Dolphins, Spectograms, and Scorescapes: an interview with Yolande Harris

morgancurrie | 13 October 2009, 6:04 pm

Did you know Herman Melville's sperm whale was silent? That's because he wrote *Moby Dick* in 1851, seventy years before bioacoustic devices revealed that whales, insects, and other seemingly dumb creatures create sounds beyond human hearing range. So what other sounds exist out there, unknown to our limited senses?

Sound artist Yolande Harris's complex work explores this aural frontier, along with the several technologies that define it. For *Sun Run Sun* (2008), she built handheld, mobile processors that converted satellite GPS information into electronic pulses. As the audience walked around with these processors and a set of headphones, they experienced the cityscape to a soundtrack composed by invisible machines floating miles overhead.

I attended Yolande's lecture on her latest work-in-progress, *Scorescapes*, at DNK at Smart Project Space on September 14. The short presentation employed a mesmerizing range of original material: spectograms visualizing dolphin songs and the sound of rain, a recording of Alvin Lucier's chamber echoes, videos and underwater audio, historic texts. The overall effect was a poetic collage, accumulations that didn't neatly tie up, a non-linear proposal that still managed to resonate with strong aesthetic cohesion.

(Still from "The Pink Noise of Pleasure Yachts in Turquoise Sea")

I sat down with Yolande for an interview, to find out more about where her project is going and where it came from.

You're currently working a lot with water. Where did this interest come from?

I've been working with water, coastlines, the sea for a long time, and now I'm investigating underwater and particularly the human relationship to it through sound. Our relationship to the oceans is bound up with technological developments and extensions that enable us to survive, so the way we're mediated through technology is especially highlighted at sea and particularly when we go underwater. It also extends an idea of making something audible that's otherwise inaudible to humans, something that's increasingly important in my work – I worked with satellites to achieve this aim in *Sun Run Sun*.

I read that you came back recently from visiting a group of scientists at UPC's bioacoustics lab in Barcelona. What was that like?

Well, I was interested in this group because they specialize in underwater sounds, and the interaction between anthropogenic noise, biotic sounds (like animals and fish), and abiotic sounds (like waves). It's an applied bio-acoustics lab where they really work with the materials and sounds, building instruments and developing specific technologies to test at sea, and developing real solutions to change problems of underwater noise. I approached the Lab not as a scientist but

as a composer. I wanted to understand how scientists work daily with sound, find out what their processes are, and how they relate to the methods and processes a composer uses to deal with sound.

I arrived at a working fishing harbor, two towns south of Barcelona. Walking into a small house, the doors and windows wide open because it was so hot, seven people were working with the head scientist Michel Andre. The bathroom had fishing tanks and wetsuits, the kitchen was kitted out as the biology lab and an 8 meter long hydrophone array snaked through the house. Outside was a boat / buoy fitted with hydrophones and wireless transmitters to stream live sound over a distance, and there were two big water tanks for researching sound and cephalopods, the family of squid and cuttlefish.

Your work is concerned with breaking down long held ideas about anthropomorphism. I'm thinking about the part of your lecture that mentioned Melville's time, when people thought whales didn't make noises. Now we know they have a complex language.

Right – one way to put our anthropocentrism in perspective is to think about the physical limits of human hearing range and that a lot of sound occurs outside of it. We're making sounds we don't even hear, that affect ecologies, birds and insects and underwater animals, that are impacted dramatically and in negative ways by the noises of our activity, including military research, industry and tourism. Once we start to understand how little we are able to hear in the overall sound spectrum, we can't help but shift away from an attitude that we're the central creatures on earth. And then we can learn from the immense and complex sound interactions and behaviors that make up these interlocking ecologies of which we are only a part.

Your ideas about scoring music are so unconventional. How do you define the word 'score'?

A musical score is basically an interpretation of sound into image and back into sound again. It involves transduction across different media. In its most open form it's really about communication and interpretation. With developments since the 50s and 60s, including electronic music, improvisation, recording technology, and intermedia works, traditional western notation became too limited to use, and notational scores as a communication between composer and performer were redundant. But my idea is that the score can be a key conceptual tool for these very forms of music, rethinking the relationship between composer and audience, the audible and inaudible, particularly in the complex area between sound and image and interpretation across media.

The underlying concept of *Scorescapes* is to rethink scores as a means to activate and define our relationship to the environment. This theme runs through my earlier work [*Taking Soundings* and *Sun Run Sun*], starting around 2006, that explored navigation, mapping and the environment. One way to know your location is by relating what you see in your environment to a visual representation of it in the form of a map. What happens when you turn that process into sound?

This led me to experiments with sonic navigation including research into how cetaceans and other animals like bats navigate, how they build up what we think of as 'images' of the environment primarily through sound. That's one of the basic ideas behind *Scorescapes*.

You're working with so many disparate media: sound, still images, video, lectures, historic texts, contemporary theory, technology. What processes do you go through to synthesize all of this?

Well for me, these aren't all separate; they're all part of the same idea. Yes, the materials and the formats are different between theory, sound, image, performance and lecture, and I do present them separately. But for me it doesn't quite work as well – what's more interesting is how they all fit together. The main trouble is that they're institutionally, culturally and therefore formally, split. Traditionally, musicians only work with sound, visual artists work with the image, et cetera. With *Sun Run Sun* for example, I presented it as an installation, walk and performance, and I also gave lectures. Different sides of the same ideas came out through multiple formats of presentation. [you can read about *Sun Run Sun* in the interview (pdf) with Annet Dekker published by Virtueel Platform.]

Also, I develop each element out of a long working process, not like making a collage or mix of found objects. I prefer to work intuitively, from my own direct experience of the world. There is an enormous difference between putting a hydrophone in the water to make a recording, than getting a sound recording off the Internet. To make a recording yourself, you have to go through the processes of selecting a location, and learning to use the technology optimally. It's this interaction between place and technology that make up the experience and provoke unexpected perspectives on environment. For example, there's a gap in perception between your ears and eyes when listening to something underwater and looking at the surface from above.

The spectogram image of the dolphin, for example, came out of a year's worth of research. A spectogram is a way of visualising sound files by presenting frequency and amplitude over time. After initial research, I developed a proposal to work with Michel Andre at the bio-acoustics lab, then I had an artist residency at the Atlantic Center for the Arts in Florida with composers Alvin Lucier and David Dunn, where I created an opportunity to record dolphins in the wild. After that I visited Michel and discussed how as a scientist he works with spectograms. Finally, I did a small residency at STEIM in Amsterdam, where I worked on my own sound recordings, experimenting with creating spectogram images that looked like their sounds.
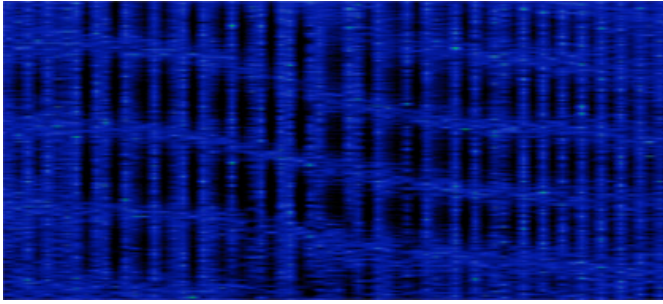
(Image of dolphin eco-lating)

Technology plays such an important role in your work. You make your own devices, right?

Yes I've designed my own instruments. Interestingly, there's a long history of both musicians and scientists making their own equipment.

The conceptual motivation behind my instrument design is my idea of 'techno-intution'. Techno-intuition aims to absorb technologies and techniques into an intuitive way of moving through the world. Much like a musician and their instrument, you use these technologies so much that you can absorb them as an extension of yourself. Think about sailing a boat. The boat itself is an extension of the sailor, a complex of wind, working with ropes, feeling your balance. Rather than thinking consciously about what you're doing, you're actively doing it. The two ways of thinking and being in the world seem oppositional, often because technologies are not designed with this in mind. A clear example is the way GPS navigation systems tend to overrule peoples ability to navigate, which is why the *Satellite Sounders* turn this GPS data into sound to provoke a re-experience of navigation.

(Satellite Sounders)

I think that our ability to create and adapt to new instruments, technologies and tools has ironically meant that the technology becomes the determining factor that dominates our ways of thinking, behaving and developing. The goal with techno-intuition is to get over a blind faith in technology, and encourage an attitude to development that maximizes our physical and cognitive abilities. It's not simply a romantic notion of going back to a time before technology, as if this were even possible! Instead it leads to an idea of technological development that's ultimately more sustainable and environmental.

I'm thinking about your work in relation to new media studies. Do you think we're shifting from privileging text into privileging images? Where does that leave sound?

Sound isn't thought about enough, and it doesn't work like an image. Sound is durational, spatial and contextual. Think of it more as a field. Working with sound reveals a different side of life.

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