



Ars HYPERMEDIA

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Ars HYPERMEDIA

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ELASTIC GROUP OF ARTISTIC RESEARCH
THE NORDIC PIONEERS OF NEW MEDIA ART PABLO BERNASCONI
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WINTER
2009

THE NORDIC PIONEERS OF NEW MEDIA ARTS

By Björn Norberg &

Jonatan Habib Engqvist

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Between Heaven and Earth
Charles Sandison. Computer
code and data projectors.
(2002)

In order to contextualize the Nordic Media art scene historically, one should perhaps begin in the 1960's. The spirit of entrepreneurship and genuine curiosity over the possibilities of technology in experimental art prevailed, and there was money to go around. Curators and artists started to investigate the possibilities of technology along side with engineers. Together these groups attempted to break down and reconfigure many established norms concerning art by questioning old techniques, and dissolving and reconstructing images.

There were a number of different groups, institutions and key figures in this development. Many of them are still active and constantly gain new audiences and followers through the younger generations, but even those organizations and collaborations which no longer exist have through their activities in the 60's become a major source of inspiration for young new media artists.

Photo: Charles Sandison

IN THE BEGINNING, E.A.T.

One of the most influential key figures of the Nordic scene was the engineer Billy Klüver and his Experiments in Art and Technology, E.A.T. There has been a renewed interest in this work in the Nordic countries lately, partly due to intense discussions on the concept of artistic research.

Klüver (1924–2004) was born and raised in Sweden but moved to Paris in the 1950's where he met Jean Tinguely (1925–1991) for the first time. This would prove to be an important meeting. Approximately ten years later they would meet again in New York and embark on a journey into experimental art.

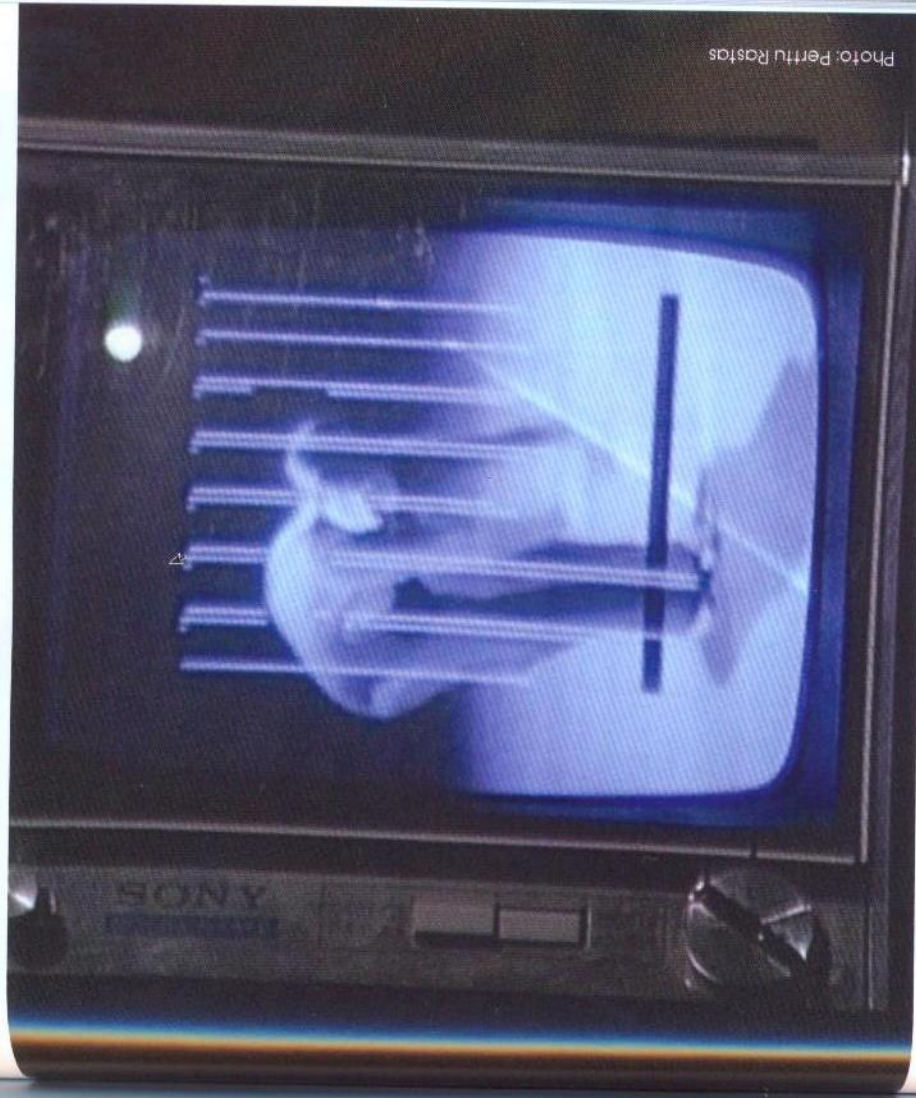
Klüver had a PhD from UCLA and was employed as an engineer at Bell Industries and Bell lab in New York. The director of Moderna Museet in Stockholm at the time, Pontus Hultén, asked Klüver to contact Tinguely and see if he needed some technical support, since Tinguely was going to make a large installation at the back yard of the MoMA. This resulted in the famous *Homage to New York* a huge installation built out of bits of old chairs, bicycles and any kind of material that Klüver and Tinguely could find in the streets and in city dumps. During a performance night the installation went down in clouds of smoke.

Later on Robert Rauschenberg asked Klüver for help with an installation called *The Oracle*, now in the collections of Centre de Pompidou in Paris.

Klüver was not able to help with all the technology that Rauschenberg required, but together they built up an interactive installation run via radio frequency. Rumors spread quickly, and several artists would address Klüver with different project-proposals. Klüver started to engage his colleagues at Bell Labs at night, and as the amount of proposals increased Klüver and some other artists decided to start a pool for artists and engineers—E.A.T.

Eventually the experiments performed within E.A.T. became an official activity of Bell Labs and were magnified in the project 9 evenings where different artists were invited to make one project each with the support of engineers from Bell Labs. Among these artists one could find Robert Rauschenberg, but also the Swedish artist Öyvind Fahlström (1928–1976) who made a performance, or rather a theatrical play that included many different kinds of media.

Fahlström was a pioneer in Swedish sound art and poetry. He realized the power of mass media early on, and especially the power of television. By using both paper and TV shows to market his actions he managed to reach a new and bigger audience. His piece for 9 evenings included some very complicated technological solutions; for example, he asked for snow that fell upwards.



DIMI-O Erkki Kurenniemi. Dancer performing with the DIMI-A on stage.

Fahlström became one of the most important artists within psychedelia and pop-art but has been seen as someone of less importance for the new media scene, with exception for his radio-based work where many Nordic artists still refer to his work. The work of Billy Klüver has however been a major influence. Klüver also became a very important contact for the Moderna Museet in Stockholm and its director Pontus Hultén (1924–2006). Under his direction the museum became one of the most dynamic European art institutions of the 1960's, and the first important contribution was the legendary exhibition *Moving Art/Rörelse i konsten* from 1961. With the help from Klüver, Hultén and the museum invited a number of artists dealing with different forms of kinetic art, including the work of Jean Tinguely. The exhibition and its experimental form has had an enormous impact on the Nordic scene.

Tinguely would come back for another exhibition in 1966 together with Niki de St Phalle and the Swedish artist PO Ulvstedt (b. 1927) whose practice could be described as somewhere near Duchamp (the roto reliefs) and Tinguely. Together with Hultén Tinguely and St Phalle started to plan what to do, quite close to the opening of the exhibition. Late in the process they decided to build a gigantic woman in the style of St Phalle in papier maché. Inside the 28x8 meter sculpture they placed a multi-medial exhibition, including a milk bar in the right breast, a planetarium screening of the *Milky Way* in the left, and a mechanical man watching TV in her heart. In one of her arms there was a screening of a Greta Garbo movie and in one of her legs a gallery with fake paintings of the old masters. The audience entered the sculpture through her sex. The installation, *She*, became a great success. In 1968 Hultén would curate the *Machine* as seen at the end of the mechanical age at the MoMA, including pieces of Nam June Paik before he became director of Centre de Pompidou in Paris in 1973.

Dendroid Arjana Kalfes. Lightresistors in rubber tubes, circuitry connecting light i/o, electrolytic cell with stannous chloride solution and platinum electrodes driven by current from the light readings, plexisheets, rubber anodized aluminium tables.

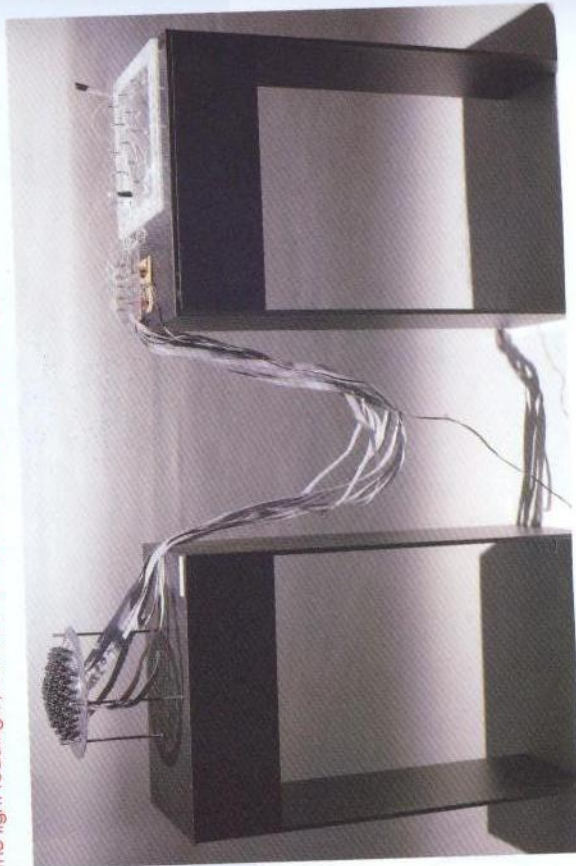


Photo: Per-Erik Adamsson

Hellhunt

Thomas Broomé.
Computer and Software.
(2001)



ORGANIZING FREEDOM?

Looking back at the seventies and the eighties there seems to be a lack of greater initiatives within Nordic new media art. There is generally skepticism for computer art, and it would not be until the late eighties before even video-art was accepted in a broader sense. Moderna Museet didn't play the same important role as it did for the field in the sixties. The experiments and development that did take place were more among single artists, and a few smaller, more or less marginalized groups, however there were a few exceptions, as will be described below.

It was not until the mid 1990's and the Internet boom that a larger movement of Nordic new media art was triggered. Artists started to organize themselves, to share expensive equipment. Important examples are CRAC in Stockholm, Atelier Nord in Oslo (which started in 1965 as a studio and workshop for graphic artists, included video and digital studios in 1993 and works with new media exclusively from 1998), BEK, Bergen Center For Electronic Arts in Norway, i/o/lab in Stavanger in Norway (who organized the first Article festival for unstable art in November 2006) and Muu in Helsinki in Finland. These organizations help artists with knowledge and equipment, but also run various projects and curate exhibitions.

In the 90's there were also a number of organizations devoted to the production of art-projects and exhibitions apart from those already mentioned. In Sweden—Electrohype in Malmö which produces the Electrohype biennale, Splintermind in Stockholm (shut down their activities in 2005) produced exhibitions for museums and web TV, Motherboard in Norway, PicelACHE in Finland; an annual festival for media art, focused on activism, open source, demoscene and VJ's run by Finnish media artist Juha Huuskonen, Katastro.fi which is an artist-run organization formed in 1998 and M-Cult, established in 2000 mainly focused in participatory, wireless and urban-based projects. M-Cult organized ISEA 2004.

SWEDEN

When looking at the history of Swedish new media there are a number of important independent organizations that should be mentioned. Apart from the Moderna Museet there were a couple of other central points in Sweden. One was Fylkingen, which started in 1933 as an association for classical music. In the 1950's it developed towards more experimental music and produced the first Electro-acoustic concerts in Sweden in 1952. In the 1960's the scene became more radical and also started up a studio for electro-acoustic music, EMS. Both Fylkingen and EMS are to this day important scenes for experimental art-forms in Sweden.



Time Ture Sjölander. Sjölander has always put himself in opposition to any establishment and still does! (1966)

One of the private galleries in Stockholm that soon became well known for a radical attitude was Galleri Karlsson. Its first exhibition was "Ture Sjölanders Ni är fotograferad" ("You are photographed") in 1964. Sjölander (b. 1937) belongs to the very pioneers within new media and video art and already in this first exhibition he understood the impact that television had on its audience.

Sjölander's photography contained a raw attitude against photography and the naked model, and after a television show from the exhibition ten thousand people visited the gallery. With this experience he contacted the Swedish Television in 1965 for another show where he included exhibitions in two cities, billboard advertisement in a third and a TV-production. This was intended to be a large multimedia happening, but the state television refused to broadcast his production, since they found it too provocative. Instead he was offered to make another TV-production where he collaborated with the artist Bror Wikström. Sjölander had, according to himself, already as a teenager experimented with distortions on television screens. Along with the engineers at the Swedish television the artists could perform wild experiments in a piece that was given the title *TIME*. They were not able to work directly with the video-signal, so they had to transfer the monitor to film and then back on to video in order to create the desired effect.

In 1966 Sjölander expanded this theme. He started to collaborate with the journalist Lars Weck in a project called *MONUMENT* where they worked with television in Sweden, Germany and France. The result was broadcast in USA along with several countries in Asia and Europe. It was seen by an estimated audience of a hundred and fifty million viewers, and is described in *Expanded Cinema* by Gene Youngblood.

Sjölander and Weck used images of famous paintings and celebrities such as the King of Sweden, the Beatles, Charlie Chaplin, Picasso, and the Mona Lisa, and distorted them beyond recognition. Stills from the film were then transferred to paper, magazines posters, textiles and paintings by the Swedish artist Sven Inge de Monér and a record with the soundtrack by the Swedish group Hansson & Karlsson was released. All together it became an enormous project, analogue to the ideas of the multi-medial project Sjölander had been working on earlier. Sjölander is still active as a painter, conceptual and web artist.

"According to Pontus Hulten, 'Art should be accessible to the public.' The difference between Pontus Hulten and Ture Sjölander was that Hulten made boxes—museums—where he put things and people, and Sjölander opened the boxes and let things and people out."

-Ture Sjölander



Monument Ture Sjölander. (1967)

Teresa Wennberg (b. 1944) had a very different attitude to the computer compared to other pioneers, since she at an early stage stressed that the computer had an artistic expression in itself, discussing computer graphics as objects. She left Sweden for Paris in 1974 where she found a different attitude to technology than at home.

Around 1978 she started to work with video and came in contact with Ture Sjölander. They started the Video Now ("Video Nu") association in Sweden, which became important for the development of video art in Sweden. In 1983 she started to work with digital-images, and since 1998 she has been working as an artist in residence at the Royal University College of Technology, KTH in Stockholm and their VR-Cube environment. She is however probably more well known outside of Sweden.

In 1996 the Swedish artists Karin Hansson (b. 1967) and Åsa Andersson-Broms started the organization Temporary Art [A:t] with a first net art exhibition including some 20 Danish and Swedish artists. Three years later they organized the influential exhibition "Best Before" at Tensta art gallery. Among the artists in the exhibition one could find Ola Pehrson (1964–2006).

Ola Pehrson participated with his piece *Yucca Invest Trading Plant* where a yucca palm-tree was connected to a computer via electrodes. The palm tree's impulse fed an Internet-connected computer that traded on the Swedish stock market. If the trade was successful the plant would be awarded through a watering device. In this piece he linked the market to nature in a very intelligent way—not only through the installations but also exploring market-terminology such as growth and off shots. A year later he created the *NASDAQ Vocal* Index which was a choir-piece for 8 to 24 singers. Each singer represented one company stock on NASDAQ receiving "notes" in real-time according to the current rates downloaded from the stock market. Pehrson also collaborated with the Interactive Institute in Stockholm, a vast research institute with several departments for technology development.

The SMART studio (which changed name to Art & Technology in 2006) is maybe most famous for their *Brainball* installation. It was created by a team of artists and engineers, among them Arijana Kajfes and Thomas Broomé (b. 1971). The game is played by two persons sitting on each side of a table equipped with sensors that measure brain-activity. The objective of the game is to have as low brain-activity as possible. If you reach a lower level of activity than your opponent, a ball will start to roll forward. The game is over when the ball reaches one of the short ends of the table.

Brainball
SMART studio,
Interactive Institute.
Computer, mechanics,
brain sensor. (2000)

Photo: Tobias Stödlin



Monochrome Eye

Arijana Kajfes.
Two tricolour (RGB) light
diodes (LEDs), circuitry
connecting light I/O,
one red, one green and
one blue light sensor on
a silicon fingerholder,
silicon mask.
(2004)



Photo: Per-Erik Adamsson

Arijana Kajfes was artist in residence at the Interactive Institute, and during that time she also worked on her *Ocular Witness* project for which she researched aspects of light from the point of view of physics. The project received an honorary mention at Ars Electronica in 2006, along with another Swedish project, *SUBJECT* by Italian born Alberto Frigo (b.1979) now living in Stockholm. For three years he has been photographing every object used by his right hand. It can be seen as investigation of his relation to objects and it consists of a large database of over a hundred thousand images so far.

Another method for documenting, or tracing life, can be found in Mikael Lundberg (b. 1952). In *Lifeline* he tracked his movements using a GPS device for one and a half years (2004 and 2005). Ten years earlier he had his remaining life time calculated and created *Lifetimer*—a digital clock that, based on his statistical life-expectancy, counted down the estimated time left of his life in seconds.

SUBJECT

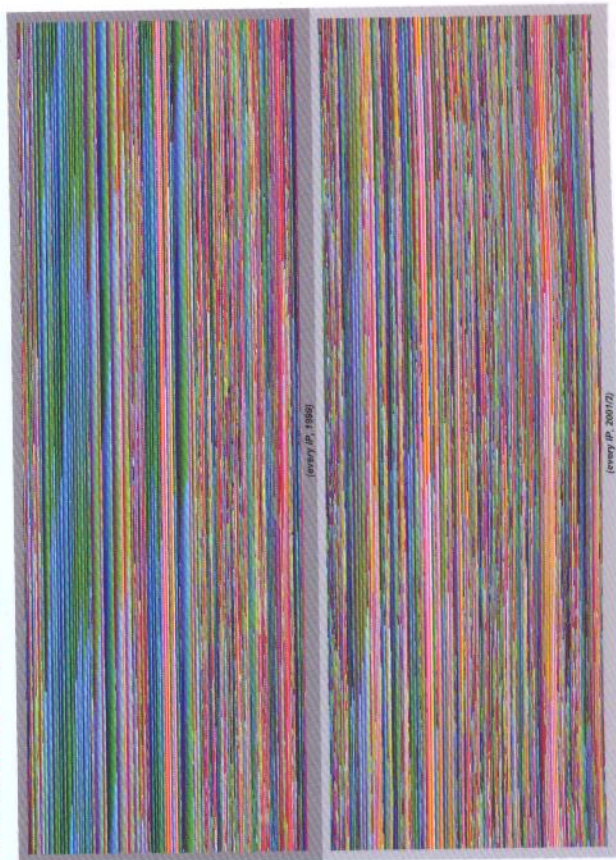
Alberto Frigo
At Ars Electronica 2006,
Computer, database,
database interface,
photographs.
(2004-06)



Although she is of Swedish origin, Lisa Jevbratt (b. 1967) might be better known outside Sweden. She moved to the USA in 1994 and started to work on "e-mail art" in her project *Hej Gud (Hi God)*. A year later she started to work with web-pieces. She should definitely be regarded as one of the early pioneers of net-art, even though she did not belong to a net-art group. She still lives in the USA, and is employed as Associate Professor at the University of California and a member of the artists group C5. She often produces web-based work with a typical "meta-web" touch. For example, in 1:1 from 1999 she created a database that used a web-crawler to collect all URLs in the world. She soon discovered that the web was growing faster than the database.

In *Infome Imager* Jevbratt used a crawler to collect diverse information about websites, such as their length, when they were made, which network they belonged to and what colors were used. This information was then selected by a computer, and images functioning as statistical diagrams found were created.

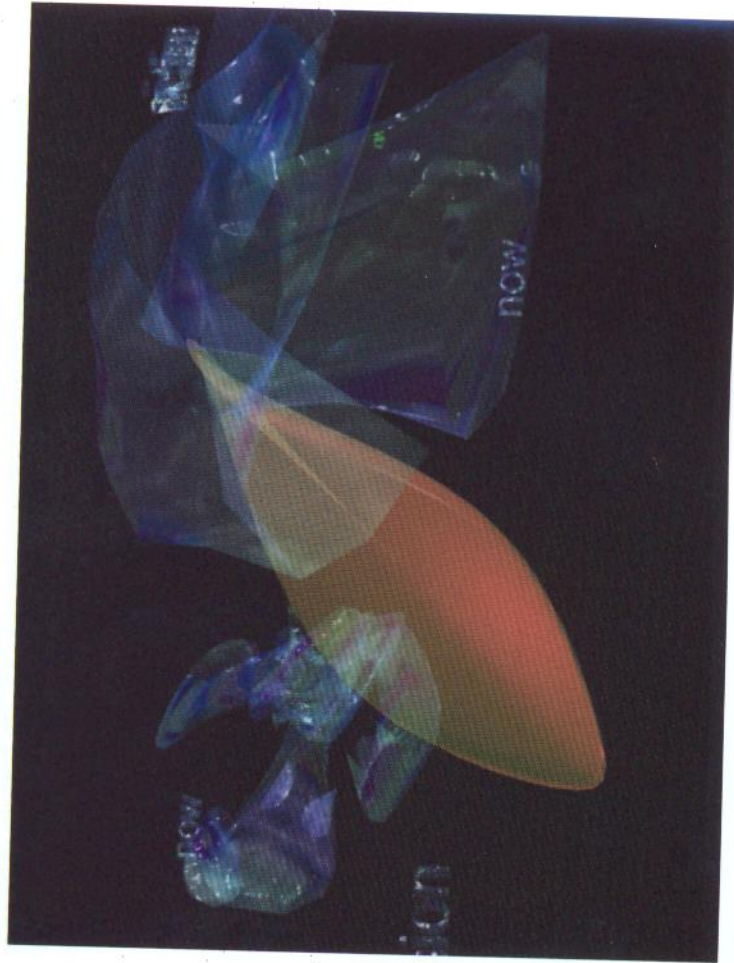
Recently Jevbratt had a piece, *Rösten (TheVoice)* commissioned by the Swedish National Public Art Council, which might be the first commissioned web piece in Sweden. Here she displays all the keywords typed in to the internal search-engine of the council's website. The words are displayed in chronological order and are shortcuts to relevant information belonging to the keyword.

1:1 (2) Lisa Jevbratt. (1999-2002)

The Creative Room for Art and Computing, CRAC has been important for many artists in Stockholm. One of the founders of CRAC was the Swedish artist Peter Hagdahl (b. 1956), who is currently a professor in media art at the Royal University College of Fine Arts in Stockholm. Peter has for a long time been focused on the complexity of actions and interactions in society between people and technology and in different virtual spaces. His public project created for the University College for Teachers in Stockholm, *Dream Generator*, consists of several sensors placed in the university building. The sensors pick up activity inside the school and the information generated is used as data-input for a 3-D animation, which transforms according to the data. Hagdahl has influenced the Nordic scene intellectually and practically, as the initial force behind CRAC, the new media laboratory Mejan Labs (in 2006) and as a professor at the university.

In the 1990's Hagdahl also made a number of collaborations with Carl-Michael von Hausswolff (b. 1956) who is not only one of the most important names in Swedish sound art, but also a visual artist of importance. He has worked with radar equipment and oscilloscopes to describe reality through these technologies in a number of different installations. In his composing he has been working with everything from tape recorders, DAT and radio frequencies to more updated technologies such as samplers and laptops in order to create noise compositions. C-M von Hausswolff received an honorary mention in the Digital Music category at Ars Electronica 2002.

Dreamgenerator Peter Hagdahl.



Dreamgenerator Peter Hagdahl. Permanent installation at the University College of Education in Stockholm. Sensors, computer, software, 3D animation. (2002)

ICELAND

Another important pioneer of new media and video from the Nordic countries is of course Steina Vasulka, born in 1940 in Reykjavik in Iceland. In the 1950's she went to Prague to study violin, where she met the Czech engineer and filmmaker Woody Vasulka. In 1965 they moved to New York where Woody started to work in the film industry and Steina free-lanced as musician. Woody had started to experiment with electronic images and sound and brought some of the equipment that he was working with within the company home, and Woody and Steina started to experiment with video technology.

For Woody the video technology offered a way to question narratives, and he was amazed by the possibilities of video feedback. Together, and probably thanks to Steina's background as a musician, they also started to connect audio inputs to the video in order to create various effects.

They understood that both the audio and the video signals consisted of waveforms and that these could be exchanged, in turn generating interesting results that could be processed into a complete piece.

In 1971 they started the Kitchen which became a home for experimental video, music and performance projects and discussions. From working closely with Woody during the 1960's Steina started to focus on her own work in the 1970's. Her "All Vision and Machine Vision" series are today considered as milestones within new media art. She separated the video-camera from the human view in different installations. Using a reflective sphere placed on a crossbow and placing one camera at either end of the crossbow it was as if they were filming a spherical mirror, enabling them to project

their entire surrounding space, 360°. She also started to experiment with a violin, run through an audio synthesizer in order to affect video signals in her project *Violin Power*.

In the middle of the 1970's the Vasulkas started to collaborate with programmers, which lead to development of digital tools such as Digital Image Articulator/Imager, used in several pieces from the 1980's. Steina would, in the mid-1990's, work as artistic director at STEIM in Amsterdam; where she, together with Tom Demeyer, developed one of the first VJ soft wares, the Image/ine.

Steina's pioneering work is of great importance for the development and understanding of both video and new media art and has inspired many artists. Both her and Sjölanders art were great sources for the Swedish artist group Becoff when they, in 1996, started to experiment with analogue and digital video combined with Internet-streaming. Becoff established the *nonTV/taion* project and the streaming organization Splintermind that enhances a large network of artists, galleries, museums and organizations all over the world, participating in ISEA 2004 and the Parisian La Numérique festival at La Villette science-park the same year.

In Iceland Steina has few followers, and there are not so many new media related artists. Some of them, such as net artists Paul Thayer and Ragnar Helgi Olafsson (b.1971) have organized themselves in an association called Lorna. Olafsson is known for his piece *Web Waste* where the web visitor is invited to upload his/her computer trash bin to Olafsson's piece. The waste is exposed as it is in a mess of text, images and sound. Olafsson has also worked with interactive video installations.

Another Icelandic artist, Finnogi Petursson (b. 1959) has received great attention for his sound art installations that refer to the minimalism of the 1960's. For the Venice Biennale in 2001 he created the installation *Diabolus* where he used the interval between two tones that the Vatican church banned in the middle ages. The interval is called "diabolus in musica" but the reason why it was banned is not necessarily because it was expected to call forth the devil. Some music-historians think that it simply did not sound very good and that it was just regarded as a very unnatural combination of tones. In *Diabolus*, Petursson constructed a small building, narrow as a corridor, where he had two sound-sources. One was a speaker with a 61,8 hz tone and the other an organ pipe of 44,7 hz. The two tones represented the diabolic interval but also created a non-audible, but physically present 17hz sound-wave. This effect is also used in installations such as *Dream* and *Sphere* where the very low frequencies affect the surface of water.

This minimalism he has in common with the Danish artist Jeppe Hein (b.1974) who in his installation *Invisible Labyrinth* created labyrinths where the walls simply were infrared light. With a special headset you felt the walls as vibrations if you walked into them. The form of the maze changed from day to day and had famous patterns such as those from Pacman, or the labyrinth outside the hotel in Kubrick's film *The Shining*. In 2002 Hein smashed a white cube in a gallery with a metal-ball the diameter of 70 cm. The ball moved around in an empty gallery-space, activated by a sensor. The movements of the gallery-visitor sent the metal-ball crashing into the walls, corners and heaters of the gallery.



Photo: Johann Koenig, Gallery in Berlin.

360° Presence Jeppe Hein. (2002)

computers powerful enough, but also it belongs to an intellectual shift, an attitude where computers had a value in themselves without having to be transferred to more traditional techniques. This attitude can for example be compared to digital pioneers such as the Swedish artist duo Beck & Jung, Sture Johannesson, Ann-Charlotte Johannesson, Kars-Gunnar Bodin, Sven Inge de Monér and Torsten Ridell who used computers to design images that were later transferred into graphic prints or paintings. One odd example worth mentioning is Göran Sundqvist (b. 1937) who was computer engineer at SAAB in Sweden and was, from 1958, working with the development of pioneering computers such as SAAB D2, D21 and D22, the first transistor-based computers in Sweden. He came in contact with composers at Fylkingen in Stockholm and for fun and as a demonstration of the machine he let it compute some music pieces. He also programmed a few games on it and made some digital images, but they had to be photographed to be preserved since he used an oscilloscope as a monitor, and of course had no printing options.

Mogens Jacobsen didn't experience the same attitude problems as Wennberg, even if the computers of late 80's or early 90's definitively had their limits. For three years in a row, from 1993 to 1995 he received an honorary mention at Ars Electronica. The first two years in the category Computer Graphics and in 1995 in the category Interactive Art where he, with the installation *The Entropy Machine*, finally managed to free the computer from many traditional art techniques.



Entropy Machine
Mogens Jacobsen.
Installation at Ars Electronica
1995. Computer, monitor, software,
digital thermometer, bacteria,
petridiscs. (1994-1995)



DARTI (Left) Göran Sundqvist. Computer generated image. (Early 1960s)
Network3 (Right) Göran Sundqvist. Computer generated image, coloured in the 1970's.
(Early 1960s)

He had by then gone through a process where he looked for ways to use the computer in a manner that wasn't just a substitute for "the pen, the brush and spray cans" since he had seen it's possibilities with interactive communication, advanced information-processing and simulations.

DENMARK

The Danish artist Mogens Jacobsen (b. 1959) has in some studies on time and dynamics in video reached results that reminds of Steina Vasulka's work. Lately he has been working with his own software, allowing him to regard the video as a 3D object in a space rather than a chronological sequence of frames. Jacobsen belongs to the first generation of artist that understood the possibilities of computers, to make art with the computer exclusively, without the need to make a print or to transfer it to a stable media to get an artistic result. Of course this is thanks to their chance to work with



Rocket System N55. (2005)

With *The Entropy Machine* he worked with the ideas of cloning, hormone therapy, DNA etc. that emerged during the biotechnological revolution of the 1980's and lead to many different applications during the 1990's. This installation consisted of five framed images and a metal box with sides of fabric. There was a monitor inside the box surrounded by pietre dishes containing cultivations of bacteria. The box functioned as an "information greenhouse" together with a computer that chose among 40–50 different images that were screened on the monitor. A cellular automata algorithm changed the image on the monitor through every generation it passed. After a while it started up with a new image and algorithm chosen according to the temperature inside the box. Since the temperature was crucial for the growth of the bacteria it had a double function, it stimulated both the cultivations and the digital images.

The same year Jacobsen was involved in the founding of the Danish organization Artnode, which has since then been an important centre for new media activities in Denmark. It functions as an intellectual resource producing articles, exhibitions, net-art and as an archive and gallery for net-art.

This is remarkably early—the same year as ädä'web started, and one year before Rhizome. Danish Artnode is still very active and should not be confused with the Swedish organization with the same name.

In Denmark two artists groups have developed very large projects that mix activist thinking, business strategies, design and technology. Superflex is maybe more commonly seen as a relational art group, but their project *Karlskrona2* from 1999 was an exploration of the possibilities that virtual environments can offer. They built a virtual copy of the Swedish city Karlskrona and the inhabitants in the real city could create avatars to inhabit the virtual city. As avatars they were able to change the city and rebuild it. The project showed how virtual space could be used as a democratic tool in city planning and how it could be used to catch up on ideas from the inhabitants of a city.

N55 is a Copenhagen based artists group that started with an aim to rebuild the city from within and are working with different activist projects that merges technology, design and architecture. In 2000 they created *FLOATING PLATFORM* and *N55 SPACEFRAME*, which together functioned as a working space and home for the group. They have created alternative architecture for mobile and compact living but also created *ROCKET SYSTEM*, which is a rocket that can spread flyers from an altitude of 5200 metres.

NORWAY

Norwegian artist Stahl Stenslie (b. 1965) became the father of cybersex after his *Cyber SM* project in 1993. The project was aimed at creating a system for real-time, visual, sonic and tactile communication over telephone lines. Stenslie created two "stimulator suits" where two people could physically interact over distance. In 1993 he used the suits to connect users in Paris and Cologne.



Solve et Coagula
Stahl Stenslie.
Custo, built bodysuit
controlled by proprietary
interface technology

HC Gilje (b. 1969) has been devoted to real-time video processing for many years. He started with Steina and Demeyer's *Image/ine* and later went on to *MAX*. Working with these tools he points out that he can work in real time but still have full control over both structure and context. He tries to focus on perception and conception of reality using technology. In 1999 he started to investigate live aspects of video with music, dance and theatre as references, since these art forms had a history of improvisation. He has since been working on his own, in the VJ group 242.pilots and as a part of the Norwegian dance company Kreutzerkompani.

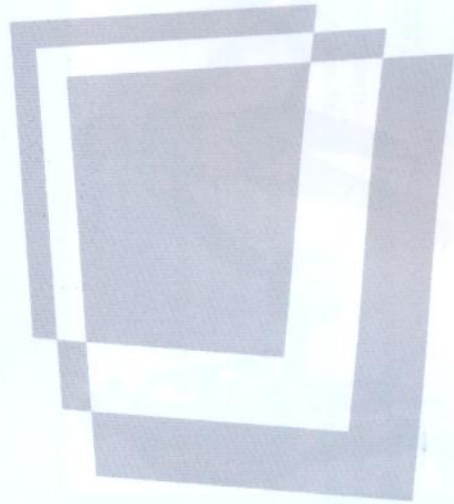


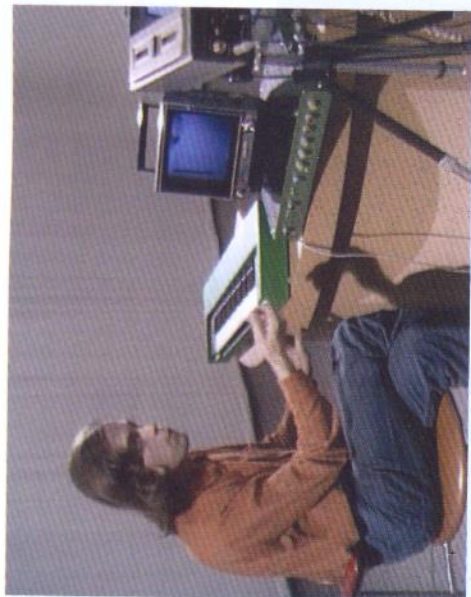
Photo: Karl Henrik Børseth

Synk HC Gilje and Kreutzerkompani. Dancer: Gry Bech-Hansen and Kristianne Mo.

FINLAND

The Finnish new media scene woke up very late and it wasn't really until the 1980's when the first video piece was made. It was by Marikki Hakola (b. 1960) and the Turppi-group—Earth Contacts from 1982. New media was not really established in Finland until the mid 1990's, but there was one early and important figure on the Finnish scene: Erkki Kurenniemi (b. 1941).

Kurenniemi isn't only a true pioneer of the Finnish scene but belongs to the pioneers of the global new media. Already in the 1960's he composed computer-generated music and designed his own synthesizer—*The Andromatic* (1968), purchased by the Swedish composer Ralph Lundsten. Since then Kurenniemi has moved between art and science,



DIMI-O Erkki Kurenniemi and the DIMI-O video synthesizer.



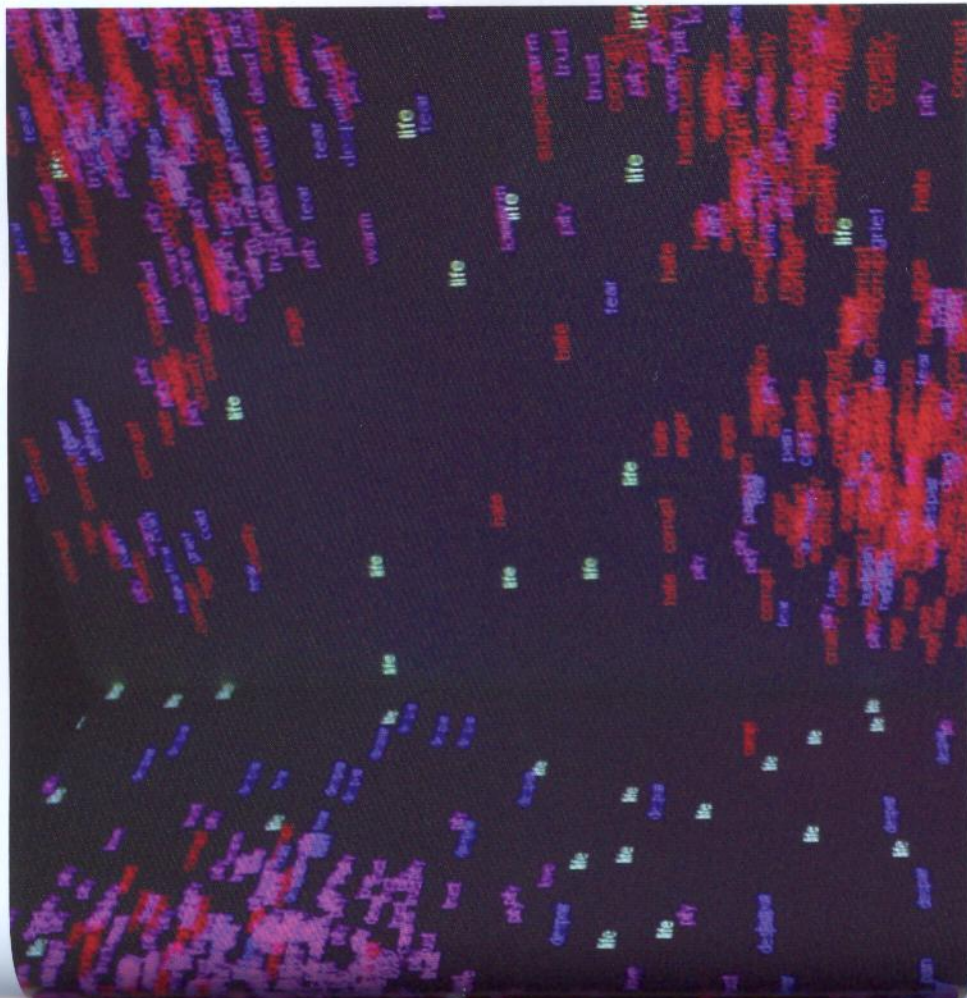
DIMI-A Erkki Kurenniemi performing with the DIMI-A.

music, film, computers and robotics. Around 1970 he worked with a number of original synthesizers in the DIMI (Digital Music Instrument) series. In 1971 he collaborated with dancers around his DIMI-O, a type of video synthesizer which used the motions of the dancers to generate a real-time soundtrack. Other DIMI's were DIMI-A, which was played by using "electric pens," the DIMI-S which was played by four people touching each other, and the DIMI-T that generated sounds by measuring the brain activity of the player. Kurenniemi has since then been working with Artificial Intelligence with the aim to merge man and machine.

When video became established in the 1980's a number of video artists entered the scene. Among them of course Eija-Liisa Ahtila (b. 1959) who has established herself as a major international video artist. Marita Liulia (b. 1957) was the first Nordic artist to work with CD-ROM and received an honorary mention at Ars Electronica with Mairé in 1994. She also had a great success with her piece *Ambitious Bitch* from 1996, where she investigated femininity. This piece was followed by *Son of a Bitch* (1999) where she worked with masculinity at the end of the millennium. She created a virtual apartment of the psychoanalyst Jack L. Freud in Quicktime VR where one is guided through the game by the virtual butler Esco. The environment works in a similar fashion to an epical computer. Freud, who is an expert on masculinity, has left the apartment empty for our investigation on the ideas of the modern man.

New media art is now well established within the Finnish art world. This is thanks to a number of small and vivid organizations and festivals, such as the artist group Katastro.fi, the new media festival PixelACHE, artist run organization MUU, M-Cult (who produced ISEA 2004) and AVANTO festival. Also thanks to the contemporary art museum Kiasma, which has organized a number of important exhibitions, bought several pieces to their collection, and who had a media curator when they were established in 1998. Around them a number of young artists have developed their practice.

In the mid 1990's, the British born artist Charles Sandison (b. 1969) moved to Tampere in Finland. He has described himself as a writer born in an artist's body and creates digitally generated installations that combine the potential of computers with concrete poetry. For *Living Room* from 2001 he wrote software that simulates human behavior using Artificial Intelligence. Using computers and projections he fills a space with words—moving, living and reproducing. They move around, interact with the room, chase or avoid each other, and if they meet they either eliminate each other or create new words. He uses few words, each one with a special behavior: MALE (they are hunting for FOOD), FEMALE (avoids MALE until they have eaten FOOD), MALE hunts FEMALE to reproduce, FATHER replaces FOOD. When the population has grown too big, a deadly VIRUS is spread. All words will also die when they have reached a certain age. In a similar installation, *Good & Evil*, from 2002, he uses only two words, GOOD and EVIL. Both of them try to expand at the expense of the other. When they collide one of them disappears.

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Summarizing the Nordic new media art scene with the 1960's as our point of departure is perhaps an ambitious project that would require a lot more time and space. Every summary, regardless of its length is, doomed to reductionism. However it is obvious that a lot of the important development in this area takes place in various artistic and artist-run collaborations. The great exceptions to this principle are the dynamic first period of Moderna Museet, under the direction of Pontus Hultén, and perhaps more recently Kiasma's opening in 1998 in Helsinki.

Nordic artists have gathered together sharing expensive equipment and common ideas generated by new technology and certain movements in society in general. One example is what happened around the Internet boom in the mid 1990'.

Also some large companies, where artists had a chance to experiment with new technology, have played an important role. Examples such as SAAB and the Swedish state television in the 1960's have been mentioned here, and there are certainly others. Hopefully this survey of the Nordic new media art can show some characteristics that can be compared to the global scene in general. The latest decades of great exchange with the international scene has of course implied that the authentic Nordic art scene might have lost a Nordic identity, if there ever was one. But looking at history and some of the artists mentioned above, one can say that they really should be seen as pioneers, even from an international perspective, and that they deserve to be a part of the international new media canon. ■