

PYLON

“Eureka Moments: A background to aura, Sonic Augmented Reality by Steve Symons”

by Helen Sloan
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Introduction

By choosing to wear an **aura** backpack, the user guarantees themselves of several minutes of a unique enhanced environmental experience. [1] The experience is not only sonic through sounds generated by the aura system, it is also ‘real world’ in that external environmental factors both visual and aural are key to the work. The user takes a



backpack and headphones for a walk in the open air and, within a frame of variable radius (to date this has been up to 500m but can be extended), binaurally experiences sounds at areas anchored by GPS points. The user is given the freedom to explore the frame to find these areas of sound which bleed into an area rather than being discrete points of sound – the piece guides the user in. **aura** takes you into an experiential world that corresponds to events such as seeing a feature of a familiar building for the first time or reaching an exhilarating point in a walk. The user becomes super-sensitised to the landscape, environment and their position in it through the manufactured sounds of **aura**. It enables the user to concentrate on the space they occupy as they explore the soundscape generated by the system. The user is in control up to a point and can choose to revisit areas of the frame. The routes that they take in the space may be very different from the ones

that they might take during a walk. The piece also has a social element – by wearing the backpack and distinctive headphones the user sets themselves out from the crowd open to curiosity, ridicule and even envy, for those in the know, from others.

Subsets of Sound Experiences

The development of experimental sound seems to have followed cultural resonances particularly based on the availability of technology. Sound is much more versatile than visuals when it comes to technology and is central to the history of broadcast and recording. The history of visual culture and language presents mores, rules and technologies which have taken a century to challenge through modernism. Whilst musical notation and arrangement presented a history of rules and systems over centuries, other forms of sound did not reach significance until experiments with sound recording began in the 19th Century. As technologies presented further possibilities over the 20th Century, sound became more versatile operating away from the confines of the rectangular screen that impacts and impacted on much visual work.

Sound is truly immersive – it penetrates a whole space whether it is formed by environmental sound, concert hall, recorded sound, binaural sound or 3-D sound design. Both this general immersive quality and the development of sound technology has meant that artists working with sound have had license to be more experimental in the development and use of their tools.

Broadly speaking there are two kinds of sound: **Cultural/human sound** – this is sound that signifies a response or behaviour e.g. church bells, sirens, music, commands, ritual song and chants. These kinds of sounds can influence immediate human behaviour.

Environmental/ambient/natural sound – These are sounds that may have cultural meaning assigned to them but are commonly present in the environment. e.g. animals, weather, machinery, transport, and the distant sound of voices. [2]

aura and Locative Media

Using the tools of locative media, sound artists are able to equip themselves with the means to combine environmental sounds in the real world with ones created or 'found' by the artist. aura plays to this strength creating a singly experienced musical instrument in the landscape/environment in which the user is both the player and the listener. A number of locative projects have a tendency to focus on the physical location of the object or person being tracked emphasising where participants/objects end up, what path they take and who or what they interact with. It is not uncommon to be asked to wear RFID tags at events to have your progress, social and geographical routes mapped. Ars Electronica 2004's 1000 Deathclock in Paris [3] by Tatsuo Miyajima and Hajime Tachibana and B.Tween festival's new commission by Someth;ng, **2 Cities** [4] are two examples of the many projects using these techniques reframed to gather different kinds of data. These projects map collective behaviour and can be useful for sociological research but often lack an aesthetic or a direct engagement for the individual audience member, participant or end user. These kinds of projects can be traced to the history of the development of locative media and its role in communication. Mobile phones, in particular, and other locative media have added another fundamental question to the

dialogue of communication. It is about the 'Where are you?' alongside the 'How are you?' Sometimes the 'Where are you?' becomes dominant. [5]

aura and Psychogeography

Locative media can be important and rewarding in forming part of a collective experience but sometimes the unique individual experience is missing. Artists who introduce a strong psychogeographical [6] component to their work often have more success in combining the strengths of both the collective and individual experience. [7] These works place participants in a collective while allowing them to input and engage with the highly personal. Perhaps what distinguishes these projects and aura from most locative media projects is that they put the user into their individual experiential field. Like more traditional artworks, the user experiences the same set of parameters but brings their own unique set of values. Users are not simply represented by a dot or line on a map.

In the 1990s, there was much more of a fascination with combinations of the real and the virtual in artworks and also in the relationship of technology with people. Early immersive works that incorporated sound were pieces such as Susan Collins, **Audiozone** [8], for **V-Topia** 1994. This piece was a locative work in the gallery – through infrared headphones, the participant walked through the gallery among the other pieces in the exhibition discovering sounds and video that signified seduction and sexuality. The participant was enticed into starting an affair with the technology.

In contrast, Paul Demarinis's, **The Edison Effect** [9] (1990 – 1993), asked viewers to think about the fragility and specificity of the sound recording through the juxtaposition of natural material – by making phonographic records using beeswax the recording becomes distorted over time.

The ultimate virtual landscape piece of the 1990s, Char Davies's **Osmose** [10] kitted the user up with the essential technology of the time, a data glove and headset, and pushed them into a virtual landscape of trees, floating creatures and ASCII. The user's presence was recorded through the sound of breathing as they traversed the landscape.

Currently, works such as Mark Hansen and Ben Rubin's **Listening Post** [11] , 2003, present more contemporary concerns around collective/global communication on the Internet. By collecting in real-time short text fragments from chat-rooms and displaying them on multiple screens seductively placed in columns in the exhibition space, the viewer experiences the content that is being unwittingly provided by chat-room users. This piece seems to be a homage to technology highlighting a potential insignificance of the individual in contemporary communication networks. The immersivity in the work is completed using voice simulators to give the text fragments a sonic presence in the installation.

Listening Post and **aura** are works that present a contemporary trend towards revisiting the immersivity that grew out of the 1990s. Technologies and concerns have changed significantly in the last decade with **Listening Post** being a particular work that looks at the way in which technology has patched itself into contemporary society. **aura** by contrast uses contemporary technological tools to examine the concerns of a decade ago – how to establish a distinctive identity in a relationship with the homogeneous and generic qualities demonstrated by current technologies. This is not to say that **aura** is anachronistic. At the core of Symons's practice is the quest to maintain the randomness of the quirky creative experience rather than that which is uncontrollably generated by the technology itself.

Technology and the Romantic Sublime

By focusing in different ways on our relationship with technology, contemporary works such as **Listening Post** and **aura** revisit the Romantic Sublime of early 19th Century painting in very different ways. **Listening Post** embraces insignificance while **aura** tries to confront it. As technology has become ubiquitous, the role of the individual has diminished. In the 19th C the individual battled with his/her insignificance in the landscape. More recently, technology has taken over from the landscape. It can be no coincidence that people have tried to reclaim a stake in technology through the growth of blogs, Myspace, You Tube and Second Life.

Artists have also responded to the globalisation and pervasiveness of the technology for instance by turning back to the role of the landscape and environment and even reclaiming it. For instance, Thomson and Craighead's, **Light From Tomorrow [12]**, 2006, took tomorrow's outdoor light readings (in realtime) in Tonga and broadcasted them to San Jose Museum of Modern Art, USA, thus highlighting their different timezones. As ecology and sustainability becomes more of an issue, it is likely that geographical landscape will again become as resonant as our relationship to technology. **aura** makes the viewer more aware of the geographical landscape whether urban or rural and demands that they look closely at their relationship with the technology and the terrain. In spite of its need to employ innovative technology, **aura** is a very human-centred project asking users to focus on themselves in a given environment.

aura and walking



Historically, when engaging with artist walks, the participant is guided by documentation, a pre-recording, a performance or a set of instructions. The path the participant takes is often a series of linear causal routes produced by research into context or site undertaken by the artist. In many pre-recordings or performances, the artist instructs the participant what to experience. By virtue of the component that asks the participant to experience both

recorded and ambient/environmental sound simultaneously *aura* is close to Janet Cardiff's [13] work. However, the experience of **aura** is much less specific in its context .

Symons's approach is to assign mainly abstract and found sounds in relation to how they might change the sense of space. Through a database of soundloops (in **aura – the stuff around the stuff around you** ie version 1 of the work), Symons assesses the space through a site visit or by mapping the site remotely. Using a toolkit to identify GPS points for soundloops, he adds sounds relating to his experience of the space. This mapping allows for beacons or points of sound, soundbleeds and silences. Symons tries to second guess user behaviour but allows flexibility within the system for the unexpected. More freedom of control is given to the user in terms of the route taken and the sequence of experiences than in other walking projects. As already pointed out , Symons asks the participant to learn to play a spatial instrument controlled by the route taken and the GPS points. The environmental experience of **aura** becomes the participant's own individual memory, exploration and marker.

aura and the development of sound technology in the mainstream

Looking at developments in processing, listening to and distributing sound over the last 30 years a trajectory that leads us to **aura** can be traced. Perhaps most resonant is the growth of the personal stereo and MP3 player. Audiotours such as tourguides and the work of artists such as Janet Cardiff (see above) would not be possible without the development of this technology. It is a part of our fabric to immerse ourselves in sound in the environment although with the exception of radio, the shift button and MP3 shuffler we are unable to control the sounds we hear in a given place or time. These technologies, as they have developed in the mainstream, are also focused on the minimization of the external environment rather than engagement with it.

Other artists relate to the minimization of the external environment. Iannis C. Yessios's **Urban Environment Survival Suit** [14] is a performance around a proposed wearable technology that physically protects the user as in a suit of armour as well as allowing the user to block out undesirable external factors such as sound and antisocial behaviour. **aura** demands that its users simultaneously engage both with the environment and the tools that can facilitate minimization ie binaural headphones and PDA. For this reason, Symons has worked to make the design as unobtrusive as possible for the user so that the system becomes indistinguishable from the environment – one cannot exist without the other. Whether *aura*'s approach will carry over into the mainstream will depend on potential applications and a focus away from the current obsession of minimization.

aura and Acoustic Ecology

Through the latter half of the 20th Century, artists explored the relationship between manufactured sound and environmental sound. The development of portable recording and playing devices enhanced the process of recording environmental sound. Murray Shafer's **World Soundscape Project** originated in the 1970s in Canada as a response

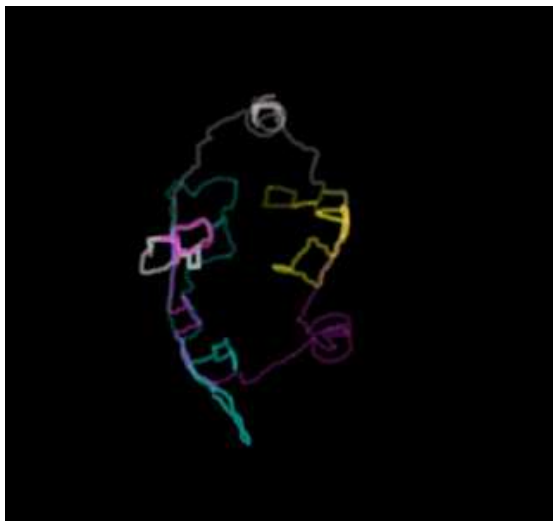
to what was seen as a growing problem in noise pollution. As it developed, the positive value of environmental sound was explored giving rise to the World Forum for Acoustic Ecology [15], Canada, 1993. Acoustic ecology has been an important contributor to the growth in interest in recorded environmental sound and its current incorporation into sonic arts, gaming and virtual environments, and music.

Symons's work, while not directly related to acoustic ecology, introduces a potential new component to the field with his approach to mixing found recorded sounds with environmental sound. It provides the potential for acoustic ecologists to look not just at what is in the environment but also how recorded sound impacts on and interacts with that environment. As has been discussed previously, thanks to developers such as Steve Symons this approach of fusing environmental sounds with recorded sound offers many possibilities to other fields if they choose to experiment.

Current and past versions of the aura system

Symons has been working on aura since 2003 and the piece began as a single user environment, **aura – the stuff around the stuff around you**. In this version, as previously indicated, Symons collects and adds soundloops to his database and these are assigned to GPS points in relation to the site. The piece has been shown extensively nationally and internationally in this context.

In 2005, Symons began to develop the technology into a multi-user environment, **aura – the stuff that forms around you**. Within the first version of the piece, the soundloops were fixed in a particular location. In this second version users synthesise sound in real-time, building on the sounds created via the routes taken by previous users. The immersive experience and individual exploration remains similar but new variables are added. Each time a user passes the same route the sound is built upon and changed. Direction, throughflow of traffic, location and the route taken can all add to future users' experiences. The addition of a map outlining users' routes and trajectories shows charted and uncharted territory and encourages the user to explore unvisited areas.



The challenge of the piece continues to remain in the exploration of the space sonically and visually and the potential for developing individual memories and markers. Users however have a wider set of permutations and combinations of focus and engagement. [16]

Symons combines a rare understanding of the creation of technical tools and the behaviours people display when engaging with them. **aura** is valuable in that it can be a tool that other creatives can engage with while also being an artwork of universal appeal,

and Symons has the integrity to allow one to inform the other. His work comes out of a rich but brief history of immersive environments, sonic arts and the growth of digital audio technologies in a creative context. **aura** is as much about a spatial and environmental awareness as it is about the technology itself and this is the quality that particularly sets it apart from other work in the field of media arts and specifically locative media. The work he has developed brings a poetics to the negotiation of space and environment setting him above many of his peers. It uses hybrid culture in its most productive way, appropriating the best from all worlds. It is clear that Symons is set to develop his ideas further and offer a significant body of work to the creative community. Like **aura**, his research uncovers surprises and uplifting moments if those who engage are willing to explore.

1. Steve Symons refers to this as Sonic Augmented Reality and Michael Cohen, Human Interface Lab University of Aizu Japan refers to it in his paper **Augmented Audio Reality: Design for a Spatial Sound GPS PGS** for the Virtual Reality Conference in 1994
2. With thanks to Nigel Helyer of Sonic Objects and developer of AudioNomad, an augmented audio reality system in independent development. Conversations with him and his presentation AudioNomadism available at sonicobjects.com have been invaluable in informing this text.
3. See www.1000inparis.net
4. See www.somethingonline.org/index.php?main=happened&sub=btween
5. See note 2
6. Aura and other psychogeographical works owe much to the continuing legacy of artist walks. Tracing back through recent art history from Richard Long, Tim Brennan, Gillian Dyson, Anne Bean, Iain Sinclair, Janet Cardiff and Simon Pope in the UK it is possible to see how aura combines elements of their work.
7. Works by artists such as Peter Gomes, Simon Pope, Neil Jenkins and Urban Tapestries (Proboscis) together with writers like Iain Sinclair have engaged in this way along with drawing from the legacy of artist walks.
8. See www.ucl.ac.uk/slade/sac/SACbio.html and www.luxonline.org.uk/history/1990-1999/v-topia.html
9. Paul Demarinis was a pioneer in the investigation of the immersivity of sound. See www.well.com/~demarini
10. See www.immersence.com/
11. See www.earstudio.com/projects/listeningpost.html
12. See www.thomson-craighead.net/docs/lftdoc.html

13. See Mirjam Schaub Janet Cardiff, The Walk Book, USA, 2006 and www.artfocus.com/JanetCardiff.html
14. See www.yessios.com/
15. See interact.uoregon.edu/MediaLit/WFAE/home/index.html
16. Since developing aura – the stuff around the stuff around you, Symons has plans to put the technical specifications of the work online under the umbrella of muio.org for use by other practitioners. The research phase of the new work has been supported by Pylon, SCAN and Folly Gallery through action research in residencies, demonstrations and workshops; the first showing of aura – the stuff that forms around you is at Enter_Unknown Territories, Cambridge UK April 2007.

Helen Sloan has worked as a curator, researcher, writer, editor and producer in media arts and culture since late 1980s. Since 2003, she has been Director of SCAN, a networked organisation and creative development agency for media arts in the South of England working on media arts projects and strategic initiatives in arts organisations, academic institutions and further aspects of the public realm. Helen has worked both freelance and as a curator at organisations such as Camerawork, FACT, ICA and Site Gallery as well as directing festivals such as Across Two Cultures in Newcastle 1996 (an early conference on the overlapping practice of creative thinking in arts and science) and Metapod, Birmingham 2001 - 2. Current areas of interest and curatorial work include the points of intersection of science and culture, immersive environments, and wearable and soft technologies.

<http://www.scansite.org>