Breaking the Loop

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6 December 1997

Introduction

The record industry maintains its status in the global economy and its income streams by way of repetition. Repetition is the key to generating an audience of consumers for its product: music. Audiences dutifully purchase a representation of the music, which they then listen to repetatively in their homes, their cars, walkmans, bathrooms... anywhere one could conceivably place a speaker.

The record industry maintains its status in the global economy and its income streams by way of repetition. Music that is played over and over again so much that it creates its own audience that in turn purchases its representation to listen to it over and over again in their homes, their car-s, walkmans, bathrooms… anywhere one can think of to place a speaker.That's a loop: music that repeats itself in the lives of people, who in turn purchase what they hear, little knowing how much control the industries that stimulate and maintain this cycle exert, on listening.[There's no tie-up clause here: ie expecting you to say something else about "Music that is ..., is ...". Maybe just do something like "This is repetition of music that is ...." or leave out the "that"]

Breaking the Loop awakens us to the relationship between the consumer (listener) and consumed (composer/musician), and to a strategy exploring the emergent public space of the Internet for the delivery of artist-owned and artist-deployed works of sound.Imagine for a moment music that doesn't repeat, that is never heard the same way twice, that is somehow fresh every time it is performed. A new music genre, self-evolving and at present, difficult to commodify, is emerging.

Generative music is algorithmically driven [maybe use "is driven by mathematical formulae" sometimes?] to produce variation, ongoing evolution and development of sounds. Techniques for creating generative music are not new to composers, but ready access to the technology to produce and publish it widely is not.

Late 1995, a small UK-based software development company, SSEYO, released a suite of generative music software. The authoring tool, KoanPro, is essentially an interface to SSEYO's algorithms, offering over 250 parameters for altering the way sounds and musical arrangements can mutate over time.

The Australian Broadcasting Corporation's, *The Listening Room*, commissioned one such composition. Between August and September 1997, over a period of 60,480 minutes, *Sensorium Connect* had recomposed itself in real-time via the Internet. Created in collaboration with performance artist, Stelarc, *Sensorium Connect* provided visitors to its Web site with an ever-changing sound space, an on-going exploration of non-repetitive creative possibilities.

This performance/paper has been informed by and references the seminal texts, *Noise* (Attali, J 1997) and *Art and Revolution* (Berger, J 1969). It explores the process towards the generative streaming composition, *Sensorium Connect*,. commissioned by The Listening Room (ABC,

August 1997).

It was presented at *Recycling the Future*, 10 Years of ORF/KunstRadio, Vienna, December 1997.KunstRadio, ORF Centre, Vienna, December 1997.

Preamble

Imagine for a moment music that doesn't repeat, that is never heard the same way twice, that is somehow fresh every time it is performed. A new music genre is emerging - self-evolving and difficult to commodify.

Generative music is driven by mathematical formulae to produce variation in music and sound. Techniques for creating generative music are not new to composers, but ready access to the technology to produce and publish it widely is not.

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Music is dead! Tot, kaputt, fertig!

We listen, love, work and die silently in numbing arpeggios of repetition. With its skilled interpreters, concert halls and cathedrals, theorists and record companies, its evolution from ritual to repetition confirms the end of music and its role as creator or social space.

The maintenance of social order and cohesion is built upon the absolute denial, prohibition and commodification of free expression. Music is no exception. In fact it acts as an indicator of its success, the success of power and of commerce, to define and control its compositional procedures and its production, distribution and consumption (Attali, 1997).

Music is dead!

In the Middle Ages, in Europe, jongleurs both musicians and entertainers, would travel from village to village performing privately and publicly. The jongleurs' income was derived from these performances. Their material was gathered, assimilated and modified from what they heard and what they saw along the way. They ensured that access to music remained the privilege of every social class. They were essential to the social circulation of information. The jongleur "…*was* music and the spectacle of the body. [They] alone created it, carried with [them], and completely organised its circulation within society."[1]

Music is dead!

True folk music is no longer possible. The process of incorporating previous melodies and lyrics

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[1] Attali, J 1977, *Noise*, University of Minnesota Press.

into constantly evolving songs is impossible when melodies and lyrics are privately owned. The jongleur became a businessman, a skilled interpreter of music inhibited by cultural property and copyright protections.

Music is dead!

"The mind believes what it sees and does what it believes…" The messengers of capital are thorough in creatingan audience for their own message. You cannot rebel against something you have been taught to believe you want, need, can't do without.

Music is dead!

Doesn't the avant garde,
sound sculpture,
culture jamming,
KunstRadio – radio art,
studies in noise ecology and other sonic experiments
push back the economic boundaries,
free creativity and explore new sonic landscapes?

Is this enough?

Can this not break the loop?

It could be said that contemporary musicians give the appearance of being more independent of power and money than their predecessors, but are more tightly tied into the institutions of power than ever before. Jacques Attali, a French political economist, suggests that the contemporary composer and musician, "separated from the struggles of our age, confined within the great production centres, fascinated by the search for an artistic usage of the management tools of the great organisations (computer, electronic, cybernetic) …has become the learned minstrel of the multinational apparatus. Hardly profitable economically, [they have become, perhaps] the producer of a symbolism of power."[2]

Culture jammers, noise artists, for example, terrorise this model – eroding power from the inside out … KunstRadio and *Recycling the Future*[3] are examples of anarchy gnawing at the heart of the beast – from within these electromagnetic walls, are we not shaping the new paradigm, breaking the loop like terrorists with sound as ammunition and Internet collaborations our own information vectors?[4]

Music is dead! Dare we resurrect it?

The author John Berger suggests "There is always a danger that the relative freedom of art can render it meaningless. Yet it is this same freedom which allows art, and art alone, to express and preserve the profoundest expectations of a period [in history]." Would the resurrection of music call for a collapse of capital? Would it demand that we turn the tools available to us now into instruments for the socialisation of free expression? As a composer immersed in technology, bound to all that should harness my skills in the service of capital, I have opted for the realisation of a music, and an aural aesthetic, that strives towards the liberation of imagination, towards the discovery of inert creative capabilities, towards autonomous listening zones, independent of that which would commodify and render our work inept, dull, repetitive… The future of music and

[2] Attali, J 1977, *Noise*, University of Minnesota Press.
[3] Recycling the Future, [online] http://kunstradio.at/FUTURE/RTF/ [Accessed August 2000].
[4] Wark, M 1994, *Virtual Geography*, Indiana University Press.

sound is an undefinable space!

Sensorium Connect[5] is one such space, an ever-changing generative sound space that combines the medium of radio and that of the Internet into an exploration of non-repetitive creative possibilities.

Sensorium Connect is both composition and process. The composition is comprised of sounds created by the artist, Stelarc, during performances recorded in 1990.[6] Sounds include the motors of the third mechanical hand, and those triggered by brain waves, heartbeat and blood flow.

An angle transducer that measures the bending angle of the legs, and a sensor that monitors respiratory CO_2, were also used as triggering devices for sound sources. "These variations make it a much less predictable signal and a much more beautiful resulting sound. The sounds that are indicative of the third hand are rendered neutral in their associations so that they don't sound like a musical instrument or natural sound or some kind of other technological object that we know and identify with."[7]

These sounds were further mutated through the generative composition based on the premise that the arrangement and sound sources are in a constant state of flux.

Acoustically, what's happening in Stelarc's performances is a kind of aura that is generated around the body. "When internal body signals are amplified they are, in a sense, emptied from the body into the room within which the body is performing. The humanoid shape of the body that originally contains the sound becomes the cuboid space of the room."[8]With *Sensorium Connect,* these sounds are further emptied into what one might call the suspended, ever-evolving space of the Internet: An acoustical landscape translating from humanoid form, to cuboid space, to Internet space as instrument.

The process of creation, performance and distribution of music is changing. The Internet is an amorphous infrastructure for the liberation of creative ideas and is no doubt influencing the work of artists the world over. It is a time of enriching exploration and discovery that is akin to the period during which Francesco Pierro discovered perspective. Where Pierro uncovered a new relationship between the body and space, now, human sounds are being found to have a previously unsuspected relationship within the unbounded, interconnected, virtual spaces of the Net.

Can music change before it dies outright?

It is changing. It's participatory change. Listening to *Sensorium Connect* contributes to the process, engaging the space, whether you listen via the Internet, or never have anything to do with computers. The suspended space is expanding, and, in consequence, our assumed knowledge of the physical world will change.

The distance between audience and performer is becoming reclaimed physical space. We are all engaged in the space of change, giving birth to spectacles that both fascinate and liberate the mind, breaking the loop… perhaps!

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[5] Sensorium Connect, [online] http://www.abc.net.au/arts/lroom/sensorium/ [Accessed August 2000].
[6] Stelarc 1991, *Enhanced Gesture/Remote Desire: Post-Evolutionary Strategies*, Anckarström.
[7] Stelarc 1996, interview with the author.
[8] Stelarc 1996, interview with the author.