

Shores

CLÁUDIA MARTINHO

c.martinho@gold.ac.uk

Goldsmiths, University of London, London, United Kingdom

ABSTRACT: The aural experience *Shores* seeks to value artisanal fishing as an important part of the cultural heritage of São Miguel and the Azores, which has been drastically declining. A boat was converted into an acoustic shell to transmit a sonic memory of the fishing community, on a soundscape travel through places and ecosystems of São Miguel' shores.

Shores intervention resulted from a dynamic of co-creation. A workshop involved fishermen families and students in a process of sound mapping, field recordings, soundscape composition and installation of the acoustic boat. It looked to encourage conscious listening across generations and a sonic connection with the acoustic environment.

Shores' aural architecture spatialised the soundscape with natural acoustic effects, according to its frequencies spectre. Space's resonance magnified environmental sounds to enter into sympathetic vibration with the audience's body and mind. The installation facilitated an experience of affective attunement to self and the surroundings.

KEYWORDS: aural architecture, field recordings, soundscape composition, urban intervention, acoustic ecology.



Figure 1. *Shores* installation at Ponta Delgada harbour.

1. Exploring Aural Architecture

This project for Invisible Places is part of my ongoing practice-based PhD in Sonic Arts (at the Unit for Sound Practice Research, Music Department, Goldsmiths, University of London). My research's title is *An Exploration of Aural Architecture, for an Ecology of Vibration*. It engages an experimentation of sonic ecologies as urban interventions in public space where my interests converge: field recordings, soundscape composition and the creation of aural architecture experiences. This results as a multidisciplinary praxis, where practice embodies theory and generates new concepts to experiment further.

Trained as an architect and an acoustician, I have always been interested in the experience of space beyond visual, how space is more than what we see, and how things that we do not see affect our experience of space, often unconsciously. As our global culture is mainly influenced by the visual sense, our other senses are usually neglected in the experience, perception and creation of space. Next to that, urban space is increasingly saturated by massive propagation of acoustic and electromagnetic waves of all kinds. I inevitably got concerned by the quality of our acoustic environment and its consequences to all living beings within. So I got closer to acoustic ecology and engaged in a practice of soundwalking, listening, field recording of places with particular acoustics and soundscape composition, as a symbiotic way to integrate place and self. I also got interested in how soundscape composition could be engaged on an activist and political level, as a way to “create a strong oppositional place of conscious listening” (Westerkamp 2002). All this was converged into an exploration of aural architecture. And my practice emerged as sonic ecologies through urban interventions in public space for acoustic sensibilisation, as a way to connect places, to experience self, and to enable a dialogue between inside and outside.

Aural parallels visual and refers to the human experience of a sonic process, and aural architecture refers to the properties of space that can be experienced by listening (Blessner and Salter 2007, 2–5). Any environment, natural or built, generates an aural architecture. Every space has an aural architecture. It is the attributes of a space, such as surfaces, objects, materials and geometries, that will determine its specific acoustic aspects. And it is the human experience of that space that determinates its aural qualities. The acoustic cues orientate our navigation but provide also sensory stimulus which define the space's aural specificity and influence our associations and moods (such as feelings of cold or warm, public or intimate, freedom or insecurity). According to Blessner and Salter, aural architecture can be defined in social, navigational, aesthetic and musical aspects. This means that our auditory spatial awareness manifests itself in at least four different ways: influences social behaviour; allows orientation and navigation through a space; affects our aesthetic sense of place; enhances our experience of music and voice. Moreover the aural experience can be described in terms

of abilities: sensation as detectability; recognition as perceptibility; affect as desirability (Blessner and Salter 2007, 11–13).

My approach emphasises experimentation towards the affective aspects of aural architecture, in its relevance to the experience of life, because this is where we find a lack of practice-based research. My practice links the physical reality, object of study of acoustics, to the personal relevance of that reality (Drever 2013). I am interested in the whole experience of sound in a certain environment, to understand how its spatial attributes determine its acoustics, its atmosphere and by consequence the ways we relate to it. So I am exploring aural architecture as an holistic experience, which relates object to subject, linking sensation, perception and affect, in its enveloping and overwhelming dimensions that scientific methods alone cannot analyse. This kind of holistic experience should unify life sensations: visual, acoustic, tactile, kinetic; and contribute to balance the environment, our inner world with our outer world (Westerkamp 1999). It has been argued that “this sort of interplay creates a dynamic process – being, alive.” (Carpenter and McLuhan 1953, 70). An important point to refer is that I am not searching to create a consensual peaceful place or exclude the reality that cities are full of noise. Instead, my aim is to create an experience that awakens our senses from everyday routine, raises awareness of ecological issues, provokes a discussion, incites critical thinking, encourages a quest for an understanding of self, of our relationship to others and the environment, and ecological alternatives to live everyday. If someone stops to listen and to feel its surroundings, I consider that already a great achievement.

2. Collective memory of São Miguel, Azores



Figures 2–4. Photographs at Porto de Abrigo cooperative.

I had never been in Azores before, although this was a travel I dreamt of, but not as a tourist. The Invisible Places' call for residencies was the perfect opportunity to get to know this unique place. Being Portuguese myself, when I thought of Azores I have always imagined boat sailing, fishermen and deep ocean. Of course there is much more than that, but still, it is an important part of Azores' cultural heritage which is disappearing. Arriving to São Miguel I confirmed that artisanal fishing has been drastically declining. One of the main reasons is that as the fishing activity is inevitably industrialised, small scale fishing companies are

disappearing, and so are certain fish species, most of artisanal fishermen and wood boats' builders. Consequently a significant part of the island's sustainability is out of balance. Next to that, I realised that each year, tourism is augmenting exponentially in São Miguel, for its unique attractive ecosystem. And so is the number of planes landing and taking off. Adventure tourism tours are contributing to the infrastructure evolution with motorways. So the acoustic ecology of São Miguel is becoming heavily contaminated by jet airplane motors and tourism buses. Obviously, these changes in such a small territory (736 km²) have a strong ecological impact. Sea exploration to watch dolphins and whales is also an issue. Locals complain that multinational companies have monopolised the Azores market as they have the capital to invest in high tech all comfort safe boats, captivating tourists. Of course, one may say that this is inevitable, this is the world's global progress. Still, there are ways to balance and work towards local sustainability. But in this panorama, as fishing activities are diminishing, fishermen are left workless and excluded of this emerging sea tourism. The link between traditional sea activities and new sea tourism markets should be a major political, social and cultural concern. But according to locals, there is no education investment in the fishing communities towards new inclusive sea activities. So traditional fishermen are left out of the touristic scenario and small communities by the sea are disappearing, as it has happened over and over in different places around the world. And unfortunately, their ancestral sea knowledge is being quickly forgotten. My question therefore was how could I contribute to valorise this collective memory and cultural heritage, and moreover to promote their aural identity? My idea was that my soundscape work should create and transmit meaning, connect places, renew a collective memory of São Miguel. I wanted to do a sonic intervention in urban space to create embodied and subjective understandings of the island's reality. This sense of place, or essence, could be many different things, according to the one that experiences it. So the idea was not to transmit one meaning, one memory, one understanding, one sense of place. On the contrary, I wanted to create an affective experience to open up different ways of listening to São Miguel's life's diversity, urban and natural, its sea culture and its ecological richness as a small island in the middle of the ocean. This could raise listening awareness and even incite an active engagement with the surrounding soundscapes.

In this context, I wanted to avoid a touristic or superficial approach. Being Portuguese was already an advantage. Still, this place's specificity was foreign to me. At first I could not understand some words because of the strong accent. Here it was very clear how the sounds of an oral language, its rhythms, tones and inflexions, are attuned to the contour and scale of the local landscape (Abram 1996). Curiously though, I felt some kind of immediate resonance I could not explain. Perhaps it was because I lived half of my life near the sea. So I was in residency the longest I could, almost four weeks, to reach a deep experience. Generally, when I get to a place that I do not know, my approach is to follow my intuition and

let my work emerge from within everyday life's experiences, at the rhythm of the place. We may find similarities with an ethnographic approach in the way that it focus "on fieldwork primarily through sensuous experience and the creation of an outward response to that experience from the inside", as John Levack Drever points out. And ethnography may offer practices of soundscape composition ways to move forward in a relevant and social way, with a more critical and reflexive mode of operation (Drever 2002). I wanted to take time to embody the territory, to live and feel its essence, so that the soundscape would reveal itself. And in the same way, it also takes a long time to build up confidence with local communities. Luckily the symposium organiser, Raquel Castro, has engaged a local producer, Diana Diegues, who made my task a lot more easy. By introducing me to Liberato Fernandes, the former president of fishing cooperative Porto de Abrigo, the doors of the fishing reality got opened to me. He has done an impressive amount of political and social work to help the fishermen communities in reclaiming their rights and improving their work conditions. And curiously, he was very enthusiastic with the whole project, as he believed that these cultural interventions are means to reveal the fishing world to people that are normally not aware of it. Liberato Fernandes was the key person that turned this project possible.

3. A soundscape in a boat

My idea was to convert an old boat into an acoustic shell to transmit a sonic memory of the fishing community and ecosystems of São Miguel' shores. This boat would act as a sonic intervention in an urban public space of the main city of Ponta Delgada, in order to reach a bigger audience. For the soundscape composition, my aim and central idea was to get on a fishing hunt and record it; and to go to the harbours of fishing communities and record everyday sounds. I also wanted to develop my work in a dynamic of co-creation, in a collaborative and participative process with local communities. I thought of interviewing fishermen's families, to let their voices be heard about their actual situation and concerns. And besides, I also wanted to engage students on a workshop, in a process of sound mapping, soundwalking and field recordings around the island's shores. My work therefore had several layers to take into consideration. It articulated a social, cultural, educational and ecological intervention; and an artistic, architectural and acoustic creation.

3.1. Rabo de Peixe

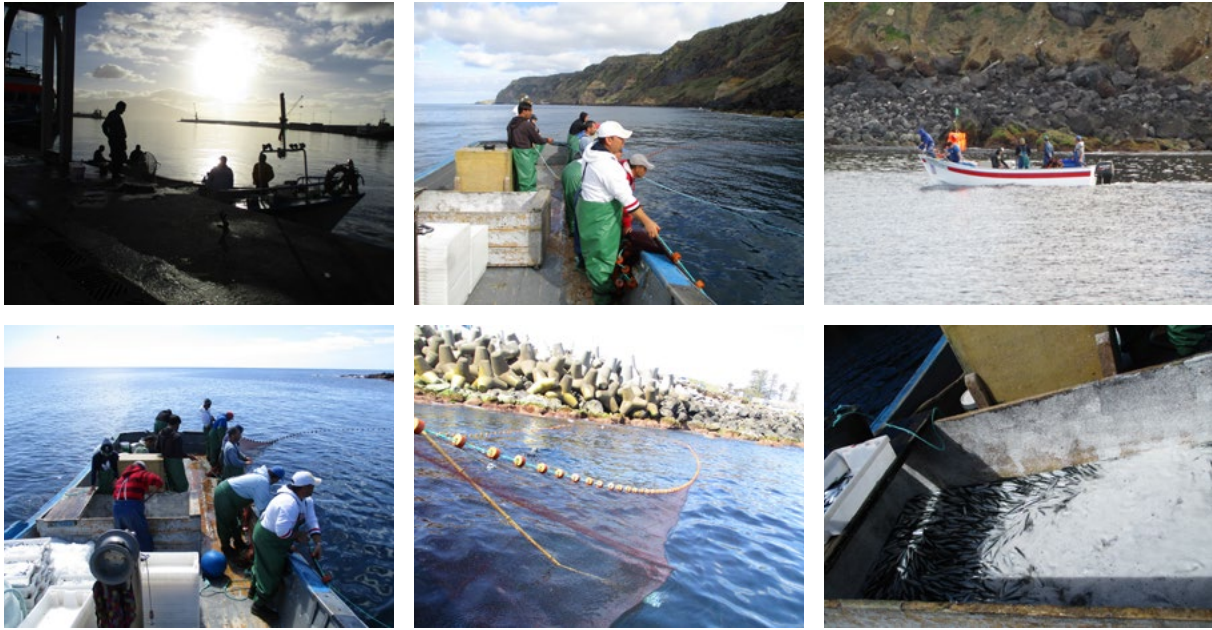


Figures 5–7. Rabo de Peixe – views of harbour and village.

On my third day in the island, Liberato Fernandes personally took me to Rabo de Peixe, which is the biggest, poorest and most united fishing community of São Miguel. I became aware of this side of the island reality, which is ignored by most of the people in the main city of Ponta Delgada. Surprisingly, the fishermen were very enthusiastic as well with my project, even though they are not the usual public for this kind of artistic intervention. I was generously offered three old boats that I could use and convert into an acoustic shell. And I also got several possibilities to join fishing companies. I decided to go on board with the companion of master Paulo Sousa, a traditional fishing boat with 13 fishermen.

3.2. The fish hunt

So a couple of days later, my first fieldwork was to get on a boat with these fishermen and go on a fish hunt. I had never been on a fishing boat before, so I had absolutely no idea how this was going to be. I knew that it would last for about 7 hours. We left at 7 am and got back at 2 pm. Normally they would have left at 6 pm and return at 6 am, to fish mackerel during the night. But it was a time of major crisis, there was no mackerel since 3 weeks already. So they had to hunt the little sardines, which is done by day light near the shores, with the traditional technique of purse seine fishery. It is still a challenge for me to describe in detail this overwhelming experience.



Figures 8–13. Fish hunt.

I have retained though a deep feeling of how the experience changed my whole way of understanding the human relationship with the sea and its ecosystem. I felt that the movement of the boat over the sea waves liberated my senses, as some sort of sensorial reset. This was a new soundscape and acoustic reality that I had never listen to before: the fishermen strong powerful voices, echoing as the sea waves against the cliffs, the changing hunting movements of the fishing net, at the quick rhythm of the schools of sardines, with a constant background drone of the motor, with modulating frequencies changing with the speed of the boat. And still we could also clearly hear sounds from the shores coming once in a while with the wind blows, such as church bells, cars, motorcycles, planes, waves crashing against the volcanic stones. For me, this was a whole new relation to the territory and to my self. I felt part of the team, in the same dynamic. Somehow I felt this close relationship between the Azorean human being and the ocean being, as one. I was experiencing this ecosystem reality through the fishermen's oral/aural culture, as native sea hunters, micro-macrocosmos everyday practitioners. The familiarity with the ocean environment and the "instinctive knowledge of the habits of his prey ... provides the hunter with an expanded set of senses, an awareness of events happening beyond his field of vision" (Abram 2015). It has been argued that this sort of interplay between sense perceptions "creates a dynamic process – being, alive. the ritual drama – particularly in primitive societies where the association of elements in such patterns is especially strong" (Carpenter and McLuhan 1953, 70). This senses synergy, and how it engages a peripheral or atmospheric perception, has also been pointed out by some authors as a valuable way of experiencing the environment, of sensing a place (Pallasmaa 1996, Leitner 1998, Thibaud 2011). I understand this state as a mode of attunement, which has been described as an act of tuning-in relationship which

relates to the lived experience of the flow of “inner-time” and its duration (Schütz 1951). In this sense, fishermen engage a tuning-in relationship with the fish school and the sea being, through their sharp senses and their artisanal instruments. It looks incredibly hard to fish the way they do. At the same, it feels like they naturally know the sea forces and how to anticipate their prey’s movements. As their ancestors, they surround manually, patiently and precisely the exact species of fish they are hunting for. A very important point is that this is a sustainable and ecological way of fishing. They are not just throwing the net and grabbing whatever comes in, as most of the industrial fishing companies do with trawl nets. Therefore I realised that one of the most valuable things we can learn from oral communities and Azorean native hunters is ecological intimacy, a symbiotic way of experiencing place, of being in tune with their environment, and in this case, an embodied knowledge of the ocean’s language. “When we study attunement, we study something that has always been there: ecological intimacy, which is to say, intimacy between humans and nonhumans” (Morton 2014). So this is the collective memory and sense of place that I wanted to share through my work. After this amazing experience in which I learnt so much, I felt an even greater respect for these people.

4. Shores’ sources

Back to the ground, it was time for a soundmap and soundwalking with students to record. I could have selected the sources myself, but it seemed to me important to engage participation of the inhabitants in spotting out their island’s ecological diversity. This is a way to raise awareness and concern on the acoustic environment. So I enquired the architecture students I was going to work with and different locals I met around. My question was what sounds and places with particular acoustics near the shores they liked. Many people told me about quiet, restful places in the interior of the island. They turned their back to the sea because they found it aggressive, associated with struggle, disgrace and death. But there were some that mentioned the ocean with passion as an amazing living being, and its shores as strong, powerful places that made them feel alive. I realised the ocean is a love-hate relationship for São Miguel’s people, as it tends to happen in most of the islands. Some comments significantly resume this relationship:

I don’t particularly like the sea, but I miss it when I’m elsewhere.

I love the ocean, it’s such a huge, enormous, living being.

The sea rules it all, you have no idea how it is like to live on a island. Much respect.

In this place I feel myself, I feel alive.

I cannot live elsewhere. I wanted and tried, but I could not.

This enquiry confirmed that the sea is a major element that determinates São Miguel's sense of place and its people identity. Its shores are very rich ecosystems, with amazing acoustics due to its shorelines' topography and surrounding landscape. Many people mentioned the same places so I started to draw a sound map with a few spots to experience.

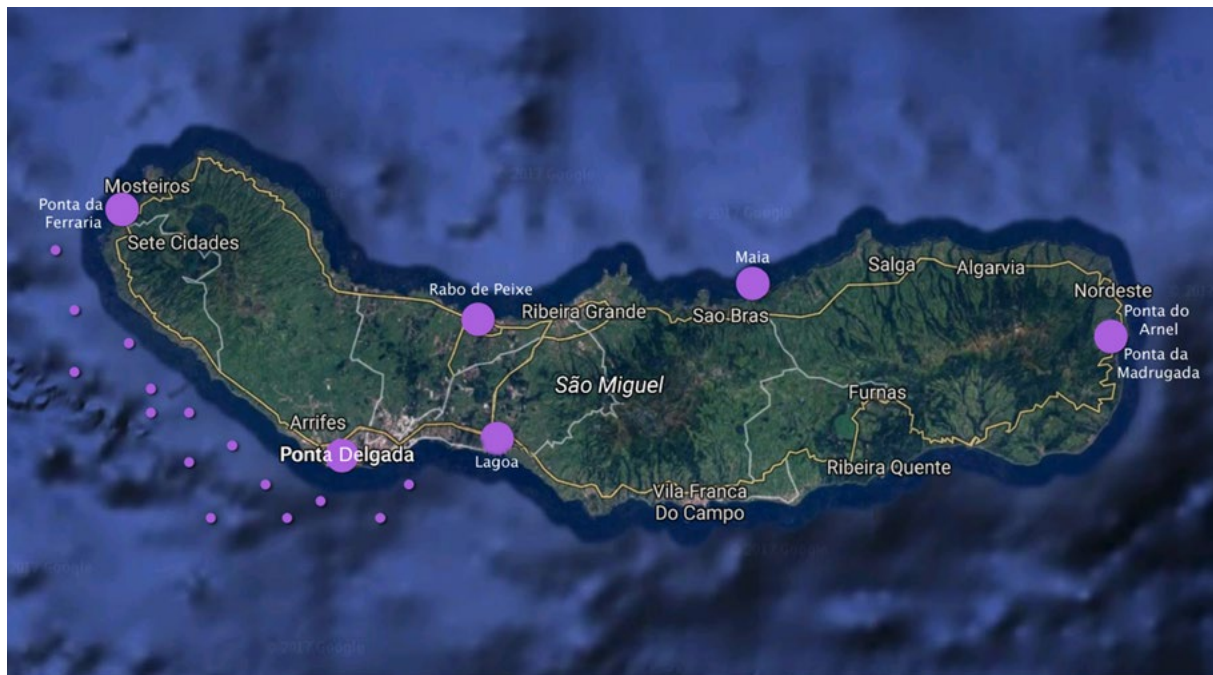
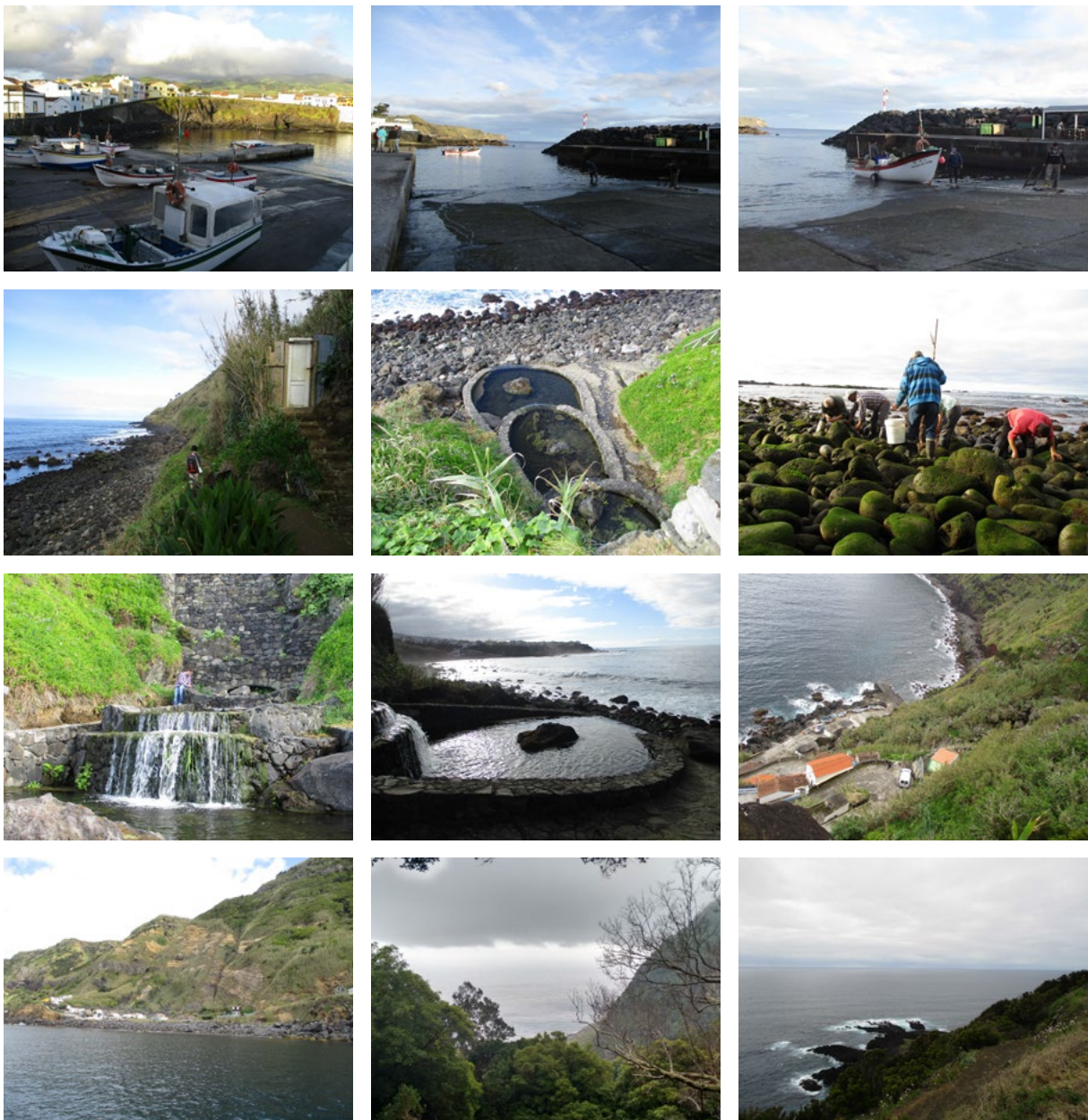


Figure 14. Map with sources location.

5. Field Recordings

The idea then was to soundwalk, background-atmospheric listening, and recording coastal places with particular natural acoustics. The workshop was proposed as an educational tool to develop conscious listening and acoustic sensibilisation. It was engaged as a way to generate a sonic connection with the surroundings, and as an incentive to care and explore further the acoustic environment. Architecture students were too busy, so I only managed to get a couple of them to come along for a journey in Maia. We basically explored differences modes of listening with the ear and with binaural microphones. “The ear and the microphone are the starting points for the soundscape composer. They are two quite different tools with which we gather our sound materials and our listening experiences”, as it transmits different information about the soundscape and often changes recording/listening practice (Westerkamp 2002). In this place, besides fishing, there were people crab hunting and scuba-diving. In

ancient times, women used to wash their clothes in a beautiful volcanic stone construction of water tanks and small cascades, through which a river flows down to the sea. Curiously it also created some sort of amphitheatre where the sea waves resonated with great force, playing with the water falls' sounds. I felt that our senses were clearly washed up with this experience. The students seemed satisfied. After the workshop, I continued fieldwork on my own, and went on recording other places: Rabo de Peixe, Lagoa, Ponta da Ferraria, Nordeste, Ponta do Arnel, Ponta da Madrugada and Ponta Delgada.



Figures 15–26. Places recorded.

6. Soundscape composition

The emergence of a piece is not unlike getting to know a soundscape itself, its rhythms and shapes, its atmosphere. (Westerkamp 2002)

After two weeks of fieldwork, soundwalking and recording, my ears started to adapt to the harsh climate changes and strong winds. I finally got the feeling that I embodied the island and the island embraced me. Still my overall feeling was that this place raised a sense of how small and vulnerable we are. A deep listening experience arose from a powerful soundscape of ocean waves, human voices attuned to their territory, peculiar chanting of endemic birds (such as *cagarros* and *prioulos*), extremely loud airplanes, church bells, cow bells, noisy motorcycles and milking motors; resounding through the wind, fog, low clouds, rain and the reverberating acoustics of volcanic stones, volcanoes' craters, cliffs and harbours. The resulting material was as a mix of dominant frequencies and sonic landmarks; and specific sonic effects generated by particular acoustic qualities of certain places, rather than specific sounds (LaBelle 2010, Auinger and Offenhuber 2013). I felt my soundscape composition was emerging as alive matter and dynamic sonic beings. This was already so intense that I decided to only subtly highlight the essence of this place's life with its own energy and forces at work. So I composed the field recordings into specific frequencies sequences, to reach acoustic and psychoacoustic effects in its spatialisation; fading one into another, with no digital effects processing.

I did also a compilation of fishermen's interviews, to provide a contextual testimony of their current situation. This soundtrack was presented as a separated piece to complement the soundscape composition, which the audience could listen to attentively with headphones.

7. Tuned and modulated ambiance

For the soundscape installation, my question was how to create resonance between audience and composition. I decided to leave the old boat to recycle in the harbour, instead of moving it to a central place in the city. It seemed to me relevant to attract people to the harbour, to get to know the reality of this part of the city. In this way, the urban intervention would extend the acoustic ecology of that place, in a relation of continuity to its context. So the acoustics of the harbour would amplify the whole soundscape experience. The boat was intentionally inclined with the help of fishermen, so that when the audience stepped in would feel slightly unstable, and would had to reach for a different state of equilibrium, in a similar way as when we get on a boat floating above water. I remembered that it was this search for balance and references that switched my senses interplay and produced a sensorial reset. When seated, the whole body would be emerged in the soundscape, facing the water, receiving a fresh sea breeze with a smell of fish. I find that Jean-Paul Thibaud

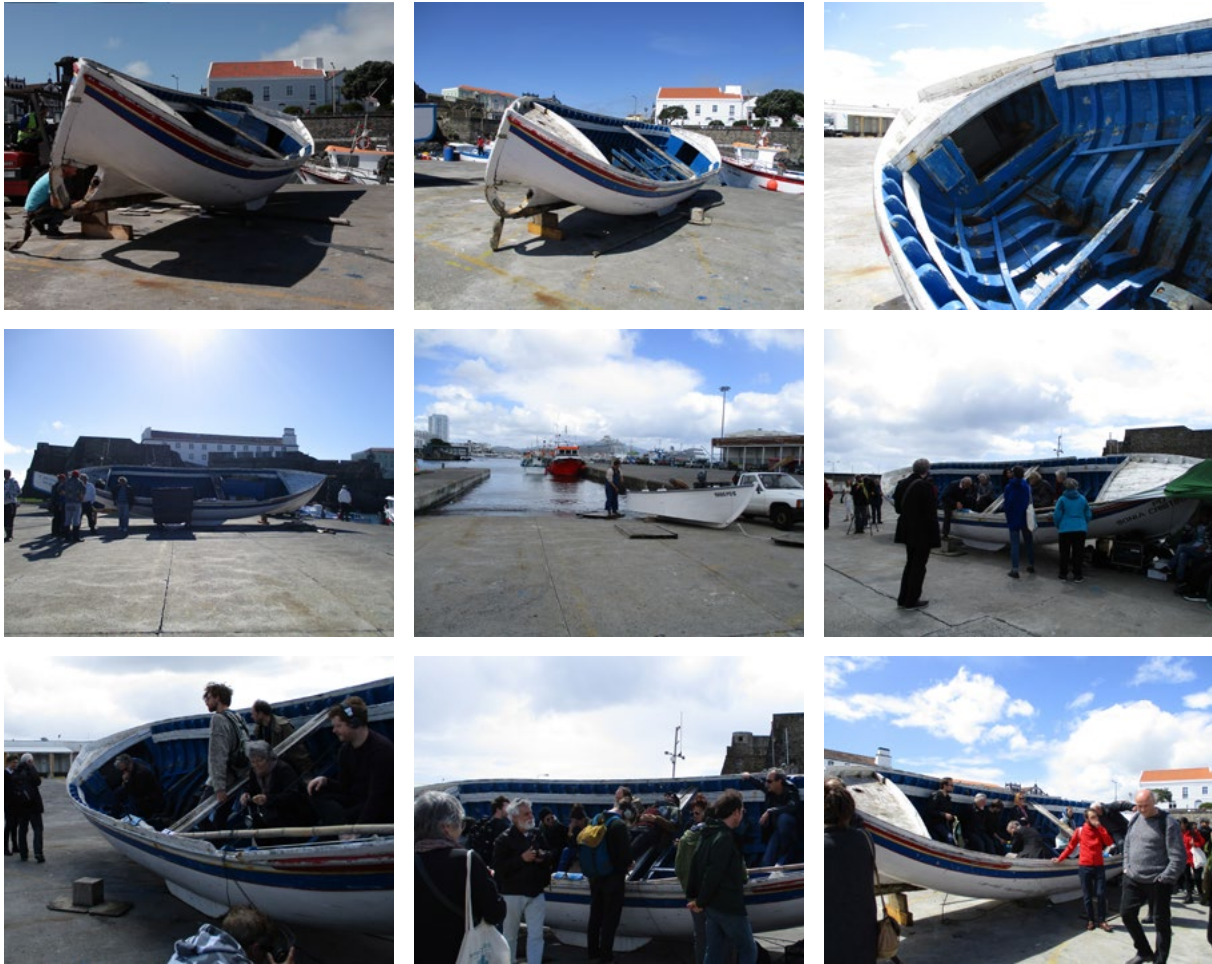
description of tuned and modulated ambiances fits well my intervention. For him, a tuned ambiance “emerges as the place is brought into tune with the conduct it supports” and therefore engages “an ecology of the lived world”. And a modulated ambiance involves slight variations of the sensory context of the place. So what is left fluctuates over time and varies in line with activities. It engages “an ecology of situated perception”. In this sense, by tuning and modulating the harbour place’s ambiance, I experimented “a form of receptiveness that links up with specific corporeal states” to bring “the senses into synergy”, involving the emotional aspect of the situation (Thibaud 2011, 45).



Figures 27-29. The harbour ambiance.

8. Acoustic boat shell

I cleaned the old boat full of holes that was left abandoned and filled with trash. It was brought to life. Recycling an old boat was also a way to valorise traditional wooden boats’ heritage, which is disappearing. Even fishermen that passed by ignoring it everyday since four years, started to look at it, stepping inside of it and talking about possible uses to recover “such an old and rare beautiful boat”; “perhaps we could put in a sail to take tourists for a sailing tour”, they commented. I was very glad already that this was generating discussion among fishermen. For the purpose of my intervention, the shape of the boat wood structure was perfect to generate a resonant aural architecture, with no need for modification.



Figures 30–38. Installation and public presentation.

As I have initially described, the question of affect in experience is central to my aural architecture research. This acoustic boat shell also aimed to generate a tangible experience of some kind of unified field, through a subtle amplification of material vibration with resonance frequencies. So I spatialised the soundscape composition with natural acoustic effects, in relation to its frequencies spectre and the boat wooden acoustics. Wood is a material “with a strong ‘live’ quality. Somehow it always seems to respond, to resonate” (Leitner 1998, 299). Space’s resonance magnified environmental sound and entered into vibration with the audience’s body and mind. Resonance triggers psychoacoustic effects, such as the emergence of affective attunement, or the feeling of being vibration, as a living dynamic relation with another being, through a participative process (Stern 2004, Massumi 2008, Morton 2014). So on one hand I explored how to create an experience of bioresonance and attunement drawing from Martin Heidegger’s notion of *Stimmung*, that describes it as a way of relating that “draws up into beings as a whole” (Risser 1999, 43). But on the other hand attunement can also affirm difference and be receptive to non-human “qualities, rhythms, forces, relations and movements” (Stewart 2011). For this reason, I explored the idea of activation of affective attunement through the collective experience, where “difference may

be found in unison” (Massumi 2008). The experience would unfold and modulate affect as microperceptions from the same constructive suspense. All bodies would be attuned but all might be distributed differently, depending on the tendencies and capacities of each of them (natural, cultural).

As a result, the soundscape resonated with the boat’s physical structure and the audience, into an aural travel experience, as in the middle of the sea – surrounded by sounds. According to the testimonies transcribed below, it seems that this aural architecture set up opened up different degrees of affect and a diverse range of experiences of attunement: with them selves, with others, the fishermen, vibration, the boat, the sea, the harbour’s place or the island.

I loved the feeling of the mixture of the outside sounds with the soundscape composition, there were resonance frequencies happening, I felt quite immersive, a physical experience of sound.

I’m feeling slightly dizzy from this experience. I wonder if it was because of the angle of the boat and the vibrations... When I got back to the ground, I actually feel like I have been at sea.

I felt I was part of a working energy, constantly surrounded by this motor sound, which was interesting, because I think we often forget about that presence. I wonder if the fishermen and the people would also forget about that sound. It is a barrier between us and the water experience. It comes out really clearly here.

I’m still feeling emotional. I wasn’t when I was on the boat, but I’m feeling it now.

I listened by getting in the boat and outside the boat by putting my ear to the wood. Quite different experiences of course. It’s really nice to hear the water bubbling through the wood... a close idea of what it would be like, to be at sea...

I felt a bit sick, you feel movement, as if the other boats around are moving.

It was like being on a real boat over water, some sounds are really taking you inside the water space.

I liked the angle of the boat, it turned into a big sound system. And I liked the interaction with other people.

You're just there with the fishermen, in the sea.

I felt I was living your experience at sea. I was inside the vibration, it feels like it is really happening for real.

Peaceful, then violently sick, then peaceful again.

I liked the boat angle, I laid down looking at the sky and felt like I was sailing...

I liked how the work is done with the fishermen, you can feel there is a respect for their work, for what they do. Not like someone that comes from outside, takes things, uses them and goes away. On the opposite, it feels like you were working together and doing something with the community. It seems you tried to learn from them, and for a continuity with it.

We need to have this kind of experiences permanent in public space, its really important to share this longer, to be part of everyday life.

The choice of the boat made all the sense, not just an obvious thing, but for the place where it was placed, the angle, the relation with the water, how it resonated, how you could go on the back and hear how wood resonates sound... I liked the particularity how the boat wood structure resonated the sound of the sea so well and took me on this travel...

As the soundscape composition was composed for a specific aural architecture, the experience is not reproducible through audio documentation, because the acoustic effects could only be heard and felt in that situation. Nevertheless, you may listen to the soundscape composition here: <http://spacefrequencies.org/2017/04/07/shores>.

9. Continuity

After this wonderful residency, I believe this project was just a beginning of what can be a fruitful collaboration with fishermen communities, and so does Liberato Fernandes from fishing cooperative Porto de Abrigo. I hope I can go back to São Miguel, to do a workshop with children from Rabo de Peixe school for listening and recording their families' fishery

activities. Resulting from this work, I would like to co-create a permanent acoustic boat soundscape installation with a local wooden boat builder, for Rabo de Peixe public space, and for its community's appropriation with their own cultural activities.

ACKNOWLEDGMENTS. The fishing community of Rabo de Peixe, master Paulo Sousa and his companion of the boat *Lisboa*, shipowner of the boat *Sónia Cristina*, Liberato Fernandes and the Cooperative Porto de Abrigo, Lotaçor SA, Portos dos Açores SA, students from the department of Architecture of Azores University, and the Municipality of Ponta Delgada.

REFERENCES

- Abram, David.** *Speaking with Animal Tongues*. Available at <http://acousticecology.org/writings/animaltongues.html>, 1996.
- Auinger, Sam and Offenhuber, Dieter.** *Urban Configuration and the Soundscape*. Available at <http://www.stadtmusik.org/wp-content/uploads/2013/03/Configurational-Aspects-of-Soundscapes.pdf>, 2013.
- Bennett, Jane.** *Vibrant Matter, a political ecology of things*. Duke University Press, 2010.
- Blessner, Barry and Salter, Linda-Ruth.** *Spaces Speak, Are You Listening?* The MIT Press, 2007.
- Carpenter, Edmund and McLuhan, Marshall.** "Acoustic Space." In: *Explorations in Communication*, pp. 65-70. Boston: Beacon Press, 1953.
- Drever, John Levack.** "Soundscape composition: the convergence of ethnography and acousmatic music." In: *Organised Sound*, 7, pp 21-27 doi:10.1017/S1355771802001048, 2002.
- . "Silent Soundwalking: an urban pedestrian soundscape methodology." In: AIA-DAGA 2013, the joint Conference on Acoustics, European Acoustics Association Euroregio, 39th annual congress of the Deutsche Gesellschaft für Akustik and the 40th annual congress of the Associazione Italiana di Acustica. Merano, Italy. Available at: <http://research.gold.ac.uk/8655>, 2013.
- LaBelle, Brandon.** *Acoustic Territories: Sound Culture and Everyday Life*. Continuum, 2010.
- Leitner, Bernhard.** *Sound:Space*. Cantz, 1998.
- Massumi, Brian.** "Of Microperception and Micropolitics," In: *Inflexions* No 3. Available at: http://www.senselab.ca/inflexions/volume_3/node_i3/massumi_en_inflexions_vol03.html, 2008.
- Morton, Timothy.** *Attunement*. Available at: <http://ecology-withoutnature.blogspot.pt/2014/11/attunement.html>, 2014.
- Pallasmaa, Juhani.** *The Eyes of the Skin, Architecture and the Senses*. John Wiley & Sons Inc., 1996/2012.
- Risser, P.G..** "Landscape ecology: does the science only need to change at the margin?" In Klopatek, J.M. and Gardner, R.H. (Eds.), *Landscape ecological analysis*, pp. 3-10. Springer, 1999.
- Schütz, Alfred.** *Making Music Together: A Study in Social Relationship*. In: *Social Research*, 18, pp. 76-97, 1951.
- Stern, Daniel.** *The Present Moment in Psychotherapy and Everyday Life*. W.W. Norton, 2004.
- Stewart, Kathleen.** "Atmospheric Attunements." In *Environment and Planning D: Society and Space*, Volume 29 Issue 3, pages 445-453, 2011.
- Thibaud, François.** "The three dynamics of urban ambiances." In LaBelle, Brandon and Martinho, Claudia, editors: *Site of Sound, of Architecture and the Ear*, pp. 43-54. Errant Bodies Press, 2011.
- Westerkamp, Hildegard.** *Soundscape Composition: Linking Inner and Outer Worlds*. Available at <http://www.omroep.nl/nps/radio/supplement/99/soundscapes/westerkamp.html#lecture>, 1999.
- . *Linking Soundscape Composition and Acoustic Ecology*. Available at https://www.sfu.ca/~westerka/writings/page/articles_pages/linking.html