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## The Archaeology of Sound, Acoustics and Music : Studies in Honour of Cajsa S. Lund

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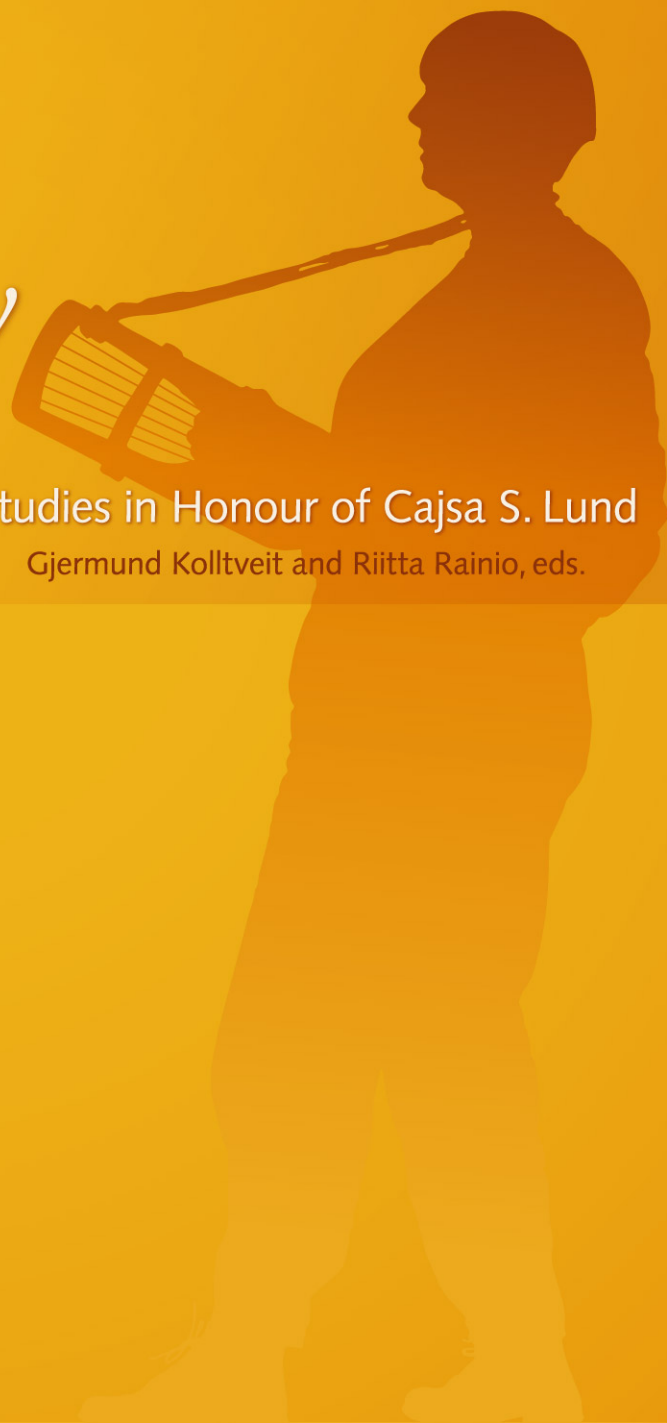
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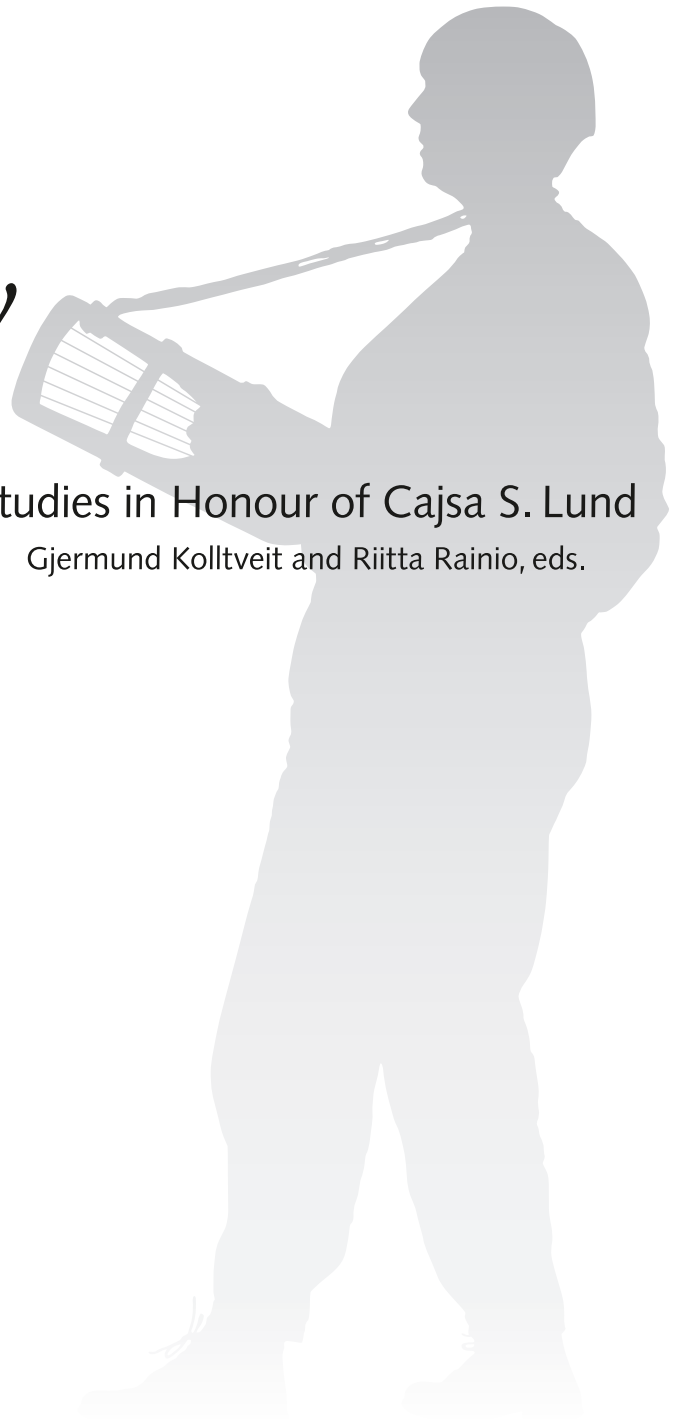
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## Introduction to the Volume

### The Archaeology of Sound, Acoustics and Music Studies in Honour of Cajsa S. Lund

By Gjermund Kolltveit and Riitta Rainio

Cajsa S. Lund is a celebrity in music archaeology. She has been a pioneer and a central voice in this interdisciplinary field of study since the 1970s. Her work and ideas have influenced and motivated many scholars in Sweden, other Nordic countries and the rest of the world. In this book some of the leading music archaeologists in Europe explore the archaeology of sound, acoustics and music with articles written in honour of Cajsa and her inspiring work.

Cajsa Stomberg Lund was among the first to carry out systematic and continuing research on sound tools derived from archaeological materials. In the 1970s she worked for the Music Museum (*Musikmuseet*) in Stockholm, conducting an extensive inventory project on prehistoric sound tools in Sweden (called *Riksinventeringen*). Later she was a research fellow at the Royal Swedish Academy of Music (*Kungliga Musikaliska Akademien*). She has always been active in international cooperation and was one of the founding members of the Study Group on Music Archaeology of the ICTM (International Council for Traditional Music) in Seoul in 1981. Between 2013 and 2018, Lund was a member of the project team of the EU-funded European Music Archaeology Project (EMAP), where she represented Sweden through the regional institution *Musik i Syd*. In this institution she was regularly employed as Head Researcher and Artistic Director.

As a researcher, Cajsa S. Lund has focused on prehistoric music, sound, sound tools and soundscapes of Scandinavia, with particular attention to experimental music archaeology, identification of sound tools and methodology. She has developed a direction of research that to some extent differs from work with cultures in the

South, notably the ancient civilizations of Greece, Rome, Egypt and Mesopotamia. The material from Scandinavia – and northern Europe as well – can only to a limited extent be supplemented with written documents or iconographical representations. The interpretations are chiefly based on the archaeological findings: artefacts and their contexts – sometimes in combination with ethnographic analogy drawn from preserved archaic features and traditions. In addition to this work, her wide understanding of the concept of music must also be mentioned. Typically, she prefers to use “sound tools” instead of “musical instruments”.

Cajsa is also a musician and began her career as a bassoonist (and also a classical saxophonist) in the Malmö Symphony Orchestra. A musical and artistic direction has always been important in her work. “Music archaeology is a tool for art and knowledge,” says Cajsa. A milestone in her work was the famous LP and later CD *The Sounds of Prehistoric Scandinavia* (Swedish *Fornnordiska klanger*), originally produced in 1984, which she did the research for and was the producer. This record has reached a broad audience, and many of the contributions in this book mention this phonogram.

One of the hallmarks of Cajsa’s work is presenting her research for the general public as concert demonstrations and popular lectures in museums, concert halls, schools, kindergartens and other places. In these award-winning, outward-oriented activities, she has often included the instrument maker and fellow musician Åke Egevad. Cajsa’s interest in children and “ordinary people” is symptomatic of her general attitude as a music archaeologist and scholar. She is always curious, continuously asking questions and forming new theories and hypotheses.

Cajsa is still an active researcher, contributing much important work. She is always busy with travels, lectures, concerts and papers. Moreover, she is now working at Linnaeus University, where she has a position as a research affiliate. There, she lectures and is introducing a new generation to the field of music archaeology.

This book arose from the Symposium in Honour of Cajsa S. Lund that took place at Linnaeus University’s Department of Music and Art, in Växjö, Sweden, 18–19 February 2016. The symposium was organized by Nordic music archaeologists Gjermund Kolltveit (Oslo) and Riitta Rainio (Helsinki), with Cornelius Holtorf and Karin Hallgren as local contributors at Linnaeus University. It was funded by the Swedish Research Council, the Nordic Culture Fund and *Musik i Syd*, and was attended by Cajsa’s colleagues and fellow music archaeologists, students and staff at Linnaeus

University as well as other interested people. One of the aims of the symposium was to strengthen the bonds between the archaeological and musicological communities in the Nordic countries, but it was still an international symposium with papers, panels and concert demonstrations by scholars from different European countries. Most of the articles in this book are based on papers presented at the symposium in Växjö. The editing of this book was supported by the Finnish-Norwegian Cultural Foundation and the editorial work was finalised by several language revisers, to whom we editors are most grateful.

The book starts with four forewords – or greetings to Cajsa – written by distinguished scholars with different relationships to her. Cornelius Holtorf is Professor of Archaeology at Linnaeus University with a wide approach to archaeological research, including interest in heritage and future studies. It was Holtorf who invited Cajsa to take the position as affiliated researcher at the university. Iain Morley is a leading archaeologist and palaeoanthropologist at the University of Oxford. With interests in the evolutionary origins of musical and ritual behaviours, he is situated on the outskirts of the mainstream music-archaeological landscape. Catherine Homo-Lechner was Cajsa's counterpart in Paris in the 1980s, where she had an active career and, amongst other activities, worked with the publications of the ICTM Study Group on Music Archaeology. Finally, Emiliano Li Castro, from Tarquinia, Italy, was Cajsa's colleague as the Head and Art Director of the European Music Archaeology Project (EMAP).

The authors of the first research articles address themselves to the field of music archaeology as a whole and to Cajsa S. Lund's legacy within it. In his article "Sound Archaeology and the Soundscape", Rupert Till explores the conceptual boundaries between music and sound and ends up framing music archaeology as a sub-discipline of sound archaeology, which in turn can be seen to fall into the larger, burgeoning fields of sound studies and multi-sensory archaeology. Till traces the beginning of this development back to Cajsa, who from her early work onwards has systematically broadened the field of music archaeology from a focus on musical instruments to include sound, sound tools and soundscapes. Cajsa's visionary role is further discussed by Frances Gill, who in her article "Ears to the Ground" reviews Cajsa's methodological and terminological initiatives, pointing out how they gently and broad-mindedly hand over interpretation also to suggestion and possibility. Gill goes on to relate how Cajsa, as a role model even before gender and feminist archaeologies,

has influenced her own work in Sweden, mainly situated within the movements of experimental music and experimental heritage.

In her article “The *Rommelpot* of the Netherlands”, Annemies Tamboer goes deeply into Lund’s Probability Grouping, a method of grouping archaeological objects by their probability of having been used for sound production. The article tests the method meticulously in practice and demonstrates that the concept is well-suited for analysing – or putting in order – extremely challenging, fragmentary material. Graeme Lawson’s article “The Mammoth in the Room” calls for according more respect and intrinsic value to music-archaeological endeavours by stating that musical necessity has been one of the key factors driving innovation in ancient technology. In the article, music’s frequent proximity to innovation is illustrated via a wide variety of examples, ranging from tool-making behaviours of early humans to Upper Palaeolithic ivory pipes, Sumerian lyres, Chinese bell casting and Late Antique lyres. According to Lawson, “the time has come for archaeology to re-engage with its musical materials and to invest in their study”.

Four of the articles are devoted to stringed instruments. Stefan Hagel connects musical instrument design with music theory, specifically the tuning of the six-stringed lyre from the northern parts of early medieval Europe, its connection to the basic hexachord system and its use by Guido of Arezzo in his famous solmisation system from the 11<sup>th</sup> century. The impact of the lyre in music theory seems more than random, and Hagel’s interpretations convincingly demonstrate some significant developments in European music. “The Birth of European Music from the Spirit of the Lyre” will prove to be an important article, not only in music archaeology and instrument history, but in historical musicology more generally as well. The tuning of the “northern” lyre is also a point of focus in Timo Leisiö’s article. He applies the neurological research of Gerald Langner and his own “seeker tone system” to the tuning of lyres and psalteries. The article offers fresh and bold interpretations of northern stringed instruments. Among the issues discussed in the article are the reasons why the lyres of western Europe had six strings, while the psalteries along the eastern coasts of the Baltic Sea region had five. Besides his theories on tuning, Leisiö also draws a comparative map wherein he discusses these instruments and the relationships between them in folk traditions.

Sigtuna is one of the medieval cities of Sweden where many excavations have taken place. Anders Söderberg introduces some finds from old and new excavations

there related to stringed musical instruments, including a wooden artefact interpreted as a tuning key for a *nyckelharpa*. The artefact is from an early excavation when the methods did not conform to modern archaeological standards, but Söderberg claims that the object possibly might be related to a 13<sup>th</sup>-century cultural layer. This indicates that the *nyckelharpa* dates back much earlier than previously thought. Another interesting find, from Wolin in northwest Poland, vaguely suggests the same thing and is the topic for the article by Dorota Popławska, Andrzej Janowski and Stanisław Mazurek. The artefact is a wooden plate, dated to the 13<sup>th</sup>–14<sup>th</sup> century, which in all likelihood was a soundboard for a stringed musical instrument. Like in Sigtuna, other remnants of the instrument have not survived and, unfortunately, the single object does not allow for a substantiated identification of the instrument it once belonged to. It could be a type of fiddle or citole, but the authors conclude that a reasonable interpretation is that it was a soundboard of a *nyckelharpa* – even if it is too early according to our present knowledge of the origins of this medieval instrument. An interesting part of music archaeology is that new finds sometimes shed new light on the history of musical instruments. When the written sources have limited value, archaeology yields new material, as illustrated by these contributions.

The topic of Simon Wyatt's text is the ritual and transformative uses of TRB drums, i.e. pottery drums of the *Trichterbecher* or Funnelbeaker culture in Neolithic Germany. There is a change in the drums, their form, decorations and find circumstances from an early to a later phase, and Wyatt discusses the reasons for these changes. Whereas the drums from the early phase were related to copper artefacts, fire and death, the later drums are usually found in settlements and seem to loose such connections. Wyatt's interpretation is that the TRB drums in the late phase loose their connection to rites of passage and other transformational ritual ceremonies. The point of focus in the article by Raquel Jiménez Pasałodos and Riitta Rainio is also ancient drumming, or more precisely the search for ancient drumming through a study of drumbeaters. They start with a survey of drumbeaters used by Sámi and Siberian shamans, and from these ethnographical, partly historical samples, they search for parallels in European archaeological collections, and discuss the potentials of some artefacts being used as drumbeaters. Especially promising in their study is the analysis of use-wear in some Sámi drumbeaters, which provided them "with a set of useful criteria and a clear idea of what type of artefact and use-wear to search for". Here, Jiménez Pasałodos and Rainio have developed a methodology that can be useful for future studies.

John Purser, in his article “Beyond the Carnyx”, surveys recent developments in Scottish music archaeology. He presents the ongoing projects of his colleagues and reports new intriguing finds, such as rock gongs, depictions of wind instruments and a Roman altar with possible acoustic use. The most detailed reference is made to the putative bridge for a plucked string instrument, an early example of its kind, which Purser recently examined using optical microscopy. The work was carried out together with Graeme Lawson.

The famous lurs from the Bronze Age have for a long time fascinated archaeologists, musicologists and the general public. A separate volume from the second conference of the ICTM Study Group on Music Archaeology, organised by Cajsa S. Lund in Stockholm 1984, was devoted to bronze lurs. The book had a variety of contributions, and the introductory article by Cajsa is still referred to quite often on this topic. One research issue however, has not previously been treated in depth, namely the decorative elements and sculptural decorations of the lurs. Joachim Schween deals with this topic in his article, which is based on systematic analysis and examinations of detectable structures on the surfaces of the instruments. Schween finds traces of production and use, typological rudiments in the development of the instruments and symbols of religious and cosmological significance that reveal cultic usage.

At the Växjö symposium, we asked Cajsa to tell about her own history and experiences as a pioneering music archaeologist. Her historiographical, personal talk, “In the Mind of a Music Archaeologist”, was the culmination of the event. As the talk contained many interesting stories and anecdotes about the early stages in the development of the field and potentially valuable documentation for future generations, we have included it, as such, at the end of the book. The book concludes with a comprehensive list of Cajsa S. Lund’s publications from 1972 up to now. We have included scientific and popular articles, in Swedish as well as in English and other languages. The list demonstrates impressive research activity spanning five decades. Even still, the list continues, since Cajsa is as active as ever. The only times when she reduces her workloads somewhat are during large sporting events like the Winter Olympics – where she follows the Swedish cross-country skiers – and the international championships in football – where she cheers on the Swedish football stars.

Gjermund Kolltveit & Riitta Rainio



*Cajska S. Lund in the garden at her home Hampusgården in Åkarp, Sweden.*



