

To be published in an upcoming issue of *Neue Zeitschrift*, 2004.

From Telepresence to Co-experience: A Decade of Network Music

Atau Tanaka

Sony Computer Science Laboratory Paris

My experiments in composing musical works for networks span a period since 1994, and have evolved from recreating traditional musical practice to conceiving new malleable musical forms. This parallels the *representation to composition* trajectory set forth by Jacques Attali in **Noise**.

My first instinct as musician was to attempt to recreate performance dynamic over the network. I began by performing telematic concerts using videoconferencing technologies. I sought to use network time delay musically – to consider it the *acoustic of the network*. This ultimately led to **NetOsc** in 1999, a project of Sensorband, removing visual contact and sending only control data instead of audio amongst remote performers. Performance practice on networks, then, was about perturbations of musical communication.

I then questioned whether qualities of networks were better suited for explorations other than performance. My installation pieces explored the spatial aspects of networks manifested in sound. **Constellations** (1998) juxtaposed mixing of multiple network MP3 streams alongside acoustic mixing of multiple sources in the gallery space. **MP3q** (2000) was a web-based piece – a sort of net.art music. The listener mixed multiple music streams using an abstract graphical text interface, and also could contribute his own sounds. Driven by participation, the piece was at its outset but an empty shell. Pierre Levy predicted that artists would no longer make objects and instead serve as filters. Here was a *contentless composition*.

Two projects can be considered hybrid pieces. **Global String** (2000), a collaboration with Kasper Toeplitz, is a monochord spanning two cities. Network traceroute connects the two ends of the string and also acts as its resonating body. **Prométhée Numérique/Frankensteins Netz** (2002) was a hoerspiel combining web-based participation and live radio broadcast, vehicled by a machine performer.

I have since focused on the social dynamics afforded by networks, extending my experiments into the wireless domain. I use mobile systems to create compositional structures allowing groups of people to participate in the musical creation process. Subconscious acts of listening to music and moving around urban environments are the stimuli into the system. *Musical avatars* represent geographic location and shared co-experience create a *social remix*.

The recurring theme in these projects was the search for musical qualities of the network, to create work that is *idiomatic* for the medium. After following my musician's instincts, I learned to let go. Rather than controlling time and space with sound, I now create architectures for collective musical processes.