SV: ....... an installation I did a couple of years ago about ALL VISION. You see, we have been preoccupied with this "All Vision" type thing ...

(Dan interrupts)

SV: (starts again) This is an installation I did of ALL VISION and if you look at the thing here -- theoretically each camera should take 180° and together they should become 360° but these spheres - each of them takes more than 180° - so there is only one point where when I disappear on one camera, when I am exactly behind this lens here, which is not really a lens - it's like a ball - and so I disappear in that one moment, but that's the moment when I'm most prominent in the other one. And so this goes for the whole room - it's total surveillance. And there's only one dead spot in each camera at any time. It's what I really wanted to do to was to take a ball like this and have the camera pointed at the ball from the inside, because this thing here sees everything. It sees more than a human vision can ever accomplish. It can see the whole room at all times and that's what started to fascinate me about MACHINE VISION as I call those things -- they can see things we cannot see ... and the camera can vision things in a way that the eye does not work -- the eye cannot possibly work. Like if you look at those things here, like this camera is moving on this axis and this camera here is looking at the rotating mirror. It is recording the types of things that only machines can record. And what's also interesting is that it's the framing - that we will always have to -- the human eye doesn't get restricted by this frame like a camera does.

Here is another frame also, which is not in our own perception. Because if I am looking at this ball, I see the whole room behind me - I see everything here on the sides, but I don't see exactly what's in the back because it's blocked vision. But, of course because it's not restricted vision, I don't build a frame here. I have a lot of peripheral vision that video cannot have. It has to put a frame on it.

Let me just show ...

...... those other things do. I have this MACHINE VISION which deals with ... I'm really interested in with those things of installation is to have the cameras survey each other -- they are keeping track of what the other camera is keeping track of. So -- the camera here that's moving on this axis is at the same time looking at this 360° surveillance and if you then go over to the next thing that's happening here ....

...... which is this camera here, which isn't doing much right now, ... but if I plug in this AC, it's a mirror. So at the one extreme it is seeing those cameras that are moving 360° and in the middle it sees the camera that is looking through the mirror and the other extreme it should be seeing this thing here -- but it isn't -- I have to move it in. Umm... it's hard to find it. Let me see. Too late.

Alright, so it's surveilling this environment here, which if I turn that one on, you can see that the mirror here is moving on the top so ... That becomes this image here -- let me see if I can improve it...

The particular environment here does - I can move it back now. It has a surveillance of the room 360° on this axis, but it also turns it upside down, so it is moving on this as well. It's because of the slanted mirror and the lens is pointed up. The camera is pointed up and this mirror slants so it will - the angle will change it to move both on this axis and on this axis. So, it's a - yet another type of surveillance.
W: Is it all together.
S: Yeah.

W: So, I look at this madness .. anyway, why do you deal with 19th century machinery?
S: Yeah, it's interesting because you were dealing with this a lot earlier with film when I was not involved and didn't even think it was that interesting. But it's a tremendous challenge to me because I cannot master this medium and I always have to ask for you help in the end for drilling those holes and the fine mechanics of it.

W: So you need someone to kind of help you.
S: Well, that's not the reason why I do it. Part of the reason is that - the technical challenge, but part of the reason is that this medium just offers it, you know. As you know I'm a very passionate camerawoman, and I always like to jazz the image up and then I realize I should have left it alone. I should just not have been behind and that's what those machines give me-- They give me kind of non-control. A mechanical kind of pans and zooms and stuff -- no human, you know.

W: It seems to me it is presenting some kind of mysterious force behind. It must be a challenge to you that, in a way, you kind of examined those mechanistic systems as a child, but it must present some kind of level of mystery to you.
S: Yeah, it does. and its a challenge, but so is video. And so is computers, but I like to be involved in -- I feel that there are three things that are separate, but in a way overlap -- It is the sort of mechanical age, here, machine age-- and then it is the electronic age, which in its first part is the analog-- and the second phase is the digital. And at this point I am sort of involved in all three. I'm flirting with all three areas I think - machine type things, analog video which is like normal video, and then lately, we are now involved in digital image - computer image. It's sort of-- but what do you feel, dear Woody?

W: I mean, you have to confess that you have inherited a lot of these things from me, so I kind of feel that there is a kind of piece of past of mine. Like I was interested in very much in 360° recording on film before and in fact this is kind of a concept that I have developed. But you have applied it so skillfully - always is shocking to me ... ...

S: Yeah, I ripped you off.

W: ... that you are applying those possibilities. But anyway - that's how the Vasulka team works, I guess, to a certain degree.

S: Oh, yes. This is definitely a team work, because I tricked Woody into doing all this for me and so ...
W: I think this is too much a revelation of family secrets. I think you should keep your mystique and you should be a lady involved in machines as an image -- I guess that's more powerful -- Then I sneak in here and reveal this ...

S: What do you want instead, Woody? Do you want me to give you the computers? You can have the computers.

W: I'm not entitled to do these kinds of interviews anyway.
Woody: of the matrix. A work which is related to the horizontal movement contrary to the vertical movement, which is so natural to television. Many times it's so -- the television set is rolling vertically, but we, through a set of coincidences, a set of errors, found out that also television in fact can roll horizontally -- the television frame can also roll horizontally -- which was quite a surprise to us, since we didn't even believe that there were frames in television -- that there indeed were frames, because we could roll them horizontally and vertically. In cinema it's very difficult usually to roll horizontally since cinema is purely vertical arrangement, but in television, since horizontality and verticality is in fact a result of time - or time sequences - then it is, by alteration either of the horizontal or vertical frequency drives for the cameras, you can in fact easily obtain both sets of movements and by their combination you can also move the image diagonally. I guess we will have a little sample of that tape.

Now just to make it all normal, I'm going to show you what we've done at the beginning. The same period where we found out that there is a horizontal movement possible through timing or re-timing of... re-timing the horizontal drive for a camera.

This happens to be called EVOLUTION -- it is not, it wasn't our idea, it was a friend of ours who gave this name to this tape, but it happened to be a summary of some kind of set of operatives of ours -- so it somehow corresponds, the personal evolution at that time and that particular medium.

Now we don't have sound -- we don't need sound (Steina: No, we need sound).

This is the horizontal movement I was talking about -- so typical. This horizontal is something that we call horizontal blanking. (points to the screen in this section) It's vertical blanking, but it manifests horizontally, and the other, the vertical bar here is actually vertical sync and vertical blanking, which -- actually horizontal sync and horizontal blanking which manifests vertically. Well these are really confusing questions, maybe we shouldn't even explain them, but I would like to kind of indicate -- by the way the speech is arbitrary, we can remove a lot of this. You don't have to pay attention to what I say, but you should, really, because I'm going to tell you things that are sort of interesting, but maybe not.

So, when we found out that in fact there was a frame in television -- and the frame is just what you're looking at, which normally is hidden behind the television frame and so you don't see it, but by a set of errors, we could move the original frame somehow in position -- within the whole field and we could somehow move this... horizontal frame as we say, horizontally. The new frame was added to it, through the system and now the frame of a frame is seen. And the frame which normally is hidden -- is still there. If I move this monitor... -- There is a set of 2 frames... I cannot stop it. This is one frame which is normally hidden and this is the second frame which is kind of... it's repositioned. But we noticed it's repositioned and it's relatively static, this particular horizontal line. That means it is referenced to the same kind of frame as the overall frame that's added. It's only shifted
That means there's a delay which repositions this particular edge. The other thing that we are looking at is the product of time or a re-time or a time delay or a time drift -- one time reference drifting against the other. For example, the horizontal -- which at that time we could not control, this was something we were just looking at. I believed we just prayed that it would go slower, because we just couldn't really stop it. There aren't any knobs for that -- it was a pure accident. So, that is a result of one frequency drifting against the other -- in this case, the system produced it's own reference, and then through a broken cable or something, the other frequency reference got unlocked from the original system and started to drift. Now... later we found out -- I mean we started rationalizing it particularly then and we found out it is possible to control -- so lately we devised certain simple things like oscillators with knobs and we could then control this movement and stop the movement or reverse the movement -- so that's what I guess we cannot look out to...

But let me just show you one of the same accident applied to feedback in which the camera is looking at itself -- it's own image in the monitor and so forth.

I mean the feedback was something which we had known about, by that time well -- but we never could combine it with the horizontality of the movement...

The possibility of rolling the whole frame -- it was the first time we saw a consistency of a roll. We could see sometimes that there was kind of a misplacement, sometimes, by timing errors. we could see that the frame was delayed, but we could never see it as a coherent structure moving through this particular time frame. So I guess if we would have worked with a -- in a television studio with hundreds or thousands of coincidences in which this particular event would take place -- but it was the first time we could in a way observe a coherent way this particular arrangement.

And of course by the way we were very much involved, at the same time, in exchanging the image for sound -- controlling the sound with images and vice-versa. Generating images from sounds. In this particular case we had taken the video signal and we are interfacing it with an audio synthesizer and so whatever we are seeing in a way has an overall energy content -- it's being made audible.

And just to give you some other sample. This process which is... again related to horizontality, which we have kind of taken from that particular possibility of moving the whole frame, but in this case the whole movement is again induced by horizontal timing, but the frame is intact -- only the information rolls or drifts through the referential frame and this image is originated from sound -- sound shapes and we've used audio oscillators to be displayed on a regular television set. But again, finding the horizontal -- because in this case the whole event has taken place vertically, so at that time we started to turn monitors on their side in order to achieve horizontality. And we started to combine them in horizontal matrixes specially to get access to 3 monitors at one time -- actually some of these are the original ones we'd gotten. And we started to relate these 3 images horizontally in the sense of horizontalities. And we have produced a kind of consistent matrix -- horizontal matrix pieces which we would later arrange in a circle and the images then would be travelling in a ... induce the whole environment in a kind of a circle, dynamic pattern.
But of course these sounds are not very much musical, they are rather crude, also the sounds are related to the lower range of 60 cycles and overtones. The high frequencies are modulated and they are in the range of over 15,000 cycles a second so that it is not a true translation, but indeed it's a direct translation.

The equipment that we have used which is small format has a great tolerance to imperfections. It was kind of ideally suited for our work in any direction -- like Steina would make tapes which are hand cranked so to speak. She would take a piece of image which you would hand advance a certain section of the frame and would make various variations of an image. It was possible only because the equipment had a great tolerance to these imperfections in order to hide them. The design was to produce the television cheaper and you had this great tolerance. Today the tendency is opposite -- this difficulty of television image had been overcome to a degree. And now the whole idea is to bring it back to more precise and specific perimeters.

This again is something that is quite unorthodox ....

This equipment cannot deal with this very easily -- you see it breaks the structure, but it was just about what we could still perceive as coherent frame and structure and in fact through these deficiencies we have learned a lot about the inside of the television medium. And in fact through these set of errors or coincidences, planned or accidental, we eventually arrived to a much greater control than systems which would be designed to put overall control on the aesthetic content, like production equipment which was designed totally to hide all those deficiencies, and in fact never produced them.
RC: ... Of what you people do that may be at great variance with what you think you're up to, but it goes something like this. That before the television image appears that most people are familiar with -- with KOJAK or with MARCUS WELBY, or whoever -- there is another television picture which is the essence of the medium itself, just as paint for an artist working with canvas, there is a specific artistic vocabulary of the medium of television. And my image of you two is that you are more concerned with that anyone I know -- who have done more exploration over what is that nature and I want to know if that coincides with what you feel you're up to.

W: I guess I would go back to the notion of physicality, because you mentioned the methods, or the materials -- our materials that are quite physical -- like paint to a painter. So I would say we have developed this attitude towards an electronic medium -- especially the television frame which at certain points you can perceive as a physical construct since you can in fact control the particular arrangement and as we know it is line by line, time with energy construct which comes to your home TV set -- its a frame. There's nobody hidden behind the frame. But now we start working with that way and you can see it as construct -- addage construct, onto which that image is added somehow later with its meaning, interpretation, -- it's story, whatever. And you find out you've developed the same attitudes and habits towards that electronic image as you would to any other physical meaning or physical art materials. And I characterize that as our interest -- in an image. It is not what it means as being a symbolic or a comical story like structure -- it is the line by line construct which has its time and position or location in time on the screen -- and to organization, or internal organization of those time-energy components, you would in fact create the image, but, again, you create images that are relevant to that particular concept. Of course, they go beyond that -- they have to in a way be somewhat aesthetic -- and they may become traditional in sense of interpretation. But in a way of controlling, I think that's the innovative part of television -- what we call an electronic image.

RC: One of the ... One of the things that I admire about the work the two of you have done over the years is what seems to be an intense dedication to finding out what is the nature of the television image before there's a picture on it -- before there's KOJAK or MARCUS WELBY -- to really explore the alphabet of video -- or the vocabulary. Is that the way you see it yourselves -- what you're doing?

W: First of all I guess we have to realize to work in television that behind the television frame -- behind the meaning, behind the image, there is a sort of physicality -- in a sense in any other medium there is some physicality which in the case of television is manifest through a frame -- a frame which carries the image, and is in fact a construct, constructed line by line area which then provides the space or provides the display for television image which is coded into this physical frame. And since you pay a lot of attention to that aspect, we've developed a relationship with that frame as being controlled or being accessible to another means. For example, with non-camera means, internally generated images which have something to do with possibilities of placing energy in particular portions in this time construct of a frame. But again -- it's a specific I'm describing, it's a very ordinary relationship to that image that gets developed in working with television frames that way. So, I don't know how to place it in a normal, ordinary jargon -- I develop all that language in a way, certain components and myself -- so I've developed a certain relation to it, so maybe you could ask....

RC: Well, may I ask -- maybe this is not the right time, but I've .. would like to ask -- since you have so much understanding of the engineering aspects of video -- could we go back a little bit with both of you, as to where you came from and how you got into video and maybe that would shed some light on the different approaches you've taken withing video. Steina?
S: Well, I was introduced to it by Woody so I think we should trace it to the origins.

RC: Can we be even more biographical -- you're from Iceland, is that correct?

S: Yeah, born and raised in Iceland, and trained as a violinist. And that's what I was doing, I was freelancing as a violinist in New York when Woody started bringing home those toys from the place where he worked. As a matter of fact...

RC: You met Woody in New York?

S: Oh, no - I met him in Prague. I was studying violin in Prague and I met him and we came here together in '65 and so we were here 5 years before we sort of landed into video. Woody started in '69 in the summer and we started to spend the nights over at the place where he was working, which was called Light's Productions - they were doing industrial shows for television. An industrial exhibit I guess it was.

W: Maybe you could scrap that part of it... I don't mention it.

S: Alright. (laughter)

RC: We're going to get an selected version of your... history...

W: Make it... because I don't want to talk about Harvey Lloyd right now. Maybe next week...

RC: Alright.. Let's talk about whatever you want to talk about -- but is it maybe useful to the audience to know that you were in film. You studied engineering at school?

W: I studied hydraulic engineering which I never had any use for because my mind was never mathematical and there were a lot of calculations. So by family tradition sort of, I became engineer-trained, trained engineer. But my private interests - I did a lot of writing, and poetry and fiction-- So I am in a way literary oriented mind, but I, by coincidence, I went to film school in Prague, which I appreciated very much. It gave me some practice in image, but it began rather narrative and kind of symbolic content of image oriented work. Even if I landed in a documentarian kind of branch, I was still practicing poetry, my general background. I still hope it is my general background, and...

RC: Were you involved in the Czech Pavilion at Expo? Or did I have that wrong?

W: No. But strangely enough, when I came here - it was in '64, in about 2 years I got working in New York City in many multi-screen projections and multi-screen film work for Montreal exhibits so indirectly. I didn't have anything to do with the Czech part of that multi-media presentation, but I landed in multi-media from the American side. I guess I was destined to do some kind of media work compared to literary experiments. I could never practice in film -- I could do it, but I could never find this kind of mysterious character about it, but with video it was instant kind of - instant devotion - the non-materiality of it and the mysteriousness of it was just overpowering. Even - but of course, the simplicity to begin with, but then eventually it came to kind of a whole creative vision.

RC: And how did you -- what was the historic day when you first picked up a portapak? How did that happen?

W: That was the place I worked in and it was in '69. And in fact, very important for me was seeing Howard Wise exhibit TELEVISION AS A CREATIVE MEDIUM. That was...
S: Yes, that gave us all the excuses to go ahead. I mean we had already been doing feedback and stuff and we sort of did it for each other -- We didn't know if it had any meaning or it could be justified by society. I don't know -- but seeing that exhibit and seeing that other people were dealing with the same kind of things... We walked in there and we found Nam June on the floor fixing the TV BRA and I realized in retrospect that that had a great influence on me.

RC: It's Nam June Paik, huh?

S: Not he in particular, but seeing that exhibit and everything that was in it. Actually I remember the best Seigel piece - EINSTEIN...

RC: Yes.

W: For us, Seigel and that branch, also respected....

RC: This is Eric Seigel for people who don't know. who might be watching video

W: It's interesting how got sidetracked into art, interpretation of art or art kind of...

RC: Do you think that's unfortunate?

W: No, but it's simply totally misleading to my interpretation, because I think it was a phenomena which went beyond the category of art. It was a particular phenomena in time and...

RC: Of course my interpretation is that there is nothing beyond the category of art. (Laughter)

W: Yes, of course it is.

(Dan interrupts)

END CASSETTE
RC: The exhibition at the Howard Wise Gallery in 1969 - TV AS A CREATIVE MEDIUM - was a - something of a watershed for both of us. And that was a show that took me - excited my interest in video and got you guys deeper involved yourself. How about the origins of the Kitchen -- can we talk about that? That was, still is, a very prominent gallery in New York City devoted to video and electronic music and I think of you people, if you'll pardon the expression - the parents of it. I mean, weren't you the -- didn't you get it off the ground?

S: I am the mother of The Kitchen and Woody is the father of The Kitchen (laughter)

RC: The chief cooks.

W: Can I backtrack to Howard Wise exhibit. What was, still is astonishing to me is that it, as I said - I didn't say that -- that in a way it completed totally my television experience as genre - videocraft as genre - constant as genre. Because you had all components that had been through time only extended. They had not been reinvented right away. Image processing, colorizing, there was raster processing, the position of the scan lines -- the scan lines, self processing. There was time work, there was sculptural work there -- and so all these components since that exhibit, I've never seen performed in a way conceptually different. It was the complete thought. It was...

S: It touched all areas (overlaps Woody a bit)

W: ... video was really completed by that show for me. And it's very strange, because we're still doing video, or kind of associated with video. But it has totally different meaning now, for example, for me -- because that was video. I mean now it has different meaning... Going back to the Kitchen.

RC: Let's pick that up later because I'd like to pursue that. But let's get some history over with. You mentioned that you were involved with multi-screen art works or light shows, or whatever it was in the '60's and then you -- when the Kitchen started you began multi-channel video pieces. Am I getting things in the wrong order here, or confusing...

S: No we did that before...

RC: Before?

S: Yeah, the thing is we got so many people visiting us at home that we had no privacy left, so we were already wondering about if we could find a new place. And there was no place - there was no video theatre. There were a couple, but they were dedicated to their kind of work - not open to other artists coming in. And a friend of ours showed us this space and we just fell in love with it. So I think the Kitchen originated -- there was some idea behind it, but mostly it was a wonderful space that was there and we started fixing it up and not knowing really what we wanted to do with it and as it turned out we couldn't use it-- I mean we couldn't possibly use it 7 nights a week and so we started inviting anybody else who had anything to express to come and luckily enough we got this musician to organized avant garde music which was at that time much more advanced than video. And their contribution to the Kitchen was great. They gave us so much - we learned so much from them - in the sense that they had traditional culture and were dealing with electronic medium already in a way that we haven't even approached it yet 7 years later. I mean, we video generation in the sense of discipline and form and originality. But those people had and have Um...
W: How would... I mean at that time there was in a way a vacuum in space that would allow performance at that time. There were a few places as you remember -- Automation House and a few others, which would of course get you very, very kind of sophisticated electronic works, but it wasn't the open scene -- So all our contribution was, when I see it in time, was to provide a time-sharing space and soon it just grew out of our hands totally and became sub-programmed and so we -- our credits were truly as the mediators of that particular, physical facility. We were paying the rent and all those things and -- a certain open-mindedness, not to avant garde, but to non-avant garde, in fact. To what was highly culturally polluted environment from rock and roll to kind of homosexual theatre. We had that kind of possibility of extending our interests in the narrow crowd of avant garde. I was in fact surprised when the first legitimate avant garde came to the Kitchen -- it never truly came-- always somehow around. But we had developed that particular, I would say, avant garde in this new video sense -- but, again, there were many other video people who would not consider that a place for them. So it was not culturally defined -- was totally ambiguous. That was our problem.

S: It was also a problem that we didn't understand them. We never invited anybody to perform there. We never asked anybody to do anything -- people came to us, and as long as we did manage it, we never turned any people down, because we had that much time on our hands. By now, the Kitchen is really overcrowded and they cannot accommodate everyone who wants to perform there. So, in the beginning... it was self-running.

RC: Yeah.

S: and we didn't do anything for the artists either. We didn't do a thing for them. They had to sweep the floor; they had to set up the chairs; they had to take care of the collection at the door; and it's fantastic how much they enjoyed it -- printing their own posters, you know... So, our contribution wasn't that great... we just let people slave for themselves...

RC: One of the... one of your major contributions was showing some of your own works there which were very beautiful. Can you describe some of those early works and the origins of them -- and maybe we might even be able to see a little of them.

S: The best work we did there, we don't even have a tape of...

RC: Oh, really?

S: It was so beautiful. We had those -- we called it GEMINI -- and we had those two naked boys -- They sort of descended from the ceiling down and we had all those screens like 6 or 8 monitors...

W: I didn't know it was such a great work of ours... (laughter)

S: It must be, because we don't have any record of it...

W: Maybe if it was two naked girls descending from the ceiling (laughter)...

An intersting point...

S: Maybe that was what it was...

W: No, it's an intersting recollection. I wouldn't...

S: Oh, I loved that. It's just that among others, we did those live performances and we performed video -- which you can only do if you have all the machines there, if it's yours and you have a lot time -- then you can perform video,
W: you see, we kind of obtained multi monitors and we got them cheap - a good size, 25" Setchel Carlsons. So we established that kind of habit of showing on multi-screen. It doesn't mean, for example, I never liked multi-channel in the sense of multi-information matrix as other people would do. I would rather relate all the screens to a single movement -- like horizontality.

RC: um, hum.

W: ... a lot of work in the image. For example, the frame was cut loose. It's a time conscious.. a timing effort, re-timing the horizontal sync. But maybe that would be a sample that we could look at and give you some visual introduction to that direction. And then we stayed with the multi-channel and it probably even stayed behind after we left and became kind of a footprint on the Kitchen. But, ...

RC: Did there come any point where you thought of making video tapes that could be seen by broadcast as any kind of a goal - or something that you wanted to do?

S: Not really as a goal in the sense of making for broadcast, but I would love to see my tapes on broadcast. I think that most people would watch them. But, if you mean audience - oriented geared toward that kind of audience, I don't think so...

RC: Right.

W: I'd never... you know I have this dilemma with mass culture means, because I constantly detect that people would like to join or participate in some kind of a common unconscious of kind of living or building a common myth, like youth cult, or like Hollywood in its best is doing and also rock and roll has done its togetherness of the '60's, performed it... I have a great dilemma with that, because the number or the participation is only time conscious -- It exists in particular time. I'm much more interested in things that are in fact indirect, that are placed culturally in a certain point that you could stumble over them, grow up for example. That's how I came to liking poetry. It was very very strange. I put to you know, find an accident. So I have no great desires to participate in this cultural medium. I would rather hope that some of these strings would be buried. Some were in my work and will eventually be found and that - again it doesn't mean that I don't want to work, but I don't know what it is - I don't know how to work for a living in a television. I don't know even how to address a television which I have home - directly as person to a person. I work with television as material - as I build it together, I put it together physically - I extend it or control it. I understand what it is. But, what it is, I eventually believe that television is what we are -- in fact create a myth of television. But, there's no unity between the television and me yet -- I'm trying to build some relationships. There are endless possibilities now to use the medium in a way communicate to larger audiences. And we did not have that before. We were confined into our own environment. But with the small format coming to terms with broadcast, or the ecological exchange, we are suddenly facing the possibilties of having this mode of work... of working...

RC: The prospect of the greatest hits of the Vasulkas on video disc at your local record shop -- This...

W: ... This is always possible, -- this kind of a very strange notion. But, all is possible ...

S: Even if... (W, RC overlapping)... Even if it wasn't "The Greatest Hits of the Vasulkas" and selling millions, you know, it could be something that would just sell in the hundreds or in the thousands -- and it would be wonderful and I'm sort of hoping that it will eventually happen and technology allows it -- the video discs,
you know, because lots of very good composers of music - both contemporary and old ones -- it's not what is called "hit records" but they definitely get distributed to the kind of people who....

RC: Talking about hit records... There's a very, very famous tape of your's that's associated with a hit record. I wonder if at this point in the program we might play it.

S: Certainly. (laughter)

(Dan interrupts)

RC: Steina, one of the questions I have related to your work, your tapes... being shown -- are you still doing tapes because what we're seeing here is a direction of video installation which is not very widely distributable as you mentioned.

S: No, I also document it. I also go around and make tapes of it-- that's actually what I've been doing in the last year -- the type of tapes I have been doing. You haven't been doing any tapes -- you have been doing films in this last couple of years and I have been doing mostly what I call MACHINE VISION and then all kinds of color fields type work -- or working with grain, or beading of colors and this kind of absolutely no image. So I could show you maybe some sample of that.

RC: Yes. I'd like to very much. Can you talk about them a little bit as if they-- we were seeing them.

S: That's really hard, because I would have to be looking at them to see them ... It's just ...

RC: How do you relate the two -- to the average viewer, like me, the installation and the abstract tape -- seem two different orientations...

S: They are (overlapping RC) totally unrelated, because one is a sort of preoccupation with space and .. sort of with time and space.. And the other thing is absolutely surface, 2-dimensional and deals with texture and grain. So they are in a way opposites. I compensate, one for the other. Also the installation work I do in black and white and the other I do almost all in color.

W: I would say, it's very hard to... Sometimes I think we kind of have a direction or style, but we've violated that so many times. Like, one time I wanted to be a purist and use only generated image. I would touch the camera image. Other times I just don't mind violating those rules and I found that in SteinAs work even much more pronounced -- it's so contradictory in a way. Sometimes, as she said, it's so surface oriented, the other cases - so physical. And in my case, I have this total schism now -- in one case I deal with arithmetic image and in the other case I deal with scan processing. One so physical, so analog - the other one so digital, so abstract in a mathematical sense.

RC: Could you stop there and talk about the two in a little more detail? If you want...

W: I would put it this way: The main key towards what happened, what appears to be a style or direction is usually embedded in the tools it's the evolution of the tools which in our work we usually illustrate. That means, our work may not be illustration but it's definitely kind of an output of the structural - how it looks like. It usually imprinted or resolved a particular tool. So we went from a very simple tool to more complex video tools - colorizers, modular keyers- and eventually we arrived at
scan processor. In that evolution each of those components had definitely
effected or imprinted the visual style. Now the same thing happens to us -- with
the evolution of the tools, we are arriving to a digitally organized image which
a priori I could never find the motive in such an image because it's totally alien
to me by my non-mathematical nature .. But I deal with it since it has the consistency
of the evolution of tools, because I'm not really obsessed with style -- infact, style
has no meaning to me. In fact I found that constantly a tradition in my work, but
all the possibilities of dealing with the tools , of the technology, in fact
 evolving this self-learning process in tools and in fact mastering them within
our own environment and economical unit as 2 individuals. That is crucial to me -
so, in fact I'm looking for some possibility of acquiring a knowledge which would
give me probably some security - I would say. That would be the main line, since
I'm watching with great interest what I'm doing as a disrelated individual to what
I am.

RC: um, hum.

W: So it is that kind of path I would kind of trace in my own work and work out...

RC: I just managed to forget my next question...

S: In case you show a tape, I'll just make a comment.. The MACHINE VISION Comes
out of Woody's background that he was a machine maker -- He did this kind of -
in film he did this kind of panning and type of things that needed to construct
those tools for that I am now using , but I am also now integrating into my work
my background, which is the violin. I used to use the violin - stoking the bow on
a string - to trigger the electromagnetic spectrum in the sense that I would use it
to switch between two cameras and things like that .

W: That relates only to the sample.

S: Yes, that's only if you select that sample, and that's the introduction to it.

W: I think that's very interesting.

S: I'll give you a copy of the tape .

W: The piece should characterize ourselves as a working team. That would probably
be the key to understanding what we do -- that we can exchange particular physical
experiences / like Steina was using a lot of tools which I gave up for different
purposes/ - She simply applied them to her work .. and I learned from her, let's say
this untraditional look at image and treatment in time, which is her music discipline
in truth, which I never really had .. I thought camera was a matter of abuse . To be
camera was a picture. Eventually the whole discipline and structuralism in fact, I
inherit from her -- the freedom of non-narrative structures which I was brought up with
and worshipped for a long time . This is the level of exchange, because in work you
cannot truly share, you cannot work in creating in a unit of 2 -- you can in fact make
a creative decision only in the unit of 1- which we are both witness to...

RC: So that sometimes you 've each become the assistant of the other at different
times .

S/W: That's exactly what it is //
W: Sometimes...

S: Sometimes we wouldn't even know it -- sometimes it was so fluid that one of us would take over and since we trust each other, we have no problem -- and just give up the ego to the other -- and then we felt knowing it, it would have changed the balance again, so -- in those pieces that we used to do together, we cannot identify in many cases whose idea it was, whose development it was and how it was... it was totally...

W: But, the performance itself is always...

S: We do together......

W: Is actual, step out, I think... because you become very tired at 3:00 and you work on a piece, you may just give up -- and the other fixes it up and eventually performs it or does it -- so its that kind of...
RC: Of the tapes that you've done - you mentioned that you have one work which is a favorite of yours, which is not available on tape - but the tapes you have done, do you have individual favorites, the two of you? Are they the same, I mean... Steina, what is, what do you think...

S: It's very hard. The favorite changes all the time, and then we find an old tape that we have thrown out as not being very good and we say, oh, this is now our favorite. And then of course it is. But I, personally - I always liked NOISEFIELDS very much. And maybe I like it especially because it seems to me that not that many other people like it. It's maybe a sort of a stepchild type of a....

W: Or this kind of a retarded child syndrome...

S: Syndrome, right...

W: We'll cut that out.

RC: What was the thinking behind NOISEFIELDS?

S: There wasn't really -- Woody did all the thinking on that, I think. You thought up the circle and the noise. And you set it up, set it in motion, and then just walked away, because you said, this is it, you know.

W: Yes.

S: And I sat down and I pressed the button and started working with it, which is typical of what we do. If I set something up, Woody is supposed to come in and perform it. I know very well in this case -- you set it up, I was very interested and you just walked away.

RC: Let me ask you -- If you object when we show that tape - we'll show probably NOISEFIELDS - is it alright to continue some of that dialogue over the beginning of it - or is that offend you?

S: No -- but at a certain point there is a sound image..

RC: That's important.

S: ... that relates to it. And we could talk about the sound relationship.

W: We'd have to go over the genesis of our work, but it's - The sound-image interchange is very important to us, because in fact all the control modes -- What I mean by control modes is the change of the image in time is usually kind of reciprocal slow voltage change. So it's a natural source for voltage control sound. So we've done a lot of sound -image. Kind of...

RC: Which is reciprocal... sometimes the image controls the sound and sometimes the sound controls the image...

W: (overlapping) Right, exactly. So we could generate images from sound wave forms and we could also influence sounds from the structural brightnesses of the television image.

RC: Is there -- is there one particular work we could show that would dramatize that?

S: Well, NOISEFIELDS is one for sure.
RC: Oh, NOISEFIELDS Itself?

W: There's a piece called EVOLUTION, which is a kind of a .. crucial to me personally. It was the first time when I attempted to make compositions in three parts, kind of a tryptic -- again, slipping back into the ___ structures. And that piece contains the most important components for me: which is sound-image exchange, image-sound control, and the re-timing - which means the horizontal drift. And the name was given by a friend -- I'm innocent of that -- It's called EVOLUTION and that contains all the codes of early work and so that would be my favorite. But then again, not favorite -- it really changes...

S: Important...

W: It's like in music. I stumble over works which I kind of culturally dismissed, like Brahms was totally forbidden for me because I grew up in an environment which Brahms wasn't a particular favorite. But I found out that Brahms has a great contribution to make to my personal interpretation of ... It happens to me all the time in other arts.. painting and .. In video it happens to me also -- suddenly I discover this asynchronous importances and ... But I still prefer working in electronic image because I think - not only to me - but I think it has a supreme importance, otherwise I wouldn't deal with it. But I feel it is the medium that incorporates possibility of working with really metaphysical environments.

RC: Do you think that ...

(Break for Steina to check cassette)

RC: As a necessary audience preparation for the

// (phone rings)

RC: Let's make the assumption that it's desirable that as many people as possible appreciate what's going on in video - let's say particularly with what you're doing, we know that to get the most out of painting a certain amount of education is desirable. Do you think it's required to understand the works that you're doing that a person should understand horizontal drift or get higher technological education than the average person has?

W: Again, since I have the priviledge of putting into philosophical terms -- I would say it's still -- it's the understanding of time which I personally gained from working with television. I can treat that screen as a particular time conscious or time influencible surface. That means the notion of physicality of time - time particular position or distance or space, became - from the phrase of spoken word - became a physical experience. That I can somehow progress to the better understanding of, let's say, the general theory of relativity, which is totally beyond my kind of well-educated background. I just could not comprehend that as a possibility that I could place that thought there. Now I could not even see that in fact light is the propogation of life; which is the philosophical boundary of our way of dealing with the universe. It is in fact relatively slow, in fact it's very slow as it bounds between moon and earth -- it takes a second or something. It's a whole different understanding of the space or the universe. And that was very important for me that I could do this medium and gain, let's say, didactic understanding in a particular environment. And that in fact is the light motive -- so I think that the work should be understood... or shouldn't be stood and that brings me back to education kind of environment. I'm teaching, but I feel that in teaching, in the sense of university, or students, it's a very confined environment. In a way elitist. A priori it sounds good - we work for the university, we work for the society, but
in fact it is retreated from the possibilities we had as artists - in a way working
in a larger medium of those ideas distributed throughout and maybe through legitimate
television as well, but we can indicate those transformations and so that personal
experience then maybe can become the way to the means of the codes we put into our
work- or appear in our work. and I think it also has a political implication from
this dramatic, revolutionary street work, we've become the conscious both as an
environment in fact in which the establishment maintains, you know, the orbital
surveillance -- that's in a way the place to which today there is being kind of,.. is
made secure or unsecure and it's also the physicality of this environment - arithmetic
environment which then provides the kind of environment we live in. So I would
find this very important, that we can as individuals disclose the secrets of the
establishment in that sense and try to understand what is going on on all levels.
I think that is the supreme political duty.

RC: Related to that, you've had recent experience showing your work in Europe--
do you find a response on the same level as you do around here? Is there a gap
of some kind?

W: I.. Speaking openly, it may sound arrogant, or very much unfair.

RC: Go ahead.

W: I find European mode of thinking very much involved in kind of social alignment -
in a kind of post-Marxistic class oriented understanding of society, which pays a
lot of attention to the primary relationship between means of production and
individuals, between the oppressive Capitalists and the workers. And most of the
intellectual work gets bogged down on this basic, I would say, neo-Romanticist or
post-Christian kind of level - a level of understanding of political struggles. I'm
hoping I could convey the idea that just placing these importances, these political
stresses outside of the primary level, can in fact alter the whole structure of
political meaning, of those antagonisms and all its -- I didn't say it well
Disregard that...

RC: Do it again.

W: You see, I grew up in an environment in which a regular revolutionary Romanticism
was still alive. I did infact believe in certain instances, that it is the human
conditions that can be altered. But I've given up on this particular... it is a
great sport, a great interest, a great passion, but to see it as a sense of being,
I think there are many other possibilities-- and this is just one of them. Just to
understand -- First we understood that the globe was round and became an object in
space -- Now we can locate it at least in particular relationship to the solar system
and to the rest of the galaxies. And I think these steps of understanding of our
presence is extremely important to our interpretation of being.

RC: I think I may have been interpreting you too literally. Do you see experimental
work in video as somehow helping to break down international barriers in any way?

W: I don't know, because most of the Europeans that come for example here - they see
the surface-- you know the junk, the industrial junk, equipment. They get caught in
the first level. They usually accuse us of being misled or being coopted, you know,
because they don't understand....

S: You talk about Europeans as "them", but don't they are also "us" (laughter)

W: Right. Again, it's an exchange, because -- I like the cultural background which
I inherited, but I understand American society as the society that deals with the
_______ that's different. This doesn't mean to American society as the barter system,
but it still means a lot to European intellectuals -- it's, somehow, it's kind of bigoted, no I shouldn't (laughter)

RC: Go back to that Phrase "co-opted" - in what sense would they view you as being co-opted?

W: First of all, we are of course, an institution in our own way. We are very much related to support structure, you see. We cannot in a way maintain our -- develop our environmental equipment through the selling of a product. So we are somehow very much related to you know, like funding, and that is very much again related to the rest of the values of society. We are judged at some level somewhere and we are kind of maintained -- which is surprising to me as well -- why society should maintain this kind of research. I have an explanation for that, but that's kind of personal. But this, even this particular level existed -- for existence by many Europeans is put into the dilemma of the establishment and anti-establishment, as a class conscious structure, and it's related into a co-option by American system which is in many cases viewed as a capitalistic or imperialistic -- At least I don't have that sort of dilemma. It's the dialogue, but....

RC: Do you ever feel inhibited by any of the funding you get from various government or state or private sources? Is there any inhibition on your creativity?

W: Do you want to answer that?

S: No, I don't.

RC: Is there any danger of it -- perhaps it is something to be alert for, but...

S: Yeah, but what should the danger be?

RC: I don't know, Is there any self-censorship possibly that might- that one might impose because one is taking a grant from some source that might be offended if you took some particular direction in your work...

S: There might be a self-censorship in the sense of when I get a grant, I feel that I have been really lucky, but now it's up to me to really use this opportunity. I have been granted an opportunity and that I have to use it -- that's again Christian morality (laughter). But I never know if I'm ever going to be granted again - so this is the time to use it - So I work very hard. I, actually when I do teach and get my income that way, I don't work as hard, because I cannot come home exhausted from teaching and I feel like I am entitled to come home and rest and have a nice time, because I earn my money. But with a grant you don't have that. You get very restless - you get very hunted to work, you know.

W: But it comes from your... what is your...

S: Protestant.

W: Yes, Protestant. We Catholics don't have that (laughter) I am continuously surprised that I can exist in such an environment -- in such a... That I feel sometimes that I'm truly -- been given a job to do these things with some... kind of... a return, which is - I'm here to disclose certain principles, certain secrets. Which I don't in a way convey back - because I don't have any explanation for this -- why would I be living in America, in Buffalo, doing this kind of work -- But I feel totally free in doing it, I don't in a way feel motivated or mortified by any of that. And it becomes in a way for me, a physical problem -- how to develop this environment or how to extend this environment and still be able to maintain it in the sense of repair, in sense of purchase. How to know in fact, how to have the knowledge of
having it. So the money itself becomes immediate in that, but the purpose -- I have no idea why am I doing it, physically. I know why I'm doing it mentally because I'm interested. Very interested.

RC: Um, hum.

W: But, I, this way, I don't know....

S: I know why. All societies, all cultures always granted money to serving people to accumulate knowledge.

W: I have different experience from society. I was brought up in a society which was always conscious of experiment. But it was always directed to a social need, like political, or political obligation and -- but this society, maybe I am... I don't see it, but I'm not aware of it and I'm trying to find out what is the moment in which there is an exchange, which is hard cash exchange and I would like to find or define it -- I haven't found it yet. But there must be something... but there may not be... I don't know. I don't want to witness. I don't want to testify for the free society of the United States as well. But I haven't found that validity - kind of boundaries of this pressure point, this ideological pressure here yet. I don't think it exists.

RC: That's very good. We may have pressed that as far as we can. Can we go back a little bit and pick up -- I remember what kind of technological education an audience might need.

(Dan interruption)

RC: This question I think has to do with relationship to the world of making video to the world of -- the art world. And it harps back to a question I asked earlier, what sort of technological education do you think an audience would need to appreciate your work at a beginning level at least? What kind of art education, if any, do you think would be helpful for them to have? Because to me I can only understand because I developed as an abstract painter - only understand some kinds of video as an extension of that. I can understand the possibility that people could come directly to it without any interest in painting at all and still enjoy it. I just wonder - do you have views on that?

W: I suppose. It's an interesting dilemma. For example, if you speak about abstract and concrete, in a sense, Let's say other arts, particular painting has developed intellectually -- intellectual diffraction of form or creating an alternate form. Here in video, we went from the other end in our material, since we reached for non-camera image -- was very ambiguous to begin with - It was abstract and it still in many cases is... 

(Dan interrupt -- bad airplane noise)

Retake not good Cassette ENDS