The Architecture of Radio, Waves are Among Us

We are immersed in invisible radio waves, almost all the time. This is a matter of fact in every city or town, with scientific studies divided on the possible physical consequences. We can trace the visualisation of electromagnetic waves to analogue measurement devices, which treated this kind of information with mechanical measurements (a measuring needle going over a line). Digital measurement devices, on the other hand, are based on topographic maps that usually represent electromagnetic waves through the abstraction of figures and lines. The Architecture of Radio is an artwork in the form of an iOS app, developed by Richard Vijgen, which visualises radio waves by relying on the “global open datasets of cell tower, Wi-Fi and satellite locations”. Using GPS it shows a “ghostly” presence of waves, which become alive in the screen. The augmented reality effect it implements is aesthetically built to hide “the visible” (or the physical structure) “while revealing the invisible” (the waves).

Message Past Future, Corrupted Waves Tomorrows

Audio recordings of a voice evoke a person and also the period when the recording was made. Our analogue past, tapes were one of the most popular repositories for voices, as they were personal and non-media. Message Past Future installation by Adam Basanta is made with vintage portable cassette-tape recorders with modified cassette tapes all produced between the end of the sixties and the end of the seventies. On one of the tapes there is a quote by writer and professor Peter Drucker “the only thing we know about the future is that it is going to be different”, spoken here by a specific synthesis algorithm which was unavailable when the sentence was written (1973). The contrast between the used technologies (“vintage” in hardware and software) and the content, reinforce the sentence, but it’s hard not to notice a melancholic character, and also an admittedly contemplative one.

The whole machine can be experienced as coming from a past future that will never be.

CellF, External Brain Improvisation

CellF Brain Ben-Ary, “biological” brain divided into two parts. His project is to reprogramme the brain, join neural network, defined as the “external brain”.

Then he developed a robotic body to interface it with an array of analogue modular synthesisers. Both bodies, voltages are passed through the different components to produce sound or sound. In a performance by Ben-Ary, which was fed into the “external body” stimulations. The neurons responded by controlling the synthesiser. The degree of ‘human’ decisions in this performance is the main aspect questioned by Ben-Ary. We can go even further here and ask if the influence on human component in the production of music is any that sounds non-human.

But this is not just about intention – to live with those doubts while experiencing the reality he created.

20 Oscillators in 20 Minutes, Radically Performing Electronics

20 Oscillators in 20 Minutes is a performance by Darsha Hewitt, staged at the 2015 Chaos Computer Club’s Chaos Communication Congress. Hewitt builds twenty small electronic circuits with wires, chips, small components and nine-volt batteries in twenty minutes. The time element is obviously critical to this performance as it demonstrates a scale of forced human production that translates into a minimal orchestra of synthetic sounds. Hewitt is also facing live troubleshooting, which in turn she defines as “a method of musical improvisation”. The resulting work is part sound and part electronics production because the artist is working under time constraints and is therefore limited to very specific and economic gestures. An important part of Hewitt’s performance is to interact with the public, explaining and commenting, and even asking for help, culturally transforming a technical challenge into an implicitly collaborative social environment.