

Kasper T. Toeplitz

The DATA_Noise project In collaboration with Myriam Gourfink

DATA_Noise is a project of a mixed media (or dance and electronic music) realisation by composer Kasper T. Toeplitz, along with the choreographer Myriam Gourfink, in which the moving body is seen or used as another musician/instrument albeit a silent one. Or not so silent. Probably, at times a very noisy one.

The piece is conceived as an electronic musical composition, to be played in real-time, by a musician playing a computer (and, if needed, its different controllers) and a dancer, whose body equipped with sensors, produces the "data-noise" which is meant to "perturbate" the sometimes "too perfect" actions of the computer. At other times the dancing body can create its own, heard, music, according to its global movement.

Background (Kasper T. Toeplitz and dance projects)

I have collaborated with dance pieces since I have started working in music, and, coming from a "dancer" family, have been aware of the dance world even long before. In 97% (or so) of the cases those collaborations were of live music, played in the same time as the dance was happening, either by myself (using traditional instruments, electric instruments or the computer as a live, real-time instrument) or by different ensembles of musicians (soloists, small ensembles, string quartet) enhanced or not by electronics; however since the beginning of the 21st century all my compositions use some sort of interaction with the digital power of the computer-as-instrument.

What's more, I am probably one of the few composers (but certainly not the only one!) to regularly include, in my "purely musical" compositions, dancers, which are then used either as "silent musicians", whose movements are written/conceived as a counterpoint to the played music (such as in "Demonology", for 2 musicians and 2 dancers – choreography by Myriam Gourfink – or "O de lo pater", written for 5 silent instrumental voices and 5 dancers – choreography by Olivia Granville) or whose movements have a musical - heard - function, and can sometimes be the only musicians (such a case was my "Capture", score for 3 dancers whose movements, as seen by 3 cameras, were generating, in real time, the music which was written on the score (more about "Capture" – which received a Honorary mention at Ars Electronica – at http://www.sleazeart.com/Capture_KTT).

Since 2010 a new direction in this research of dance-as-musical-ingredient took place, which I call "Data-noise". Said quickly, the idea is to use the global movement of the dancing body – as opposed to the very deterministic action of creating a given gesture in order to produce a sound – to perturbate the actions of the computer which generates or processes the sound; very often the computer is said to lack the "imperfection" or the "warmth" of the classical instruments, to be "too perfect". In having the whole structure of the "patch" which generates the music being, in a small percent, being affected by what is transmitted by the moving body of the dancer, I hope to re-inject some of the "danger" in the computer, and some more "life" into the created sounds. As said the dancers create this "data-noise" in a non-deterministic way, by having different sensors attached to the body (mostly accelerometers), which are always switched "ON" and which are sending constant flows of data.

_In "The Monster which never Breathes" for pipe organ, live electronics, data-noise and movement (choreography by Myriam Gourfink), the dancer had an iPhone fixed to the body, and the organ player a Wii on her forearm, both units sending 3 continuous flows of data to the computer processing the organ sound. The new "adaptation" of this piece, "Breathing monster" (for electric BassComputer, live electronics, data-noise and movement) uses the same amount of data-noise, creating, for each movement, but also for the most subtle vibration created by the low frequencies, lots of micro-details in the treatment of the sounds. More about "The Monster which never Breathes", including the exact set-up, the musical patch, and a text about the realisation of the composition, is to be found at <http://www.sleazeart.com/MONSTER> . A video of the piece is on the included DVD "Data-Noise 1"

_"Inoculate?", written for trumpet, trombone and saxophone (bass & soprano), live electronics, data-noise and movement (choreography by Myriam Gourfink) is based on more or less the same ideas in the field of music/dance interactions, the main differences being that when I did commission the choreography from Myriam Gourfink I did insist on some constraints in order to blurry (a little bit) the

line between dancer and musician : the dance should not be in-front and the musicians behind – they all had to be on the "same" line, should all use more or less a similar surface of the stage and the dance should work mostly in the horizontal space, since all the other musicians (playing wind instruments) were standing up. It might be interesting to note that the trombone was equipped with the same system (an iPhone) sending "data-noise" which was literally "destroying" his own sound by way of wave shaping and granular synthesis. Beside, during a small part of the composition (part 3) the dancer, using the same sensors, produces her own music (controlling a bank of resonant filters in auto-oscillation). Which makes the recorded CD of the piece certainly one of the very few recordings where one can actually listen to the dance part.

More about "[Inoculate?](http://www.sleazeart.com/INOCULATE)", including the musical and dance scores, computer patch etc, is to be found on <http://www.sleazeart.com/INOCULATE> . A bad quality video of a portion of the piece is on the included DVD "Data-Noise 1", as is a VERY bad video of the "musical dance solo".

_Further explorations of this "data-noise" idea are being explored in the upcoming projects with Myriam Gourfink, such as "Araneïde", written for a trapez artist/dancer and live electronic music (premiere in february 2013), or "Deperdition" (june 2013)

Similar but not same ideas of interactions between dance and music are used in two more current projects :

_in "[Replis](http://www.sleazeart.com/replis)", a night-shot camera sees the otherwise almost-invisible dancer (Clémence Coconnier) and I transform the images in real-time, creating also, on the same computer, the live electronic music. The images of the dance and the music are produced by the same initial input – the gestures of the dancer. A video of the result, as well as a "making of" video of the project are included on the DVD "Data-Noise 2". More about "Replis" on <http://www.sleazeart.com/replis>

_"[DESASTRE](http://www.sleazeart.com/DESASTRE)", to be premiered in september 2012 and created with the dancer Nina Santes, takes another approach to create, at the same time the music and the dance : the dancers are equipped with small wireless microphones which are creating the audio feedback with the various speakers placed on stage. This feedback(s) (modulated by some filters and delay lines) are the sole element used to create the music, which is then dependant not only of the specific space but also of each direction and move of the dancing body, as those modulate the feedback and change the resulting pitches. A video of the work-in-progress is included on the DVD "Data-Noise 2". More about "Désastre" on <http://www.sleazeart.com/DESASTRE>

It is to be noted that both Clémence Coconnier and Nina Santes are dancers for Myriam Gourfink's company, LolDanse.

Dance "new technology" (a brief look at Myriam Gourfink)

Even if the collaboration between Kasper Toeplitz and Myriam Gourfink lasts since 13 years, and is made of 20 or so different pieces, most of them using "new technologies", we very often decided NOT to make a direct, technological, interaction between dance and music, but to use separate technologies for dance and music ; the use of computers in music is well known, however the use of sensors and computers in dance alone, produced by the dance and meant to interact with the dance is less common. In many pieces Myriam Gourfink used different technological devices, mostly sensors placed on dancers' bodies, to create the next part of the dance. Her language, based on precise composition, fully written down (in a language derived from the Laban notation) prior to the first rehearsal, permits this kind of interaction of the dance with itself. In many of her pieces LCD screens on the stage show to the dancer the "next" part of the score to be danced, those being generated based on what was danced just before, or the "quality" of the danced parts. In such pieces (for instance "[Contraïndre](#)" - 2004 - "[This is my house](#)" - 2005 - or "[Bestiole](#)" 2012) the data obtained from the dance is re-used in the danced process. In some other cases we tried other interactions : in "[L'Ecarlate](#)" (2001) one section of the music was played by a neuronal network which received a "double input" - the score was my composition, when the interpretation was derived from the "quality" of the dance as it was performed on that particular evening - this way, just as a real musician would do, the neuronal network was playing the same score, but filtered by the general "mood" of that particular evening.

Much more about Myriam Gourfink on <http://www.myriam-gourfink.com> and in the included special add-on about her work (and our collaborations) of the magazine "Mouvement"

Data_Noise, the project

Based on those elements, those researches and the past common work, the piece "Data_Noise" is a project of a duo, danced by Myriam Gourfink, and played, on a computer as a live-instrument by Kasper T. Toeplitz. We want to use the data-noise, as described, generated by the dancing body to interfere with the electronic music, in real time. Also the resulting data (music + data-noise) would be used to generate subtle changes in the lightning, using LED projectors, and converting some of the informations generated by the mixed medium of "dance and music" into the DMX protocol.

The piece is yet to be written, but we want in a small part of it to use the gestures to generate its own music (in a way a music soloist would have a "free moment" on top of a pre-composed music. For this part I am planning to use the feed-back system such as developed for the project "Désastre".

The resulting piece, "Data_Noise" should be 30-40 minutes long.

Included material

_1 double DVD ("Data Noise 1" and "Data-Noise 2") with some recent works in th edance-music inetraction by Kasper T. Toeplitz

_1 CD "Capture" of a composition by Kasper T. Toeplitz, played by 3 dancers

_1 CD "Inoculate?" of a composition by Kasper T. Toeplitz, for wind trio, live electronics, data-noise and movement

_1 copy of the "Mouvement - Myriam Gourfink" magazine about our work

_1 short CV of Kasper T. Toeplitz and 1 short CV of Myriam Gourfink

Useful Links

_Myriam Gourfink web page <http://www.myriam-gourfink.com/>

_Kasper T. Toeplitz web page <http://www.sleazeart.com/>

_Kasper T. Toeplitz discography <http://www.sleazeart.com/KTdiscography>

_Kasper T. Toeplitz Youtube page, including many projects including dance
<http://www.youtube.com/user/sleazeArt>

Contact

Kasper T. Toeplitz

33/35 rue des Panoyaux
75020 PARIS _ France

t: home +(33) (0)1 40 02 08 91

mob +(33) (0)6 63 42 85 34

e-mail: kasper@club-internet.fr

kasper@free.fr