Seiko Mikami Featured Artist Ars Electronica 2012

The Japanese artist Seiko Mikami is "Featured Artist" of this year's Ars Electronica Festival. Since the 1980s, she has created very large-scale installations that deal with the interrelationship between the human body and Information Society. In the 1990s, she turned her attention increasingly to interactive works into which she integrates human perception. Outside of Japan, where the artist holds a chair at Tama Art University, she exhibits her work primarily in Europe and the USA.

Machining Perception Andreas Broeckmann on the work of Seiko Mikami

Seiko Mikami's works offer a deconstruction of human and machine perception. In *Molecular Informatics*, for instance, the visitor dons a head-mounted display and can then see the traces of his or her act of looking, visualised as animated lines and shapes, in a virtual space. A projection displays the animation for the gallery audience, offering to them the opportunity of observing perception as an immersive experience. In her various, often ongoing projects of the past two decades, Mikami explores the conditions of perception, whether in the solitary audiospace of *World, Membrane and Dismembered Body* which plunges the participant into the gap between self and perception, or in the complex disposition of *Gravicells* that correlates the physical presence of the visitors with the gravitational forces of the Earth and of communication satellites. All of Mikami's works are strictly interactive in that they primarily use and factor current perceptual and sensor data, creating loops of seeing, of hearing and of sensing, folding what is being perceived back onto the act of perception.

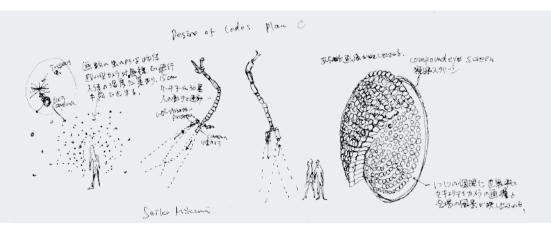
With the new work, *Desire of Codes*, Mikami has conceptually moved from the machining of human perception, towards the deconstruction of machine perception and cognition. A small step, since the differences between human and machine conditions of perception and cognition, of vision and visual data processing, seem to have become negligible. We perceive like machines, and machines perceive like us. At least, that is the openly *fictitious* claim that *Desire of Codes* appears to make, or test. As we enter its space, we are immersed in the robotic sense organs of a machine mind that curiously follows our every move, and into whose workings we gain the most eerie insight when we stand or sit still and wait for it to forget about our presence. That's when the machine, Mikami's contraption, begins to "dream", to reprocess images from its data storage, mixing them to a rumbling sound with current images from the live streams of networked camera eyes.

By presenting an image both of the voyeuristic juissance of the machine, and of its melancholy processing of the past and of the distant, Mikami invites us to reflect on the way in which we ourselves deal with perception, desire and memory, with the emotional surplus that we project onto the data worlds. What is it that distinguishes us from the machines that—selfishly?—aid our perception, and construct our access to the world, to ourselves?

Seiko Mikami

Desire of Codes

Desire of Code expresses the ambiguous boundaries between the data body in the virtual world and the physical body in the real world in the information-oriented society.



The interactive installation comprises three parts. First, a white wall composed of 90 mechanized rods resembling tentacles with built-in small surveillance cameras (Ninety Wriggling Wall Units). Second, a set of six large robotic arms, equipped with video cameras and laser projectors, which are suspended from the ceiling (Six Multi-perspective Search Arms). And third, a large, round, 4.7 m projection screen that looks like an insect's compound eye, wall-mounted at the back of the exhibition space (Compound Eye Detector Screen).



Ryuichi Maruo [YCAM]



Ryuichi Maruo [YCAM]

Ninety Wriggling Wall Units

Ninety devices are distributed across a $14m \times 4.5m$ wall. As soon as a visitor enters the area in front of the wall, the devices' heads start blinking, and all together they move in the visitor's direction like an insect's tentacles. Highly sensitive cameras (0.00003 lux) and microphones able to detect motion and sound beyond human perception record the visitor's action and send the recorded images and sounds together with the data collected in this work's integrated database, from where they are eventually transmitted to the Compound Eye Detector Screen.

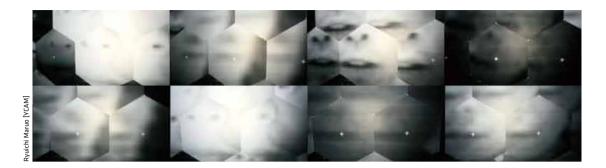


Six Multi Perspective Search Arms

Six robotic search arms resembling an insect's tentacles are suspended from the ceiling. Video cameras and small laser projectors mounted onto the ends of these arms follow and record the movements of approaching visitors, and simultaneously project the recorded images. Through the looped feedback resulting from the search arms' endlessly repeated input (recording) and output (projecting), the visitor perceives reality as a repetition of voids.

Data from the search arms' movements are stored in the Desire of Codes database, which controls the operation of the work as a whole and is ultimately reflected in the installation's light and sound.



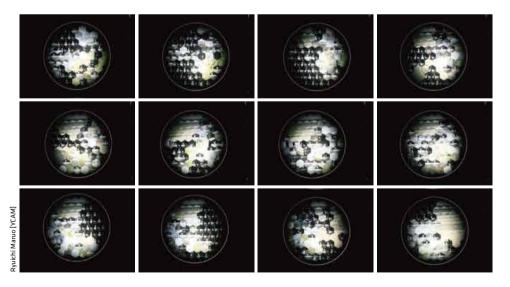


Compound Eye Detector Screen

The Desire of Codes database contains images from the exhibition venue, such as the visitors' skin, eyes, hair, bags, which are recorded in real-time by the devices on the wall. The footage also includes images recorded seconds, hours and months ago, so that elements from the past and the present are mixed and projected onto the screen.

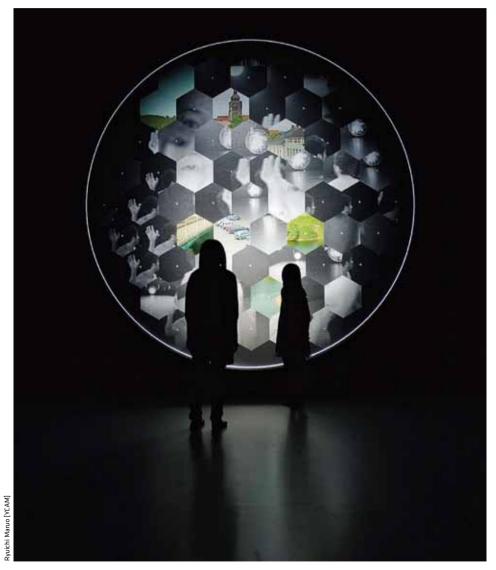
Additionally surveillance images recorded in public places—airports, parks, hallways or crowded streets around the world—and images in this database are transferred to a 4.7 m round screen that looks like an insect's compound eye and is divided into 61 hexagonal video screens.

Looking at the constantly changing projected scenery with its shifting time axes, the visitors feel as if they are watching a segmentalized dream or memories stored in the brain, and discover the desires that are automatically generated through the act of monitoring. This Compound Eye Detector Screen visualizes a new reality in which fragmentary aspects of space and time are recombined, while the visitor's position as a subject of expression and surveillance at once indicates the new appearances of human corporeality and desire.



Sound

Sound from the audience in the installation space, the sound generated by the machinery and other noise is collected by highly directional microphone. The changes of sound pressure and sound frequency over time are also collected and sent to the database for analysis purposes. New sound space is created when the present sound triggers the recollection of sound recorded in the past that is stored in the database.



Desire of Codes database program

In this installation the monitor displays different aspects of the *Desire of Codes* database program.

- The indicators on the left: 15 horizontal lines are directly related to the cameras mounted on the "wriggle wall" and display a visitor's position and react to his movements
- The indicators on the right hand side show the current video camera source for the images being displayed on the Compound Eye Detector Screen
- · Grey: Images from the past
- · Light grey: WEB surveillance camera images from across the world in real time
- · Dark grey: facial image recognition
- · Black: Real-time images from this installation
- Blue: Movement of the line that displays images that the camera is currently recording of visitors in front of the Ninety Wriggling Wall Units
- White vertical lines running from one side to the other indicate when the database is being searched. This software is the program manager of the *Desire of Codes*, combining the past and the present by displaying these composite images on the Compound Eye Detector Screen.



Desire of codes is a work commissioned by [YCAM], Yamaguchi, and has been exhibited at ICC, Tokyo, Hartware Media Art Association, Dortmund, and at Kuenstlerhaus Vienna.

[YCAM] Yamaguchi Center for Arts and Media, Kazunao Abe (Curator)
[YCAM] InterLab (Soichiro Mihara, Richi Owaki, Satoshi Hama), Norimichi Hirakawa, Ryota Kuwakubo TAKEGAHARASEKKEI, Sota Ichikawa, Tama Art University, Course of Media Art