

1st Symposium of the AMBP network, Cambridge 2009: A Keynote

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1st Symposium of the AMBP network, held on 19th June 2009 at the Cavendish Laboratory of the University of Cambridge

I like to express my congratulations to Rupert Till and colleagues for setting up the *Acoustics and Music of British Prehistory* (AMBP) network, which combines researchers of a variety of disciplines, including archaeologists, music archaeologists, and acousticians, on one side, and artists on the other. Such network, focussing on a specific cultural area and time, including a variety of approaches, is a novel. Comparable groups exist, such as the *International Society for the Study of Greek and Roman Music and its Cultural Heritage* (MOISA, <http://www.moisasociety.org/>), primarily focussed on music philology and archaeology, or the *Ancient Music Cultures of the Americas and the Living Traditions* network (AMCA, currently existing in form of a directory posted at http://www.mixcoacalli.com/?page_id=4, future conferences are planned), which is still in its first stage of development.

At the 1st Symposium of the AMBP network, held on 19th June 2009 at the Cavendish Laboratory of the University of Cambridge, diverse papers around the AMBP topic were held: Ian Cross (Palaeo-acoustics: Materials and Approaches), Aaron Watson (Multimedia Monuments: Exploring Sound and Vision in Prehistory), Paul Devereux (Natural Sound Behaviour in Archaeological Contexts), Graeme Lawson (Evidenced Acoustical Behaviours and Acoustical Space: Re-integrating Sound-tools and Landscapes in Ancient Acoustics), Seb Jouan (Arup Acoustics Glasgow: Acoustic and Laser Modelling), Gry Baelum Nielsen (Odeon Software and Acoustics of Roman Theatres and Odea), Sarah May (Reverence and a Noisy Experiment at Silbury Hill), and Adje Both (Research Questions in the Acoustics and Music of Prehistory: A Synthesis). Without going into the details, I'll try to summarize some of the most important points discussed. This, hopefully, might lead to the formulation of common research questions and objectives at most followed by all members of the network.

The papers held were characterized by individual approaches and applied methods, and individual objectives and results in different stages of progress. I emphasize *individual* here, as so far no shared approach, method or objective has been established within our network. To achieve this will be one of the essential tasks for the near future.

The approaches presented at the symposium focussed primarily on the archaeoacoustics of finds, including flint stones (Cross), rock gongs (Cross, Devereux), or bone flutes (Lawson), and on the archaeoacoustics of archaeological structures, such as stone circles and chambers (Watson, Devereux, May, Both). Two papers focussed on computational applications to recreate the acoustics of archaeological structures and sites (Jouan, Nielsen). Cross and Lawson touched the experimental reconstruction of ancient musical instruments, an approach related not only to the acoustics (when these instruments are played and tested) but also to organology. Watson added a scientific-artistic approach that he calls *multimedia archaeology*, that is “capturing and communicating sensory experiences” and transform these in multimedia settings, such as video performances and sound installations.

Having a serious approach, true transdisciplinarity between all involved parties should be achieved within the AMBP network, which in my view only then could be successful. So, what is the network doing, and how is it doing it? One must taken into account, that research models have long been discussed in music archaeology (see publications by Ellen Hickmann, Dale Olsen, Cajsa Lund, Julio Mendívil, Adje Both), but so far no theoretical framework exists (a first attempt was made in my thesis from 2005, *Aerófonos Mexicanas*). At the 1st Symposium of the AMBP network, the risks of monodisciplinary work and problems that result from a non-existing theoretical background were exemplified by Both on hand of acoustical studies undertaken in the pre-Hispanic Americas, which failed at the level of interpretation.

One of the most important questions that need to be asked is how to link the individual approaches and objectives of the AMBP network members. It would probably be a good idea to establish work groups and research teams consisting of representatives of each relevant discipline (archaeology, music archaeology, and acoustics) and the arts, who share a single focus (for instance, as proposed by Lawson, music archaeological research at one specific site, as a case study). But there should also be prime goals (for instance, documentation and mapping of all

archaeological sites in Britain, in which acoustical phenomena are observed). It will also be necessary to define the ways of diffusion, within the scientific community and the public (publications, conferences, web presence, TV documentary, radio features, exhibitions, public performances, and so on). And there remains the question of further funding such valuable and highly desired research.

When coming back, for example, to the archaeoacoustical research at one particular site, some questions should always be raised and taken into account. How did a particular site transformed over time? If we see its ruined (and sometimes partly reconstructed) end-state, were there phases of construction, and if so, how did the acoustical conditions change over the time? What about the reflecting surfaces? They could have changed considerably, even if the structure remained architecturally intact. Acousticians say that also the climate conditions must be taken into account, and there is a strong need for standardized research methods in recording and testing. Then, a crucial question: were the described effects intentionally designed, or just welcomed aspects only observed after the structure or site was built? Was the structure modified to achieve even stronger effects? And what was the purpose of the acoustical effects? Also, apart from the human voice, which specific musical instruments were played in that specific time around that specific site? Is the archaeological and/or iconographical evidence for this? And how were these instruments played? ...

One must be aware that today many of these and other questions are difficult to answer and that there is always much uncertainty and the risk of speculation. Especially therefore one must be extremely cautious how the individual information is obtained and what to do with it. It is important to define to what extension interpretation might lead without losing ground. Scepticism, often raised by conventional archaeologists, should be taken as a challenge to optimize our research.

In my view, only transdisciplinarity carried out in research teams, including archaeologists, music archaeologists, acousticians, physicians, musicians, writers, instrument makers, ethnomusicologists, iconologists, multimedia artists, and programmers for 3D applications, will reduce the above described risks. And we would all learn from each other.