## WORLD'S FIRST NETWORK ART BY ISDN

by Keigo YAMAMOTO

Telephones are used daily without much thought to their rapid development over the past century since Alexander Graham Bell first invented the telephone in 1875: During this time, a network of telephone lines which link people all over the globe has been established, and has enabled people to communicate on a vast scale. For communications into the next century, an infrastructre for ISDN(Integrated Services Digital Network) began in April 1988 in Japan; this was well in advance of other nations. Due to the increase in demand for lines to transmit conversation, facsimiles, data and images, the existing telephone system is unable to cope. Consequently, the concept of ISDN was established for the demands of the future, which integrates lines for voice with lines for facsimiles, PC's and images, providing digital communications.

"Japan-France Network Art--Mask and Body" was an event carried out from Nov.1-5,1990, with the use of ISDN. We used Macintosh, which enabled instant image processing. On the Japanese side, the work was created through the communications between Tokyo, Nagoya and Fukui, and in France there was a similar creation between Paris and Nancy. On the final day, these works were exchanged between Fukui and Nancy.

This was a joint event between Prof.Don Foresta (Eclole Nationale Superieuredes Arts Decoratifs), Hiroshi Maeda(designer) and myself. Because this was the first challenge for international ISDN, there was much preparation and study required; we visited a number of companies to study the hardwere, there was also much time given to procurement and adjustment of the equipment and adjustment of line impedance between two Japanese terminals. From mid-September there were four tests between Japan and France, totalling nine days. Together with the study carried out on the hardwere, we also made great efforts in obtaining the coopration and involvement of others in network art. The study of the transmission material and its processing also took up a lot of time. In such a fashion, this project was really an accumulation of cooperation by many hardwere and software specialists. It was as if we were searching for the" "Silk Road" of the 21st century as a bridge connecting East and West.

On the theme of "Mask and Body", each terminal station created computer images or selected images from a video or MAVICA(electronic still camera) source, and stored them on the computer. Next the images were transmitted from A to B through an image transmission unit. Upon receipt of these images, an artist at B, with an image processing unit, further processed the work by adding, transforming or cropping the image in any way felt suitable. Then this was transmitted to C or returned to A; thus the work was created by a relay method.

This form of artistic expression was an intercultural joint creation which transcended all borders of language, beliefs, ideas and ethnic mores. A tension was created, much like a debate, and the spontaneous happenings created mental stimulation; in this way there was a charge of energy for new creations.

There are various interactions in this work, such as the realization of different approaches to the subject and their comparison, as well as the ability to change at will. Such interactions play a major role in "merged thinking" and" "merged thinking" for Network Art.

This method is but one example of what Network Art can do. In some cases the work may be finally completed at a single terminal. But from the relationships between works created at various terminals one may see the creative processes and intentions. In this way, Network Art enables different compilations of works and creates great possibilities for new art forms.

The forerunners of Network Art approach can be found with Hokusai's "Thirty-Six View of Mt.Fuji" which depicted the various angles of Mt.Fuji, Monet's "Haystack" which prevented a technique of time-lapse, and Picasso's cubism which grasped the subject's essence from many points of view

November 10, 1990

Note: I would like to express my thanks to the Zero-One Shop Nagoya and Zero-One Shop Fukui Gallery, who provided the venues for this event.