

# Interaction between Perception and Memory - Art and Technology in Japan

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## ABSTRACT

This paper is a summary of the text "Interaction between Perception and Memory - Art and Technology in Japan in the 1990ies" from Yukiko Shikata. This text will mention a short overview of the evolution of media art and interactive art in 1990s in Europe and how this influenced the beginning of interactive art in Japan in the early 1990s. Furthermore we describe the progress of interactive art in Japan, and which the most meaningful artworks are in the realm of interactive art of the Japanese Culture. Which influences the big disasters of the Japanese economics, the great earthquake and the terrorist attack in Tokyo had on the interactive artworks.

## Keywords

Art interactive Japan Internet 1990 participation Europe history NetArt

## 1. INTRODUCTION

In the 1990 we entered a world with a finishing-process of the cold world war, but simultaneously there exist a new war in which the USA was involved. This war was called gulf war in Iraq and Kuwait, and marked the advent of live-broadcasting war by CNN. The US citizens were able to watch the battle in realtime from their home TV. Almost the same happens with the war in Yugoslavia, where the scenes of war were mediated by the new arising medium Internet.

Therefore the war became more and more a media and virtual event and for the viewer. This situation combined with the result of spreading computers, games and other consumer devices derived from military technology, the people get more familiar with the idea of virtuality. These new media forms and their related character of a non-linear narrative increased the generation of a new reality.

The high popularization of the computer in the early '90s and the rise of the Internet later added a new dimension of communication around the world. Community forms like Open source arised and boomed until today. This rise of network technologies also introduced a new level of control. All big cities and big companies in the world installed many CCTVs and / or created new dimensions of information databases.

The media artists tried to be very open-minded in a creative way with this new evolution of communication and technology. Compared to the pre-1980s electronic media, the possibility of joining all kinds of media to a new formation of artwork through the digital technology was overwhelming. By this progress the human individual is integrated more as a part of the process in the media.

## 2. Interactive Art in Europe in the 1990s

The advance of interactive art in Europe was common term in the early '90s and led to the constitution of media art. In the late 1980s the Ponton European Media Art Lab has to be mentioned as one of the first groups that opened the door to virtual space as a new communication platform. Their interactive TV Project "Piazza Virtuale" enabled live interaction with existing devices and studio systems. So the user could navigate the studio cameras over phone. People like Jeffrey Shaw made firstly possible to work with real-time arithmetic processing with high performance computer, so that the artists came in contact with the new state-of-the-art (visual) technologies. Now it was possible to work with virtual-reality and artificial systems. These systems and technologies are mostly invented by the U.S. Americans..

In the beginning of 1990s interactive art was mainly driven by institutions for research and education like the ZKM in Karlsruhe and the Institute for New Media in Frankfurt. The first half of the 90s can be credit by the artists Sommerer & Mignonneau, Ulrike Gabriel and Christian Möller. The viewer that experiences their interactive artworks became parts of the system. Physical or informational interfaces connecting participants (the viewer) with the system, as well as on terms-such as real/virtual, life, interface and telematics and so on.

The spreading of the Internet has triggered the creation of net.art, which often works of "independent disturbance" of social and technical regulations by artists, hackers and activists. In the year 1997 software art, Internet radio and open archives emerged among others in Europe.

## 3. Japan in the first half of the 1990s

Interactive art in Japan was mostly introduced by mecenat programs of big companies like ICC, Canon ARTLAB and ARTEC.the late 1980s in Japan was a time of expansion. Video enhanced to high vision and in computer graphics, the increasing speed of processors made a more accurate and narrative expression for this artist possible.

In spite of this technology evolution none interactive artist from Japan used these high-speed computer graphics in the first half of the 1990s. By contrast the interactive artist used consumer electronics or self-developed electronic circuits for the connection to their participants and systems. For example the artwork "Pulse Beats" from Seiko Mikami in the year 1991 threw the unified social, political and informational topography into obscurity. This artwork created through interactive blinking lights the vivid impression of a huge, living capsule, to which several individuals were connected via a central system

The first like interactive art events were hosted by ICC and the ARTLAB in 1991 and 1992. The ARTLAB exhibition introduced products of an experimental collaboration between artists and engineers. One successful product was called "Date Machine".

This systems equipped a couple with portable electrocardiographs and sent the data into this Date Machine. This machine controls different electric fans, TV Sets and other home electronics. Depending on the couples heartbeat the machines turns off or on. so this artwork connected the normally invisible biological rhythms of human bodies to electronic apparatus.

All the exhibitions were published before the burst of the "bubble economy" begin to have a impact on the Japan society. The burst of the bubble economy showed up how virtual financial information was handled in Japan. Yoshinori Tsuda utilize exactly this negative event for his interactive artworks issues of trust in finance and religion. Together with Kenjiro Okazaki they unveiled in 1993 their work "Random Accident Memory" at ARTLAB. This was a challenging display of some kind of psychoanalytical mechanism. Their system triggered unpredictable stories and stored them in form of imagery and text data through computer and printers. The output is a visualizing reciprocal transfer between participants and the system.

#### **4. Japan in the second half of 1990s**

The next crucial turning point in Japan after the burst of the economic bubble was marked by two big disaster that shook the country early in 1995. The Great Earthquake and the sarin gas attack on the Tokyo subway disrupted the legend of Japan as a safe place.

However this was the time when a large number of interactive artworks began to surface the realm of media art. The Japanese artists Masaki Fujihata, Toshio Iwai and Kazuhiko Hachiya won the Prix Ars Electronica and became established on the international stage of media art. Iwai and Fujihata spent some time at the ZKM in Karlsruhe and created during that time his "Piano - as image media" artwork. In this artwork He transformed patterns drawn by visitors into sounds and colorful visual with the help of a piano.

From the year 1995 to 1996 many artworks were published. Some artworks went more in a constructionalistic notion other went more in a philosophical and historical notion or in a technology notion, like playing with technical parameters (e.g. the shutter of a digital camera).

Reviewers from the West had frequently pointed out the lack of social nature in Japanese media art. They presume the Japanese artist that they like to refer to much to an electronic identity and they tend to base works on their own perception, physicality and memory.

In the 1996 the duo "exonemo" came up and they were probably the only Japanese members of the global net.art scene. They promote noise born out of connections of different kinds of information, so the user was always a part of their work.

In 1998 a group, founded by the architect Sota Ichikawa, presented the work "2 skins". This system or program had the aim to redefine architecture from its notation. A new form of artists arised in Japan, every artist came from other backgrounds and information environment. We will see what kind of artworks would be created in the future and how they influence the West.

#### **5. REFERENCES**

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