# no2pho / notovo   so-on / 2006

"Art is politics. Everything that takes hold of the flow of life for its own sake is politics."
[hans richter 1929]

The quotation from Hans Richter summarizes his pivotal role in the development of the early twentieth-century avant-garde [dada] and his political activism. When Richter's work is viewed in its historical and political context, he emerges as an artist committed to the power of art to change the fabric of social, political, and cultural affairs.

This quote is used as a the conceptual starting point for the no2pho/notovo-project.

no2pho [from noise to voice] by so-on

keywords: voice/language/text/psychogeography/machine-aesthetics/ ...and non-sense

"... as I see it, poetry is not prose simply because poetry is in one way or another formalized. It is not poetry by reason of its content or ambiguity but by reason of its allowing musical elements [time, sound] to be introduced into the world of words."
John Cage

"Text means tissue; but whereas hitherto we have always taken this tissue as a product, a ready made veil, behind which lies, more or less hidden, meaning [truth] we are now emphasizing, in the tissue, the generative idea that the text is made, is worked out in a perpetual interweaving; lost in this tissue -this texture- the subject unmakes himself, like a spider dissolving in the constructive secretions of its web."
Roland Barthes

No2Pho is an artistic research project investigating the behaviour of language in its many appearances: textual, sonic and visual, as well as gestural or body language. How do these disparate elements relate to each other and how do they organize within a system which includes human and computer as a sender and a receiver [and vice versa]?
As a generative sound installation No2Pho plays with a connected set of elements. It is composed of dissonant synthetic voices, changing in real time from speech to sound. The multiple voices are spatialized in a virtual environment. Its compositional parameters are defined by the physical trajectory of the listeners on the installation site. The listeners' motion is tracked and this data is fed into a software in which the code itself creates the score. By graphically rendering this score the sounds are visualized, making the speech visible.

From noise to voice and from voice to music.

As such, No2Pho wants to create an artistic context for research about audiovisual cooperation between humans and machines. Development and realization of the artistic aspects of the project take shape through a collaboration between the researchers involved [artists, composers, programmers and interaction designers]. All phases of the project are open for discussion and reflection with the public.

No2Pho/notovo is a collaborative project by so-on.be, with support of okno.be and the VAF (vlaams audiovisueel fonds).
The notovo-physical/digital platform is developed together with sukandar kartadinata (tesla, berlin) and johannes taelman (gent) [sensordesign], edo paulus (bumpersound, amsterdam) [max-environment], billy bultheel (sonology, den hague) [soundprocessing] and annemie maes (so-on,brussels) [concept, texts, phonemes&sound processing].

notovo: a research from noise to voice

voice networks and machine aesthetics:
a research into synthetic speech combining litterature and philosophical content

A physical network and a virtual network. people and voices. wireless headphones and 12 spatialized soundsources. people walk their traject through physical (empty) space and as such localisationdata are produced. synthetic voices are generated and frequency and pitch are modulated by the variable parameters of localisation and orientation.
thus the text can be physically crossed and experienced according to the own position. voices are layered and mixed by movements and trajects through space.

maxmbrola speech synthesizer:
generate & manipulate phonetetic strings of text.
emulate intertwined phonological, prosodic and musical properties of speech.

Intertwined relationships of physical and virtual networks/parameters:
metric organisation; different pitchsets; tonal and timbral variations; cadential and accidental moments.
-> to create a text/ soundart from which perceptual modes are:
understanding of language / musical nature of language / linguistic nature of music /
all this out of combination of pysical action and machine aesthetics.

Hereafter a visual overview of the researchprocess.
The premiere of the installation will take place at the Happy New Ears (festival for new music)-festival in Kortrijk, Belgium (23 sept - 8 october 2006).

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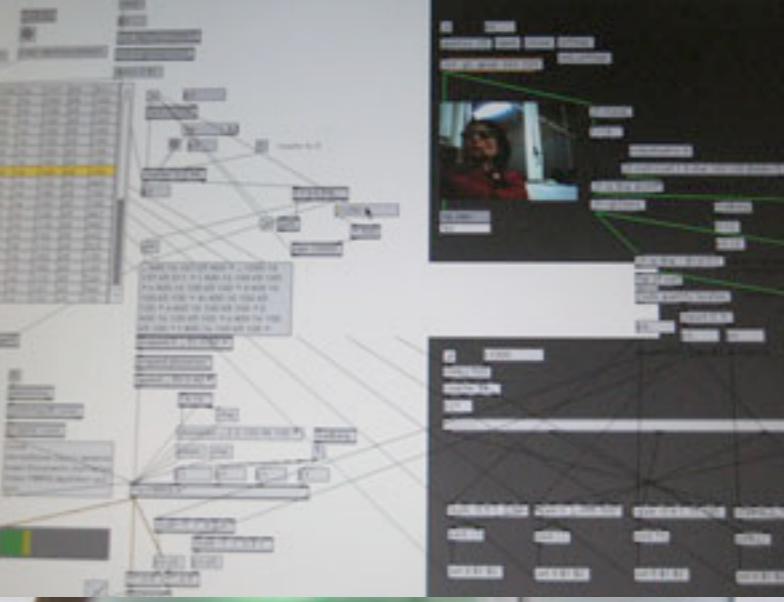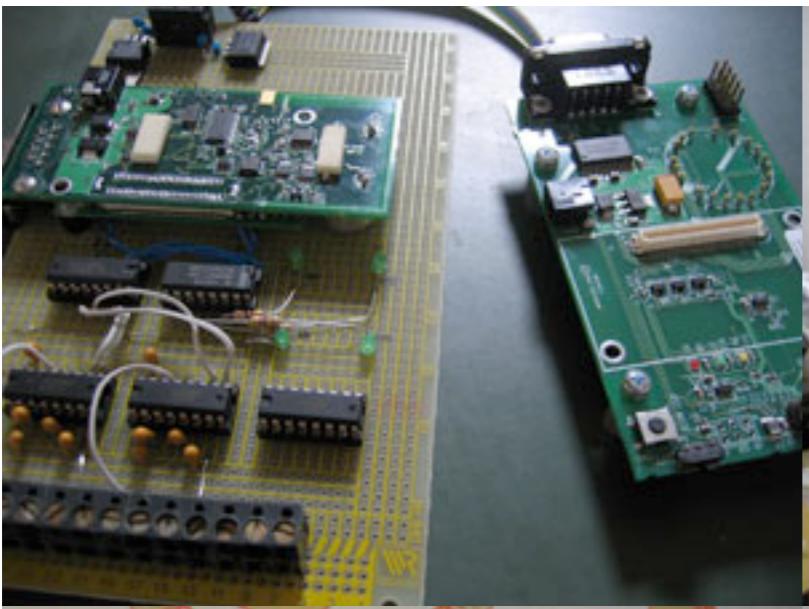
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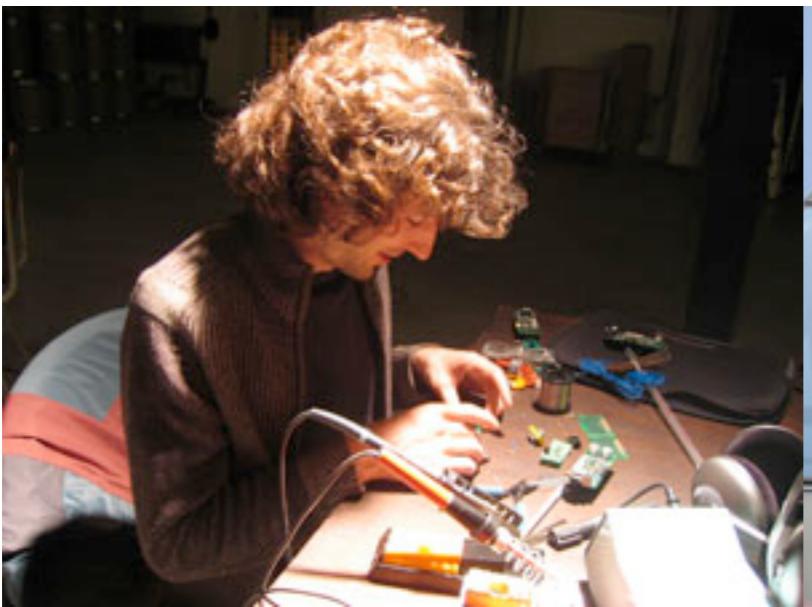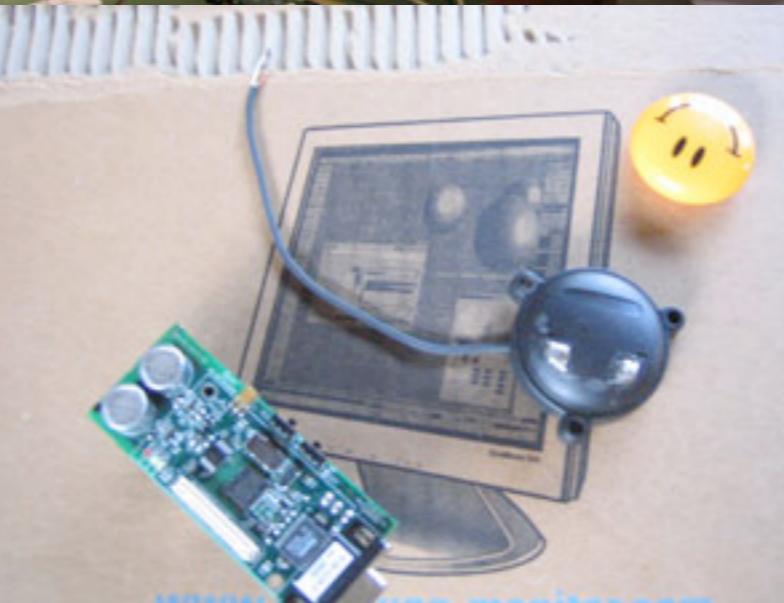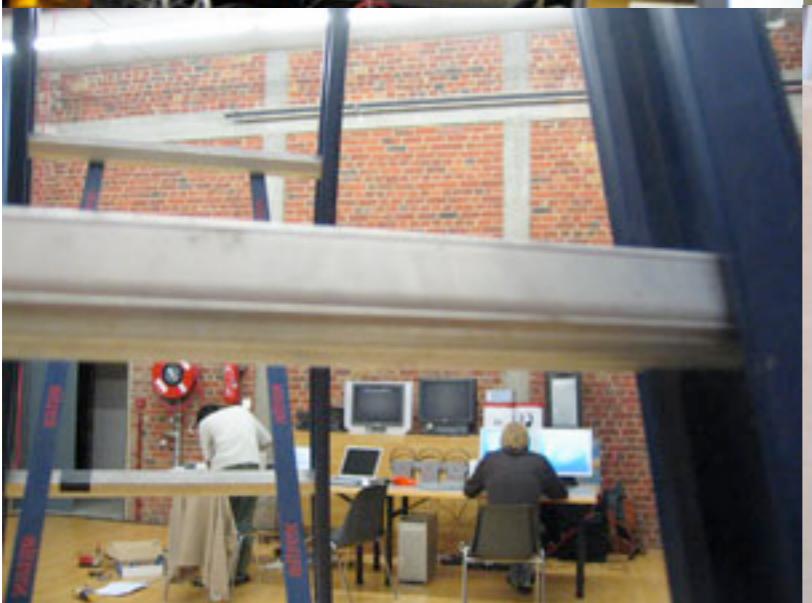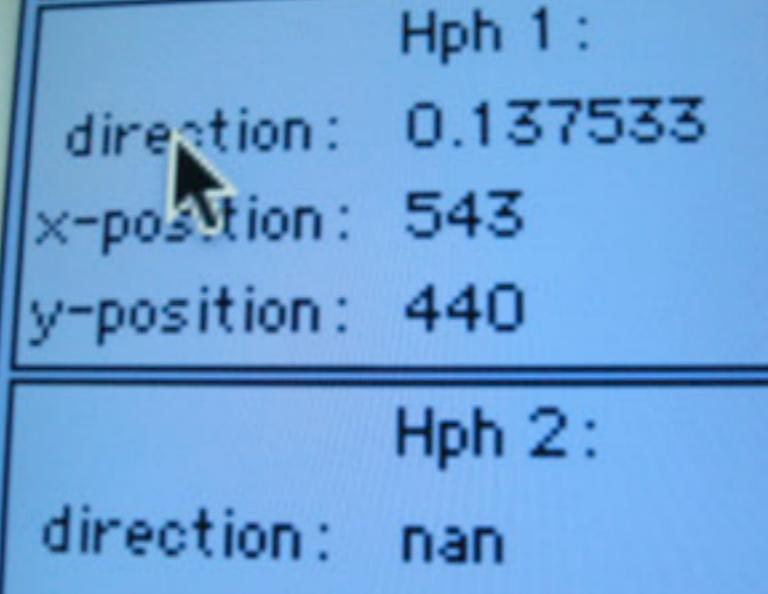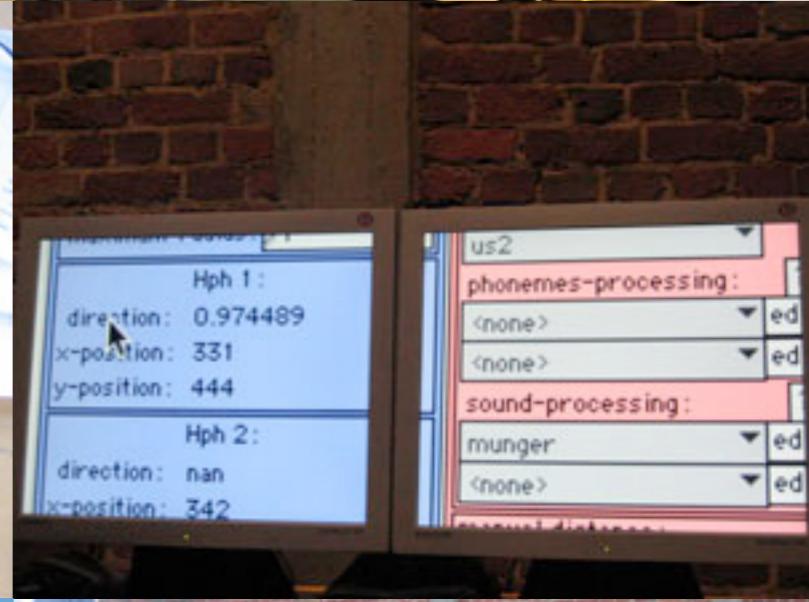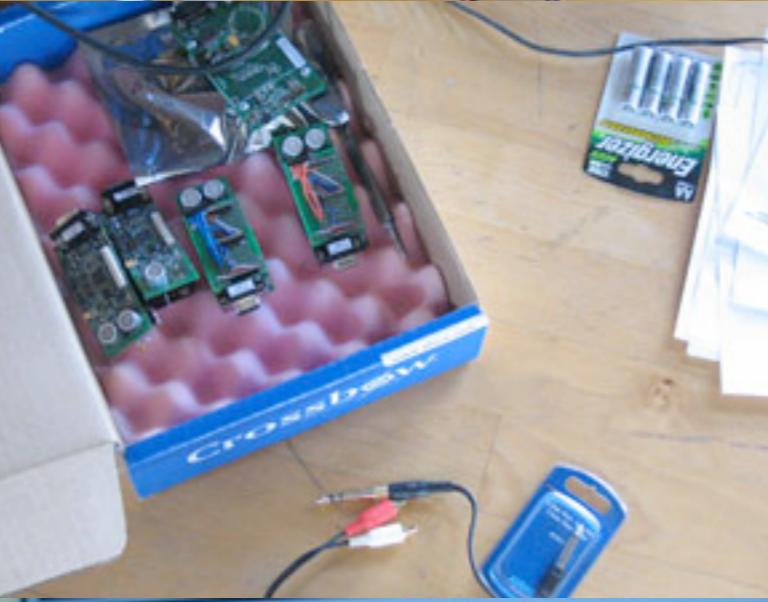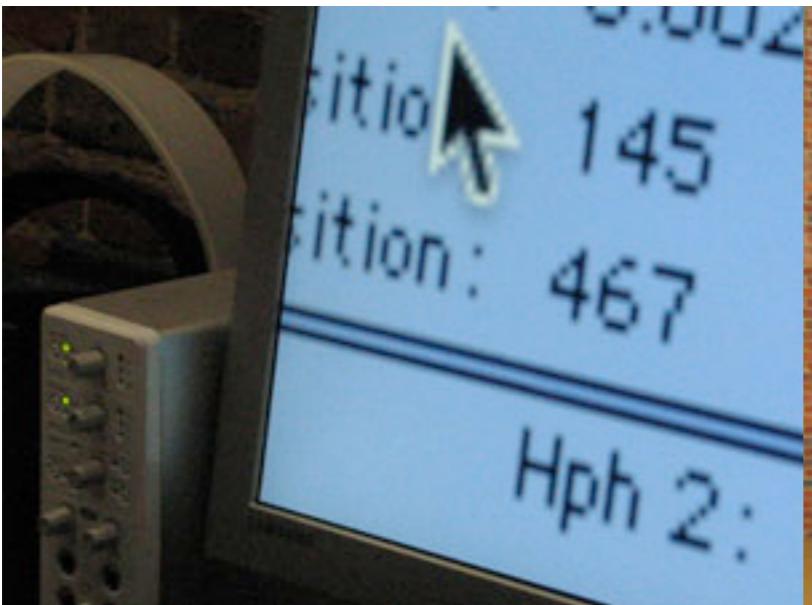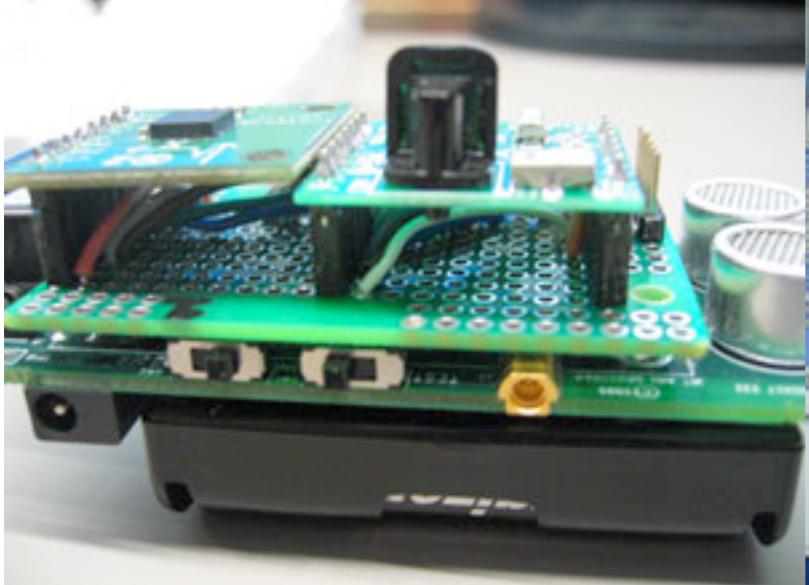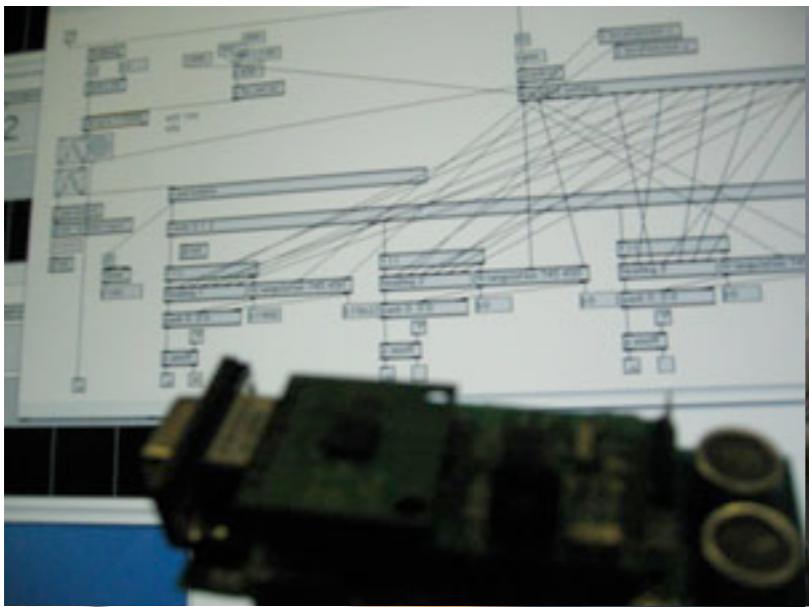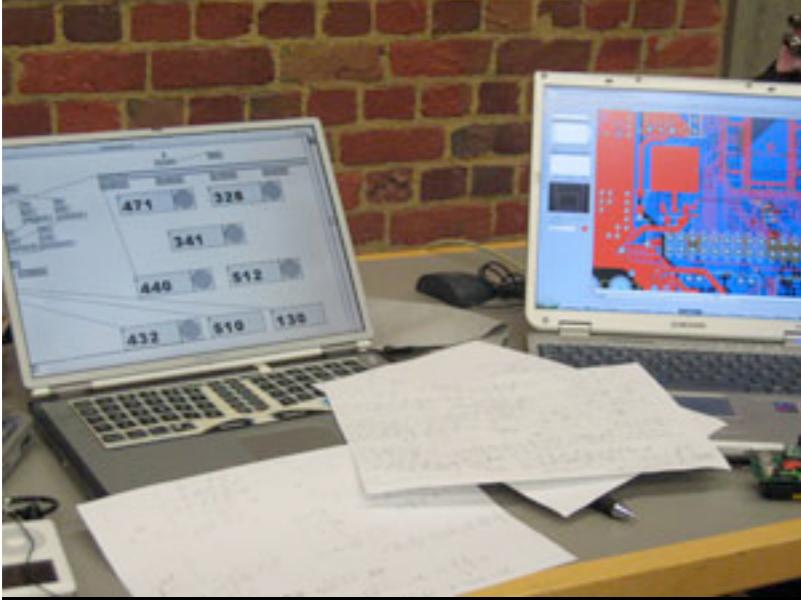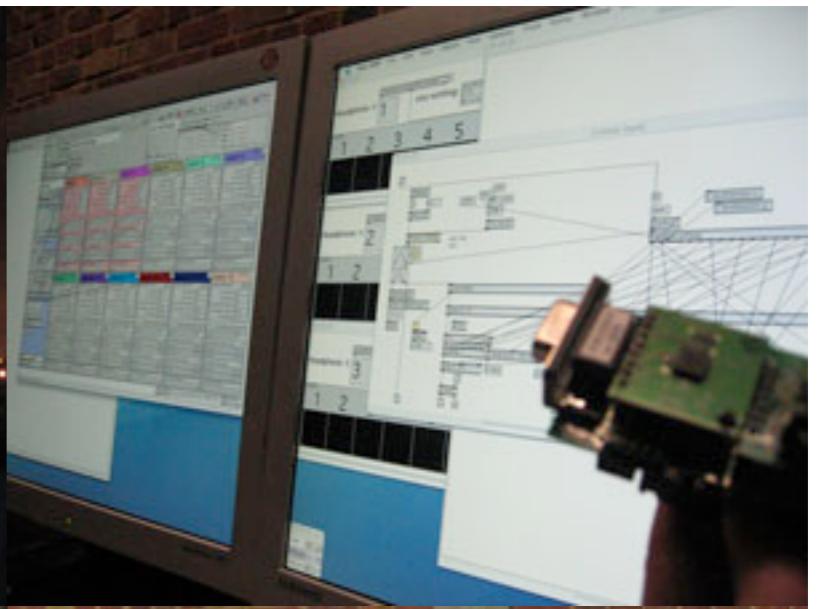
no2pho: language, voice, space

1. outline

'Language' and 'speech' are the most prominent human means of expression. Remarkably, on one hand language is a means of communication, and on the other a barrier to communication between distinct actors, due to its complex structural and semantic characteristics.
Fascinated by this double role of language, by its simultaneously defining and disrupting function, especially when situated in the interaction between humans and machines, No2Pho formulates an artistic answer to this complex behaviour of language and speech, both in an analytical and in a synthesizing manner.

The synthetic speech generated in realtime is coupled to different behaviours of the system, both of which are generated and modulated by the spatial coordinates of the human visitors. The physical world, represented by the psychogeographic trajectory of the visitor, is mapped on the virtual world, which consists of 36 sound sources. The visitors wear wireless headphones, equipped with 'crickets', a wireless sensor network. The crickets network registers the movement coordinates of the visitor, using RF and ultrasound technologies. The localization data is then used to modulate the parameters of the phonemes, adapting the realtime synthesized sound to the continuous movement trajectories of the visitors. Through this psychogeographic link, the visitor can 'penetrate' and interact with the sonic world.

At a given location in the space, different sound sources converge. The visitors have access to the complete sound information only at this particular position, enabling them to extract their own semantic meaning of the whole. The sonic experience is always tied to an individual, and as such it becomes a momentary display of the interaction between human and machine within the same system. Sometime the system will 'sing', other times it will 'whisper' or 'stutter' or 'frostily recite' the information, depending on the cooperation between the physical and the virtual.

It's a play between the interwoven parameters of the physical and the virtual network. People and voices. Wireless headphones and multiple spatialized sound sources. People walk their trajectory through physical space, synthetic voices are generated simultaneously and are modulated by the parameters of localization and orientation: different pitch sets, tonal and timbre variations, cadence and accidental moments. In this way the text can be physically crossed and experienced according to the listener's own position. Voices are layered and mixed by movements and 'dérivés' through space. The perception of this new-born sound poetry is externalized on three levels: the understanding of language, the musical nature of language, and the linguistic nature of music.

2. on words and letters

The direct source of inspiration for this project is the formal, while at the same time poetic approach to linguistics by collectives such as the Lettrists and Oulipo. These groups experimented with words, sounds and letters in the utmost creative and revolutionary manner. The treatment of text is entirely sonic, emphasizing the formal deconstruction of words and letters, as well as the rhythmic representation of separate graphemes within a musical structure.

"Destruction of WORDS for LETTERS
This does not mean: destroying words for other words. Nor forging notions to specify their nuances. Nor mixing terms to make them hold more meaning.
But it does mean: TAKING ALL LETTERS AS A WHOLE, UNFOLDING BEFORE DAZZLED SPECTATORS. MARVELS CREATED FROM LETTERS [DEBRIS FROM THE DESTRUCTION]; CREATING AN ARCHITECTURE OF LETTRIC RHYTHMS; ACCUMULATING FLUCTUATING LETTERS IN A PRECISE FRAME; ELABORATING SPLENDIDLY THE CUSTOMARY COOING; COAGULATING THE CRUMBS OF LETTERS FOR A REAL MEAL; RESUSCITATING THE JUMBLE IN A DENSER ORDER; MAKING UNDERSTANDABLE AND TANGIBLE THE INCOMPREHENSIBLE AND VAGUE; CONCRETIZING SILENCE; WRITING THE NOTHINGNESS.
It is : the role of the poet to advance toward subversive sources. The obligation of the poet to advance in the black and burdened depths of the unknown. The craft of the poet to open one more treasure-room door for the common man."
MANIFESTO OF LETTERIST POETRY by Isidore Isou, 1947

The accent on the sonic qualities of letters and words pushes the semantic meaning of the text to the background, while confronting the listeners with the straight aesthetic experience. Words become physical and unlash a particular sensitivity within the audience; a direct and sensual sonic occurrence. The poetry is freed of its prose, which tends to emphasize the content, disregarding the performative value of text. The kernel of poetry is probed: quasi-invisible, highly intimate elements of experience are transmitted through an appealing sonic base. A physical experience of the sender and the receiver becomes entangled; a synaesthetic experience of drifting in the imagination of 'the other'.

2. the performative voice

Since time immemorial artists of various flavours experimented with the phenomenon of 'voice'. The voice is our primary means of communication, as well as one of the most robust human technologies, expressed in speech and singing.
New techniques for human-computer interaction and communication have to be tested within new structures; similar to scientific ideas being tested within scientific experiments. Sounds should be synthesized by combining frequencies, each of them with their own intensities, elapsing within a given time frame. Sounds constructed from code.

Within No2Pho, the 2-way human interaction of the Lettrists is researched from the digital and technological perspective, the 2-way human-computer interaction. All speech is computer-generated, without application or sampling of the human voice. The behaviour and display of this speech is created by the human individuals, whose spatial trajectories modify the parameters of the phonemes, attuning the pitch, timbre and rhythm of the synthetic voices.
This technique emphasizes the performative talent of the performer, in this case the computer, while depriving the text [in the first layer] of the restrictive intellectual approach to spoken expression. Text is described in a musical manner, following the structure akin to music. The notes in a score have their contextual meaning removed, functioning only as symbols. However, between words as phonetic material, as well as between the functional phoneme-units of this material, there exists an evident relationship. In verbal language the link between the signifier and the meaning is arbitrary, which makes it possible for a word to be seen as a symbol [de Saussure, Peirce], while the musical note can be seen as free of all arbitrary meaning.

It is important to design a system fit for expressing this concept in an appropriate aesthetic manner. For this design No2Pho deploys technology developed in the speech laboratory of the Université Polytechnique Mons. With the Mbrola speech synthesizer, based on the phoneme-system within which frequency and pitch can be annotated, the sound can be constructed and 'directed' down to its finest grains.

While being immersed in the system, the visitors discover their influence on the aesthetic display of the voices. After some time, they will discover the second, semantic layer of the work. The conscious migration of the visitors through the space guides them to a convergent position, where all information streams gather. 'Space' becomes a new dimension and an essential component of the system. Extracting meaning requires collaboration with the machine.

3. link to the space

Psychogeography is a study of specific effects of the geographic environment which [with or without particular order] influences the emotions and/or the behaviour of the individual. The Situationists linked psychogeography to the term 'situation', in the philosophical, scientific and artistic fields. The term situation includes the notion of 'locality', in physics defined as 'remote or far removed objects can not have direct influence on each other'. An object can be directly influenced by another object if existing in its immediate surroundings.

'Derivé' or 'drifting' is one of the approaches which guided the Situationists, especially Guy Debord. Drift is a technique where a person rapidly evolves, passing through different emotional moods and urban ambiances, guided by the invisible streams of a city. 'Derivés' demand an open and constructive behaviour from their participants, who should be conscious of the psychogeographic effects [both on themselves and the environment]. The Situationists envisioned that approaching and exploring the space in such a way, the space will open up to the individual, unveiling previously never experienced psychogeographic characteristics. This approach is opposed to the automatized behaviour of an individual, who usually follows the same 'parcours', without exploring the space and it's hidden qualities.

4. Realtime human-machine interaction

Being a part of a living system implies that all components of the system interact with each other in realtime.

Realtime: "of or relating to systems that update information at the same rate as they receive data, enabling them to direct control of a process, or the time it takes for the process to occur". Steven Dixon

The poetics of an artistic environment cannot be reduced to separate materials or elements that constitute it. 'Process' as a medium becomes a communicator between the elements of the artwork and the individual. The concept of the work is woven through the process and can, as such, be transmitted to the individual. The individual can then inscribe the whole in a specific communication stream.

In this process of exchange, the individual drifts in and out of generated information, which gradually forms into a coherent whole, until the moment in which the visitor begins assigning meaning to the experience. Partially due to the input of individual's own variable parameters [space, time, culture], the artistic system finds itself in a continuous process of creation.

Schematically, we can describe the flow of information in this system as follows:
sender [the work] > code [the relationship between the separate elements which constitute the work] > medium/signal [the channel in which the transmission occurs] > reconstruction/decoding [the rebuilding of the information by the individual] > receiver [interpretation by the individual].

The transmission is always disrupted by a particular type of noise or interruption of the signal. The individual will have to interpret this signal and select correct information by ordering the elements in a specific way. While decoding the signal the visitors send information back to the system. In this process, the receiver becomes the sender and the initial sender becomes the receiver, creating a feedback loop. The information that is transmitted is based on this continuous correlation and exchange.

For optimal communication with the system the environment can be experienced by only one visitor at the time, except if additional people can be considered as 'interferences' and integrated as such in the functioning of the system.

Given that every signal is continuously coded, transmitted, decoded and sent back, the artistic environment finds itself in a constant state of transformation. The sender and the receiver become two systems inherent to the work itself as they interact and unceasingly modify each other's conditions. Furthermore, the work itself changes due to the transformations of these two systems. The visitors will interpret a realtime artistic work based on the duration of their participation in the system. The work will continuously unfold and adapt its own elements, becoming a self-organizing system.

5. Methodology

A selection of existing texts gives shape to the basis of the work. These texts are selected as a commentary on specific situations within our arts and cultural society [Richter, Flusser, Stein, Beckett...].

The analysis of the text occurs in real time, by translating graphemes to phonemes, together with their corresponding frequency and pitch values. The phonemes are resolved and every virtual voice is assigned a specific set of behaviours.

The synthesis is influenced by the visitor. All parameters for the display of the synthetic voice are linked to the 'distance factor' of the individual. Based on the formal composition, the individuals themselves determine the speed in which the semantic meaning of the text becomes clear, or becomes utterly deconstructed, completely descending into noise.

The multi-platform output requires a dual interface structure: a sensor-triggered human localization/response, and a computer-mediated rendering of the data through the Mbrola speech synthesizer, which emulates intertwined phonological, prosodic and musical properties of speech.

The MaxMbrola object processes phonetic strings of text and allows the speech processing to be integrated within the Max/MSP environment, linked to the data gathered by the sensor network and finally binaurally spatialized.

Once generated, the synthetic voices are treated through a specific DSP [digital signal processing]. The correlation between the distance factor and the phoneme-parameters [with the addition of DSP effects] generates a range of possible varieties for the creation of realtime sound and image.

The result is a combination of physical action and machine aesthetics.

It's a human machine collaboration.

footnotes:

The Lettrism movement was founded in the late forties by Isidore Isou [1928].
In the development of the art of poetry, Isou saw the Lettrist at the end of a long chiseling phase which had begun with Baudelaire reducing narrative in his poetry to anecdote, then Rimbaud disregarding anecdote for lines and words, Mallarmé reducing words to sound and spaces and finally the Dadaists destroyed the word altogether. Isou saw at the end of this phase the new beginnings of an amplic stage for culture, from which a whole host of new arts, ways of working, and social institutions would eventually spring.
en.wikipedia.org/wiki/Lettrism

Oulipo was founded in the 1960's and stands for "Ouvroir de littérature potentielle", which translates as "workshop of potential literature". It is a loose gathering of French-speaking writers and mathematicians, and seeks to create works using constrained writing techniques.
en.wikipedia.org/wiki/Oulipo

Ferdinand de Saussure [1857-1913] was a Swiss linguist, considered by many to be the father of structuralism. He laid the foundation for many developments in linguistics in the 20th century. He perceived linguistics as a branch of a general science of signs he proposed to call semiology or semiotics.
en.wikipedia.org/wiki/Ferdinand_de_Saussure

Charles Sanders Peirce [1839-1914] was an American polymath. An innovator in fields such as mathematics, research methodology, the philosophy of science, epistemology, and metaphysics, he considered himself a logician. He saw logic as a branch of semiotics, of which he is a founder. In 1886, he saw that logical operations could be carried out by electrical switching circuits, thus anticipating the digital computer.
en.wikipedia.org/wiki/Charles_Peirce

The Situationist International is an international political and artistic movement which has parallels with Marxism, dadaism, existentialism, anti-consumerism, punk and anarchism. Formed in 1957 the SI movement was active through the 1960s and had aspirations for major social and political transformations.
 Guy Debord [1931-1994) was a writer, film maker, hypergraphist and founding member of the groups Lettrist International and Situationist International.
en.wikipedia.org/wiki/Situationists
en.wikipedia.org/wiki/Guy_Debord

So-on, currently developing the No2Pho-project, is a group of artists working with image, sound and technology.
Annemie Maes is working with voice, language, text and sound in a transdisciplinary and convolutional way.
Edo Paulus is using generative processes to create sound and musical textures resulting in automatical music-generating software, live music performances, sound-installations and audio for interactive imagery.
Sukandar Kartadinata is a technician who is focused on custom music&art technology.
Billy Bultheel is a student at the sonology-program in den hague.
www.so-on.be
www.eude.nl/
www.sukandar.de/
www.glui.de/mainframe.html

The MBROLA project, initiated by the TCTS Lab of the Faculté Polytechnique de Mons [Belgium], is developing a set of speech synthesizers for as many languages as possible, and provides them free for non-commercial applications. The ultimate goal is to boost academic research on speech synthesis, and particularly on prosody generation.
tcts.fpms.ac.be/synthesis/mbrola.html
The MaxMBROLA Project is an MBROLA-based real-time voice synthetizer for Max/MSP.
tcts.fpms.ac.be/synthesis/maxmbrola/

inspiration, sources, backgrounds and documentation

composition as explanation
gertrude stein, selected writings, 1928

There is singularly nothing that makes a difference a difference in beginning and in the middle and in ending except that each generation has something different at which they are all looking. By this I mean so simply that anybody knows it that composition is the difference which makes each and all of them then different from other generations and this is what makes everything different otherwise they are all alike and everybody knows it because everybody says it.

It is very likely that nearly every one has been very nearly certain that something that is interesting is interesting them. Can they and do they. It is very interesting that nothing inside in them, that is when you consider the very long history of how every one ever acted or has felt, it is very interesting that nothing inside in them in all of them makes it connectedly different. By this I mean this. The only thing that is different from one time to another is what is seen and what is seen depends upon how everybody is doing everything. This makes the thing we are looking at very different and this makes what those describe it make of it, it makes a composition, it confuses, it shows, it is, it looks, it likes it as it is, and this makes what is seen as it is seen. Nothing changes from generation to generation except the thing seen and that makes a composition. Lord Grey remarked that when the generals before the war talked about the war they talked about it as a nineteenth-century war although to be fought with twentieth-century weapons. That is because war is a thing that decides how it is to be done when it is to be done. It is prepared and to that degree it is like all academies it is not a thing made by being made it is a thing prepared. Writing and painting and all that, is like that, for those who occupy themselves with it and don't make it as it is made. Now the few who make it as it is made, and it is to be remarked that the most decided of them usually are prepared just as the world around them is preparing, do it in this way and so I if you do not mind I will tell you how it happens. Naturally one does not know how it happened until it is well over beginning happening.

To come back to the part that the only thing that is different is what is seen when it seems to be being seen, in other words, composition and time sense.

No one is ahead of his time, it is only that the particular variety of creating his time is the one that his contemporaries who also are creating their own time refuse to accept. And they refuse to accept it for a very simple reason and that is that they do not have to accept it for any reason. They themselves that is everybody in their entering the modern composition and they do enter it, if they do not enter it they are not so to speak in it they are out of it and so they do enter it; but in as you may say the non-competitive efforts where if you are not in it nothing is lost except nothing at all except what is not had, there are naturally all the refusals, and the things refused are only important if unexpectedly somebody happens to need them. In the case of the arts it is very definite. Those who are creating the modern composition authentically are naturally only of importance when they are dead because by that time the modern composition having become past is classified and the description of it is classical. That is the reason why the creator of the new composition in the arts is an outlaw until he is a classic, there is hardly a moment in between and it is really too bad very much too bad naturally for the creator but also very much too bad for the enjoyer, they all really would enjoy the created so much better just after it has been made than when it is already a classic, but it is perfectly simple that there is no reason why the contemporary should see, because it would not make any difference as they lead their lives in the new composition anyway, and as every one is naturally indolent why naturally they don't see. For this reason as in quoting Lord Grey it is quite certain that nations not actively threatened are at least several generations behind themselves militarily so aesthetically they are more than several generations behind themselves and it is very much too bad, it is so very much more exciting and satisfactory for everybody if one can have contemporaries, if all one's contemporaries could be one's contemporaries.

There is almost not an interval.

For a very long time everybody refuses and then almost without a pause almost everybody accepts. In the history of the refused in the arts and literature the rapidity of the change is always startling. Now the only difficulty with the volte-face concerning the arts is this. When the acceptance comes, by that acceptance the thing created becomes a classic. It is a natural phenomena a rather extraordinary natural phenomena that a thing accepted becomes a classic. And what is the characteristic quality of a classic. The characteristic quality of a classic is that it is beautiful. Now of course it is perfectly true that a more or less first rate work of art is beautiful but the trouble is that when that first rate work of art becomes a classic because it is accepted the only thing that is important from then on to the majority of the acceptors the enormous majority, the most intelligent majority of the acceptors is that it is so wonderfully beautiful. Of course it is wonderfully beautiful, only when it is still a thing irritating annoying stimulating then all quality of beauty is denied to it.

Of course it is beautiful but first all beauty in it is denied and then all the beauty of it is accepted. If every one were not so indolent they would realize that beauty is beauty even when it is irritating and stimulating not only when it is accepted and classic. Of course it is extremely difficult nothing more so than to remember back to its not being beautiful once it has become beautiful. This makes it so much more difficult to realize its beauty when the work is being refused and prevents every one from realizing that they were convinced that beauty was denied, once the work is accepted. Automatically with the acceptance of the time sense comes the recognition of the beauty and once the beauty is accepted the beauty never fails any one.

Beginning again and again is a natural thing even when there is a series.

Beginning again and again and again explaining composition and time is a natural thing.

It is understood by this time that everything is the same except composition and time, composition and the time of the composition and the time in the composition.

Everything is the same except composition and as the composition is different and always going to be different everything is not the same. Everything is not the same as the time when of the composition and the time in the composition is different. The composition is different, that is certain.

The composition is the thing seen by every one living in the living that they are doing, they are the composing of the composition that at the time they are living is the composition of the time in which they are living. It is that that makes living a thing they are doing. Nothing else is different, of that almost any one can be certain. The time when and the time of and the time in that composition is the natural phenomena of that composition and of that perhaps every one can be certain.

No one thinks these things when they are making when they are creating what is the composition, naturally no one thinks, that is no one formulates until what is to be formulated has been made.

Composition is not there, it is going to be there and we are here. This is some time ago for us naturally.

The only thing that is different from one time to another is what is seen and what is seen depends upon how everybody is doing everything. This makes the thing we are looking at very different and this makes what those who describe it make of it, it makes a composition, it confuses, it shows, it is, it looks, it likes it as it is, and this makes what is seen as it is seen. Nothing changes from generation to generation except the thing seen and that makes a composition.

Now the few who make writing as it is made and it is to be remarked that the most decided of them are those that are prepared by preparing, are prepared just as the world around them is prepared and is preparing to do it in this way and so if you do not mind I will again tell you how it happens. Naturally one does not know how it happened until it is well over beginning happening.

Each period of living differs from any other period of living not in the way life is but in the way life is conducted and that authentically speaking is composition. After life has been conducted in a certain way everybody knows it but nobody knows it, little by little, nobody knows it as long as nobody knows it. Any one creating the composition in the arts does not know it either, they are conducting life and that makes their composition what it is, it makes their work compose as it does.

Their influence and their influences are the same as that of all of their contemporaries only it must always be remembered that the analogy is not obvious until as I say the composition of a time has become so pronounced that it is past and the artistic composition of it is a classic.

notovo/ scrambled stein
so-on

words. words. is is look-- language. an interval art that means: looks-- a sense. which .-- .... .. - .... explains . -..- .--. .-.. .- .. -. ... there with .-- .... .. - .... this - .... almost .- .-.. -- --- ... - new -. . .-- shows-- it confuses-- not interval as this interval -- by -... -.-- and .- -. -.. its creation shows-- composition shows-- likes-- again. is interval poetics of time and means seeing-- as and an and seen-- not poetics make time a language. sentences of almost again-- poetics and seeing-- is that natural or new-- interval sentences sense. time which makes? interval for seeing-- is composition not senses-- words-- by poetics time likes.. -- . art this beginning and thing creation beginning is politics. shows-- shows-- show and .- -. .. and .- -. -.. this and their interval .. -. - . .-. ...- .- .-.. confuses-- -.-. --- -. ..-. ..- ... . -....- -....- as .- ... shown ... . --- .-- by sense. ... .- ... . .-.-. looks-- senses-- ... . -. ... . -....- - ....- composition poetics .--. --- . - .. -.-. ... .- -. confuses-- their - ....-. this that as that - .... .- - and as beginning beginning -... . --. .. -. -. .. -. --. poetics .--. --- . - .. -.-. ... things seeing-- ... . .. -. --. -....- -....- seen-- and senses-- ... .- ... . -....- -....- a .- language. of --- ..-. politics. .--. --- .-... .- .. -.-. ... .-.-. and of words-- .-- --- .-. -.. ... -....- -....- beginning that make words-- .-- --- .-. -.. ... -....- -....- time - .. -- . senses-- creation as .- ... time of --- .. .-.. .. -.- . .... .- .-.- composition again. .- --. .- .. -. .-.-. and .- -. -.. again. .- --. .- .. -. .-.-. again. .- --. .- .. -. .-.-. language .-.. .- -. --. ... .- --. . beginning -... . --. .. -. -. .. -. --. art .- .-. - this - .... and and and seeing-- ... . .. -. --. -....- -....- words-- .-- --- .-. -.. ... -....- -....- again-- sentences look-- .-.. --- --- .-. ... -....- -....- is .. ... and .- -. -.. and .- -. -.. what .-- .... .- - and almost. art natural -. time.- - .. .-. .- .-.. time - .. -- . new-- -. . .-- -....- -....- interval .. make -- .- -.- . interval .. -. - . .-. ...- .- .-.. and show ... . --- .-- shows-- likes. .-.. .. -.- . .... .-.-. likes. .-.. .. -.- . .... .-.-. it.

somebody's voice, nobody's voice :
on orality and polypoetry at the dawn of the 21st century

essay by Jelle Dierickx
== Jelle Dierickx was one of the lecturers/teachers of the 'synthetic speech for the expressive masses'-workshop, organised in 2005 by okno/so-on ==

(…) les quatre coins de la conscience de l'Homme où nichent le son, le geste, la parole et le souffle qui crache la vie.

Breathe in

In Uno, nessuno e centomila (Somebody, nobody and 100,000), written in 1926, Luigi Pirandello describes how his protagonist Vitangelo Moscarda undergoes a complete identity crisis. The cause is an apparently casual remark from his wife:

'What are you doing?' my wife asked, when she saw me dawdling for an unusually long time in front of the mirror.
'Nothing,' I replied, just looking at my nose, in this nostril. It hurts a bit when I touch it.'
My wife smiled and said:
'I thought you were looking at how crooked it is.'

From that moment on, his reflection becomes an obsession, together with the thought that he is 100,000 different people through the gaze of others, and that at the same time, that idea turns him into nobody.
The question is whether Moscarda would have experienced the same crisis if his wife had pointed out that his voice was a little grating. If so, we may wonder if the book would have been as successful as it was. After all, Western culture is very much oriented towards the visual.
If there is any discussion of the voice in the book that Pirandello worked on for fifteen years, it is to emphasise unreliable aspects of our communication system:

'But the trouble is, my friend, that you will never know what your words become inside me, and I will never be able to explain it either. It's not like you were speaking Turkish or something. The two of us, you and I, were using the same language, the same words. But is it our fault, yours and mine, if the words themselves are empty? Empty, my friend. And you put your meaning into them when you say them to me, but when I hear them, I cannot do otherwise than put my own meaning into them. We thought we understood each other perfectly: but neither of us has understood anything of what the other was saying.'

It goes without saying that the voice can communicate in more ways than just at the verbal and semantic level.
If we were to list a couple of points concerning the use of the voice at the beginning of the 21st century, we will probably have to conclude that we are dealing with somebody's voice, nobody's voice and 100,000 voices.

To clarify this, two aspects that are prominent at the beginning of the 21st century must be discussed in further detail: the impact of multimedia and the apparent return of orality. This clarification creates more questions than it answers, but it is probably worth the effort of asking these questions.

A multimedia voice

The French poet Guillaume Apollinaire was made aware of his own voice at the Sorbonne in Paris in December 1913. That was when he received his first opportunity to make a sound recording of several of his poems. The man was sensitive enough to realise that this event would have consequences as far-reaching as Moscarda's problem with his nose.

Jean-Pierre Bobillot speaks of the impact of the birth of an audiosphere and of a determining moment when Apollinaire realised that new rules would apply in the mechanical and later on the electronic era.

Apollinaire confessed at this moment that:'Comme je fais mes poèmes en les chantant sur des rythmes qu'a notés mon ami Max Jacob, j'aurais dû les chanter comme fit René Ghil, qui fut avec Verhaeren le véritable triomphateur de cette séance.'

Bobillot concludes from this: 'Qu'est-ce à dire sinon qu'il se reproche, après-coup, de n'avoir pas su tenir compte de la spécificité de la technique et du support auxquels il se trouvait soudain confronté ? Ils lui auraient en effet permis d'intégrer au poème lui-même tout ce que la typographie et le papier, par leurs caractéristiques conjuguées — que relayait une diction par trop convenue, réduite à une illusoire oralisation de l'écrit —, en excluaient : sa propre « enveloppe » intonative, sa corporéité phonatoire, sa dynamique. Ou en d'autres termes : sa venue, que la page imprimée et la parole socialisée tendent à évacuer, solidairement, à l'exclusif profit de la tenue morpho-syntaxique de l'énoncé — et de son contenu. Ce pourquoi, très précisément, il avait décidé in extremis de supprimer toute ponctuation sur les épreuves d'Alcools.'

If Apollinaire were still alive at the beginning of the 21st century, he probably wouldn't know where to begin. Developments in multimedia have progressed so fast that it is difficult to absorb their implications, let alone apply them consistently to the poetic medium. Up to now, the majority of poets have not yet digested the 19th century, and so the insights of Apollinaire and co. remain a current topic. The gulf between the unstemmable flood of words that refuses to face – or hear – multimedial poetics is immense. There are only a handful of poets in Europe who are applying the achievements of the digital age in a relevant and meaningful way: if not its technical aspects, then certainly its way of thinking. In previous articles, I referred to the scene where this does sometimes occur as 'polypoetic'. This term is completely superfluous in the sense that only 'poetry' exists, but it is necessary in this discourse in order to avoid confusion, given that poetry is all to often conflated with the (written) Word.

However we should not make the mistake of applying the term 'multimedia' to new media alone. Or, as the philosopher Bart Vandenabeele rightly remarks:

The one-sided application of the issues of new media in art to new, Western technologies is, among other things, ethnocentric: the use that Chris Ofili makes of elephant dung in his work, or that economically backward Huichol Indians make of beads from the Czech Republic, Slovakia and Japan to create their masks, is at least as much (or as little) a question of multimedia as video or media art à la Bill Viola or Pipollitti Rist.

He then concludes that the question is not 'what is art in cyberspace or hyperreality,' but 'how does cyberspace change the production and reception of art in our world.'

However it is still not easy to determine with any certainty which voice(s) we hear in the aforementioned cyberspace.

A virtual voice

In our time the voice no longer needs breath, only bits. The electronic/digital body is everywhere, although it seems to go unnoticed by most people.

My first question is whether Heidegger's dichotomy, which Albert Borgmann applies in Technology and the character of contemporary life, also applies here. Is it so that the voice is no longer seen as a thing, but as a device? Just as we have forgotten that it is not really normal for water to come out of the tap or that we have not always been able to speed along at 80 miles an hour along seemingly endless stretches of tarmac. Is it possible to lose touch with your own voice? To consider your voice as a mere device? Just as there is a demand for instant products (whatever the cost, as long as they're cheap), is there a demand for instant voices, with no commitment to what they are saying, no impact, but efficient in their ability to acquire products?

The disappearance of the voice as a thing is linked to the emergence of the virtual body. After all, the voice is not only a device for conveying semantic messages (and, from a biological perspective, it is not even designed to do so).

Joke Dame writes about this issue in her study of the 'singing body,' discussing sung frequencies here:

The tension in the vocal cords, pharynx and larynx, in other words, the physical exertion needed to produce a note, is certainly characteristic. The same applies to the resonance cavities. The shape of the nose, throat and mouth cavities has a great influence on the sound of the voice. In other words, you do not only hear a certain frequency, you also hear a body. Barthes would say: you mainly hear a body.

This begs a second question, concerning communication. What message does a virtual voice carry?

"Hello. This is Gina. I'm online right now, but if you leave a message, I'll get back to you." That's what you'll hear if you call me while I'm on the Web.

While you are creating a virtual body in silence, your digital voice repeats the same message time and again. It seems certain that this voice will have an increasing impact, because money is involved, and a lot of money at that.

Coppercom, a company set up in Florida in 1997, which specialises in VoB (Voice over Broadband) solutions and network technology, claims the following in a "White Paper":

Eight of every ten dollars earned by carriers in the US is earned on voice services of some sort. For the local exchange carriers, voice is such a dominant revenue source that even voice custom calling features earn more revenue than all data services combined. Given such a large voice revenue stream, even data-centric carriers would have to expect to offer voice services to maintain a competitive position in the face of multi-service discount policies. Yet some have said that in the network of the future, voice will be a free premium given to attract data customers.

There is certainly no shortage of such basically non-speaking virtual voices. Experienced chatters know how to use all kinds of emoticons, but may themselves remain completely indifferent to them, and cannot know whether a given emoticon meets with the same genuine emotion. The - often androgynous - electronic voice speaks or sings to an anonymous audience. In that grey audience, however, each individual believes that the voice speaks to him or her specifically. Just as TV, film and so on convey an apparently personal message. At a basic level, this is the same effect that even books have.

It seems, then, that there is not much new under the sun, as far as the silent voice is concerned. Is this also the case for the sounding voice?

Vox antiqua = Vox nova?

The human voice cannot be dislocated from the notion of history. We speak of an oral tradition, but to what extent can we speak of a straight line? It may seem clear enough that we are not living in the time of Beowulf, the Arabian Nights, the Chanson de Roland or Homer's Odyssey. The box office success of recent Hollywood productions of Troy and The 13th Knight and the Disney cartoon Aladdin might suggest the opposite, however. Stories (in whatever form) have never left us, and probably never will, for as long as human beings still hear their own voices. Or as philosopher Karel Boullart puts it:

We are children in the dark, who light candles not to drive the darkness away (it wouldn't work) but to convince ourselves that it isn't there. The 'Ding an Sich,' is unknown and cannot be contained in knowledge. It seems that the consequence of this is that we can only grasp the world and understand it if we tell stories about it.
(…) We rely on stories because we are mortal and because we know it.

The fact of the continuous presence of stories great and small is clearly not the most transparent of situations. In the 21st century, everything exists at once, all opposites co-exist and in that sense cancel each other out: the belief in a god or gods and rejection of this belief, belief in science and rejection of it, the most finely wrought classical music and the most banal of pop music, to give a few examples.
Can an individual still hear his or her own voice amidst this confusion? Does he or she hear the voice of others? How many others? How many voices can an individual cope with?
Is it not the broken, smothered or duplicated voice of the polypoet that deals with these questions – or, precisely, does not deal with them – in polypoetry? Is this way of acting on the current climate not a present-day form of incantation, weaving the thread of a story through a web that appears impossible to untangle?

Who hears voices?

A voice is created as it were time and time again. Each time we express something orally (aurally), the result is fairly unpredictable: it will inevitably be something different from the last time. Or as Friedrich Nietzsche puts it in the 333rd aphorism in Menschliches, Allzumenschliches:

Gefahr in der Stimme.-Mitunter macht uns im Gespräch der Klang der eignen Stimme verlegen und verleitet uns zu Behauptungen, welche gar nicht unsren Meinungen entsprechen.

Just as deconstruction unravels a multiplicity of voices in a text, we can obviously also speak of multiple voices in the domain of sound. A multitude which, according to Marcel Cobussen and Jacques Derrida, cannot be reduced to a polyphony or polytonality:
The desire for a transparent voice is a dream, an illusion. Every general Verstimmung at all times interrupts a familiar harmony.
Who hears which voice(s) in this inharmonious muddle?

The voice of the one god at the beginning of the 21st century may be nobody's voice, but for 100,000s of people, that voice sounds loud indeed. The same is true of the one Poet: nobody believes in it, but you can hear it everywhere. The voice of Apollinaire is somebody's voice, but how far does it carry? Ligeti, Xenakis, Penderecki and numerous other composers have captured the voices of 100,000 in their compositions, or is this here, too, just the voice of that one composer? The virtual voices that glide through the ethernet screech in silence, or are they the nerves and neurons of a thinking world? Is the so-called 'return of the subject' the return of somebody/nobody among the 100,000?
Are the voices in polypoetry (in the broader sense) not the voices of somebody, nobody and 100,000 all at once?

Breathe out

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Besides that he's also the artistic leader of five International Krikri Festivals on Polypoetry (Gent, Belgium) and of several other concerts and performances.
http://www.krikri.be/main.php?lang=en
http://www.ipem.ugent.be/staff/jelle.html

realtime making of phonemes-lists via the mbrola/mary server

ve we we ve, we ve ve we, rfe le le re, le re re le, re ne ne re, ne re re ne

route text

english is not better

t s b

| /Applications/Perl/maryclient.pl -i TEXT_EN -o
MBROLA - | /Applications/Perl/mbrol2Max.pl -o -s

zl join

echo

zl join

shell

prepend set

"phonemes v 50 0 100 * w 49 * i 62 * w 46 * i 87 *
v 32 * w 49 * i 87 * v 32 * v 50 * w 49 * i 62 * r
41 * f 76 * I 48 * @ 36 * I 57 * @ 36 * r 45 * EI 87
* I 57 * @ 36 * r 45 * EI 87 * r 45 * EI 87 * I 57 *
@ 36 * r 45 * EI 87 * n 51 * i 97 * n 51 * i 97 * r
45 * EI 87 * n 51 * i 97 * r 45 * EI 87 * r 45 * EI
87 * n 70 * i 244 * _ 200 100 100 * _ 100 100 100
#"

fromsymbol

prepend set

echo ve we we
le re re le, re
Applications/Pe
-o MBROLA - | /
mbrol2Max.pl -

opendialog

conformpath colon

prepend voice

stop

MaxMBROLA~

loadbang

100

100

shifter~

dac~

phonemes v 50 0 100 * w 49 * i 62
* w 46 * i 87 * v 32 * w 49 * i 87
* v 32 * v 50 * w 49 * i 62 * r 41
* f 76 * I 48 * @ 36 * I 57 * @ 36
* r 45 * EI 87 * I 57 * @ 36 * r 45
* EI 87 * r 45 * EI 87 * I 57 * @ 36
* r 45 * EI 87 * n 51 * i 97 * n 51
* i 97 * r 45 * EI 87 * n 51 * i 97 *
r 45 * EI 87 * r 45 * EI 87 * n 70 *
i 244 * _ 200 100 100 * _ 100 100
100 #

sample converted into a coll for use in the NOTOVO application:

```
0, _ 200 0 100 51 100;
1, E 200 0 100 51 100;
2, v 200 0 100 51 100;
3, r 200 0 100 51 100;
4, I 200 0 100 51 100;
5, T 200 0 100 51 100;
6, I 220 0 100 51 100;
7, N 200 0 100 51 100;
8, D 210 0 100 51 100;
9, { 220 0 100 51 100;
10, t 220 0 100 51 100;
11, t 250 0 100 51 100;
12, EI 230 0 100 51 100;
13, k 200 0 100 51 100;
14, s 225 0 100 51 100;
15, h 220 1 100 51 100;
16, @U 240 1 100 51 100;
17, l 225 2 100 51 100;
18, d 230 1 100 51 100;
19, V 235 1 100 51 100;
20, v 250 1 100 51 100;
21, D 256 1 100 51 100;
22, @ 235 1 100 51 100;
23, f 250 0 100 51 100;
24, l 230 0 100 51 100;
25, @U 235 0 100 51 100;
26, V 230 0 100 51 100;
27, v 230 1 100 51 100;
28, l 215 0 103 51 100;
29, AI 220 1 114 51 100;
30, f 235 0 117 51 100;
31, I 230 1 110 51 100;
```

the notovo max-mbrola environment

voice mapping/ spatialisation map (example)

¤ beakon

¤ beakon

*V2

*V1

hot spot

*V5

5 voices
4 voices
3 voices
2 voices
1 voice

*V3

*V4

¤ beakon
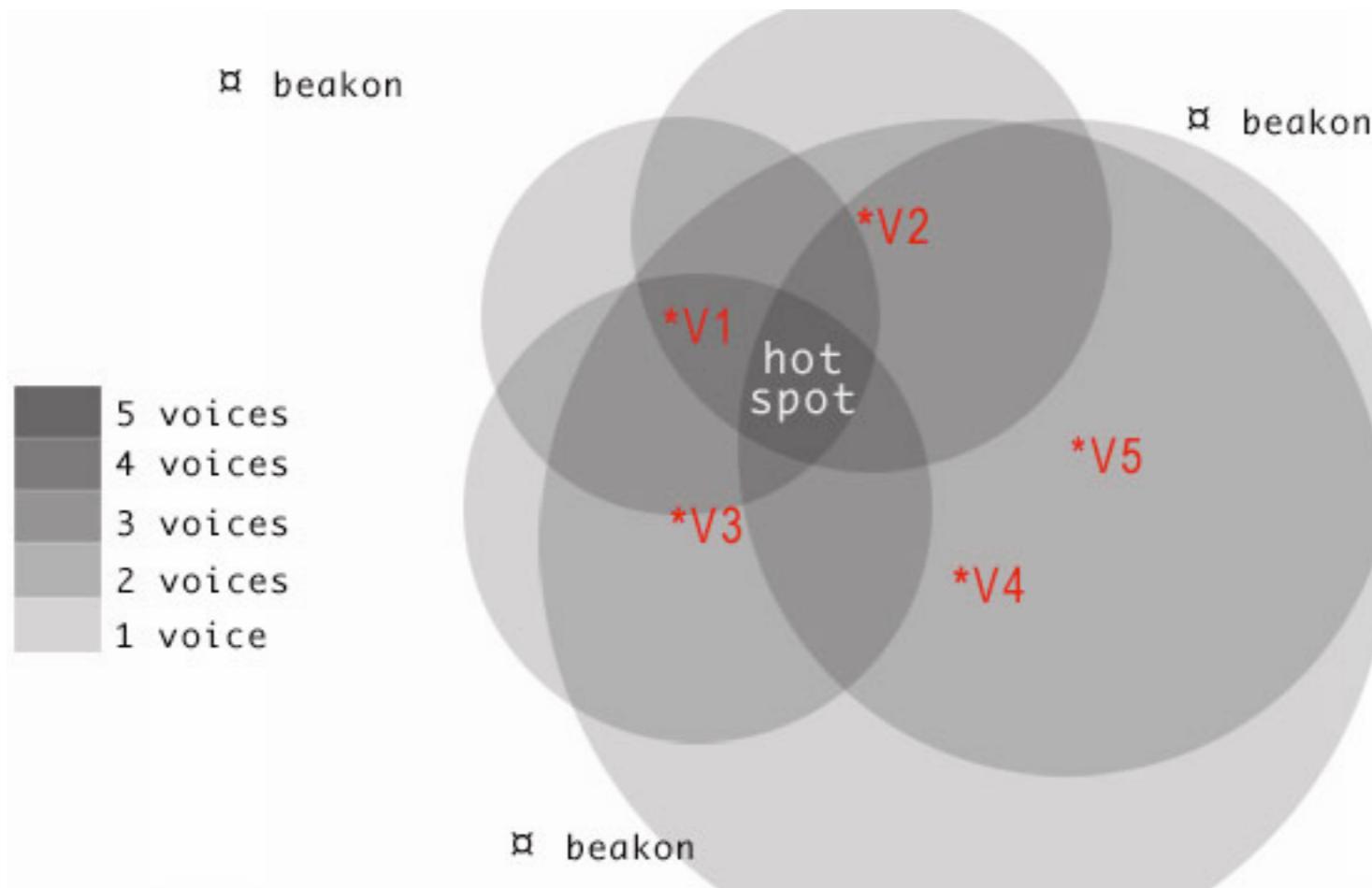
**notovo/ data aquisition
the cricket indoor location system**

http://cricket.csail.mit.edu/
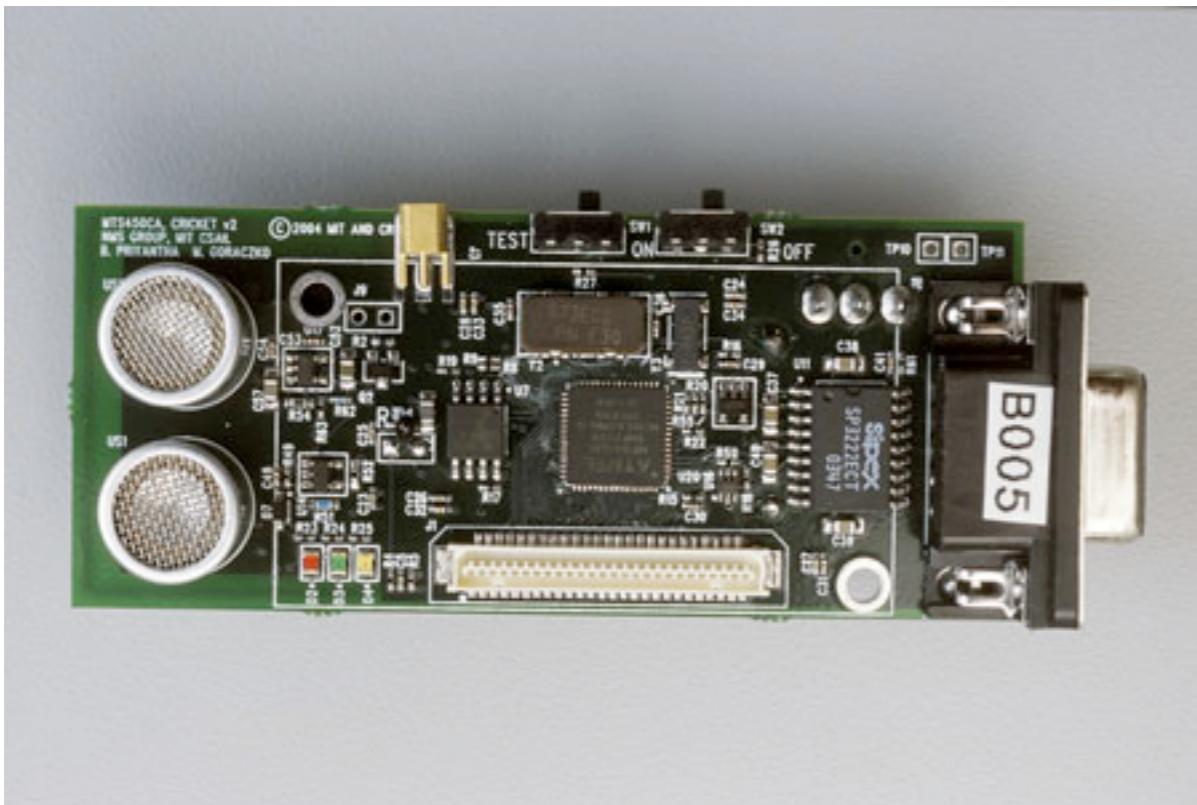
and also:
sukandar kartadinata, home of the glui
http://www.glui.de/mainframe.html

biographies

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The focus is to identify innovation and change while developing artistic projects, and focus on new aesthetical presentation techniques. Therefore they are working closely together with multiple collectives in belgium and abroad. As co-founder of OKNO [together with Guy Van Belle and Gert Aertsen], Annemie Maes is strongly involved in the artistic production and presentation of okno, and is responsible for okno's day-to-day management.

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sukandar_kartadinata crafts modern musical instruments that are made from micro-electronics and computer code rather than wood or brass. His designs are usually custom-made depending on the specific needs of individual musicians and media-artists.

Kartadinata studied computer science and electrical engineering in Karlsruhe, where he also maintained close ties with ZKM (Zentrum für Kunst und Medientechnologie) and acted as lead engineer in Sabine Schäfer's Topophonien project on sound spatialization. While still studying he started working at STEIM (Studio for Electro-Instrumental Music) in Amsterdam where he developed his interest in sensor instruments. He completed his studies in 1996 with a thesis on realtime sound-analysis at CNMAT (Center for New Music and Audio Technology) in Berkeley. Since then he has worked as a free-lanced developer in Berlin and has lately started to hold workshops and lectures.

usefull links and contacts

http://so-on.be
http://okno.be
http://www.eude.nl
http://www.sukandar.de/
http://www.glui.de

http://www.so-on.be/?id=792 --> streaming audiofiles of testparcours through the installation
http://www.so-on.be/?id=790 --> research on the visualisation of the score (not meant to be integrated in the installation at this phase)

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