Between Art and Technology

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Introduction

When using technology to create a piece of art, you often get trapped between those who are mostly (if not only) interested in the newest technology and those whose references are strictly from visual arts. It is no secret that new media art is a loosely defined discipline consisting of people coming from different backgrounds with various preferential degrees toward technology fetishism. Here more often than not you meet people whose favourite topics of discussions are the newest technological gadgets rather than those of aesthetical or philosophical, who know more about the latest releases from Nintendo than the latest exhibitions at Tate or MOMA, and to whom such names as Matthew Barneys, Sophie Calle, Damien Hirst or even Bill Viola only ring hollow bells. As though neither the constant economical set-backs since the '70s nor piling-up of social and environmental problems leading to our mistrust in human nature has ever left any visible trace to change our mental picture of "the future," they seem to continue to march on with their almost religious-like faith in techno paradise.

On the other hand, though artists want to consider themselves radical and forward-thinking, still assuming their rightful position to be the cutting-edge crowds within the hierarchy of aesthetic society, history tells us otherwise when it comes to utilizing new technology to their art. The most notable example of this is probably the use of photography as an art medium. Except for a few open-minded artists, it took more than a century for photography to be accepted as a valid means to produce art, and those who proceeded in using camera before its acceptance were simply called "photographers" and not "artists." Film also went down the same path. Though some handful french artists such as Legé and (American-born) Man Ray experimented with the medium at the dawn of cinema, film-makers gradually developed their own language with its particular concerns. As a result film as a genre acquired a specific sphere quite different from that occupied by visual arts. Though many visual artists today use these technologies for their creation, we cannot erase our history of specialisation in which these genres have created their own discourses. As a result what we witness today is different categories of artists using the same technology (i.e., photographers and artists using photography, film-makers and artists using film, etc.), contributing in parallel to their related areas of discourses. The difference, therefore, is not so much as what kind of technological media or medium one uses, but rather what kind of discourses one's work stems from and refers to. Likewise it is safe to say what one appreciates as a member of the public depends very much on what kind of discourses and languages one is familiar with and accustomed to.

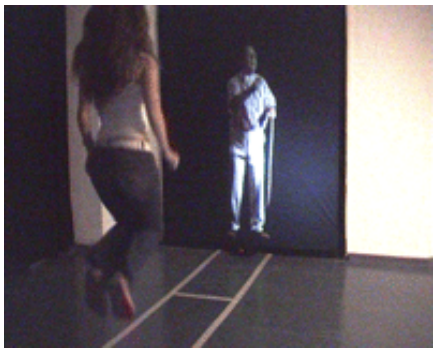
WRO 05 - International Media Art Biennale - that took place in May '05 in Wroclaw was no exception of being a melting pot of various disciplines. There film-makers and video installation artists were encouraged to mingle with techno enthusiasts while the festival introduced such interesting pieces as *A Fleur de Peau* by Lynn Pook (2003) and *Grafikdemo* by Niklas Roy (2004). *A Fleur de Peau* uses sensors to send sounds through a human body. While wired, you "hear" sound not through your ear drums but through your scull bones. Based on a similar conception as A. Gerber's underwater project in Malm? '04 (summarised in her article in this number of hz (1)), but in a much more articulated manner, this piece questions our preconceived idea of what sound is and opens up new experience for sounds. Another work freshly presented at the festival is *Grafikdemo* by Niklas Roy: it is an artefact which, by playing with "electronics" and "mechanics," also refers to the history of home computers with its subculture of "nerds." While these works left me with much impact during the festival, in this article I would like to discuss three other works, all also presented at WRO 05 festival, which caught my attention by their high grade of integration between technology on the one hand and conceptual referential points in other aesthetic disciplines on the other.

Heartbeats

The first work that caught my eyes at WRO 05 was an interactive installation called *Heartbeats* by Orna Portugaly, Daphna Talithman and Sharon Younger (2004). *Heartbeats* is an installation in which, by letting yourself interact with a machine, your own interaction with other human-beings comes into focus. In the centre of the installation is a round table onto which four beautifully filmed video figures, captured from above against a totally white background, are projected. As four touch screen stations surround the round table, a visitor, when placing his/her fingers on one of the touch screens, becomes assigned with one of the video figures. Awaken, the video figure starts engaging in repetitive movements. The pace of the movement is controlled by the heartbeat of the participant, captured by ECG via the touch screen, and the figure is caught in its own repetition until it meets another video figure. Then as if magic has happened and their spell broken, they are released from their repetitive movements and start interacting with each other, their awkward movements becoming beautifully choreographed body conversations. After a short while of this physical communication with each other, they disengage and return to their previous movements, awkward and repetitive, only to seek another moment of encountering another human figure on the screen.

Heartbeats by Portugaly, Talithman and Younger (2004). Click here to view quicktime video >>>

By applying the idea of multiple-participants-system in which multiple participants together create narratives (common in game industries but still quite rare in interactive installations), Portugaly, Talithman and Younger have succeeded in creating an interactive installation in which not only our "heart-beats" is its conceptual key symbol but the whole situation in which the narratives of the installation are being woven becomes a metaphor for life. By transforming repetitiveness of heartbeat into habitual behaviour of human, they remind us of the experience where the unconscious dullness becomes an unhealthy imprisonment, in which only meeting and interacting with another heartbeat is the key to break away from the unspoken and often self-unaware loneliness. And as we interact and look for our own special Ariadne in the piece, we come to realise the fact that we also act as Ariadne for our fellow human beings. It is a warm reminder of human relations.



Here it is worth mentioning another installation called *Jumping Rope* by the same artists. Made prior to *Heartbeats*, *Jumping Rope* was firstly developed for children as a course assignment at Camera Obscura of the Arts in Tel-Aviv. Later modified from the very concept, *Jumping Rope* conveys the essence of what Portugaly, Talithman and Younger are trying to do. Two video figures, projected on each wall opposite to each other, hold each end of a rope, letting the participant to jump between them. The participant is forced to imagine the invisible rope and jump to the rhythm set by the video characters. The success or failure of each jump is monitored by sensors and commented by the

Jumping Rope by Portugaly, Talithman and Younger(2004). Click here to view quicktime video >>>

video characters in the manner "if you can make it to ten [jumps], you'll get a kiss!" or "you missed again!". Here again, like *Heartbeats*, the installation becomes a metaphor of life; it offers its participants and on-lookers a simulated life situation in which you, as an adult, suddenly realise that your behaviour is pruned through a haunting invisible rope by the people around you (may they be your parents, peers, colleagues, bosses at work) and that you may still be dancing to someone else's tune. In a strange manner, I am reminded by their installations of Jenny Holzer's *Truism*, as human echos are brought about in an almost organic way through seemingly cold technologies.

resonanCITY

resonanCITY is an audio-visual performance by Derek Holzer and Sara Kolster, accurately coined as "Live-Cinema Performance" (2004). On the stage, both Holzer (sound) and Kolster (image) sample their material (found objects for sounds and film positives for image) and proceed to manipulate and compose with them in real time. In their performance constructed as "a dreamlike journey in a live improvisation" (2), they start out with a familiar scenery of landscapes, then constantly move on to more abstract image to end it by returning to the scenery of our starting point. Moving from the macro-level to the micro-level of imageries, *resonanCITY* is not only a journey through the audio and visual experience; it is also a journey from the surface into the heart of matters.

Sampling settings of Holzer (sound - above) and of Kolster (image - below)

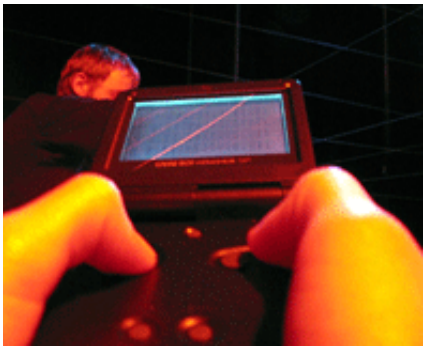
Technically the performance moves along the familiar path for those of us who are accustomed to the real-time audio-visual manipulation from VJ cultures or live electronic concerts. What attracted me in their work, however, is its procedural and thereby structural coherence between the two performers representing two independent artistic disciplines. By sampling "matters" in real-time in both audio and image and by treating them in a similar manner through the same programme (the open-source-programme Pure Data by Miller Puckette who developed the original Max/MSP at IRCAM), they construct a piece in which the inter-relations between sounds and image are clearly defined from the start. Because of the nature of the material (i.e., film positives) Kolster samples through a video camera on the stage, embodied in their work is their stark and apparent reference to American experimental cinema of the '60s. Since she then proceeds to manipulate them with wide-spread video techniques such as superimposition through alpha channel and dividing up the fields in different ratios, the effect the audience experience is Stan Brakhage's *Mothlight* transmitted through our digital video age.

Though technically less complicated than many audio-visual performances I have seen, the straight-forward yet well-thought-out formula of the Holzer-Kolster collaboration give them a certain advantage over many other live electronic performers. Despite its name "live performance," live electronic audio-visual performances normally comprise several parts of pre-recorded materials. What is purely "live" often comes down to the degrees of sound and visual manipulation of (often pre-recorded) materials, their differentiations in sequential orders, their instant fixations amongst vast combinations between audio and visual components as well as the variations within each discipline. Though several artists sample their materials directly, this usually evokes non-electronic moments disintegrated and isolated within the flow of performances. However, as Holzer and Kolster restrict themselves to carefully prepared but still instantaneous sampling without pre-recorded or computer-generated materials (thus keeping their performance as "live" and as strictly "sample-based" as possible), the solid base they construct with their sampling concept allows them to establish the audio-visual interrelations at a much earlier stage within the performance procedure than for most other performers. This helps them to create a flow without any auditive or visual disruptions throughout the concert, by leaving adequate space for human interpretations by and between the performers, whose sensitivities toward their sound-image objects as well as each other are therefore heightened throughout their temporal composition.

Visuals from *resonanCITY* by Holzer-Kolster.

Gameboyzz Orchestra Project

When I grew up, there was no Nintendo game around (and I was born and raised in Tokyo). Space Invader just hit the road and became a huge success; I also remember the days when I sat with my friends in a café after university entrance exams chilling out by playing PacMan together (I know this sounds like a contradiction in terms - how can you chill out by playing a computer game? - but it's true). These are the only memories I have of computer games from my teenage years. My generation is not that of computer games but that for which commercially available music synthesizer was a big revolution. Mine is also the generation in which, while familiarising oneself with the "synth-sounds" through Kraftwerk and Yellow Magic Orchestra, one was caught up with the old-fashioned notion that you had to go to universities/electronic-music studios to learn how to programme on a main-frame computer if you really wanted to compose with electronic sounds. Macintosh home computer revolution was still several years away.



The members of *Gameboyzz Orchestra Project* (2001-ongoing) belong to a completely different generation. On the stage, the members of the band sit comfortably on sofas with Nintendo's Gameboys in their hands. Then off they go with their "blip-pop" music (their own term to describe their music), improvising with "blip" "boop" "beep" sounds from their Gameboy boxes. They use such music sequencers and drum-machines as Nanoloop, Little Sound Dj, GB Electric Drum, etc. all to be run on Gameboy devices to generate sounds by taking advantage of Gameboy's sound chip. Though this may sound like a commercial (or at least Gameboy-nerds-) niche, the sounds they create by using various effects like delays and reverve are surprisingly colourful and the loud volume of sounds coming from 5 amplified Gameboys (3) is at times almost as amazingly rich in its

Gameboyzz Orchestra (Jaroslaw Kujda, Pawel Janicki, Mariusz Jura, Agnieszka Kujda, Thomasz prockow) with their Gameboys.

expression as the soundscape of the noise legend Merzbow. On the screen is a huge projected display of a computer game, from Tetris to SuperMario, which a member of the band literally plays throughout the concert (at least this was the case at the concert at WRO 05 - I was told later that this display differs somewhat from a concert to the next). For each points scored, a big cheer comes from the audience, who obviously grew up in the same era as the musicians and who know every step of the game by heart. The cheers of the audience gradually fill the concert hall and become part of the music. And as the audience share the moments with the musicians, the atmosphere of the concert becomes almost like a "rave" party of the '80s.

For several years now, microsound music has been popular and much talked about. Many seek the grey area of sounds that derive from sound particles below the level of the musical notes. The members of *Gameboyzz Orchestra* are not an exception: they proudly proclaim that they "utilize the latest technologies along with the retro ones used by musicians associated in the MICROMUSIC society whose key word is 'lowtech music for hightech people'."(4) Though microsound music is now often associated with a certain music style, the history of microsound goes back to early electronic and computer music of the 1950s and 60s. Stockhausen and Xenakis contributed to the development of microsound aesthetics and many young sound artists today take advantage of the situation in which "Recent technological advances allow us to probe and manipulate these pinpoints of sound, dissolving the traditional building blocks of music -- notes and their intervals -- into a more fluid and supple medium."(5)

Although it is uncertain to me how much of the referential relation there is between the music and attitude of *Gameboyzz* and the historical and musical definition of microsound, none of that mattered as I sat in the audience and related to this group from a completely different angle. When the 5 band members sit on the stage, as if they are playing a video game together on their sofa at home, playing music through their hand-held Gameboys with the intention of letting us know how groovy these "blip" sounds can be, the whole concept of computer game becomes much more than just a game; it becomes not only a social context but almost like a social pretext, with the hidden agenda of a hanging-out-with-your-pals event and sharing-the-childhood session, a revelation which on second thoughts you realise it must have always been that way. The music of *Gameboyzz Orchestra* is a manifestation of that particular generation which embrassed computer games to their hearts. And while Cage would have applauded at the idea of using those sounds in a musical context, *Gameboyzz* also make a strong distinction from the era of Zen-Cage, simply because they don't preach us to appreciate those sounds as "music" but they play them and we enjoy it.

from *Gameboyzz Orchestra Project*'s concerts from microscopesession and Ars Electronica (2002-right). Click here for their mp3 files >>>

Epilogue - Personal

It is interesting to know how the members of *Gameboyzz Orchestra Project* came up with the

idea of using Gameboy consoles as music instruments. Pawel Janicki, one of the members of *Gameboyzz Orchestra*, once told me that they needed a drum machine for a completely different project. Since drum machines were still quite expensive in Poland (their native country), they opted for using a Gameboy as a drum machine. Discovering the beauty of Gameboy sounds and how intimately related those sounds were to their own childhood, they started forming a concept for a band with distinct sounds solely from Gameboys.

In 2003 I was asked by a curator of a show I was going to participate in if I could modify and use an X-box instead of a Mac in order to bring down the cost for the exhibition. X-boxes are, I was told, sophisticated computer machines below the surface and when buying one, you are actually getting much more than money's worth. Unlike Oliver Wittchow who came up with Nanoloop, I was not technically genius enough to convert it to a pure computer to run my work (in other words, I was not high-tech enough to make the low-tech work) and thereby missed my chance of discovering interesting visual concepts and components for my future works.

Margaret Mead once commented on American culture as the immigrant culture and how it differed from that of the old world.(4) In the old world, the young generation learned from the elders whatever there was to learn about their culture; their cultural and social knowledge were handed down from one generation to another, from the elder to the young. However, in the immigrant culture of the US, this natural flow was broken as the younger generation (the second and the third generation of immigrants) learned the language and adopted to the new culture much more quickly than the elder (the first) generation. As a result, the elders, who in the old world stood for knowledge, wisdom and experience, became the ones to learn from the younger, who unlike in the old world stood now for knowledge and wisdom in the new culture.

Her observation of the immigrant culture is probably true for any present culture in today's world. Since the mid 19th century our world has witnessed many new technologies as such inventions as telegraph/telephone, radio/TV and Personal Computer/the Internet have changed our daily experience of the world rapidly and forever. While the young absorb the new advancements in technology as fun, it also creates a society where the elders are the ones who have to do the catch-up with the constantly changing everyday technology.

As a genre so closely connected to technological advancements, this condition is even more true in the new media circles. For example, the artists discussed in this article are all born in the mid- to late-'70s. Though I am always humbled by these new talents who are well-informed of what the situation of present technology is, I've noticed myself looking for something else, beyond the new, beyond the technology, a referential point through which I can relate, where the person I have become through experience and accumulation of knowledge can find a way to canalise into what I see and hear. At the same time, I remember an incident of more than 15 years ago; I was spending the Easter with my in-laws, and my uncle-in-law and his nephew were discussing MTV, still a new thing then in Sweden. I jumped into the conversation by saying "Well, you should not be so negative about those videos. Each generation has its own sensitivities. The fact that they don't appeal to you does not mean they are rubbish." They replied: "Well, don't you ever get the feeling that you want something to make sense to you?" Now, I am wondering, am I turning into that Uncle Bob (or Aunt Olga) myself? It is a scary thought.

Bearing that self-doubt in mind, let me proceed with my point. What I enjoyed about the three works presented in this article is the fact that they stand solid even outside the usual new media circles. All of them are highly advanced in programming (a must-thing in new media) with two of them (Holzer and Gameboyzz) even programming their own softwares (a top-of-the-chart- thing in the current scene in new media); you may say that they are "new media-ly correct." Yet their conceptualisation as well as realisation of their works do not narrow down the language of new media but rather expand it to include those of other aesthetics besides technology.

The point I am raising here is also a question of history, i.e., what types of histories we are prepared to incorporate into the future history of new media. Are we to limit ourselves to the narrow definition of new media where application of technical advancements into visual or auditive conversion and advanced programming codes are of its main focus or are we to include our histories of philosophy, visual arts, music, etc.? Caught between techno-worship with future-optimism as its God and reactionary conservatism based on techno-phobia, where are we to go from here?

notes:

(1) http://www.hz-journal.org/n6/gerber.html
(2) Fromthe information sheet of resonCITY by Holzer and Kolster.
(3) Although Gameboyzz Orchestra Project consists of6 members, at WRO 05 concert where I was present, only5 of them were present.
(4) From the information sheet ofGameboyzz Orchestra Project.
(5) from MIT site on theirrelease Microsound by Curtis Roads.
http://mitpress.mit.edu/catalog/item/default.asp?tid=8587&ttype=2
(6)Margaret Mead, *Culture and Commitment: The New Relations Between the Generations in the 1970s* . New York: Columbia Univ. Press; Garden City, N.Y.: Anchor Press.(1970) Revised and updated in 1978. First published with subtitle: *A Study of the Generation Gap*.

all photos by courtesy of the artists.

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