

# ICTM Study Group on Music Archaeology

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## Music archaeology: Research on the sounds and musics of the past

As acknowledged by UNESCO, music in all its facets, including music-related activities such as instrument making or dance, form part of what today is considered intangible cultural heritage. Therefore, these activities are a valuable subject of research, documentation, and preservation. Yet, the sounds and musics of the past seem to be gone forever—at least before 1877, the year when Thomas Alva Edison invented the phonograph. The only traces left of the infinite voices of bygone eras are in many cases only sonic relics, whose value cannot be underestimated: these are archaeological musical instruments and sound tools, which are sometimes displayed, but, to a greater extent, stored in hundreds of museums and private collections worldwide.

The activity of instrumental sound-making must have been already known by early hominins in Africa roughly between 2.5 and 1.5 million years ago or even earlier, as a byproduct of rhythmic hitting in stone-tool fabrication, but we will never know if individuals of *Australopithecus*, *Homo habilis*, or any subsequent species sung or intentionally manufactured sound-producing devices for musical purposes. We can only be more sure about such activities millions of years later. In the time span between 60,000 and 40,000 years ago, the earliest most likely sound tools are extant in the archaeological record: pipes (whistles and flutes, belonging to *Homo sapiens* and possibly also *Homo neanderthalensis* contexts),<sup>1</sup> and, from between 30,000 and 20,000 years ago onwards, lithophones, different rasps and rattles, bullroarers, and shell horns (Both 2018). For many

thousands of years, only instruments made from materials such as bone, ivory, antler, shell, teeth, or stone scarcely survive in the archaeological record. Nothing is known about possible instruments made from perishable materials. Since Neolithic times, from about 8,000 years ago onwards, ceramic sound tools were produced, which are sometimes preserved intact and even playable today: rattles, flutes, trumpets, and drums, the latter obviously found without hide. Instrument finds made from metal and less-durable organic materials, including the earliest stringed instruments, are so far only known since the Bronze Age, from about 4,500 years ago onwards.

The archaeological material provides a rich source for the study of organological knowledge and developments, production techniques, cultural interactions, trade, and migration. In terms of archaeoacoustics, the potential sound range of the sonic relics can be obtained and studied by means of playing intact originals and, if this is not possible, replicas or reconstructions. Systematic acoustic and psychoacoustic analysis carried out in sound studios and laboratories may tell us a lot about certain components of lost musics (volumes, tone colours, frequencies, and their impetus on brain waves, etc.). Also, contemporary musical improvisations and compositions, using originals, replicas or reconstructions of ancient instruments, may at least provide an idea about the musical possibilities that the instruments provide. Obviously, the results of such experimentations with archaeological sonorous material are shaped according to the musical background and skills of the performer or composer at present. What we hear today is modern music played on ancient instruments, the musical interpretation also being related to our musical socializations and the view of the past that we have.<sup>2</sup>

Fortunately, musical instruments and sound tools are often not the only traces of past sonic activities. Since the Bronze Age, from about 5,000 to 4,000 years ago

1 Between 38,000 and 36,000 BCE, several perforated wing bones of vultures and swans, interpreted as flutes or clarinets, as well as pipes produced from mammoth tusks were excavated in caves of the Swabian Jura, southern Germany, which by that time were occupied by *Homo sapiens*. A controversial find from a cave in Slovenia is the perforated thigh bone of a young cave bear, showing traces of human workmanship as well as marks made by animals, which could belong to Neanderthal culture (dated between 58,000 and 48,000 BCE, to a period shortly before the first evidence of European settlement by anatomically modern humans).

2 This activity can be called “playing history,” in accordance with the activity of “writing history,” the way our understanding of the past is actively shaped through observation and interpretation.

onwards, many cultures worldwide developed music imagery, showing musical instruments, playing postures, and performance contexts in increasing numbers. From this information, in addition to the interpretation of the archaeological context of music-related finds, enormous insights on ancient music practices can be deduced. In Mesopotamia and China, and later in the Mediterranean, a number of cultures developed writing and musical notation, presenting further evidence on ancient instruments, sounds, and musics. Such information may contribute to actual musical reconstructions, primarily of Greek and Roman musical pieces. The earliest traces for vocal music are evident in hymns from the second millennium BC, recorded in cuneiform writing.

Although individual research on past sounds and musics has been carried out for the last 150 years (Engel 1864, 2014), music archaeology became a more widely recognized topic and scientific approach only towards the end of the twentieth century. Challenges in studying ancient sound tools today are disciplinary barriers between musicians, musicologists, archaeologists, and other scientists such as philologists or art historians. While not so many musicians and musicologists draw on archaeological knowledge, including the treatment of archaeological finds, not so many archaeologists draw on musicological expertise and/or are able to perform on a musical instrument. This is one of the reasons why professional musicians are not always given access to archaeological material preserved in museums. Conventional musicologists or archaeologists, on the other hand, often do not consider the possibility that the sounds and musics of the past could be a promising and valuable subject of research, not only with regard to the history of music but also the development of human culture and interaction. As archaeologists and conservators usually do not draw on specific musicological, in particular organological knowledge, sound artefacts stored in museums world-wide often remain unrecognized or misclassified today.

Despite the scarcity of information in many cases, music-archaeological approaches developed since the 1980s may lead to a fairly comprehensive picture of past sonorous activities (Both 2009a). Apart from scientific methods, artistic skills in instrument manufacture and experimental playing are required to explore the topic. Along with a growing amount of research tools and possibilities, the approach often requires a specialist team of multiprofessional researchers and experienced artists, such as instrument makers and musicians. One of the challenges is that the study field is immensely wide: it covers a time span of roughly 60,000 years ago until the present (instruments are also buried and rediscovered in recent times), and it has to deal with nearly all so-far

known archaeological cultures of humanity and their music-related remains.

## The ICTM Study Group on Music Archaeology

From the 1980s onwards, the ICTM Study Group on Music Archaeology played a very important role in the formation of the scientific approach, as it represented a worldwide, unique platform of communication and exchange for musicologists and archaeologists turning to the topic. The stimulus for the establishment of this study group was an innovative roundtable entitled “Music and archaeology,” held at the 12th Congress of the International Musicological Society in Berkeley, California, in 1977. The participants were the chair Richard L. Crocker (Berkeley), Anne Draffkorn Kilmer (Berkeley), Mantle Hood (Los Angeles), Charles L. Boilès (Mexico), Bathja Bayer (Israel), Liang Ming-Yueh (China), Ellen Hickmann (Germany), and Cajsa S. Lund (Sweden). Among the variety of topics discussed were perspectives in the recovery of ancient musics, and the recreation of ancient musical instruments. The most prominent contemporary example, which also gave birth to the roundtable, was the reconstruction project of a Hurrian cult song from 1400 BCE, leading from scientific publications to the vinyl record with the booklet *Sounds from Silence: Recent Discoveries in Ancient Near Eastern Music* (Kilmer, Crocker, and Brown 1977). The papers from the roundtable, which already covered a wide array of music-archaeological approaches, were published in 1981 by Richard L. Crocker and Ellen Hickmann within the report of the 12th congress of the International Musicological Society (Crocker and Hickmann 1981).

In a recent paper, Cajsa S. Lund remembers the meeting in Berkeley:

We must establish a global contact network of people interested in the combination of music and archaeology”, Mantle Hood said. This was in his hotel room, late at night, while he poured glasses of Jack Daniels – whisky, you know! “Cheers!” I said: “and let’s call this contact network *Musical archaeology*”. Can you imagine it! There I was among outstanding international researchers, drinking Jack Daniels and introducing the term Musical Archaeology! One of the participants, Professor Bathja Bayer from Israel, proposed instead another name, *Archaeomusicology*, to stress the importance of both bases of this field of research, namely archaeology and musicology. But later on it would become established as *Music Archaeology*, to reflect the increasingly archaeological character of much of its evidence. (Lund 2020:334)

The ICTM Study Group on Music Archaeology was founded in Seoul, South Korea, in 1981, on the occasion of the 26th World Conference of the Council. The

four founding members were (in alphabetical order) John Blacking, Ellen Hickmann, Mantle Hood, and Cajsa S. Lund. While Blacking and Hood were already well-known ethnomusicologists by that time, music-archaeologists Hickmann and Lund were promising scholars, who would dedicate their lifetime to music archaeology. Hickmann, who became professor of musicology in Hannover in 1976, would be elected as the first chair of the study group in 1981 (a position that she held for about twenty years). By the early 1980s, she was already undertaking extensive research on the music of the pre-Columbian Americas—her husband, ethnomusicologist and music archaeologist Hans Hickmann, who died in 1968, was a recognized researcher on the music of ancient Egypt. Lund, who would be the first secretary of the study group, was a research student of Ernst Emsheimer, Swedish musicologist of German birth. Her travelling exhibition, *Klang i flinta och brons: The Sound of Archaeology* (in Sweden, 1974–1975; Lund 1974a, 1974b), was a landmark event, and since then has been working extensively on the sonic remains of prehistoric Scandinavia.

Without being officially recognized by the ICTM until the 27th World Conference held in New York (1983), the first international scholarly meeting of the study group was held in 1982 in Cambridge, UK. This event of eighteen participants—among whom were scholars such as Ernst Emsheimer, Ann Buckley, Frank Harrison, Ellen Hickmann, Peter Holmes, Gunnar Larsson, Jeremy Montagu, Laurence Picken, and Joan Rimmer—was the very first international conference on music-archaeological topics. It was organized by Graeme Lawson, another researcher who would dedicate his life to the music and sounds of the past. By that time, Lawson and Peter Holmes were students of the British prehistorian John Coles. While Lawson would focus on ancient European stringed instruments, Holmes's research was on European Bronze Age horns and trumpets. The summary and abstracts of the first international meeting are found in the unpublished Music-Archaeological Report no. 6 (Lawson 1982, see also Homo 1984–1986; Homo-Lechner 2015a).

The second meeting of the study group members was held at the 27th World Conference of the ICTM in New York, USA, in 1983. The conference was an important event in the sense that the study group was officially recognized as a body of the ICTM at that time. The abstracts of this roundtable were published in the *MAB – Music-Archaeological Bulletin/Bulletin d'Archéologie Musicale* (vol. 1, 1984, which was still called *AMB – Archaeo-Musicological Bulletin*; see Homo 1984–1986; Homo-Lechner 2015b), while the papers were published by Ellen Hickmann in *Acta Musicologica* (Hickmann 1985).

A selection of articles and many of the reports on meetings, conferences, and research activities shared among early study-group members were included in a new publication outlet of the study group: the handmade *MAB – Music-Archaeological Bulletin/Bulletin d'Archéologie Musicale*, with six issues published between 1984 and 1986 (Homo 1984–1986; Homo-Lechner 2015b), and the succeeding journal *Archaeologia Musicalis*, with six issues published between 1987 and 1990 (Homo-Lechner 1987–1990; 2015a). *MAB* especially demonstrates the positive energy and the joy that the very first researchers in music archaeology had with their developing field.

The second symposium of the ICTM Study Group on Music Archaeology was organized by Cajsa S. Lund in 1984 in Stockholm, Sweden, and the papers were published in two volumes by the Royal Swedish Academy of Music, which became a great supporter of music-archaeological activities by that time (Lund 1986). The volumes contained 37 contributions and—even if mainly focusing on Bronze Age lurs and the instruments rescued from the sunken seventeenth-century Swedish warships *Kronan* and *Wasa*—reflect the wide scope of the growing field; in case of the lurs, including metallurgical analysis, production techniques, and playing possibilities. However, music archaeology at the time was still practised by a small circle of researchers, having little impact in the currents of conventional (ethno)musicology and archaeology.

Two years later, the third symposium was organized in 1986 by Ellen Hickmann in Hannover, Germany. A photo shows a group of participants arriving at Hannover airport (figure 1). While a detailed synthesis of the conference was given by Kenneth J. DeWoskin (1987), the papers were published in *The Archaeology of Early Music Cultures* (Hickmann and Hughes 1988). The volume contained twenty-eight contributions on a variety of topics, including reflections on the methodological and theoretical approaches of the research. In 1990, four years after the Hannover event, the fourth symposium was organized by Catherine Homo-Lechner in Saint-Germain-en-Laye, near Paris, France, and subsequently published in *La pluridisciplinarité en archéologie musicale* (Homo-Lechner and Bélis 1994).

In organizing the first four international symposia of the ICTM Study Group—of which three were called “international meetings,” according to the nomenclature of the time, and one was called a conference—four scholars played a leading role in the ongoing development of the group: Ellen Hickmann (chair), Cajsa S. Lund (secretary), Graeme Lawson, and Catherine Homo-Lechner. The core group of the ICTM Study Group on Music Archaeology consisted of a small number of members, among which were several schol-





**Figure 1.** Study Group members arriving from Sweden at Hannover airport in 1986: Anders Hammarlund, Olle Henschen-Nyman, Ernst Emsheimer, Doris Stockmann, Cajsa S. Lund, Bo Lawergren (photo courtesy of Cajsa S. Lund).

ars who dedicated a substantial part of their lives to music-archaeological research (in alphabetical order): Ellen Hickmann, Peter Holmes, Catherine Homo (later Homo-Lechner), Bo Lawergren, Graeme Lawson, and Cajsa S. Lund. While John Blacking and Mantle Hood soon turned to their respective topics (without leaving substantial contributions to music archaeology, especially in the case of John Blacking), other members joined the group, mostly ethnomusicologists and conventional musicologists, with fewer archaeologists. Most of them, however, explored selected topics related to music-archaeological research, and then turned to other subjects. In a way this reflected the scholarly state of the discipline, which was still forming, although the methodological approach was already established.

Despite of the fluctuation of active study-group members, a group of scholars from all over the world was formed. According to the records provided by Lund, between 1981 and 1986 a total of 101 members from 31 countries joined the group (in alphabetical order): Australia (4), Austria (1), Belgium (2), Bulgaria (1), Canada (1), China (3), Colombia (2), Czechoslovakia (2), Denmark (2), East Germany (4), Ecuador (2), England (11), Finland (1), France (3), Greece (1), Iraq (1), Ireland (3), Israel (1), Japan (4), the Netherlands (1), Norway (3), Poland (1), Spain (2), Sweden (17), Tonga (1), USA (14), USSR (2), Vietnam (1), West Germany (7), Yugoslavia (2), and Zambia (1).

In the prolific early phase of the study group (1980s and early 1990s), members also organized round-

tables at other international conferences. However, such activities seldom had opportunities for publication, with the exception of a roundtable at the XIIe Congrès International des Sciences Préhistoriques et Protohistoriques (“Music and plays in ancient cultures”), the results of which were edited by Danica Staššiková-Štukovská and published in the 4th volume of the *Actes du XIIe Congrès International des Sciences Préhistoriques et Protohistoriques* (1993). Another event of this kind was the International Rock Art Congress, in Turin (1995), with a number of music-archaeological contributions published by Hickmann (1996).

The proceedings of the 4th symposium of the ICTM Study Group on Music Archaeology in Paris (Homo-Lechner and Bélis 1994), and of the 5th symposium in Liège, Belgium (Otte 1994), belong to the “franco-phone period” of the study group in the early 1990s, and reflect the great impact that music archaeology had and still has in the French-speaking world. These volumes completed the initial phase of the early ICTM Study Group on Music Archaeology (what Lund has called its “golden era”; Lund 2010:186), which helped to establish a new scientific discipline at the cross-section between (ethno)musicology, cultural anthropology, and the arts.

After this period, although the activities of the study group were ongoing, a far lesser volume of research was published. The 6th symposium was held in Istanbul, Turkey (1993), the 7th in Jerusalem, Israel (1995), and the 8th in Limassol, Cyprus (1996). Only a few

music-archaeology papers from this period, in particular those focussing on stringed instruments, were published in *Studien zur Musikarchäologie* (Hickmann and Eichmann 2000), the first volume of the series of a newly founded scholarly body, the International Study Group on Music Archaeology (ISGMA).

By nature, successive times are followed by less fortunate periods. By the mid-1990s, Ellen Hickmann, still chair of the study group, and other key study-group members decided to leave the ICTM as an organization mostly circumscribed to music scholars. In 1998, two years after the Limassol conference, Hickmann and the German archaeologist Ricardo Eichmann founded the ISGMA, in particular with the aim to develop within the field a greater focus on archaeological perspectives, and inspire more archaeologists to participate. The move was understandable in the sense that within the framework of ICTM, it was extremely difficult to attract archaeologists to become members. Other reasons for the move were related to unfortunate disputes on funding meetings and publications, carried out between the chair of the study group and members of the ICTM Executive Board. The break was also related to the struggle that the developing field had from its very beginning, namely the appropriate scholarly affiliation at the cross-sections of (ethno)musicology and archaeology.

While important members such as Lund or Homo-Lechner turned at least for some time to other studies and responsibilities, most study-group members of the core group, formerly joining the ICTM, followed Ellen Hickmann to the successful ISGMA Michaelstein symposia, which turned out to be real music-archaeological happenings. Between 1998 and 2004 and in collaboration with Ricardo Eichmann, at that time director of the Orient Department at the German Archaeological Institute, Hickmann successively organized four conferences at Kloster Michaelstein, Landesmusikakademie Sachsen-Anhalt, which were funded by the German Research Council (DFG). Later ISGMA conferences, held with the support of Lars-Christian Koch at the Ethnological Museum and recently at the Humboldt Forum of Berlin, and with the support of Fang Jianjun and other Chinese colleagues in Tianjin and Wuhan, China, contributed to the recognition of the field of music archaeology as a global scholarly endeavour.

The ISGMA was most effective at a time when the research was intensified and broadened, but its success cannot be understood without the activities previously carried out by the germ cell of the ICTM study group. Conferences with public concerts, meetings, and publications also stimulated the formation of other research groups, such as the MOISA Society (International Society for the Study of Greek and Roman Music and

its Cultural Heritage), and ICONEA (International Conference of Near Eastern Archaeomusicology). From 1998 onwards, the discipline was also opened not only to scientists, but also to artists, namely instrument makers and musicians, who joined and substantially contributed to the subject.

Between 1996 and 2003, the ICTM Study Group on Music Archaeology was left without a chair and was not active. In 2003, the archaeologist Julia L. J. Sanchez re-activated the group on the initiative of Anthony Seeger, then secretary general of the Council. The revival began with meetings in Los Angeles, California (2003), with fifteen participants, and Wilmington, North Carolina (2006), with ten participants. These were rather small meetings, compared to the much larger symposia held in the 1980s and 1990s, reflecting a new start with a new group of members. On the occasion of the ICTM World Conference in Vienna, Austria, in 2007, I was elected chair of the study group.

With the endeavours of local co-organizers, in the following years it was possible to hold a series of international symposia bringing together old and new ICTM study-group members, researchers entering the field from ISGMA, and a large section of newcomers, including students turning to the topic, instrument-makers, and musicians. The first symposium of the series was a highly successful joint-conference, held with co-organizer Zdravko Blažeković in New York, USA (2009). In following the consecutive way of counting, this symposium was the eleventh of the study group since its foundation in 1981 (also the twelfth conference of the Research Center for Music Iconography), gathering forty participants. Successively, the twelfth symposium was held with the support of co-organizer Raquel Jiménez in Valladolid, Spain (2011). With more than sixty participants, this was the largest meeting of the study group so far. This was followed by the thirteenth symposium with twenty-five participants, co-organized by Matthias Stöckli in Guatemala City, Guatemala (2013), and the fourteenth symposium with forty participants co-organized by Dorota Popławska and Anna Grossman in Biskupin, Poland (2015).

From a publishing point of view, the revival of the study group between 2003 and 2009 was difficult. From the first two symposia only a selection of articles focussing on the pre-Columbian Americas was published in a special issue of *The World of Music* (Both and Sanchez 2007); and from the joint-conference in New York some articles were published in *Music in Art* (Blažeković 2011). Also, the 2009 *Yearbook for Traditional Music* featured a special section on music archaeology (Both 2009b).

Then, in 2013, a new publication platform in the form of a book series was established: *Publications of the*





**Figure 2.** Participants of the fifteenth symposium in Ljubljana, Slovenia, 2017 (upper row): Irena Miholić, Katinka Dimkaroska, Matija Turk, Luboš Chroustovský, Frances Gill, Boštjan Odar, Susanne Münzel, Jean-Loup Ringot, Nino Razmadze, Svanibor Pettan, Fang Xueyang, Aleksandra Gruda, Jim Rees, Susan Beatty, Cajsa S. Lund; (lower row): Michael Praxmarer, [student], Dorothee J. Arndt, Arnd Adje Both, Annemies Tamboer, Adriana Guzmán, Gretel Schwörer-Kohl, Olga Sutkowska, Marta Pakowska (photo courtesy of Arnd Adje Both).

*ICTM Study Group on Music Archaeology.* Three volumes have been issued so far, with 44 individual case studies on a variety of topics in total. The first two volumes, *Music and Ritual: Bridging Material & Living Cultures* (Jiménez Pasalodos, Till, and Howell 2013), and *Crossing Borders: Musical Change & Exchange through Time* (Both, Hughes, and Stöckli 2020), gather a selection of papers on topics discussed on the symposia of 2011, 2013, and 2015. The third volume, *The Archaeology of Sound, Acoustics and Music: Studies in Honour of Cajsa S. Lund* (Kolltveit and Rainio 2020), is a Festschrift with a core of papers given at a conference held in 2016 at the Linnaeus University in Växjö, Sweden. The book demonstrates the impact of Lund's research on music archaeology since the early days of the study group. Within the series, two special editions feature reprints of the earliest publications of the study group, the *Music-Archaeological Bulletin/Bulletin d'Archéologie Musicale*, and *Archaeologia Musicalis* (Homo-Lechner 2015a, 2015b).

Between 2013 and 2018, the ICTM Study Group on Music Archaeology became an associate partner of the European Music Archaeology Project (EMAP), an EU-funded multinational project dedicated to the study of the musical instruments and sound tools of ancient Europe, in particular their production and playing technologies, and their cross-cultural relations through time. Pioneers of the study group, such as Lund and Holmes, substantially contributed to this project. Among the outputs was a travelling multimedia exhibition entitled ARCHAEOMUSICA, of which I was appointed curator (Both 2019), and the two most recent symposia of the study group were related to this event. The fifteenth symposium with forty participants was held at

the Slovenian Academy of Sciences and Arts and the National Museum of Slovenia in Ljubljana (2017), and the sixteenth symposium with thirty participants at the State Museum of Archaeology in Brandenburg/Havel, Germany (2018). A photo from the Ljubljana symposium shows some of the participants at the venue of the Slovenian Academy of Sciences and Arts (figure 2).

The ICTM Study Group on Music Archaeology developed over the years beyond a small circle of enthusiasts to encompass an international body of experts from numerous disciplines, including science and the arts. Today, its activities reflect the wide scope of music-archaeological research worldwide, benefiting from perspectives from a range of subjects, including newly emerging fields such as archaeoacoustics, but particularly encouraging both music-archaeological and ethnomusicological perspectives, as in the very early days of the study group. Its many publications demonstrate that music making, as a means of sonic interaction beyond language, has formed an integral part of humanity since Palaeolithic times, despite all cultural specifics. It must be mentioned, however, that the study field, due to the challenge that the music itself is lost and the complexity in terms of its multidisciplinary approaches, is still carried out by a small number of specialists in comparison to other musicological or archaeological subjects, encompassing maybe not more than two hundred active researchers worldwide. Despite the many insights gained, we are still far from a comprehensive overview and understanding of our musical past.

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