

Zeitschrift: Trans : Publikationsreihe des Fachvereins der Studierenden am Departement Architektur der ETH Zürich

Herausgeber: Departement Architektur der ETH Zürich

Band: - (1997)

Heft: 1

Rubrik: Trace

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 14.08.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

ties/processes and generate spaces which are interfaced with the activities of users. They place traditional geometric representations of architecture. Membranes formulate transversals between different superimposed media bodies (audio, light, geometry, gravity), which are received as parallel information streams. Membranes are the main communication platform between users and environment.

geometry engine

GEOMETRY. modular geometry generates perspective spaces based on instances of self similar elements in matrices. The geometric syntax of spaces is defined according to function, level of detail, and interaction mode (interior/private, transparent/public).

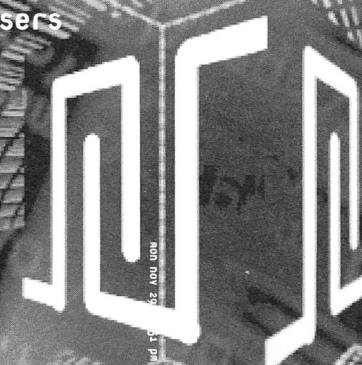
DATABASES. The databases contain the access of user activities and are updated each time unit (Login/Logout).

data bases

audio. audio enables spatial, non-material orientation. audio beacons and ambient audio are very important for registering spacial relations by users.

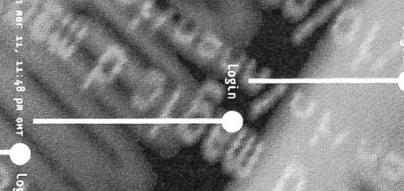


online users



internet

system time



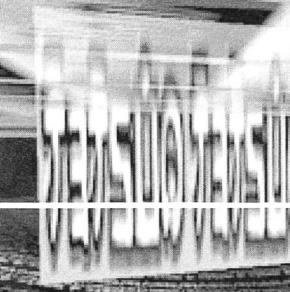
spaces places

SURFACES. SURFACES ARE EXPRESSED THROUGH TEXTURE MAPS AND DEFINE, TOGETHER WITH LIGHTING MODE, SUBSTANCE AND CONTENT OF THE GENERATED SPACES.

EVENTS. EVENTS START INDEPENDENT PROCESSES AND ANIMATIONS IN SPACE. PERCEIVING AND ASSOCIATING EVENTS SUPPORTS THE GENERATION OF MENTAL MAPS.

event agent

LIGHT. LIGHT GENERATES SPACIAL DEPTH, AND CODES THE EMOTIONAL CONTENT OF THE SPACIAL ELEMENTS.



hybrid spaces

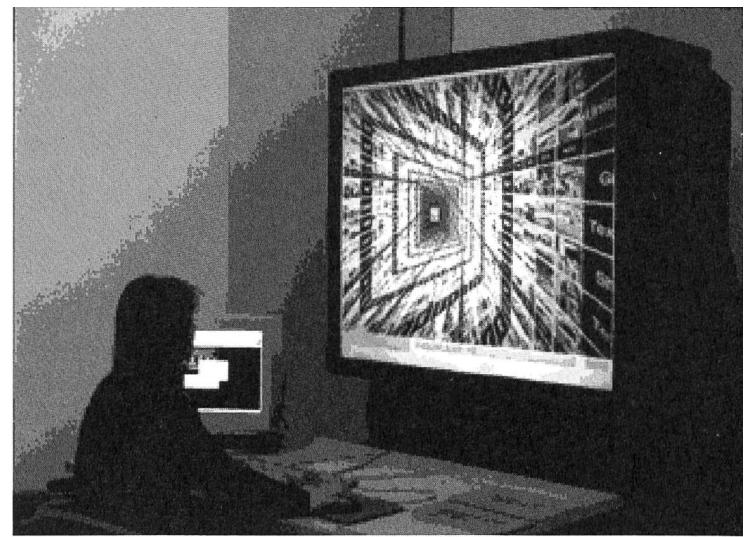
"Abstraction today is no longer that of the map, the double, the mirror. The concept. simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyperreal." (jean baudrillard, "simulations", 1983)

The interactions between natural organic systems and virtual cognitive systems are not very well understood, because there is not yet a common descriptive language. An important function of virtual worlds is thus, to act as a mediator between these coexisting worlds. In this direction we propose a new concept for the city. The name of the installation is TRACE. TRACE generates spaces by registering activities by local and networked visitors and by interpreting and representing them. The substance and the gene code of the space is therefore formed by the history of the visitors' activities.

trace evidence - core module: ability to recognize, collect, secure, and preserve physical evidence, including trace and microscopic evidence and preserve the chain of custody of such evidence assuring its scientific and legal value. (american board of criminalistics)

credits:

environment: architectural space laboratory (asl), chair for caad and architecture, eth zürich
online information at <http://caad.arch.ethz.ch/trace>
concept, programming and support: florian wenz and fabio gramazio



links: Funktionsschema von TRACE

TRACE.facts: TRACE untersucht im Rahmen der Ausstellung "The Archaeology of the Future City" die Rolle der *Stadt als Netzwerk*, die, ebenso ungebaut wie unbaubar, eine der möglichen Denkmodelle für das sich derzeit entwickelnde Informationsterritorium ist. Als *Digital City* generiert TRACE mit dem Medium Computer ein interaktives, dreidimensionales Artefakt in Real Time Multimedia, das allerdings nicht als Simulation der physische Stadt zu verstehen ist. Ausgehend Benutzer-spuren (Traces) nutzt TRACE die Sprache bestehender urbaner Wahrnehmungsmechanismen und neuer Mensch-Maschine-Interfaces um ein kognitives Modell einer Stadt zu generieren, das dynamische, assynchrone Kommunikationsprozesse als urbane Raumsysteme modellhaft abbildet und damit vorstellbar macht.

TRACE.intelligence: Theorien, Konzepte, Datatectures: Florian Wenz und etoy | Audio Samples: Christian Waldvogel | Internet Research: Barbara Strelbel

TRACE.support: Rene Stämpfli, Silicon Graphics Switzerland/Japan | Takeshi Sumi, Department of Cultural Affairs, Tokyo Shimbun | Kazufumi Oizumi, Aichi Prefectural University of Fine Arts and Music | Prof. Takashi Uzawa, Institute of Art and Design, University of Tsukuba | Yosuke Oga, Museum of Contemporary Art, Tokyo

TRACE.funding: Eidgenössische Technische Hochschule, Programm zum Wissenschaftsaustausch Schweiz-Japan | Tokio Shimbun, Tokyo, Japan

TRACE.sites: Museum of Contemporary Art, Tokyo, July 24 - Sept. 16, 1996 | Hiroshima Museum of Art, Sept. 22 - Nov. 4, 1996 | Gifu Prefectural Museum, Nov. 12 - Dec. 22, 1996, Users traced on site: 5473

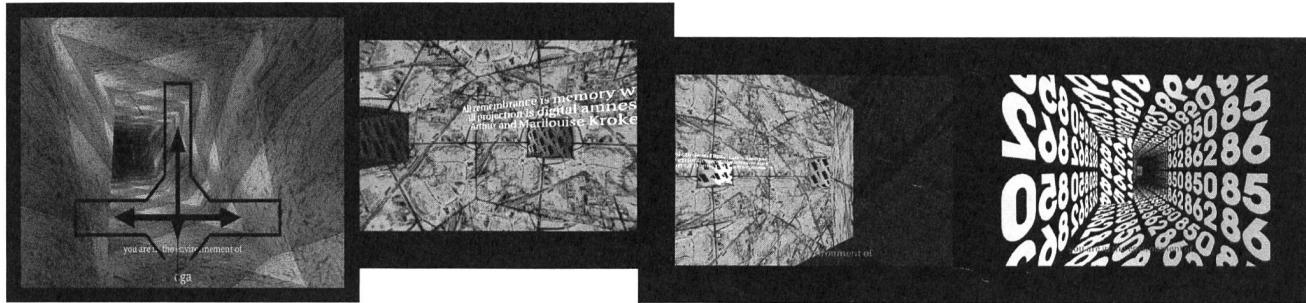
TRACE.specs: Hardware: Indigo 2 Maximum Impact, Silicon Graphics Computer Systems | Software: 209.372 Zeichen C++-Code | Open Inventor Development Environment | Operating System: IRIX 5.3

TRACE.research: Architectural Space Laboratory (ASL), Professur für Architektur und CAAD, Prof. Dr. Gerhard Schmitt, Abteilung für Architektur, Eidgenössische Technische Hochschule

rechts: Die Installation TRACE im Museum of Contemporary Art, Tokyo. USER mit Architekturgenerator und Lesemaschine.

<http://caad.arch.ethz.ch/trace>

```
NUM_CUBES_F2; | INT NUM_CUBES_F3; | INT CHANGE_FLAG = -1; | INT CHANGE_FLAG_EXIT = -1; | INT GO_OUTWORLD_FLAG = -1; | | STATIC FLOAT
X_MAX[MAX_FOLDS][MAX_CUBES]; | STATIC FLOAT X_MIN[MAX_FOLDS][MAX_CUBES]; | STATIC FLOAT Y_MAX[MAX_FOLDS][MAX_CUBES]; | STATIC FLOAT
user collision detection ON
```



TRACE Technologies != World.Cortex

01

*TRACE.In.World:
Interaktions- und
Wahrnehmungsdiagramm.*

02 03 04

*TRACE.In.World:
Architektonischer Syntax aus
Geometrien, Informationsträgern,
Belichtungen und
Bewegungsmustern.*

<TRAILER: abstract>

I will not waste my precious ASCII and your REM cycles with redundant recombinations, but I will use your INTELlectual property as my FREEware. I will blind you with SCience, as the most effective of all belief SYStems. Anything I claim should be verified by you.

*After all, this is Real.Life and nobody gets a true *replay after *game over. Excused are those who can still distinguish between a description of who_they_are and a description of where_they_have_been ... and those who have never touched the *POWER button of the WHITE BEAST... dream on.*

<INTRØ: The Big Picture>

GØØD Data:

A group of low-income families in California were in danger of losing their homes and having their families torn apart. Over a communications network, their lawyer learned of a new rule from Washington through which he managed to save their homes just a few days before they were due to be evicted, and weeks before the local housing agency heard about it. Only interactive communications can supply this kind of reach for the individual and this level of timeliness.

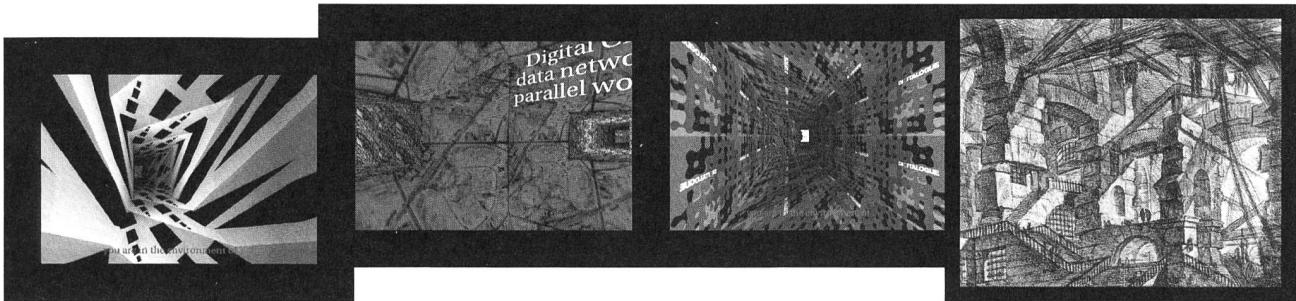
Data gone BAD:

A hacker breaks into a California computer and downloads 20,000 credit card numbers.

Pirates intercept cellular bandwidth, looting a cellular phone carrier and its users of an estimated \$500 million to \$1 billion annually.

An employee "kidnaps" a block of secret corporate data, locks it with an encryption program, then sends the company a ransom note demanding a transfer of \$3 million to a numbered bank account outside the country.

```
#include "INCLUDE.H" | #include "DEFINES.H" | | #include "MONOPLAYER.H" | #include "COLLISION.H" | #include "OVERLAY.H" | #include "INWORLD.H" | | | O
STATIC FLOAT NUM_CUBES VER_SWICH[SWICH][10][4]; | VOID DELTAS_SWICH(INT); | | INT COLLISION_FLAG = 0; | | INT IF_FOLD; | INT IF_SWICH; | INT MYSWIC
```



01 02 03

In World aus der Benutzerperspektive

04

ein Exponat von visionärer historischer Architektur
aus "The Archaeology of the Future City"
Piranesi, Giovanni Battista, *Invenzioni capricciose de carceri: Gothic Arch*, c. 1758 - 60



TRACE - an Autonomous Urban Process Field Online

Florian Wenz
etoy

TRACE - an Autonomous Urban Process Field Online

01 - Autonomous

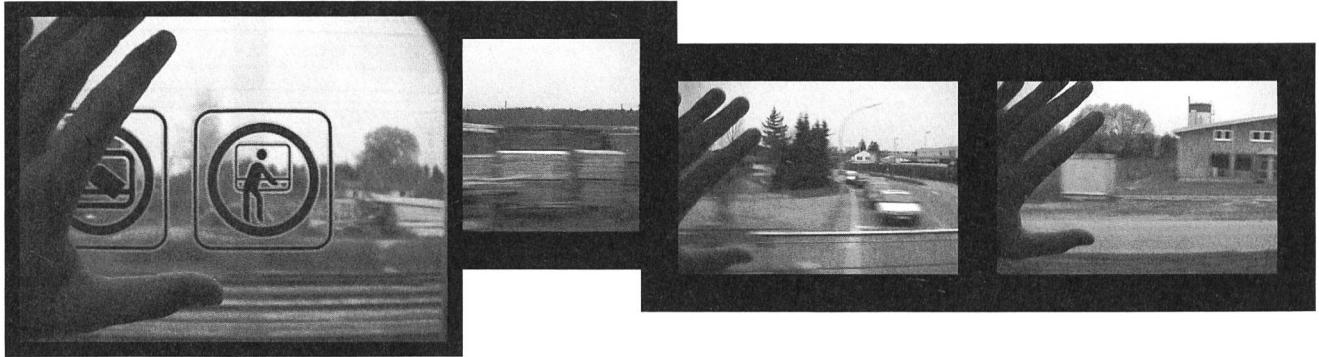
"Abstraction today is no longer that of the map, the double, the mirror or the concept. Simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyperreal." (Jean Baudrillard) (1)

Abstraktionen entstehen meist aus der Notwendigkeit, komplexe Realitäten analysierbar und damit manipulierbar zu machen. Dabei werden bestimmte, für die Problemstellung relevante Aspekte isoliert und durch symbolische Repräsentationen in Objekte und Relationen umkodiert. Diese Modellelemente können dann zu Simulationen zusammen gesetzt werden, deren kognitive Interpretation die Übereinstimmung mit dem simulierten Objekt vortäuscht. Da Simulationen im allgemeinen einfacher denkbar sind als das simulierte Objekt, beginnen sich diese oft vom Original abzulösen und bilden als autonome Systeme mit eigenen Gesetzmäßigkeiten eine enge Symbiose aus Objekt (Original) und Subjekt (Abstraktion).

Die Stadt, das vermutlich komplexeste, vielschichtigste Artefakt der menschlichen Kulturgeschichte ist heute ohne Abstraktionen nicht mehr denkbar. Während die individuelle formale Gestaltung des wahrnehmbaren Stadtraums immer mehr gegenüber den anonymen Kräften von Infrastrukturen an Relevanz verliert, gewinnt die Navigation in abstrakten Modellen von unsichbaren Strukturen zunehmend an Bedeutung. Da das Erleben dieser Form des Reisens in subjektiven Gedankengebäuden stattfindet, ist die physische Bewegung des Navigators dabei nebensächlich. Die Faszination von "Virtual Reality" beruht genau auf diesem, bisher zumeist uneingelösten Versprechen des "Travelling without Moving".

So lebt jeder Bewohner einer grösseren Stadt bereits mit mindestens drei, sich überlagernden Navigationssmodellen: der erlebten Stadt als Abfolge

```
MESSAGE; | INWORLD_UPDATE; | | INT MESSAGE_FLAG; | | INT SOUND_ID; | INT SOUND_FLAG = 0; | | STATIC FLOAT VER_FOLDS[MAX_FOLDS][MAX_CUBES][10][4]; |
INT MYFOLD = 0; | INT MYPOS = 0; | INT MYDIR = 0; | | FLOAT POS_X; | FLOAT POS_Y; | FLOAT POS_Z; | | | INT NUM_CUBES_F0; | INT NUM_CUBES_F1; | INT
```



01 02 03 04
"Travelling without moving"
in "A Description of the Equator and
some Other Lands", (Pocock, Wenz,
Huber, Noll), *Documenta X*, 97.

<http://king.dom.de/equator>

Really USEFUL Data:

In the United States there are currently about five billion privately owned records that describe each citizens finances, interests and demographics. Information bureaus such as TRW, Equifax and Trans Union possess the largest and most detailed databases on American consumers. Their 450 million records on 160 million individuals include birth dates, family makeup, current and previous addresses, telephone numbers, Social Security numbers, employment and salary histories, credit transactions, mortgage rates and legal entanglements. This information is compiled into databases and sold to corporations who use it to facilitate marketing decisions and to find potential customers.

<SCENE01: The Timeless Moment>

The obscure Japanese Trash-Metal Guitarist and Performer *< i > HAINØ* *< /i >* takes pride in stating "There is no more culture, only information." This distinctly sets him apart from the current ØTAKU generation of his contemporaries who, in the true tradition of a SEAfaring nation are finally SURFing the Net forever.

This TRAVELLING generation is still confusing culture with information and is performing autistic Real Time Remix Rituals of trivia information samples about pubescent teen popstars or MANGA heroes ("Battle Angel Alita", "Giant Robot", "Video Girl Ai"). Meanwhile, *HAINØ* strikes back.

In live solø performances, frequently lasting up to three hours, his vast soundscapes of terrifying fury or monastic stillness celebrate an apparently long lost magic item: "... the timeless moment, that does not know the difference between New and Old."

Just to be sure that even this ANALØG.artist is blessed by the comings of the Inføage, we have one of the mighty Find-All-Nøw!-Machines eject the TRACES, that his timeless creations have generated on the World Wide Web:

Documents 00-10 of about 100 matching the query, in no particular order:

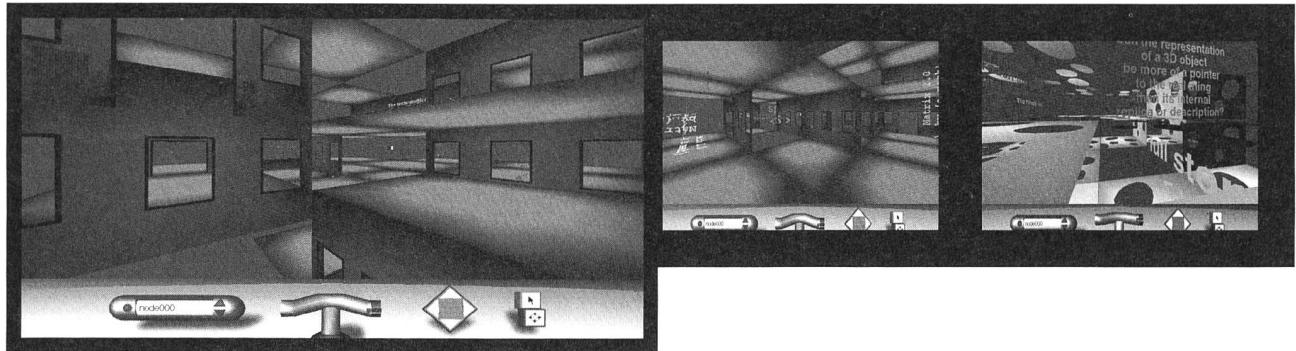
The Artist is present

"Friday, 7 April 9pm \$8/10 TOKYONOISECORE: Keiji Haino (9pm)"

*Friday, 7 April 9pm \$8/10 YOKONOISECURE. Reiji Hanno (9pm)
http://www.knittingfactory.com/Schedule/MainSpace/April/07_04.html*

Possibly a Doppelganger:

```
Y_MIN[|MAX_FOLDS||MAX_CUBES]; | | STATIC FLOAT X_MAX S[|MAX_SWICH|]5; | STATIC FLOAT X_MIN S[|MAX_SWICH|]5; | STATIC FLOAT Y_MAX S[|MAX_SWICH|]5; | ST
{"ARCSHORT"}, {"BEEPSMALL"}, {"BUZZ1"}, {"BUZZHUM"}, {"DRUMS"}, {"E-WEIRD"}, {"ELECTROWIGGY"}, {"FLANGERAMBIENT"}, {"HOLLOW"}, {"INDUSTRIAL"}]
```



von Gedächtnisbildern und deren Assoziationsketten, dem Strassenplan als grafische Repräsentation von möglichen Bewegungsmustern und den öffentlichen Verkehrssystemen als schematisches oder numerisches Beziehungssystem von Haltestellen, Umsteigemöglichkeiten und Zeitplänen. Jedes dieser Modelle erzeugt seine eigenen Koordinatenpunkte, die der urbane Navigator parallel lesen und in synchroner Übereinstimmung bringen muss, um sich effektiv fortzubewegen. Dabei verschmelzen sensorisches Wahrnehmen und abstraktes Denken den urbanen Raum zu einer Einheit: dem kognitiven Modell der Stadt.

02 - Urban

"The City is an accumulation of spaces cobbled together in time. The City in time reflects the powers, rules, and economic systems of each age, succeeding as an actual space linked to that particular age's technology and styles. Personal aspirations can be found swirling in every nook and cranny of this city space, leaving traces of their collisions with public systems. The actual extant city is thus a complicated object, an amalgam of the traces of diverse "times" and "spaces", and the reality of the city is a compound made up of logic and contradiction."⁽¹⁾

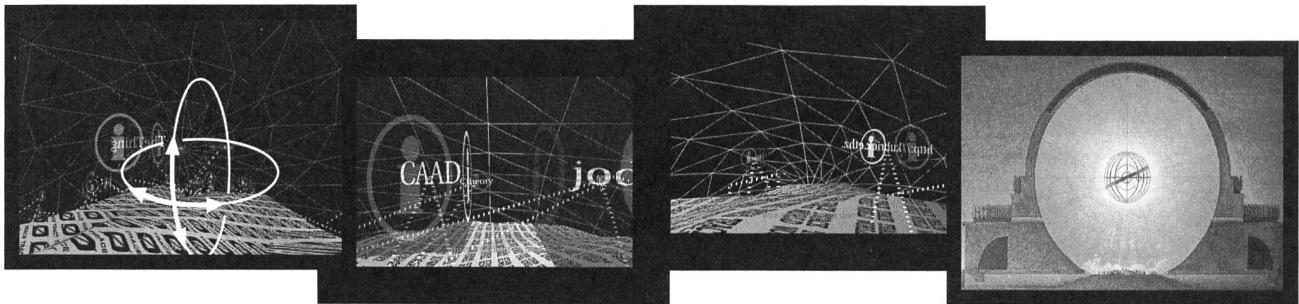
Diese einleitenden Bemerkungen zu "The Archaeology of the Future City" könnten unter anderem Kontext auch den Zustand des globalen Kommunikationsterritoriums Internet in seinem derzeitigen Entwicklungsstand beschreiben. Eine verwandte Leseart von Territorien wird auch von André Corboz dem ehemaligen Professor für Geschichte des Städtebaus an der ETH vertreten, der in diesem Zusammenhang den Begriff des Palimpsest geprägt hat. In "The Land as Palimpsest" beschreibt er die Stadt als ein vielfach geschichtetes, textuelles Feld, das durch sich überlagernde Spuren von kulturellen Eingriffen geprägt ist.⁽³⁾

Diese Benutzerspuren (Traces) als architektonischen Text abzubilden ist auch Ausgangspunkt für die Installation TRACE. TRACE generiert urbane Räume, indem es die Aktivitäten der Benutzer registriert, interpretiert und in zeitlich versetzten Überlagerungen darstellt, wobei das vœuveristische Lesen von Traces anderer Benutzer gleichzeitig wieder Traces generiert. Dieser sich selbst generierende Lese-/Erzählraum garantiert eine kontinuierliche Evolution des Systems und baut auf den gleichen sozialen Mechanismen auf, die auch zur Omnipräsenz des World Wide Webs geführt haben. Als Subnetz im Netzwerk und Verwalter seiner eigenen Ontologie ist TRACE ein vollkommen selbstreferenzierendes, autonomes System.

01 02 03

Babylon_M - Matrix:
Parametrische Home.Tecture als personalisiertes Raumkontinuum.
Florian Wenz, Christian Waldvogel,
"Real Fiction - Virtual Reality", ETH,
1996

<http://caad.arch.ethz.ch/babylon>



01

TRACE.Out.World:
Interaktions- und Wahrnehmungsdiagramm.

02 03

Out.World aus der Benutzerperspektive.

04

Ein Exponat von visionärer historischer Architektur aus "The Archaeology of the Future City": Bouleé, Etienne-Louis, Project for a Cenotaph for Isaac Newton, 1784

"Ratliff says that Haino always wears sunglasses and black clothing."

<http://www.artnet.com/magazine/features/magrack/magrack4.html>

Unofficial Identities:

"An Unofficial Keiji Haino Homepage"

<http://www.cems.umn.edu/~keffer/index.html>

Important Incidents:

"Alan cemented his reputation as the Evan Dando of Noise by recording LPs with Loren Mazzacane, Keiji Haino & Connie Burg and Max Factory."

http://www.matador.recs.com/bios/bio_runon.html

Trade Mark:

"Fushitsusha is Keiji Haino's guitar/bass/drums "power trio," a dense roller coaster of sound ..."

http://www.knittingfactory.com/Schedule/MainSpace/April/08_04.html

Positions of Power:

"Keiji Haino has been, for over two decades, one of Japan's leaders in the field of guitar-based experimentation ..."

<http://www.dutch-east.com/dsa/dsa54040.htm>

True Emotions:

"Keiji Haino: AFFECTION"

<http://www.mashell.com/~zzajdr/imprevw.htm#REV09>

Respect:

"So no, I don't have any interest in playing "with" Haino. He is totally incredible though."

<http://www.matador.recs.com/bands/runon/teenlooch.html>

Missunderstanding:

"A man hitting strings of guitar, singing words I can't understand."

<http://www.v2.nl/Archief/ArchiefTexten/Vitals/Vital39.html>

Defamation:

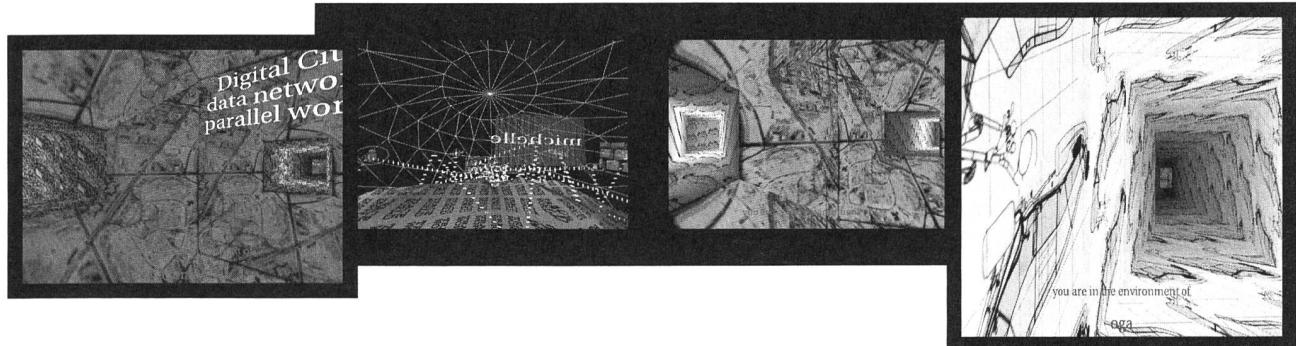
"TF: Does Haino play guitar?

Alan: No, he doesn't play guitar! He just sings and plays percussion."

<http://www.meer.net/~charnel/fushitsusha/fushitsusha.html>

Mind yøu, nøne øf these "døcuments" cøme frøm <i> HAINØ </i> him-self, he just plays guitar. Nøt having the Trace Evidence Cøre Mødule installed, he is unable tø perførm the møst basic øf all ønline.Identity.Functiøns: The ability tø recøgnize, cøllect, secure, and

{"SEA"}, {"SPARK"}, {"TEKKNOWIND"}, {"THEWOLVES"}, {"TURBULENCE"}, {"UNDERWATER2"}, {"WEIRDO"}, {"WINDMILL1"}, {"WINDMILL2"}, /* {"ADIEO2"}, {"AMB07"}, {"AMBTECH3"}, {"APAINO1"}, {"CLEANER"}, {"CRMBLE01"}, {"ELECTO2"}, {"LAVA01"}, {"OWNSAVE"}, {"POWERU_1"}, {"SPACEB_1"}, {"SWISH01"}, {"TELEPTO1"}, {"TELEPTO2"}, {"VIBR01"}, {"WAV01"}, {"WAV02"}, {"WAV03"}, {"WAV04"}, {"WAV05"}, {"WAV06"}, {"WAV07"}, {"WAV08"}, {"WAV09"}, {"WAV10"}, {"WAV11"}, {"WAV12"}, {"WAV13"}, {"WAV14"}, {"WAV15"}, {"WAV16"}, {"WAV17"}, {"WAV18"}, {"WAV19"}, {"WAV20"}, {"WAV21"}, {"WAV22"}, {"WAV23"}, {"WAV24"}, {"WAV25"}, {"WAV26"}, {"WAV27"}, {"WAV28"}, {"WAV29"}, {"WAV30"}, {"WAV31"}, {"WAV32"}, {"WAV33"}, {"WAV34"}, {"WAV35"}, {"WAV36"}, {"WAV37"}, {"WAV38"}, {"WAV39"}, {"WAV40"}, {"WAV41"}, {"WAV42"}, {"WAV43"}, {"WAV44"}, {"WAV45"}, {"WAV46"}, {"WAV47"}, {"WAV48"}, {"WAV49"}, {"WAV50"}, {"WAV51"}, {"WAV52"}, {"WAV53"}, {"WAV54"}, {"WAV55"}, {"WAV56"}, {"WAV57"}, {"WAV58"}, {"WAV59"}, {"WAV60"}, {"WAV61"}, {"WAV62"}, {"WAV63"}, {"WAV64"}, {"WAV65"}, {"WAV66"}, {"WAV67"}, {"WAV68"}, {"WAV69"}, {"WAV70"}, {"WAV71"}, {"WAV72"}, {"WAV73"}, {"WAV74"}, {"WAV75"}, {"WAV76"}, {"WAV77"}, {"WAV78"}, {"WAV79"}, {"WAV80"}, {"WAV81"}, {"WAV82"}, {"WAV83"}, {"WAV84"}, {"WAV85"}, {"WAV86"}, {"WAV87"}, {"WAV88"}, {"WAV89"}, {"WAV90"}, {"WAV91"}, {"WAV92"}, {"WAV93"}, {"WAV94"}, {"WAV95"}, {"WAV96"}, {"WAV97"}, {"WAV98"}, {"WAV99"}, {"WAV100"}, {"WAV101"}, {"WAV102"}, {"WAV103"}, {"WAV104"}, {"WAV105"}, {"WAV106"}, {"WAV107"}, {"WAV108"}, {"WAV109"}, {"WAV110"}, {"WAV111"}, {"WAV112"}, {"WAV113"}, {"WAV114"}, {"WAV115"}, {"WAV116"}, {"WAV117"}, {"WAV118"}, {"WAV119"}, {"WAV120"}, {"WAV121"}, {"WAV122"}, {"WAV123"}, {"WAV124"}, {"WAV125"}, {"WAV126"}, {"WAV127"}, {"WAV128"}, {"WAV129"}, {"WAV130"}, {"WAV131"}, {"WAV132"}, {"WAV133"}, {"WAV134"}, {"WAV135"}, {"WAV136"}, {"WAV137"}, {"WAV138"}, {"WAV139"}, {"WAV140"}, {"WAV141"}, {"WAV142"}, {"WAV143"}, {"WAV144"}, {"WAV145"}, {"WAV146"}, {"WAV147"}, {"WAV148"}, {"WAV149"}, {"WAV150"}, {"WAV151"}, {"WAV152"}, {"WAV153"}, {"WAV154"}, {"WAV155"}, {"WAV156"}, {"WAV157"}, {"WAV158"}, {"WAV159"}, {"WAV160"}, {"WAV161"}, {"WAV162"}, {"WAV163"}, {"WAV164"}, {"WAV165"}, {"WAV166"}, {"WAV167"}, {"WAV168"}, {"WAV169"}, {"WAV170"}, {"WAV171"}, {"WAV172"}, {"WAV173"}, {"WAV174"}, {"WAV175"}, {"WAV176"}, {"WAV177"}, {"WAV178"}, {"WAV179"}, {"WAV180"}, {"WAV181"}, {"WAV182"}, {"WAV183"}, {"WAV184"}, {"WAV185"}, {"WAV186"}, {"WAV187"}, {"WAV188"}, {"WAV189"}, {"WAV190"}, {"WAV191"}, {"WAV192"}, {"WAV193"}, {"WAV194"}, {"WAV195"}, {"WAV196"}, {"WAV197"}, {"WAV198"}, {"WAV199"}, {"WAV200"}, {"WAV201"}, {"WAV202"}, {"WAV203"}, {"WAV204"}, {"WAV205"}, {"WAV206"}, {"WAV207"}, {"WAV208"}, {"WAV209"}, {"WAV210"}, {"WAV211"}, {"WAV212"}, {"WAV213"}, {"WAV214"}, {"WAV215"}, {"WAV216"}, {"WAV217"}, {"WAV218"}, {"WAV219"}, {"WAV220"}, {"WAV221"}, {"WAV222"}, {"WAV223"}, {"WAV224"}, {"WAV225"}, {"WAV226"}, {"WAV227"}, {"WAV228"}, {"WAV229"}, {"WAV230"}, {"WAV231"}, {"WAV232"}, {"WAV233"}, {"WAV234"}, {"WAV235"}, {"WAV236"}, {"WAV237"}, {"WAV238"}, {"WAV239"}, {"WAV240"}, {"WAV241"}, {"WAV242"}, {"WAV243"}, {"WAV244"}, {"WAV245"}, {"WAV246"}, {"WAV247"}, {"WAV248"}, {"WAV249"}, {"WAV250"}, {"WAV251"}, {"WAV252"}, {"WAV253"}, {"WAV254"}, {"WAV255"}, {"WAV256"}, {"WAV257"}, {"WAV258"}, {"WAV259"}, {"WAV260"}, {"WAV261"}, {"WAV262"}, {"WAV263"}, {"WAV264"}, {"WAV265"}, {"WAV266"}, {"WAV267"}, {"WAV268"}, {"WAV269"}, {"WAV270"}, {"WAV271"}, {"WAV272"}, {"WAV273"}, {"WAV274"}, {"WAV275"}, {"WAV276"}, {"WAV277"}, {"WAV278"}, {"WAV279"}, {"WAV280"}, {"WAV281"}, {"WAV282"}, {"WAV283"}, {"WAV284"}, {"WAV285"}, {"WAV286"}, {"WAV287"}, {"WAV288"}, {"WAV289"}, {"WAV290"}, {"WAV291"}, {"WAV292"}, {"WAV293"}, {"WAV294"}, {"WAV295"}, {"WAV296"}, {"WAV297"}, {"WAV298"}, {"WAV299"}, {"WAV300"}, {"WAV301"}, {"WAV302"}, {"WAV303"}, {"WAV304"}, {"WAV305"}, {"WAV306"}, {"WAV307"}, {"WAV308"}, {"WAV309"}, {"WAV310"}, {"WAV311"}, {"WAV312"}, {"WAV313"}, {"WAV314"}, {"WAV315"}, {"WAV316"}, {"WAV317"}, {"WAV318"}, {"WAV319"}, {"WAV320"}, {"WAV321"}, {"WAV322"}, {"WAV323"}, {"WAV324"}, {"WAV325"}, {"WAV326"}, {"WAV327"}, {"WAV328"}, {"WAV329"}, {"WAV330"}, {"WAV331"}, {"WAV332"}, {"WAV333"}, {"WAV334"}, {"WAV335"}, {"WAV336"}, {"WAV337"}, {"WAV338"}, {"WAV339"}, {"WAV340"}, {"WAV341"}, {"WAV342"}, {"WAV343"}, {"WAV344"}, {"WAV345"}, {"WAV346"}, {"WAV347"}, {"WAV348"}, {"WAV349"}, {"WAV350"}, {"WAV351"}, {"WAV352"}, {"WAV353"}, {"WAV354"}, {"WAV355"}, {"WAV356"}, {"WAV357"}, {"WAV358"}, {"WAV359"}, {"WAV360"}, {"WAV361"}, {"WAV362"}, {"WAV363"}, {"WAV364"}, {"WAV365"}, {"WAV366"}, {"WAV367"}, {"WAV368"}, {"WAV369"}, {"WAV370"}, {"WAV371"}, {"WAV372"}, {"WAV373"}, {"WAV374"}, {"WAV375"}, {"WAV376"}, {"WAV377"}, {"WAV378"}, {"WAV379"}, {"WAV380"}, {"WAV381"}, {"WAV382"}, {"WAV383"}, {"WAV384"}, {"WAV385"}, {"WAV386"}, {"WAV387"}, {"WAV388"}, {"WAV389"}, {"WAV390"}, {"WAV391"}, {"WAV392"}, {"WAV393"}, {"WAV394"}, {"WAV395"}, {"WAV396"}, {"WAV397"}, {"WAV398"}, {"WAV399"}, {"WAV400"}, {"WAV401"}, {"WAV402"}, {"WAV403"}, {"WAV404"}, {"WAV405"}, {"WAV406"}, {"WAV407"}, {"WAV408"}, {"WAV409"}, {"WAV410"}, {"WAV411"}, {"WAV412"}, {"WAV413"}, {"WAV414"}, {"WAV415"}, {"WAV416"}, {"WAV417"}, {"WAV418"}, {"WAV419"}, {"WAV420"}, {"WAV421"}, {"WAV422"}, {"WAV423"}, {"WAV424"}, {"WAV425"}, {"WAV426"}, {"WAV427"}, {"WAV428"}, {"WAV429"}, {"WAV430"}, {"WAV431"}, {"WAV432"}, {"WAV433"}, {"WAV434"}, {"WAV435"}, {"WAV436"}, {"WAV437"}, {"WAV438"}, {"WAV439"}, {"WAV440"}, {"WAV441"}, {"WAV442"}, {"WAV443"}, {"WAV444"}, {"WAV445"}, {"WAV446"}, {"WAV447"}, {"WAV448"}, {"WAV449"}, {"WAV450"}, {"WAV451"}, {"WAV452"}, {"WAV453"}, {"WAV454"}, {"WAV455"}, {"WAV456"}, {"WAV457"}, {"WAV458"}, {"WAV459"}, {"WAV460"}, {"WAV461"}, {"WAV462"}, {"WAV463"}, {"WAV464"}, {"WAV465"}, {"WAV466"}, {"WAV467"}, {"WAV468"}, {"WAV469"}, {"WAV470"}, {"WAV471"}, {"WAV472"}, {"WAV473"}, {"WAV474"}, {"WAV475"}, {"WAV476"}, {"WAV477"}, {"WAV478"}, {"WAV479"}, {"WAV480"}, {"WAV481"}, {"WAV482"}, {"WAV483"}, {"WAV484"}, {"WAV485"}, {"WAV486"}, {"WAV487"}, {"WAV488"}, {"WAV489"}, {"WAV490"}, {"WAV491"}, {"WAV492"}, {"WAV493"}, {"WAV494"}, {"WAV495"}, {"WAV496"}, {"WAV497"}, {"WAV498"}, {"WAV499"}, {"WAV500"}, {"WAV501"}, {"WAV502"}, {"WAV503"}, {"WAV504"}, {"WAV505"}, {"WAV506"}, {"WAV507"}, {"WAV508"}, {"WAV509"}, {"WAV510"}, {"WAV511"}, {"WAV512"}, {"WAV513"}, {"WAV514"}, {"WAV515"}, {"WAV516"}, {"WAV517"}, {"WAV518"}, {"WAV519"}, {"WAV520"}, {"WAV521"}, {"WAV522"}, {"WAV523"}, {"WAV524"}, {"WAV525"}, {"WAV526"}, {"WAV527"}, {"WAV528"}, {"WAV529"}, {"WAV530"}, {"WAV531"}, {"WAV532"}, {"WAV533"}, {"WAV534"}, {"WAV535"}, {"WAV536"}, {"WAV537"}, {"WAV538"}, {"WAV539"}, {"WAV540"}, {"WAV541"}, {"WAV542"}, {"WAV543"}, {"WAV544"}, {"WAV545"}, {"WAV546"}, {"WAV547"}, {"WAV548"}, {"WAV549"}, {"WAV550"}, {"WAV551"}, {"WAV552"}, {"WAV553"}, {"WAV554"}, {"WAV555"}, {"WAV556"}, {"WAV557"}, {"WAV558"}, {"WAV559"}, {"WAV560"}, {"WAV561"}, {"WAV562"}, {"WAV563"}, {"WAV564"}, {"WAV565"}, {"WAV566"}, {"WAV567"}, {"WAV568"}, {"WAV569"}, {"WAV570"}, {"WAV571"}, {"WAV572"}, {"WAV573"}, {"WAV574"}, {"WAV575"}, {"WAV576"}, {"WAV577"}, {"WAV578"}, {"WAV579"}, {"WAV580"}, {"WAV581"}, {"WAV582"}, {"WAV583"}, {"WAV584"}, {"WAV585"}, {"WAV586"}, {"WAV587"}, {"WAV588"}, {"WAV589"}, {"WAV590"}, {"WAV591"}, {"WAV592"}, {"WAV593"}, {"WAV594"}, {"WAV595"}, {"WAV596"}, {"WAV597"}, {"WAV598"}, {"WAV599"}, {"WAV600"}, {"WAV601"}, {"WAV602"}, {"WAV603"}, {"WAV604"}, {"WAV605"}, {"WAV606"}, {"WAV607"}, {"WAV608"}, {"WAV609"}, {"WAV610"}, {"WAV611"}, {"WAV612"}, {"WAV613"}, {"WAV614"}, {"WAV615"}, {"WAV616"}, {"WAV617"}, {"WAV618"}, {"WAV619"}, {"WAV620"}, {"WAV621"}, {"WAV622"}, {"WAV623"}, {"WAV624"}, {"WAV625"}, {"WAV626"}, {"WAV627"}, {"WAV628"}, {"WAV629"}, {"WAV630"}, {"WAV631"}, {"WAV632"}, {"WAV633"}, {"WAV634"}, {"WAV635"}, {"WAV636"}, {"WAV637"}, {"WAV638"}, {"WAV639"}, {"WAV640"}, {"WAV641"}, {"WAV642"}, {"WAV643"}, {"WAV644"}, {"WAV645"}, {"WAV646"}, {"WAV647"}, {"WAV648"}, {"WAV649"}, {"WAV650"}, {"WAV651"}, {"WAV652"}, {"WAV653"}, {"WAV654"}, {"WAV655"}, {"WAV656"}, {"WAV657"}, {"WAV658"}, {"WAV659"}, {"WAV660"}, {"WAV661"}, {"WAV662"}, {"WAV663"}, {"WAV664"}, {"WAV665"}, {"WAV666"}, {"WAV667"}, {"WAV668"}, {"WAV669"}, {"WAV670"}, {"WAV671"}, {"WAV672"}, {"WAV673"}, {"WAV674"}, {"WAV675"}, {"WAV676"}, {"WAV677"}, {"WAV678"}, {"WAV679"}, {"WAV680"}, {"WAV681"}, {"WAV682"}, {"WAV683"}, {"WAV684"}, {"WAV685"}, {"WAV686"}, {"WAV687"}, {"WAV688"}, {"WAV689"}, {"WAV690"}, {"WAV691"}, {"WAV692"}, {"WAV693"}, {"WAV694"}, {"WAV695"}, {"WAV696"}, {"WAV697"}, {"WAV698"}, {"WAV699"}, {"WAV700"}, {"WAV701"}, {"WAV702"}, {"WAV703"}, {"WAV704"}, {"WAV705"}, {"WAV706"}, {"WAV707"}, {"WAV708"}, {"WAV709"}, {"WAV710"}, {"WAV711"}, {"WAV712"}, {"WAV713"}, {"WAV714"}, {"WAV715"}, {"WAV716"}, {"WAV717"}, {"WAV718"}, {"WAV719"}, {"WAV720"}, {"WAV721"}, {"WAV722"}, {"WAV723"}, {"WAV724"}, {"WAV725"}, {"WAV726"}, {"WAV727"}, {"WAV728"}, {"WAV729"}, {"WAV730"}, {"WAV731"}, {"WAV732"}, {"WAV733"}, {"WAV734"}, {"WAV735"}, {"WAV736"}, {"WAV737"}, {"WAV738"}, {"WAV739"}, {"WAV740"}, {"WAV741"}, {"WAV742"}, {"WAV743"}, {"WAV744"}, {"WAV745"}, {"WAV746"}, {"WAV747"}, {"WAV748"}, {"WAV749"}, {"WAV750"}, {"WAV751"}, {"WAV752"}, {"WAV753"}, {"WAV754"}, {"WAV755"}, {"WAV756"}, {"WAV757"}, {"WAV758"}, {"WAV759"}, {"WAV760"}, {"WAV761"}, {"WAV762"}, {"WAV763"}, {"WAV764"}, {"WAV765"}, {"WAV766"}, {"WAV767"}, {"WAV768"}, {"WAV769"}, {"WAV770"}, {"WAV771"}, {"WAV772"}, {"WAV773"}, {"WAV774"}, {"WAV775"}, {"WAV776"}, {"WAV777"}, {"WAV778"}, {"WAV779"}, {"WAV780"}, {"WAV781"}, {"WAV782"}, {"WAV783"}, {"WAV784"}, {"WAV785"}, {"WAV786"}, {"WAV787"}, {"WAV788"}, {"WAV789"}, {"WAV790"}, {"WAV791"}, {"WAV792"}, {"WAV793"}, {"WAV794"}, {"WAV795"}, {"WAV796"}, {"WAV797"}, {"WAV798"}, {"WAV799"}, {"WAV800"}, {"WAV801"}, {"WAV802"}, {"WAV803"}, {"WAV804"}, {"WAV805"}, {"WAV806"}, {"WAV807"}, {"WAV808"}, {"WAV809"}, {"WAV810"}, {"WAV811"}, {"WAV812"}, {"WAV813"}, {"WAV814"}, {"WAV815"}, {"WAV816"}, {"WAV817"}, {"WAV818"}, {"WAV819"}, {"WAV820"}, {"WAV821"}, {"WAV822"}, {"WAV823"}, {"WAV824"}, {"WAV825"}, {"WAV826"}, {"WAV827"}, {"WAV828"}, {"WAV829"}, {"WAV830"}, {"WAV831"}, {"WAV832"}, {"WAV833"}, {"WAV834"}, {"WAV835"}, {"WAV836"}, {"WAV837"}, {"WAV838"}, {"WAV839"}, {"WAV840"}, {"WAV841"}, {"WAV842"}, {"WAV843"}, {"WAV844"}, {"WAV845"}, {"WAV846"}, {"WAV847"}, {"WAV848"}, {"WAV849"}, {"WAV850"}, {"WAV851"}, {"WAV852"}, {"WAV853"}, {"WAV854"}, {"WAV855"}, {"WAV856"}, {"WAV857"}, {"WAV858"}, {"WAV859"}, {"WAV860"}, {"WAV861"}, {"WAV862"}, {"WAV863"}, {"WAV864"}, {"WAV865"}, {"WAV866"}, {"WAV867"}, {"WAV868"}, {"WAV869"}, {"WAV870"}, {"WAV871"}, {"WAV872"}, {"WAV873"}, {"WAV874"}, {"WAV875"}, {"WAV876"}, {"WAV877"}, {"WAV878"}, {"WAV879"}, {"WAV880"}, {"WAV881"}, {"WAV882"}, {"WAV883"}, {"WAV884"}, {"WAV885"}, {"WAV886"}, {"WAV887"}, {"WAV888"}, {"WAV889"}, {"WAV890"}, {"WAV891"}, {"WAV892"}, {"WAV893"}, {"WAV894"}, {"WAV895"}, {"WAV896"}, {"WAV897"}, {"WAV898"}, {"WAV899"}, {"WAV900"}, {"WAV901"}, {"WAV902"}, {"WAV903"}, {"WAV904"}, {"WAV905"}, {"WAV906"}, {"WAV907"}, {"WAV908"}, {"WAV909"}, {"WAV910"}, {"WAV911"}, {"WAV912"}, {"WAV913"}, {"WAV914"}, {"WAV915"}, {"WAV916"}, {"WAV917"}, {"WAV918"}, {"WAV919"}, {"WAV920"}, {"WAV921"}, {"WAV922"}, {"WAV923"}, {"WAV924"}, {"WAV925"}, {"WAV926"}, {"WAV927"}, {"WAV928"}, {"WAV929"}, {"WAV930"}, {"WAV931"}, {"WAV932"}, {"WAV933"}, {"WAV934"}, {"WAV935"}, {"WAV936"}, {"WAV937"}, {"WAV938"}, {"WAV939"}, {"WAV940"}, {"WAV941"}, {"WAV942"}, {"WAV943"}, {"WAV944"}, {"WAV945"}, {"WAV946"}, {"WAV947"}, {"WAV948"}, {"WAV949"}, {"WAV950"}, {"WAV951"}, {"WAV952"}, {"WAV953"}, {"WAV954"}, {"WAV955"}, {"WAV956"}, {"WAV957"}, {"WAV958"}, {"WAV959"}, {"WAV960"}, {"WAV961"}, {"WAV962"}, {"WAV963"}, {"WAV964"}, {"WAV965"}, {"WAV966"}, {"WAV967"}, {"WAV968"}, {"WAV969"}, {"WAV970"}, {"WAV971"}, {"WAV972"}, {"WAV973"}, {"WAV974"}, {"WAV975"}, {"WAV976"}, {"WAV977"}, {"WAV978"}, {"WAV979"}, {"WAV980"}, {"WAV981"}, {"WAV982"}, {"WAV983"}, {"WAV984"}, {"WAV985"}, {"WAV986"}, {"WAV987"}, {"WAV988"}, {"WAV989"}, {"WAV990"}, {"WAV991"}, {"WAV992"}, {"WAV993"}, {"WAV994"}, {"WAV995"}, {"WAV996"}, {"WAV997"}, {"WAV998"}, {"WAV999"}, {"WAV1000"}]



03 - Process Field

Nach dem französischen Phänomenologen Maurice Merleau-Ponty und dessen Standardwerk "Phenomenology of Perception" ist der eigene Körper, das "Selbst" in Beziehung mit der Aussenwelt, dem "Anderen", die Grundlage für jede Form der Raumwahrnehmung: "My body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my comprehension If the words 'enclose' and 'between' have a meaning for us, it is because they derive it from our experience as embodied subjects." (4)

Wendet man Merleau-Pontys Perspektive auf den urbanen Raum an, so ist dessen Strukturierung in öffentlichen und privaten Raum naheliegend. Im Gegensatz zu geometrischen Raumdefinitionen, wie etwa dem Positiv-Negativraum als Baumasse-Freiraum, orientiert sich diese Definition an der psychischen Interaktion des Bewohners mit der Stadt und steht damit in direkter Beziehung zu den Rahmenbedingungen einer interaktiven Medieninstallation.

In einer bewussten Überzeichnung dieser Dualität ist TRACE in zwei komplementäre Raumsysteme gegliedert, die in der Installation zu einer dialektische Einheit verschmolzen werden: Public.Out.World und Private.In.World. Beide bauen auf eigenen geometrischen und ästhetischen Systemen auf, verwenden unterschiedliche Navigationsmodi und verlangen dadurch vom Benutzer das interaktive Erlernen einer eigenen Raumsprache.

TRACE.Out.World

TRACE wird immer durch eine von vielen möglichen Konfigurationen von Public.Out.World betreten. Die navigierbare geometrische Form von Out.World besteht aus dem BLOB (Binary Large Object), der aus einer einzigen NURBS-Oberfläche (Non-Uniform Rational B-Spline Patch) gebildet wird und im idealen, entspannten Zustand die Gestalt einer perfekten Kugel annimmt. Die tatsächliche Form des BLOBs wird bestimmt durch ein fliessendes Gleichgewicht von Kräften, die von symbolischen Einsprungspunkten zu Subwelten (In.Worlds) ausgehen und an den Kontrollpunkten des NURBS-Patch ansetzen.

Entsprechend der mathematischen Logik des NURBS-Patch navigiert der User auf dem BLOB durch Rotationen entlang seiner beiden Parameterachsen U und V, in Analogie zur Navigation mit Hilfe eines Kompasses entlang der Richtungen Süd-Nord und Ost-West. Dieser Navigationsmodus beschränkt die Bewegung des Benutzers auf zwei Rotationsachsen, so dass die Illusion des freien, schwerelosen Surfens, das üblicherweise mit

01 02 03 04

Benutzerspur (Trace) eines einzelnen Users mit Wechseln von In.World zu Out.World zu In.World.



01 02 03

"Aquamicans"
ein Konstrukt aus 51 virtuellen Räumen in VRML, die um einen surrealistischen Text von Raymond Roussel (Kap. 3) aus "Locus Solus" geordnet sind.

<http://caad.arch.ethz.ch/projects/aquamicans>

preserve his own physical evidence and preserve the chain of custody of such evidence assuring its scientific and legal value.

<SCENE02: Perspective Rendering>

ne step further down the road to stereoscopic 360-degrees VISIØN, we are already seeing the next generation of Make-Sense-Nøw!-Machines at work. A click on a friendly device called "Live Topics" renders a very handy pocket version of <i> HAINØ </i>, that fits onto a single page precise hierarchies of main topics and related keywords. Print this out and pin it up, its all you ever need to know about the artist:

KEIJI:

rourke, drones, connors, fahey, drumm, loren, guenter

TRIO:

sax, percussion, guitar

REISSUE:

improvisations, psychedelia, incus

BoREDOMS:

label, droning, artist, electroacoustic, masterwork, duets

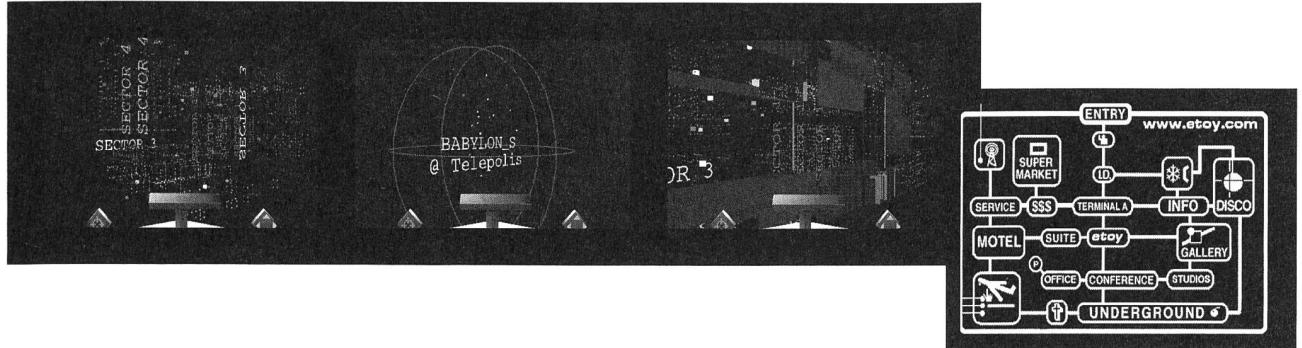
What is being sold to us as another major development in user FRIENDliness is in fact a well disguised PERSPECTIVE machine, that can display self organizing topologies from any vantage point. Its main purpose is to fill the unattractively empty gaps between original information units, called user.INTERPRETATION. Wait for this technology to run in High Resolution and Smooth Motion and the concept of Virtual Reality will finally make perfect sense.

<SCENE03: TRACE Technoløgy>

For the exhibit "The Archaeology of the Future City" (Museum of Modern Art, Tokyo, Hiroshima Museum of Art, Gifu Prefectural Museum, July - Dec. 96), that displays the history of the City as Cultural Signifier, we code a Real.Time.3D installation named TRACE. Camouflaged as another three-dimensional interface to the World Wide Web, TRACE registers and translates all user activities as maneuvers in a smooth interactive sensory environment. These TRACES are reflected back onto USER on two compatible projection layers, Public.out.World and Private.In.World.

Public.out.World, a reference to urban public space, provides jump-in-points to documents on the WWW and local user.logs on top of a continuous

TICES & CALCULATES BOUNDARIES FOR EACH CUBE OF FOLD | INT EDGE_1; | INT EDGE_2 = 3; | STATIC FLOAT DELTA_X[MAX_FOLDS][MAX_CUBES][4]; | STATIC FLOAT DELTA_AX[MAX_FOLDS][MAX_CUBES][4]; | STATIC FLOAT DELTA_BX[MAX_FOLDS][MAX_CUBES][4]; | STATIC FLOAT DELTA_AY[MAX_FOLDS][MAX_CUBES][4]; | STATIC FLOAT



VR-Installtionen verbunden wird, dem Gefühl einer Bewegungsmaschine, ähnlich eines überdimensionalen Space-Ball-Devices weicht und das navigierte Geometriemodell intuitiv vermittelt wird.

Die Kontrollpunkte (Nodes) auf der Oberfläche von Out.World dienen als Verbindungselemente zu Subwelten und gliedern sich in zwei Klassen: Links zu bestehenden Websites im World Wide Web und Gateways zu Private.In.Worlds, die während der Dauer der Installation von den Besuchern erzeugt werden. Sie werden beim Generieren der Out.World entsprechend dem derzeitigen Leseraster dynamisch in Patterns entlang Achsen und konzentrischen Ringen angeordnet und über Linien miteinander verbunden, so dass die inhaltlichen oder chronologischen Beziehungen der Nodes als verdichtetes urbanes Cluster erscheinen. Beim Eindringen des Benutzers in einen Node durch dessen Membran verlinkt das System entweder über das Internet einen zweidimensionalen Leseraum aus dem World Wide Web (Website) oder erzeugt einen weiteren dreidimensionalen Navigationsraum (Private.In.World).

TRACE.In.World

Während Public.Out.Worlds komplex, heterogen, abstrakt und vielschichtig sind, sind Private.In.Worlds einfach, homogen, immersiv und spezifisch. Der genetische Kode für das Erscheinungsbild einer spezifischen In.World besteht aus Traces von Daten, die als Benutzerspuren von einem anderen User durch interaktives Erkunden der Installation zuvor erzeugt wurden.

Diese Traces werden von dem Geometriegenerator in ein Netzwerk von Containern und verbindenden Pipelines übersetzt, durch die der Benutzer in einer kontinuierlichen Vorwärtbewegung navigiert, indem er in jedem Container eine von drei möglichen Abzweigungen wählt. Das Erzeugen dieses Raum-Gang-Systems ist mit der Bewegung des Benutzers synchronisiert, so dass jede In.World unendlich erscheint, obwohl sie tatsächlich zu einem Zeitpunkt immer nur aus einem Container und den dazugehörigen vier Pipelines besteht.

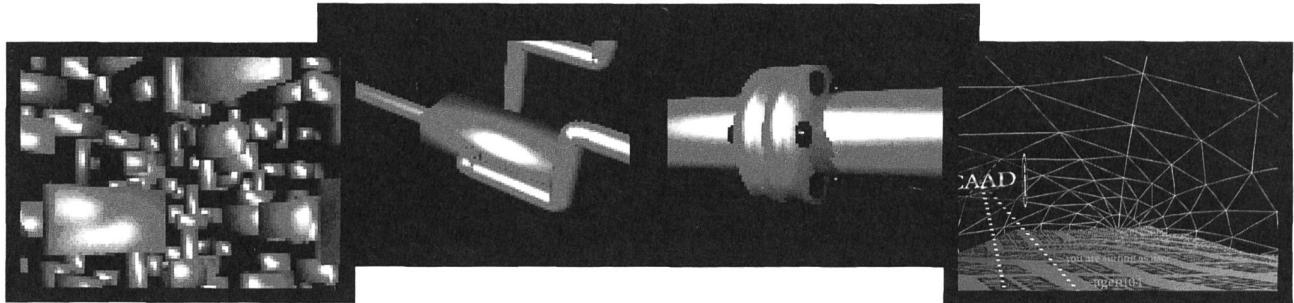
Alle Container beinhalten ein einziges Objekt aus mehreren möglichen Medienklassen wie Textzitate, geometrische Objekte, Audiosamples und Bilder, während die verbindenden Pipelines nur das Bewegungsmuster beinhalten, das der Benutzer nachvollziehen muss, um zum nächsten Container zu gelangen. Diese Bewegungsmuster variieren zwischen Geradeaus, Links-Rechts, Zig-Zag und aufsteigend-absteigend. Da sich die Geometrie der Container aus den Bewegungsmustern der angrenzenden Pipelines ergibt, reicht der formale Spieler Raum des Systems von ideal-orthogonalen euklidischen Geometrien bis zu komplexe gefalteten Räumen.

01 02 03
*Babylon_S- the City:
 Stadt als Interface, Struktur in
 inhaltliche Sektoren mit multiplen
 Darstellungformen in Abhängigkeit von
 der relativen Position des Benutzers.
 Ausstellungsbeitrag zu "Telepolis",
 Luxembourg, 95*

<http://caad.arch.ethz.ch/babylon>

04
etoy.TANKSYSTEM

<http://www.etyl.com>



01 02 03
etoy.TANKSYSTEM
Aussenansicht und Details

04
TRACE.Out.World

øpus.surface øbject, called the BLØB (Binary Large Øbject). Unable to escape from its delimiters, USER will eventually enter Private.In.Wørld, a 3D maze of containers and connecting pipelines with enclosed multimedia memory fragments, organized as an associative neural net and assembled from the TRACES of other USERS before him.

TRACE 1.0 runs for six months in three different locations and collects 5123 user logs without disclosing its surveillance mechanism. TRACE + will soon come to a location near you ... do NOT use it.

<SCENE04: The Author goes Home with the Audience>

We are currently working on "A Description of the Equator and some other Lands", a team production for the Webside of Documenta X (Kassel, June - Sept. 1997). In a preliminary strategy round, the main coordinates of the project were mapped out:

*Date: Sat, 9 Nov 1996 13:46:51 +0200
To: pocock@dom.de (philip pocock)
From: wenz@arch.ethz.ch (Florian Wenz)
Subject: Re: A Description of the Equator and some other Lands*

1. In otherLands, any individual perception has to be transformed into communication signals. Perception is analog, high resolution and diffuse, digital signals are symbolically encoded, low resolution and discrete.
2. This lossfull compression SCAN contains the main paradigm shift: Within the current version of otherLands, all signals become compatible with each other. The universe of private OBJECTS turns into a public SPACE of relations that can be navigated at USERS own risk.
3. As a consequence, IDentity is defined through parametric connections of database entries, and their interpretation is directly dependent on attributes like <encoding>, <keywords>, <indexes> and <display modes>. Within the system constraints, anything is evidence and anybody can present evidence.
4. All conflicts are fought on the frontline of coding. Actors are either CODER & subject or USER & object of otherLands. Bill Gates is Coder.
5. Denial is a legitimate strategy: Switch off the machine, look out of the window, RELAX ... nothing will happen.
6. For all bodily and material things are on a lower scale than pure and spiritual intelligences. But the angels, whether they be good or whether they be evil, are pure and spiritual intelligences. Therefore they can control what is below them. (Malleus Malificarum * 1487 * Last change: 1997)

```
VOID COLLISION::SET VERTICES FOLDS(INT NUM_FOLD, INT NUM_CUBES, FLOAT V[MAX_FOLDS][MAX_CUBES][4][4][3]) { | | IF [NUM_FOLD == 0] [NUM_CUBES_FO = NUM_CUE_NUM_CUBES; | | FOR [INT A = 1; A <= NUM_CUBES; A += ] { | | FOR [INT B = 0; B < 3; B += ] { | | VER_FOLDS[NUM_FOLD][A][0][B] = V[NUM_FOLD][A][0][0][B]; | | VER_FOLDS[NUM_FOLD][A][1][B] = V[NUM_FOLD][A][1][0][B]; | | VER_FOLDS[NUM_FOLD][A][2][B] = V[NUM_FOLD][A][2][0][B]; | | VER_FOLDS[NUM_FOLD][A][3][B] = V[NUM_FOLD][A][3][0][B]; } } }
```



Die Erscheinungsform jeder In.World wird durch einen Parameterset kontrolliert, der Texturen, Belichtung und Medienobjekte bestimmt und in einer spezifischen Klasse von Räumen resultiert. Dieser Architektursyntax versteht sich als abstrakte Repräsentation des Benutzers in Analogie zu einem neuronalen Netz das Erinnerungsbruchstücke verschiedener Medien assoziativ oder chronologisch miteinander verbindet. Der Navigator dieses mnemonischen Artefakts ist in dessen Labyrinth gefangen und kann es nur verlassen, indem er sich rückwärts wendet und sein eigenes Bewegungsmuster zurückverfolgt. Dies veranlasst das System, die derzeitige In.World durch eine neue Out.World zu ersetzen, die nun seine vorherigen Traces enthält, womit ein Generationenzyklus der Installation abgeschlossen ist.

04 - Online

Losgelöst von der Ausstellung selbst steht TRACE in Zusammenhang mit Forschungsinhalten, die seit der Gründung des Architectural Space Laboratories vor fünf Jahren dort konsequent verfolgt wurden und seitdem kontinuierlich an Bedeutung gewinnen. Es geht darum, für die unausweichliche Evolution vom Informationsterritorium zum Cyberspace Inhalte, Methoden und Instrumente zu entwickeln und durch die Etablierung einer Sprache für immaterielle, digitale Architekturen dem Berufsstand eine aktive, gestaltende Position in der Informationsgesellschaft zu sichern.

Auf dem Umweg über die Metapher "Digitale Stadt" stellt sich dabei letztlich die Aufgabe der Identitätsfindung der Gesellschaft Online. Als Ausblick mögen folgende Bemerkungen des Architekten Toyo Ito über die japanische Gesellschaft dienen: "Japanese society today is a society permeated by information and penetrated by communications systems. A society in which each individual has two bodies: a 'real' body consisting of its physical presence, and a 'fictional' body, shaped by the information directed at or received by it.". Als Konsequenz erwartet Ito den Verlust des traditionellen Stadtbegriffs: "A kind of de-socialisation will take place within the city which will then be perceived as a 'fictional' structure, its spaces no longer needed to serve the needs of a 'real' population. At this time the non-city will emerge as the 'real' answer." (5)

- Referenzen:**
- (1) Jean Baudrillard, *<Simulations>*, Semiotext(e), 1983
 - (2) Katalog zu "The Archaeology of the Future City", Museum of Contemporary Art, Tokyo, 1996
 - (3) André Corboz, *<The Land as Palimpsest>*, Diogenes 121, Unesco, 1983.
 - (4) Maurice Merleau-Ponty, *<Phenomenology of Perception>*, Humanities Press, 1992
 - (5) Toyo Ito. *<Experimental Architecture>*, World Architecture No 34, London, March 1995.

01 02 03

"This life and this cinema mean nothing, since they have become interchangeable."
aus "A Description of the Equator and some other Lands", Node a_134, (Pocock, Wenz, Huber, Noll), Documenta X, 97.

04

TRACE.In.World