Abstract. Limits to Growth is a sonic parasite. It feeds off its surrounding auditory environment in order to make itself heard. Over the course of its infestation, its relationship to the environment changes. Interventions from invited artists, gallery staff, passing traffic and its own voice see the work ‘mature’ in situ, establishing a niche. The piece develops from something closed to something structurally coupled to the environment, where behaviours and transformations of sound are themselves driven by what it ‘hears’.

Keywords: sonic art, feedback systems, multi-channel audio, performance with installation

Description

Limits to Growth (LTG) feeds off the sound of its surrounding environment via four miniature microphones positioned around the space. It records and stores sounds at intervals which are then used and transformed as the basis for its utterances. LTG is designed to exhibit changing behaviour over the course of its inhabitation of a space. Initially, it is a closed system—simply a piece that sounds periodically; over time it becomes more coupled to its surroundings, such that both the nature and timing of its soundfulness are environmentally driven.

As an embedded artwork, LTG aims to draw listeners’ attention to the sounds that happen in the venue where it is installed. The sounds undergo this process in situ so automatically adapt themselves to the context in which they are found. This is not particularly interesting until you take into account the character of what has been heard and what is being played.

One the one hand, the piece makes an anarchic comment and intrusion into the environment it is in, regurgitating material based on what it has already heard. In this respect it could be argued that we ‘hear’ the voice of the machine, randomly exploring itself on its own terms. To some extent this is true, although this machine (like all machines) is not just algorithmically energised but also twisted toward the taste of the people who designed it.

There are two characteristics that impinge on one another. The characteristics of the sounds that occur in the space are integral to themselves and belong to the moment of their creation. As these are captured and played back, they begin to assume characteristics integral to these sounds being played back again in the space. The obvious links to these feedback and transduction processes align in some respects with Alvin Lucier’s and Agostino Di Scipio’s work.

What becomes important about this work is the way in which these comments on what has already been heard in the space are articulated and how they feed back in. The original content and context provide one characteristic shape, but these shapes are quantised and refashioned by the listening and playback tools we’ve designed and implemented.

Biographies

Martin Parker, 1975, UK

I think sound is at its best when you know what you’re doing but you don’t know what’s going to happen. I explore this idea across my work in composition, improvisation and sonic art by experimenting with sound technologies, people and
I teach a number of courses as Programme Director of the MSc Sound Design at the University of Edinburgh and am slowly developing a trilogy of pieces designed especially for performance in cinemas. I do a number of other things as well, have a look around this website to find out more http://tinpark.com. To learn about the MSc Sound Design, please go here: http://soundeducation.net. You can access some of my scores and music via online music publisher http://sumtone.com

Owen Green, 1975, UK

I enjoy making soundful systems that breathe and try, playfully, to adapt to their surroundings. Much of what I do involves making such system-compositions as a territory / provocation / instrument for improvising players (usually me, plus chums). I work at the University of Edinburgh teaching on a number of sound and theory based courses on the MSc Sound Design, as well as working as a freelance composer, sound designer and recording engineer. Check out http://owengreen.net for a selection of projects, sounds, videos and publications.