

ARTICULATE

TINKERERS

STEINA AND WOODY VASULKA

GREGG WEISS & MELODY SUMNER

When you visit the Vasulkas, you step into an electronic jungle: dozens of cables crisscross the floor, a headless life-size robot floats overhead. Stacks of video monitors climb the walls, spilling into the connecting room where more components and monitors stretch toward the ceiling. Another room: electronics with names like "field flip/flop switcher" and "digital image articulator." Some lie gutted: circuitry exposed, collecting dust. A Mac sits idly on a desk, daisy-chained to a three-wheeled robot, its head a voice-activated video camera. An adjacent office holds scads of 3/4" videotapes chronicling decades of video experiments. What you're witness to are the tools of the Vasulkas' unending work-in-progress: a two-decade old conversation with the machine.

Articulate tinkering is the day-to-day work of the Vasulkas whose accomplishments are equaled by their indifference to the accompanying accolades. Self-proclaimed blue collar artists, their differing backgrounds cross-pollinated to create the Vasulkas, whose influence is demonstrably historical. In 1971, five years after arriving in New York from Czechoslovakia, they co-founded (Steina says, "to get people out of the house") *The Kitchen*, a theater for presenting new video, film, music and theater. It became the prototype for alternative art spaces around the world. Their resulting interest in video technology, initially simple feedback loops documenting electrical current, expanded with their technical knowledge. Increasingly, their attention turned towards the epistemology of their equipment. The questions were both naïve and complex: Where does the image itself come from? How is it formed? How liquid is the information the camera records?

Those initial questions provided the intellectual fuel that has propelled their work since. Funding their work through a combination of fellowships, grants, (NEA's and Guggenheim's among them) exhibitions, and installations. The Vasulkas reached a nexus of divergent interests whose constant was the expression of a dialogue with the machine. Woody's attraction to hardware found him increasingly involved in building the machines they wished to use. In the late 70s, with engineer Jeffrey Schier, Woody designed the Digital Image Articulator, whose facility for rendering digital images as they happen (real time), was part of the technology explosion that modern personal computers currently utilize. Steina, a classically-trained violinist was the first to use a musical instrument with live interactive video, inspiring a generation of performance artists. And her multi-screen works express the untapped lyrical fluidity of the image. Recently, the American Film Institute honored them with the Maya Daren Award for 1992 and they are to receive major retrospective at the San Francisco Museum of Art in 1995.

Where their mechanistic dialogue will lead is moot: Steina and Woody thrive on being in real time with their machines, noodling around to see where it leads. —G.W.

STEINA

Born in Iceland in 1940, Steina attended the Music Conservatory in Prague in the early sixties, which is where she met Woody. Steina's relationship to her long-time partner is cooperative, but they have taken independent paths. Steina's relationship to her machines is both cerebral and highly sensual, evidencing her interest in a synthesis of spontaneity and control. Since the early seventies, images formed on motored mirrored spheres have played a significant part in her work and constitute one of her most significant innovations. These installations titled "Machine Vision" or "Allvision" involve two cameras moving in a circle around a spherical mirror which captures images of the viewers, the surrounding machinery, and the entire room including the playback of the machine's "vision" itself as displayed live on monitors.

Since moving to the southwest in 1980, Steina has produced *The West*, *Geomania*, *Vocalizations*, *Ptolemy*, and *Tokyo Four* (filmed during a recent fellowship commission in Japan). In their creation, these multi-screen installations engage a tech-

nique that comes closest to musical composition. And the effect on the viewer too is musical—one sits in front of a curved bank of monitors from which enveloping waves saturate one physically with sensation and sound. *Steina and Nature* seem to be acting in unison to compose and conduct the work. *The West* has been widely praised as "ecstatic," on "exhilarating tour-de-force." The work traces the efforts of humankind to alter and map the land—from cliff dwelling to radio telescope systems, and it uses an evocative technique in which the image drifts from screen to screen unimpeded by the discrete boundaries of the forty-eight monitors.

With characteristic wit and ingenuousness. Steina says of her recent works: "I moved here from New York because I wanted to experience what it is to live in the beauty. I did not want to think it was going to affect my images as much as it did. For the first two years I resisted it. First of all, the beauty of the West is so seductive. Secondly, I didn't feel up to it. I mean, are you going to take on God?" —M.S.

WHAT DID YOU DO BETWEEN THE TIME YOU ARRIVED IN NEW YORK FROM PRAGUE AND WHEN YOU STARTED THE KITCHEN?

It was about five years, and five gorgeous years because to be in New York in this period, in the late sixties, was absolutely fantastic. We would just party a lot and drink and drug and all those things and suddenly the flower revolution was upon us and it meant going to Central Park and seeing sit-ins and be-ins and smoke-ins and all those things.

At that time we bought a magnetic audio reel-to-reel recorder that had sound-on-sound capacity so you could record first one track and then the other and then it had an echo between the two tracks. We would take microphones and speakers and investigate feedback and stuff, to see how controllable audio feedback was and then by mid-1969 we rambled into the first video.

WHEN YOU SAW THE FEEDBACK WHAT WERE YOU SEEING? WHAT DID FEEDBACK SEEM LIKE TO YOU?

It was the energy. It was very cosmic. For me, it was like America. You see I never understood electricity. It comes out the wall and makes things work. And this was the same thing. You were harnessing this energy of the camera and the monitor and making them into these bursts of light which video feedback is.

HOW DID THE KITCHEN COME INTO EXISTENCE?

In 1971 we found this wonderful space with a friend of ours, just another empty loft that had been the kitchen of a sort of bar mitzvah place and hotel. We talked to the landlord and asked him if we fixed it up if we could have it for awhile and he said that we could and whenever we got money for rent we should pay. The space was really very beautiful. We had a lot of volunteer help and in June of '71 we opened it as the Kitchen and it immediately took off. We didn't much run it because it was sort of self-run. There were so many volunteers and whoever wanted to

show there always got in. It was mostly used by musicians, mostly electronic and avant-garde musicians, and by the performance artists who weren't known as performance artists at the time and the rest of it was video.

WHEN YOU WERE DOING MACHINE VISION... WHAT WAS THE MACHINE PART OF IT?

I wanted to have moving images that were moved not by the musculature of the hands of an artist but moved in some kind of mechanical way. I was also after a vision that was not a human vision, that was not something that we conventionally see. Why repeat that? Our normal, average vision?

SO YOU WOULD PUT THE CAMERA IN A PLACE THAT IT WOULD TAKE A PICTURE OF SOMETHING BUT WHAT IT WAS YOU DIDN'T REALLY



Steina Vasulka

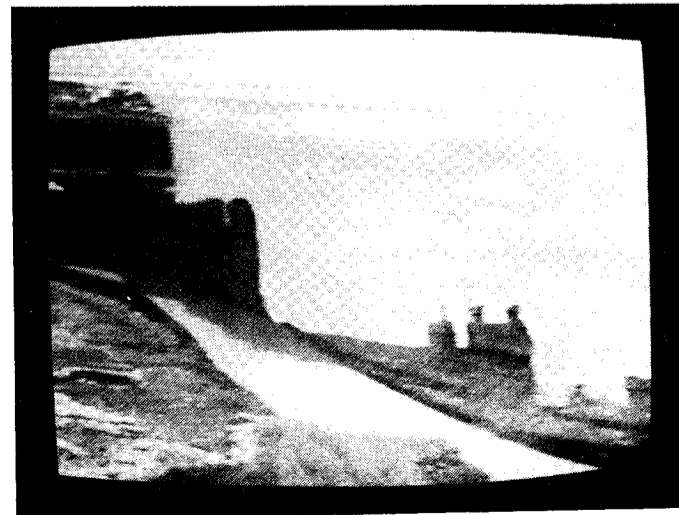
KNOW?

Yeah, in my religion of this I could never change anything. If I was in my house and was doing the turntable idea and had forgotten to remove the chair... it was really stupid to have the chair there but at that point, religiously, I couldn't move the chair because that would be altering the scene.

WHAT HAPPENED AFTER "MACHINE VISION"?

Then we moved to Santa Fe. We didn't have any studio here to speak of, so I moved outside and said, "Okay, this is now my studio and it has an infinite high ceiling and it is blue with nice white clouds on it and the walls are invisible and it's all for the better." And that's when I started doing my landscape pieces. I did an installation called "The West." Since then, I've become more and more drawn into making installations, having multiple channels.

Steina Vasulka, from *The West*



DO YOU SEE THE VIDEOS AS MUSICAL COMPOSITIONS?

Yes, but I usually compose it from the visual. I find visual material that matches or counterpoints, and then I work with soundtracks, rather than having the soundtracks ready and then put the video over it, although I have done that too.

SO THE IDEA IS THAT MUSIC HAS TWO FORMS, ONE THAT YOU HEAR AND ONE THAT YOU SEE?

Yes, I have no relationship to still images personally. I love them as a consumer, as a viewer but for me a painting and photography lack movement. I have my camera and I snapshot but it doesn't mean anything to me because it doesn't relate to the previous and the one after. It is of great importance to me to have the flow, the movement and that comes directly from music because music doesn't exist in a still. It's always the progression.

YOUR WORK REVOLVES AROUND COOPERATING, MAKING, BUILDING THE RELATIONSHIP BETWEEN YOU, THE MACHINE AND THE IMAGE. WHAT DO YOU SEE IN THE MACHINE THAT FASCINATES YOU?

I think it is the flow. It is the majestic orbits of the universe that everything works in streams, in orbits. Everything repeats in cycles and everything, in a way, is time-driven. So it is rather time than the machine per se as a result. I don't know where I got this fascination for machines. I didn't have it in my childhood. I'm not one of those who had that workshop in the basement, but I remember discovering those things like gears and DC motors as some kind of a great mystery and a miraculous thing and I find it very close to life. A mechanistic replication of the biological mystery.

CAN YOU DESCRIBE THE PROCESS YOU GO THROUGH TO CREATE?

It's a very interesting question because I wake up in the middle of the night and ask myself what I'm going to do and why I think that this is of interest even to me, much less to anybody else. Of course, you know in moments of self doubt you have absolutely no idea what you are doing. But then once you start doing it, you have this conviction that this is completely the right thing to do and everybody must see it that way. You're put into this hysteria that if you tape something in Japan and put it up in four screens that the whole world is going to just be at your foot steps. It's so important that you do it and you fall into this particular state of mind, this kind of creative contemplative state where time flies and you feel very good about yourself. Then comes the moment of truth when you show it to all the people and they say, "So what!" And you say, "Yeah, you're actually right. So what." That's how you compensate for this disappointment and then you look at it again a little later and then you say, "But it is still a good work. I still do like it." You like the work and it doesn't matter that the world doesn't. It has nothing to do with it. And I think that a lot of artists work this way. From one work to the next. And every time they are absolutely convinced that now they've got the masterpiece.

WHEN YOU REVIEW A PIECE OF YOUR WORK AND DECIDE YOU LIKE IT, WHAT QUALITIES DOES IT HAVE?

I don't suffer looking at it. First you go through the period where you do it and you put it together and you know what you are after and then you have the audience with you, looking at the work and you see it through their eyes instead of your own and you suffer tremendously but you say, "Now, they are thinking this is too long and they are looking at that part and saying 'If she only had . . .'" And so you edit in front of the audience. Then I go back usually and I revise the work and look at it again with the audience and I like it. That's the criteria. Look at it as though it were somebody else's. Basically, you take the ego out of it but then once you take the ego out of it, it either stands or it doesn't. And if it doesn't then you revise it.

WHAT ROLE DOES FUN PLAY IN THE CREATIVE PROCESS FOR YOU?

A great role. A big role. It's all play and people accuse me of that. They say, "But you are just playing" as though it were bad and I'm very proud of that because I think that is a primary function of human beings. You see it in children; they don't know any better than to play but eventually you unlearn the playing. A lot of adults unlearn it and stop playing and then they even think that there is something wrong with playing. That it's sinful or something. I can't remember any art that doesn't have that sense of play however serious its mission is.

WOULD YOU SAY THAT'S WHAT YOU PAY MOST ATTENTION TO WHEN YOU'RE WORKING?

It always starts with me trying to be, you know, mind over matter, you know me trying to impose my divine vision onto the machine and when I succeed I always come home with the trivia because my mind isn't that interesting. But if I decide to have matter over mind and keep this dialogue open, I can get quite interesting, paradoxical images that I will then be able to use in my work. The motivation is always to do your vision and then it's a matter of compromise and the more you compromise the luckier you get. That's my rule.

WOODY

Woody Vasulka seemed destined to spend his life as a tradesman machinist - the craft he inherited from his father. But instead of construction steel behemoths he found himself writing poetry and cooking elaborate meals for the crew. Stopping him one day on the streets of Prague (1962), Steina asked him to fix her motorcycle. They went to New York City and he found work as a multi-screen film editor. Now known as a leader in the development of video as an art form, Woody has also been instrumental in the creation of advanced digital and robotic instruments working closely with inventors and designers over the years. A "practical philosopher" he describes his work as a form of play. The machine was never his rason d'etre but in the machine he finds artistic inspiration: The poet-machinist says, "I like metal- I have passion for it which is very much physical. It's the touch. I can communicate with it. I prefer metal over moss."

Born in Brno, Czechoslovakia in 1936, Woody emigrated to the United States in 1964. Since his move to Santa Fe in 1980, he has completed three major works, The Commission, Art of Memory, and The Theater of Hybrid Automata. His Art of Memory must be counted among the most acclaimed and widely-exhibited works in the history of video art. This fall, Woody displays at Artifices Two in Paris his latest incarnation of an ongoing investigation, The Theater of Hybrid Automata which includes in its early stages collaborative multi-media works with other local artists: Steina, composer David Dunn, vocalist Joan La Barbara, and actor Tim Thompson.

—M.S.

HOW DID YOU COME TO AN INTEREST IN MACHINES?

My father was a metal worker. Also, I grew up during the war in Czechoslovakia across from an airfield. My first interest as a kid was to take apart the most complicated machines of that era, the German fighter planes. My youth was spent in these graveyards of airplanes. You can find everything there to drive your fantasy crazy. Europe itself was a huge junkyard after the war—you could find weapons and human fingers in the dump.

The European cultural environment where I came from is so densely dependent on music and literature. What you talk about with your friends is culture. It's impossible to grow up without knowing the heroes of literature. Virtually everything you think about is derived from another source. Culture is what I would call an accumulation. But it's not the same way here in the States, which fascinates me. Every generation starts from square zero. Information is so decentralized. When I came to the States I had to divorce myself from the metaphoric language and old narrative forms and pay attention to new electronic tools. I had to rethink all my aesthetics.

It is difficult to express why technology became the most suitable method for my own work. Let me just say that there is a system of muses, and the muses allocate the tasks to the workers, and these workers—the artists—then work for the muses who have some concept of whatever the hell this is all about. If they assign you to technology, they nurture you from childhood, and they groom you for the task, and eventually you are employed by some metaphysical corporation.

HOW DID YOU FIRST GET INVOLVED IN VIDEO?

After the war in Europe, any notion of experimentation with the media was avant-garde. All the modern Czech literature, poetry, painting, and also media, were astonishing. But the war and the political situation rendered it all useless. We didn't pay attention to media-based information, but became interested in ideologies,

larger mythological or narrative systems. When I came to the States, I discovered that there was a whole generation of practicing artists called the Structuralists who paid attention to what the European avant-garde did. My basic introduction to video was through the concept of the electronic image being made out of organized energy. People call it abstract video but that is just a transposition of an aesthetic term from the world of painting. Abstraction wasn't our goal. Our goal was to create reality, a certain reality that would testify to its own electronic complexities. In the process of experimentation there are two conclusions: it either succeeds or fails. But if it's art, it has to succeed. There is no failed art.

But I don't want to live in the necessity of success. The whole idea about activity and success is very much Western. Any activity takes you into optimistic areas. That's why people in the West like to travel, or develop activities in which they prevent death, improve their finances, become mentally more healthy. Coming to Santa Fe for me was something of a retirement from duties. I found this isn't a community in which to compete, but to contemplate.

CAN YOU DESCRIBE YOUR LATEST CREATION, THE THEATRE OF HYBRID AUTOMATA?

The Theatre of Hybrid Automata is a physical construction containing a pool of enlightened electronic tools. In its present state, it possesses the ability to communicate through the recognition and synthesis of speech, vocalizations, musical instruments, lights, and sounds, and robotic response. A singular feature is its complete internal interactivity—any gesture can influence any other element in the system.

My interest is to make a binary model that contains physicality interlocked with the virtual performance. In the computer a sphere reacts as the head is moving in space. When the camera stops the graphic or virtual space also stops. The actual space is a physical environment inside a transparent cube (10' x 10' x 10') which is to be observed from outside: the cube, functioning as a "stage," provides an exo-skeleton upon which the various performing components of The Theatre are affixed. I am in the process now of constructing an extremely sensitive and articulate interface between a live performer and the machine based on a physical reading of the performer's body.



Woody Vasulka

I want to set up a series of experiments to study the voluntary and involuntary gestural and spasmodic data in order to integrate a performance into the dramatic protocol of the Theatre as a whole

IT'S AN EXPLORATION THEN; YOU DON'T KNOW WHAT IS GOING TO OCCUR?

I'll tell you what it is: it is a system to be observed. One major ritual is called calibration. The camera simply scans the space and locates itself or looks at

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the six targets which are placed precisely at north south east west and above and below. In order for the machine memory to work, and for the machine to know where to look, it has to orient itself. The representation of the space is aligned this way because the program is written in the Cartesian six-location representation. If the machine tells us it is looking east, it really has to be looking east, as far as the space is concerned. It speaks the truth about itself and in real time. A certain procedure for the audience is simply to watch the way this machine calibrates itself— puts itself in the space— how it comes to know what and where it is. This particular ritual is not going to produce a complex narrative system. But all together, the ritual is highly narrative because calibration procedures are so telling . . . it is a self-exploratory narrative system.

WHAT ARE THE IMPLICATIONS FOR THE HUMAN IMAGINATION?

Basically, it provides a critique of psychological drama as presented in film and theatre. The traditional genre of drama is a psychologically supported system. I would like to find something that appeals to human perception from rather a different angle. Something that is not concretized by an emotional relationship between protagonists, but still represents a certain order or pattern that can be discerned.

I think by now we are all in search of new structuring. Music has gone through centuries of exploration of particular structures, since the Renaissance up to the nineteenth century, which allowed it to become very perfect and precise. Minute emotional changes can be expressed mapped into a vast orchestra. Today I guess we know that we can't really repeat the past as far as the level of craft and the social circumstances that were available back then. We are in a desperate search for a new structuring, and so this effort in using technology is taken to be part of that search. The separation that people try to put between themselves and technology is quite silly. When you start working with technology it provides an environment in which your craft can be practiced.

AND BY THE WORD CRAFT, WHAT DO YOU MEAN?

I mean the code systems. All the code systems have to eventually express some kind of aesthetic summary or aesthetic definition which maybe then is called, art. The tools are different now, and the notation is different. We still don't know how the new patterning builds a dramatic form.

The most prevalent achievement of these new technological systems employed in an aesthetic way is that they can provide a great number of variations. In music we know exactly what variations are. They are used in many different art forms to examine a specific scheme or a particular pattern. This is one of the most valuable, the most captivating, but also at the same time the most crippling aspects of working with new technology. One can certainly become captive to these new variations because it is something one can observe again and again. It almost preempts one's interest to create the new.

HOW DOES YOUR APPROACH DIFFER FROM SCIENCE?

Maybe the method is somehow scientific, but I am not trying to find a specific answer, I do not have a specific goal. I am trying to discover how the performance of this theatre might affect the observer, and I am trying to mediate it within the cultural codes., guided purely by curiosity and intuitive interests.

I think that computers came here to give us questions. The question of interest to me has something to do with space. Is space the place where extraterrestrials come from? Is space polytopic, multi-directional, non-centric? Hence are we freed from the limits of a Renaissance definition with perspective and such? Or, is the computer memory the true representation of space? It has no spacial qualities unless assigned. So this question — what is space — must again be asked. That is why I liked film: basically a representation of space made of light and shadow, very abstract, but still it represents hard realities — there is a certain power in that. Video too brought in wave forms as a materiality— the wave forms are a formation of energy and time which point to a type of universal event, they are not really on a human scale. But video never had the strength to criticize film.

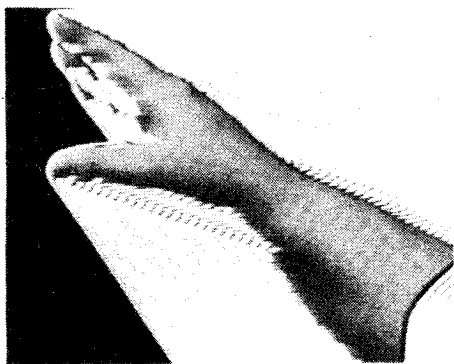
I was born into the world of book, media, film, transportability — I like things that can be duplicated, things that can be represented, the immaterial. All my upbringing was conditioned by the mistrust of objects, unique artifacts, as tangible property. I can't overcome my bias against art as commodity. I have settled on describing my work as a form of practical philosophy, or rather a form of play in which one experience follows another without being considered as fixed or recorded. It suits me the way computers represent the world by code. My guess is that I feel a kind of disbelief in reality. However, I still feel that theatre could be more immaterial with a real physical presence of dramatic elements. Now I am working with that, building a kind of stage. Why I am doing this, I haven't the faintest idea. But obviously the muses decided, or one of them decided, that this is what I should do and so I am obedient.

WHAT IS NEW IN THE WAY A VIEWER RECEIVES WHAT IS CREATED?

The new technology in general offers the possibility for decisions to be made by the participant. As we know film is a proscribed medium you

cannot alter the story. A book is more alterable, you can stop, go back and reread. But film in particular is a very totalitarian mode of perception. You can see it only as the author proscribed it. Music is also proscribed because of the notation; however, there are ways of interpreting it so there is a little room for interaction. Virtual reality is the view in which you as a participant are inside the mind of the computer. (What I do is not virtual reality: I'm involved in controlling actual space.) In some ways the perfectly constructed new digital narrative space could provide for the viewer a completely personalized tour. What does this mean? To me the most interesting thing about art is the proscription by the artist — that kind of unique guidance. But it could be that the audience now might begin to have a more creative involvement in the art.

However, whatever we do really depends on the intelligent involvement of the viewer. Sometimes someone constructs an interesting work which is engaging and important at a certain moment but if the viewer misses that moment then the thing seems very primitive. And too, the articulation of the new



Woody Vasulka, from *Vocabulary*

tools is not as fluid as in some older forms. For example, the conductor of an orchestra moves a little stick just a little bit in a certain direction with a certain speed and a vast body of people interpret that with such minute precision that the result is stunning.

Of course, the human mind-and-body system constitutes the most elaborate control-system ever devised — the codes of communication are so complex and refined, so elegantly crafted and executed with such a divinity of talent that we may refer to it as perfect, unequivocally. At the same time, it is a closed system where success is measured on the most familiar scale of reinforcements. Our dramatic sense longs for more surprising rules, more abstracted and open-ended genres of expression, for a representation of principles and tendencies from beyond our limited psychology. I'm actually not trying to de-psychologize space as much as I'm interested in making models for alternate states of awareness.