

peter weibel (hg.)

I M B U
C H S T
A B E N
F E L D

die zukunft der literatur

neue galerie graz

Axel Roch

**DIAGRAMMATICAL READ/WRITE-HEAD
2001**

Equipment:

Pentium IV, Linux

Eye/Gaze-Tracking System

Infrared-Imageprocessing (50Hz)

Beamer SVGA

Plasmascreen

Chair

Flightcase

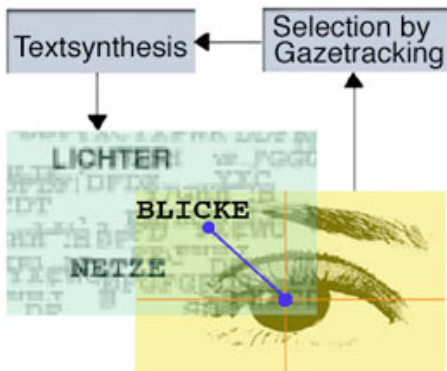
*The equipment was sponsored by
the Academy of Media Arts, Cologne.*

Web:

<http://www.axelroch.net>

<http://www.khm.de/~roch>

*From: Peter Weibel (Ed.), "Im Buchstabenfeld -
Die Zukunft der Literatur", Catalog from the
Exhibition, Neue Galerie Graz am
Landesmuseum Joanneum, translated by Ilona Leimisch,
Graz: Literaturverlag Droschl, 2001, pp. 299-318.*



AXEL ROCH

Diagrammatical Read/Write Head

*In meiner Stube ist es todenstill
---meine Feder kratzt nur auf dem
Papier, denn ich liebe es,
schreibend zu denken, da die Maschine
noch nicht erfunden ist unsere
Gedanken auf irgendeinem Stoffe
unausgesprochen, ungeschrieben,
abzuprägen...
Friedrich Nietzsche*

Peter Greenaway once worded very impressively, "The most interactive task I know is reading - and it has already been existing for 5000 years". Interactivity in electronic media can be compared with a culture history of reading and writing. Reading/writing as a feedback process demands a lot of practise from the individual in schools or other social institutions. Writing is culture technology of the body, written in a disciplinary way. When the philosopher Michel Foucault developed his methodology of discourse analysis, he restricted to finiteness and positivity of discourse and statements (type writer). Michel Foucault' s worst nightmare was nothing else than the "gaze" on a document that could not be deciphered: A message as a noise, which the sender can not decode the elements of, an unreadable text (communication in the presence of noise). Discourse analysis based on libraries,

archives and typewriters collapses as soon as the materialities and sensualities of the interface are at disposal. In this case the viewer as a perceiving subject could not only revive the dead material of history, but also become a creating sender.

The installation "Diagrammatical Read/Write-Head" takes this as an initial move to question writing as a sensomotoric process. New media, electronic and poetic ways of articulation not only are symbolic or discrete, but first of all questions about the interface, the problematic nature of an experimental interface culture of reading and writing. Before the invention of printing press, reading and writing was tied to hand writing and so directly to the body. With the introduction of the computer, interfaces and surfaces turn up to be new culture aesthetic paradigms. The "meaning", that had always been the reconstructed and imagined face of history, only comes into being in the body of the reader, in the path of the observer. For this reason the question of mediality of electronic writing also is a question of the reader's triage. In this context the installation "Diagrammatical Read/Write-Head" produces visual and motoric forms of reading itself as access to the memory, as a condition of writing (Random Access Memory). Reading, however, is more pathologic and experimental, intentionally set off against a medical view. At the same time the usual linearity of reading, the nick of its identity in stone (Read Only Memory), is broken up to be a scenery of ruins of significant.

The movements of the eye as an expression of reading are the input for an algorithmic writing machine. An Eye/Tracking-System evaluates the "reading" gazes of the viewer and so generates new, subjectified statements. But in media the term

"tracking" not only means "pursuing", but also "the exact following of a magnetic head in a given track", just like you would lead a pen.

Here it is not about the infinite tape, not about the condition of the universal electronic machine but about the sensual materialities of the read/write head itself. The measuring system is enhanced by contingent picture and text fragments, scripture particles, differences in the mask. The viewer slowly and successively finds a meaning in a simultaneously possible and creative variation of typographic information carriers. Fragmented word and letter elements emerge on the surface, that are linearized after the selection (dragon teeth). It is the viewer himself who creates messages with the movements of his eyes. Through interactive and measurable gazes the reader gives signs to the computer. The exhibit suggests out of an originally white noise of significant an imaginary continuity of reading. In connection with the Eye/Tracking- System this also is a process of writing. The individual and reading gazes of the viewer produce statements that are synthesized from semantic analysis of discourses, modelled with so-called RT-networks and selected by the staging of reading as reading. Everyone who experiences the installation can generate an individual message in an interactive read/write process. The most interactive process of cultures- reading- is presented as the active movements of the body of the viewer, an experimental interface turns the reading eyes into an algorithmic writing of messages.

Every sentence of the installation is mechanically produced by the reading gazes of the viewer. The operator is not responsible for technical failures of the algorithms, for the generated content and so occurring damage and the resulting consequences. The operator distances himself from any kind of messages that refer to well-known persons in public life. The operator also asks every reader/writer to have the same humorous distance.

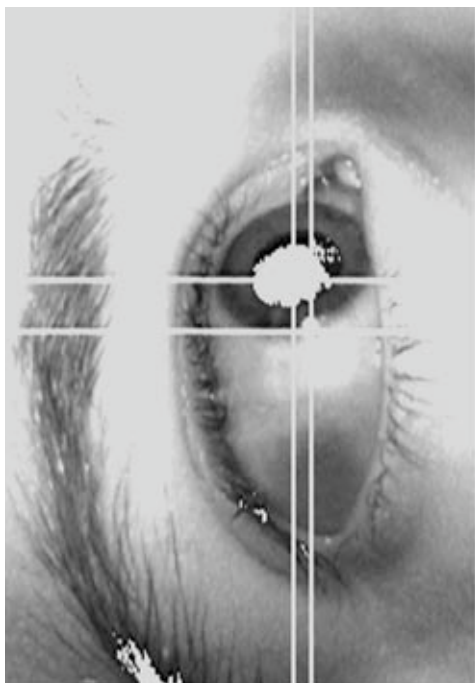
More on the relation of reading gazes and selection in disturbed communication channels, see: Axel Roch, "Stochastic Interaction and the Mind-Reading Machine II", in: *Rauschen. Seine Phänomenologie und Semantik zwischen Sinn und Störung*, Andreas Hiepko/Katja Stopka (Eds.), Würzburg: Königshausen & Neumann, 2001, pp. 181-187.



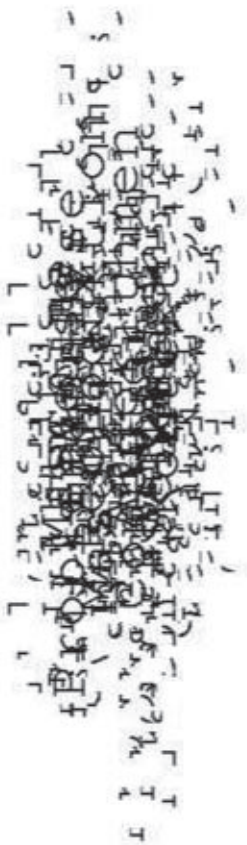












Maschineweise
 Problemlösung

Maschineweise: Reproduktion

Computer-Algorithmen

schematischer Kontext