

THE VOICE OF THE ADRIATIC? THE KESZTHELY TRITON CONCH TRUMPET

AZ ADRIA HANGJA? A KESZTHELYI TRITONCSIGA KÜRT •

ILON, Gábor¹  & SÜMEGI, Pál^{2,3} 

¹Independent researcher, H-9662 Mesterháza, Kossuth u. 2.

²Department of Geology and Paleontology, University of Szeged, H-6722 Szeged, Egyetem utca 2.

³ HUN-REN Institute for Nuclear Research, H-4026 Debrecen, Bem tér 18/c.

E-mail: ilon.gabor56@gmail.com, sumegi@geo.u-szeged.hu

Abstract

A trumpet made from the shell of a triton conch (*Charonia* sp.), from the time of the Late Copper Age Protoboleráz horizon, was found at the Keszthely–Fenépuszta I site in western Hungary. Triton's trumpet conches are widely spread in tropical, subtropical, and Mediterranean marine habitats, including the Mediterranean and Adriatic Seas. In Hungary, extremely rare finds of this species may have originated from the Adriatic Sea, the closest distribution area within the reach of long-distance trade. By removing the tip of the shell of the conch, a horn was made which could be used to emit high-pitched sounds, as a ceremonial horn and/or played in harmony with other instruments.

Kivonat

A késő rézkori protoboleráz horizont idejéből egy tritoncsiga házából készített kürt került elő Magyarországon, Keszthely–Fenépuszta I. lelőhelyen. A trópusi, szubtrópusi és mediterrán vizekben, köztük a Földközi- és az Adria-tengerben elterjedt tritoncsiga (*Charonia* sp.) rendkívül ritka leletei távolsági kereskedelemmel, mint legközelebbi elterjedési területről, talán az Adria-tengerből származhatnak. A tritoncsiga héjának csúcsát eltávolítva olyan kürtöt készítettek, amelyet magas hangok kibocsátására, szertartási kürtként használhattak fel és/vagy más hangszerekkel összhangban szólaltathattak meg.

KEYWORDS: LATE COPPER AGE, MUSICAL INSTRUMENT, TRITON CONCH SHELL TRUMPET, LONG-DISTANCE TRADE

KULCSSZAVAK: KÉSŐ RÉZKOR, HANGSZER, TRITONCSIGA KÜRT, TÁVOLSÁGI KERESKEDELEM

Introduction

Between 26 November and 4 December 1964, Nándor Kalicz (1928–2017) excavated a small part of a prehistoric settlement at the site of Fenépuszta I, Halászárt, Nádgazdaság clay quarry (site I) in Keszthely (Zala County), located about 1 km south of the access road to the village of Sármellék. Here, the remains of five vaulted clay ovens were recorded in a 52-meter long, crescent-shaped, and 3–4 meters wide “trench”, or more precisely, pit system, dug into the ground. Unfortunately, the documentation lacks an exact drawing of this surface, thus we can only rely on a few surviving photographs (**Fig. 1.**) in its reconstruction. There were burnt human skulls around two of the ovens. Several jaw fragments as well as a human long bone were scattered elsewhere in the area. Large numbers of animal bones, and pot shards were also identified.

The outstanding find recovered in the eastern part of this area was an instrument made from the Triton conch (Kalicz 1964; Kalicz 1991, Abb. 19. 22; P. Barna et al. 2009, 37, Taf. I. 2.). Unfortunately, the exact location and circumstances of its discovery were not recorded by the excavator. The conch was first identified as a great Triton trumpet conch (*Charonia tritonis* Linnaeus, 1758) by István Pintér (1911–1998), a lawyer and malacologist from Keszthely, through the mediation of Miklós Füzes (Frech) (1931–1997), an archaeobotanist in Keszthely.

This conch trumpet indeed belongs to the *Charonia* genus which also includes two additional species: *C. lampas* (Linnaeus, 1758) and *C. variegata* (Lamarck, 1816) that inhabit the Atlantic and Mediterranean Sea. Today *C. tritonis* is found only in the Indo-Pacific region (Motti et al. 2022, fig. 1/A).

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Fig. 1.: The excavation area with pits and ovens. Keszthely, Fenékpusztá–HalásZRét, Nádgazdaság clay quarry (Photo: Nándor Kalicz)

1. ábra: A feltárás területe gödrökkel és kemencékkel. Keszthely-HalásZRét, Nádgazdaság agyagbányája (Fotó: Kalicz Nándor)

Because the outer lip of the Keszthely conch is broken, it is actually difficult to be sure which species it represents. Due to geographical proximity, however, identification as *C. lampas* looks more likely.

Nándor Kalicz suggested that he had uncovered the remains of a house with a pillared structure in the middle of the pit system, whose function he suggested was ritualistic, based on the presence of human bones and the trumpet. The hypothesis can be neither confirmed nor refuted in the present study that is only concerned with the Triton trumpet. Nándor Kalicz published a selection of finds from the excavation (Kalicz 1991, Abb. 19) as material typical of the Protoboleráz horizon. He dated it to the early part of the Late Copper Age, the middle third of the 4th millennium BC. András László Horváth, in his foundational study of the Protoboleráz horizon, also discusses this site, including the Triton conch trumpet (Horváth 2001, 461, Abb. 5. 7, Abb. 6).

Description of the object

Triton trumpet conches are widespread in tropical, subtropical and Mediterranean waters, including the Mediterranean and Adriatic Seas (Motti et al. 2022). The colour of the Keszthely specimen (**Fig. 2.**; Inv. No. 76.27.1. Balaton Museum, Keszthely) is a mixture of white, beige and grey shades, peppered by pale rust-brown spots. The tip of the shell is missing; it was removed and was where the trumpet could be blown. On the front and back there are two places of old damage, that is, amorphous holes of a few square centimetres. Dark patches of solidified calcareous deposits can be seen inside the trumpet. A hole is visible near the base at the wide aperture. It seems to be artificial, where a suspension cord may have been passed through, perhaps to attach the trumpet to a belt or the wrist. It is also possible, however, that this hole is a perforation caused by a predatory snail species in the *Naticidae* family, an interpretation consonant with the fact, that the hole has a regular, round shape with no wear on the “top” of the perforation attributable to prolonged suspension (**Fig. 2/3**). Specialized micro-wear studies would be required to determine which of the two hypotheses is more likely.

The surface of the shell is heavily eroded. The spindle-shaped calcareous shell is 176 mm long, the maximum width is 100 mm, the diameter of the blow hole is 22 mm. The diameter of the potentially artificial hole is 6 mm. The artifact weighs 232 g.

The closest parallel to this trumpet in Hungary comes from the site of Budapest–Békásmegyer II (**Fig. 3.**; Hungarian National Museum, Prehistoric

Collection, Copper Age Department. Inv. No. 1957.1.1). It came to light from a settlement pit dated by Ferenc Tompa and János Banner to the Baden/Pécel culture (Tompa 1936, 49, Taf. 17. 11; Banner 1956, 69, 160, Taf. XXXIX. 1). That specimen was already mentioned by Nándor Kalicz in his excavation diary (Kalicz 1964).

The tip of the Békásmegyer conch was also removed. There is a small hole on the wavy edge, as described by Ferenc Tompa. However, in the photograph in his internationally known publication, this side of the conch is not visible (Tompa 1936, 49–50, Taf. 17. 11). Outside and inside the tip, remains of a black, possibly organic compound have been preserved. This substance may have been used to fix a tube/nozzle/spike into the hole. The length of that trumpet is 234 mm, the maximum width is 122 mm, the height is 93 mm, the diameter of the blowhole is 25 mm, the drilled hole is 5 mm. The wall thickness of the conch is 4.5 mm. It weighs 537 g.

The third site from this period where such a find has been recovered comes from Bodman (Baden-Württemberg, Germany), where two triton trumpets are known (Maier 1955, 169). One of them is described as having had the tip of the shell removed, making it suitable for blowing (Much 1904, 108–109). Pictures and details of the trumpets were published in currently inaccessible literature.

Clay horns from the 5th millennium BC have recently been analysed by Hungarian researchers, including specimens from the Middle Copper Age Balaton-Lásinja-Ludanice complex from Mosonszentmiklós–Pálmajor, Császártöltés–Kiscsala and Szihalom–Sóhajtó (Bánffy & Egry 2021, 7–16, figs. 9–12). Ceramic horns assigned to the Baden culture were found at Pilismarót–Basaharc (Bondár 2015, 44–45, Pl. 12. 4; Bánffy & Egry 2021, 17–18), Pécs–Bagota and Balatonőszöd–Temetői dűlő sites (Horváth 2009, 119, fig. 17; Horváth 2012, 621).

In his book published in 1925, V. G. Childe (1958, 113) was the first to suggest that such triton trumpet shells represented long-distance, southern import. The specimens under discussion here may have been brought most probably from the northern Adriatic, the nearest region within the area of natural distribution of the *Charonia* genus). During the late Copper Age, these conches may have arrived to the land-locked Carpathian Basin as gifts or exotic trade objects. One cannot rule out the possibility that trumpets made from cattle horn or clay were unique rivals to this type of artefact.

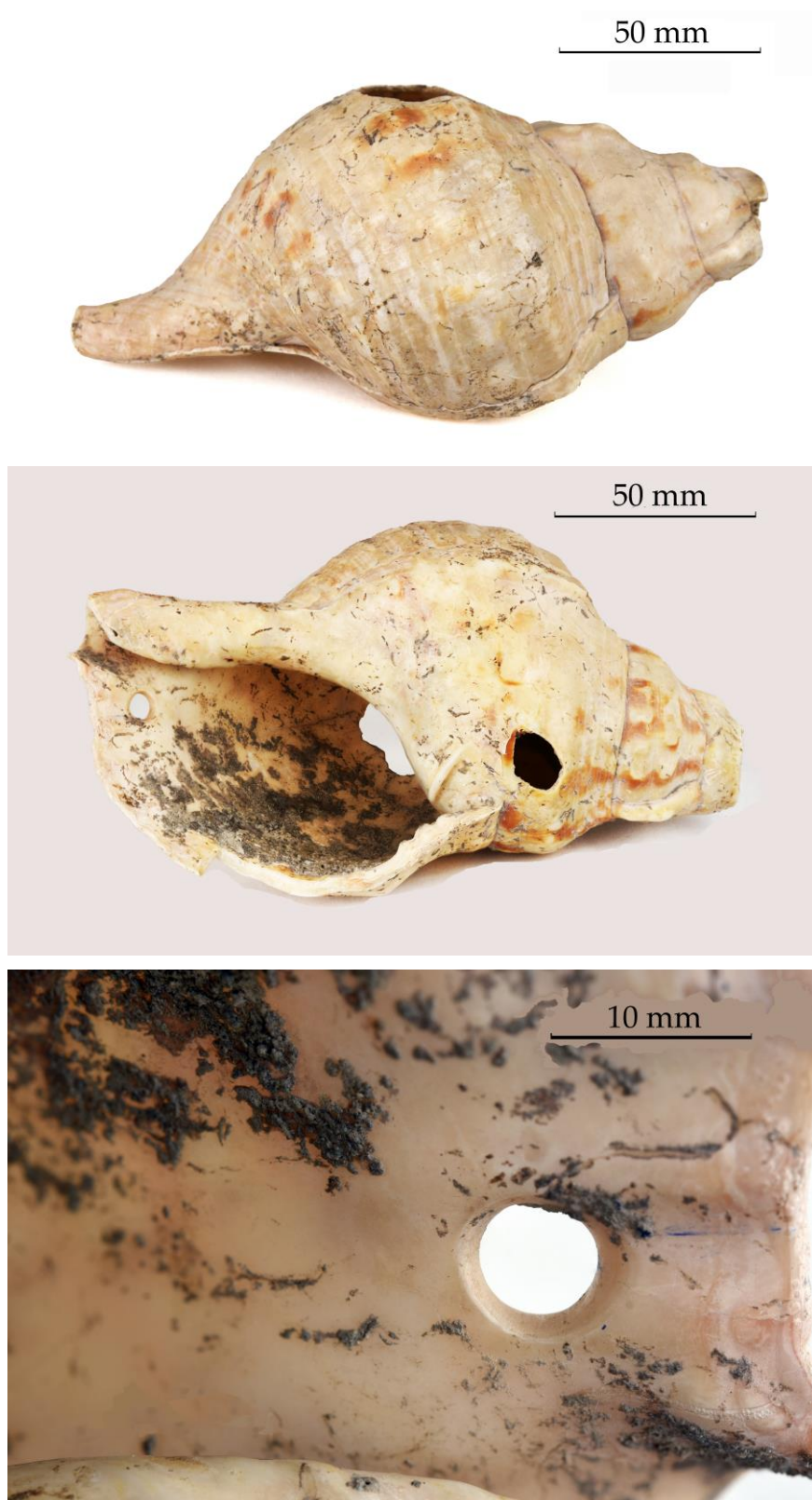


Fig. 2.: The conch trumpet of Keszthely (Photo by József Bicskei, Göcseji Museum, Zalaegerszeg and Viktor Kiss, Balaton Museum, Keszthely)

2. ábra: A keszthelyi kagylókürt (Fotó: Bicskei József, Göcseji Múzeum, Zalaegerszeg és Kiss Viktor, Balaton Múzeum, Keszthely)



Fig. 3.: The conch trumpet of Békásmegyer (Photo by József Rosta, Hungarian National Museum, Budapest)

3. ábra: A békásmegyeri kagylókürt (Fotó: Rosta József. Magyar Nemzeti Múzeum)

The earliest known such prehistoric trumpet is a specimen of *Charonia lampas* (Linnaeus, 1758) found in the northeast Atlantic, was discovered in 1931 at the entrance to Marsoulas Cave in south-western France. The wall paintings in that cave have been dated to the Early Magdalenian period of the Upper Palaeolithic. The wavy edge of the aperture was cut away. A brownish clay layer observed on the outside and inside of the ‘cut’ tip hole was interpreted as the remains of an organic compound indicative of a blowpipe attachment. The

necessity to place a separate whistle in the shell aperture was confirmed by sounding experiments. This instrument was adorned using decorative paint (Fritz et al. 2021, 1–2, 4–5, figs. 1C–D, 2D).

According to the experiment carried out by Beate Maria Pomberger (2018, 11, appendix 3), smaller conch shell trumpets such as those discussed here (Békásmegyer, Keszthely) might have had a higher pitch, in the 4/5 octave. Triton conch trumpets and clay horns could have been used as alarms, for locating, or for calling e.g. for some event (see in

Appendix). They may also have served to indicating direction, e.g. in hunting or in battle. However, they may also have been used in rituals such as during ceremonial feasting (Bánffy & Egrý 2021, 12, 27, Appendix 2–3). In Greek mythology, Triton, after whom this type of conch is named, was the son of the sea god Poseidon, half human, half fish (**Fig. 4**). He is called the trumpeter of the sea and his attribute is the twisted “conch”. When he blew his trumpet hard, it created a great storm; when he blew it softly, the storm was calmed down (<https://www.britannica.com/topic/Triton-Greek-mythology>; 2023.10.03. 19:50).

At the end of the Copper Age, the possible function of this object may be interpreted in numerous ways. Given its rarity, it may have been a status symbol. Perhaps its possession could signal a ‘secular’ or religious leader in the community. It is also possible, however, that such hypothetical functions are merely reflections of a theory of misplaced archaeological elitism (Ribeiro & Giamakis 2023). Probably, it should be enough to consider this object purely as a fine instrument used by an able musician of unknown social status.

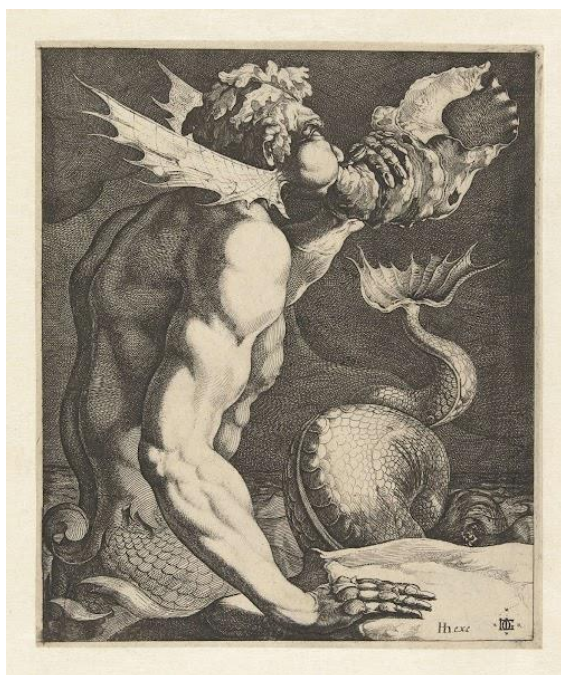


Fig. 4.: Triton blowing the trumpet (Jacques de Gheyn III, Dutch master, 1616–1620; downloaded: <https://www.rijksmuseum.nl/en/rijksstudio/subjects/triton>; 2023. 10. 03.)

4. ábra: Triton fújja a kagylókürtöt (Jacques de Gheyn III. holland mester metszete, 1616-1620 - letöltve 2023. 10. 03.: <https://www.rijksmuseum.nl/en/rijksstudio/subjects/triton>)

Contribution of authors

Ilon Gábor Conceptualization, Investigation, Writing – Original draft. **Sümegei Pál** Review & Editing, Project administration.

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Appendix

The first link is a simple sounding of the triton shell trumpet by David Sears.

<https://www.youtube.com/watch?v=TTwA-sLqleo>

The second link is music produced by two Austrian researchers, Beate Maria Pomberger and Bernhard Winkler, also featuring a conch shell trumpet.

https://youtu.be/54peLkcYa_g

The third link is an excerpt from the first song by American trombone artist Steve Turre, performed by his jazz ensemble in Vienna on 13th July 1997. The artist regularly plays on seashell instruments. In this recording, the sound of the snare trumpet, together with the rhythm of the drums, evokes ancient music.

<https://www.youtube.com/watch?v=EJbdWn7ltDg>

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