Telecommunications

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Arts and Access And Coffee, Too

Electronic Café Lets Artists Interface Internationally

By Barry James

PARIS — Imagine going into a café and being able to chat with someone on the other side of the world, show him or her your family pictures via a computer screen and even produce a joint work of art.

Such an establishment is scheduled to open early next year at La Cité, the futuristic science park at La Villette in Paris, and at other centers in Europe, Japan and the United States.

Called the Electronic Café, the project is designed to test the limits of a recently developed communications technique known as ISDN, or Integrated Services Digital Network, a method of transmitting high-quality digital information over upgraded telephone lines.

Café also is an acronym, standing for Communication Access for Everybody, but the organizers promise that coffees and drinks will be available to make the process as user-friendly and non-intimidating as possible.

Don Foresta, whose two-man company, International Media Consultants, has helped to develop the concept, said he hopes the experience of allowing members of the public to experiment with the network will lead to new ideas and applications.

Transmissions carried out during the recent Apple Computer show in Paris were a success, Mr. Foresta said. The experiments linked artists in different cities, enabling them to collaborate simultaneously, in real time, in producing graphic images. The technique has been under development for some time by a group of like-minded video artists.

The concept was originally devised by two American artists, Kit Galloway and Sherrie Rabinowitz, who opened the original Electronic Café in Santa Monica, California, during the 1984 Olympic Games and are participating in the plan to extend the idea globally.

The technique has virtually limitless possibilities for anyone whose work requires graphic presentation.

Architects or engineers in different cities, for example, could work together on the same electronic blueprint. Doctors could have the same X-ray on their screens.

Graphic artists could work on designs with printers without the need of being in the same place. Small publishers could bring in photographs and illustrations from around the world as easily as they now receive facsimile messages.

The Electronic Café will turn off-the-shelf Apple Macintosh Computers and standard hardware into a single interactive system. It will enable somebody sitting in Paris to control a computer in Tokyo or New York, and vice versa.

The system allows more than two points to enter the network. In one transmission, experimenters in Paris managed to manipulate a computer in Lyon via the hard disk of a computer in Tokyo.

Problems uncovered during the experimental transmissions were more of a human than a technical nature, Mr. Foresta said.

For example, when two people in different cities are controlling the same cursor and commands, who decides when and how to make the next move?

Mr. Foresta said it will be necessary to work out some conventions to enable the network to work smoothly. One suggestion is to introduce an icon on the screen that would indicate when someone at the other end of the line wants to take over the cursor.

ON THE other hand, Mr. Foresta and his partner, Georges-Albert Kisfaludi, say they want to avoid introducing too many rules in order to allow people full rein in expressing their ideas and creativity.

France Télécom, which is sponsoring the experiment, will make lines available free in the early stages. This is not pure altruism. First, it will introduce the ISDN network to a wider public. Secondly, it will help extend the network to other parts of the globe and create new markets. Thirdly, it may result in the development of commercially valuable applications.

France is ahead of the rest of the world in commercializing ISDN service, partly because of its experience in developing advanced digital packet transmission for the national Minitel Teletex service. In giving away a block of time on ISDN, the telecommunications company is repeating the lesson it learned in developing Minitel, the most advanced service of its kind in the world. France Télécom has given away millions of Minitel terminals to

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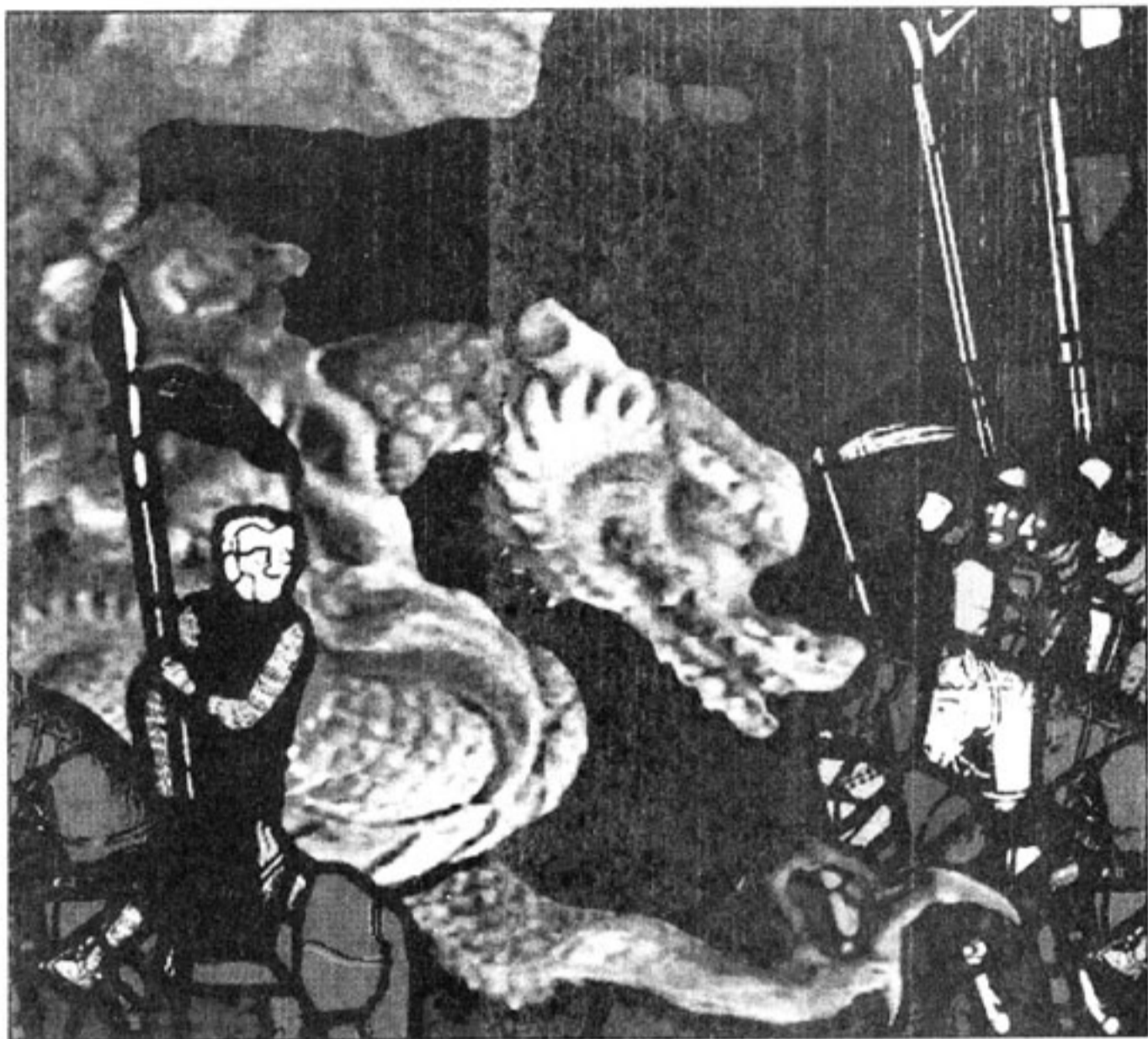
Japanese and French artists worked together on a digital network to produce this video picture.

achieve control of a market that did not exist 10 years ago.

ISDN service already is available in most French towns, enabling the relatively cheap transfer of digital signals.

In France, connection to the service, which is known as Numeris, costs 675 francs (about $116), and the monthly rental fee is 300 francs. The system, which uses commonly available communications hardware and software, is primarily of interest to organizations that need to transmit large amounts of data cheaply. Using Numeris, it costs 11 francs and takes three minutes to transmit a 1-megabyte file from Paris to Marseille. It would cost 195 francs and take up to 90 minutes to transmit the same amount of information via a modem.

ISDN links are made over two channel connections, one of which is used for digital data transmission while the other can be used simultaneously for voice transmission.

Mr. Foresta said the Electronic Café will correspond with similar operations in Tokyo, Nagoya, Karlsruhe, Lausanne, Geneva, Brussels, Glasgow and New York, as well as Santa Monica.

When the café opens, the public will be encouraged to bring in paintings, photographs or any other kind of image that can be scanned into the computers. A resident artist will be on hand to help people with any technological difficulties. The science park will also include a video workshop for young people, who will then be able to go on to use the Electronic Café.

"We want the technology to become completely transparent," Mr. Foresta said. "The 12-year-olds will probably pick it up fastest."

AT THE same time, he said he hopes the café will push the technology to its furthest limits, and that manufacturers will take the experiments into account when designing hardware or software.

Mr. Foresta is a former U.S. diplomat and former director of the American Cultural Center in Paris. After leaving the diplomatic service in 1976, he earned a doctorate in information science at the Sorbonne, founded the department of video art at the Ecole Nationale Supérieure des Arts Décoratifs, and currently is the director of that section.

He sees the Electronic Café as fulfilling Marshal McLuhan's description of the artist as an initiator of new technologies and educator of perceptions.

These perceptions are in the process of rapid evolution, Mr. Foresta argues in a new book, "Les Mondes Multiples de l'Art, de la Science et de la Technologie." If the physicist-philosopher Werner Heisenberg's uncertainty principle has taken the certainty out of the natural sciences, it has also restored to them an element of creativity, he said. At the same time, it has re-established the visual arts to the role they held in the Renaissance as a tool of scientific research.

The development of printing enabled the rapid transfer of images throughout Europe in the 16th century, making it possible for artists in Germany and Italy, for example, to work on the same problems and solutions, Mr. Foresta hopes the Electronic Café will perform the same function on a global scale.

The Electronic Café will compress not only space but time, enabling artists to act not reactively to each others' work, but interactively.

Mr. Foresta said he hopes the adventure will be as much philosophical as technological. The café concept could be the start of a global electronic billboard with pictures, a kind of common cyber-space in which imagination will be the only limit.

BARRY JAMES is on the staff of the International Herald Tribune.