

Le Tombeau de Freddie

A Concept for ” Six Perspectives in Digital Music ”
and an Acoustic Realization of "L'Internationale"

by the Formant Brothers

Credits

Concept by the Formant Brothers
(Nobuyasu Sakonda & Masahiro Miwa)

Acoustic Realization by Nobuyasu Sakonda
(based on a Song composed by Pierre C. Degeyter in 1888)

Music Video by Hiromitsu Murakami

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Notes on the Concept of "Six Perspectives in Digital Music"

I. Presence via Apparatus

Similar to the human face with its distinctive attributes, each human voice has a unique "sonic wave" which is inseparable from the characteristic properties of the human individual. Rather than seeing it merely as a typical "waveform" of the human voice, we define it as a complex aggregation of a large number of temporal transitions such as intonations and the sound spectra of phonemes. Even if vocal attributes appear to be comparable to facial characteristics, there are nevertheless, subtle differences between them. Perceptual data given by the complex, multi-dimensional transitions in three-dimensional space of the human face differ in their essential nature from the perceptual information gained from the "aerial vibrations" of the human voice. This accounts for the fact that it is virtually impossible (given normal eyesight) to confuse the presence of a real face with a two-dimensional video image of the same face, whereas the presence of voices (or any other sounds), when mediated via apparatuses can, depending on the fidelity of the mediation, induce the illusion of real original sound sources (when acoustic events are not contradicted by visual perceptions). This does not simply imply that the excellent quality of contemporary audio equipment makes it difficult for the hearer to distinguish between sound conveyed via apparatuses and an original real sound, but more importantly, that the voice and sound in general in real space are essentially the results of physical wave-like vibrations in real space which reach us as "shadows" or "traces". This fact leads us to notice that any sound (real or conveyed via apparatuses) always implies "*with-ness*" (immediate presence) which corresponds to a specific event, and an "*after-ness*" (delay) which is a result after the event, at the moment we recognize the sound.

II. _ Rock Star

The challenge of the Formant Brothers' project "*Le Tombeau de Freddie / L'Internationale*" lies neither in composing nor in playing music, neither in editing nor in arranging music using sound samples, it lies rather in synthesizing electro-acoustic sounds using the latest DSP technology. However the Brothers' interests are not focussed on creating as yet unknown sounds with state-of-the-art technology, but rather to create an acoustic reproduction of the real world which encompasses the "*with-ness*" and "*after-ness*" of sounds. In other words, our challenge is to bring an origin of sounds "*which-has-been-there*" into existence through synthesized sounds alone. Especially in this project, the Formant Brothers have attempted to create the "body of a subject" which might have produced a "trace" in the form of a recorded voice. From this perspective, the Formant Brothers selected singing voices in the field of "pop music" as the target of their investigation.

It is a well known fact that the singer, Freddy-M, sang in the rock band "Queen". But what does it imply when we state that so many people all over the world know this fact? In the vast majority of instances, this fact is founded on the "presence via apparatuses", or in other words, the fact is established through the mediation of media technology. Therefore we merely believe in the existence of a personality called Freddie-M, and this belief is based on the "*with-ness*" of his singing voice. This belief could be confirmed through the visual reappearance of Freddie-M in the (allegedly) first "promotion video" in history, produced in 1975. If musical experiences for most people nowadays are limited to mediated experiences, reaching them through media technology, then the synthesized singing voice of Freddie-M should be compared, not to the real, original voice of a Tanzanian native called Mr. Farrokh Bulsara (autonym of Freddie-M) but to the recorded voice of "the Freddie-M" using apparatuses of the past.

III. _ Synthesizing a Voice

Today the level of technology used in synthesizing the human voice has reached a remarkable degree of perfection, to the extent that virtual singers have been marketed as commercial software products. Nevertheless it still remains difficult to parameterize and simulate a human voice of a particular known person such as, for example, Freddie-M. Of course, to enable audiences to recognize a synthesized singing voice as “the voice of Freddie-M”, the (synthesized) sound waveform (and its spectrum) should be closely comparable to the waveform of the original personality. Therefore it is necessary to customize the waveforms with extreme exactitude so as to recreate an exact instance which also possesses the almost undefinable characteristics of Freddie-M's “style of singing” which originated from his own physical body and which constantly change every millisecond. Technology has not yet found ways to automate the customization of the creation of virtual voices, (that is to say, match the virtual voice parameters with those of the original voice). In this field, little brother (N. Sakonda) developed his own computer algorithms specifically to control the modeling of the characteristic spectral transitions of Freddie-M's singing voice, such as, for example, the “degree of stress of the vocal chords”. After lengthy and painstaking manual adjustments of a large number of related parameters, he finally accomplished the creation of a virtual “singing voice of Freddie-M”. While the algorithm itself is based on a theory known as “formant synthesis”, the “coding” for the singing voice is a masterwork which could be done only through a trial and error based on human intuition, and this was the real challenge taken on by the Formant Brothers. Even if it includes many interesting scientific discoveries, it is not an achievement in scientific research, such as a new modeling method for voice synthesis, it is instead an art work in the form of the “Presence via Apparatus” of the singer, Freddie-M.

IV. _ The Internationale

The year of Freddie-M's birth marked the beginning of the cold war (1946) and the year of his death marked the collapse of the Soviet Union (1991). The period of East-West confrontation was also an era in which technological, and by extension military superiority, was a political priority. Technology is however, not only a subject of natural scientific research, but also a highly ideological matter. For example, the communist movement might be seen as a colossal 20th Century experiment, which regarded human society in its entirety as a sociological machine, and which attempted to reconstruct human culture by using the power of industrial technology. "*The Internationale*" composed by Pierre C. Degeyter is a song that was sung enthusiastically by people all over the world in the praise of communism. It was even established as the national anthem of certain nations. The song is emblematic of the cold war era.

Bernard Stiegler stated that the most important event in the history of music in the 20th century, is that vast numbers of human ears learned to listen to (mediated) music, namely "the pops" (popular hits) within a short time (1). The lyrics of "*The Internationale*" were translated into numerous of languages as a sort of "pop song" of global mass culture and it inspired and motivated millions of people from various cultures and historical backgrounds. During this era, in which competing propaganda programs on DX radio were broadcasted from East and West, this song functioned as a common "sound index" of many stations in the East, which stood in opposition to the relaxing "pop songs" of West, and it rapidly spread, was literally transmitted, around the globe. "*The Internationale*" fed the Eros of a utopian world that was united through the universality of technology, which intoxicated people, discriminated against many of them, caused the death of some of them, and which was finally erased from people's minds after the end of the cold war. But we still vaguely remember the people who sang this song and were killed for doing so. And we remember those who were killed by the people who so fanatically sang this song.

V. _ Specter without the dead

Without its corpse, Freddie-M's "voice" sings "*The Internationale*" in Japanese we, the Formant Brothers, would call this situation "specters without the dead". It is not about Freddie-M's actual death. It is concerned with the singing voice, newly "generated" as digital data, not edited, modeled on earlier recorded samples of his own voice when he was alive. If the singing voice were Freddie-M's recorded voice from an earlier time, irrespective of its recording quality, it must be regarded as "*ça-a-été : something that has-been*"(2), that is to say, as a "specter". This is a term which Roland Barthes uses to describe the Noema of photography, in other words, the trace of a person who no longer exists. But we should take note of the fact that the voice as digital data generated out of nothing, also asserts its right to its own past. Once we experience and recognize the familiar voice of Freddie-M, even for a moment, singing "*Le Tombeau de Freddie / L'Internationale*", then it is true that Freddie-M has *actually* sung "*The Internationale*" in Japanese.

This assertion is based not only on the fact that we have no other basis for the assumption that a (acoustic) event existed other than the "effects" we recognize through mediated copies of "music", some of which are downloadable as digital contents, but it is also based on the recognition that all actualities from which our reality is constructed, are in fact merely "effects of traces" created by today's media technology. This is what is expressed by our concept of "presence via apparatuses". The presence is already a trace, though we undoubtedly perceive it as presence. The trace itself is already an effect, though it actually appears as a unquestionable testimony of the past. This peculiar mode of existence which substantiates the deconstruction of traditionally naive ontologies, should be described as "something spectral", and not merely in technical terms such as "virtual reality" or "simulation" (3). The spectral effects of traces realized by actual digital technology are the essence of "specters without the dead", which will envelope future society. "Specters without the dead" is a phenomena which connects us "*who-are-being-here*" with the past "*which-has-been-there*".

VI. Roku-gaku

“New Art” created by these technology based “effects of traces” is essentially an “expression via apparatuses” such as Photography, Cinema and contemporary Media-Art. But among these new genres of arts we have never had an appropriate term for “recorded music” which distinguishes it from music in general. We have never been able to listen to sounds, which could have been recorded from the perspective of technological history, such as the screaming voices echoing in the gas chambers of Auschwitz or the terrific blast of the atomic bomb in Hiroshima(4). The presence of a voice or a sound can have a much more devastating and intolerable effect on us than any realistic visual depictions. That is why even now we, as “listeners” restricted to the single dimension of sound-recordings, continue to consume "pop hits" characterized by highly conventionalized and detoxed forms, as if we were trying to withdraw our awareness of the critical possibility that technology can attack our “presence : voice”.

To sum up the above argument; we have never had any term which appropriately defines “recorded music”, and therefore we, the Formant Brothers, have decided to give to this terminological blank the name “Roku-gaku” (a new word coined from the Japanese words for 'record' and 'music'). “*Le Tombeau de Freddie / L'Internationale*” will be a milestone of “Roku-gaku”. This term encompasses all mediated "music", including not only the vast resources of past “recorded music” in familiar technologies, but also today's “digital music” derived from contemporary media technologies.

It is an attempt to spectralize our “presence” by bringing the "now-and-here" of two “bodies” together; Freddie-M and the Cold War. Both are united coincidentally by their demise at the same time (1991). And it is also an attempt to spectralize our “history” through the use of technology which recreates the facts of the past according to “*ça-a-été : that-has-been*”.

“*Le Tombeau de Freddie / L'Internationale*” asserts the “fact” that Freddie-M has *actually* sung “*The Internationale*” in Japanese. It is the first revolutionary song sung by a specter's “voice : effects of traces” instead of a human “voice : presence”(5) which has been sacredly protected from the specter-hauntings of technology. It is nothing but an attempt to demonstrate the potential of “Roku-gaku” as one of the most major media innovations since the invention of Phonograph. *The International unites the human race.....*

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(1) Stiegler, Bernard. "*De la misère symbolique 1: L'époque hyperindustrielle*", Galilée, 2004.

(2) Barthes, Roland. "*La chambre claire*", Gallimard, 1980.

(3) Derrida, Jacques. "*Spectres de Marx*", Galilée, 1993. "*Specters of Marx: The State of the Debt, The Work of Mourning, and the New International*", Trans. Peggy Kamuf, Routledge, 1994.

(4) Hasumi, Shigehiko. "*Godard, Manet, Foucault*", NTT publishing, 2008.

(5) Derrida, Jacques. "*La voix et le phénomène*", Presses Universitaires de France, 1967.