



A sample image courtesy of video artist-composer Don Ritter

HORIZONTAL HOLD

Victoriaville blurs the line between sound and vision, logic and impulse

BY ANDREW JONES

For its eighth year, the Festival Internationale Musique Actuelle de Victoriaville is out to deconstruct more than just the boundaries between musical styles.

The stunning, eclectic program accomplishes that easily enough. There's everything from the griot tales of Foday Musa Suso, the

hardcore attitude of John Zorn's trio Slan, the subtle pan-African orchestrations of Trevor Watts Moiré Music Orchestra, and the breathtaking jazz architecture of Marilyn Crispell.

But this year, the festival organizers are planning to explore other media. Just ask interactive video artist Don Ritter. A professor at the

department of design art at Concordia, Ritter is fascinated by human interface design, or the study of communication between people and machines. Ritter feels the act of creating and performing music with high technology can bridge the gap between human impulse and electronic logic.

"I'm not a musician," says Ritter over tea in his Old Montreal loft. "I've always been envious of the spontaneity that they can have, and the way they interact with the media. My background is in painting and sculpture, and those mediums work differently. I do something in my studio alone, and then it gets displayed."

"Musicians don't work that way, especially improvisers. They do something the same moment the audience hears it. The spontaneity of the whole creative art is shown. With visual media, the audience doesn't see the creative act, they see the remnants. I decided I didn't want to talk to my paintbrush through my hand; I wanted to talk to it through music. That's human interface design."

And that's where George Lewis comes in. Ritter met the Chicago-born trombonist, improviser, and Anthony Braxton disciple in MIT's media lab, where, along with Richard Teitlebaum and Robert Dick, they developed "hyperinstruments," new tools for manipulating and humanizing electronic and electroacoustic music.

Ritter's program, which he calls Orpheus, is an "expert" software system—a computer term meaning the computer has a certain amount of intelligence in evaluating data and making decisions based on what it receives. In this case, Orpheus evaluates and electronically responds to Lewis' improvised trombone by suggesting bizarre dada and surrealist images from a bank which have been fed through a digitizer into Ritter's computer.

The interactive system allows for differences in pitch, velocity, and timbre, and reacts accordingly. The resulting panoply of sound and vision is arresting, funny, and ultimately visionary.

"Electronic media, especially TV and video, is mainly being used for documentary purposes," says Rit-

ter, "not for artistic ones. But these tools have incredible potential."

Festival Internationale Musique Actuelle de Victoriaville Oct. 4-8. (819) 752-7912

New Technologies: Perils and Pleasures

MICKI MCGEE

New electronic technologies—like toys under a Christmas tree—seduce and delight. From pocket calculators to pacemakers, they promise us improved health, longer lives, time and money saved from quotidian concerns, enhanced entertainment value and even the possibility of a democratized media. While many welcome these innovations with ingenuous glee, others remain skeptical—all too aware of how disappointing day-old Christmas presents can be.

Between this dichotomy of naive enthusiasts and stubborn skeptics are numerous artists who've begun exploring new technologies, while remaining well aware that technology can't substitute for ideas or vision. The pleasures and problems of a technologically sophisticated art practice were exemplified in the recent Large Screen Computer and Video Image Projection series presented by the Experimental Intermedia Foundation.

Founded in 1968 by a group of musicians, filmmakers and dancers including Trisha Brown, Elaine Summers, Phil Corner and Phill Niblock, the Experimental Intermedia Foundation has continued to provide an unpretentious space in a downtown Manhattan loft for intermedia experiments.

Recently, EIF acquired a new Sony 1041 Video Projector. Like all new products, the projector promises us something new: in this case, the projector claims to free the video image from the confines of TV screen and allow video, like film, to be projected in a darkened room. Sony's new product delivers with an astonishingly clear, sharp and defined projected image. Several artists experimented with the projector in E.I.F.'s performance series last March.

Among the most successful of these experiments was Don Ritter's collaboration with musi-



Don Ritter *Ducks Against Glass*, 1989

cians George Lewis, Richard Teitlebaum and Wadada Leo Smith. Ritter, who came to New York by way of Toronto and MIT's Center for Advanced Media Studies and Media Lab, devised a software system for his Amiga computers that reads the tones and intervals produced by any musical instrument and then calls up specific video frames, sequences and effects. Put simply, a keyboard, a trombone, or any instrument connected by a MIDI cable to the computer can control the instantaneous recall of any stored video frame. While this sound/light extravaganza may sound like a sophisticated version of '60s light shows, Ritter's images, coupled with tremendous trombone and trumpet performances from Lewis and Smith, resulted in a captivating, acoustically-controlled animation. Daliesque digitized computer animation of Medusan arms squirming from eye sockets suggested a nightmarish vision of bio-technology out of control. Ritter's grotesque animated imagery suggested that technology may often fail in the service of human needs. Paradoxically, his event offered an example of the pleasures of hi-tech innovation.

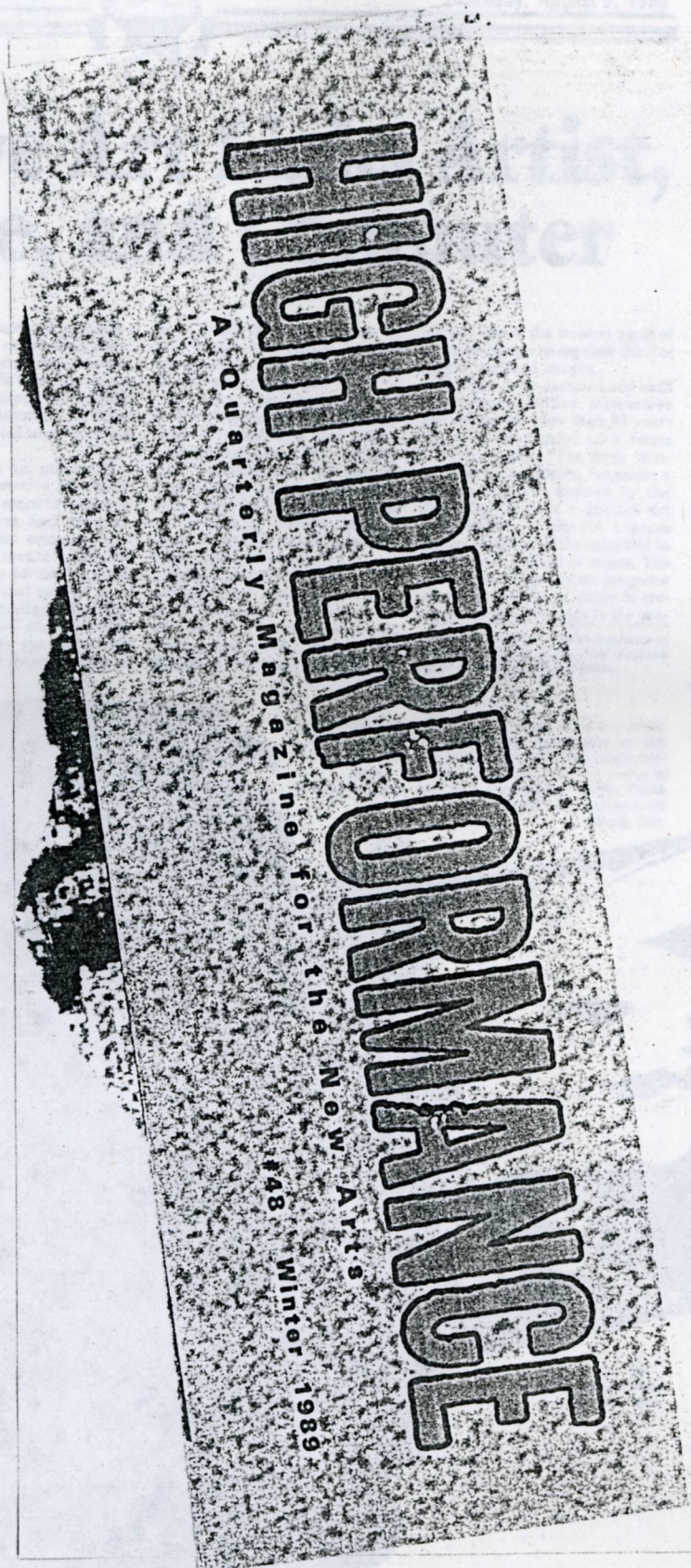
Phill Niblock's collaboration with dancer/choreographer Muna Tseng extended Niblock's concerns with storytelling and posed questions

about technology and labor. While a video-monitor played back Tseng telling stories from her childhood, her hands danced on a closed circuit projected video image. Niblock's high contrast, nearly abstract slide images, and 16mm footage of Chinese peasant farmers at work were counterpoint to Tseng's "finger dance" and storytelling. The sheer duration of their performance altered the reading of Niblock's film: what might have been mistaken for exquisite National Geographic travelog footage was transformed into an exhaustive record of manual labor. Labor-intensive peasant life lost any trace of charm as men and women thatched roofs by hand, irrigated canals with only buckets, planted garlic clove by clove, rolled and cut noodles, picked soybeans pod by pod, washed laundry at a river's edge and laid bricks one by one. Niblock's duration aesthetic became something of an endurance test with an interesting result: the difficulty of simply watching such exhaustive physical labor forestalled any fantasy of agrarian paradise. Since there is no going back to the colonial fantasy of Edenic peasant life, Niblock intimates a question: what technologies are appropriate? What kinds of compromises must be made between industrial (and now postindustri-

al) technologies for humans to maintain any sense of global ecology? Niblock and Tseng's collaboration pointed toward critically important questions, however indirectly these questions were posed.

Similarly, Anne Tardos' computer graphics and music intimated—but never quite articulated—a set of important concerns. Her computer graphics and sound sequences evidenced a passion for Atari graphics and sound software, and a not yet quite realized vision. Her *Human Geography II* suggested an interest in the bio-morphic: architectural images of spiral staircases were juxtaposed with anatomical drawings of an alimentary canal; a pitchfork suggested the digits of the human hand; images of the brain were perhaps intended to intimate some relationship between computer technology and the brain. But the links remained tenuous as Tardos relied on simple juxtaposition in her images. She might have exploited the real time situation to produce a text soundtrack (rather than electronic music) to articulate her concerns. Interspersed, but seemingly unconnected with her images, was a sound performance by poet Jackson Mac Low and musician friends that relied on low-tech items: the human voice, the flute, the bass and simple amplification. A bonafide collaboration between Tardos and Mac Low (or another sound-text poet) might explore the subtleties of the interface between human and the technological that seems so much a part of Tardos's vision.

When I set out to consider these collaborations I asked myself a question: why organize a series of performances around a new piece of hardware? Why bring together artists simply to experiment with a new technology? What would distinguish this series of events from a trade show demonstration? Now the answer seems clear: out of these experiments arises a set of critical questions about technology, aesthetics and human needs. These collaborations have only begun the work—intimating the questions and occasionally implying answers. Much remains to be done, political and aesthetically, if we are to build a future where technology works in the service of human needs and visions, rather than at our expense.





Interactive Art Links Artist, Audience, and Computer

★ By Gregory Patrick Garvey

Current happenings in interactive art and artificial reality are the subjects of the panel "Interactive Art and Artificial Reality," chaired by Gregory Garvey from 9:00 a.m. to 10:30 a.m. today in the Dallas Convention Center. See page 38 in this Show Daily for more information on the panel. Session location information is available at the on-site registration desk in the Convention Center.

In 1961, years before she met John Lennon, artist Yoko Ono exhibited a work entitled "Painting to Hammer a Nail In," a painting into which the

viewer was encouraged to pound a nail. With such simple technology, Yoko Ono created a type of interactive art that didn't require an explanation, training, documentation, or even electricity. It failed only with inhibited users or a lack of nails.

As time went on, other artists inspired by interactive art experimented with interactive computer graphics systems and even attempted the first computer-controlled environmental installations. Today, the terms "artificial reality" and "virtual reality" compete for attention, suggesting completely synthesized virtual worlds with which users can intuitively and immediately interact. Fans of

Yoko Ono's work might now be able to pick up a virtual hammer and pound a virtual nail, accompanied by a virtual sound.

For works of art that attempt to create a broader degree of interactivity than letting a user grab a hammer and slam a nail, the computer is a necessity. Therefore, for most artists, the computer represents what might be described as the medium of choice for interactively controlling sound, graphics, video, light, and music.

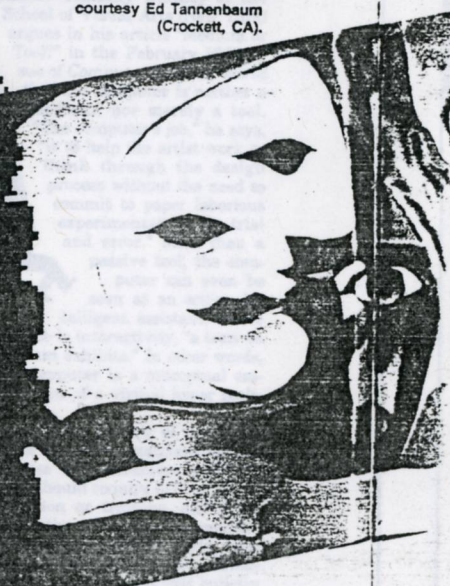
Today's interactive works of art can range from artist Myron Krueger's "Videoplace," with which the user can paint his or her own live, moving images (with multicolored shapes) in real time, to artist Don

Ritter's use of the musical input of a live musician to regulate the display of digitized images.

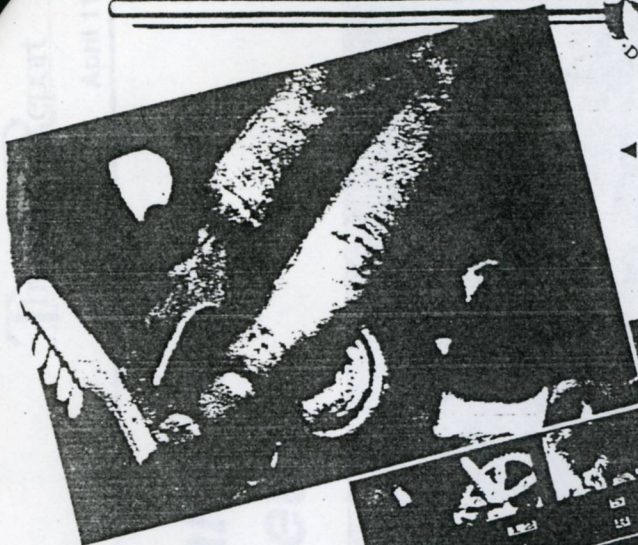
Krueger, who designed and built computer-controlled interactive environments more than 20 years ago, defines computer art in terms of interactivity. "The term 'computer art,'" he states, "suggests a unique medium defined by the computer. If such a distinct art form exists, it should express unique qualities of the computer in the work it is used to create. The most novel capability the computer affords artists is the ability to create work that responds to the peo-

ple." Gregory Patrick Garvey is an instructor in computer graphics at the New England School of Art and Design (Boston).

Ed Tannenbaum's "Recollections" is an interactive video environment in which the viewer sees himself as a mirrored silhouette or outline on a video projection screen. Any movement that the user makes is recorded on-screen as a sequence of colors. Photo courtesy Ed Tannenbaum (Crockett, CA).

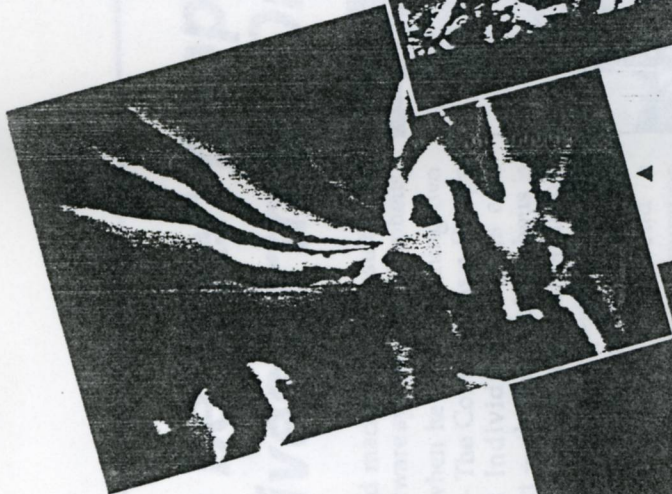
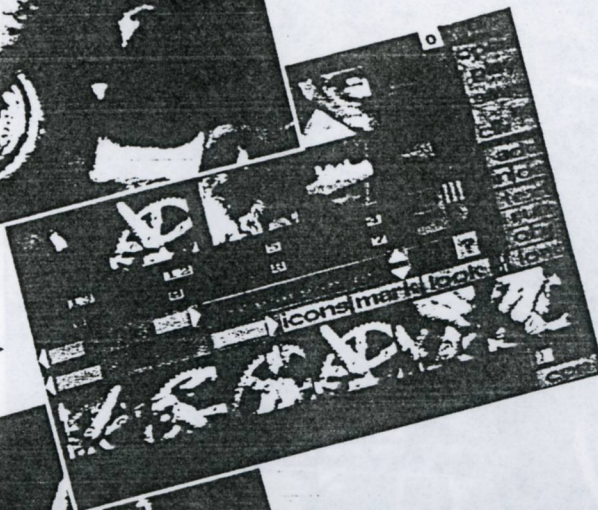


▲
"After Picasso," Lillian Schwartz, 1986



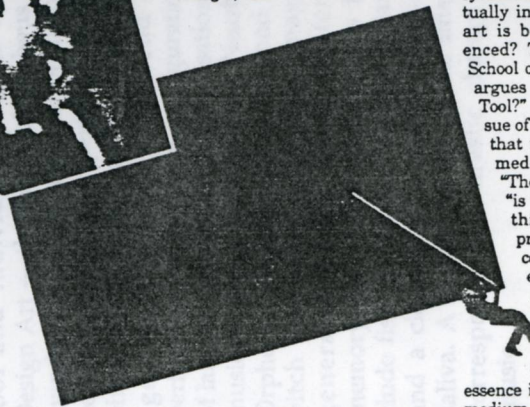
◀ "Orpheus System Menu," (partial view)
Don Ritter, 1990

"Orpheus System Menu," (full view)
Don Ritter, 1990 ▶



◀ "Videoplace—Body Surfing," Myron
Krueger, 1990

"Videoplace—Two-Way Teleconferencing and
Shared Artificial Reality," Myron Krueger, 1990 ▶



Interactive Art, cont. from p. 13
ple who encounter this work. The quintessence of interactive art is an artificial reality in which the laws of cause and effect are composed by the artist."

In like manner, artist Ritter, in describing his work, captures the synergy that results from the interaction between human and computer. "The use of computers and video as fine art media," he says, "make available a broad range of unexplored perceptions. My current work explores this potential using interactive computer graphics and video systems for live performance that are 'played' like a musical instrument. This configuration allows the playing of visu-

al imagery through the human interface of a musical instrument. The images become synchronized with the music itself in real time."

Yet another computer artist speaks of the interactivity that takes place between the artist and the computer during the creative process itself. Lillian Schwartz, who began her influential computer work at Bell Labs in 1968 and won an Oscar in 1980 and an Emmy in 1985 for her computer-generated animated films, says in *The Computer Art Book* (written along with Laurens Schwartz, forthcoming from W.W. Norton and Co., © Computer Creations Corp., 1990), "It [the computer] can help develop an artist's eye,

through which the creative act is channeled into the work of art. Not because it can think, but because it can be told how to calculate in a logical fashion, the computer can also be used for art research and analysis. In other words, computers can be made to accommodate the entire breadth of artistic thought."

Does the pervasiveness and seeming inevitability of interactivity devalue the work of the more traditional paintbox computer graphic artist, who is content to restrict interactivity to manipulating a mouse and a keyboard in order to make a static work? I believe that paintbox graphics and the virtual realities created with

photographic realism are both the outcome of a fundamental dialog between artist and machine—made possible by the abstract nature of the digital representation of information and concepts. This digital representation engenders interactivity, regardless of whether the goal is an interactive installation or a static print.

For the paintbox artist, therefore, the ability to cut, copy, duplicate, and paste—that is, the ability to compose with potentially unlimited visual materials, to save work at whatever stage of completion, and to experiment without fear of losing previous work—is, in itself, after all, inherently interactive and part of a new epoch of image-making.

Active Participant

The inherent interactivity of the digital domain transforms the passive viewer into an active participant in the creation of a work of art. Even with hyper media performances, in which the emphasis is on a passive audience's observation of the performer/artist's ability to combine computer graphics, video, and sound, the interactivity between the performer and his or her "hyper instrument" is palpable and heightens the aesthetic quality of the live performance.

How much does the all-purpose, symbol-manipulating computer actually influence the way in which art is both created and experienced? Timothy Binkley of the School of Visual Arts (New York) argues in his article "Medium or Tool?" in the February 1989 issue of *Computer Graphics World* that the computer is neither a medium, nor merely a tool.

"The computer's job," he says, "is to help the artist work or think through the design process without the need to commit to paper laborious experimentations by trial and error." More than a passive tool, the computer can even be seen as an active, intelligent assistant, whose essence is interactivity, "a trait no medium exhibits." In other words, the computer is a conceptual embodiment of a virtual hyper reality.

Yoko Ono's work of nearly 30 years ago set a standard for the success of interactive art: The work should require little or no explanation or training, and it requires the active user to complete the piece. In today's world, phenomena such as Nintendo adventure games and electronic bulletin boards suggest the emergence of an interactive and user-directed art that respects and elevates the active participant to a position of parity with the artful designer whose creative presence lurks behind a virtual, if not artificial and surreal, world.★

Interaction between people and machines gives birth to 'Orpheus'

As a boy in Edmonton, Don Ritter showed an above-average aptitude for engineering. While his friends, snug in their pajamas, watched Saturday morning cartoons, young Don would tear down and reassemble his mother's television set.

Soon the inner workings of Mom's stereo were dismantled, but the concept of stereophonic sound was "boring," said the 31-year-old Professor of Design Art at Concordia.

Wide range of interests

Over the years, Ritter has turned his attention to academic pursuits in Fine Arts, Psychology, Engineering and Design. He has earned a diploma in Electronic Engineering Technology from the Northern Alberta Institute of Technology in Edmonton, a joint honours BA in Fine Arts and Psychology from the University of Waterloo, and an MSc in Visual Studies at the Centre for Advanced Visual Studies at the Massachusetts Institute of Technology (MIT), where he graduated in 1988. He joined Concordia in 1989.

So what does a visual artist do with an exceptional aptitude for engineering and physics?

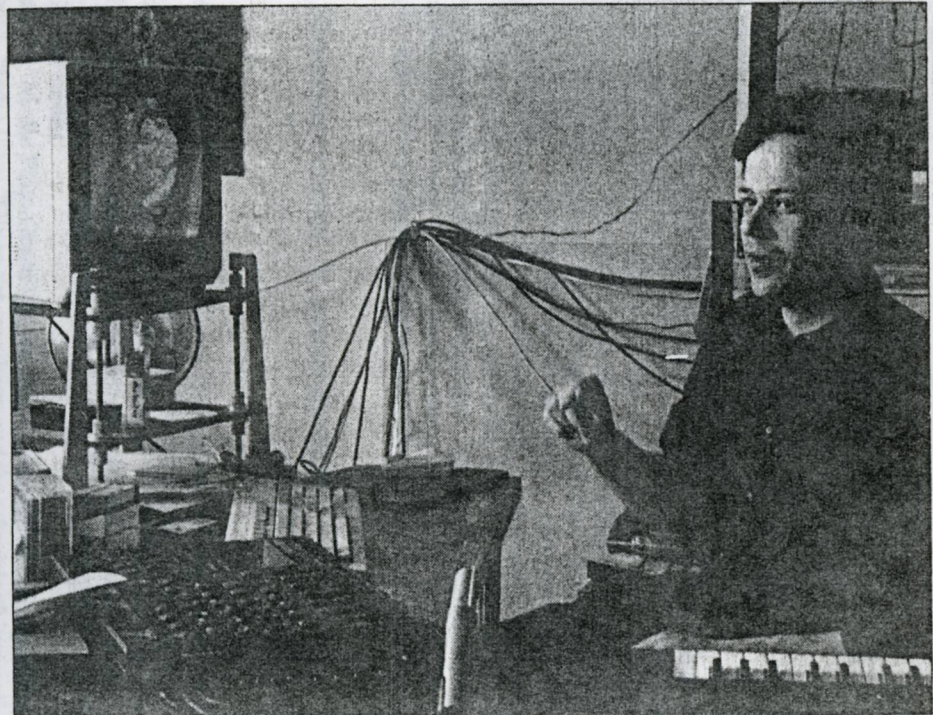
Ritter admitted there was a period in his life when he felt "fragmented." The one common thread that has held his eclectic interests together was his fas-

people and machines. The result is an expert software system called Orpheus.

Today, when he is not teaching two courses — The Computer as a Design Tool and Individual Projects and Design Art — the father of Orpheus is found working on his creation in his downtown studio, or performing. Orpheus allows musicians to "play" images with music. To attend a performance is to face a configuration of large screens and an improvisational musician doing his/her thing. Nearby, Orpheus, programmed to respond to pitch and volume, displays images generated by the music. Ritter's memory-stored surrealist images include fish protruding through breasts and a close-up of a mouth dripping saliva. A drastic change in the image corresponds to a drastic change in music.

Daliesque animation

A reviewer for *High Performance* magazine in 1989 described Orpheus this way: "Daliesque digitized computer animation of Medusan arms squirming from eye sockets suggested a nightmarish vision of bio-technology out of control. Ritter's grotesque animated imagery suggests that technology may often fail in the service of human needs. Paradoxically, his event offered an example of the pleasure of hi-tech innovation."



Don Ritter

PHOTO: Moritz Gaede

Ritter's research at the Centre for Advanced Visual Studies at MIT, where it made its debut in 1988 with trombonist George Lewis. Since then, Orpheus has appeared at such prestigious events as the Verona Jazz Festival, the International Festival Musique Actuelle Victoriaville and New Music America, and has been featured in such international venues as A Space in Toronto, the Art Institute in Chicago and the Alternative Museum in New York.

wanted to develop video as a live performance medium. Live performance is the creative act, while video is the creative excrement."

The general response to Orpheus has been dichotomous, said Ritter. People comment on either the technology or the content, but rarely make the connection in which technology interacts with imagery through sound.

"At least I get more than just, 'that's nice.' I don't think I would want that."