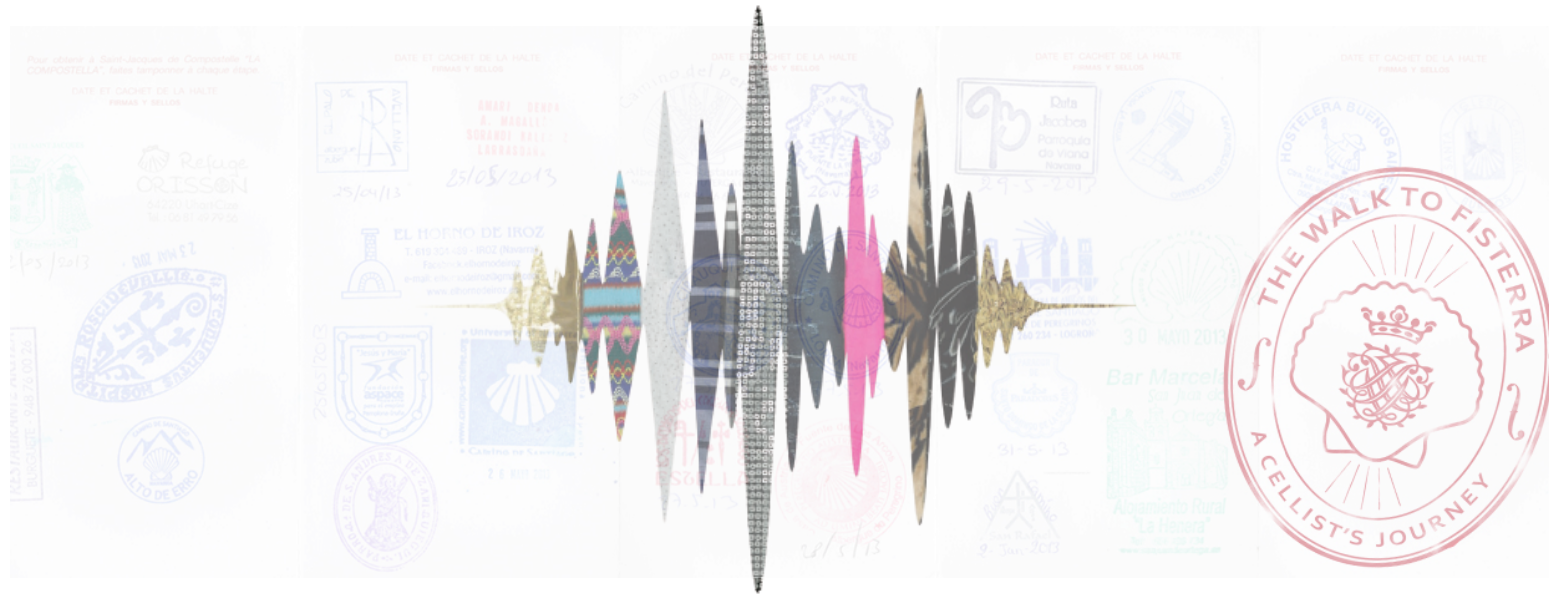


sonic scenery : interactive storytelling through sound and music

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Sonic Scenery is a project exploring interactive storytelling through sound. I am producing a hybrid installation-live performance piece that uses music and technology to take listeners on a journey through emotion from different points of view. Thanks to an invitation to join the Walk to Fisterra team, I took on the Camino de Santiago where I was able to encourage other 'pilgrims' to share their experiences. I have produced a 3 movement audiovisual work with the possibility of live performance.

The following report documents the experience.

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Introduction

The work I am presenting is the product of a journey – educational, spiritual and literal. I have developed in many ways this year and with an onslaught of new knowledge, comes a terrifying but wonderful sense of understanding so much more but not yet knowing how to use this knowledge. I flirted with as many different possible new skills as I could this year hoping to integrate them all. My plans were too extensive, for this year at least, and I was getting concerned of the risk of not actually producing anything. At the lowest point, an answer came in the form of an invitation to join a film-crew making a documentary – an idea I had not seriously entertained since my young self came to the realization that I could never be Michael Palin.

I joined them as a sound engineer along with Kyle Pyke. We brought a lot of very expensive, sought after audio equipment, and as a team we walked the Camino de Santiago. Whilst the project started as a documentation of Dane Johansen’s travels with his cello and recording sessions in the churches along the way, it morphed into a much more selfless offering to the camino community, looking at the stories of many pilgrims and instead of private recording sessions, offering free concerts.

Every day we had two Units – Van unit and Walking Unit, seeking out the best nuggets of the camino to capture. I came away with a plethora of raw footage and have made it into a 3 movement suite with visuals to express the emotional journey of some of the pilgrims we met along the way.

Description of the Work

The work is a through-composed piece in three parts for audio and video.

The first movement is made up entirely of field recordings from the camino. The recorder melody was recorded at the church of Zabaldika with a shotgun up in the gallery to emulate the sound of standing above looking down over the player.

I had already programmed the second movement as a standalone piece in Max MSP so the final element for that was trawling through the audio footage to extract some moments I found particularly expressed the emotion I was portraying in my lyrics.

The final part is an arrangement of Feliciano's setting of R. Tagore's poem *Silence My Soul*. Before I left for the camino I felt like this would be a perfect summing up and when I reached Finisterre, this was confirmed. The natural sounds in this movement are from Finisterre and the spoken word was recorded in the Berklee studios on our return. I originally planned to find all the words of the poem in interviews from the camino but quickly realised I did not have time for that and there was no reason to only use pilgrim interviews when really the piece is about an emotional cycle we all experience whether on a camino or not.

The second and third movements can both be performed live with Max MSP with a live performer taking the primary role. The versions in the film I am presenting feature recordings of Ganavya Doraiswamy singing in Mvmt 2 and myself playing recorder in Mvmt 3, both live with the program recorded directly from Max. I added the field recordings to Mvmt 2 after the live recording but Mvmt 3 is entirely recorded in Max. The additions to Mvmt 2 and the whole 1st movement were edited in ProTools and the final mix and master was also in ProTools.

Innovative aspects of the work

The concept of presenting a work in a new form is something that has caught my imagination. With an initial proposal to produce an interactive promenade theatre piece, I started to learn to program in Max MSP and Jitter and designed the system to run such a show. From that, I was able to experiment with new ways to allow anyone to perform with technology without requiring specialist knowledge. The two parts of my work that can be performed live with Max, whilst complex under the surface, have friendly user interfaces allowing anyone to perform with the piece. This was proven at an event at the Museo de las Bellas Artes in Valencia where Ganavya Doraiswamy performed the 2nd Mvmt. With no prior Max experience she was able to perform a complex multichannel piece controlling the software with the tool she knows best – her voice. When performed live, the 3rd Mvmt will be such that any audience member can take the role of the main orator and the piece will listen to them.

For me, this is the beginnings of an understanding and implementation of true interactivity and immersion.

New Skills Acquired

This year has given me more new skills than I could have hoped for. I now feel confident in a myriad of areas all of which have been of immense use whilst making this work.

- Programming in Max MSP/Jitter

This has been an invaluable skills which I did not anticipate learning or enjoying as thoroughly as I have. There is a long way to go but I feel that every day I become more comfortable in this medium and I love to compose and design with it.

- Recording and Mixing skills on large format consoles

After a year of watching, I am astounded how comfortable I know feel working on the AKSS.

- Audio editing

I am much quicker and more confident now.

- Video editing

Another skill I did not anticipate learning at all. I would like to continue developing this to improve my personal brand image.

- On-location film audio techniques and etiquette

Life as a sound engineer on a film-crew is in many ways very different to that in the studio. It is true it is sometimes overlooked with precedence given to camera but in reality it is the unit dynamics that dictate the quality of any footage captured, camera or sound.

- Troubleshooting and patience

Probably the most useful skill I have developed.

- Be open to change and do not limit yourself with your own expectations

Probably the joint most important thing I have learned.

Challenges

Time has been a recurring challenge for this year and this filming project. We were constantly pushing to get to the next venue, set up before a Missa, capture interviews before our subjects moved on to the next pueblo. In many ways, on-location recording, in particular the Camino de Santiago environment, is the polar opposite of that as fostered on a film set or in a recording studio. Very little can be planned and anything you do plan rarely turns out as expected. We all had to accept that any expectations we had were limiting the experience and once we let go of those expectations, we started to find some brilliant situations.

I knew that time would be an issue for me personally all year but hoped to improve. In reality I am still frequently up against the clock but I have also learnt that the problem only comes when the panic and react adversely to this instead of taking the opportunity to use that adrenalin to fuel work. Thus giving an example of limitation fostering creativity.

Lack of experience in film audio was a challenge. I arrived certain that I could apply my studio etiquette and techniques and whilst true to some extent, I found I had to learn a whole new vocabulary, style of working, people skills to succeed. I particularly enjoyed the challenge of working with people we met and documenting their reality rather than the 'artist' in a studio documenting their art.

The biggest challenge has been self-belief, whilst learning so many new skills, it was easy to conclude I simply couldn't do anything very well. Accepting that with learning new skills comes the responsibility of understanding that you have a lot more to learn has been a great challenge to overcome.

The future and further plans for the work

I hope to take all the skills I have learned this year and continue to design and program innovative uses of technology to both enhance reality and encourage real interactivity and immersion for anyone without requiring technical knowledge.

The first element to complete after graduation will be my full intention for the 3rd movement. It will have the ability to become heavily interactive allowing the guest to take the role of the primary orator. The programming of this movement is such that anyone can stand in front of it, offer their musical ideas and their 'performance partner,' Max MSP, will respond and interact in a sensitive way. For this reason I will be able to also setup this movement as a stand-alone installation piece to see if people enjoy interacting with it. This observation will be extremely useful in development of future interactive works also.

The next stage of development for this piece – and an exploration for future works using similar technology – would be to give the audience more control over the dialogue narrative and let them choose their own path. Each audience member would be given a 'passport' which can 'read' the objects and provide personal narrative via headphones. The passport would hold an app to gather audience decision-making, so I must have a way to send that information from the interactive physical element to the app. I can achieve this using a Raspberry, a RPi-Arduino shield bridge and the Arduino NFC shield.

This shield can read NFC tags on the objects, send information to Max via Maxuino and thus trigger the appropriate audio file. An extension would be to run something akin to wordclock over a wifi network to each 'passport', which could allow more specific control over integration of the headphone audio with the speaker audio. Adding a WiFi USB dongle to the Raspberry Pi and writing the patch to have an overall clock keeping

an eye on the piece and communicating musical time to each device would achieve this. An alternative to the Raspberry Pi would be to use an Arduino Yun board although more research is needed to define which would ultimately be more suitable for the task.

I would have two options for headphones. One is to use bone-conduction technology for the full effect of both audio sources being experienced as intended without interference from having headphones over ears. I have successfully made a prototype of simple bone-conducting headphones made from piezo transducers. They function well as a prototype although the sound quality is somewhat low fidelity and I will look into the best amplifier to use, as the one I used in the prototype is not powerful enough. I could instead provide users with an alternative solution, possibly being open-backed earbuds or just one earpiece. Whichever my decision, I also must decide if the headphone feed will be mono or stereo. The dialogue will be recorded using my own binaural in-ear microphones so stereo would be ideal but perhaps overkill realistically speaking.

The next project I would like to work on using the technology I learn through this study would be trying the same ideas but with pre-existing stories and fairytales. I would like to focus on bringing together traditional theatre elements and new interaction technology ideas to provide hyper-immersive interactive theatre that the audience can take true ownership in. This was a project too extensive for this year and will require me to find some likeminded people who can offer their specialist skills to help out in the realization. Through The Walk to Fisterra project I have started to network internationally and I am starting to see that it is a possibility to achieve this.

Conclusion

I had no idea the joy that I would experience in capturing the emotions of others in audio. Spoken word as music has always been an interesting concept to me, sparked originally by Steve Reich's *Different Trains* and I now realise that it is not just a simple interest but I really love to listen and work with spoken word.

I also have a new appreciation for the impact of visual media and I will be making efforts to further my familiarity with this medium. I will be undertaking an internship in the audio department of a post-production house in New York this Fall which I anticipate being a very enlightening experience which I can use to not only work with other people but also implement in my own work.

In conclusion, my primary findings from this year of study have been confirming my idea that technology can be used discretely and simply to enhance one's experience of the world around you. Now I hope to continue bringing the audience further into that world with fewer barriers to their full experience.

