



8 Feb, 1989

Dear Steina and Woody,

Did Santa Fe get caught when the dam finally broke up in Alaska? I'm still finishing up a second try at flu this winter after too many weeks of STEIMing by day while recording by night. I really appreciated your hospitality and the sneak preview of winter in New Mexico. I hope I can get a second chance some time when there is more time.

So just to get this going I'm going to list the basic WORK PLAN for your project as it is seen by the boys in the back room. If we have missed anything in concept or detail let us know as soon as you can.

=====  
Motor controller hardware  
Motor controller software  
Violin interface  
Process software

### i. Motor Controller Hardware

Paul Spädermann, STEIM's chief engineer, has suggested we make our own motor controller communicating via MIDI instead of using the A-bus IBM PC boards.

The Advantage: you can use **any** computer that has **MIDI** to talk to the motor controller. We know MIDI as a control language and we have already designed a small controller/computer (8x4x3 inches) which can be easily adapted to control stepper motors and relays. Though this is custom hardware, we feel we could be up and running faster than if we had to learn the A-bus IBM system. We have little IBM/80x86 programming experience and our scheme would allow you to use the Mac or Atari as a platform for the design of this and future pieces, an altogether more simpatico situation as most = "all" of our software in the recent past has been based on these two machines. Is this acceptable to you as a way to get a working system?

**Questions:** it is important to let us know how far you have gone already in putting together the camera mount mechanics and motor system and what help if any you need in this area. In order to control the **stepper motors** we need to know **how many, how precise, and how powerful** they will be. We also need to have a scheme for **zeroing the system**, that is, the computer has to have some way of knowing that all the motors are at some known or "0°" position. This could be accomplished using micro or optical switches or 360° potentiometers to feed back position to the controller. Do you have any ideas about this? It very much depends on the specifics of the mount mechanics. Do you have any diagrams or photos?

# STEPPER

## ii. Motor Controller Software

We will write general stepper motor "driver" software to control the multi-axis stepper motor system. Just the minimum basic routines to rotate so many steps in so many seconds providing a language with which to address the camera mount. The specifics of these drivers depend on the kind of motors used and the basic physical geometry of the mount.

**Question:** we need to know your conceptualization of the camera mount geometry. Ignoring as much as possible the instrument interface, how do you view the cameras motion? Photos and diagrams are essential here!

## iii. Violin Interface

A device to convert instrument sounds and gestures into an abstract flow of data.

a. one solution, using an ultrasound sender/sensor pair mounted on the bow and body of the violin measuring distance and velocity.

Advantages: simple linear response to control independent of actual sound the controller; it is also easily expanded: more switches or continuous controllers can be added with little additional soft or hardware

Disadvantage: more custom hardware. ( But this interface is well known at STEIM and has been built several times and used in many applications.

b. a second solution using a microphone or other pickup with the IVA "Pitchrider" or other commercial pitch to MIDI converter to make the amplitude and pitch of the sound available for control. A few other parameters of control are also available : pitchbend (lots of data thus could be difficult to use) and loudness.

Advantage: off the shelf

Disadvantages: quantized pitch response; possible complications with PA feedback leaking into Pitchrider pickup.

c. Both of the above might be used together. Both will convert gesture into MIDI for interpretation by the process software

**Questions:** how do you currently conceive the violin as a controller? Is the emphasis on using its natural sound as the controlling medium? or the gestures of playing? or is it even possible to supplement the violin with additional channels of control (eg switches, pressure etc?)

## iv. Process Software

# STEIM

Probably the most interesting category, but vague at this point as we don't really know your piece yet. It can be specific to the violin case but there can be factored out more general modules to cover other future processes you might wish to use to move the camera. The basic problem is always first how directly or indirectly you want to control the robot's activity and is the motion "parallel" or "one to one" to your gesture or should there be more indirection, multiple reactions or contrary reactions for the same input? There are lots of ideas that George Lewis and I have developed in the past that can be brought to bear on this problem.

## v. Other hardware/software

Have you made any decisions about other hardware devices such as the linear tracker/robot arm or the 3D/rendering software? If there is something we have forgotten or suppressed let us know.

## Ignorantia

Are there unsolved problems we are ignoring? The camera mount mechanics, the video signal communications, the 3D modeling software?

## EQUIPMENT LIST

We also need to know particular equipment you expect when you get here such as a computer of xxx type; special audio effects, samplers...I'll try to include a list of what we have. (separate video/Montevideo needs in their own list we'll pass it on.)

## Another subject entirely:

We would also like to plan any public appearances you might wish to make while you are here. I have been leaking the dates of your visit and the response is strong. They all want to know when they can visit or if you can be persuaded to do a workshop or if you'll help open a new shopping centre in Hengelo. How should I respond to these requests in the future? Are you available? Would you like to do a workshop while at STEIM? This is not to put pressure on you of any kind but just to find out your feelings so that we can make any necessary arrangements in advance.

Hope to hear from you soon and give my regards to Gene and Mort.

Joel



Achtergracht 19 1017 WL Amsterdam 020-228690

ST/GL/NB/049  
march 20, 1989

Steina and Woody Vasulka  
Route 6 Box 100  
SANTA FE  
New Mexico  
87501 USA

Dear Steina and Woody,

Concerning your project at STEIM, we would like to make some practical arrangements.

We planned your working period between the 22th of april and the 15th of july.

You both will have your own studio: a room with a setup of equipment you need but without special acoustical facilities. There is the possibility of using one of the sound studios we have at ground floor level.

We have accomodation for you in our guest house.

We invite you to have one presentation of your work during your stay at STEIM in one of our monthly events.

If you travel from New York we pay your ticket up to \$ 881,- each, if you travel from Santa Fe we offer you \$ 1138,-.

Your fee will be 4500 guilders (approx. \$ 2250,-) each.

That's all for the moment.

We are looking forward to have you with us next month!

Best whishes,

Gabrie Lantinga

STEIM RESEARCH PROJECT

3 NO

STEIM:

20 - 21.81  
20 - 21.81  
20 - 21.81

The purpose of our involvement with STEIM is to conceptualize and create a new class of tools which would serve to expand our work in these particular areas:

- 1) To build a computer driven camera platform which would provide a MIDI driven programmable movements in concert with sound/performance/installation interactive system.
- 2) To create a concept of electronic stage which fully employs a function of a computer as a storage coordinator and executor of images, sounds, motion control parameters of physical stage components and to facilitate interactive modes of stage to performer and performer to stage command and control communication.

Although the project seems to emphasize the physicality and technology, it in fact is designed to provide cultural interface between the creative processes of writing or scoring for the stage and the execution of this process through the media. The ambition here is to begin to create nomenclature through which a unified genre could be practiced through opening more general possibilities for a creative participation through works of art organized electronically in somewhat more stable and unambiguously notated strategies.

The main motivation for this project lies in a belief that there is a conscious impulse in the creative art community to use high technology for their expression. It is therefore an experiment in this assessment as well. If the domain in information and entertainment of technology should be tested, the effort in touching the audience profoundly should be exercised as well.

# **Image/ine**

## **STEREOTYPE**

On G3 systems Image/ine may hang going to or from perform mode. The workaround is just opening the video setup window (command-0), right after startup, and hitting ok. (Don't ask me...)

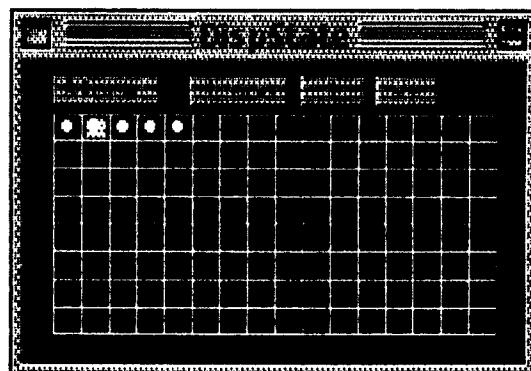
On a related note, the QuickTime settings are not currently saved in the Image/ine prefs... Sorry, PAL countries.

### **Some things which didn't make it into the manual:**

- In the TableLibWindow and the Preset window: you can edit the names of the tables and presets by clicking once and holding the button. The field will change into an editable text field. Type the new name and hit return to finish the editing process.
- Using the cursor keys in the display state, preset and tablelib windows will move the selection. Hitting return will open the table edit window or activate the display state or preset.

### **The way Image/ine deals with program change is also different from the manual:**

- Program change is now hard-wired to presets; in the midi setup window you select the program change channel, pgc 0 now selects preset 0 (the first one) pgc 1 preset one etc. You define your own midi commands to select display states; in the display state window you move the selection with the cursor keys, at each position you'll have up to three editable numericals to select the midi command which will enable that particular display state. It is possible to select program change as the midi message here, this pgc command will then override the preset selection, and the particular preset will not be addressable through midi anymore. In the example below, the second display state will be activated when Image/ine receives a note-on message on channel 1, note number one, any velocity.



Nicolas Collins  
Palestrinastraat 10-II  
1071 LE Amsterdam  
Netherlands  
tel: (31 20) 676 3069  
email: nicc@xs4all.nl

June 18, 1996

Steina Vasulka  
c/o STEIM  
Achtergracht 19  
1017WL Amsterdam

Dear Steina,

Here is a copy of the press for *Stroomgeest*. If you want more copies of the photos please contact the photographer directly. Please call me before July 10 if you need more copies of the catalog from the show.

Let me take this occasion to thank you very much once again for participating in the project. It was a lot of work for very little money and a very short exhibition period, and I feel as though all the artists made a major commitment of time and energy. The rubric was clever, perhaps, the setting was unique, and the production crew was extremely competent, but the extraordinary success of the show was fundamentally an indication of the quality of the artists' work. We couldn't have done it without you. Thanks.

At the end of the summer I move with my family to Berlin for a one-year project with the DAAD. We plan to return to Amsterdam in the fall of 1997. I hope to have the chance to work together with you in the future. Please stay in touch.

cheers,



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Best whishes,

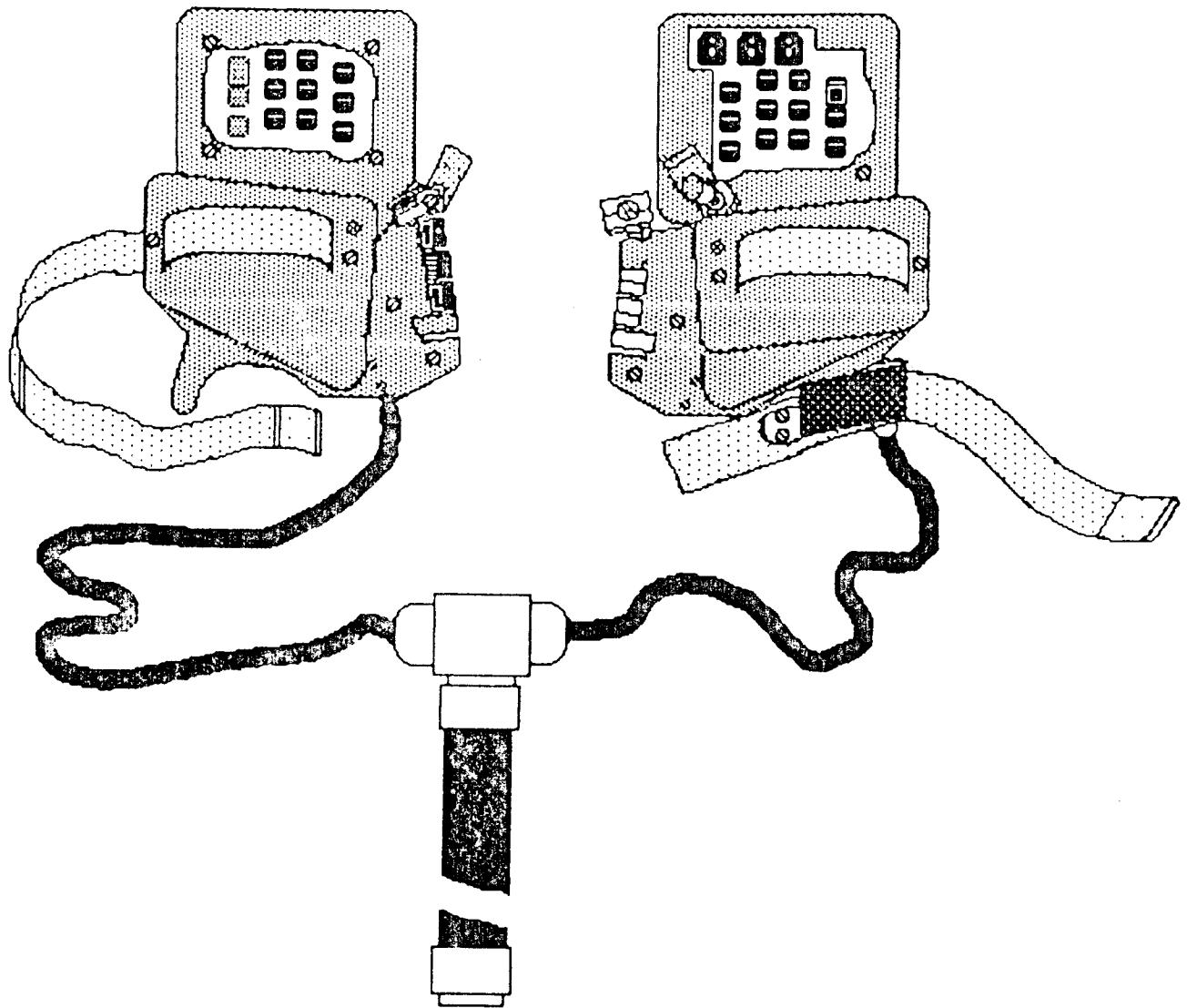
G. Lantinga

Gabrie Lantinga

VIDEO TRANSFORM

415 494 1529.  
West Coast Video

468 7330



# "HANDS"

played on

## THE HANDS

by

Michel Waisvisz

## **"HANDS"**

**a composition  
by  
Michel Waisvisz**

**for three Yamaha TX7 synthesizers  
remote controlled by  
Michel Waisvisz on:**

### **The Hands**

**Sound engineer: Maurits Rubinstein**

**Hands is a physical and visual approach to electronic music**

**It's live electronic music**

**no tapes  
no video  
no Computer Composition  
no Artificial Intelligence**

**"The Hands" are instruments with sensors and switches that are fitted under ones hands and transmit each move of an arm, hand or finger to the electronic music instruments.**

**Image: Balinese dancers, old European magicians, boxers and conductors connected by wire as if it was the "Turing Test on a Tesla Transmission"**

**Sound: If music "of the seventies" was about meditation on the cyclical activities of rowers at sunset, and about the trajectories of the resulting wave patterns, than "Hands" is about rowing itself.**

## **MICHEL WAISVISZ**

**born in Leiden 1949  
lives in Amsterdam**

- \* Composer and performer**
- \* designer of electronic music instruments**
- \* artistic director of STEIM foundation**
- \* co-founder of Claxon (annual sound festival and record label)**
- \* concept-creator and co-organiser of Pandora's Music Box (annual big-scale "New Wave" festival in Rotterdam)**

### **Solo concerts and instrument development**

Started giving concerts in 1967 on electro-acoustic instruments (strings and metal objects amplified through the use of contact microphones)

In 1969 concerts with electronic music instruments ( classical electronic music equipment + moog synthesizer) "Explo" and "Impulse".

Early seventies: concerts with the "Hand-tapes"; the first authentic instrument built by Waisvisz. The player is seated between two tapeloops and controls playback of the tapes, on which specially formatted soundmaterial is prerecorded, entirely by hand movements. Synchronised performance of both loops and footpedals could produce "stretched" sounds. In a later version live recording on the tapeloops was also possible. "Gullivers Travels" and "Trajects".

From 1972 concerts with a modified Putney VCS3 synthesizer. Modifications included the addition of a set of conductive fingerpads as a keyboard.

In the same period the first Crackle-box was built. This instrument was for a long time Waisvisz trademark and was realised with extensive support from STEIM/Amsterdam of which he later became the artistic director. The instruments design was based on the use of conductive fingerpads that were connected with a specially designed set of oscillators. This way the body of the performer became an integral part of the electronic instrument - a thinking part -. The fact that both, patching the functions of the oscillators as controlling these functions were executed by the same controllers: the fingers, made the Crackle-instrument one of the first flexible electronic music instruments suited for live performance.

From 1975 Waisvisz gave many solo-concerts and performances using the Crackle-boxes and similar systems with theatrical purposes.

After having toured the major New and Free music festivals/places in Europe he did a short tour in the US and Canada in the late seventies

Claxon released "Crackle" a record with compositions for the Crackle-synthesizer performed by the composer.

Only after '81 Waisvisz started experimenting with digital sound-production. The WACRA was built. This instrument, that he called "the battlefield" consisted of linked electronic instruments of various kinds. The main components were a modified casio 510 and the Crackle-synthesizer. A special keyboard was played with hands and elbows, and also voice input became important.

The piece "Beat concret" marked the end of this period of experimenting with commercially available digital music instruments.

"Beat concret" was performed during the Claxon Soundfestival of 1984 in the Concertgebouw in Amsterdam. Two Fairlight computer music instruments, 5 Yamaha DX7s and the WACRA were "conducted" and played with "The Hands" by Waisvisz.

Development of **The Hands** began, again with support from STEIM, late '83. The Hands are remote-controlers for custom built and commercially available computer music instruments equiped with MIDI communication facilites.

The Hands consist of handsized aluminium plates, strapped to both performers hands. On the plates a set of sensors, fingerkeys and mercury switches is mounted to provide continuous detection of arm-, hand- and finger movements as well as detection of the distance between the hands. The data obtained from these sensings is given musical meaning through the selective use of the MIDI-codes. In circles of computer music composers this instrument is seen as a possible breakthrough in the direction of a more humanized approach to live electronic music performance.

In 1985 Waisvisz started touring extensively with a piece performed on The Hands "The Conductor" ( Electronic Music Festival Bourges, Stedelijk Museum Amsterdam, Palais de Beaux Arts Brussels, Centre Pompidou Paris etc.)

He received an invitation to work at the IRCAM ( One of the major international centers for the development and creation of computer music).

Early 1986 a new concertwork was conceived: "Hands". This work will be performed during several tours that will be made in the first half of the year. Februari: Switzerland and Italy; april and may USA and Canada.

In the fall he will start working on a extended version of The Hands at electronic music department of the Royal Conservatory of Music in The Hague. These Hands will be able to control the Vosim generators developped at the Institute of Sonologie / Utrecht by Kaegi an Tempelaars. At IRACAM the Hands will be modified to play the main computersystem the 4X.

## Music theatre

Waisvisz contributed an important part in the development of Dutch music theatre in the seventees. Starting with happening like projects with members of the Free Academie in The Hague ('71) he brought together people from very different disciplines in a serie of "plays" that received a lot of attention during a period of about ten years. A lot of special electronic instruments, derived from the Crackle boxes, were used during these performances. "De Electriciteit", "Het Anarchistenbal", "Pandora".

In 1972 he composed and performed the music for Harry Mulisch's theatre play "Oedipus Oedipus" during the Holland Festival.

Together with singer/actress Moniek Toebosch he formed a duo that reached a wide audience with a show that matched relativating wit with heavy drama and the exhausting power of totally improvised performance. On rare occasions they still perform together.

In Middelburg ('80) Waisvisz organised a three day music-environment "Rust-Roest" for which he invited his music and theatre friends (amongst others: Laurie Anderson, Truus de Groot, Maarten Altena and Armand Perenet).

Maarten Altena (composer and bassplayer) and Waisvisz founded Claxon and worked together in many incidental music theatre-productions.

In 1982 Waisvisz decided to concentrate on music and made a quiet salute to his music theatre friends with "The Wais-crack" (Holland Festival). The work started as a theatre/ballet performance and ended as a concert.

### **Music Groups**

Also in the early seventies Waisvisz took part in the movement of free improvisation. He performed in groups with the major European "instant-composers": Misha Mengelberg, Peter Brotzmann, Han Bennink, Willem Breuker, Derek Bailey, Maarten Altena, Steve Lacy etc. There are several records out that witness these activities. Around 1980 he stopped working in this area.

### **Theatre robots**

During the Holland Festival 1981 Waisvisz controversial music theatre work "De Slungels" had its turbulent premiere. In the work the major parts were performed by robots designed by Waisvisz. The assumption that most of human beings behave like robots most of the time and that that should be a ground for applying the human rights also to the actual, not very intelligent, generation of industrial robots was the central theme of the play where robots and human performers mingled indescernibly.

Since that time the robots performed other pieces and concerts on many occasions. They toured Poland and Italy and grew old very fast.

In 1984 Waisvisz started using some of the remainings of the Slungels for designing a new ensemble of composing and performing robots. In 1986 this ensemble "Euterpe" will premiere "Manu tenersi" a work for 4 electronic composer/performers and a human soloist/conductor playing The Hands.

### **Museum robots**

The Stedelijk Museum in Amsterdam hosted a Cracklebox exhibition where some of Waisvisz early musical robots were responding to caressment by the audience.

Waisvisz performance "Confrontation with a paper-point-head" was part of "Sonorita Prospettiche" Rimini Italy 1982. This performance was done by a very small paper cone shaped robot that could move around and through the audience that was grouped in a sort of boxing ring. The paper-point-head "imitates the audience in an oral way, but it will not do this correct. The little mistakes will be of musical importance."

Waisvisz designed a concept for an exhibition of a group of very light battery-powered musical robots that float through the museum space. The project deals with group behaviour of robots. The "Floater" perform a very distinct social behaviour that floats between personal gravity, social attraction or repulsion. The Floater will be realised in the near future.

### **Ballet Music**

Waisvisz composed 5 works for ballets choreographed by New York resident Dutch choreographer Ton Simons. Except for "Ikoon" they were all tape-compositions. "Kameubelkarmengelmoes", "Commonplace quintet", "Rondo", "Geen Beweging".

### **Film music**

Waisvisz worked on music for films of the Dutch independent filmmaker Frans Zwartjes in early seventies. Together they organised music theatre trainings at the Free Academie in The Hague.

### **Blitz**

Waisvisz is working on a piece that will be performed in the open air and makes use of explosives and electronics. A musical vocabulary is created by choice of the required chemical compound of the explosives (pitch, loudness , timbre) and by selection of the appropriate spatial location (distance and positioning under earth or water etc). The electronics are used as detonators as well as to create a suitable accompaniment. A special indoor version is considered after achieving a sufficient amount of control over the chemical instrumentalists.

### **Yeti**

For the Apple Foundation in Amsterdam Waisvisz developed a concept for extra-terrestrial communication. He assumes that the most efficient way to start a communication with unknown intelligencies is to send as much received space-noise back into space as possible. In 1986 this instrument will start operating for the period of a year. The Yeti-machine will be placed in open air. Visitors can see and study all records of received and transmitted space- "noise".

### **Adresses**

Claxon Alexander Boersstraat 16 Amsterdam  
Steim Groenburgwal 25 1011 HR Amsterdam (0)20-228690  
Euterpe Postbox 27004 1002 AA Amsterdam

## MICHEL WAISVISZ

Born in 1949 Leiden. Started playing with shortwave receivers at 4.  
Worked as newspaper corrector and music journalist at 16.  
Did theatre lighting for a year and entered an Art School (De Vrije Academie-The Hague).  
Started giving concerts with home-made electro-mechanical instruments at 18.  
Founded a studio for electro-acoustic music at the art-school and started teaching at 19.  
Started working in the electronic music studio of the studio of the Royal Conservatory of the Hague with Dick Raaymakers as mentor. Many solo performances.  
Developped his first electronic music-instruments at 20.  
Builded electro-instrumental sound instruments for the opera Reconstruction of which the collective of composers became the founder of STEIM.  
Composed and performed several works of live electronic music ("Impulse", "Explo", "Gullivers Travels")  
Produced and acted in a serie of music theatre works together with filmmaker Frans Zwartjes.  
Composed and performed the music for Harry Mulish's theatreplay "Oedipus Oedipus" in the Holland Festival 1972  
Got involved in the West-European improvisation-scene. Worked with Willem Breuker, Peter Brotzmann, Misha Mengelberg, Maarten Altena, Han Bennink, Derek Bailey, Steve Lacy and many others.  
Started an instrument-development project at STEIM out of which the Crackle-boxes evolved.  
Played at most of Europa's free-music festivals.  
Formed a duo with singer and actress Moniek Toebosch; extatic reactions in Holland, Germany, Sweden and France.  
Founded Claxon together with composer and bassplayer Maarten Altena. In 1986 they will organize the 5th edition of their Claxon Sound Festival.  
Waisvisz' crackle-syntheser pieces appeared on Claxon records under the title "Crackle".  
Left the improvised music area and started to perform "one man shows" ( "Het Anarchistenbal" "The Waiscrack" )  
Wrote and directed one of the first music theatre pieces entirely performed by robots ("De Slungels" Holland Festival 1981 ).  
Became the artistic director of STEIM.  
Became the "idea-generator" for Pandora's Music Box an annual international New Wave festival held in the Rotterdam Doelen.  
Realised the work "Beat Concret" ( commissioned by VPRO radio ) in the Amsterdam Concertgebouw in 1984. In this piece two Fairlight CMI and 3 Yamaha DX7's were controlled by a new musical control instrument by Waisvisz "The Hands".  
Started composing for the Hands and 3 DX7's in 1985 "The Conductor" ( performed at the international Electronic Music Festival in Bourges, Fridricianum Kassel, Vleeshal Middelburg, Centre Pompidou Paris etc.).  
Furnished his first operational computerprogram : the MousicomTree ( a visual control instrument playing musical notes and motifs using the Macintosh "mouse"-interface and a MIDI encoding system ) just before the start of the 2nd STEIM SYMPOSIUM ON INTERACTIVE COMPOSING IN LIVE ELECTRONIC MUSIC in november 1985.  
  
Will be touring Europe, USA and Canada with the Hands and a new piece.  
Is working on the creation of an ensemble of automated composing performers "Euterpe" (composing computer-music- "robots" that attempt to unveil their inner musical thoughts, by their visual appearance, while they work; conducted by a human performer using The Hands). Premiere is planned in the spring of 1987 with "Manu Tenersi".

## Maurits Rubinstein

Born in 1964 in The Hague.

Started to work for STEIM after schoolperiod.

Played the drums in Art 142, and toured the Dutch new wave concertplaces.

Developed into one of the leading sound engineers for new music in a short period. Worked as technical assistant for Stockhausen during his project at the The Hague Conservatorium for Music.

Assisted, or designed the sound set up, and did operational sound work for new music composers and performers as: Francis Marie Uitti, the ASKO ensemble, Moniek Toebosch, Diamanda Galas etc.

Assembled the micro electronic sound "animals" for Felix Hess' "Frog" project.

In theatre he worked for Onafhankelijk Toneel, Stichting Dansresearch and others.

Rubinstein designed the complete sound installation for Barbara van Loon's ballet of harbour cranes "Neigend IJzer" in summer 1985.

He also did the technical set up for the soundeffects during Pandora's Music Box 1985, and did the operational soundcontrol for the Claxon soundfestival in 1984.

He became sort of known to a wider public in Holland as "neefje M" by doing the soundtechnique during an interview of Renate Rubinstein with the Dutch Crownprince Willem Alexander.

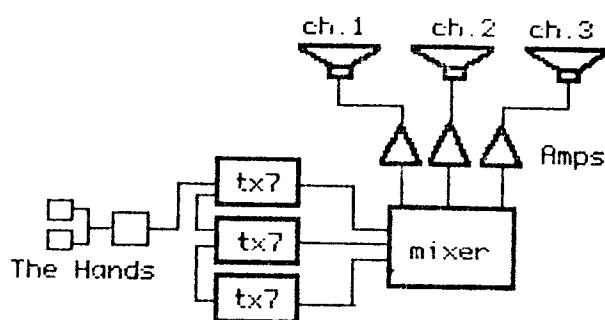
Rubinstein was responsible for the soundtechnique of all of Waisvisz concerts in the last 3 year and will tour with him in Europe and the USA in 1986.

"HANDS" by Michel Waisvisz

TECHNICAL DATA SHEET jan '86

Phone 228698 Amsterdam

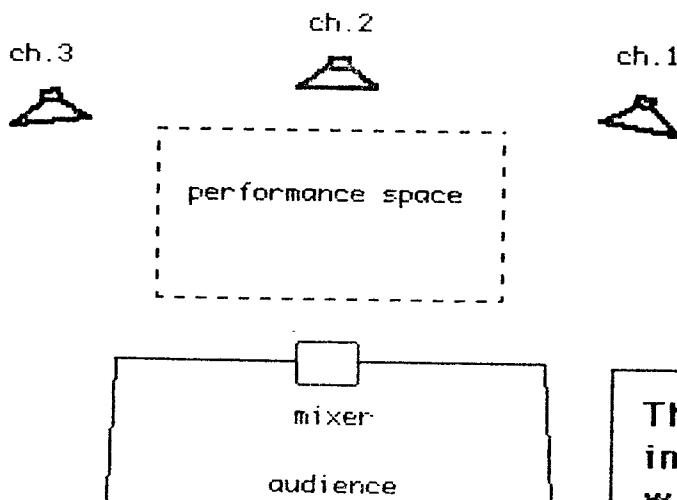
engineer: Maurits Rubinstein



Hello,

We will bring The Hands and the 3 Yamaha TX7's. The soundreinforcement equipment is to be provided by you. The following list is meant as an indication of the classification of the system. We will not accept lower quality. Please contact us in case of doubt.

Soundcraft 200 (min. 6 in 4 out) mixer  
Quad 450 or Yamaha amps  
JBL Prof Series Mod 4623 loudspeakers  
Power reference: 600 cubic meters = 6 JBL's



Build up time - after installation of the soundreinforcement system: ± 30 minutes  
Soundcheck: ± 45 min.  
The TX7's are off stage so "change" time in case of festivals is very short

The mixer should be positionned in the best acoustical place within the audience. Maurits Rubinstein will operate it during rehearsals and concert





is unique among its kind, an electronic music studio dedicated to live performance. Our work is primarily geared towards the development of new musical instruments and software for performance, though collaborations with artists in other media are welcomed. At STEIM we receive musicians of all varieties and political persuasions drawn only by the fitness of technology to the realization of their artistic goals.

STEIM is undergoing major reorganization in response to what we perceive as the changing relation of music and technology. The distance between the worlds of music made in the studio and music performed live on the stage is paradoxical, both increasing and decreasing at the same time. The increase is relative to aesthetic norms dating from times when the mere use of electronic technology made you a part of the avant-garde. Being modern however is no longer enough, computer music is no longer interesting just because it is new. The migration of digital techniques out of the academic studio into the greater world of music is the cause of a great deal of nostalgia for a rapidly evaporating distinction. At the same time, innovations in the tapeless studio are provoking a revival of venerable "tape" techniques, techniques once part of the definition of tape music, and are now feasible in performance.

STEIM offers research residencies, assistance with custom software and instrument design, studio facilities and other forms of support to composers of electro-instrumental music. The creation of unconventional instruments and the adaptation of existing ones to fit new ideas are part of STEIM's daily work. Growing with this work has been our expertise in the design of embedded microprocessor systems. This has allowed us to apply evolving software technologies to the solution of musical and artistic problems.

On the premises of STEIM in the center of Amsterdam are workshops for hardware and software design, recording studios and ateliers for resident artists. The work at STEIM is managed by a staff of ten with an operating budget provided by the Dutch government. In addition to strictly musical work STEIM is open to collaborations in music-theatre, video and film

sound track production and in all the varieties of audio and performance art. STEIM also sponsors concerts of the work of our collaborators for the Amsterdam Community and presents workshops in Holland and at studios and conferences throughout Europe and North America.

In parallel with our work in live performance, the STEIM recording studio is set up to aid composers in coming to terms with the revolution currently taking place in studio technique. With Midi automation and digital audio, the line between live performance and "tapeless" tape music is no longer clear. Styles and modes of presentation once dictated by practical necessity are now a matter of choice. The studio and design staff are dedicated to enabling this merging of aesthetics.

The small design team (one hardware and two software engineers) can cope with a limited number of projects at any one time and therefore it has become necessary over the years to develop some selectivity. All projects must have live presentation as one of their goals. Priority is given to ideas that focus on the man-machine interface, especially on solutions using sensitive control devices, and the search for new ways to integrate these solutions with the composition process.

#### Recent STEIM developments

The Hands • The Sensor Lab • The Web • Spider • The Midi Conductor • The Hall Gloves • The Lick Machine • Deviator • Big Eye • Lisa • Midi Concertina • The Sweatstick

for more information,  
call or write

STEIM  
The Studio for  
Electro Instrumental Music

Achtergracht 19  
1017 WL Amsterdam  
The Netherlands  
tel: 020-6228690 fax: 020-6264262

# BigEye

Realtime Video to Midi Software.

BigEye is a computer program designed to take realtime video information and convert it into midi messages. It runs on any Macintosh computer running system 7 or later, QuickTime 1.6 and the Apple Midi Manager or OMS. It supports all QuickTime compatible video digitizers, including cameras like the Connectix QuickCam, making it usable for PowerBooks and other non-AV Macintoshes. It is also possible to use prerecorded QuickTime movies as a video input source.

Due to the high demand on the computer's processing resources it is advisable to use as fast a computer as possible. Typically achievable frame rates range from 2 frames per second on a PowerBook Duo 210 to 12 frames per second on a PPC 7100/66 to the full 25 on an 8500.

The user configures the program to extract objects of interest, based on color, brightness and size. These objects are tracked (up to 16 simultaneously) and their position is checked against a user-defined series of 'hot zones'. These 'hot zones' are drawn by the user and are grouped in 'screens'.

Objects and 'hot zones' interact in three distinct ways: a zone sees a new object, a zone sees an old object moving, and a zone sees an object disappear. Each of these three 'events' can generate midi or cause internal program parameters

to change. A simple example: the new event causes a note to be switched on, a move event causes a pitchbend and a disappear event causes the note to be switched off.

To specify the midi to be sent out the program provides for two distinct modes: a simple mode in which the user can specify midi parameters and screen changes; and a powerful, complete scripting language that includes a real time scheduler, conditionals and loops. In the simpler environment one can quickly link to midi most of the causing object's parameters, such as position, speed and size. In scripting mode one has many more parameters available. BigEye provides for 16 independent 'channels' which can analyse the incoming image in different ways, allowing, for instance, green objects to act differently from objects of other colors.

For more information, contact

Tom Demeyer  
STEIM  
Achtergracht 19  
10171 WL Amsterdam  
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(tomd@xs4all.nl)



# Image/ine

Image/ine is a program that allows the user to manipulate visual source material in a digital video environment:

- video (live and recorded)
- QuickTime movies
- text
- scanned images
- pict files with alpha channels

Unlike digital video editing programs such as Adobe Premiere, Image/ine works in real time. There is no compression slowdown, no rendering time - the digital filtering effects are immediate and variable.

Image/ine's strength lies in the ability to integrate and combine three basic techniques:

- Keying
- Temporal manipulation
- Image displacement

By combining these techniques with an abundance of input possibilities, variable parameters and a wide range of controllers (there are over 60 parameters and 27 assignable program controllers), Image/ine becomes a dynamic imaging tool. Add to the mix the ability to control all functions with Midi and you have your hands on a powerful performance application.

As a time-based imaging tool, Image/ine allows the user to assign controlling parameters to all the functions of the program. This can range from:

- total computer keyboard control of all functions
- full Midi control of assigned

functions

- auto-dynamic control (LFO's)
- unlimited combinations of the above

For example, to scale (zoom in and out) an image you might assign the mouse as the controller, scaling as it moves along the X axis. Or, you might assign scaling to the data slider on your Midi keyboard or you may want it to function auto-dynamically.

Although Image/ine is not an editing program, the composited output can have the appearance of a well-crafted video with a surprising array of effects. The ability to synchronize the program to a (midi) clock and capture the output makes it possible to use Image/ine as a non-realtime video effects machine as well.

For more information, contact

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10171 WL Amsterdam  
Holland  
(tomd@xs4all.nl)

download demo: <http://www.xs4all.nl/~steim>



# LiSa v1.10

LiSa (Live Sampling) is a real-time audio manipulation environment that runs on any Macintosh computer with a PowerPC (PPC) processor. The program uses the 16-bit AD/DA converters of these platforms and the computing power of the PPC RISC processor. This combination turns the Mac into a versatile audio sampling machine, able to generate up to 64 voices on a fast PPC604e equipped machine. Complete program control is possible via Midi, thus allowing the user to work with this system in a performance environment.

The system contains one big Sample Buffer, and the user defines so called 'Zones' which have access to some part of the sample buffer. A library of Zones can be created (more than two thousand) and each Zone can have six different functions:

- 1) Playing back the sample buffer's data (start and length as defined by the Zone) in various ways.
- 2) Recording audio data into the sample buffer (start and length as defined by the Zone) in various ways.
- 3) Reading a sample file from disk into the sample buffer (start and length as defined by the Zone).
- 4) Writing part of the sample buffer (start and length as defined by the Zone) as a sample file to disk.
- 5) Copying data from the 'Output' or 'Process' buffer back to the sample buffer.
- 6) Reading saved recording data into the sample buffer (start and length as defined by the Zone).

Since the user has access to these Zones thru Midi, the top layer of the system is organized as 'Presets', each Preset enables the user to assign the Zones to one or more Midi note events. The program can store up to 128 Presets, whereby each Preset can load a so called 'Preset Image' (sample file) into the sample buffer in various ways.

Each Preset can have different Zone assignments for each of the 16 midi channels, so flexiblty is the keyword here.

LiSa does not try to compete with hardware samplers in terms of ultimate sound quality, no, it tries to compete in terms of flexiblty. One of the more important features of LiSa is that at all times the user is able to record new samples in the Sample buffer, not only while other Zones are playing, using this part of the Sample buffer, but more than one recording Zone may be active, meaning that the samples can be recorded in different parts of the Sample buffer simultaneously!

To use the program you will need:

Any PowerMacintosh computer with System 7.5 or higher.

OMS or The Apple Midi Manager (driver, manager, patchbay).

Sound Manager 3.1 or higher.

For more information, contact

Tom Demeyer  
STEIM  
Achtergracht 19  
10171 WL Amsterdam  
Holland  
(tomd@xs4all.nl)

download demo: <http://www.xs4all.nl/~steim>



# 2nd STEIM SYMPOSIUM ON INTERACTIVE COMPOSING IN LIVE ELECTRONIC MUSIC

'85

Ijsbreker 6,7,8 november Musicom 9 & 10 november

IJSBREKER TALKS

IJSBREKER CONCERTS

MUSICOM

EXHIBITION

GUESTS

A  
Ijsbreker  
Weesperzijde  
Amsterdam

oooooooooooooo SPECIAL EDITION ooooooooooooooo

# □□□ STEIM NEWSLETTER □□□

6, 7 and 8 november 1985

De Ijsbreker Amsterdam

STEIM live electronic music festival  
&

2nd STEIM symposium on interactive composing in  
live electronic music  
&

9 and 10 november

Mercury hotel Nieuwegein

STEIM exhibition at Musicom

STEIM is in the process of organising the annual STEIM symposium on interactive composing in live electronic music. Last year the symposium was integrated with Musicom, the principal Dutch electronic music instruments fair. However, this year's symposium, as well as the new STEIM live electronic music festival, will take place entirely in Amsterdam's new music center, De Ijsbreker. There will also be an exhibition of new STEIM instruments at this year's Musicom.

## The Symposium

The 1985 symposium is focusing on a meeting of exponents of highly personal approaches to live electronic music composing/performance systems and representatives of the more traditional users of "big systems". The common ground is the desire to work interactively and use the increasing power of the so called "small" systems.

Daytime meetings are divided into one-hour sessions, at each, invited composers will introduce a subject followed by discussion.

Among the topics are: MIDI-controllers, psycho-acoustic problems encountered during live-composing, interactive composition algorithms for personal computer systems, implementation of Forth on the Yamaha CX5, a rolling computer music robot, a distinctive approach to accompaniment-systems, (semi-) automatic composing systems and performance control-systems.

As at last year's symposium, there will be a meeting to discuss the improvement of information exchange, specifically research facilities and concert-possibilities available to composers and soft- & hard-ware developers working in the interactive composing field.

The following composers will give introductory talks:

Martin Bartlett, Peter Beyls, Clarence Barlow, Don Buchla, Roger Dannenberg,

David Wessel, John Chowning, Martin Spanjaard, George Lewis, Joel Ryan.

The host will be Michel Waisvisz.

A limited number of guests can attend the symposium.

Register as soon as possible at STEIM.

Contact:

STEIM Gabrie Lantinga Groenburgwal 25 - 1011 HR Amsterdam  
(0)20-228690.

Registration costs 75 Dutch guilders for three days (concerts not included).

### **The live electronic music festival**

The concerts will be given in De IJsbreker each night at 21:00 h.

Wednesday 6: STEIM-residents

Martin Spanjaard, Joel Ryan, Michel Waisvisz, George Lewis.

Thursday 7 : STEIM-guests I

Nicolas Collins, Ron Kuivila, Clarence Barlow.

Friday 8 : STEIM- guests II

David Wessel, Don Buchla, Martin Bartlett.

All pieces are live performances by the composers utilizing authentic interactive computer music systems. Extra musicians are invited to perform in the pieces by Lewis, Collins, Barlow and Bartlett.

The concerts are open to the general public. Reservations have to be made directly with the IJsbreker weesperzijde 23 Amsterdam (0)20-681805.

## **The exhibition at MUSICOM**

This is MUSICOMS third year. Among international electronic music instrument fairs it has rapidly evolved in importance due to its particular combination of commercial displays along side of the original products of individual artists, researchers, studio's and centers like STEIM.

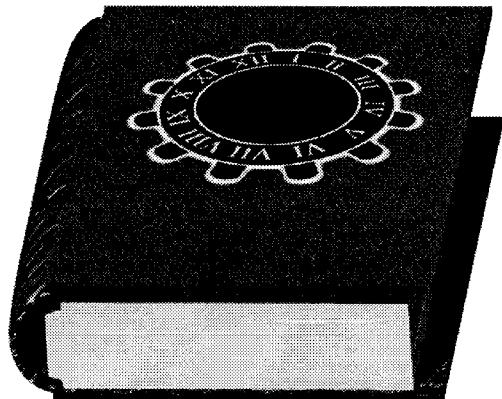
STEIM will show the new "Hands" a MIDI- gesture controller and "the Musicom tree", a visual MIDI-controller that uses the Macintosh-mouse interface. There will be demonstrations by some of the composers of the symposium and also by Peter Dessain who will demonstrate musical "computer-tools" that he wrote in the computer language LOGO to generate MIDI-signals..

For additional information contact STEIM: Gabrie Lantinga or Michel Waisvisz.

Specific details about the lectures will be available at registration. This special edition of the newsletter is distributed to a wider range of addresses. Subscriptions to the STEIM newsletter can be ordered via STEIM or during the symposium.

The symposium and festival are funded by grants obtained from the Dutch Ministry of Culture and the City of Amsterdam.

*Open deur blijkt  
verboden toegang  
voor ongelovigen*



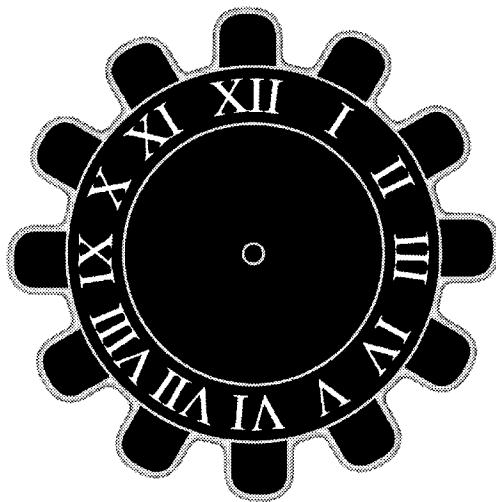
stroomgeest  
Groot Bentveld

Richting geven  
aan tijd gaat  
trager dan de  
verwachting



Stroomgeest  
Groot Bentveld

*Communiceren  
met het verleden  
is fluisteren over  
de toekomst*



**Stroomgeest**  
**Groot Bentveld**

woensdag 13 mei 1996

3

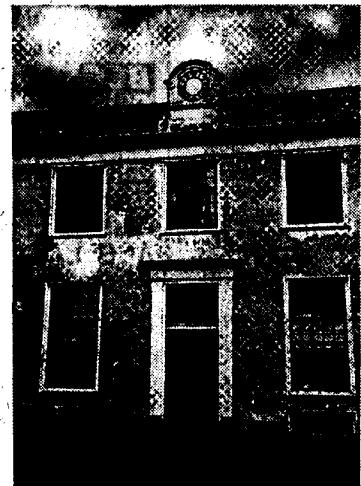
De eerste anonieme brief kan nog terzijde geschoven worden, maar bij de tweede en zeker bij de derde gaat het te veel knagen. Waarom stuurt iemand het Zandvoorts Nieuwsblad anonieme brieven? En wat betekenen die filosofische teksten en de illustraties?

„Richting geven aan tijd gaat vanger dan de verwachting". En: „Open deur blijkt verboden toegang voor ongelovigen." Maar ook: „Communiceren met het verleden is fluisteren over de toekomst." Ze zijn geschreven op geschept papier dat uit kleine envelopjes tevoorschijn komt. Op de eerste staat een foto van de voorkant van het landgoed. Wie goed kijkt ziet een wijzerplaat als gevelsteen op de foto. Die wijzerplaat komt terug op het boek (een soort bijbel?) van de tweede brief. Op de derde staat de wijzerplaat eenzaam afgebeeld. Het boek en de wijzerplaat, en dat geldt vermoedelijk ook voor de letters, zijn met de computer vormgegeven.

Stroomgeest Groot Bentveld... Niet bekend bij de PTT. Wel bekend bij de bewoners van het landgoed?

Een zandigerig pad leidt langs oude bomen en een vervallen

gebouw in een lommerrijke tuin. Vogels, vlinders, voorjaar. Een witte auto in het gras. Het groene hek ziet er zwaarder uit dan



het is. Maar dan. Een zwarte hond met de afmetingen van een pasgeboren kalf staat op. Loom loopt ze op de ongewenste bezoeker af. Ze blaft bloeddorstig en oorverdovend. „Niemand dringt mijn domein binnen." Alle ingrediënten voor

een horrorfilm zijn aanwezig. Alleen de muziek ontbreekt nog.

Pas bij de tweede deur is het raak. Een vrouw doet open. „Koest," spreekt ze de verlossende woorden richting het zwarte monster. Een geruststellend cliché: „Ze bijt niet hoor." Nee, de vrouw weet niets van de brieven. Ze woont er niet, maar is slechts op bezoek.

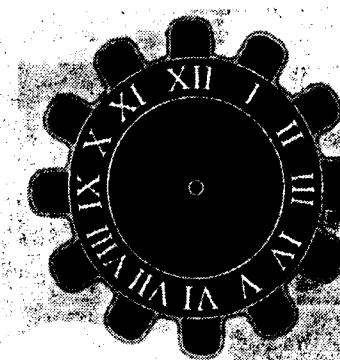
Aan de andere kant van het gebouw, dat in een u-vorm is gebouwd, sleutelt een man aan een beige jeep. „Stroomgeest Groot Bentveld, geen idee, nooit van gehoord. Heel veel mensen fantaseren over dit landgoed. De wildste Indianenverhalen doen de ronde. Terwijl het zo eenvoudig is. Jack Bakker is de eigenaar van het landgoed en een aantal mensen huurt een deel ervan van hem. Zelf woon ik hier tien jaar. Ik heb zelfs een huurcontract voor het leven."

Volgens de man gaat de geschiedenis van Groot Bentveld terug naar 900 jaar na Christus. In de loop der jaren hebben branden diverse bouwsels in de as gelegd. Het huidige gebouw

dateert uit 1850. Een vennootschap onder firma is de huidige eigenaar, waarvan een Jack Bakker bestuurslid is. De vof heeft het een paar jaar geleden gekocht samen met de grond eromheen. Bakker wilde het landhuis afbreken en de grond bebouwen met huizen. Maar dat mag niet, omdat het een rijksmonument is. Alleen woningen bouwen op het braakliggende terrein aan de zijkant levert eveneens problemen op. De gemeente Zandvoort heeft Bakker in de tang: hij mag dat terrein wel bebouwen, maar moet dan ook het landhuis en de tuin opknappen.

Volgens een bewoonster van het landgoed is hij op korte termijn van plan te renoveren, maar Bakker zelf spreekt dat een weekje later telefonisch tegen. „Er zijn wel plannen. Dat klopt wel. Maar er worden al eeuwen lang plannen voor ontwikkeld. Mijn ideeën moeten met diverse partijen besproken worden. De gemeente, ja. Ik wil er verder niets over kwijt. Wanneer wel? Tegen de zomer, dan is er meer nieuws."

Zijn reactie lost het mysterie rond de brieven niet op. Dat komt pas als de PTT een nieuwe kleine bruine envelop bezorgt.



De brief brengt eindelijk verlossing: Stroomgeest Groot Bentveld is een manifestatie van 11 kunstenaars uit Amsterdam en omstreken. Van donderdag 16 mei tot en met zondag 19 mei is er niet alleen kunst te zien, maar ook te horen in de ver-

schillende vertrekken van het landgoed. Het hoorbare wordt zichtbaar gemaakt en het zichtbare hoorbaar, vermeldt het persbericht.

„Het evenement gaat over de grens tussen zien, horen en voelen," vertelt Arend-Jan Weysters in heuse kunstenaarsstaal desgevraagd. Schilderijen, objecten en muziek, allemaal gedoopt in een sinistere sausje. Weysters: „Het landgoed ademt ook een mystieke sfeer uit, daarom is voor Groot Bentveld gekozen."

De anonieme brieven dienden als lokkertje. Hij glimlacht als hij hoort dat de brieven zelfs tot een barre tocht door Bentveld hebben geleid. „Onze opzet is dus gelukt. We wilden een sfeer scheppen die bij de manifestatie hoort. Een beetje gehemzingheid, vandaar die teksten. Het viel niet mee om ze verzinnen trouwens, daar zijn we wel een middag mee zoet geweest." De manifestatie Stroomgeest in landgoed Groot Bentveld vindt plaats van 16 tot en met 19 mei. Een concert met elektronische muziek opent op donderdag 16 mei om negen uur 's avonds in STEIM (Utrechtsedwarsstraat 134, Amsterdam) het evenement. Zandvoorters kunnen ook op 16 mei in Bentveld om 12 uur 's nachts bij de opening aanwezig zijn. De bizarre tentoonstelling is verder te bezichtigen op vrijdag, zaterdag en zondag van 11 tot zes uur. Pas op voor de hond.

Driedaagse manifestatie van visuele en auditieve kunst in en om landhuis

# Spot op Groot Bentveld

Een driedaagse manifestatie van beeldende- en geluids-kunst richt tussen vrijdag 17 en zondag 19 mei weer eens de schijnworpers op Groot Bentveld. In dit nagenoeg lege achttiende-eeuws landhuis in Bentveld vervaardigde wijlen kunstenaar Wim Steijn sinds 1948 jarenlang zijn krachtige schilderijen en scherpe etsen.

BENTVELD • JOHN OOMKES

De manifestatie *Stroomgeest* is een initiatief van STEIM, het Amsterdamse centrum voor electronische muziek in ons land, en heeft op het oog niets te maken met de voorgeschiedenis van Groot Bentveld, die door Steijn is medebepaald. Nicholas Collins, een Amerikaanse geluidskunstenaar die in ons land werkt, heeft samen met tien andere bekende collegae op het dwarsvlak van visuele en auditieve kunst een evenement opgezet, waarbij speciaal ontworpen installaties een weekend lang zullen prijken in de ka-

mers van het landhuis.

*Stroomgeest* heeft wel een magisch aspect, want alle opgestelde werken vertonen volgens initiatiefnemer Collins 'een onzichtbaar effect, of dit nou door Freuds onderbewuste of door klopgeesten wordt opgeroepen, of dit nu door de ether of door internet wordt overgedragen.' De werken reflecteren daarnaast ook het unieke karakter van het landhuis, zodat de bezoeker niet alleen een galeriebezoek ervaart, maar als het ware te gast is op een groot en excentriek feest in een landhuis 'waar de gastheer zich niet laat zien'. Het landgoed wordt overigens

bebouwd met zes extra villa's — een nieuwe bestemming voor het landhuis zelf is nog niet gevonden.

De manifestatie wordt op donderdagavond 16 mei (21 uur) geopend met een concert van electronische muziek van Joel Ryan en Jerry Hunt in de eigen ruimte van STEIM aan de Utrechtsedwarsstraat 134 te Amsterdam. Aansluitend wordt het eerste nachtelijke bezoek aan Groot Bentveld gebracht (entree concert en busrit 25 gulden, reserveren 020-622 86 90).

In Bentveld komt werk tot stand van Christiaan Bastiaans, Matthijs de Bruijne, Nicholas Collins, Ger van Elk, Jo Heijnen, Felix Hess, Joel Ryan, Steina Vasuka, Matt Wand, Annie Wright en Miriam de Zeeuw. Zo heeft Collins zelf de kameropera *Truth in Clouds* gecomponeerd, die de bezoeker van Groot Bentveld het verhaal vertelt van

Anna Mary Howitt, een pré-rafaëlitische schilderes, vroege feministe en spiritiste. Matt Wand ontwierp electronische spoken, die de bezoeker vanachter een serie schilderijen op de voet volgen met in het donker opglanzende ogen. Andere fotografi sche installaties van De Zeeuw en Heijnen bedoelen het verle den te bevriezen, al of niet in samenhang met dat van het landhuis.

De manifestatie is van vrijdag 17 tot en met zondag 19 mei tussen 11 en 18 uur toegankelijk. Groot Bentveld is te bereiken met buslijn 80 van de NZH (uitstappen halte Bentveld). Wie met eigen vervoer komt, rijdt via de Zandvoortseweg richting Zandvoort, gaat linksaf bij naambord Bentveld op de Duindoornlaan en weer linksaf bij de Teunisbloemlaan naar huize Groot Bentveld.

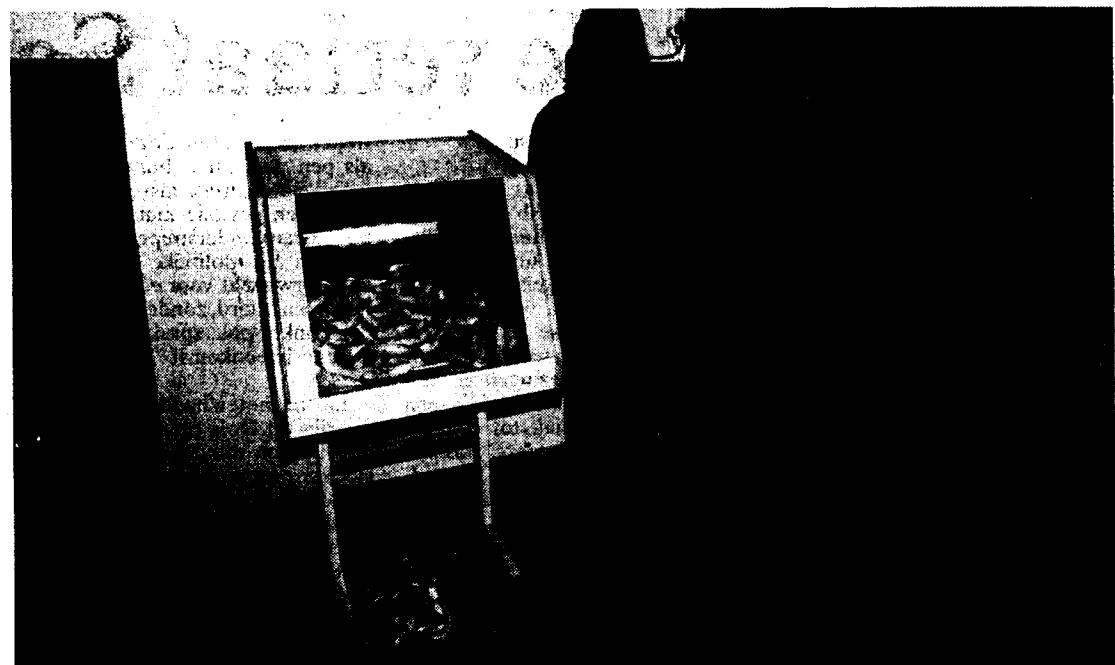
## Griezelen in Groot Bentveld



Als het glas over de ronde tafel beweegt, begint ergens in de kamer een stem te praten. Een vogel fluit. Er klinken pianogeluiden. Griezelig en mysterieus, met een sterke hang naar het verleden. Dat was donderdagavond tot en met zondagmiddag het thema van de kunstmanifestatie 'Stroomgeest' in landgoed Groot Bentveld. Zo'n duizend

mensen bezochten het vervallen landhuis, waar in diverse lege kamers iets te zien en/of te horen viel. „Een perfect huis voor een spookverhaal dus ook voor dit evenement,” aldus de Engelse organisator Nicolas Collins die zelf het idee voor de séance met het glas uitwerkte

Foto André Lieberd



Contact Comfort van Matthijs de Bruine in Groot Bentveld (Foto Jørgen Krielen)

## Kunst in een rijk vol geesten

Door onze redacteur  
HANS DEN HARTOG JAGER  
BENTVELD, 17 MEI. Spoken hou-

den niet van regen. En dus waren ze naar binnen getrokken, vannacht op de opening van de manifestatie *Stroomgeest* in het landgoed Groot Bentveld in het plaatsje Bentveld bij Aardenhout. De bomen voor de ramen van de achttiende-eeuwse villa maakten grilige silhouetten in de wind en de regen kletterde op het dak — het maakte de sfeer binnen er alleen maar spannender op. Want Groot Bentveld is een *haunted house*, zo willen de legendes die op de opening wellustig de ronde deden: alle huwelijken van vorige eigenaars zouden zijn gestrand en er zouden allerlei noodlottige ongevallen hebben plaatsgevonden — sinds een jaar of vier staat Groot Bentveld leeg.

Zoals dergelijke legendes óók willen, ziet alles op Groot Bentveld er nog uit of de geest van de laatste eigenaar ieder moment achter een deurpost kan opduiken. De villa is een doolhof van vervallen grandeur, met krakende planken, afbladderend behang, spinrag in de hoeken en donkere krochten waar je in kunt kruipen zodat niemand je nog ziet. Als decor voor een horrorfilm zou het te clichématig zijn, maar in het echt blijkt het geen probleem. In Groot Bentveld heerst de geest van Edgar Allan Poe.

Een locatie als Groot Bentveld is prachtig om een beeldende kunstmanifestatie te organiseren, al is het

maar omdat iedere kunstenaar een sfeer cadeau krijgt die hij in een museum of galerie zelf moet creëren. Van die mogelijkheden hebben de elf deelnemers goed gebruik gemaakt: veel van de tentoongestelde werken gaan over angst, mysterie of het onbekende en lijken speciaal voor de vervallen kamers van Groot Bentveld gemaakt. De *Whispering Gallery of Reticent Spectres* bijvoorbeeld, een installatie van Matt Wand, bestaat uit een verduisterde kamer waarin allerlei geschilderde portretten aan de wand hangen. Er klinken wat gejaagde geluiden, maar verder is er niets aan de hand, tot je gaat rondlopen en in alle schildderijen plotseling kittenogen oplichten die je vervaarlijk aanstaren. De voorouders lijken je in de gaten te houden, maar in werkelijkheid reageren ze op de voetstappen van de bezoeker — de *Whispering Gallery* is een van de vele interactieve installaties op *Stroomgeest*.

De IJslandse Steina Vasulka maakte *Pariah*, een video-disc die op een toetsenbord is aangesloten, zodat je al pianospelend je eigen claustrofobische film kunt samenstellen en Matthijs de Bruine installeerde *Contact Comfort*: een aantal gazen cilinders, bekleed met sensoren en een donzig vachtje. Raak je die aan dan begint de koker merkwaardige geluiden te maken — alsof er een wasbeer door een rioolbuis wordt getrokken.

Lang niet alle werken op *Stroomgeest* zijn even energerend, maar het wandelen door de vervallen acht-

tiende-eeuwse kamers is op zichzelf al een belevenis. Zeker als je daarbij op merkwaardige beelden stuit als *Hermits Heart* van Christiaan Bastiaans. In een van de kelders — aarddonker, de vloer bezaid met grote brokken puin en slechts te bereiken via een wenteltrapje — draait hij een video van een liggende man die telkens opnieuw in stof en puin uiteenvalt — een beklemmend beeld dat ook op andere locaties goed zou werken.

Uiteindelijk komen alle werken op *Stroomgeest* bij elkaar in de centrale kamer, gemaakt door Nicolas Collins, de samensteller van *Stroomgeest*. De ruimte is schemerig, er staan palmen en een paar zitjes, en in het midden is een ronde tafel neergezet met letters en een glas erop. Normaal worden de geesten geacht het glas tijdens een spiritistische séance in beweging te brengen, nu vraagt een bordje bij de ingang de bezoeker het glas zelf te verschuiven. Doet hij dat, dan klinken uit alle nissen van de kamer — van kozijn tot bloemenvaasje — geluiden: pianomuziek, vogelgezang of een vrouwengemstem die brieven van Dante Gabriel Rossetti voorleest. Hoewel *Truth in Clouds* even mysterieus is als de andere werken op *Stroomgeest* is de installatie ook een geruststelling: de mens triomfeert over de geest in de bloemenvaas.

*Stroomgeest. Tot en met aanstaande zondag op Groot Bentveld, Teunisbloemlaan, Bentveld. Inlichtingen: 023-5248830.*