

Moulinex Research and Development

Zoë Irvine

One of two research and development projects commissioned by the Arnolfini Gallery and Mobile Bristol, Moulinex is site-specific audio work exploring the possibilities offered by wireless technology (802.11) and GPS. The work was designed to be experienced using an iPaq (handheld computer), GPS unit and headphones. It was carried out in collaboration with programmers from Mobile Bristol who are currently building the authoring software.

As an artist working principally with sound I was excited to read a call for work which included the phrase "WANTED – audio artist". A first in my experience, so of course I applied. Whilst I am accustomed to writing proposals (a process which involves research, fantasy and practicality), what actually gets made is always something that goes beyond what I initially imagined. This seems to be the process of collaboration between my ideas, a response to place and of course a grappling with what is actually possible within the resources of time and technicalities. This journey of actually making the work is what really engages me as an artist.

Another aspect of the call for work that particularly attracted me was that the project was within the remit of research and development. This allowed me to explore this set of technology and ideas without the pressure of creating a completed public ready artwork. The research questions that I initially set out with remained in place as the idea for the project mutated in response to the reality of technology and place. The main research questions were to do with the work's content, its interface and its resonance:

- What is the nature of headphone experience? And how does the experience of this technology relate to older models such as walkman experience?
- Can a 'walkman'/ filmic experience provide a rich listening experience for participants in the project to go beyond the technology of delivery
- What are the technical logistics / possibilities of mapping sounds onto specific objects, locations and how the mapped data could be triggered either actively or passively by the participant?
- Using location sensors to trigger audio filters as well as audio files – creating sounds that can be far away and then approached.
- In which ways can the iPAQ/PDA serve as a 'compass' and narrative navigation tool?
- How can a website serve as an interface to the project allowing a virtual experience of the work for headphones as well as the movement or addition of audio material to the work.
- Can automated positioning of audio files within the sound work and its stereo field be set up?
- Can two-way headsets be used so that participants could leave audio traces with or without a using a mobile phone.
- What are the most powerful ways of enhancing the sense of the cityscape as interface rather than the gadgets?

Summary of Original Proposal:

'Soundtracks' (working title) an interactive audio space in which participants experience, manipulate and contribute to a sonic space. The idea would be to build an open narrative in sound, which would traverse and include virtual and physical sound sources relative to the site. This flexible audio journey to be worked on during the period of the residency relating to the telecommunications of local buildings, local radio transmissions, airline and flight (including balloons) communications, recorded soundscapes, overheard conversations, music flooding out of windows and loud mobile phone conversations. These recordings will be mixed to form an alterable filmic soundscape. This soundscape will be open for additions and changes. The user additions can take the form of audioBlogs (www.blogger.com) – phone messages left from a on a server, which will then be located in the composed soundscape.

The work will also have a website that would provide a further way to interact with the basic structure of the composed audio space. Allowing the upload of audio files into categories of 'music' 'textures' 'sound effects' and 'voices' in accordance with the conventions of filmic sound design. These sound files would be mixed either by me, or an automated audio programme.

Research and Development of the project:

The first major tasks were to locate geographic spaces to work with, begin to generate material and to get a feeling for the technology and its current boundaries. As Mobile Bristol is developing the hardware

infrastructure and authoring software there was a sense that a great deal was ultimately possible but not within the time frame. There were three basic phases of research and development:

Nov/Dec 2003 – the project began. I came to Bristol, met the Mobile Bristol team and got a sense of the city. Had a technical introduction and discussions with the team. At this time I felt I wanted to make two works one that re-staged scenes from films set in Bristol ('Set in Bristol') and another that engaged with the telephonic history set in Telephone Avenue. I made visual research making photographs and mapping the locations I wanted to work with. As the original proposal separated into two ideas their requirements became specific. The Telephone Avenue work would require the possibility to leave and retrieve messages, whilst 'Set in Bristol' needed good GPS coverage and male and female voice actors and a cut up script. At the end of this phase of the research I decided to work on both projects knowing that the technical requirements of Telephone Avenue would be difficult to reach despite the teams optimism.

Week beginning Jan 12th – Based in Bristol, this week provided me with time to develop the ideas in situ, and work with two voice actors to successfully record a cut up script that I had developed from films that had a connection to Bristol such as 'Chicken Run', 'Look Now' and 'Princess Cariboo'. The script became a simple and somewhat surreal dialogue between a nameless man and woman, the way it came out suggested that it should be set in the dock area.

I had also recorded and began to work with material for the Telephone Avenue idea. This was to be a soundscape where conversation fragments would float in space, there would be archive recordings, telephonic sounds and extracts from telephonic vocabulary we hear in our everyday lives 'thank you for continuing to hold'; 'your call is being recorded for training purposes' etc. This would form the background into which participants could build their own telephonic landscape by leaving messages via the iPaq.

The week also included the main contact time with the Mobile Bristol team and some intensive software training. As the documentary footage shot by MB will testify this was a steep learning curve for me. As someone who had never done any programming I was introduced to such basics as 'variables' and the conditional 'if then else'. This was an exhausting and rewarding part of the whole. I left this week armed with a PC laptop and a printed out manual. There was also an agreement that both Dan and I would make work for Queens Sq – this was for technical reasons and to make the experience of people coming to listen to the works easier. This shift in context would have implications on essentially site specific work of course. Other technical realities became clear – the iPaqs' ability to record sound would not have developed software in time and there was no way of developing a link between an audioblog site and the server in the time available. Although this was a process of defining limitation it was freeing in that the territory of what was actually possible became clearer. It would be a work for Queens Sq. using GPS and no wireless technology as all the information would be stored on the individual iPaqs. This meant a serious rethinking of the ideas as they stood.

Jan 17th – Feb 3rd – Working remotely this was the time to actually realise something. I decided to leave the Telephone Avenue idea and work on the film soundtrack idea. As I began to work with the recorded dialogue I realised that this did not work in the new setting of Queens' Sq. I returned to considering the location to see if there was another way of working. The fact that the Sq. had been used for open-air film screenings was important. It became clear that the thing to do was to work with existing soundtracks that had been screened there. In the course of Dan's research he had collected stories where people told him about the experience of seeing both Moulin Rouge and The Matrix. I decided to use these films as 'found material' for this project. This new piece had a new title and proposal:

Moulinex Outline:

The piece explores the location's history as a venue for open-air cinema creating a 'sonic archeology' of The Matrix and Moulin Rouge, films screened in the square. Sounds and dialogues from the films are mapped onto the location and manipulated by the visitor's movement. As the viewer moves around the area elements the soundtracks from the two films are gradually mixed and manipulated, in this way the work touches on the isolating/unique, filmic experience associated with the use of walkmans ("your personal soundtrack") and the DJ culture of quoting and mixing recognisable source material, which both film soundtracks participate in themselves. Each viewer is placed in the position of being immersed in a sound which changed in response to their location and movement history.

The process of Realising Moulinex:

I edited dialogue from both films and selected sound effects. Both films were very different and afforded different opportunities. The Matrix of course is sci-fi with a sense of quest and revelation. The dialogues addressing the main character could easily be edited, removing any reference to names so they spoke directly to the headphone wearer with phrases like 'let me tell you why you're here' and 'do you think you're the ONE?.'

Moulin Rouge which is a musical has very little dialogue on analysis, the thrust of the plot is communicated through the music which has layers of quotation and appropriation. The dialogues that I chose mainly referred to putting on a show such as 'welcome to the all singing, all dancing Spectacular Spectacular!'. The preparation and manipulation of dialogue and effect sound files took a great deal of time and concentration. A sonic architecture and tuning had to take place to be able to bring the elements of the two films together. To do this I created a looping bed of sound that incorporated sound from both films, I chose a specific pitches that could form a background for any of the triggered sound files. This looping bed of sound would also serve as a signal to the headphone wearer that the work was 'on' as it would be triggered immediately when walking into the square and underlie all other sounds. Preparing the material was like assembling a palette, the composition of the work took place in the mapping of sound onto the space using the Mobile Bristol software. The following process was one of placement and trying it out in simulation mode in the software. I went between sound editing software and the MB software creating manipulated versions of the original files in response to the development of the MB composition. As I was working remotely I was not able to experience the location and the sound simultaneously while composing the work, it was not until I actually tried the work out that I realised how different the experiences of the reality and simulation modes are.

Feb 4th & 5th - These were the final preparation days and presentation of the work. On the first day we had evaluation sessions with the MB team, a presentation to UWE computer science students and a test session using the work. As I mentioned this experience was completely different from that of previewing the work within the software. As I walked around the first aspect I was struck by was how difficult it was to know, as a user, what effect your movements actually had on the soundscape. GPS readings jump anywhere within a 20 metre accuracy, so the users ability to work out the map is seriously impaired and even though I myself had created this map of sounds I was often totally incapable of having an overview. As I moved and the map jumped, sound regions were triggered in unanticipated ways. Files that seemed unlikely to even overlap were suddenly triggered almost simultaneously. I realised that the whole experience was going to more random than I had anticipated, even with the high elasticity I had built in. As a result of trying this out I created some regions of sound that could serve as a more sturdy architecture. I placed some quite large regions in corner areas and decided that there should definitely be an area of reset and escape if the whole soundscape became too overcrowded.

The project was presented to an audience on the 5th Feb 2004.

Conclusions:

Whilst there were a fair few hitches and glitches along the way I was pleased with the outcome as it was on the 5th. Certain things did not work, for example the files added in at the last minute with the hope of providing a solid sonic architecture served only to clutter an already full soundscape. Listening to the feedback, given generously at the gathering afterwards certain things were confirmed in my mind. An immersive sound environment such as Moulinex, whilst effective, it is isolating. The question of interactivity and the self-perception of the users role is key to the development of such work. As people navigated the sonic space and the landscape these two experiences were dislocated. Now this was part of the magic of that first walkman experience that I wanted to recapture, but in doing this those crucial senses of role, agency and interaction disappear into something more passive. I don't think many people had the sense that as they walked around the square that it was there movements that physically mixed the sound and that their particular path in space determined the way in which the sound played.

On a more personal level an unexpected outcome for me was a sense of achievement in having understood and employed some very simple transferable programming skills which I will no doubt find useful in the future.

Ideas for the Future:

I will present the Moulinex project within the context of research and development at Futuresonic in Manchester at the end of April. Though I feel that Moulinex itself has run its course for now, I would definitely like to develop work with this technology. I am currently developing work responding to the telephone past, present and future and I can imagine working with this technology, building on the Telephone Avenue ideas. This is certainly something that I will attempt to persue.