant and more abundant presence in the archaeological, iconographical, and, especially, the mythological and religious evidence. We find the *aulos* and its music to have associations with cults and myths of a wide variety of

deities and heroes amongst which also such seemingly contrastive ones as (the ‘Phrygian’ goddess) Cybele and (the prototypical ‘Greek’ god) Apollo. Through a close analysis of the various associations and sources concerned, we try to achieve a complexified understanding of the multiple practices, customs and beliefs involving the music of the *aulos* in Greek life and thought. In the Greek context, musical and religious behaviour intertwine, and it is ultimately this innate complexity and specificity of the Greek *Mousike*, “of the Muses”, that we try to understand.

Broader archaeological and anthropological approaches and concepts (e.g. ‘ethnic’ music) are more adequate to this purpose than the traditional ‘historical’ concept of Greek music as a distinguished form of Art or Science.



Graeme Lawson [Great Britain]
Traces of Ancient Musical Practice

Research by Graeme Lawson in England (the *Ancient Musical Instrument Surfaces Project*) focuses on the microscopic study of ancient musical surfaces and the ghostly traces they bear of ancient operation and handling.

The poster illustrates recent results, from optical photomosaic maps of the finger-hole margins of bone pipes to studies of some of the fine detail. Such detective-work involves both close examination of the ancient material and experimental replication of observed characteristics. Analytical techniques used include profilometry, adopted from tribology (friction-wear engineering), as well as optical and scanning electron microscopy.

Some of the details we see in the ancient material seem to derive from human manipulation of the finger-hole margins: but others may be the result of actions since deposition - even since excavation. It is one of the principal aims of *AMISP* to characterise and distinguish between ancient wear and the recent handling which compromises so many older, antiquarian finds. It is important to appreciate how - even today - such fragile evidence is susceptible to damage as a result of unprotected and careless handling.

Emiliano Li Castro [Italien]

The Secret Beat of Etruria

The iconography of the Etruscan's tomb paintings (7th - 2nd century B.C.) shows a wide and rich variety of musical instruments and, together with many different specimens retrieved from those graves and from other sites of the Etruscan culture as well, displays nearly all the instrumental tools which were widespread over the Mediterranean area during that period, clearly showing the great importance of music in Etruria. One notable exception has to be pointed out: the extremely rare and late evidence of the frame-drum, although archaeologically and ethnologically attested in any other Mediterranean civilization. The almost complete lack of this instrument observed in Etruscan contexts and in related sources is rather astonishing and involves interesting implications, suggesting stimulating interpretations and demands to delve deeper into the question.



Cristina Majnero [Italy]

A Casual Finding of a Tibiae's Reed from Pompeii

The reed is the most important part of a musical instrument, but one has never been found in an archaeological context until recently. This is due to the durability of the material used. Fortunately, the event of the volcanic eruption of Pompeii has conserved a good number of instruments and their parts.

Among some finds that weren't classified, an object was found, that the author recognized as a reed of a tibia. This reed is a double piece made out of cane and about 6 cm in length and 1,7 cm broad in the vibrant part. Comparisons with iconography and with traditional and modern reeds confirmed the author's assumption that the object is a Roman double reed.

Further study should be motivated to deal with the question of which material was used for manufacturing the reed and also, where the material originated, because in ancient times as well as in modern times the point of origin has an effect on the quality of the reeds.

María Isabel Rodríguez López [Spain]

Music and Funerary Rites in the Classic World: Archaeological Remains

This poster shows a panoramic view of the presence of music and of its symbolic meanings in the rites and funeral beliefs of the Classic Antiquity. It seems probably that the association music-death was a deeply-rooted custom from the Neolithic. From Cycladic Culture, Archaeology had demonstrated that music was in narrow relationship with the beyond: It's tempting to imagine that the Cycladic performers were the petrification of the interpreters of *threnoi* and that their melodies could have been part of funerary ceremonies.

In the Greek World there are different musical subjects in funerary contexts: This can be glimpsed through the daily use of music and of the musical myths (of high symbolic meaning). The Greek myths explained, in part, the mystery of death. Hermes, the magician-god, creator of music instruments, guides the souls of the dead to Hades, in his *psicopompo* condition. Apollo is the God of the music and of the hidden knowledge; the muses, divine singers of his entourage are divine beings that have their origins in the music. Their presence evokes, symbolically, the harmony of the Universe. Hermes, Apollo and The Muses, Orpheus or the sirens, among others, were united symbolically to the funerary contexts to satisfy their desire of knowledge and to understand the transit. The beautiful death, as a farewell, and the heroic death, the most beautiful of the deaths, are the fundamental concepts of this Culture, that since the middle of the 5th century shared the hope of the future life. The artefacts (musical instruments, for example) over the shaft have been interpreted as burial offerings, reveals the cult of the dead. The funerary steles also contain musical depictions, maybe in connection with the heroic death.

The Etruscans were obsessed with the dead and the other world thus inspiring their elaborate funerary practices. The firm belief on the Beyond made them conceive death as a happy continuation of the earthly existence. The walls of tombs were frescoed with scenes from daily life or the most important or enjoyable moments in the deceased's life: shows banqueters reclining on couches while being entertained by musicians and waited on by servants. Also depicted are many figures of dancers and musicians playing together. The tombs' frescoes illustrate the ubiquitous Etruscan *joie de vivre*.

The myths of Greek inheritance are also associated to death in the Roman world. To the traditional subjects of Orpheus, the mermaids and the muses we can also find the noisy *Bacchic* entourage and placid marine *thiasos*, guarantees of the transit to Beyond. In reality, we know lots of facts about the death in Rome: concept and beliefs development of rituals, laws, social aspects. Music made part of the funerals of roman citizens with high status and of all the rituals and ceremonies related to the future life. Some funerary steles allow us to know the identity of musicians belonging to the army (*tubicines* or *cornicines*) or the musical inclinations of the deceased. The reliefs of the roman sarcophaguses show us frequently the journey to the Great Beyond with musical accompaniment.

Susanna Rühling [Germany]

Pugnate - Ancient Sounds of the Arena

Sounds of the ancient arenas – what a promising name – is what the ensemble *MVSICA ROMANA* tried to re-create with their new album. Having had the idea of playing with a *hydraulis* surrounded by other musical instruments of antiquity, such as *cornu*, *kithara* or *aulos*, it is still an on-going experiment to travel and give concerts at several ancient monuments as well as at modern places. The acoustics, the loudness, the reaction of the modern audience or more specifically the usability and the wear of the instruments are of special interest.

The organ was widespread in antiquity. According to written sources, the water-organ has been invented in 3rd century B.C. by the Greek architect Ktesibios. It seemed that it has entered Rome in 1st century B.C. At the latest in 2nd century A.D. the organ has also been urged with air-bellows.

There are also images from antiquity. They show diversity in size and type of the organ, as well as the ancient writers describe. The *hydraulis* had a strong relationship to the roman *ludi* (games).

In 1931 the remains of an organ were found in Aquincum (today's Budapest, Hungary). The instrument dates to the year 228 A.D. Most parts have been preserved well. Two more finds of ancient organs have been made: Aventicum (today's Avenches, Switzerland) and Dion (Greece).

Our reproduction of a *hydraulis* was established in spring of 2006 by Justus Willberg and Martin Braun. The model was the found of Aquincum. The substructure and urge with water was constructed according to ancient images and written sources. Compromises were made in the choice of material. Just as the model it also has four organ registers and by the side-mounted shifter rods each register can be turned on and off separately and in combination. The series of single registers are in the ancient keys: hyperlydisch, hyperiastisch, lydisch and phrygisch (source: f.e. anonymi Bellermann).

After many attempts the water-organ finally works with approximately 50 litres of water to wind a usable pressure. We need therefore two well-established *Kalkanten* to operate the pumps.

More reconstructions based on ancient images, archaeological finds and literary descriptions have been made so far. Ralf Gehler built a *kithara* following various images, especially that of a *lyra* from the ship's discovery of Mahdia, a lute, panflutes and the layout of the various *auloi*. He also built an angle-harp according to an archaeological found in the Egyptian Museum in Cairo. The brass-instruments were made by Axel Gladrow and Hagen Pätzold according to finds of *cornu* and written sources dealing with the roman *tuba*.

Susanna Rühling as producer and director of *MVSICA ROMANA* made up the concept for the recordings, arrangements, compositions, mastering and the dramaturgy for the album.

Furthermore she documents and publishes the experiences with the usability and possibilities of the project and its components.

When an atmosphere comparable to the one in the arena 2000 years ago is created, we achieved our aim.



Friedemann Schmidt [Germany]

Whistling vessel – Trumpet – Shell horn

Apart from its well-known vascular ceramic, the culture of the Moche (ca. 0-700 A.D.) produced ceramic wind instruments as well, such as the so-called whistling vessels, coiled trumpets (or Queppa) and shell horns (the Huayllaqueppa).

These musical instruments will be investigated with a special focus on its iconographical, acoustical and technological characteristics and documented in the form of posters.

Furthermore, short films will introduce to the manufacturing process necessary to create whistling vessels and trumpets.

Replicas of all instruments will be produced in advance, to enable the visitors to try out each of them personally.

**Abstracts of the concert performances presented at the
6th Symposium of the *International Study Group on Music Archaeology*
(in alphabetical order)**

Dai Wei [China]

The Qin

I

Wild Geese Descending on the Sandbank

(Ping Sha Luo Yan)

According to the Score of “*Jiao An Qin Pu*”(1868)

Handed down by Sun Shao-tao

The earliest score survived is the “*Gu Yin Zheng Zong*”(1634) of the Ming Dynasty. Its source and composer are attributed to one of the following Qin masters: Chen Zi-ang of Tang Dynasty, Mao Min-zhong of Song Dynasty and Zhu Quan of Ming Dynasty. It was collected by many Qin schools. The scores copies were different, they had sections of 5, 7, or 10, and the tones were also different, including the Gong, the Jiao or the Yu. This version of Guang Ling School has seven sections; it is in the Yu tone. The serene work of poetic atmosphere transmits the ideology of staying aloof from worldly success. The melody is quiet, light and refined. It is peaceful and fluent with a little pain and sigh like feeling. The concept is deep and artistic.

II

Evening Song of the Drunken Fisherman

(Zui Yu Chang Wang)

According to the Score of Li Zi-zhao

Handed down by Wei Zhong-le

The earliest score survived is the “*Xi Lu Tang Qin Tong*”(1549) of Ming Dynasty. It is said to be composed by two poets Pi Ri-xiu and Lu Gui-meng of Tang Dynasty when they were rowing a boat on the Song Jiang River. This version belongs to Chuan School. The melody is fluent and beautiful as if accomplished at a stretch, and it describes a leisurely and carefree scenery of a drunken fisherman singing and rowing his boat in the evening. It reflects the life and spirit of the secluded intellectuals.

III

Water and Cloud of Rivers Xiao and Xiang

(Xiao Xiang Shui Yun)

According to the Score of “*Wu Zhi Zhai Qin Pu*”(1722)

Handed down by Zha Fu-xi

The earliest score survived is the “*Shen Qi Mi Pu*”(1425) of Ming Dynasty. The piece was composed by Guo Chu-wang, a patriotic Qin master in Southern Song Dynasty. Depressed by the rotten state affairs and by the country’s inability to resist invasion by an alien race, he took a boat out to sail on the rivers of Xiao and Xiang in Hunan Province. While gazing afar at the distant Jiu Yi Mountain where water and clouds merged, he was grieved by the thought that the beautiful land of his country might fall into the hands of the enemy. However, the music is tranquil and rich in cadence. It is played in an unhurried way, stroking softly and plucking lightly. The audience is carried to the strange-looking mountains enveloped in clouds and mist.



Khairy El-Malt / Reem Farouk Shakweer / Abdul basset Mohamed Hatab /

Mohamed Maged Ahmed [Egypt]

The Tambourine "Dof" Instruments and Some Other Nubian Percussion Instruments.

We will perform the following:

- 1- Dialogue between Ancient Egyptian Tambourine "Dof" and Nubian "Dof".
- 2- Improvisation playing, on both tambourines "Dof".
- 3- Playing "Dof" with claps & the Nubian singing.
- 4- Rhythm inspired from scenes of Pharaonic "Dof".
- 5- Performing for the different Nubian rhythms.



Stefan Hagel [Austria]

Aulos and Cithara

The musical high culture of the classical Mediterranean was dominated by the aulos and the lyre in their various forms. Stefan Hagel will perform on a reconstruction of the Greek concert

cithara and on different types of auloi, demonstrating some of the instruments' capabilities and bringing two thousand years old melodies to life.



Graeme Lawson [Great Britain]

Traces of Ancient Musical Practice: The Silver Lyre of Ur

Remains and pictures of ancient musical instruments show us not only their individual forms or 'designs' but also the ways in which these forms varied through long periods of time and from culture to culture. Such evolutions can offer insights into the varied purposes which they served, affording the modern performer a functional starting-point for both imaginative and scientific, technical exploration.

Lyres, a once-ubiquitous class of instrument, span almost the entire history of Old World civilization. Lyre-player and composer Graeme Lawson explores some of their handling characteristics with the aid of experimental reconstructions, including one of the famous lyres of Ur: the so-called 'Silver Lyre' in London's British Museum. He reveals how far the shapes and string-configurations of lyres encourage dexterity, subtlety and diversity in performance technique.



Andy Lowings [Great Britain]

The Gold Lyre of Ur: Music, Dance and Poetry

The Golden Lyre of Ur Project presents a costumed performance of ancient Mesopotamian poetry, music and dance, featuring translations by N.K. Sandars and Stephen Mitchell, music by Bill Taylor and Michael Mauldin, and an archaeological-choreography by Diana Conti.

Lyre player: Bill Taylor

Voice: Jennifer Sturdy

Dancer: Diana Conti

Cristina Majnero / Roberto Stanco [Italy]

Tibiae Pares and Impares, Hypotheses of Roman Music

In the Performance on the 10th of September, four very short pieces will be played.

"Quintus" is an "a solo" in which the Tibiae Impares are presented. On this instrument one tube is longer than the other and with each of them a tetrachord can be played to form a Phrygian mode when played together. The performers will try to show briefly all the different possibilities of this instrument.

In "Festina Lente" the Tibiae Impares are played with the technique of circular breathing and will be accompanied with a Tympanum, the most important percussion instrument in roman music.

"Punctum contra Punctum" with two pairs of Tibiae Pares (two dextrae with the same Phrygian tetrachord and two sinistrae with a Lydian tetrachord), is an hypothesis of music for a religious Pompa.

"Mare Nostrum" a piece for dance with two pairs of Tibiae Pares (two dextrae and two sinistrae all in the Phrygian mode at a fifth of distance) and the Scabillum, a percussion instrument played with the foot, which was often used by the Tibicine (Tibiae player).

All the pieces are composed and played by Roberto Stanco and Cristina Majnero.



José Pérez de Arce / Claudio Mercado-Muñoz / Francisca Gili [Chile]

La Chimuchina goes to Berlin

This concert is based on several previous performances, adapted to three interpreters (not the original five ones). The members of "La Chimuchina" have researched ethnographic music traditions and ancient musical instruments collections. This experience inspired the creation of this music performance that includes sound, visuals, and movement.

The main aim is to make music based on the indigenous aesthetics and musical approach. This concert will be characterised by the interpretation of sound in movement, monotonous rhythms that allow for ecstatic modes of consciousness, the complex integration of sound in its environment and the use of homogeneous sound textures with its related harmonic language.

This experience attempts to capture essential Amerindian aesthetics, where all the participants contribute to a complex system of music in which the complement between sounds and performers is essential. This way of interpretation is developed and practiced on several free group improvisations based in vocal techniques accompanied by the interpretation of ethnographic instruments and replicas of archaeological sound artifacts.

The concert is accompanied by the projections of illustrations that represent the musical performance. These drawings, inspired by indigenous iconography, are a special kind of scores used by the group in their previous music creations. The presentation can be described as a changing musical space, a journey to indigenous American cultures and their sounds.



Nancy Thym / Thilo Vierig [Germany]

The Norwegian Krogharpe – an Attempt at the Reconstruction of a Lost Playing Technique

The "harp" or some form of stringed instrument is mentioned in Norse Sagas of the 13th and 14th centuries and also in medieval Norse ballads. There are 9 surviving folk harps or "*krogharpe*" in Norway, most of them from the easternmost valley of Østerdalen. Several of these instruments resemble harps depicted in medieval European iconography. Most of the Norwegian harps can be dated to the 17th and 18th centuries and are characterized by a very unique feature: the forepillar is a hollow soundbox, identical in construction to the actual soundbox. Both soundboxes are hollowed out of one piece of wood and covered with a lid at the back, a typical medieval construction method. The neck is a simple curve, the tuning pins are wooden blades, and the strings are of metal with very wide spacing. There are literary references to the *krogharpe* dating from the 16th to the 19th centuries, but use of the harp has since died out completely in Norway. The *krogharper* share features of construction and decoration with the harps of Scotland, Ireland and Siberia.

After examining all the *krogharper* in Norwegian museums, Nancy Thym had a reconstruction of the "Westgaard" harp (dating from 1776) built. By examining early Norwegian descriptions of harp playing and comparing them to other Northern traditions, such as those in Scotland, Ireland and Siberia, Nancy Thym has attempted to reconstruct the playing technique and has arrived at a style very different from that of the conventional harp.

Nancy Thym will perform a short excerpt from the Bosa Saga, which contains very interesting references to harp repertoire, playing style and technique.

16th Century Harp and Violin From the Burial Chapel of the Freiberg Cathedral

In the late 1970s the musical instrument restorer Peter Liersch and the musicologist Herbert Heyde made a sensational discovery. The 30 instruments in the hands of angels standing in a gallery 12 meters above the floor of the burial chapel in the Freiberg Cathedral not only look real but are actual late 16th century instruments, some of them from a workshop in Randeck, south of Freiberg. Not until the year 2003 was it possible to take the instruments from the hands

which had held them for 400 years. The Musical Instrument Museum of the University in Leipzig, Germany has initiated a project to examine the instruments using all possible modern scientific means and to make exact reconstructions using only the methods possible at the time they were originally built. Musical instrument builder and restorer Thilo Viehrig has examined and built reconstructions of the harps and violins. Nancy Thym has experimented with the playing technique of the harps. The harps are small with bray pins which cause the strings to buzz. The soundboxes of the harps are carved from one block of wood, typical of medieval construction. The metal strings found on the harps have been the subject of much speculation. The violins are the only extant examples of violins built north of the Alps and are completely different in sound and construction from the Italian violins which superceded them in the early 17th century. This leads to serious ramifications for performance practice of pre-17th century music north of the Alps. Nancy Thym and Thilo Viehrig will play German dances and songs appropriate to the time and the instruments on copies of the Freiberg harp and violin.