Helen Thorington contributes a feature article on the evolving context for sound and radio practice, exploring networked media, participatory platforms and the sonification of every-day objects. An introducing to a series of Radio Art including recent work by Christof Migone and Sarah Washington.

What is Radio Art?

Radio art had a special meaning to those who created it in the US during the Eighties and
Nineties. From the most complex hi-tech studio productions to the raw energy of live and interactive broadcasts, these artists were predominantly engaged with subverting media conventions by presenting something other than familiar radio forms.

Thus while the work might use journalistic devices or dramatic conventions, it was neither journalism, nor drama; it wasn’t music either though it might be composed entirely of non-textual sound. American radio art was a vast array of different forms that recognised radio’s distinct means and parameters, and at the same time, its creative possibilities, how it might challenge existing social and cultural norms and create/fashion new ones.

Part of its appeal, as Claire Brilliant so aptly remarks, lay in the tension created when the experimental artist tried to subvert the medium’s mainstream status while simultaneously leveraging its capacity to reach a wide audience.[i]

In the mid 1980s, when I started New American Radio, a weekly series of half-hour radio art programmes by artists for American public radio, there was a stranglehold on channels of distribution; most people, and certainly most artists, were excluded from radio production, just as we were excluded from book publishing and music distribution. Across the US, Europe and the Pacific a handful of great radio programmes focused on radio art and experimental music – The Listening Room in Australia, for instance; Kunstradio in Austria; the Pacifica stations in the US. These, however, were the only places that sound artists could enter broadcasting and take advantage of radio’s mass distribution. And those of us who produced the programming for them, whether we liked it or not, were gatekeepers. There was no such thing as open access.

Today that stranglehold is broken. Personal computers and networked connections are everywhere; and anyone with a computer and a network connection has the capital required for production and can produce and distribute whatever he or she wants – alone or with others.[ii]

The radio scene has changed. Broadcast radio is shrinking under the flood of new technologies. And, as a friend recently remarked, ‘radio art as such seems to have vanished.’[iii] Or has it?

The Networked World: Radio meets Art, meets Life

In 1996 my organisation, New Radio and Performing Arts, Inc., extended its mandate to networked art (art that uses the internet as its medium and that cannot be experienced without it) and launched its Turbulence site. Turbulence commissions artists exploring the networked medium and originating innovative work for it. Several of the works on Turbulence reflect the changes taking place in production as a result of the internet. Prototype #44, Net Pirate Number Station by Yoshi Sodeoka is an online short-wave radio station that broadcasts numbers derived from websites. Software in the work goes out to websites of all sizes, grabs some text, converts it into numbers, filters the numbers and then transmits them to the listener using a prerecorded video host personality. Why a radio station that broadcasts numbers rather than music and news? The artist’s reply: ‘We hope you, the user, will look for meaning where there may not seem to be meaning… we want you to see the world in a new way.’

Still it was our blog, Networked_Performance,[iv] launched in July 2004, that brought home
the truth of the radical changes taking place as a result of the Internet and its spawn of new technologies. In 2004 the blog entries archived the practice made possible by the ready availability of inexpensive portable devices – wireless, mobile phones, PDAs, GPS cards, Bluetooth, and others. Computation was leaving the desktop and migrating to the street. It would now be carried in the hand, worn on the body, or embedded in devices and in the environment.

Further we observed that the work was being produced by a growing generation of programming capable artists, artistically minded engineers, architects, academics, and others – many of whom did not identify as artists – all repurposing objects from the everyday world, embedding unfamiliar functions in them.

A boxing bag plays meditative tones when struck; an American semi-tropical climbing Philodendron functions as an instrument in a musical ensemble; a park bench moves and sings; a goblet lights up when a distant friend or lover drinks from it; a wall is so sensitive to human presence that touching it sends resonant vibrations through the bodies of the room’s occupants; a darkened room responds to the aggregate breathing of its inhabitants and the lights rise, illuminating the space.

Why create work like this? Why embed alternate functions in familiar objects? The answer resonates with Sodeoko’s earlier reply: ‘We want you to see the world in a new way.’

As mobile technologies became more readily available, those interested in transmission ideas and broadcast tools began to take radio out of the studio: In *Soundpocket 2*, a huge oak tree, a sculpture, and a small pond served as local radio stations, transmitting internet radio streams; *Radio Cycle* broadcast stories, news and sounds directly onto the streets via teams of radio-carrying cyclists. *CUT-n-PASTE*, an Amsterdam women’s artist group, connected its listeners with a number of personalities in Amsterdam’s nightlife, transmitting their lives by the permanent open mike of their mobile phones to audiences via radio, the internet or into a performance venue. For eight days in September 2007, *The FM Ferry Experiment*, transformed the Staten Island Ferry into a floating radio station, broadcasting to the NYC region as it continuously traveled between Staten Island and Lower Manhattan. *Mobile Radio*, *Sarah Washington* and *Knut Aufermann’s* travelling radio and sound-art project was initiated, its mission, to seek out new forms of radio art by taking radio production out of the studio environment.

Some of these radio projects broadcast alternative content; some did not. All removed radio production from its original source in the broadcast organisation’s studio and put it in the hands of artists and other creative people.

**The Emergence of Sound Art as a Prominent Practice**

While the issue of everyday sound’s inclusion in the musical repertoire was settled by composers some time ago, it is only recently that we have seen sound-based artistic work flourish, with manifestations ranging from field recordings and sound tools, to immersive installations and computer games.

This rapid and diverse development is particularly evident in the emerging field of sonification. Data sonification – as described by *Wikipedia* – has long been viewed as a valuable tool for studying complex sets of scientific data by allowing researchers to perceive
variations and trends invisible to other analysing techniques; it has not been used extensively by artists until recently. Today, however, sound compositions created by the translation of data to sound are legion.

In August 2007, for instance, composer **Chris Chafe** let five vats of different varieties of tomatoes from his garden ripen to perfection. He and his collaborator **Nikolaos Hanselmann** recorded the ripening process by tracking the changes in CO2 that the ripening produces. Music was generated in real time by computer algorithms influenced by CO2, temperature and light readings from sensors in each vat. After the ripening, time was speeded up and a stand-alone computer music piece, **Tomato Music** was created. **Tomato Music** is then a sonification of seven days of ripening that takes place in the course of 49 minutes.

In an earlier work by **Miya Masaoka**, **Pieces for Plants**, a semi-tropical climbing Philodendron’s real-time responses to its physical environment were sonified or translated to sound by means of highly sensitive electrodes attached to the leaves of the plant. A human, the so-called ‘plant player’ worked with scored movements – proximity, and touch – to stimulate physiological responses in the plant. The ‘plant player’s’ interactions with the plant were then expressed in sound via midi and synthesiser.

German composer **Frank Halbig** used ice-core data – collected by the European Project for Ice Coring in Antarctica – to create **Antarktica: a climatic time-travel**, a concert for string quartet, live electronics and video, performed in 2006.

In 2004, **Andrea Polli**, a digital media artist living in New York City, sonified the summer heat in Central Park.

**DJ Spooky’s** most recent large-scale multimedia performance work is **Nova: The Antarctica Suite**, an acoustic portrait in which every sound is made from the sound of ice (environmental, geological, magnetic, atmospheric etc).

The list goes on and includes many projects where the focus is on sounds in our environment that are undetectable by the human ear: the sound of naturally occurring emissions such as radio signals created by the planet itself;[v] sounds intercepted from space; sounds of clouds – their size, moisture content transformed into musical sequences.

Still other works use the sounds of objects in our environment to create compositions.

In **Music for Rocks and Water** by **Cheryl Leonard**, performers play water and a variety of rocks which are ‘dripped, drizzled, poured, rolled, rocked, brushed, rubbed, stacked and even tickled’; sometimes they are played underwater.

**Peter Traub’s ItSpace** makes use of the sounds of household objects to shape a series of short compositions.

These sound works renew our connection with real life, with the objects and things around us, with the natural world, our environmental concerns, with our universe. As **Leigh Landy** writes,

> [they] offer a return to the connection of art and life because...[their] specific content creates experiential [and imaginary] associations linked with meaning by listeners.[vi]
People latch onto a sound’s perceived origin – they recognise it; they remember; and their memories fill the experience of hearing it again. These references bring the work close to daily life. They shape something we might call an interaction with the world around us, an experience of being in the world.

For many of us the flourishing of sound art is most welcome, signalling that the hegemony of vision may not be forever and that this enhancement of our sensorial experience will bring with it a deeper understanding of our relation, not just to one another but to the world we inhabit and all things in it, and therefore a richer experience of ourselves as perceiving subjects.

From my perspective, we can look on this as one of the true positives that the re-distribution of power across society and geography is making possible.

**We Together: Active Listening, Collaboration and Participation**

New technologies have developed since the networked_performance blog was initiated. Based on the observation that people go online not for pre-programmed material but to do things together, commerce has returned and established what we call social space: commercial content aggregators like like *MySpace, Facebook, YouTube, and Flickr*. Free and participatory in nature, they give users control of the media they produce and consume.[vii]

Non-commercial specialised sites are plentiful as well, sites like Jason Van Arden’s *BubbleBeats*, which allows users to combine colourful bubbles filled with music (or other sounds) to create new compositions. They are social spaces. As Van Arden says of *Bubblebeats*:

> It combines the addictive diversion of a casual game, the free expression of music, and the fun of participating in an active social network.

Free, fun, participatory, social spaces are fast becoming the next broadcasters (or perhaps narrow-casters). Activated by them, otherwise passive audiences are making new friends, composing and playing music, uploading videos and photographs, talking, sharing, exchanging, and perhaps most significantly, publishing and distributing themselves.

Virtual worlds offer other kinds of experiences. There, residents explore the technologies and social ramifications of synthetic, multi-user environments, The extraordinary success of virtual worlds such as Linden Lab’s *Second Life*, rests almost entirely on the decision the company made to support an openness within their 3D virtual world, to turn control over to users, to make it possible for any user to add almost anything to the environment.[viii]

Changes will not stop here. New technologies, new interests, new commercial ventures, will bring additional players to the networked environment, changing existing institutions and how they relate to experimental practices. The new environmental awareness, for instance, has already unleashed a wave of innovation in every category of technology – including portable music and video players.[ix] And, according to media futurist and author Gerd Leonhard, the music industry has undergone more changes in the last months than it has in the past ten years.[x] What lies ahead? Leonhard writes,

> … fully interactive, fully-share-enabled, full-length-tracks, will become a default setting
on the social networks…. regardless of the record industry’s ‘permission-denied’
tendencies…. …and they will broadcast to (and from!) those always-on, always-within-reach and
utterly personalised mobile devices fka [formerly known as] mobile phones, not just to
or from computers. Blogs will amalgamate with, and integrate into social networks.
Personal publishing will evolve to include entire ‘me-casting’ toolboxes. My taste, my
list, my ears, my audience, my artists, my, my network…[xi]

Access and participation define internet activity today. The nexus of experimental activity in
radio has shifted and because it has, it has opened doors for thousands whose voices were
silent before, and brought with it the possibility of a creative practice that, as Sodeoka hoped
for his i#44, Net Pirate Number Station, lets us see our world in a new way.

Helen Thorton, 2008

in Audio Art On the Air and Online

[ii] Yochai Benkler in The Wealth of Networks, Yale University Press, 2006 has discussed this
at length

[iii] Jacki Apple in a 4/18/08 email

[iv] http://turbulence.org/blog initiated by Jo-Anne Green, co-director of New Radio and
Performing Arts and the Turbulence website; Michelle Riel, Associate Professor of New
Media at California State University at Monterey Bay – and myself.

[v] see Robin McGinley proposal for an interactive sound installation entitled The Earth’s
Original 4.5 Billion Year Old Electronic Music Composition (A Work in Progress) which
explores an artistic approach to these natural phenomena. http://transition.turbulence.org
/networked_music_review/?s=robin+mcginley&x=10&y=8

[vi] in his introduction to Understanding the Art of Sound Organization, MIT Press, 2007

[vii] The observation that people were coming to the internet not for preprogrammed content
but to do things together, lead to the return of commerce to the Internet after the dot.com bust
and the establishment of social spaces

[viii] As Don Tapscott said in his book Wikinomics: In 2006, successful companies launched
open access platforms while the losers built walled gardens.

[ix] Artists are becoming increasingly involved in large infrastructure issues There are, for
instance, wastewater treatment systems designed by artists in park areas, such as the work
of Jackie Brookner.


(8 April 2008) Blogs will be Record Labels, and Bloggers will be the new Music Moguls. BlogJs anyone?

Foursome

A four-part Radio Art series by Christof Migone in which the artist translates Samuel Beckett’s wordless movement piece Quad, foregrounding incidental matter and the sonic by-products of visceral debris.

Hearing in Tongues

An eight-part Radio Art series by Sarah Washington exploring the roots of language, communication and consciousness.

Biography

Helen Thorington

Also read / view

Infrequency Podcasts

An ongoing podcast series of live performance recordings and artist commissions

Further References

Turbulence

New Media and Net Art Commissions by New Radio and Performing Arts, Inc.

Networked_Performance

Blog highlighting work in new media and performance by New Radio and Performing Arts, Inc.