

Institution: Goldsmiths, University of London		
Unit of Assessment: 33, Music, Drama, Dance, Performing Arts, Film and Screen Studies		
Title of case study: Transforming institutional and public understanding of the history of electronic music through the Daphne Oram archive		
Period when the underpinning research was undertaken: 2007-2018		
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:
Michael Grierson James Bulley	Reader/Professor Research Associate	2008- 2018-2020
Period when the claimed impact occurred: 1/8/2013-31/12/2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact <p>In 2006, Goldsmiths acquired the archive of the composer Daphne Oram (1925-2003). Through archival and practice research, writing and performance, researchers have brought much previously unknown music and written material into the public domain. As a result, Oram is now widely regarded as a visionary figure in the early development of electronic music – a history hitherto presented as the preserve of male musicians. But the project has also impacted upon public understandings of electronic music history more broadly. It has done this by 1) changing the ways that culture professionals – including programmers, artists, critics and historians – conceive of and present historical electronic music; and by 2) reaching hundreds of thousands of audience members, from whom evidence of a deepened, critical appreciation of electronic music history and practice has been gathered.</p>		
2. Underpinning research <p>This case study focuses on two key research projects and their outcomes.</p> <p>Oram's Oramics Machine. This early synthesiser, built in the 1960s but lost after Oram's death, was an attempt to 'translate visual and graphic processes – shapes, curves, images, and their encapsulated gestures – into sonic compositional elements' (Grierson and Boon, 2013: 92). In 2008, a team led by Grierson located the machine in France, and brought it to the UK, at which point it was donated to the Science Museum. Grierson and Science Museum curator Boon's research article provided the first full contextualization of the machine and assessment of its historical importance. It also provided a detailed technical description of the machine's workings, these arrived at through discussions with one of machine's original builders. The machine is now acknowledged as a pioneering effort in the development of synthesis and drawn sound (Holmes 2015; see S2, sources to corroborate impact).</p> <p>Still Point. In 1948, Oram created a piece for double orchestra, turntable and live electronics, <i>Still Point</i>. The piece was long thought of as the earliest composition to include real-time electronic transformation of instrumental sounds, yet it had never been performed, and was considered lost. Having located fragmentary sketches in the Oram archive, Bulley had composed a reconstruction, but in December 2016 he found a full score among the personal belongings of composer Hugh Davies. The score contained only bare indications of how the electronic elements should be realised – and, as well as relying on redundant technologies, it described processes and effects that were conflicted, or impossible to achieve in live performance. The project's driving research questions, then, were: what kind of soundworld did Oram envisage? And how could this be created in live performance?</p> <p>A BBC Proms performance was commissioned in March 2018 through Bulley's collaborator, turntablist Shiva Feshareki. Intensive practice research – only possible during the 3-week pre-concert window during which the pair had access to BBC resources – was required in order to stage the performance. This work included 1) design and testing of echo techniques to realise Oram's stipulated effects; 2) pre-recording of orchestral music, using historically</p>		

appropriate techniques, and the creation of 78rpm discs for use by Feshareki in performance; 3) the creation of a live electronics score and performance method, based on Oram's sparse and fragmentary notation and notes on the work made by the composer later in life; 4) collaboration with sound technicians to create a live electronics and double-orchestra mix. *Still Point* was performed by Feshareki, Bulley, and the London Contemporary Orchestra on 23 July 2018 at the Royal Albert Hall. Critical responses suggested that this realisation of Oram's previously untested ideas represented a challenge to electronic music's received history.

Additionally, researchers from many countries have made over 400 visits to the archive since 2008, and have used materials in creation of numerous commercial releases of Oram's music (e.g. *Oramics*), theses and books (e.g. *Geschichte der Elektromusik* by Peter Donhauser), articles (in e.g. *The Daily Telegraph*, *The Wire*), exhibitions (at e.g. Museum Tinguely, Basel) and performances (at e.g. Camden Arts Centre).

AHRC awards, totalling over £100k, were secured in 2007 and 2011 towards the development of the archive.

3. References to the research

[R1] Grierson, Mick and Boon, Tim. 2013. '[The Oramics Machine: The Lost Legacy of British Electronic and Computer Music](#)'. In: Frode Weium and Tim Boon, eds. *Material Culture and Electronic Sound* (Vol. 8 Artefacts: Studies in the History of Science and Technology). Smithsonian Scholarly Press/Rowman & Littlefield Publishers. 185-201. [book section] [Available on Request]

[R2] James Bulley. 2018. [Still Point by Daphne Oram](#). [Project] [Submitted to REF2]

Grants:

[G1] Electronic Music Studios (Goldsmiths), 2007. AHRC Project Fund Scheme for Higher Education Museums, Galleries and Collections, £42,000.

[G2] Grierson [PI] Oct 2011-Sept 2014. '[Oramics – Precedents, Technology and Influence](#)' AHRC Training Grant: AH/I024798/1, £60,250.

4. Details of the impact

Impact on culture professionals and their institutions

Developing curatorial and programming practice. The recovered Oramics machine, and with it Oram's story, became a central part of the Science Museum exhibition *Oramics to Electronica*. This was planned to run for 6 months in 2011, but the show's press and public uptake saw it extended to June 2015. Curator Tim Boon wrote that 'Goldsmiths was the prime source of the account' of Oram's projects, and that this part of the show 'was co-created with them' (S1).

In common with similar platforms, the BBC Proms had previously staged very little historical electronic music. In the view of David Pickard, the Proms' director, this was owed to a widespread desire to foreground new work, and to the quick redundancy of the technologies involved. However, Pickard said, as *Still Point* was a new discovery that also incorporated current technologies in the service of Oram's historical aims, 'we were able to have our cake and eat it, and advertise something that was a world premiere whilst also reflecting something that had happened before'. As well as enabling the programming and reassessment of an important piece, Pickard said, *Still Point* helped further the Proms' agenda to find a particularly '21st-century' kind of programming: the piece 'felt very unique and very special and uncategorisable, and we're now increasingly looking at things that don't fit into a neat box' (S2).

Developing artistic practice and the lineage of women composers. Pickard also said that the concert was an important part of the Proms' ongoing effort to address the lack of gender balance in classical music performance. The concert 'felt timely in light of the things we are trying to say about women composers in the future and the ones from the past that might have been

forgotten' (S2). Programming Oram alongside composers of successive generations demonstrated the continuity of this previously marginalised line of women composers. This was remarked upon by one of the concert's artist participants, Suzanne Ciani, herself now widely regarded as an electronic music pioneer. Ciani wrote: 'I feel more rooted now. For me, becoming aware of the excellence of Daphne's piece has given me new strength to take my own proper place in the lineage of classical music' (S3). Feshareki reported that working on the piece had shown her 'that in order to test out something completely unfamiliar, you need a familiar grounding. In this case, the live-electronic turntable manipulation of orchestral material is the unfamiliar, and the orchestral material is the familiar'. Feshareki subsequently applied this technique to her EFG London Jazz Festival / BBC Concert Orchestra commission, *DIALOGUE* (2018). Feshareki said that the Proms appearance greatly developed her professional profile in general, and had led to specific further appearances at e.g. the Sheffield Chamber Music Festival (S4).

Developing new understanding of electronic music history. Before the impact period in question, Oram's work was either absent from electronic music histories, or else perceived as underexplored. The subsequent growth of her reputation – and a consequently reshaped history of electronic music – has often been linked with Goldsmiths' archival work. For example, Oram had not been mentioned in the central, general-readership history of electronic music, Holmes' *Electronic and Experimental Music*, by its third edition (2008); by the fifth edition (2015), Oram had been allocated a three-page feature – in which she was reappraised as a 'revolutionary' figure – the informing source for which is the Goldsmiths work done for the Science Museum show. Similarly, in his landmark history of the BBC Radiophonic Workshop (2010), Niebur commented that 'the acquisition of Oram's archives by Goldsmiths College hopefully heralds an exciting future for the study of this key figure in the overwhelmingly male-dominated world of electronic music'; by 2017, Abi Bliss could write in *The Wire* that 'Oram's papers are archived at Goldsmiths College, and her music has found new audiences through reissues, reinterpretation and rediscovery' (S5). Meanwhile, *Still Point* is now being acknowledged as landmark work. *The Guardian's* review of the Prom said the piece was 'thrilling', and 'still sounds hugely groundbreaking'. The influential classical music website *5 against 4* wrote it now 'surely must rank as one of the most innovative post-war pieces of music composed by anybody' (S6).

Impact on audiences

Reach. Radio 3 live broadcast figures for the evening, while certainly significant, cannot be parsed accurately. However, in addition to those listeners, the concert's BBC Four TV broadcast had an average audience of 107,000. The concert's radio broadcast remained available via BBC iPlayer, and became the most-requested off-schedule audio for Proms 2018, with 18,478 streaming requests and 1,129 direct downloads. A video about Bulley and Feshareki's work on *Still Point* was published on the BBC Proms Facebook page and received 4,200 views (S7). The piece's staging in the world's largest classical music festival, and its hosting on BBC iPlayer for a period following the event, meant that it was encountered by many listeners not predisposed towards electronic music. 'Wowza', tweeted one music fan after 'stumbling upon' the *Still Point* performance on iPlayer later in the week (S8). 'We had fantastic feedback for the broadcast', said Pickard, the BBC's Prom Director (S2).

Cultural enjoyment. A Goldsmiths team recorded a series of voxpops in the hall immediately after the Proms performance. These responses caught an audience that was startled by the piece's innovation. Typical was the response of one concertgoer, who reported this as their first encounter with Oram, and called the piece 'breathtaking'. Social media responses during and after the performance clustered around two themes. The first was pleasure, often marked by a similar sense of surprise. 'The best concert experience I've had since forever', tweeted one concertgoer on the night; later in the week, a broadcast viewer tweeted that he had watched the concert 'a couple of times now and I'm still in awe of *Still Point*'. Other twitter users said that they had been 'mesmerized', or that days later they were 'still speechless'. The second theme was to congratulate the BBC for its programming decision, and to ask for more Oram in the future (S8).

Cultural reflection. These initial responses contrasted with those collected 8 months later, when Goldsmiths interviewers contacted a selection of people who had posted on social media about the concert in order to assess longer-term impact. A cross-section of casual music listeners, (electronic) music enthusiasts and musicians responded. For almost all, reflection upon the piece had produced a critical engagement with the idea of the history of 20th-century music. 'It makes one wonder how many composers (and artists) who were objectively good / interesting have been casted [*sic*] aside as unimportant / unoriginal just because they did not fit into the "mainstream" image of being a composer', wrote one. 'It forces us to think differently about [the canon]', wrote another (S8).

Cultural access. The audience sample suggested several ways in which the performance could be said to have impacted cultural life more broadly by expanding the potential Proms audience. 'I only had a passing interest in the Proms beforehand', one wrote, 'but post-*Still Point* I am excited about what the Proms will do next and I will definitely look at the programme this year'. The sentiment was echoed by the other respondents: 'A massive change to the norm for the Proms and for me, something I absolutely relished'. Similarly, curator Tim Boon said of the Science Museum exhibition that 'it newly engaged an audience who didn't necessarily think the museum was for them – i.e. people into electronic music. That was important for us' (S9).

In August 2019, Bulley and Feshareki staged a 4-day workshop for local young people at the Horniman Museum in London. Here, explorations of techniques found in Oram's practice – including drawn sound on a scaled-down version of the Oramics machine, and sound cut direct to disc as in *Still Point* – furnished participants with a practical introduction to experimental electronic music composition and performance. Rudi Schmidt, the Horniman's Youth Engagement Officer, said this gave participants 'a unique experience ... Partnering with Goldsmiths gave the course a shape that both interacted very well with ethos of the Horniman and gave a different, more academic perspective. This made for a very interesting project which interacted well with the participants' interests in making music while introducing them to new ideas' (S10).

5. Sources to corroborate the impact

[S1] Informing curatorial practice, Science Museum exhibition: Article. Tim Boon, Merel van der Vaart, Kathy Price, 'Oramics to Electronica: Investigating Lay Understandings of the History of Technology through a Participatory Project'. *Science Museum Group Journal* (no. 2) Autumn 2014.

[S2] Enhancing cultural programming, Proms 2018: Interview with Proms Director, David Pickard, 1 May 2019.

[S3] Supporting artistic practice; Interview with composer and electronic music pioneer, Suzanne Ciani, 8 March 2019.

[S4] Developing professional profile; Written statement from Proms performer and turntablist, Shiva Feshareki, 3 May 2019.

[S5] New understanding of electronic music via inclusion in critical historical texts. Holmes, Thom. 2015. *Electronic and Experimental Music: Technology, Music and Culture*, fifth edition. New York and London: Routledge, p. 86ff. Niebur, Louis. 2010. *Special Sound: The Creation and Legacy of the BBC Radiophonic Workshop*. New York and Oxford: Oxford University Press, p. 72; Review. Bliss, Abi. 2017. 'An Individual Note'. *The Wire* 396 (February), p. 69. [Grouped source]

[S6] Establishing *Still Point* in electronic music history: Press reviews. Lewis, John. 2018. '[Prom 13: LCO/Ames: Pioneers of Sound Review – Probing Music's Outer Reaches](#)'. *The Guardian*. 24 July.; Cummings, Simon. 2018. '[Proms 2018: Chaines – Knockturning; Laurie Spiegel – Only Night Thoughts; Daphne Oram – Still Point \(World Premières\)](#)'. *5 against 4*. 2 August. [Grouped source]

[S7] Introducing BBC audiences to Oram's work via the performance of *Still Point* at the 2018 Proms: BBC statistics provided by BBC Proms Event Manager, 6 February 2019.

[S8] Engaging audiences with Oram's composition and with history of 20th century music: Goldsmiths' audience research dossier, containing voxpops from the Royal Albert Hall, 23 July 2018; screenshots of tweets in response to Pioneers of Sound concert; and reflective interview transcripts, March 2019. [Grouped source]

[S9] Igniting public interest in cultural heritage: Written statement from Curator at the Science Museum, 29 April 2020.

[S10] Engaging new audiences in 20th century music history: Written statement from Youth Engagement Officer, Horniman Museum, London, 28 August 2019.