

Stef Conner  
Barnaby Brown  
Callum Armstrong  
Olga Sutkowska  
John Kenny  
Justus Willberg  
Rupert Till

DELPHIAN

SOUNDS FROM CLASSICAL ANTIQUITY

# Apollo & Dionysus

# Apollo&Dionysus

SOUNDS FROM CLASSICAL ANTIQUITY | EUROPEAN MUSIC ARCHAEOLOGY PROJECT VOL 5




- 1 **Invocation of the Muse** (Mesomedes) [6:31]  
Stef Conner *voice & lyre*
- 2 **From Berlin manuscript 6870 (20–22)** [0:56]  
Justus Willberg *hydraulis*, Rupert Till *bell*
- 3 **Plagiaulos variations (after Bellermand §101), part 1** [1:12]  
Callum Armstrong *plagiaulos*
- 4 **Low and Sweet** [3:15]  
John Kenny *lituus*
- 5 **12th Pythian Ode** (Pindar) [5:17]  
Stef Conner *voice*, Barnaby Brown *Pydna aulos*
- 6 **From Bellermand §98, *dōdekāsēmos*** [0:29]  
Justus Willberg *Louvre aulos*, Rupert Till *hydraulis*
- 7 **Tiaso: introduction** [2:37]  
Olga Sutkowska *Louvre aulos*
- 8 **Study on Bellermand §100, *tetrāsēmos*** [0:59]  
Justus Willberg *hydraulis*
- 9 **Study on Bellermand §101, *oktōkaidekāsēmos*** [1:29]  
Justus Willberg *hydraulis*
- 10 **Gallops and Fanfares** [2:23]  
John Kenny *lituus*
- 11 **Delphic Paeon** (Athenaios) [3:56]  
Stef Conner *voice*, Barnaby Brown *Louvre aulos*

Stef Conner *voice, lyre*  
Barnaby Brown *aulos*  
Callum Armstrong *aulos, plagiaulos*  
Olga Sutkowska *aulos*  
John Kenny *lituus*  
Justus Willberg *hydraulis, aulos*  
Rupert Till *bell, hydraulis (drone), cymbals*

- 12 **Study on Bellermand §99, *allos dōdekāsēmos*** [1:24]  
Justus Willberg *hydraulis*
  - 13 **Plagiaulos variations (after Bellermand §101), part 2** [2:20]  
Callum Armstrong *plagiaulos*
  - 14 **Study on Bellermand §98, *dōdekāsēmos* (Phrygian)** [0:54]  
Justus Willberg *hydraulis*
  - 15 **Study on Bellermand §98, *dōdekāsēmos* (Lydian)** [0:52]  
Justus Willberg *hydraulis*
  - 16 **Tiaso: first episode** [1:41]  
Olga Sutkowska *Louvre aulos*
  - 17 **From Bellermand §104, *kōlon hexāsēmon*** [0:38]  
Justus Willberg *hydraulis*
  - 18 **Quodlibet on Bellermand §§100 & 80** [0:43]  
Justus Willberg *hydraulis*
  - 19 **From Michigan manuscript inv. 1250** [0:44]  
Justus Willberg *hydraulis*
  - 20 **Tiaso: second episode** [2:31]  
Olga Sutkowska *Louvre aulos*, Rupert Till *cymbals*
  - 21 **aulo\_dia** [4:33]  
Olga Sutkowska, Callum Armstrong *Louvre aulos*
  - 22 **Aulos variations (after Bellermand §98), part 1** [3:13]  
Callum Armstrong *Louvre aulos*
  - 23 **From Berlin manuscript 6870 (13–15)** [1:01]  
Justus Willberg *hydraulis*
  - 24 **On an Armenian folk tune** [0:59]  
Justus Willberg *Louvre aulos*, Rupert Till *hydraulis*
  - 25 **Aulos variations (after Bellermand §98), part 2** [3:47]  
Callum Armstrong *Louvre aulos*
  - 26 **On an Armenian folk tune (2)** [1:27]  
Justus Willberg *Louvre aulos*
- Total playing time [56:04]

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## Recording the European Music Archaeology Project

Music archaeology developed as an academic field around 40 years ago, in response to archaeologists discovering musical instruments during excavations. For many years it has been explored by enthusiasts who are passionate about the subject, but who usually had a different main specialism, either within archaeology or music – an outlier on the edges of two disciplines, too peripheral to either to attract funding.

The European Music Archaeology Project (EMAP) was awarded significant funding by the Culture Programme of the European Union, the first time such a large grant had been awarded to this area. This five-year mission involved creating reconstructions of ancient musical instruments, the development of a major exhibition focused on the music cultures of the past, and a series of concerts, publications and educational activities. My role was to explore a range of audio-visual activities, including multimedia exhibits and apps as well as the series of five albums co-produced with Delphian Records, of which this is the final volume.

The musical instrument reconstructions made by music archaeologists have often been played by enthusiasts, and only a limited number of recordings have featured professional musicians, high-level recording processes and received proper distribution. With a background as a composer, producer and performing musician, I wanted to curate

a series of recordings drawing upon the best musicians I could find, performing in the context of innovative projects and showcasing the instrument reconstructions created under the auspices of EMAP.

A first recording project explored the oldest known Scottish pibroch notation, performed not only on bagpipe but a range of other drone instruments, including hurdy-gurdy and even varieties of harp and lyre. It is often a problem to decide what material to play in music archaeology projects; even if there is notation it is often fragmentary, with information about performance practice, interpretation and dynamics still more limited. Barnaby Brown's research, as well as his virtuoso performance on a number of esoteric instruments, provided the basis for a novel approach to solving this problem.

This first release marked the beginning of the partnership with Delphian, whose involvement put the project on a professional footing of the highest quality. Working at the University of Huddersfield, I was also able to draw upon that institution's financial support, as well as access to a concert hall, studio facilities, and equipment that could be taken on location internationally. All of this helped make the series of five recordings a reality.

The second album focused on ancient Scandinavian music, and was a collaboration with Cajsa S. Lund, one of the first academics to

have been active in music archaeology. A team of leading Scandinavian musicians were recorded on location in an old church in the Swedish countryside, including improvised performances on reconstructed Viking instruments, as well as early Christian music based on manuscripts from the Scandinavian Middle Ages.

EMAP also funded instrument-maker Jean Boisserie to create a beautiful reconstruction of a 1st-century BC carnyx found at Tintignac, in the south of France, in 2004. The carnyx is a giant Celtic trumpet, which was used across northern Europe. John Kenny is its leading player today, and the third EMAP/Delphian album was made in the University of Huddersfield's recording studio, with John overdubbing on a number of instruments – reconstructions by John Creed of another carnyx found two centuries earlier at Deskford, Scotland, and of the Loughnashade horn found in 1794 in Co Armagh, Ireland, as well as Jean Boisserie's Tintignac carnyx. 'The differences between ourselves and the ancient world are entirely cultural, not physiological,' John writes – 'in other words, anything I can do, he could do too' – and he draws upon contemporary performance techniques to create a unique sound-world for these ancient instruments.

The fourth album was performed on the oldest musical instruments ever discovered, prehistoric pipes made of swan and vulture

bone, as well as mammoth ivory. They are not really flutes; as open tubes they are more like the Egyptian ney or Japanese shakuhachi in performance technique. While I had seen archaeologists struggle to get a single note from reconstructions, contemporary flautist Anna Friederike Potengowski can elicit several octaves of sound, as well as gentle multiphonics. Her project included original compositions as well as a beautiful piece by John Cage. As with John Kenny, her work revives interest in these ancient instruments, rather than making an unsustainable claim to be playing ancient music.

It is impossible to play 'ancient music'; our ears are modern, and there is always some element of new invention in the reconstruction of instruments and musical performances. The final recording project, focused on music from ancient Greece and Rome, is in some ways the most problematic. There are examples of musical notation from this period, as well as writing about musical culture, performance and instruments, so there is enough material to show when something is wrong, without enough detail to be definitively certain about getting everything right.

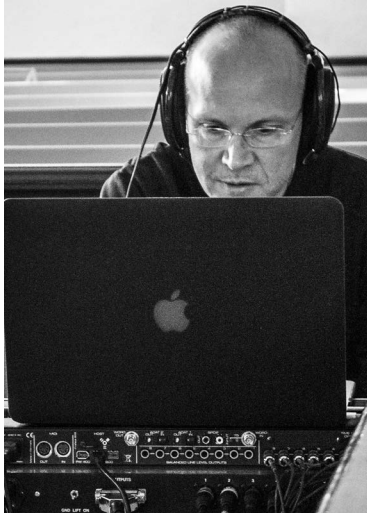
This final project focuses on a number of instruments. This include the aulos, a Greek double-reed instrument, known as *tibia* in the Roman period. Playing this is akin to putting two oboes in your mouth simultaneously, with the added complexity of circular breathing to

contend with. Reconstructing the aulos, and encouraging people to play it, has been a focus of EMAP. Another significant EMAP activity was to build a large reconstruction of a hydraulis, a water organ which was used in Roman games.

On all five albums we have sought to contextualise the musical performances within a wider soundscape. This has involved the use of captured or modelled acoustics of ancient sites, whether the reverberation of prehistoric caves, or the modelled acoustic character of the classical-era Hellenistic theatre in Paphos, Cyprus. We have also included environmental sound, such as the rowing of oars or birds singing. Overall, the goal of the project is not to reconstruct the music of the past – it is impossible to do this accurately. Rather the intention is to provide an idea of what it might have sounded like to be in the past, a phenomenological immersion in the sound-world of our ancestors: a glimpse into the acoustic ecology of antiquity.

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*Rupert Till is Professor of Music at the University of Huddersfield. He has carried out a range of research, specialising in the role of ritual and religion in music, as well as studying the acoustics of ancient sites and the reconstruction of ancient soundscapes. His book Pop Cult is published by Bloomsbury (2010), and as Professor Chill he recently released Dub Archaeology, an album of electronic remixes of music archaeology recordings.*



Rupert Till recording  
*Ice & Longboats*  
(Delphian/EMAP Vol 2)  
in Oppmanna Parish  
Church, Sweden.  
Photo: Aino Lund  
Lavoipierre

The opening track is built from two commonly joined poems with musical notation; they are attributed to the Roman-era poet and kitharode Mesomedes of Crete (early 2nd century AD). It follows the standard numbering of Mesomedes' works in treating the two pieces as a pair, in order to create a performance with contrasting sections. In Martin West's edition of the music notation, which is followed here, the texts are titled **Invocation of the Muse** and **Invocation of Calliope and Apollo**.

The performance aims to adopt linguists' reconstruction of *koine* Greek 'popular' pronunciation, which would have been used in the 1st and 2nd centuries AD. A 'learned' pronunciation, preserving elements of Classical Greek such as diphthongs and aspirated consonants, could have been appropriate for this imagined performance at the court of the emperor Hadrian, where Mesomedes served as chief musician. However, a popular pronunciation, somewhat closer to modern Greek, is used here to suggest an imagined performance by an ordinary musician, who might well have drawn their songs from the famous musicians of the time, but reinterpreted them in their own idiom.

The lyre accompaniment is based on the first two lines of the melody, which in their rather angular sequence of rising and falling fourths and fifths call to mind the cycle of tones by which a lyre can be tuned to a diatonic scale.

The sound of intervals associated with tuning cycles must have been ever-present in lyre players' ears, and seeing this sonic palette incorporated into Mesomedes' melody inspired Stef Conner to derive a technique of self-accompaniment from the same palette. One striking decision audible here is the liberal use of pauses between lines, which in one or two instances disrupt the song's metre (iambic dimeter in the 'Invocation of the Muse' and hexameter in the 'Invocation of Calliope and Apollo'). Because the melodic structure so consistently reinforces line breaks and clauses in the text, intuitive pauses between each line to take a relaxed breath make both the vocal performance and lyre accompaniment slow-moving and rhythmically free: upheld by the metre, but not strictly bound by it.

Pindar's **12th Pythian Ode** was composed in honour of Midas of Akragas, winner of the aulos-playing contest at the Pythian or Delphic Games of 490 BC, and extols in rich language the 'many-voiced song' of the aulos. No musical notation survives from this period, so the original words are sung to a newly composed melody that is based on scholarly principles defined by Armand D'Angour.

Barnaby Brown and Armand chose this text to showcase reproductions of two near-identical auloi, one buried in about 480 BC in the Greek colony of Poseidonia (modern-day Italy), the

## Notes on the sung tracks

other in about 380 BC in the Macedonian port of Pydna (Greece). These superlative archaeological finds have previously resisted revival because they are at odds with modern preconceptions: instead of dividing the octave into tones and semitones, their holes are bored to give seven equidistant tones. Thanks to the reeds, reproductions and ethnographic knowledge of Robin Howell, these high-status instruments from the time of Pythagoras, Socrates and Plato are now finding a voice.

Armand's principles determined our compositional vocabulary in a number of ways. Firstly, the rhythm of the piece is entirely bound by the dactylo-epitrite metre of the poem, although sentence breaks that coincide with metrical caesuras are filled with short aulos interludes that extend each verse with additional material following the same metrical patterns. Secondly, the pitch content of the piece is restricted to two of the scales transmitted from about 380 BC by Aristides Quintilianus – Dorian and Mixolydian. These bear no relation to their medieval and modern namesakes. The majority of the melody uses Aristides' Dorian scale, with brief modulations to the Mixolydian providing tonal dynamism and heightening the striking imagery in the text. Thirdly, the contour of our melody attempts to mirror the pitch accents of the language, producing a through-composed form which, though not strophic or strictly repetitive,

is formulaic enough to produce a feeling of stylistic unity and ritualistic persistence.

Athenaios' **Delphic Paeon** is both the longest and best-preserved example of a Greek song with musical notation. This summons to Apollo may have been composed for the Athenian Pythaidēs festival in 138/7 or 128/7 BC. Its composer – Athenaios, son of Athenaios – is listed as a director of the great chorus in the 128/7 BC festival. Although its musical notation, carved on two marble slabs, is exceptionally well preserved, there are a number of missing portions. In this version, they have been filled in principally by Martin West (the text) and Armand D'Angour (the melody), following principles deduced from the surviving portions.

The accompaniment was created by Barnaby Brown, who plays a reproduction of the Louvre aulos by Thomas Rezanka, with reeds by Robin Howell. Barnaby's accompaniment underpins the cretic-paeonic metre of the piece while also exploring the technical possibilities of the aulos. Such a texturally varied counterpoint is prompted by the vivid word-painting in the vocal line and the unrivalled status of the aulos as the most crowd-pleasing musical instrument of Classical antiquity.

## Notes on the instruments & reconstructions

Callum Armstrong initially started experimenting with the **aulos** in 2015. Working with academics such as Stefan Hagel, Armand D'Angour, and the double reed expert Robin Howell, Callum developed his own playing technique; this involved developing reeds in a historically informed manner – an endeavour aided by support and information from the EMAP project 'The Workshop of Dionysus' – that would allow for circular breathing as well as more generally forming the basis for developing a strong and sufficiently stable embouchure. Callum's aulos, made by Robin Howell, is a copy of the Graeco-Roman instrument housed in the Louvre in Paris. There are several illustrations of ancient Greek reeds from antiquity, which can be seen for example on carvings and urns, as well as archaeological finds of at least two reeds which survived in Egypt. Callum began, therefore, by following basic principles proposed by Stefan Hagel, a world-leading expert on ancient Greek and Roman music. He also watched videos of *duduk* makers making reeds. Using these techniques, he found ways of creating reeds that looked like ancient Greek examples, and that behaved in a fashion he was content with.

The process Callum developed was to take a tube of dried *Arundo donax* cane, and scrape the pith from the centre. Having removed the bark and scraped away the top layers of cane he boils the tube until it becomes soft, and then ties a tight waist in the centre of it to form an hourglass shape. He then reboils it and

compresses one end of the tube to form the reed blades. After the reed dries for several days, he starts gradually to scrape the reeds until they are playable and air efficient. It can take several weeks until the reeds are 'played in'. He has since learned various techniques to make the job easier from the maker of his aulos, Robin Howell.

Callum had first learned the technique of circular breathing whilst learning to play the bagpipe practice chanter. When piping there is no direct control over the reed, and in order to play aulos, he soon discovered that circular breathing with a double reed in the mouth requires a very strong and refined embouchure in order to play a stable note. This problem was compounded by the need to play two double reeds at once. He took a year and a half training his embouchure, in order to be able to practise enough to create a playing technique and to work on fingering for a sustained period.

He discovered quickly that very few techniques from other instruments were relevant. Unlike on most modern wind instruments, all ten digits are used on the aulos. Callum developed a 'pinching'-like thumb technique in order to play the relevant holes without dropping the instrument. He adopted a fingering system that involved picking up one finger at a time to vent the holes, similar to playing Northumbrian smallpipes. This increased the stability of holding the instrument even more, and yielded

## Notes on the instruments & reconstructions

**Right:** reeds and a reproduction of the Louvre aulos by Robin Howell, with reed caps by Barnaby Brown



**Right:** Attic vase, 5th century BC, showing duetting aulos players



**Far right:** iconography of the *thiasos* or *tiasso*, the Dionysiac procession accompanied by aulos and other instruments



a notable increase in dexterity. As his finger reflexes and embouchure have evolved, he has developed greater instrumental agility, and independence of the hands. He has also found ways to create different colours by modifying his embouchure, and to adjust tuning microtonally. As a result the aulos can be incredibly expressive; it is possible to play quieter than a whisper or louder than a Highland bagpipe.

With these experiences in mind, Callum decided to approach the present recording project by seeing what the instrument wanted to do, rather than trying to make it adhere to historical accounts of how it was played. He took a piece of notation from the manuscript known as the Bellermann *Anonymi* – a collection of short excerpts which appear to be finger-stretching exercises for aulos players – and used them to create extended compositions based on the techniques and musical effects he had developed on the instrument up until that point.

Another of the Bellermann exercises is similarly used as the basis for a piece which Callum performs on a reconstruction of the Koile Stoa **plagiaulos**. This is a Greek flute found in Athens in 2000, the original dating from around 200 BC. The reproduction played here was made by Chrestos Terzes on the basis of research by himself and Stelios Psaroudakis.

Olga Sutkowska also performs on a reproduction of the Louvre aulos – in this case made by Thomas Rezanka, based on Stefan Hagel's measurements of the original, and using reeds made by Callum Armstrong. In keeping with her main artistic and academic focus – to revive the aulos for the present day, and to illustrate the instrument's musical potential – her contributions to the album are original compositions, developed through improvisation rather than from ancient sources.

The title given to three of these tracks, **Tiasso**, is the Latin correlate of the Greek term *thiasos*, used to describe the retinue of Dionysus (god of wine and ecstasy). Greek and Roman iconography often depicts this Dionysiac procession, with the god followed by maenads and satyrs, and the music of the aulos, frame drum (*tympanon*) and cymbals (*kymbala*) is a key feature of such illustrations.

The aulos was not only played as a solo instrument, but also in duets or larger ensembles. **aulo\_dia** experiments with the rich harmony of two interacting aulos players. The title manipulates the Greek term *aulōdia*, which referred to a duo performance of a singer and an aulos player. The first part of the piece is inspired by the often tragic character and the funerary connotation of such compositions.



**Above:** mosaic (showing hydraulis) in the Roman Nennig villa at Perl-Nennig, south of Trier



**Right:** reeds and reproduction of the Pydna aulos in deer bone by Robin Howell

**Opposite page:** Robin Howell's reproduction of the Louvre aulos and reeds; dismantled, with feathers for oiling. Photo by Barnaby Brown



## Notes on the instruments & reconstructions

The **hydraulis** is a water organ that was widespread in ancient times, especially in the second half of the 3rd century BC. Invented by the architect Ktesibios in Alexandria (in present-day Egypt), over time it underwent numerous improvements and by the 4th century AD had spread throughout the Roman Empire. Wealthy Roman citizens had organs in their homes; organs accompanied singing, were used in the arena alongside bloody gladiatorial contests, and were used in the theatre. The instrument gained imperial associations, and some emperors – such as Nero – played organ themselves. A complicated water-driven system for air supply was gradually replaced by bellows; nevertheless, the name *hydraulis* was retained for the organ until the Middle Ages.

Air is pumped by means of pistons into an air reservoir, or *pnigeus*, which is open at the bottom, with a tank of water as a sealing valve. When the instrument's keys are depressed, air flows from a pressurised vessel into the organ pipes. The inflowing water ensures a constant pressure, and consistent pitch.

Several ancient texts contain technical descriptions of the instrument. Heron of Alexandria's work *Pneumatika* describes a simple system. Julius Pollux, who lived in the second half of the 1st century AD, differentiates between small organs that are operated with bellows and large instruments that work with water. *De Architectura*, by the Roman architect

Vitruvius, describes a more advanced instrument with two piston pumps and up to eight registers.

In 1931, the remains of a small Roman organ were found in Aquincum (now the urban area of Budapest), dated probably to 228 AD. The instrument had been destroyed by fire in antiquity, but since most components were made of metal, they survived relatively well. However, it is a comparatively small instrument. Other ancient organ parts have been found in Aventicum (now Avenches, Switzerland) and in Dion (Greece).

In the spring of 2006 Justus Willberg instigated a project to build a reconstruction of a Roman water organ, modelled on the Aquincum find. The water mechanism was based on antique illustrations. It kept as close as possible to the original design and dimensions of the Aquincum instrument, although some materials are different. Like the original, this organ has four stops, or sets of pipes, that can be activated individually or together, by side-mounted slide rods. The design of the pipes is unusual and quite different to today's organ pipes. The diapasons sound soft and panpipe-like, while the open pipes sound louder and clearer. The Aquincum organ is a chamber instrument rather than an arena organ, but it still produces a powerful tone.

The organ is tuned to an ancient tonal system, drawing upon a range of sources, including Bellermann and Koine Hormasia (Codex



Mosaic from another Roman villa – the Villa Dar Buc Ammera, near Leptis Magna

Palatinus 281, et al.). The registers are assigned individual modes (Hyperlydian, Hyperiastian, Lydian and Phrygian), allowing a specific set of notes to be played in each register: *proslambanómenos*, *hypáte hypaton*, *parypáte hypaton*, *diápemptos*, *hypáte*, *parypáte*, *khromatiké*, *diátonos*, *mése*, *parámesos*, *tríte*, *paranéte*, *néte*. In today's notation this corresponds approximately to the pitch series D E F G A B♭ B C' D' E' F' G' A'. The organ can also be played with all the registers switched on, which results in a characteristic timbre in which the open Hyperlydian register dominates.

The airflow mechanism was based on the written descriptions of Vitruvius and Heron of Alexandria, as well as antique iconography, including a mosaic from a villa in Nennig, near Trier. After much experimentation, it was possible to regulate the wind pressure with about 50 litres of water in such a way that a beautiful, even sound is created. In addition to the organ player, two people are needed to operate hand-pumps.

No music for hydraulis is available complete from Roman times, so the music we have



## Notes on the instruments & reconstructions

recorded here consists of original compositions and arrangements based on some of the Roman musical sources that do exist. These include the Bellermann aulos exercises mentioned above, and two manuscripts (now held in Berlin and Michigan respectively) that provide some fragmentary musical notation. Justus Willberg also performs here on the Louvre aulos (see above), accompanied by a drone on the hydraulis.

The **lituus** originated in the Etruscan civilisation which ruled most of the central part of Italy from about 750 BC, until it was definitively taken over by Roman culture around 700 hundred years later. The instrument consisted

of a long thin tube, curved at the end, almost in the shape of a 'J'. Often played in pair with the Etruscan *cornu*, in ceremonies and funerals of high-ranking people, it was also adopted by the Roman army.

The model instrument is a life-size stucco relief from the Tomb of the Reliefs in Cerveteri, dating from the end of the 4th century BC. John Kenny has created new music for the instrument – using similar principles to those underlying his performances on *carynx* and *Loughnashade horn* on *Dragon Voices*, *Delphian/EMAP Vol 3* – and performs here on a reconstruction designed by Peter Holmes and made by John Creed.



**Right:**  
John Creed's  
reconstruction of  
the Etruscan lituus.  
Photo © Guido Fuà



**Far right:**  
Justus Willberg  
playing the hydraulis

## Texts and translations

### 1 **Invocation of the Muse** (Mesomedes)

ἄειδε Μοῦσά μοι φίλη,  
μολπῆς δ' ἔμῃς κατάρχου,  
αὔρη δὲ σῶν ἀπ' ἄλσεών  
ἐμάς φρένας δονεῖται.

*Sing for me, beloved Muse,  
begin my tuneful melody;  
let a breeze come forth from your groves,  
to make my soul tremble.*

### **Invocation of Calliope and Apollo**

Καλλιόπεια σοφά,  
Μουσῶν προκαθαγέτι τερπνῶν,  
καὶ σοφῆ μυστοδότα,  
Λατοῦς γόνε, Δήλιε Παιάν,  
εὐμενεῖς πάρεστέ μοι.

*Oh wise Calliope,  
leader of the gracious Muses,  
you whose wisdom initiates the mysteries,  
son of Leto, Delian, Paeon,  
help me with your favour.*

Translation: Martin L. West, rev. Stef Conner

### 5 **12th Pythian Ode** (Pindar)

αἰτέω σε, φιλάγλαε, καλλίστα βροτεᾶν πόλιων,  
Φερσεφόνας ἔδος, ἃ τ' ὄχθαις ἐπι μηλοβότου  
ναίεις Ἀκράγατος εὐδματον κολύναν, ὦ ἄνα,  
ἴλαος ἀθανάτων ἀνδρῶν τε σὺν εὐμενία  
δέξαι στεφάνωμα τόδ' ἐκ Πυθῶνος εὐδόξῳ Μίδῳ,  
αὐτόν τε νιν Ἑλλάδα νικάσαντα τέχνη, τάν ποτε  
Παλλὰς ἐφέυρε θρασειᾶν Γοργόνων  
οὐλίον θρήνον διαπλέξαις Ἄθανα.

*I beseech you, splendour-loving city, most  
beautiful on earth, home of Persephone; you  
who inhabit the hill of well-built dwellings above  
the banks of sheep-pasturing Akragas: be  
propitious, and with the goodwill of gods and  
men, mistress, receive this victory garland from  
Pytho in honor of renowned Midas, and receive  
the victor himself, champion of Hellas in that art  
which once Pallas Athena discovered when she  
wove into music the dire dirge of the reckless  
Gorgons which Perseus heard ...*

τὸν παρθενίους ὑπὸ τ' ἀπλάτοις ὀφίων κεφαλαῖς  
ᾄε λειβόμενον δυσπενθεῖ σὺν καμάτῳ,  
Περσεὺς ὅποτε τρίτον ἄνυσεν κασιγητᾶν μέρος,  
εἰναλία τε Σεριφῶν λαοῖσι τε μοῖραν ἄγων.  
ἦται τό τε θεσπέσιον Φόρκιοιο μαύρωσεν γένος,  
λυγρόν τ' ἔρανον Πολυδέκτα θῆκε ματρός τ' ἔμπεδον  
δουλοῦσαν τὸ τ' ἀναγκαῖον λέχος,  
εὐπαράου κράτα συλάσαις Μεδοῖσας

*pouring in slow anguish from beneath the  
horrible snakey hair of the maidens, when he did  
away with the third sister and brought death to  
sea-girt Seriphus and its people. Yes, he brought  
darkness on the monstrous race of Phorcus, and*

υἱὸς Δανάας· τὸν ἀπὸ χρυσοῦ φαμεν αὐτορύτου  
ἔμμεναι· ἀλλ' ἐπεὶ ἐκ τούτων φίλον ἄνδρα πόνων  
ἔρρυσαστο, παρθένου αἰῶλῶν τεύχε πάμφωνον μέλος,  
ᾧφρα τὸν Εὐρυάλας ἐκ καρπαλιμῶν γενύων  
χρημφθέντα σὺν ἔντεσι μιμήσασαί' ἐρικλύαγκταν γόον.  
εὖρεν θεός· ἀλλὰ νιν εὐροῖσ' ἀνδράσι θνατοῖς ἔχειν,  
ὠνόμασεν κεφαλᾶν πολλῶν νόμον,  
εὐκλεᾶ λαοσσόων μναστήρ' ἀγώνων,

λεπτοῦ διανισσόμενον χαλκοῦ θαμὰ καὶ δονάκων,  
τοὶ παρὰ καλλιχόρῳ ναίοισι πόλει Χαρίτων.  
Καφισίδος ἐν τεμένει, πιστοὶ χορευτῶν μάρτυρες.  
εἰ δέ τις ὄλβος ἐν ἀνθρώποισιν, ἄνευ καμάτου  
οὐ φαίνεται· ἐκ δὲ τελευτάσει νιν ἦτοι σάμερον  
δαίμων—τὸ δὲ μόραισμον οὐ παρφυκτόν,— ἀλλ'  
ἔσται χρόνος  
οὗτος, ὃ καὶ τίς' ἀελπίτῃ βαλῶν  
ἔμπαλιν γνώμας τὸ μὲν δώσει, τὸ δ' οὐπω.

*he repaid Polydectes with a deadly wedding-  
present for the long slavery of his mother and  
her forced bridal bed; he stripped off the head of  
fair-cheeked Medusa –*

*Perseus, the son of Danae, who they say was  
conceived in a spontaneous shower of gold.  
But when the virgin goddess had released that  
beloved man from those labours, she invented  
the many-voiced song of aulos so that she could  
imitate with musical instruments the shrill cry  
that reached her ears from the fast-moving jaws  
of Euryale. The goddess invented it; but she  
invented it for mortal men to have, and called it  
the many-headed tune, the glorious strain that  
entices the people to gather at contests,*

*often sounding through thin plates of brass and  
through reeds, which grow beside the city of  
lovely choruses, the city of the Graces, in the  
sacred precinct of the nymph of Cephissus, reeds  
that are the faithful witnesses of the dancers.  
If there is any prosperity among men, it  
does not appear without hardship. A god will  
indeed grant it in full today ... What is fated  
cannot be escaped. But that time will come,  
striking unexpectedly, and give one thing  
beyond all expectation, and withhold another.*

Translation: Diane Arnson Svarlien

#### 11 Delphic Paean (Athenaios)

Κέικλυθ' Ἐλικῶνα βαθύδενδρον αἰ' λάχετε,  
Διὸς ἐριβρόμου θύγατρεις εὐώλενοι, μολετε,  
συνόμαμον ἴνα Φοῖβον ὠίδαῖσι μέλιψητε  
χρυσεοκόμαν, ὃς ἀνὰ δικόρυμβα Παρνασσίδος  
τᾶσδε πετέρας ἔδραν' ἄμ' ἀγακλυταῖς Δελφίσι  
Κασταλίδος εὐῦδρου ἴματα' ἐπιπίσεται, Δελφὸν  
ἀνὰ πρῶνᾶ μαντεῖον ἐφέπων πάγον.

ἦν κλυτὰ μεγάλοπλις Ἀθήις, εὐχαιῖσι φερόπλοιο  
ναῖουσα Τριπυλίδος δάπεδον ἄθραυστον·  
ἀγίοις δὲ βωμοῖσιν Ἄφαιστος αἰθεὶ νέων μῆρα  
ταύρων· ὁμοῦ δὲ νιν Ἄραψ ἀτμός ἐς Ὀλυμπον  
ἀνακίδονται· λιγὴ δὲ λυτὸς βρέμμων αἰόλοις  
μέλεισιν ὠίδαῶν κρέκει· χρυσέα δ' ἄδυθρου  
κίθαρις ὕμνοισιν ἀναμέλλεται.

ὁ δὲ τεχνῶν πρόπας ἐσμός Ἀθηῖδα λαχῶν  
ἀγλαίξει κλυτὸν παιῶνα μεγάλου Διός, σοὶ γὰρ  
ἔπορ' ἀκρονιφῆ τόνδε πάγον, ἄμβροτ' ἀψευδέ' οὐ  
πᾶσι θνατοῖς προφαίνεις λόγια, τρίποδα μαντεῖον  
ὡς εἶλες, ὃν μέγας ἐφρουρεῖ δράκων, ὅτε τέκος  
Γ' ἄς ἀπέστησας αἰόλον ἐλικτᾶν φυᾶν, ἔσθ' ὁ θῆρ  
πυκνὰ συρίγμαθ' ἰεῖς ἀθύρευτ' ἀπέπνευσ' ὁμῶς·  
ὡς δὲ Γαλατᾶν ἄρης βάρβαρος, τάνδ' ὅς ἐπι γαῖαν  
ἐπέρασ' ἀσέπτως χιόνος ὤλεθ' ὑγραῖς χοαῖς.

*Hark, you whose domain is deep-forested  
Helicon, loud-thundering Zeus' fair-armed  
daughters: come with songs to celebrate  
your brother Phoebus of the golden hair,  
who over the twin peaks of this mountain,  
Parnassus, accompanied by the far-famed  
Delphic maidens, comes to the streams of  
the flowing Castalian spring as he visits his  
mountain oracle.*

*Lo, Attica, famed for its great city, is here at  
prayer, home of armed Athena's unconquerable  
ground; and on the sacred altars Hephaestus  
burns the thighs of young bulls. While Arabian  
incense smoke spreads up to Olympus,  
the clear-voiced pipe weaves into the song  
shimmering tunes, and the sweet-voiced  
golden kithara raises the song of praise.*

*The whole troupe of Attic artists glorifies you,  
[Apollo,] the son of great Zeus: he who gave  
you this snow-capped crag where you utter  
undying and unlying oracles to all mortals.  
We sing of how you grasped the tripod  
of prophecy, which the great serpent was  
guarding, when you slew that spawn of Earth  
with its glittering coils, and the beast with  
frequent awful-sounding hisses finally expired;  
just as the barbarous army of Gauls, who  
impiously invaded this land, perished in rivers  
of molten snow.*

Translation: Armand D'Angour

## Biographies

**Callum Armstrong** graduated from Trinity Laban Conservatoire of Music and Dance in 2014, where he won the Silver Medal for Early Music as well as the Beryl Maggs Prize for recorder playing three years in a row. The same year he won the Chateau D'ars Solo Piping competition, returning in 2015 to win in the Petite Formation category with cellist George Pasca. In 2016 he became involved in the Actors Touring Company's production of Aeschylus' *The Suppliant Women*, in which he played the aulos. He has performed as a soloist with the London Philharmonic Orchestra, appeared as a piper in Steven Spielberg's film *War Horse*, and took part in the *Nathaniel Gow's Dance Band* project with Scottish chamber group Concerto Caledonia.

Callum's recent work has been focused on the development of a polyphonic technique for double and triple smallpipes, and a collaboration with pipe-maker Julian Goodacre to develop a chanter with a three-octave range.

**Barnaby Brown** is the first Highland piper to apply the principles of the early music movement to pibroch. His recordings, articles and editions have helped to revolutionise the way pipers approach the sources of pibroch (1760–1850), enriching the tradition beyond the legacy of the competition system. His quest to revive the northern triplepipe, the bagpipe's predecessor, led to six years in Sardinia, and from 2006 to 2012 Barnaby was a lecturer at the Royal Conservatoire of Scotland.

His passion for giving a contemporary voice to ancient instruments has led to three projects with Delphian Records: *In Praise of Saint Columba* (DCD34137), a groundbreaking collaboration with the Choir of Gonville & Caius College, Cambridge; *Set upon the Road* (DCD34154), a second collaboration with the choir, on which Barnaby plays triplepipes and a Graeco-Roman aulos; and *Spellweaving* (DCD34171), the first in the EMAP series of albums, which was informed by his doctoral research on Hebridean piping at the University of Cambridge. A founding member of the European Music Archaeology Project, he created [www.doublepipes.info](http://www.doublepipes.info) to serve its Auloi/Tibiae Revival Project and directed the first Euterpe doublepipe school, which EMAP organised in 2018.

Royal Philharmonic Society Prize-winning composer and singer **Stef Conner** draws on ancient poetry and traditional song in creating contemporary music infused with sounds from the distant past. She graduated with a starred first in music from the University of York in 2005, before joining the Mercury Prize-nominated folk band the Unthanks, and performing at such venues as the Barbican, Covent Garden, Glastonbury, the Mercury Music Awards and the BBC Folk Awards. Although she left the group in 2009 to complete a PhD in music composition, the Unthanks' raw and affecting approach to musical storytelling made a huge impact on her style.

Her work has been performed by the London Philharmonic Orchestra, the Choir of Queens' College, Cambridge, the Kreutzer and Ligeti quartets, Juice, the Nieuw Ensemble and others, and is published by University of York Music Press. She was the first Composer in Residence with Streetwise Opera; her debut opera with the company premiered at Tête-à-Tête Festival in 2015. She regularly performs contemporary settings of ancient Babylonian poetry with her group the Lyre Ensemble. She is currently a Leverhulme Early Career Fellow at the University of Huddersfield, investigating lost oral traditions.

**John Kenny** is perhaps best known for his work performing on reconstructions of the Celtic carnyx ([www.carnyx.org.uk](http://www.carnyx.org.uk)). He has been closely involved with the European Music Archaeology Project, and is the sole performer on *Dragon Voices* (DCD34183), Delphian/EMAP Volume 3 (where a fuller biography may be found). John is also a trombonist and actor, and has performed and broadcast as a soloist in over 60 different countries.

**Olga Sutkowska** is a musician and musicologist who splits her time between Berlin and Biecz, a small village in Poland. She studied oboe at the Chopin University of Music in Warsaw, before becoming interested in music archaeology, focused particularly on ancient doublepipes. She has spent more than ten years carrying out research on the aulos and tibia, investigating the archaeological finds of these instruments at museums in Europe and the USA. She holds an MA from the University

of Warsaw and a PhD from the Berlin University of the Arts, and her academic work has been recognised with the Selch Award of the American Musical Instrument Society.

Olga helped to design the European Music Archaeology Project as a coordinator of the auloi/tibiae team – a group of researchers, musicians and artisans working on the revival of ancient doublepipes. One of the fruits of this collaboration is a blog called 'The Workshop of Dionysus' ([www.doublepipes.info](http://www.doublepipes.info)), which inspires and documents the reconstruction process. Together with Stefan Hagel of the Austrian Academy of Sciences, and Peter Holmes, Martin Sims and Neil Melton of Middlesex University, she was involved in the EMAP project to reconstruct tibiae with metal keywork from Pompeii and Poetovio.

**Justus Willberg** studied early music and recorder in Nuremberg and at the Sweelinck Conservatorium in Amsterdam. Besides giving concerts as a recorder soloist, he also researches and performs the music of the ancient Greeks and Romans. After many concerts throughout Europe, he is well known as a performer on the aulos, on the *cithara* and on the Roman hydraulis, or water organ. He is a practising musicologist, involved in lectures and publications, as well as being involved in the reconstruction of ancient musical instruments. Justus teaches at the Hochschule für Musik Nürnberg, at the Friedrich-Alexander Universität Erlangen/Nürnberg, at the Erlanger Musikinstitut and is Head of the Musikschule Weißenburg.

Also available on Delphian

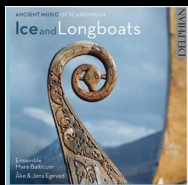


### Spellweaving: ancient music from the Highlands of Scotland

Barnaby Brown, Clare Salaman, Bill Taylor

DCD34171 (EMAP Vol 1)

The patronage of elite Highland pipers collapsed after the Jacobite rebellion of 1745. Worried that the classical music of the Gaels would fade away, the English-speaking gentry offered prize money for scientific notations. By 1797, Colin Campbell had written 377 pages in a unique notation based on the vocables of Hebridean 'mouth music', but – unintelligible to the judges in Edinburgh – Campbell's extraordinary work of preservation has remained overlooked or misunderstood until now. Barnaby Brown's realisations for a variety of drone-based instruments bring the musical craftsmanship of a remote culture vividly to life, and refocus attention on music whose trance-inducing long spans and elaborate formal patterning echo the knots and spells of Celtic culture.

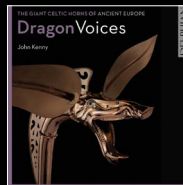


### Ice and Longboats: ancient music of Scandinavia

Ensemble Mare Balticum; Åke & Jens Egevad

DCD34181 (EMAP Vol 2)

Scandinavia's archaeologically known prehistory encompasses around twelve thousand years, culminating in the Viking period (c.800–1050AD). Standard archaeological practice places the boundary between prehistoric and medieval times for southern Scandinavia around six hundred years later than the continental European Middle Ages – a late development due to the long period in which ice still covered Europe's northern parts. Volume 2 in Delphian Records' groundbreaking collaboration with the European Music Archaeology Project features music improvised on Viking instruments, and then tells the story of the gradual introduction of Christianity to Scandinavia.



### Dragon Voices: the giant Celtic horns of ancient Europe

John Kenny

DCD34183 (EMAP Vol 3)

People of Celtic culture all over ancient Europe were fascinated by lip reed instruments, and made great horns and trumpets in many forms – including the carnyx, a two-metre-long bronze trumpet surmounted by a stylised animal head. One of these was found at Deskford, Scotland, in 1816 and reconstructed in the early 1990s; it is joined here by the magnificent Tintignac carnyx, discovered in southern France in 2004 and reconstructed specially for the current project. A new reconstruction has also been made of the Loughnashade horn from Ireland, with its exquisite decorated bell disc.

'at some points sounds like a dragon awakening, at others like avant-garde jazz ...'

– The New York Times, April 2016



### The Edge of Time: Palaeolithic bone flutes of France & Germany

Anna Friederike Potengowski flutes, Georg Wieland Wagner percussion

DCD34185 (EMAP Vol 4)

Around 40,000 years ago, towards the end of the last Ice Age, the upper Danube region was settled by anatomically modern humans. Traces of their daily life have been found at several cave sites in the south of modern Germany, including fragments of perforated bird bones and mammoth ivory. Representing the oldest evidence of musical creation worldwide, these prehistoric flutes – two from caves at Geissenklösterle, one from Hohle Fels, and a slightly later, more fully preserved find from Isturitz cave in the French Pyrenees – have been reconstructed in the modern era.

Flautist Anna Friederike Potengowski has studied the instruments and their possible playing techniques, and together with percussionist Georg Wieland Wagner has created a compelling programme of music in which contemporary modes of expression absorb and are reshaped by echoes from the edge of time. Water splashing against rocks, rustling grasses, the eternal musical truth of breath on bone ...



DCD34188