

Aiming for Dead Reckoning

Yolande Harris

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in conversation with
Annet Dekker

Yolande Harris uses sound and image to navigate and explore natural and built environments through scores, maps and instruments. Her work is currently supported by the Netherlands Fonds BKVB and she has been artist-in-residence at STEIM, Academy of Media Arts Cologne, the Jan van Eyck Academy, and the Netherlands Media Art Institute, where she developed *Sun Run Sun*. Her work has been presented at major venues internationally, including MACBA, V2, NIME, ISEA, Picnic, and UCLA. She is a PhD candidate in composition at the Orpheus Institute, Ghent. Her publications include *Inside-Out Instrument* (2006) and *The Building as Instrument* (2007).

ANNET DEKKER

You studied composing. How did you get involved with digital media?

YOLANDE HARRIS

When I studied musical composition and performance I was interested in sound as a material and in different forms of musical notation. I was also working with ideas of communication through scores and the nature of an absent public in walking and sailing performances. I looked for broader ideas and techniques for composition and began to explore electronics and digital media for manipulating sound and image and the relationship between them. I was experimenting with ways to incorporate electronic and recorded sound and video into a composition so I could perform it in a live setting. This led me to electronic instrument design, learning how to control and design for those elements of sound in real time in a meaningful way.

Another part of my background is in architecture and video. I looked at relations between architecture, moving image and sound, how to describe a space through sound, video and movement, and how to use these as architectural or performance materials. Once these 'immaterial' elements become the main material of my work, other physical descriptions of space tend to fall away leaving only the experience of a space.

Looking back, it's interesting for me to see that my early sailing and walking projects for absent publics, particularly the *Sargasso Sail across the Bermuda Triangle* in 1997, introduced me to practical technologies of navigation and communication



Satellite Sounders (2008)



at sea. I can trace the ideas of sonic navigations in *Sun Run Sun* back to these explorations where technologies have a day-to-day practical consequence. This is how I see digital media in my work, as an integral part of the nature of the work.

AD

You describe your latest project *Sun Run Sun* as follows: '*Sun Run Sun* investigates the split between the embodied experience of location and the calculated data of position. A series of portable personal "instruments", the *Satellite Sounders*, transform satellite data directly into a sonic composition. This composition constantly varies in response to the changing location of the participant as they move through their physical environment. The participant/navigator's experience of their own locational shifts are augmented by corresponding shifts in the electronic soundscape, as it is calculated/performed in real-time and played via headphones. *Sun Run Sun* explores the individual experience of current location technologies through a personal experience of sound. It seeks to (re)establish a sense of personal connected-ness to one's environment, and to (re)negotiate this through an investigation into old, new, future and animal navigation using sound.'

You bring up some very interesting and relevant issues: satellites, composition, navigation, and embodied experience. What was your inspiration to start *Sun Run Sun*?

YH

One of the themes in the project was to look at navigation in terms of what it means to know where you are and what it means to get lost. The very process of navigating used to be done by observation of the environment. These observations have been made redundant now that we have devices that tells us where we are and how to get from one place to another. Many people actually transport themselves from A to B with no idea what or where they're driving through. And when the device breaks down – which it sometimes does – they're lost.

Imagine you're out at sea, out of sight of land, without GPS. You would be navigating by celestial navigation techniques using sextant charts and the stars and observation of the

weather changes. With good technique you would be able to know where you are with reasonable accuracy. Now with GPS, you have constant coverage. You know where you are; you have a constant trace. You don't have to calculate anything or manually plot it on a chart. You have your location so simply. It strikes me that you could ignore those other elements in an extreme feeling of false security, because you 'know' where you are, even far out at sea. So if the GPS loses contact or breaks down, you could be more lost than ever before. There are different ways of knowing, and knowledge of ones environment and the ability to navigate were closely tied together. But consumer GPS technology seems to have split navigation from the environment. It's a complete lostness, a different lostness. The detachment from place, which is provoked by the technology, is very fascinating. I don't think it has actually happened before.

It's very easy just to rely on what is given and people are extremely adaptable, readily absorbing new technologies. I'm sure that GPS in this navigational age has pushed us forward and has enormous potential. But I think at the same time we risk losing a lot of what we already know, compromising a fundamental engagement to our environment. In *Sun Run Sun* I'm working towards a hybrid between these two ways of knowing, between navigation through technology and intuitive embodied navigation – a techno-intuition.

In terms of *Sun Run Sun*, I wanted to look more deeply into landscapes and environments in relation to sound and new technologies. Somehow landscapes and environments were topics hardly discussed in the art or media art world. One of the most prominent things that emerged from my research was the navigation idea; one way of relating to an environment is through navigation. The act of moving through the world includes observation, calculation and technological engagement. Of course, I was looking at maps, charts and notations of sound and landscapes, researching the relationships between scores/musical charts and maps/navigation charts. But visualising the satellite data in an image doesn't have the effect that

I'm trying to reach. It puts you into a viewing mode that sucks you into a space other than the one you're in, you're looking at the GPS screen rather than the physical world around you. The whole point for me is to experience a space that you're submerged in. Images, like maps, translate navigation onto a flat surface, whereas using sound immerses you in the space, a space that's continuously developing.

I think that navigation technologies are provoking a very superficial understanding of environment and movement through space, and in doing so we're losing something specific in our physical and emotional relation to these environments. So I try to push this project in the direction of providing an experience of the physical and data environments that is more intuitive and more directly experienced.

AD

Sun Run Sun consists of several different outputs: a performance, an installation and a walk. Why did you make these different forms of presentation? What is the relation between them?

YH

Sun Run Sun has been an in-depth exploration into various navigation techniques and our relationship to sound and the environment. When navigating we try to locate ourselves by referring to an external source - traditionally a map, recently a GPS device - but ironically a serious sense of dislocation is becoming a common experience. *Sun Run Sun* was an attempt to look into ways of re-locating and re-negotiating our sense of where we are specifically through the use of sound. By using sound rather than image, I hoped to encourage an experience of environment that is more immediate and less referential, more intuitive.

Sun Run Sun covers a conceptual area that is inherently expansive about experiencing and moving through the environment. Rather than confine this area of ideas to one form or medium, the different manifestations of the project allow both me and the audience to explore these experiences from different angles. The pieces are recognisably similar in their sound world and conceptual and technical building blocks. For me it is a challenge to see

how malleable the content is when presented in these different ways. To lead a group of people through a thirty minute performance makes different demands on me as an artist and provides different audience experience than an installation space with a considerably stretched time span or an instrument for a one-person walk. It both forces and enables me to give that content a different space and a different focus.

So the outputs of *Sun Run Sun* have separate names that reflect their specific focuses, but at the same time they feed into each other. For example, my own walks collecting GPS data are reflected in the walking done by the audience when experiencing the *Satellite Sounders*. The installation *Dead Reckoning* functions as the complementary inverse of the Satellite Sounder walks. The performances *Amphibian* and *Sun Running* combine my lead as a sonic navigator with an invitation to audience members to create their own live performances by walking. And the talks and lectures provide an opportunity to expand on the background ideas and influences. This synergetic weaving in and out of the different manifestations of the work is a way of encouraging the depth of the ideas behind *Sun Run Sun* to be explored rather than confined. It is also a way to explore the different roles of the audience and the artist, and at the same time to question the 'containers' of installation, performance and walks that are in most cases pre-defined by external factors like institutions, festivals, budgets...

AD

Why did you use the title *Dead Reckoning*, a navigational term, for the installation?

YH

During this project I have researched different historic and contemporary navigation techniques, from coastal navigation, to celestial navigation in open sea, as well as techniques of the Polynesian navigators who use observations of stars and sea state to cover large areas of open water. The title *Sun Run Sun* comes from a celestial technique of observing the sun at noon using the sextant. 'Dead reckoning' is another navigational term and refers to a technique of estimating one's position by

YH

calculating from speed through water, compass direction and any drift factors like tide or wind over a given period of time. I've noticed when sailing out of sight of land, that the boat appears to stay in the center of a circle, always the same distance from the horizon, as if not moving. It is only the sensation of the boat moving through the water and the calculations of navigation that contradict this peculiar feeling of stasis.

Vital for the project is the idea that to determine one's location at a given point, one observes things in motion. I am fascinated that our understanding of position emerges from movement, that a fixed location is established by relating to movement, and therefore that what we take as fixed and immutable is actually malleable and changeable. *Dead Reckoning* demonstrates the calculations of a fixed point by satellites that are in motion. The installation takes live data from a GPS receiver that is fixed in the space, and turns the data of the moving positions of satellites overhead into sound spatialised over six speakers hanging in the otherwise empty space. The stream of live GPS data is projected in black numbers running upwards on the wall between the windows, and reveals the calculation of the GPS as the longitude, latitude and altitude of the space continually change and drift in relation to the satellite data and its errors. The sound environment shows the room floating above the canal in Amsterdam.

And of course, the title *Dead Reckoning* has all sorts of connotations that I liked about negotiating a course between something complete, final and unchanging, and an open, live space of movement and improvisation. I was thinking of it as a complement, the inverse of the *Satellite Sounders* in its form and its way of experiencing the work. There is something about experiencing the *Satellite Sounders* that is about living, you moving...

AD

Yes they seem in some way totally opposite. How do you see this difference in space, in the installation and outside? How do you deal with and experience these different spaces that are related through technical means?

Well, walking with the *Satellite Sounders* situates you directly in the environment, the sounds, people, places. You can choose to focus your attention on the electronic sounds changing from the live GPS signal, or focus on the goings-on around you and the environmental soundscapes these create. The freedom to move between these two layers at will is important for the experience of the space and makes you relate to an everyday outdoor environment in an altered or heightened manner.

The installation space is an interior on the edge of the outside. The windows form the opening and the barrier at the same time. The space is closed and confined yet open and floating. You can move within this space and explore the sound moving through it and changing. It offers a different experience of time because on entering the space you must be aware that the work has been going in your absence, and that on leaving it will carry on. It is this extended time frame that I find interesting when exploring this material in an installation. You start to listen and experience that space on a very different level. You start to identify different sounds and how they are playing with each other, trying to hear what makes it constant yet constantly changing. (This approach has something in common with the music of very long duration by composers like Morton Feldman, Alvin Lucier). That is the kind of experience of space that I think the installation tries to get to.

AD

The *Satellite Sounders* are not about statistics but emotional and bodily transformations, a physical experience. Something that for me is completely different from the installation. Did you try to recreate this experience in the installation?

YH

I have a similar feeling in both. In the installation at the Netherlands Media Art Institute the windows are open in a space that is typically a black box. The space is empty and the placement of the speakers is such that they draw the audience towards those windows, with the projection between them. There is a physical focus on the installation's emptiness, the idea that you are moving towards the



Satellite Sounders (2008)

outside. I try to have people look out of the window, see the canal outside, see the location of the building not by pointing to it but by arranging the room towards it. The installation is a space of stillness in terms of bodily and physical engagement, which instead encourages a more meditative, contemplative engagement with the sounds.

AD

The installation is very open in an emotional way but at the same time very closed because of the barrier of the window, the walls; you can't escape and it's totally fixed. You have to surrender yourself to the experience, which also happens with the *Satellite Sounders* but in a different way, because as you are moving you become engulfed in the process of movement, which brings you in a different state. By contrast, in the installation the environment transports you to a different state. The relation and dynamic between the two is exciting. The performance is something totally different again because you are the performer that gives something to a large audience.

YH

In the two performances, *Amphibian* and *Sun Running*, I used the *Satellite Sounders* as a

Although I have begun research around this topic there is a whole series of issues I want to look into further. In producing a work like this, I had to become very specific, so minimal, in the kind of sounds, the experience of it, what things look like; the empty space with speakers hanging, the matte black *Satellite Sounders*. There is nothing colourful or tempting about the objects or the space. It seems almost to be empty and from this I really want to start looking for a deeper level of what that relation between sound and navigation might be, and language and communication and why we make this technology, how we potentially could use our own body and senses again.

I feel that this detachment of body and mind from environment, exemplified by the GPS, can be brought into focus through sound. The reason why I keep going back to water and amphibians and to what it means to float, is my interest in the bodies' physical memories. For example, I grew up on the cliffside in South Devon on the English coast, and regularly went back and forth to the shore. I can now go back in my mind and remember every step of that route over steep, uneven ground and everything about it; it's literally a physical, bodily memory that I have about it. That sort of recollection cannot happen in a virtual world. Another example: there is a physical state you experience on a moving boat which causes seasickness because you can't reconcile the balance and the shifting to your eyes and your brain. But once you make that shift you are constantly adjusting to the movement and can cross a boat without falling over. With examples like these in mind, I am really interested in keeping the physical space.

AD

The affect with space through technology is quite contested, I think *Sun Run Sun* is a very good example of how an affect with space and body is constituted via technology. Is this also something you're aiming for, or is it more a side effect?

YH

Yes, the role of the body, the physical, is key in the work's goal to make one aware of the body through technology. My hope is that

Sun Run Sun promotes the emotional and physical position of the body in environment, encouraging a bodily 'concentration' that might transcend notions of 'hybrid'.

That's why in this project I'm concentrating on the individual; your body becomes a focal point, from which you can't escape. In music, for example, we always had the musician to watch, somebody who was making the sound. This provided a focal point, somewhere outside of yourself. But the experience of music is very much an internal thing. *Sun Run Sun* (re)aligns the focus of music performance on the self.

I'm trying to present a phenomenon that one would not normally be aware of in a neutral way, leaving the interpretations to be made by the audience. I am not explicitly trying to manipulate a specific emotional or political response but open up awareness to one's surroundings. I've found that opening one's ears also opens one's eyes.

AD

How do you prepare people that go out on the walks with the *Satellite Sounders*? Is it possible to just let them go without any information or feedback possibility?

YH

It's proved to be quite a challenge working out how to present the *Satellite Sounders*. It seems to work best if I am present to hand out the instruments and give a short introduction to explain the concept behind it, my interest in navigational processes and the changing relation to environment. I then give a very brief introduction to the instruments themselves, that the components are only a GPS antenna, a small computer for receiving GPS data and processing it into sounds, and a battery all connected together and to the headphones. Finally, I ask them to walk, to explore, to pay attention to the sounds around them, to get lost and to return.

For me, the most surprising and rewarding aspect has been the reactions of people who come back with the *Satellite Sounders* and their openness to talking about their experiences. These conversations lead to a collective



experience that is very satisfying.

AD

The experiences of the audience direct already to what you briefly mentioned before – the split and connection between different spaces, worlds through technology. How do you see these different worlds – the real world where we are walking and the one that is invisible, i.e. the technological world (the satellites, the GPS system) – coming together, coexisting or is it more a reality jamming?

YH

Yes there is definitely a split between the nature of our experience of our immediate physical local reality and the superimposed abstraction of the technological sounds of location data, a feature I've consciously tried to enhance in this work. I leave the combination up to the attention of the participant.

But it does interest me that these geometric abstractions (in this case satellite data) are embedded in a considerably longer history than the technological moment we are in now, relating back even to prehistory, astronomy, calculations of solstice, abstract patterns such circles and triangles. Lucy Lippard's book *Overlay* gives an inspiring insight into the continuity of these processes in contemporary art practices of the 1960s and 1970s. In other words a level of the invisible is always present alongside the world we directly perceive.

AD

What is the function of sound, in this merging of worlds?

YH

This is an extremely important question with many answers. In *Sun Run Sun* sound is a catalyst for the experience, and shouldn't be approached as containing primarily musical meaning or symbolic references, or as a usable navigation aid. I'm trying to keep the sounds extremely simple. The idea is to use very basic and typical variations of electronic sounds to produce distinctive sound layers. They're like fundamental little sonic units, acted on by the data. The satellites connect to the GPS receiver every second. So there is a predominant rhythm, or various rhythms, that give the sound a certain quality. These rhythms are part of the data. They're not qualities that

I imposed on them, not my musical choice, but part of the material.

Sun Run Sun acts more as a provocation to let one's mind contextualise the everyday sounds and environment that we may not notice consciously. It gives a context, it forces a focus, it does this by adding to the total sound world but without claiming the attention of a piece of music to be listened to. Fundamentally the sounds make you ask questions of where you are and how you are moving and if your movements have any affect on the sound. Most people seem to expect that they will hear the movement of their position or location, but they primarily hear the movement of the satellites in orbit, which provokes a perceptual shift of perspective as the emphasis is not anthropocentric. I've said that navigation requires a correspondence between what one sees in the outside world and its representation on a map, and when this doesn't work one is lost. Likewise, the experience of sound is an internal process that influences the relationship between the self and the environment. Interestingly the use of sound in the *Satellite Sounders* often makes people comment that they see things differently...