

Institution: Queen's University Belfast

Unit of Assessment: 35

Title of case study: Sonic Art for Public Ears – Enabling Children as Designers

1. Summary of the impact (indicative maximum 100 words)

This work impacted on children between the ages of 8 and 14. Since 2011 over 90 children living in Northern Ireland have benefitted from day-long workshops, taking place at the Sonic Arts Research Centre at Queen's University Belfast (SARC). The program has been running annually since 2011. The children have benefitted in exploring digital sound technologies, learning to understand ways in which these shape and influence ways of listening to music and our environment. The children acted as content designers in the area of digital sound technologies. The impact is centred on empowering children to design content using technologies, such as iOS and sound diffusion.

2. Underpinning research (indicative maximum 500 words)

The underpinning research focuses on three key research questions, which have been pursued both theoretically and through creative practice as part of Dr Schroeder's RCUK Fellowship.

The key premise of the underpinning research is the articulation of listening within digital platforms.

Specifically, the research looks at how recent social technologies place the user at the centre of the design process, and how these technologies suggest participatory models that rely on iterative content creation.

The three research questions are:

- 1. How do modes of listening change in networked social platforms?
- 2. How is a user's perception of musical form changed through digital distribution, and how might this change a user's participation in designing content?
- 3. How might contemporary collaborative practice make use of the network as a social environment for content production?

These research questions led to the development of

- 1) Models of listening as articulated in the concept of 'haptic aurality' (Schroeder 2009)
- 2) Identification of strategies that might alter participatory engagement in the design of content (Schroeder 2012)
- 3) A specific creative practice methodology for large-scale distributed collaboration (Schroeder 2010)

Question 1:

This question was addressed in Dr Schroeder's edited volume on 'user content and digital media' and her chapter on 'haptic aurality' (Schroeder 2009), which specifically investigated listening attitudes in network music environments. It endeavoured to shed light on the question of how the network makes us listen to ourselves and to others. The research suggested a new paradigm for listening, entitled 'haptic aurality'. The idea of listening within digital platforms, investigating how social technologies change our understanding of form in music and ultimately make us listen in different ways, was further pursued by Dr Schroeder in 2013 with a journal article on 'network listening' (Schroeder 2013).

Question 2:

Dr Schroeder's work on shifting listening identities (2012) addressed this question. The research examined dissemination of content and how content has been challenged by environments such as Spotify, Youtube or by network music performances, as they



user content and listening links to other wider research activity at SARC, specifically research in the area of distributed music performance and composition.

Question 3:

This research question was addressed by Dr Schroeder's practice-based work as a performer engaged in new technologies. This work is further exemplified by an annual collaborative composition/performance showcase (www.somasa.qub.ac.uk/~fschroeder/Showcase.html), as well as by collaborations, such as with internationally renowned performance artist Stelarc (http://networkperformance.wordpress.com). In the collaborative work with Stelarc, entitled "Rotating Brains, Beating Hearts" (2010), the concept of 'haptic aurality' informed the design of the performance, while making use of social technologies (SecondLife).

The research outputs mentioned above directly led to the development of a practical hands-on program entitled "Big Ears – sonic art for public ears", in which young children could explore social technologies and gain insight into how these influence our ways of listening to music and to our environment.

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

- 1. Schroeder, F. (2009) Schroeder. *Network[ed] Listening: exploring possibilities of a haptic aurality*. In: Performing Technology: User Content and the New Digital Media (ed. F. Schroeder). Cambridge Scholars Publishing, pp. 122-132.
- 2. Schroeder, F. (2012). Shifting Listening Identities Towards a Fluidity of Form in Digital Music. S Broadhurst & J Machon (eds), in: Identity, Performance and Technology: Practices of Empowerment, Embodiment and Technicity. Palgrave Macmillan, pp. 24-43.
- 3. Schroeder, F. (2013), Network[ed] Listening towards a de-centering of beings. Contemporary Music Review, pp. 215-229. Routledge Publishing.
- 4. Schroeder, F. (2010). Rotating Brains / Beating Heart: International collaborative performance with Stelarc, the virtual reality ensemble Avatar Orchestra Metaverse, Pauline Oliveros, and Martin Parker. http://networkperformance.wordpress.com

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

This case study focuses on children as creative users and content designers, while simultaneously creating opportunities for collaboration between researchers and young children.

It places emphasis on empowering young listeners to lead projects informed by current research in the sonic arts. The meeting place between researchers and children acts as a way of publicly articulating the exchange between children in Northern Ireland as content designers and local sonic art researchers.

About

"Big Ears" was designed as a public engagement training programme, funded by the AHRC between 2011 - 12 and by the HEA in 2013. Tailored to children and doctoral students with a sonic arts background it has benefitted over 40 researchers from *ca.* 20 different UK HE institutions since its inception.

"Big Ears" has delivered training in communication skills, public engagement and offered hands-on experiences for researchers in communicating their work to a non-specialist audience. The training has received input from several Queen's University departments that specialise in public engagement and in work with children, such as the School of Education, the School of Sociology, Social Policy and Social Work and the Science Shop. SARC researchers have contributed expertise in the area of ubiquitous mobile and gaming



technologies, sensor technologies, instrument design, composition and performance practice.

The focus of "Big Ears" is to provide innovative training in public engagement for researchers while creating vital links between the University and local creative industry partner, the Belfast Children's Festival (run by Northern Ireland's leading children's arts organisation Young at Art, www.youngatart.co.uk). This partner has invaluable experience in public engagement and in working with children. Young at Art contribute extensive expertise in running programmes designed with and for children and they have a major network for the distribution of their works (website, publicity, social networking sites), attracting over 15,000 visitors each year. Furthermore, "Big Ears" delivers stimulating ways of teaching communication skills; it offers skills in designing, managing and planning a project involving children; it provides hands-on experience in working and designing with a non-specialist public.

Big Ears Impact Example

Exemplary of Big Ears' impact, which was informed and underpinned by the research outlined above, was a collaborative network environment for musical performance. In this work, the notion of 'haptic aurality' informed the design of a network instrument that allowed for children to engage in different forms of listening across two distinct spaces. Strategies for the development of participatory engagement in music making focused on children developing specific graphic scores for this instrument, while articulating musical form.

This work was presented in a performative context, which allowed children to think about ways of collaborating across these two spaces while reflecting on how best to present the distributed collaborative work to an audience. As a result there is evidence from the feedback that this has significantly impacted upon the increased self-confidence of the children involved – a feeling which is transferrable beyond this setting and which can have positive effects on young children.

User Groups

"Big Ears" has impacted on three different user groups:

- local children, and since Big Ears' inception, the programme has benefitted over 90 children
- local industry partner "Young at Art" has seen a benefit to over 20 members of their staff who have been involved in running "Big Ears".
- UK researchers, around 40 researchers from across different UK HEI have gained access to the public engagement training

Quotes by ethnographer Siún Carden (2011):

"Big Ears enhanced the University's contribution to the educational, cultural and social life of Northern Ireland by providing local children with a unique cultural experience that was both educational and inspiring."

Children's post-show comments (evaluated by 'Young at Art' and an independent ethnographer)

2011:

From over 100 notes gathered, the most popular comment was 'fun' (30 notes), followed by comments to do with sound (21), such as 'MUSIC!', 'Sonic Arts Sonic BOOM!' and 'SILENT shhhhhhh'. There were many (19) enthusiastic comments, like 'MAGIC', 'Exciting!' 'Fantastic' and 'Fabulous'. Notes (16) about the activities included 'tecy' (techy), and 'instro-Mental', 'Taming Dragons', and 'Evil Gloop', 'Crazy, mad, mental, fun, exciting, apprehensive, bit scary'. One child wrote '*This place is fandaby dosy'*.



2012:

When asked 'What was your experience like? Children comments included

"Great; Superb; Cool; Great Fun; Great, amazing; Tremendous, fantastic; Really good". Please consult the ethnographic report, which includes *ca.* 20 pages of evaluation and related materials.

2013:

Ethnographer's comments about the children engaged in the 2013 event: "The change in self-confidence and stage presence became apparent..."

"The sonic art pieces ... were based on story-lines and themes developed by the children, featuring dragons, zombies, dinosaurs, car-shootings, far-away planets, princesses..."

"Sound was complemented by light, fused with poems and narratives, illustrated by drawings, and flavoured with a dance performance".

"It was impressive to see how much creativity can be set free in just one day if children are encouraged to follow their imagination and trust their abilities"

Children's comments included

"It is epic"; "This is amazing"; "This was brilliant" and "Really cool".

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

Evaluation Reports of the Program (all three reports were done by trained ethnographers):

- 2011:
 - www.somasa.qub.ac.uk/~BigEars/Docs/Big%20Ears%20Day_Final%20Report2011.pdf
- 2012:

www.somasa.qub.ac.uk/~BigEars/Docs/Big%20Ears_Evaluation%20Report_May%202012.pdf

• 2013:

www.somasa.qub.ac.uk/~BigEars/Docs/Big%20Ears Final%20Report2013.pdf

Big Ears Main website:

http://www.somasa.qub.ac.uk/~BigEars/index.html

http://www.somasa.qub.ac.uk/~BigEars/Documentation2011.html

http://www.somasa.gub.ac.uk/~BigEars/Documentation2012.html

http://www.somasa.gub.ac.uk/~BigEars/Documentation2013.html

http://www.youtube.com/watch?v=zb25Cc0rulU

Letters of Support: on file by the Director of the Belfast Children's Festival. **Big Ears is seen on:**

http://www.heacademy.ac.uk/resources/detail/teaching-development-grants/individual-round-3/big-ears

http://www.ahrc.ac.uk/News-and-Events/Events/Pages/Big-Ears---sonic-art-for-public-ears.aspx http://learningarchitecture.wordpress.com/2011/01/25/phd-opportunities-at-sonic-arts-research-centre-qub/]

Funding:

1) AHRC AH/1500677/1 - *BIG EARS* – *sonic art for public ears*: 2011 - 2012. AHRC, Arts & Humanities Research Council Collaborative Training Grant, £10,273: PI Dr Schroeder

2) HEA (Higher Education Academy) Teaching Development Grant: "Big Ears – learning to design sonic art for public ears" (PhD public engagement training): 2012 – 2013: HEA UK, £7000