

Archaeology of auditory past

It is an obvious, but less frequently exploited fact that the archaeological record bears also evidence of past musical activities and ancient sound worlds. Remains of musical instruments, as well as depictions of musicians, carry information on intentional sound production, many other artefacts and ecofacts information on auditory environments and soundscapes. These acoustic phenomena were not irrelevant or random elements of the environment, but organic, meaningful and active parts of the cultural setting, involved in constructing the social reality. Studying them enables thus to deepen our understanding of the past societies, both in sensory and cognitive level.

This session discusses issues and methodological problems that researchers interested in music archaeology or auditory archaeology, might encounter. For example, how do we define the concept of musical artefact? How can we explore the meaning and use of these finds? How can we employ archaeological data in reconstructing soundscapes? When should we use ethnographical analogies? The session aims to bring together all Nordic colleagues working in the research area.

Chair:

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Problems and non-problems in archaeo-organology: a music-archaeological miscellany

Music archaeology is since the 1980s a common generic term that is used in Sweden for research trying to answer questions about mankind's intentionally produced music and other non-linguistic sounds in ancient societies, on the basis of archaeological finds. Questions and problems that I myself am focusing in my research work concern finds of possible sound tools, that is objects that I have reason to believe were used, primarily or secondarily, for intentional sound production. Because of the pronounced organological character of this research I sometimes use the designation archaeo-organology as a subset of music archaeology. This is a counterpart to palaeo-organology, a designation that was coined in 1968 by J.V.S. Megaw – one of the pioneers in the field of music archaeology - in an article that is dedicated to Stuart Piggot.

The title of my paper refers to Megaw's article, which is called "Problems and non-problems

in palaeo-organology: a musical miscellany". His article is a study of a great number of musical instruments from ancient Europe, and his penetrating analyses of them are summarized under subtle subheadings. My paper will discuss various theories, data and other aspects on a selection of sound tools / possible sound tools from prehistoric Scandinavia. Among my subtle subheadings are: How musical was Ibn Fadlan? The whistling Roman awl. Destructive archaeology. Music archaeology in deep water.

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Classification of sound tools and soundscapes of and in ancient societies

How did prehistoric people relate to sound? What significance did various kinds of sound have to them? Classification represents a fundamental approach to these questions. The concepts and classifications we use are indicative for our thinking as modern humans. We often classify sound either as intentional or non-intentional sound, and either as music or non-music. Moreover, as researchers we relate sound to diverse categories such as religion, ritual, hunting, communication and others. Organological oriented music archaeology, relating to artefacts, usually apply traditional classification of musical instruments and sound tools, departing from morphological and acoustical criteria. Such work with the material is relevant and important, but "artifact-centred" approaches should always be accompanied by wider "culture-centred" and cross-disciplinary directions. Lately we have seen an increasing interest in the importance of sound from wider perspectives, for instance in connection with large human-made structures or entire landscapes. What are the limits and the common ground between these new directions of soundscape studies/acoustic archaeology and traditional studies of music and intentional sound making? This also concerns the limit between cultural sounds and natural sounds, and the question if such a limit is productive for research purposes.

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To the Problem of the Distinction between Musical Instruments and Sound-producing Devices in Novgorod Archaeological Context (the Quantitative Approach)

The paper deals with the quantitative investigation of the Novgorodian archaeological collection of the

musical instruments and sound-producing devices. The author makes an attempt to answer the following basic questions. The first is – how many musical instruments do we have among different categories of artifacts in the archaeological collection from Novgorod excavations? The second is – how many idiophones, membranophones, chordophones, and aerophones do we have, and which of these artifacts archaeologists categorized as 'musical instruments' while others were placed among toys, horse harness, garment accessories, etc.?

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Soundscapes in Archaeological Contexts

Sound plays an informative role in how people engage with their environments and with each other (Cross, 2006). Within the discipline of archaeology, however, there has been no steady tradition of auditory study and no *single* discipline outside of archaeology that could be drawn on for information. Furthermore, most approaches to conceptualising the social roles of sound have been mapped in terms of modern Western conceptions of auditory environments, or soundscapes (Schafer, 1994). This bias is problematic for considering the significance of sound in prehistoric hunter-gatherer societies. It is proposed that our ability to situate sound and music within archaeological method and theory can be strengthened by drawing upon ethnomusicological evidence that delineates the dynamic roles of sound in non-Western societies (Feld, 1982; Seeger, 1987; Lewis, 2002). Additionally, ethological research (Naguib & Wiley, 2001) may offer scope for characterising soundscapes in terms of the "survival value" afforded by sonic features in the light of biological capacities and propensities. In order to investigate the social values of sound in prehistoric context, scientific analyses of past soundscapes should be supplemented by the development of new metrics, derived from considerations of ethnographic and ethological literature.

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Listening to Industrial Silence: Sound as Artifact

As the industrial project changes shape and scope, the material remains of past activity beckon for careful consideration. While structures and spatial configurations persist tangibly into the present, the sound

environment of the past is a more elusive subject of inquiry. The aural component of industrial processes projected an imperative message that cannot be dismissed, spreading far beyond the line of sight, and the archaeological record is replete with traces of compliance and escape. Working on the leading edge of memory, sound artists and musicians share a common platform with archaeologists through an engaged interest in the material past. Sonic interventions within abandoned industrial spaces resurrect sounds of the past, pointing to the need for a conceptual transition from 'sounds of artifacts' to an acceptance of sound *as artifact in and of itself*. This paper will examine the work of musicians, sound artists and archaeologists working within industrial spaces, and the significance of these investigations as they broaden and deepen our understanding of industrial social formations.

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The prehistoric and medieval bone pipes in the territory of Poland

A several dozen animal bone aerophones (both of bird and mammal bones) were discovered during the archaeological excavations in the territory of the present-day Poland. The oldest artefact, i.e. the whistle made of a finger bone of a reindeer, can be dated back to c. 25 000 BCE. Similarly, the Middle Stone Age is represented by only one archaeological item – a flute. The appearance of the panpipes can be noticed at the end of the New Stone Age and the Bronze Age. There are at least three such artefacts found in Poland. Moreover, some bone whistles were found during the archaeological excavations in the New Stone Age and the Bronze Age material. Few examples of bone artefacts are also known from the Iron Age. Not until the Middle Ages the number of the archaeological finds of the discussed aerophones grows significantly. Among the examples we can distinguish simple whistles and instruments with a couple of melodic holes. Some of these pipes are richly embellished. The main aim of the paper is to present the artefacts and also try to classify them according to types: flute or reed. Some of the instruments have never been published before and they will be presented for the first time.

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Use-wear analysis of the tubular bone artefacts (flutes?) from the Middle Neolithic grave 62 at Ajvide, Gotland

The extremely rich and well preserved osteological material from the site of Ajvide, Gotland, Sweden (about 3100–2300 cal BC), provides favourable prerequisites for studying Neolithic music and sound practices. In 1998, archaeologists discovered grave 62, which contained a large number of grave goods, among them tubular bone artefacts of an extraordinary character. Some of these artefacts had pierced holes along the bone shaft, some others an additional bone tube at one end. These artefacts, parallels of which have not been found in other graves of Gotland or any other places in North Europe, were immediately interpreted as flutes – some kind of whistles or birdcalls. Their suitability for sound production, however, was not studied systematically.

In this paper, we will present the preliminary results of our music-archaeological research project on Ajvide. We will discuss the presence and function of the tubular bone artefacts on the basis of the microscopical, morphological and metrical survey that was carried out at Gotland Museum and Gotland University. In that connection, different traces of manufacture and use were recorded to find out if the artefacts had been intended or used as musical instruments. An eventual aim is also to replicate the artefacts and test the replicas in practice. The project, as a whole, seeks to explore the osteological material of Ajvide – bone artefacts as well as remains of utilized animals – from the perspective of music archaeology / auditory archaeology.

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Wooden trumpets. Their construction and the musical practice in the light of XIXth and XXth century Polish ethnographical sources

The wooden trumpets were used in many traditions around the Baltic Sea. We have the archaeological evidences of the presence of this kind of instruments at the end of the first millennium AD (i.e. IXth century: "Oseberg lur", IX-XIIIth century: a mouthpiece found in Wolin island). The presence of these trumpets especially in the cultures of the wide forests, water (lakes, sea) or mountains indicates their probable function as long-distance signal instruments. In Poland, the use of wooden trumpets is still alive.

The Polish ethnographical sources from the XIXth century describe the methods of the construction and mention special practical technics of the sound's emission. Some of them are observed also in the contemporary practice. The ethnohistorical data can be useful in the process of revival of popularity of wooden trumpets.

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Music from the Frisian dwelling mounds along the North Sea coast

In the first millennium AD, the Frisians threw up more than a thousand dwelling mounds in the region along the North Sea in the north of the Netherlands. The mounds protected them from high tides and floods. From the 19th century on many of the mounds were levelled off because of their fertile soil. During this process, an abundance of objects was found accidentally. Not being excavated scientifically, their context in many cases was lost.

Among the finds were musical instruments of different materials: bone pipes, earthenware rattles and whistles, reed instruments of bone and wood, bronze bells and bone lyre parts. What can these archaeological instruments tell us about the culture of the Frisians inhabiting the mounds, about the sound scape, music in religion and ritual, leisure and work, high and low culture? In this paper, I will explore if and to what extent ethnological and/or archaeological analogies from other countries around the North Sea and from the Baltic Sea can assist in finding answers to these questions and in solving problems of dating and interpreting musical instruments. Some reconstructed instruments will be demonstrated.

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On the sound related to painted caves and rocks

Caves have natural properties of resonance: some parts sound very well, the sound lasts for some seconds or gives several echoes, some other parts have a dull resonance or no resonance at all. It is extremely interesting to compare in a given cave the map of the most resonant locations with the map of the locations of the paintings: are there correlations between resonance and paintings? Many Palaeolithic caves in France have been studied, and for most of them the answer was remarkably

positive; stated shortly: the more resonant the location, the more paintings or signs are situated in this location. Some examples are presented. We have worked also in Ural and started a study in Norway. Concerning open spaces, we have studied the problem of pictures/echoes relationship in open spaces with prehistoric painted rocks in France and in Finland, and obtained some results; the studies, however, are much more difficult to carry on, but are still promising.

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Ringing Stone: Concerning the Problem of Archaeological Musical Heritage Research

The following report is devoted to the problem of a soundscape. As analytical material, several myths of the Russian speaking Lapps who lived in Russia in the Kola Peninsula and Karelia in the second half of the 19th century were selected. I base my investigation on a small part of these legends connected with the topic of "petrification" – that is the turning of a person into stone. The reasons for such a restrictive approach are the following:

First, the topic of petrification is associated with the cult of the *sieidi* (or the holy stones) which is widespread among the Lapps. The second reason is connected with a *Ringing stone* – an archaeological find made in Karelia in 1966, in the area where the Lapp myths in question were widely spread. When being struck, the *Ringing stone* emits high-pitched melodious sounds resembling the sounds of a metal bell. The samples of asbestos ceramics found in the *Ringing stone* cleft date this find to the 1st century BC, to the Early Iron Age. It is most likely that the *Ringing stone* is an ancient cult percussion musical instrument and was part of a Lapp culture once existing in the territory of Karelia.

A *Ringing stone* was introduced into human culture from the world of nature, so, it can be interpreted as a mediator between two worlds – the human world and the "other", be it the world of nature, spirits, or the ancestors. The older the musical tool is and the more archaic the corresponding culture, the clearer is its mediator function. A *Ringing stone* marks a transition from the natural to the cultural field, it helps turning natural sound elements into esthetic (musical) human activity.

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Two projects about kantele

1. The Kantele Comes Alive

Over the summer 2009, the Nurmes Town Museum commenced a kantele mapping and research project titled "The Kantele Comes Alive". The project concentrated on the kanteles housed in the Nurmes Museum – including measuring, photographing and cataloguing them – as well as training the museum staff to better understand the instrument.

The project specialists consisted of Doctor of Music, instrument builder and researcher Rauno Nieminen and Doctor of Music, kantele player Timo Väänänen. During the project, a manual for photographing and describing the kantele was devised in order to help gather more relevant information on the museum instruments. <http://kantele.net/kantele-elavaksi>

2. Kindred of Kantele

The Kindred of Kantele project researches the North East Europe psaltery, lyre and zither instruments similar to Finnish kantele in Finland, Baltic countries, Russia, Poland, Belarus and Ukraine. This kind of knowledge has never been put together before in the Finnish language.

The project doesn't aim for a scientific definition of the kantele but it tries to document and describe – in various methods – different aspects of the present-day life of this instrument. We gathered information on field trips in Russia, Udmurtia, Tatarstan, Mari Republic, Chuvashia, Poland, Lithuania, Latvia, Estonia, Finland and Karelia, so far. The main goal is to publish a book and a 17-part radio series. web.me.com/kanteleenkielin

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