

YCAM PRESS RELEASE

YCAM presents  
Media Architecture Installation  
“Corpora in Si(gh)te”



**Author: doubleNegatives Architecture**

Period: October 13 (Saturday), 2007 to January 13 (Sunday), 2008

\*Note: Closed Tuesdays and December 29, 2007 to January 3, 2008

Time: 12:00 - 19:00 Admission: Free

Venue: Yamaguchi Center for Arts and Media / Studio B, Foyer, Central Park

<http://corpora.ycam.jp/>

Curator: Kazunao Abe (YCAM)

Produced by Yamaguchi Center for Arts and Media (YCAM)

Co-produced by YCAM InterLab

Organized by Yamaguchi Cultural Promotion Foundation

Supported by Embassy of Switzerland in Tokyo, Embassy of the Republic of Hungary in Tokyo,  
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Special Cooperation:

University of the Arts Zurich (ZHdK), Department Interaction Design, Zurich Switzerland,  
Nextlab, Budapest Hungary

Cooperation: The Asahi Shimbun

## An attempt to extract autonomous architecture responding to the environment through information network

Yamaguchi Center for Arts and Media (YCAM) hosts a new installation “Corpora in Si(gh)te” by “doubleNegatives Architecture” (commissioned by YCAM). doubleNegatives Architecture (dNA) is an architectural group engaged in crossover activities in new areas of architecture and design, utilizing various media and information technologies.

In “Corpora in Si(gh)te” a number of sensors are setup forming a mesh network throughout the area of YCAM in order to collect and distribute realtime environmental information such as temperature, brightness, humidity, wind direction and sound. The data collected from these sources are processed by a software and translated into nodes reflecting the sensor network. These nodes are the seeds for the virtual architecture of 'Corpora' representing a cellular, distributed network of nodes that are reacting through realtime processing, growing and subsiding like an organism. Each node makes local decisions independently of a central architect. The nodes inadvertently give rise to an architectural structure, both in the YCAM building and in the park.

This “information architecture” of nodes has its own spatial perception to make itself transform into various forms by relying on the Super-Eye concept. The fluid character of this architecture occurs as a living form. Visitors can observe this process by Augmented Reality Technology, located in various parts of YCAM.

### Work Overview

#### Introduction

In “Corpora in Si(gh)te,” the autonomous structural nodes programmed in the software are able to become subjective viewpoints in the space, which ceaselessly adjusts the relationship between each surrounding structural node. They are newly reproducing and arranging their own copies or destroying themselves based on changes in the physical environment. In addition, the act of re-designing is continuously occurring within the space surrounding each node. Such a process enables the state of “the whole body to form by autonomous generation” to finally develop, as the title “Corpora” symbolically suggests.

The rise and fall of information between a local and a global system is the audio and visual output for the viewers. This shows the combination of the unique notation system (\*1), which is the basic idea of the project and AR (\*2). It gives us a clue towards an approach from an internal viewpoint to investigate “many inherent subjective views that control the whole/partial architecture from the bottom up” in opposition to “the objective control from an

‘external viewpoint’ ” which has been the general approach to architecture.”

(\*1) “Notation; super-eye”

This approach is oriented in all directions. One’s position, basic notation point and zero point of the surroundings are shown in the reverse-projection. The direction and distance of all objects that surround the zero point can be converted and shown into a lucid equation. This can be essentially the ultimate “super-eye” that grasps an object from the inside and not from the outside.

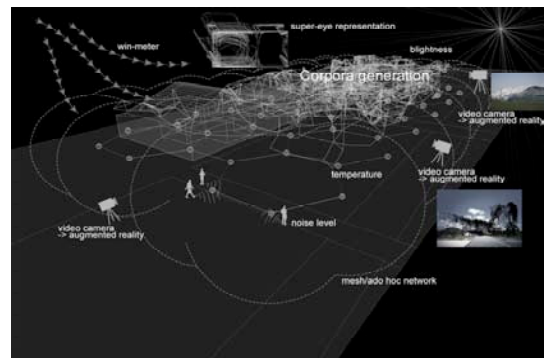
(\*2) AR (Augmented Reality)

Several cameras are set up outside YCAM observing the surrounding area. The images of these cameras will be merged with the images produced by the output of Corpora’s generative structure. This process will be visually cumulated in the exhibition space(Studio B).

>> Inside process

- Structural nodes

Autonomous structural nodes are regarded as subjective viewpoints in the space. Each of them responds under the circumstances of an ultra-subjective notation called “super-eye”. Based on this notation, each structural node has its own range of perception. Structural nodes in that range communicate to each other to form the structure. In this project, the site that is temporarily symbolized and considered to be the most important to support the architect’s space operation is interpreted as “drawing = notation”. Dismantling, modifications and experimental notations are attempted here and is approached from all directions, including polar coordinates. (This method has been consistently tried in dNA’s projects in the past, such as “super-eye,” “2 Skins – Architecture without Building,” and “dqp: dynamic quadruple phonic building,” an interactive installation using a three-dimensional sound system.)



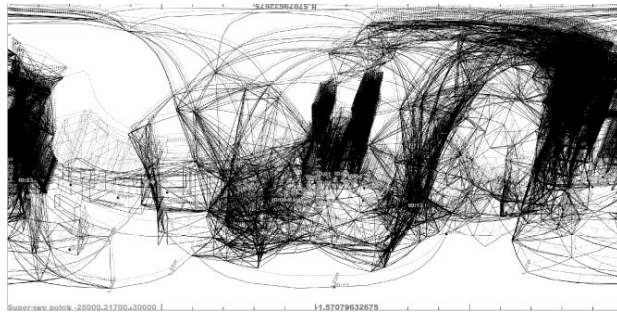
Augmented reality 1 frame image



Components of "Corpora in Si(gh)te"

- Generative rule

The generative rule of Corpora is based on the method and ideas of Cellular Automata and Conway's Game of Life. The structural nodes are varied according to different physical environmental information (direction influenced by resistance against wind, height and angle of direction according to the rise and fall of temperature, horizontal expansion due to brightness and the establishment of existence by the volume of sound). In addition structural nodes with surroundings are grasped; local analysis and judgment are made in cases of overcrowding / low density, possibility / impossibility of independence. According to such analysis and judgment, each part reproduces or destroys itself.



The description of YCAM building and park on super-eye notation system

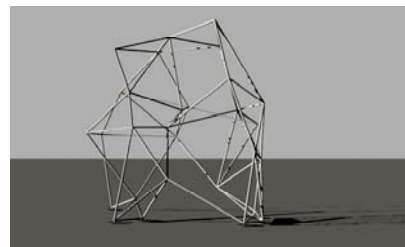
>> Installation

- Studio B

At this location visitors can experience the entire scope of Corpora, which spans over YCAM such as a virtual netting moss. The notation system of super-eye will be projected on the large screen. Realtime information from the environment and Corpora's generative information from each site are displayed at the center of the studio for visitors. Additionally the connection between the current Corpora's state and real scenery is projected through the AR (Augmented Reality) units which cover viewpoints around the YCAM complex.

- Foyer

A human scale model of the basic Corpora structure is built in the foyer. Visitors can physically experience the space that is generated by Corpora.



- Gallery and pavilion

From some points in the public space of the pavilion realtime images of Corpora are displayed by AR (Augmented Reality) to show the interwoven nature of this constellation.

## Artist Profile

- doubleNegatives Architecture

[www.doubleNegatives.jp](http://www.doubleNegatives.jp)

doubleNegatives Architecture, dNA launched in 1998 as the brainchild of architect Sota Ichikawa, views the processes and devices used to measure space as "architecture", assembling a team for each project and engaging in a unique spectrum of activities including installations, software and architectural design. Spanning both technical and conceptual aspects, dNA has consistently questioned the very concept of "architecture" since the mid-1990s, when ICHIKAWA commenced his research on spatial inscriptions using dynamic polar coordinates with the body as the zero point. Typical projects include the interactive sound construction dqpb (2000-) and plaNet Former (2002), which gives visual form to the structure of the Internet, as a process-type "architecture". Currently dNA is employing a bottom-up-style cell automaton program to study architectural modeling through the automated generation of forms, and in future aims to convert this to three-dimensional media and present it in urban spaces.

Sota Ichikawa (Architect, Japan)

Since 1995 he has started a project "smooth compound-eyes -> super-eye". In 1997, he collaborated with Knowbotic Research for "IO\_DENCIES - Tokyo"( co-produced with Canon ARTLAB ) as an architect and an urban researcher. In 1998, he worked for "Hinaya Project in Nishijin, Kyoto", a "sukiya" construction of Shusaku ARAKAWA and Madelaine GINS. In the same year, he set up doubleNegatives Architecture. Since 2003, he has produced "gravicelles - gravity and resistance", a collaborative project ( [www.G--R.com](http://www.G--R.com) ) with Seiko MIKAMI at YCAM-Yamaguchi Center for Arts and Media( Yamaguchi, Japan, 2004 ), DEAF04( Rotterdam, the Netherlands, 2004 ), transmediale.05( Berlin, Germany, 2005 ), SHARE( Torino, Italy, 2005 ), VIA( Maubeuge, France, 2005 ), EXIT( Creteil, France, 2005 ), Ars Electronica( Linz, Austria, 2005 ), Japanese postwar art and technology ( Tokyo, Japan, 2005), OOH (Gijon, Spain, 2006), Mois Multi (Quebec, Canada, 2007), EL MEDIO ES LA COMUNICACION (Santa Cruz, Canary Islands, Spain).

Max Rheiner (Artist / Soft-Hardware Developer, Swiss/Korea)

Max Rheiner's artwork focuses on interactive installation, software and sculpture. His work has been exhibited at Liste 01 Art Basel, Ars Electronica Linz, 4.Interlokalen Dada-Festwoche Zurich and ICC Tokyo and includes collaborations with other artists, such as Knowbotic Research, Felix Eggman and Raphael Perret. Since 2003, Max Rheiner lectures at the Zurich University of the Arts(Zhdk) and is head of the Laboratory of Physical Computing, where he developed 'DaKa', a hard and software environment that provides easy access to interactive computer technology for art and design

students. Max Rheiner studied electronics and worked as a software developer in the field of Computer Aided Design. After a few years of working experience he studied at the Zurich University of the Arts and graduated in 2003 in the Department of New Media. He has spent three months in Japan as an intern for ICC Intercommunication Center in Tokyo in 2001.

Ákos Maróy (Software Artist, Hungary)

He is the lead developer and director of Nextlab, the center of activity as open lab for new media, in Budapest. Ákos Maróy is founder, member, and former vice president of Emergent Systems Research Institute, Budapest, Hungary. He is also a member of art group Tilos Radio. He takes part in a number of open source software development projects, mainly in the area of online and on-air radio broadcasting. He conducted his Ph.D. studies about artificial intelligence, artificial life and agent architectures.

Kaoru Kobata (Designer, Japan)

She leads uniCoRn, attends to many advertising designs. London International Advertising Awards Finalist. She is mainly a specialist on digital retouching. She takes charge most of past graphic design of doubleNegatives Architecture. On this project version, she will work on, visual images, icon design, texture design and concept book.

Satoru Higa (Artist / Programmer, Japan)

He is a graduate student of Information Art Course, Department of Information Design, Tama Art University, Tokyo, Japan. His main interests are sound and software art. He mainly designs original signal processing and 3d graphics software and electronic musical instruments for the realtime performance of his audio-visual works.

Hajime Narukawa (Architect, Japan)

He had dedicated himself in design studio tutor in "Arnhem Academie van Bouwkunst" (2001), design for "Directie Nord Zee," a Dutch ministry building, a prize winning project in VMX Architects (2001), structural engineering for "Montjuic 2, Barcelona" and other projects in Sasaki Structural Consultant (2003). He established NAL and designed "mercibeaucoup, Kyoto" in 2006 (Collaboration with J. Endo & M. Sumiyoshi) and others.

## RELATED EVENTS

### OPENING EVENT

- artist talk

Date/Time : October 13(Sat.) 2007 14:30-16:00

Venue : Foyer Admission : Free Capacity:100 persons

Guests : Sota Ichikawa (doubleNegatives Architecture)

Taro Igarashi (Architectural Critic)

Moderator: Kazunao Abe (YCAM)

Profile:

Taro Igarashi

He is a Doctor of Engineering. Currently he is the Associate Professor at Tohoku University, at the same time teaches at Tokyo National University of Fine Arts and Music, and Yokohama National University as an adjunct professor. He has organized several expositions since 2000 in Japan: as a director, "From Space to Circumstance" in 2000, and the section of Tokyo of "World Cities", opening exposition of Mori Tower in 2003; as a curator, "High-Energy Field" and "How to use the town" of Atelier BOWBOW in 2004, "Enormous Architectural Models Museum" of Yoshiaki Miyamoto and "Kirin Art Project" in 2005, and "Architecture of New Geometry" in 2006. He directs the symposiums "Renovation Studies" and "Alternative Modern".

- laptop sound concert

Performance: The Cellular Automaton Band [Akihiro Kubota + Sota Ichikawa] ,

Taeji Sawai, Akihiro Kubota + Satoru Higa, Marina Yanagisawa

Date/Time: October 13 (Saturday) , 2007 19:00-21:00 (18:30open)

Venue: Studio A

Admission: 1,000yen Capacity:150 persons \*All standing

Ticket: WEB <http://www.ycfcp.or.jp/> (Language: Japanese only)

TEL 083-920-6111(10:00-19:00 \*Closed Tuesday)

- gallery tour by artists

doubleNegatives Architecture [Sota Ichikawa, Ákos Maróy, Max Rheiner, Kaoru Kobata]

Date/Time: October 14(Sunday), 2007 14:00-15:30

Admission: Free \*No reservation needed

## EDUCATION PROGRAM

- "pasta-architecture" workshop

Date: November 3(Sat), 4(Sun), 24(Sat), 25(Sun), December 8(Sat), 9(Sun), 2007

\*Note: 11/24, 25 : High school student or order

11/3, 4, 12/8, 9 :Elementary school over 4th grade and Middle school student

Time: 14:00-17:00

Venue: Workshop room (2F)

With: YCAM Educator

Capacity: 12 persons

Admission: 500 yen

Booking: Please make a reservation by e-mail or fax. Be sure to state clearly the program title, date, your name, age and your tel & fax number and / or e-mail address.

Yamaguchi Center for Arts and Media "pasta-architecture" workshop

TEL:083-901-2222 FAX:083-901-2216 [cis\\_ws@ycam.jp](mailto:cis_ws@ycam.jp)

### <INQUIRY>

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