

Chamberlain, Alan and Hazzard, Adrian (2015) Sonifying the Scene: re-framing and manipulating meaning through audio augmentation. In: DMRN+10: Digital Music Research Network One-day Workshop 2015, 22 December 2015, Queen Mary University of London.

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Sonifying the Scene: re-framing and manipulating meaning through audio augmentation

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INTRODUCTION

Digital locative music technologies are transforming the ways in which we are able to manipulate and re-frame the meaning of architecture, landscape and art. In this note we explore and outline some of the key features that are associated with this. Defining the future possibilities and challenges that we have identified through our research in the area. Our work is supported by examples and critically assesses the relationship between physical and aural presence, examining the manipulation and reframing of meaning through audio augmentation. "Is Space Audible?" [7].

GAZING INTO SOUND

Music has a long tradition of guiding the interpretation of many of our experiences; it provides accompaniments to our media, narrative performances and ceremonies. Typically these are carefully composed and curated accompaniments that integrate into and reflect the intended mood, narrative and meaning of the experience. But what about music listening in mobile or locative settings, those spaces where music is not normally situated? The work of R. Murray Schafer and the World Soundscape Project urged us to attend to the ambient aural environment of our physical world, to connect with and understand its physicality through its aural manifestation [5]. Subsequently, the notion of the locative ambient soundscape has been increasingly augmented or masked by personalized artificial soundtracks of music as broadcast from the Sony Walkman onwards to modern smart phones. Michael Bull states that iPod users "'aestheticise' their environment through their personal stereo use [...] a remaking of the urban to fit with the users thoughts and desires" [2]. Bull goes on to note that in urban commuting environments, the iPod is used to deliberately disrupt and re-frame the monotony of the city experience. Furthermore, artists have seized upon mobility and location as a platform for new artistic expression and often playfully engage with the juxtaposition of media - such as audio and music – in contrast to the nature of the locale and artefacts contained within [1,3,5], thus to encouraging users to reason about such objects, landscapes or activities in a different way. Little research has sought to understand the opportunities for the deliberate manipulation and re-framing of the meaning of objects, artefacts and landscapes via musical accompaniments.

Hazzard et al.'s [5] example of soundtrack work in a sculpture garden highlights the degree of manipulated meaning that music can impart upon the interpretation of objects. Here we have a setting, an external site with varied landscaped and rural parkland that has been used to exhibit a variety of sculpture exhibits. There are two layers of meaning already in play here: an artist created a

sculpture with a particular intent; this artefact was then re-framed by the park's curators who placed it in the setting of the park; Hazzard et al. [4] then imposed a third layer of meaning – an adaptive musical soundtrack - quite detached from the artist's or curators original perspective. Subsequently, visitors reported an experience clearly shaped by the mood and behaviour of the accompanying music, sometimes enhancing visitor interpretation and sometimes perturbing it. In our second example, Rider Spoke, by the arts collective Blast Theory [3], participants were encouraged to record and leave personal narratives at specified locations in cities for others to find and listen into. Here the audio fragments encourage a re-framing of the context of the locale. Rather than an anonymous alleyway or a building's facade these architectures became the backdrop to the narrative, the set from where the narrative is held and played out. the meaning of the narrative permeates and re-frames the locale.

Appreciating the wealth of such personal experiences, located in a multisensory understandings of the world and the way that these may be counterpoised against, both other experiences and physical entities allows us to further experiment and create new sonic environments that are able to open up and offer different ways to experience sonified spaces that move us beyond our current conventional understandings.

CONCLUSION

This small piece of writing asks for further understandings and re-specification of the meta-materiality and of the nature of sound and it's relationship to the world. With new technologies emerging and opening up a space for exploring audio-augmentation it is important to see this as an opportunity for understanding the relationship between sound and space, and sonification and the scenic. As a leaving gesture, it's perhaps worth thinking about how, as Ingold writes, "a landscape may be *audible*" [4].

ACKNOWLEDGEMENT

We would like to acknowledge the grant Fusing Semantic and Audio Technologies for Intelligent Music Production and Consumption - EP/L019981/1

REFERENCES

- 1. Frauke Behrendt. 2012. The sound of locative media. *Convergence: The International Journal of Research into New Media Technologies* 18, 3: 283–295. http://doi.org/10.1177/1354856512441150
- 2. Michael Bull. 2006. Investigating the culture of mobile listening: From Walkman to iPod. In *Consuming music together*. Springer, 131–149.

- 3. Chamberlain, A. et al. 'Locating Experience: touring a pervasive performance', Personal Ubiquitous Computing Journal, Volume 15 Number 7. Springer. DOI: 10.1007/s00779-010-0351-3. pp. 717-730.
- 4. Tim Ingold, "Being Alive: Essays on Movement, Knowledge and Description", Routledge, 2011 270 pages
- Adrian Hazzard, Steve Benford, and Gary Burnett. 2015. Sculpting a Mobile Musical Soundtrack. Proceedings of the 33rd annual ACM conference on Human factors in computing systems, ACM.
- 6. R. Murray Schafer. 1993. *The soundscape: Our sonic environment and the tuning of the world.* Inner Traditions/Bear & Co.
- 7. Victor Zuckerkandl, "Sound and Symbol " Vol 1, Princeton University Press, 1969, 399 pages.

Other MRL Music papers:

- Alan Chamberlain & Andy Crabtree (2016) "Searching for Music: Understanding the discovery, acquisition and organisation of music in a domestic setting for design" in Personal and Ubiquitous Computing Journal, Springer
- Steve Benford, Adrian Hazzard, Alan Chamberlain, Kevin Glover, Chris Greenhalgh, Liming Xu, Michaela Hoare, Dimitrios Darzentas (2016) "Accountable Artefacts: the Case of the Carolan Guitar", Proceedings of the Conference on Computer Human Interaction, CHI'16, May 07 12, 2016, San Jose, CA, USA, 2016, ACM
- Andrew McPherson, Alan Chamberlain, Adrian Hazard, Sean McGrath and Steve Benford (2016) "Designing for Exploratory Play with a Hackable Digital Musical Instrument", Proceedings of Designing Interactive Systems, DIS'16, June 4 - 8, 2016, Brisbane, Australia. ACM Press.
- Alan Chamberlain, Mads Bødker, Adrian Hazzard, Steve Benford (2016) "Audio in Place: Media, Mobility and HCI Creating Meaning in Space", Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services. September 6th 9th, 2016 Congress Palace, Florence (Tuscany), Italy, Mobile HCI 2016, ACM Press.
- Steve Benford, Adrian Hazzard, Alan Chamberlain, Kevin Glover, Chris Greenhalgh, Liming Xu, Michaela Hoare, Dimitrios Darzentas (2016) "Experiencing the Carolan Guitar", Proceedings of the Conference on Computer Human Interaction, CHI'16, May 07 12, 2016, San Jose, CA, USA, 2016
- Benford S., Hazzard A., Chamberlain A., Xu L. (2015) "Carolan: Augmenting a Guitar with its Digital Footprint." International Conference on New Interfaces for Musical Expression (NIME 2015), Louisiana, USA.
- Alan Chamberlain and Adrian Hazard (2015) Sonifying the Scene: re-framing and manipulating meaning through audio augmentation. In: DMRN+10: Digi-

- tal Music Research Network, December 2015, London.
- Hazzard, Adrian., Benford, Steve., Chamberlain, Alan., Greenhalgh, Chris and Kwon, Hyosun (2014) Musical Intersections across the Digital and Physical. In: DMRN+9: Digital Music Research Network (EPSRC), December 2014, London.
- Hoare, Michaela and Benford, Steve and Greenhalgh, Chris and Chamberlain, Alan (2014) Doing it for themselves: the practices of amateur musicians and DIY music networks in a digital age. In: DMRN+9: Digital Music Research Network (EPSRC), December 2014, London.