

DON FORESTA AND ARTISTS ON LINE

Artists on line is an ISDN network connecting art schools and independent artist's groups in Europe, Great Britain, North America, and Japan. Many of these sites function as Electronic Cafes for specific events. Artists on Line been active since January 1992. It took most of 1993 to get enough affiliates to make meaningful exchange possible. "The network has to be so big in order to have a multiple choice situation. When you only have four or five schools it's not enough. It's got to be an open highway where people can get on and move around with a certain liberty and see who's there and what they're doing and find partners. In France it's every week."

It's an ISDN network based on Macintosh graphics and videophones. Up until now Artists On Line has been primarily interactive computer graphics. A lot of image exchange. A student will offer an image to several sites and get people to work on his image and send it back and they'll start trading images back and forth. If a person's work doesn't turn people on they tend to fade away. So there's a little Darwinian selection going on.

The connections usually are one-to-one. The most complicated connection they ever did was three people on line at the same time. It was confusing not from a technical but a human point of view. It was just tough to manage. One of the things we find online is developing a protocol so people learn how to talk to each other. It's difficult for them even to learn how to type in the interactive chat mode.

Since January 1994 we've gotten the videophones so some students are starting to do online stuff in real time video. So Artists On Line is gradually encompassing all the things that Electronic Cafe would except that it's not a public cafe. It is becoming a laboratory for aesthetic research in interactive multimedia telecommunication in general, not just in computer imaging. "It's probably even more research than the cafes because we don't do it in front of a public. That means they can fall on their face quite a bit and really experiment. Everything is long term."

The idea of the school network was to build a working network behind the activities of Electronic Cafe. The training ground where people are brought up to speed on the technology, experimenting with different uses. Students bring in projects, some of which fail because they're not interesting, others take off. Through that experimentation they not only train people but develop content ideas that eventually will go public through the Electronic Cafe International network.

Don Foresta and Georges Albert Kisfaludi are the directors of Artists on Line and the European coordinators for the Electronic Cafe International network. They are headquartered at ENSAD, the National Superior School of Decorative Arts in Paris.

We still have not found a home for the Electronic Cafe in Paris. "The hardest part is money. I could probably find a good dozen cafes in Paris that would be willing to accept it. In fact I did. I had the most chic cafe -- the Cafe Boubourg, which is right next to the Centre Pompidou. The guy agreed to give us space but no money." Meanwhile, the Paris Cafe operates every Friday afternoon from the International Business Center of France-Telecom. Summer 1994 opened in the Natkin-Bertha gallery, a very small gallery in the fourth

arrondissement not far from Beaubourg. Stephan Natkin is a professor of engineering in computer science at the National Conservatory of Arts and Crafts, which is the oldest engineering school in France. The Cafe will be in his gallery for a couple of months this summer. Meanwhile he's trying to find a real restaurant, which has always been our dream. The Cafe will be in his gallery for a couple of months this summer. Meanwhile he's trying to find a real restaurant, which has always been our dream. That seems to be the most fruitful direction right now. The rest of it -- trying to do something with the Centre Pompidou or the Cite des Artes -- is too heavily institutional. It's all going to take forever.

To be part of Artists On Line an art school has only to buy the equipment. "We act as free plumbers," Foresta explained, "laying down the pipeline and getting it going. We help them get on line with a list of equipment that we know works. We have deals with a few companies to give network members 20 percent discounts to buy equipment they know will be compatible with everyone else on line. They know it works and they know they can get upgraded. We have enough industrial interest to scrape together the equipment. It's a lot of handholding, a lot of convincing, a lot of visiting different industrial outfits, but we do get it. What industry likes about the art network is that it's permanent. That's something they relate to. That gives Artists On Line technical support, and that support functions for the Cafe.

"At the same time we have a missionary role, running around training people how to operate the equipment. We get paid for that. over a three or four day period we will train them how to operate the equipment and expose them to ideas and projects that are already active so they get some feeling for it. For the rest of it, we're paid teachers. So we're organizing these projects as part of our curriculum at our school. I'm on salary there and also at CNAM for the courses that I teach there. There's a certain missionary edge to it.

It's not every student that's going to present a project that will find partners. To coordinate projects they use telephone, fax, internet, and we have electronic mailboxes on the network. Most people on the network leave their Macs on so that you can leave them messages or drawings or whatever in their mailbox. Another reason why it has to be permanent.

The telecommunication costs are paid by the institutions, so for the students it's toll free, which is an extremely important experience. This is why I've been putting so much energy into the school aspect of it. It's the only way you can have the institutional support that's necessary to really build up an international ISDN network. It provides an institutionally supported research laboratory so that we're not always running around looking for funding. It allows us to build up all kinds of research projects of any kind of complexity and still have the possibility of actually completing them. What I expect is that that network will give birth to Electronic Cafes around the world.

In the spring of 1994 began a program of art students and engineering students working together on projects in new technology. There were six projects, five initiated by art students with fifteen engineering students participating, and one initiated by an engineering student with two art students participating. Twenty-seven students were involved altogether.

SCENES (Paris): For the 200th anniversary of NCAM in October 1994 they're going to use the Artists On Line network to put President Mitterand online and have him talk to numerous centers around France along with Umberto Eco.

SCENES (Paris): Students put a two-way mirror in front of the Mac screen so people can see their own image with their digitized image on the Mac being processed variously in real time by students at other schools. They'll see their mirror image in real time and also their digitized image in real time as it is being processed by the Mac software. That will be transportable on the network.

SCENES (Paris): The most common thing they do is real time shared-screen drawing and painting. they circulate images around them network, each school modifying them and passing them on. It has turned out to be more gimmicky than productive. For two reasons. One, when you get people on the same screen they often don't know what they're doing together. It takes preparation to get to the point where you're actually working on an architectural drawing together or somebody has a project that makes sense. The other thing is that data transfer is still too slow even with ISDN. You need more compression if you want to do real time color imaging. So when we do it we reduce the number of colors from a palette of sixteen million to 256. Even at that the speed is not the speed that people are used to when they work on their own computer, so

they tend to get bored because it takes too long. gene: nevertheless it is in principle a useful thing, for example some very complex global interactive performance was being planned for the participants to be able to draw plans and stage drawings together. Don: with two ISDN lines we'll hook up two computers so that as the person is talking they can also illustrate with the Mac and the people on the other end will be able to respond.

SCENES (PARIS): They circulate images around the network, each school modifying them and passing them on. Most visual interactions are MacGraphics exchanges but also doing data-compressed videophones with 25 frames per second. They will do dance events with the videophone. The French vidphone blurs due to data compression, but in a neat way, goes into heavy pixels. Artists love it, so they're going to play with that effect.

SCENES (Paris): setting up conference series using ISDN. Most of them with people physically here in Paris. The first speaker, in December 1993, was Woody Vasulka, and the last was Benoit Mandelbrot. Within that series of conferences we started online conferences as well. We inaugurated the first one with Kit and Sherrie at the end of March 1994. The subject was Kit and Sherrie, their work and the Electronic Cafe. And there were questions from audiences of fifty people in Paris, twenty in Lyon, twenty in Nantes. They were using the PictureTel on their end and we were using the French equivalent which is called Camaris. They spoke to four sites in France at the same time. There were two sites in Paris, the engineering school whose French initials are CNAM, and the manufacturer of the Camaris videophone, and the schools of fine art in Lyon and Nantes. There was a voice-activated videoconferencing bridge. We all saw Kit and Sherrie first and then when we went into question-and-answer the site that had the microphone appeared on screen. Speaking into the microphone automatically switched both audio and video to that location. I

was worried that it would be chaotic but people were disciplined and it worked quite well. The technology became completely invisible. People were really into the subject.

SCENES (Paris): We're going online with what we're calling a virtual faculty. Our objective is distance learning with a faculty of artists and scientists. I've gotten it started by just having conferences. The next one will be the sixth of June with Jeffrey Shaw at the Electronic Cafe in Santa Monica. It will be about his work. It's artists and scientists lecturing about their work in a distance learning context, with the audience being the schools that participate in Artists On Line. After Jeffrey Shaw I'm going to do another one with Ralph Abraham, just with a class of about seven students.

SCENES (Paris): In Nice they did a lot of hokey stuff like getting Miss France to open a perfume bottle that could be smelled in Santa Monica.

SCENES: (Paris): For the grand opening at Arhus we did a telerobotic cutting of a ribbon. They had a little robot that was radio controlled and we just hit a key on the Macintosh in Paris and that pushed this little robot over with the scissors going and it cut the ribbon.

SCENES (Paris): building a system with an engineering team that through an electroencephalogram you'll be able to intervene on a videotape, stop and start it, change the color and the playback speed and direction. By brainwave activity. he's linked up with one of the hospitals here and they're giving him access to one of the machines, and in exchange he and his team of three engineering students are all becoming guinea pigs. they're going to have their brainwaves analyzed. I programmed David Rosenboom at the Dragon Center in the 1970s with a brainwave machine. So all that crazy stuff is coming back again

in certain form, with more technical capability and actually doing it. And also in a more resonant form due to the scale of distance. When you start doing brainwave stuff across oceans its gets really spooky.

SCENES (Paris): the most interesting project that has come out of research in computer image exchange is a longterm project by a student who wants to develop a whole new visual language with grammar and syntax. A linked iconic language. Not just a string of icons but drawings that can be linked together to form a sentence. He speaks English. He's been working on it since December 1993. We'll go online at the beginning of the 1994-95 academic year to actually build this visual language with people from different countries from around the world.

SCENES (Paris): transmitting a live image of a nude model who will be changing perspective and facets of her own body using lights. She's behind a scrim and by turning lights on and off she's going to be actually changing the way her image is transmitted to other sites. The ultimate objective of the student is that the other people online will actually be able to intervene and by remotely controlling the lights change the image they're getting. He started testing the idea in May 1994.

SCENES (Paris): Lyon students are going to have an online jazz concert with students in Nice at the end of May. It will be all acoustic instruments transmitted over ISDN in digital stereo. They will do dance events with the videophone.

SCENES (Paris): French choreographer Jean Marc Matos is working with students in developing an interactive dance piece using videophones. The dancers will come in from distant locations and participate in a live concert locally. The audience will see them in a composite image on a screen dancing

to the live local music.

SCENES (Paris): Some students are working on networked virtual reality. Participants from different sites can go into a virtual space. The most difficult one is a virtual reality space that isn't built yet (he's only gotten to the point where he's defined all the technical problems with his engineering collaborators and now we're going out to fundraise for the actual building of the piece). It will be a space where you'll have the task of tying a knot where two different participants at two different sites each have an end of the string. He's building the virtual space in a way that it will have a mental handicap. The people will go into a space and they will experience problems of perception that are parallel to certain kinds of mental disabilities. He's doing this with a medical clinic in Paris that specializes in the mentally handicapped. You put on the virtual reality eyephones and you see your hands and the other person's hands and the string that you're trying to tie a knot in, under circumstances in which you and the other person are both perceptually handicapped in such a way that makes tying knots difficult. It's a visual handicap so that you can't see properly. Through Internet he found a Canadian who has developed software for tying knots in computer graphics. It's a two-year project considering that he's already taken six months to get this far. He's established enough credibility that he's got engineers and the medical clinic taking him seriously. The clinic is working with him because they see therapeutic value in this research.

The schools on line as of fall 1994 were, in France, the schools of fine art in Nantes, Lyon, Poitier, Rennes, Bourges, Strasbourg and Toulouse; CNAM, the National Conservatory of Arts and Trades, France's oldest engineering school; CIRM, the International Center for Musical Research in Nice. An independent artist's group, Center of Binarisation Paris, is also a permanent member of the network, and they've also worked with students from the Ecole des Beaux Arts in Paris, and have connected with other areas from time to time in France, including the school of fine arts at aix-en-Provence. In Germany the Academy of Media Arts in Cologne, and the Mobile Electronic Cafe in Cologne. In Japan, the University of Musashino and the Asagaya School of Art and Design, both in Tokyo. In the U.S., California Institute of the Arts through its affiliation with Kit and Sherrie. In the United Kingdom, Exeter, the University of Plymouth, the Glasgow School of Art, the Institute of Advanced Studies of Cardiff, Napier University in Edinburg, Scotland. In Spain, the universities at Vigo, Cuenca, and Bilbao.

In addition, negotiations were under way in the fall of 1994 with three sites in Canada: the Banff Art Centre, the McLuhan Center at the University of Ontario, and the University of Quebec; with three sites in Austria: Graz, Linz, and Vienna; with the of Media Studies department at the State University of New York at Buffalo; and there was a request for funding from the European Union to hook up the Technical University in Brno in the Czech Republic and the University of Bratislavia in Slovakia. ISDN exists there but it's not operative. Woody Vasulka is setting up a Video Multimedia Performance Atelier in Brno. So I'm trying to convince the Czech Ministry of Education to put pressure on Czech Telecom to make the center in Brno a pilot project and give them ISDN. "We want to get some of the new ideas across to the Eastern Europeans," Foresta told me in the summer of 1994. "They are more interested

than a lot of Western Europeans because they've got a kind of ideological vacuum and they don't really know what to do. They know they don't want Reaganite Capitalism, which is what some European countries are proposing, and they don't want to go back to Communism, but they don't see an alternative."

- GENE YOUNG BLOOD
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