

# WHAT IS WRONG WITH MUSIC ARCHAEOLOGY? A CRITICAL ESSAY FROM A SCANDINAVIAN PERSPECTIVE INCLUDING A REPORT ABOUT A NEW FIND OF A BULLROARER

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Music archaeology in Scandinavia is on friendly terms with its legitimate parents, musicology and general archaeology. However, their interest in and attitudes toward their child, music archaeology, are divergent. Musicology seems to have no doubts about considering music archaeology its legitimate offspring. Archaeology, on the other hand, is apparently having some difficulties in accepting its part of the parenthood.

The Norwegian archaeologist Arne B. Johansen gives voice to this way of archaeological thinking in an article in the journal *Fornvännen*, here freely translated into English: '[music archaeology] ... has seldom met with any serious understanding on the part of us "general" archaeologists. We accept it, to be sure, but retain so many doubts that a safe distance is maintained between it and "true archaeology"' (Johansen 1984, 278.)

And so while present-day musicology in Scandinavia frequently discusses music-archaeological research and its results in reference books, manuals and other relevant literature, this is not the case with archaeology. Generally speaking, modern archaeological literature very rarely includes music-archaeological reports or makes reference to them.

Let me give an interesting example. A few years ago, the Swedish journal *DIK-forum* (a union publication for employees within the sector of documentation, information and culture, enjoying a wide circulation) started a series of articles written by established archaeologists, aiming at giving a presentation of *all* branches of archaeology (such as prehistoric, medieval, Mediterranean, industrial, maritime, aerial archaeology, etc.). But not a word about music archaeology!

How come? Are not archaeologists in Scandinavia generally aware of the existence of music archaeology? Yes, they probably are. There has been a considerable output of information over a ten-year period,<sup>1</sup> and there are papers published in standard archaeological journals. I should mention, too, that I myself am a *bona fide* archaeologist, educated in that discipline. And there is a general network of archaeological contacts. So archaeologists here in Scandinavia should indeed be aware that music archaeology exists.

The above-mentioned archaeologist, Arne B. Johansen, has expressed the opinion '... that general archaeology does not regard music archaeology as a *true* archaeology... because sounds cannot be physically excavated from the earth... But we archaeologists forget, he continues, that neither social organisation nor economy, nor *types* of arrows, can be physically excavated; they are as reconstructed as a flute sound!', Johansen says (1984, 278).

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1. The Study Group on Music Archaeology of the ICTM was founded in 1981, in Seoul. The ICTM (= The International Council for Traditional Music) is a music-anthropological organisation (a UNESCO body). This means that the ICTM's printed information on its music-archaeological Study Group will primarily reach musicologists. In Scandinavia, however, this information has been distributed also to archaeological departments, museums, libraries etc. The first meeting of the ICTM Study Group on Music Archaeology took place in Cambridge in December 1982, hosted by Graeme Lawson. Among the participants were Ann Buckley, Ernst Emsheimer (†), Frank Harrison (†), Ellen Hickmann, Peter Holmes, Catherine Homo, Gunnar Larsson, Wendy Lawson, Jeremy Montagu, Laurence Picken, Joan Rimmer and Lothar Siemens.

According to Johansen, it is really an archaeological problem: namely, what archaeology is, what it can and should consist of, based on its own premises. Johansen's conclusion, even though implicit, is that there must be something wrong with archaeology (*ibid.*, 278ff)!

For my part, however, I would like to turn the question around and ask: Can there be anything wrong instead with music archaeology?

#### PALAEO-ORGANOLOGY

Let us have a critical look at the content of music-archaeological work thus far in Scandinavia. What are the problems and questions? what are the issues being discussed? Taken as a whole, but at the risk of being perhaps too incisive, it is primarily a matter of organology, or—using a more relevant term—palaeo-organology.<sup>2</sup> The sound tools themselves are of main interest. The archaeological aspect, however, is many times confined to such information as location and context of the find, and dating. Let me elaborate on this.

Questions of music archaeology often have to do with whether or not an individual archaeological find of a possible sound tool (or a group of similar finds) is a sound tool beyond any doubt: is the bronze tube with a hole perhaps a flute rather than a hanging ornament? the saw-toothed bone or flint implement a scraper used for sound production? or the wooden plug a tuning peg from a stringed instrument? And what about tubes of bone with bevelled ends? Are they whistles or are they something completely different? If so, were they also used occasionally as whistles?

It is certainly necessary for music archaeology to try to reach answers to such questions. As is well known, we have a paucity of source material and must continually work to enlarge it. I refer here to a discussion about the lack of data in an article entitled 'On Animal Calls in Ancient Scandinavia: Theory and Data' (Lund 1988, 295 and 303).

The main question in that article is whether a certain category of neolithic artefacts of bone may be identified as buttons, belt adornments, beads, amulets, textile tools, flutes, or something else. The same paper contains a preliminary table of hitherto known flutes and possible flutes dating from Scandinavia's antiquity (*ibid.*, 293). The table is reproduced below (fig. 1), and as can be seen, there are only four artefacts which are clearly identifiable as flutes (= Probability Group 1) but there are eighty-five possible flutes (= Probability Groups 2–5).<sup>3</sup>

#### A BULLROARER (?) OF SHALE, RECENTLY FOUND IN NORWAY

It was reported to me in the summer of 1991 that a bullroarer was found in an archaeological excavation in northern Norway. The field archaeologist in charge, Hein Bjartmann Bjerck, intends to publish the find, but has kindly given me permission to discuss it here.

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2. The term organology is used here in the sense of the study of musical instruments.

3. See also Lund 1984/1991, a gramophone record (LP and CD) where forty-seven artefacts are recorded but of which only fifteen for sure can be regarded as sound tools!

The bullroarer is of reddish-brown shale and resembles a little propeller blade. It is 6.4cm. long, 2.7cm. wide and weighs 9 grams. It has a triangular cross-section 0.4cm. thick at the most. As can be seen (fig. 2), three notches have been cut into one end.

The find was made in the spring of 1991 in a cultural layer with shale objects at a site called Tuv at Saltstraumen in Bod Municipality. Near the bullroarer was found a spearhead of greyish-green shale. The site can be dated to the Neolithic period, c.3500–5000 BC. We are now awaiting the result of a C-14 dating.

When the find was made, the field archaeologists discussed various interpretations. It might be the blade of a knife, but in that case how did one fasten the handle to the end? Could it be a piece of jewellery? Possibly; but what function then did the middle notch have? Would not a piece of jewellery hang better if it were fastened only in the notches on the sides? Eventually Hein Bjartmann Bjerck hit upon the idea that it could be a bullroarer, and in that case unique for its type in Norway. He fastened a fishing line (see fig. 3) and swung the object around in the air. 'It was a fantastic experience to hear the shrill, powerful sound that was made', he writes to me.

Hein Bjartmann Bjerck's interpretation is entirely plausible; and perhaps he has further criteria up his sleeve such as, for example, traces of wear and tear in the notches from the string that could only have come about if the piece of shale was used as a bullroarer.

It would indeed be a significant advance for music archaeology if we could, in some way, at some time or other, verify that a possible bullroarer really is a bullroarer (or that a possible buzz-bone really is such, or that a potential rattle is a rattle, a potential 'phalange flute' a phalange flute (fig. 4), etc.). However, that an artefact can produce sounds—as in the case of the Norwegian artefact under discussion—does not prove that this artefact was actually used as a sound tool. One can fasten a string to the end of a ruler, a reflector tag, an empty yoghurt container, a spoon-bait, a key, a rubber eraser... and get these objects to produce perfectly good whirring sounds. But neither their primary nor their secondary function is that of a bullroarer!

One question that I ask myself in this context is: To what extent can one describe and explain the society where this bullroarer of shale was used? Are there ethnographic parallels for this society? If so, can we, on the basis of these, come up with any ideas regarding the use of bullroarers at the Norwegian site: who can have used such sound tools? when did they do it? and why?

#### THE BULLROARER (?) FROM KONGEMOSEN, DENMARK

In 1955, Danish archaeologists excavating at Kongemosen on Zealand in Denmark found a c.8500-year-old object of bone in the form of a propeller (fig. 5). The function of the object was unknown. Was it a fishing tool? or a utensil for weaving? Almost as a matter of chance, someone tied a string to the end of the object and swung it around in the air. Then, according to those who witnessed it, there came a noise, a strange kind of rising and falling buzzing—they had discovered Denmark's oldest musical instrument; it was an organological sensation! (*Skalk* 1968/2; see also Jorgensen 1956).

The Kongemosen bullroarer has become world famous both on the music side and on that of archaeology. One of a number of reasons for this would seem to be that music archaeology in Scandinavia has had this bullroarer 'in the repertoire' for a long time, in scientific publications as well as in lectures. It had been uncritically presented as Scandinavia's oldest-known sound tool. On being viewed in a wider context, it acquired a music-ethnographic character. Archaeology of the Kongemose bullroarer has usually been restricted to information about the findplace and dating. Is that perhaps why the

archaeology side seems to consider (uncritically) the Kongemose bullroarer, as well as other bullroarers, to be more of a musicological than an archaeological issue?

In this context, there is another interesting aspect to report. In 1981, I conducted practical experiments with the Kongemose bullroarer, using an exact casting of the original, as well as a reconstruction made of bone. My purpose in doing so was to attempt to ascertain what type of string or cord could have been used with it.

The experiments yielded some bewildering results, and for certain reasons (see Lund 1981, 256) I had to conclude that '... the possibility also exists that the Kongemosen find is not a bullroarer at all!' (See also Lund 1984, 13 and 1991, 40–42.)

At the same time, I conducted practical experiments with a selection of original objects—so-called buzz-bones (fig. 6). The results of these, too, were instructive. This was because not all of the original objects could have functioned as buzz-bones; the holes were quite simply wrongly placed on the bones: 'The archaeological buzz-discs of bone, like the Kongemose bullroarer, are examples of how apparently valid theoretical interpretations begin to give way when they are tested in practice. The examples mentioned also illustrate the importance of constant, critical scrutiny of the sources and a reconsideration of theories and hypotheses, not least one's own' (Lund 1981, 257).

The music archaeologist's situation is thus paradoxical: the more we carefully analyse and critically examine our source material with the aim of trying to answer the remaining questions, the more questions we arrive at instead!

#### 'OLD PALAEOLITHIC TRUTHS'

As is well known, there is a large number of 'classical' finds of possible bullroarers, scrapers, whistles and other types of flutes from Palaeolithic times (especially from France). These objects have been discussed by different generations of palaeo-organologists. I shall mention here only a few names: Piette (1874), Wilson (1898, 524ff), Rutot (1906), Passemard (1923), Seewald (1934), Absolon (1936), Allain (1950), Megaw (1960), Moeck (1967), Meylan (1974), Brade (1975), Harrison (1978), Biebuyck (1980–81), Fages and Mourer-Chauviré (1983), Scothern (1986), Popławska (1994).

The discussions have for the most part concerned only the objects themselves, for instance, whether the hole in a phalange was made by human hand for acoustical reasons (e.g., whistle) and/or whether someone wanted to get at the marrow, or whether it happened by mechanical means (while lying in the earth), or from an animal bite.

Another example from several that have been discussed for more than a century is the 'antler flute' found at Poitiers (see, for example, Fétis 1872, Moeck 1967, Brade 1975). Is it really a flute? How old is it actually?

What one *can* point out is that different opinions about the 'old' Palaeolithic sound tools have billowed back and forth over the years. And it would seem, at the present time, very difficult to introduce any new, revolutionary organological ideas to this problem.

At the time of writing, I am not aware of any studies treating of these Palaeolithic sound tools where the questions are not solely organological, or in any other way artefact-oriented, but also deal with the society and the human beings behind the sound tools! (But perhaps there are—and here I ask for assistance from my international colleagues.)

## CONCLUSION

Is it perhaps this which is 'wrong' with music archaeology in the eyes of general archaeology: that the organological and thereby the musicological aspects predominate, and that 'archaeology' is often treated mainly as a synonym for the concept of Antiquity, or as a kind of stock of finds?

In that case we who are looking for a response from modern archaeological research must try to be more 'archaeological' than we have been. We should, for example, try to see the sound tools in a broader social perspective; indeed, in a word, we should try to devote ourselves more to the people behind the sound tools, '... we should let the latter be mirrors and by no means, as sometimes happens, an end in themselves'. These last two lines were formulated by the archaeologist Carl-Axel Moberg (who died in 1987) at one of the many seminars where he critically discussed all kinds of so-called find-Positivistic archaeology.

Finally, I also want to emphasize that music archaeology must try to establish increasingly closer contact with the archaeology side. Ultimately, it is a matter of archaeology and musicology together and on a more institutional basis, formulating problems and working to try to solve them. Music archaeology would in this context be like the span of a bridge, a link between its two legitimate parents.

In conjunction with this I will refer to the following lines of the Polish archaeologist Tadeusz Malinowski (1988, 340): 'Permanent cooperation between individual archaeologists and musicologists apparently already exists in various countries—but this is quite a different question from that of *institutional* cooperation'.

What I have said above is, to be sure, more easily said than done, and perhaps not of very great interest to each and every music archaeologist (there are about 130 'registered' so far internationally).<sup>4</sup>

But this paper should not be taken either as a literal proposal of a concrete programme of action for music archaeology as a whole. It is rather food for thought for one who is self-critical, the gist of which can be summarised as follows: If archaeology does not come to music archaeology, then music archaeology must come to archaeology!

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4. The figure gives the approximate number of members in The Study Group on Music Archaeology of the ICTM. See further in n.1 above.

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Flutes and possible flutes.

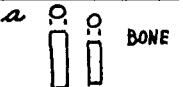
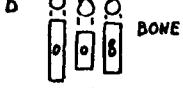
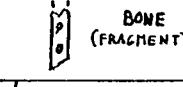
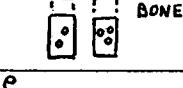
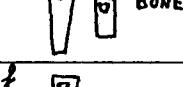
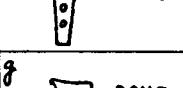
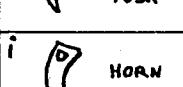
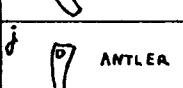
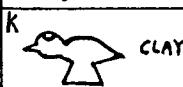
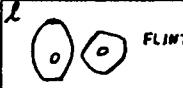
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	1	2	3	4	5
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b  BONE			10		
c  BONE (FRAGMENT)			1		
d  BONE				3	
e  BONE	2	3			3
f  BONE	2				8
g  BONE					7
h  BOAR'S TUSK					6
i  HORN			2		
j  ANTLER					7
k  CLAY			1		
l  FLINT			3		

Fig. 1. Flutes and possible flutes in Scandinavia. (Diagram after Lund 1988, 293)

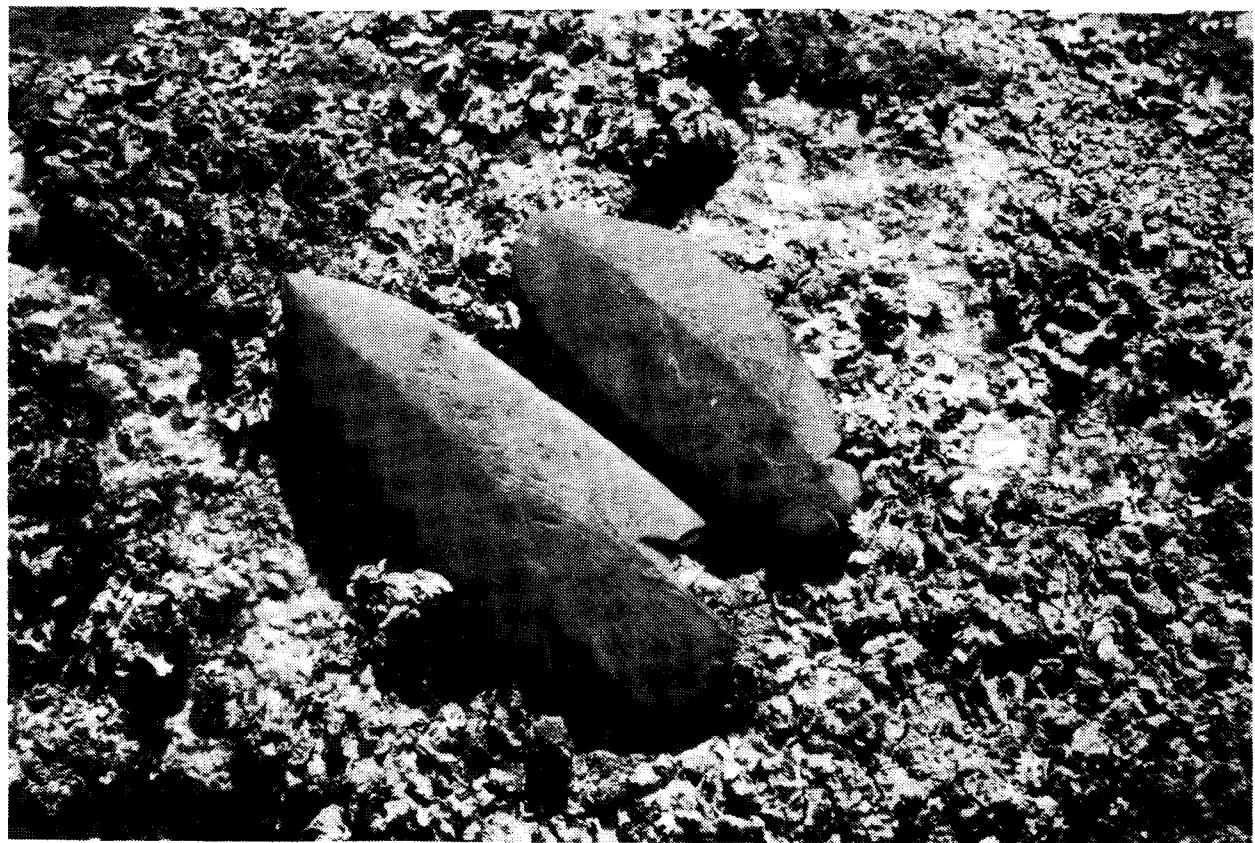


Fig. 2. A spearhead (left) and a bullroarer (?) (6.4cm. long, right); both made of shale, and found at Tuv, Norway, c.5000–3500 BC. (Photo: H. Bjerck)

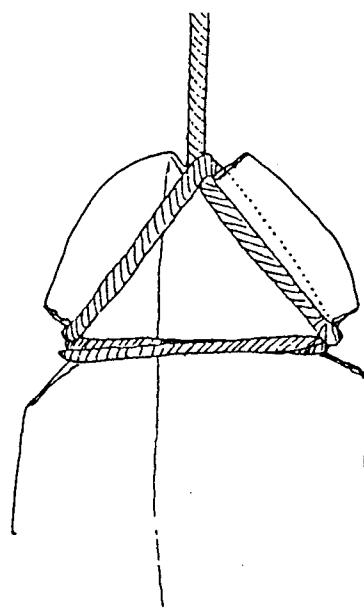


Fig. 3. This is how the string is fastened to the possible bullroarer from Tuv. (Reconstruction and drawing: H. Bjerck)



Fig. 4. 'Phalange flutes'. Type models made from phalanges of present-day deer (*cervitoe*).  
(Photo: L. Gölén)

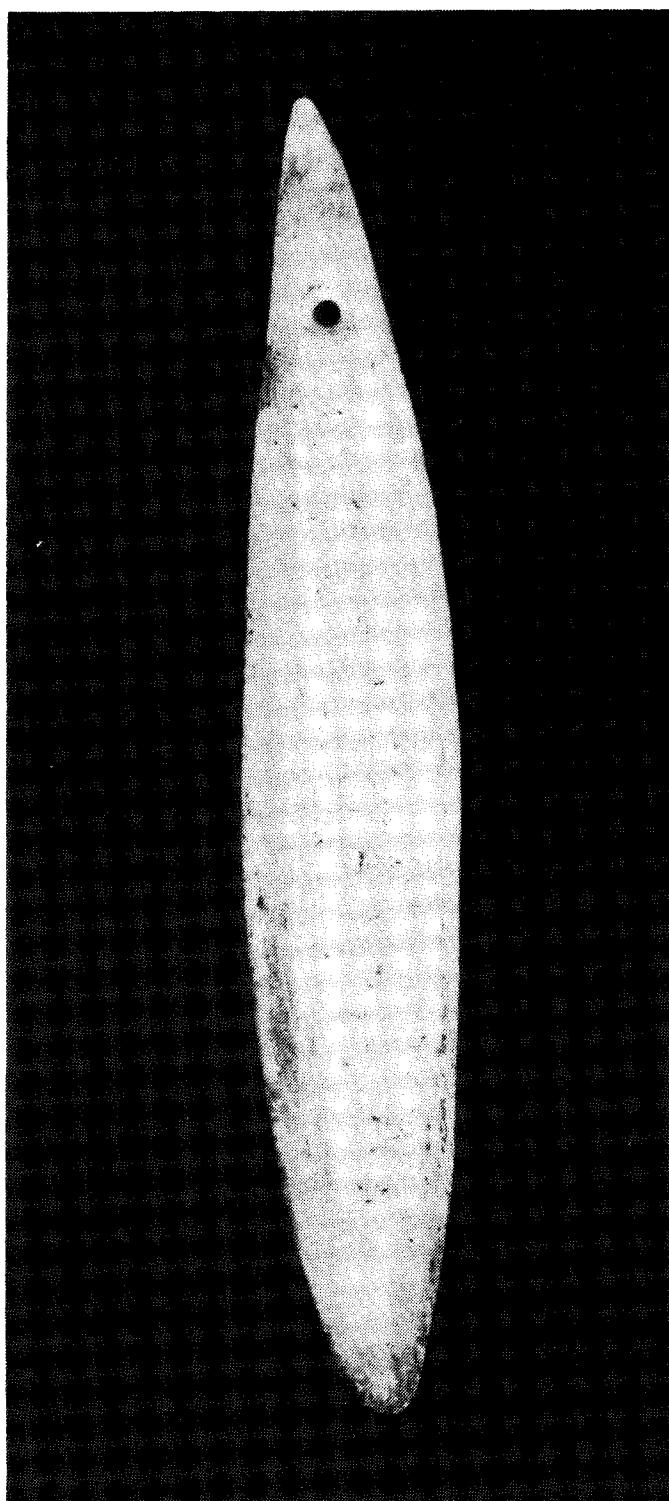


Fig. 5. A replica of the bone bullroarer from Kongemosen, Denmark, c.6500 BC. Length 11.1cm. (Photo: L. Gölén)

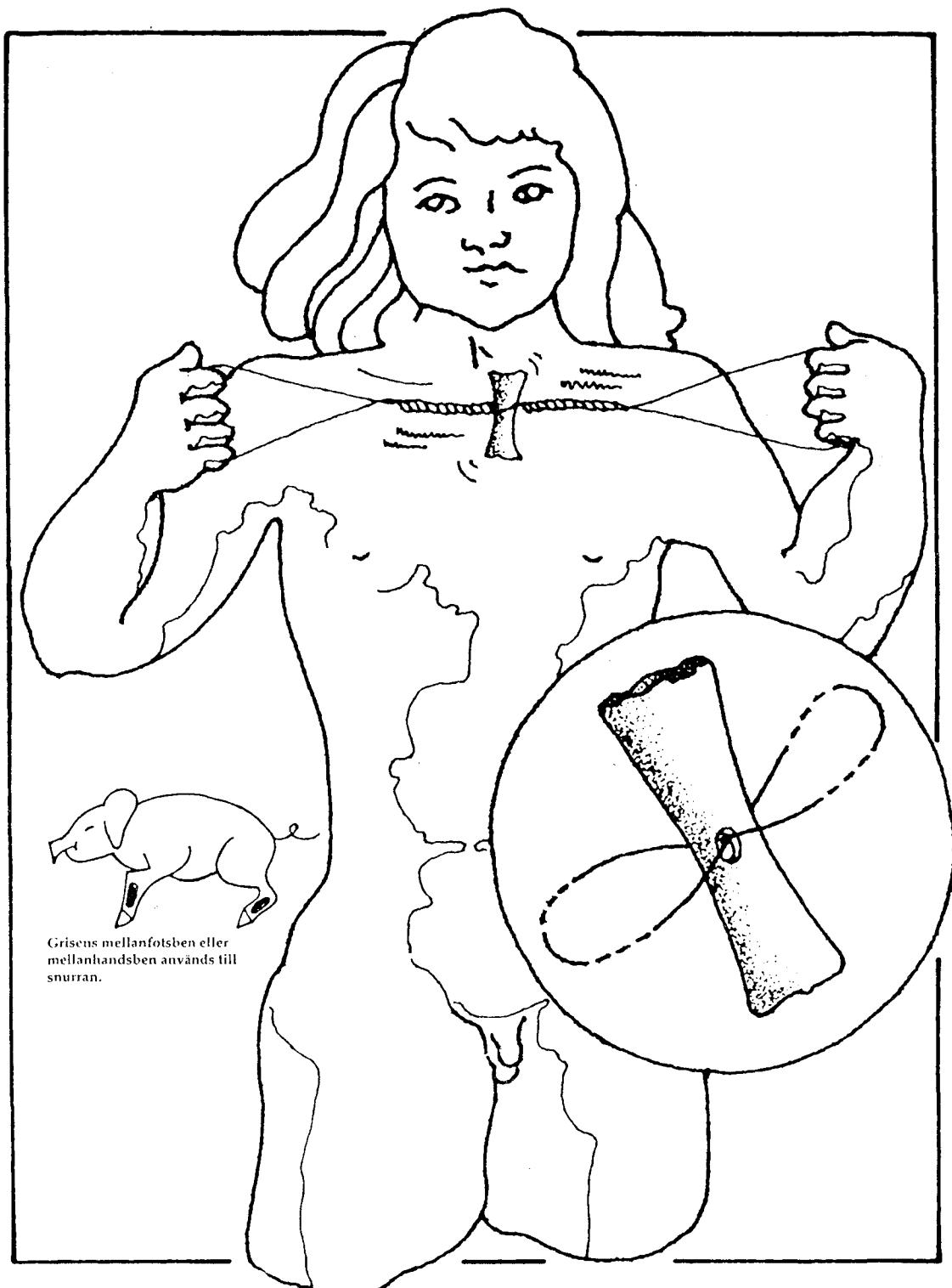


Fig. 6. A buzz-bone in operation. (Drawing after Lund 1984, 22)