

Institution: University of Oxford		
Unit of Assessment: 29 Classics		
Title of case study: Rediscovering Ancient Greek Music: researching ancient music to inform practice		
Period when the underpinning research was undertaken: 2013-2017		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Armand D'Angour	Professor of Classical Languages and Literature	2000-present
Period when the claimed impact occurred: June 2016 – 31 July 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>D'Angour's project to recreate the scores of ancient musical documents, and his performance of the Euripides' <i>Orestes</i> chorus (408 BCE) and Athenaeus' <i>Paeon</i> (127 BC), have allowed audiences worldwide to witness the rediscovery of the sounds of ancient Greek music either directly or through broadcasts and digital media. The project has promoted the revival of performance on the aulos for the public stage and has informed and enlivened public discussion and understanding of the sonic dimension of ancient Greek tragedy, its place in the development of the western musical tradition, and its ongoing significance for musicians and audiences.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Nearly all the poetry of ancient Greece was sung music – words and music combined. Around sixty musically notated documents that survive on stone and papyrus have been published in E. Pöhlmann and M.L. West's <i>Documents of Ancient Greek Music</i> (OUP 2001). Most are highly fragmentary, and few have been thought susceptible to practical musical realisation.</p> <p>D'Angour's analysis of the relation of ancient Greek word pitch to melody encouraged a new approach to the music's realisation [R1]. He outlines his methodology in his monograph on ancient Greek innovation [R2], where he explores experimentation with new musical styles (the 'New Music') by Attic tragedians, such as Euripides, who was notorious for his musical innovations in the late 5th century BCE [R3] (see <i>Bryn Mawr Classical Review</i>, 23/1/13: 'a brilliant, dazzling chapter ... required reading for any student or scholar interested in the nuances of ancient Greek art, literature, music, or creativity'). D'Angour's research demonstrates ways in which musical sound relates to the words of Greek poetry [R5], and how metrical patterns yield evidence for rhythm and tempi [R6].</p> <p>The notation from part of the chorus of Euripides' <i>Orestes</i> (408 BCE), preserved on a fragment of papyrus discovered in 1892, had posed intractable challenges to interpreters: its use of quarter-tone intervals implied an alien melodic sensibility, leading scholars to assert that ancient Greek music was irretrievably lost. D'Angour [R5] shows that when the quarter tones are recognised as passing notes, the piece's underlying tonality is evident. Such tonality is a feature of Athenaeus' <i>Paeon</i>, and there is no evidence or likelihood of a wholesale change in musical sensibility during the intervening centuries. This insight opened the way for new attempts to hear how the music might have sounded.</p> <p>A former professional cellist, D'Angour trained at the Royal College of Music and regularly performs with the London Brahms Trio. In 2016-17, supported by a GBP4,000 grant from the Oxford Humanities Knowledge Exchange Fellowship, he worked with classicists, musicologists and creative practitioners. The project enabled scholars, practitioners and audiences to hear and evaluate renditions of ancient music that:</p> <ul style="list-style-type: none"> do not contradict historical or literary evidence 		

- attempt to minimize the effects of modern cultural bias
- draw upon archaeological research and the embodied knowledge of skilled performers playing state-of-the-art reconstructed instruments.

The knowledge exchange involved:

1. Consultation, supported by a BA Fellowship (2013-15), with the maestro of the Sardinian triple-pipe, Luigi Lai, which revealed the practical use of vocables to allow the player to entwine melodies [R4].

2. Collaboration with the European Musical Archaeology Project (EMAP, including collaboration with Stefan Hagel (Austrian Academy of Sciences), who combines expertise in ancient harmonic theory with practical reconstructions of the aulos (a double-pipe reed instrument). Using Hagel's computer modelling of the dimensions and handling of surviving archaeological specimens, auloi have been reconstructed with high precision by instrument-maker Robin Howell. Played by skilled pipers Barnaby Brown and Callum Armstrong, they provide a faithful guide to the pitch range of ancient Greek music, and to the instruments' own pitches, timbres, and tunings [R4, R5, R6].

3. References to the research (indicative maximum of six references)

- R1.** [Chapter, available on request] A. D'Angour (2006), 'The New Music: So what's new?', in S. Goldhill and R. Osborne (eds), *Rethinking Revolutions*, Cambridge, 264-283. ISBN: 9780521154581
- R2.** [Authored Book, available on request] A. D'Angour (2011), *The Greeks and the New: Novelty in Ancient Greek Imagination and Experience*, Cambridge, 184-206. ISBN: 9780521616485.
- R3.** [Chapter, available on request] A. D'Angour (2016), 'Euripides and the Sound of Music', in L. McClure (ed.), *A Companion to Euripides*, London, 428-443. DOI: [10.1002/9781119257530.ch28](https://doi.org/10.1002/9781119257530.ch28)
- R4.** [Journal Article] A. D'Angour (2016), 'Vocables and Microtones in Ancient Greek Music', *Greek and Roman Musical Studies* 4.2: 273-285. DOI: [10.1163/22129758-12341279](https://doi.org/10.1163/22129758-12341279)
- R5.** [Chapter, listed in REF2] A. D'Angour (2018), 'The Musical Setting of Ancient Greek Texts', in A. D'Angour and T. Phillips (eds), *Music, Texts and Culture in Ancient Greece*, Oxford, 47-72. Book ISBN: 9780198794462; Chapter DOI: [10.1093/oso/9780198794462.003.0003](https://doi.org/10.1093/oso/9780198794462.003.0003)
- R6.** [Chapter, available on request] A. D'Angour (2018), 'Hearing ancient sounds through modern ears', in S. Butler, and S. Nooter (eds), *Sound and the Ancient Senses*, Abingdon, 31-43. DOI: [10.4324/9781315648248](https://doi.org/10.4324/9781315648248)

Grants, Awards and Reviews

Greek Music and Poetry: integrating sound and sense in ancient Greek song; British Academy mid-career Fellowship awarded to A. D'Angour of GBP112,950 (2013-2015)

The Greeks and the New [R2] was *Spectator* Book of the Year 2011; Runciman Prize 2012 runner-up. Review: 'reconsidering music in the overall context of a society pursuing innovation sheds new light on Greek musical developments', *Journal of Classical Studies* 62: 2014.

4. Details of the impact (indicative maximum 750 words)

In July 2016, D'Angour presented his first research-driven concert of ancient Greek music in the Nereids Gallery of the British Museum. His reconstruction of the chorus from *Orestes* was recorded in Oxford that December. It was performed in July 2017 at the Ashmolean Museum by a mixed voice choir of 12 singers, accompanied on the aulos by Barnaby Brown and Callum Armstrong – filmed by Oxford Digital Media for a video posted on YouTube [E1.2, E1.3]. Appealing to a younger audience, it went on to be viewed on YouTube over 699,000 times achieving nearly 50,000 hours of watch time. Between 2016-2020 viewers from the UK (48,000) and the US (217,000), Greece (44,000), Brazil (33,000), Russia (31,000), and elsewhere, witnessed the investigation of a dimension ancient Greek culture that was believed to have been lost [E1.5, E1.6].

D'Angour's research has:

1. Informed public awareness & discussion of the reconstruction of ancient Greek music

By explaining the technicalities of his musical reconstruction in a scholarly but accessible manner, D'Angour has heightened interest in ancient Greek music, its place in Greek culture, and the technicalities of reconstruction.

The YouTube videos (standard and HD) have received more than 650 comments. They led to an online debate with D'Angour's detailed responses in English, or Greek, to questions from composers, musicologists, rock musicians, the interested public and even an Assassin's Creed enthusiast on a range of topics including: the relationship between ancient Greek music and music in Rome; the use of the pentatonic scale in Epirus; the connection between the aulos and single reed instruments in Sardinia, and countries in the Balkans and the Levant; the connections between poetry and music in ancient China; the nature of the musical notation for Athenaeus' *Paeon*; the role of the *chorodidaskalos* (chorus trainer); the function of the *phorbeia* (chin strap) worn by aulos players; and the evidence D'Angour used for the reconstruction.

D'Angour's feedback was well received: 'Thank you very much for sharing your work and [...] answering questions here on YouTube. I've learned a lot from your comments'; a composer expressed his appreciation of the 'clear pointers and appropriate references'. Many viewers found the sensory investigation of the past exciting: 'This video filled me with hope and optimism. History is never as dead as it can seem.' Others found it motivating: two listeners asked where they could commission aulos; and it resolved another to become a historian, 'I hope one day, when I'll be a historian too (sic), I'll be able to do something as admirable and great as this' [E1.2].

D'Angour's article in *The Conversation* 31/7/2018, which proposes a broader compass for the origins of Western music, received over 16,000 Facebook shares and over 370,000 reads [E2.1], becoming the second most-read article between Sep 2018-Mar 2019, a reader commenting, 'Was never quite convinced that Western music began with Gregorian chant'.

[E2.1] Another article by D'Angour in *Aeon* achieved over 1,400 Facebook shares [E2.2]. Recordings, discussion and live performances were aired in an hour-long programme on BBC Radio 3's *Early Music Programme*. During the programme, presenter and host of the Early Music Show praised the collaborators' 'devotion to reviving this [...] elusive area of ancient music', and later wrote that, 'it was one of the most interesting EMSs I've done'. [E3.1b]

In January 2017, D'Angour was interviewed by Labis Tsirigotakis (*To the Sound of Big Ben*, ERT1 Channel); and a viewer commented, 'To learn the classical languages without taking into account their music is to distort the way they felt their world'. [E3.2] In his piece for *The New York Review of Books* (21/4/2019; approximately 135,000), James Romm described the Ashmolean performance and the productions it had inspired, such as *The Suppliant Women* [E5, E6] and the NYC production of *Herakles* [E7] as 'pathbreaking' and 'the awakening of a theatrical tradition that has lain dormant for two millennia' [E4].

Altogether the level of public interest and critical response to D'Angour's project has been considerably higher than the previous benchmark in this highly specialized field, namely Stefan Hagel's EMAP-sponsored videos, which have attracted approximately 40,000 views since 2014.

2. Influenced adaptations of Greek tragedy in Europe, US and Hong Kong 2016-2019

The Actors' Touring Company's (ACT) adaptation of Aeschylus' *The Suppliant Women* opened at the Edinburgh Lyceum in October 2016, before touring to the Young Vic in London and 8 other cities, including Dublin, Hong Kong and Malmö – performing to packed houses. With a 50-strong female chorus recruited from each local city community, and ancient Greek music taking centre stage, the production drew upon D'Angour's research in order to revive the role of a locally-recruited chorus in the fifth century BCE. Composer John Browne writes, '...a version of a 2,500 year-old play incorporating my music, a production and a score that have been hugely successful...due in no small part to the help I and the other creators of this version received from Armand D'Angour [...] He clarified the instrumentation, the tonalities, shared extant examples of the music with us [and explained] metre in ancient Greek poetry [...] Crucially, Armand linked [us]

up with two British members of [EMAP] who [...] ended up performing the aulos. This was a stand-out feature of our production' [E5.1].

In an interview in *The Guardian*, playwright David Grieg described how listening to the aulos inspired him to change his adaptation of the play: 'For me there was a flash that I should go in precisely the other direction...to go back, so the audience thinks "My God, this is 2,500 years old but it's talking to me as directly as if it was written yesterday.'" This enhanced the play's relevance to the contemporary refugee crisis by evoking the common plight of refugees in the deep past and the present [E5.2]. The cultural value of hearing the instrumentation of ancient Greek tragedy was widely recognized. *The Times* described how 'the rhythms of the writing tightly entwine with a sparsely beautiful soundtrack of percussion and ancient aulos pipes to truly hypnotic effect' [E6.1], a view endorsed by Susanna Clapp's review of the Young Vic production in *The Guardian* (26/11/17) [E6.2]. It was *The Observer* and the *TLS* show of the year in 2016.

In New York, Caleb Simone (who had sung the *Orestes* choral ode at the Ashmolean in 2017) made ancient Greek music central to his production of Euripides' *Herakles*. Staged at the Minor Latham Playhouse New York City (4-6/04/2019), it won USD45,000 in grant support from NYC-based foundations [E7.2] and was attended by a live audience of 500, followed by 7,000 viewers who accessed the production on YouTube. It was acclaimed by Romm in the *NYRB*. [E4, E7.2] Columbia University graduate composer, Anna Conser, drew upon D'Angour's research to develop the score [E4] and used tonal pitch accents of ancient Greek as a guide to compositional technique. She praises D'Angour's generosity in fostering the work of others: 'He... gave me extensive feedback on my methods for melodic reconstruction'...[D'Angour] even arranged for...Armstrong to play the accompaniment on a reconstructed aulos', the first live performance of the aulos in the US [E4, E7.1].

3. Developed the skills and profile of aulos players by facilitating public performance

Ancient Greek instrumentalists were virtuosi, whose playing enthralled audiences. D'Angour's active promotion of aulos players for 12 major public productions has enabled them to work towards achieving the skills of their classical counterparts and has boosted their public profile. 'It's no use receiving a superlative reproduction of a superlative archaeological find', says Barnaby Brown, 'You have then got to make music. Thank you, Armand, for coming along at just the right time with a very interesting and very challenging score. (cited at 5:33) The performances gave us an opportunity to learn how to play the instrument' (cited at 29:28) [E8.1]. Callum Armstrong adds, 'Armand has made me understand... the way ancient Greek rhythms and metre works...[and he has] inspired the way I set up reeds for the aulos in order to produce aulos music in the most historically informed way that is currently possible'. [E7.3] Recently, 12 new aulos players in Greece have begun to experiment with reconstructed instruments. Support from the Oxford KE seed-fund has meant that, in total, 21 months of performance rehearsals have been recorded on MP3 and have been uploaded together with the scores in open file formats on Figshare to facilitate future experimentation. [E9]

D'Angour and Brown comment, 'A Tardis would be required to know if the results approximate...to the sounds that an ancient Greek audience would have heard... [but,] rather than letting scholarship be an inhibiting source of anxiety, our goal is to inspire...engagement between the present and the past'. [E8.4] For Poland's European Centre for Theatre Practices Gardzienice, D'Angour's research has been a revelation: 'It has guided our work and thought and will have a definite and lasting impact on our performances and audiences worldwide'. [E10]

5. Sources to corroborate the impact (indicative maximum of 10 references)

E1. Selected YouTube videos and data, Feb 2017-May 2020

- 1.1 *Orestes* chorus sung, Holywell Music Rooms, Oxford
- 1.2 Rediscovering Ancient Greek Music
- 1.3 Rediscovering Ancient Greek Music – Official HD Version
- 1.4 Rediscovering Ancient Greek Music – Aeon Video
- 1.5 Individual video Youtube Analytics
- 1.6 YouTube analytics for the channel

E2. Two online open access articles with comments

- 2.1 Article on the *Conversation* detailing the impact of D'Angour's work on Ancient Greek music and comment thread (31.07.2018)
- 2.2 Open Access Journalist article detailing D'Angour's discoveries (08.08.2018)
- E3.** Selected Radio and TV coverage
 - 3.1a The *Early Music Show* (07.04.2019)
 - 3.1b Email from the host of the *Early Music Show* (28.01.2018)
 - 3.2 An interview on national Greek television (*To the Sound of Big Ben*, ERT1 Channel, (30.01.2017)
- E4.** Review by James Romm in *The New York Review of Books* (21.04.2019) of the Barnard College, Columbia production of *Herakles*
- E5.** Selected Statements from practitioners working on *The Suppliant Women*
 - 5.1 Statement by musical director John Browne (11.11.2019)
 - 5.2 Interview in *The Guardian* with playwright David Greig (06.09.2016)
- E6.** Selected Reviews of *The Suppliant Women*
 - 6.1 A review in *The Sunday Times* (07.10.2016)
 - 6.2 A review by Susanna Clapp in *The Guardian* (26.11.2017)
 - 6.3 A review by Mark Fisher in *The Guardian* (6.10.2016)
- E7.** Letters from practitioners working on *Herakles*
 - 7.1 Composer for *Herakles* (04.03.2020)
 - 7.2 *Herakles'* Director (06.03.2020)
 - 7.3 Aulos performer (27.02.2020)
- E8.** Commentary by aulos players through YouTube videos, articles, and blog posts
 - 8.1 Public Engagement with Research Conference July 2018
 - 8.2 Hellenic Society Oct 2017
 - 8.3 The Euripides' *Orestes* Chorus, doublepipes information August 2018
 - 8.4 Use of D'Angour's research in collaboration with Bradfield College, internal report June 2019
- E9.** Openfile documents on Figshare
 - 9.1 the open access files relating to the *Orestes'* chorus (posted 02.08.2018)
 - 9.2 the open access files relating to the Bradfield Euripides' *Alcestis* (posted 29.06.2019)
- E10.** Statement from Gardzienice Centre for Theatre Practices (09.12.2019)