

32 July 24, 1977

C#1

Woody:

I mean the strongest point in working with video was for me the notion that time is a certain physicality, <sup>workable.</sup> There's a control mode to time. So far, in four households the clock was the most sophisticated time instrument. Now it is the television set. Even if people don't realize it, it's there in every home. It's ticking <sup>its</sup> with high frequencies <sup>in</sup> and a great precision. That is almost symbolic meaning to the system that delivers the image is in fact time based. So that means the precision for the perception of time systems - like seconds used to be sacred, even in the last century a second meant a lot of precision. Today a second is an extremely crude event. Then length of <sup>our screen</sup> ~~an oscillator~~ is about 50 microseconds. So that's how we have to view the television system being in our homes.

Woody: But then we are talking about a hierarchy of time relationships. Which in television is the hierarchy of master clock divided into chain slaved, usually, maybe many many, like 12, 15 <sup>before it reaches</sup> which <sup>is</sup> in fact your television set. Actually there is a phase shift relationship between the master clock and your received signal, but since it's independently corrected, you eventually receive the same <sup>cognitive</sup> information except in absolute time relationship it is phase shifted. This chain of time dependencies I still call a construct. It's the very essence, it's the support structure for whatever the content can be.

Jon: All right, but the construct doesn't have to be realized to be a construct.

Woody: But the construct can be <sup>come</sup> a content.

EXTRA

WOODY: ~~What would be the area? Because I'm interested in defining it closer.~~

JON: (Transcript date) 12/21 page four. You speak of this frequently through September and you make it very specific in the last conversations. So on the conversation from December 21st on page four you say:

"The computer is in fact everything." Okay. So what are its limitations?

WOODY: First of all if I say everything, that means in front of my view.

I see it as significant as in order to cross - I mean I see it as an obstacle, maybe I mentioned that before - and in order to cross that particular barrier we have to go one by one through this hole, through this gate or whatever. In a way rationalizing this as a new freedom. ~~Basically~~ <sup>ically</sup> what I see is that it is a struggle for a <sup>new</sup> definition of holography.

JON: Because when I read this I thought something very different. You speak frequently of, and ~~perhaps~~ in fact we've come to this perhaps significant point that - to bounce off this - an analog system designs its tools for a very specific function, but the computer ~~is only~~ <sup>is</sup> has no specific function. Its function exists within the minds of its control, <sup>t</sup> and not within its materiality as you put it.

WOODY: That's a second level. The first level is that I think it's a total cultural necessity, the computer. Just to overcome the computer as a myth, as a danger, whatever. A lot of concepts of computer should be kind of analyzed in a broad social sense because after all it's a tool that can be understood and could be demythified. And in a sense of craft I think it has to be analyzed since it contains all the media as I know them, all the scores of the past, <sup>in</sup> music and others. It contains, in fact, summarizes all the notational systems and identifies these processes in very tangible so to speak of course numerical way. Since we have not emerged from this numerical confinement yet in ~~our~~ relationship to the computer. That means there's this problem of the new myth of the ~~new~~ craft and of the organizing principles and of which we can re-synthesize <sup>-to</sup> in our own culture. That means I see it as a - especially the analog based - because the old notation, like musical notation of the nineteenth century or eighteenth century I found extremely unambiguous of course. It is something very precise. And in that confinement

it produced staggering volume of musical culture. Absolutely unambiguous with prolific output...

JON: Except that it seems, interestingly enough, that those scoring mechanisms are those that were contained within it an amount of ambiguity that is just staggering to us today. They were performance arts for instance, so what would happen is that Beethoven would write, Bach, or Telemann would write a score and then you have these range of embellishments that the performer had to put in. And that's on the \_\_\_\_\_ level. There's it's almost a compositional function for the performer. But more to the point, these are extremely imprecise modes if they were not to be performed, if there was not an instrumentalist ~~was~~ who would control timbre and phrasing, dynamics, the soul of the music, the realization of it, then ~~the~~<sup>ese</sup> set of codes would have no currency. They were designed to be ambiguous. They could only be ambiguous.

WOODY: But then take ~~it to the~~<sup>another</sup> extreme in which certain stages of Italian opera were written only for certain singers. That coding structure doesn't mean a confined state of art, but it locates<sup>eventually</sup> in time a particular unambiguous style.

STEINA: You're trying to compare the computer to <sup>this</sup> scoring in the last two centuries of music as being as precise, but of course it's much more precise because it doesn't leave any ambiguity. Supposedly. Or the ambiguity you leave in there stays there forever.

WOODY: Yes, it could be replayed, so to speak.

STEINA: No.

WOODY: I mean the ambiguity.

STEINA: I don't think so.

JON: Every temporal art until the twentieth century has been<sup>a</sup> performance art. There has been no temporal art previous to this that has not been performed. That has not been theatre, that has not been music-temporal arts specifically. So we are now confronted with something which maybe this is even relevant - something which occurs over time.

So that we are finally confronted with these temporal arts which find their crystallization of intention let's say in a kind of objectification. I mean that they have reached their point and there is no ambiguity as to its rendition. There may be ambiguity in its meaning.

That's another level of ambiguity.

ROBERT: Scoring becomes the matrix of performance.

JON: Well that's the old system...

(Section of tape is slightly garbled - couldn't understand easily)

STEINA: This is a typical algorithm, that ~~eventually~~<sup>took art</sup> execution  
<sup>on</sup> ambiguity, that it could be slower or faster or could be random-  
access and things like that - this is a code that the computer  
can cope with very well.

WOODY: It contains the modes I would say, ~~of~~ inversion of the written,  
inversion of the direction, it can run something backwards suddenly.

STEINA: But he killed your argument anyhow, Because what you started  
out saying about the computer compared to the scores is just gone  
now.

WOODY: I would start from a fresh table and say we have to descend into  
a binary state, ~~(SKETCH)~~ If we want to understand computers we have to  
say there is no state and there is a state. That's the material from  
which we build every discipline. And in this way we have accepted  
united in a holistic approach to every activity. Not only activity of  
art, of course it's the technological activities, it is the biological  
activities, it's even the code systems, you know - systems of lettering,  
alphabet, and DNA. We have some holistic base of common material which  
is a binary code. From that surprisingly within two decades have already  
been synthesized systems of codes which do contain all the perceptual  
analog changes because they can be performed fast enough to ~~assimilate~~ simulate  
in some cases. In other cases they develop their own disciplines like  
organization of data structures, and others. So it is independent within  
its own science but it's also related to all other disciplines. Art  
has been deadlocked into this contemporary idea in which computers are  
maybe technological instruments ~~that should~~<sup>and should</sup> not be related as freely to  
living or independent or individualistic processes of art. It's kind  
of a sharing of the establishment in a sense of a code access and organi-  
zation and knowledge, and it becomes antagonistic in the relationship  
between the acquisition of knowledge and the utility of that knowledge.

So I see it as a necessity. At the same time of course I would defend other modes, but I have no justification <sup>for</sup> of the defense of those any more. I cannot justify, the pathetic rejection of such a system ~~because it~~ seemed to be a rather easy way out.

JON: I found that a log of ~~me~~ reason for my being <sup>involved</sup> in video is involved with the fact of observation. And this is not only to observe the video system...

END OF TAPE ONE SIDE TWO

JON: So this was to me, it is still to me critically important, this medium. And it is that which justifies it to me. And what I see, perhaps that which is limiting within the computer system is that instead of observation which is a justification that we have posited all through these talks, we find ourselves no longer in observation but only in realization <sup>from</sup> of immaterial and abstract structures.

WOODY: But if you use the term observation you <sup>also</sup> have to add ~~the~~ a phenomenon - you observe a phenomenon.

JON: But it needn't be that which is - let's say that in that sense - in the observation of phenomena, that is where the two diverge. You are able then to observe fairly, <sup>certain</sup> abstractive processes of the system and that is where there might be this correspondence between the two.

WOODY: There is one difference, of course. I'm still observing the phenomenon - like image phenomenon in the sense of the computer. But at the same time the inevitable factor of binary code is laid in front of me in such a way that I have to deal with this not as a phenomenon any more but as a question of literacy. See? That means phenomena as we know it in video contains a lot of free thinking, free creations, free structuring, <sup>permutations...</sup> ~~free interpretations~~, .. it's an enormous freedom compared to any phenomenon observed through the computer. Because inevitably almost everything becomes a score.

JON: Becomes a question of language.

WOODY: Language, literacy, ability of manipulating the code, composing...

All the intuitive processes towards these articulations... Again, this is not <sup>for example</sup> where my personal talents are at all. But I find them so challenging in a way that I very stubbornly deal with them. But I

found other people which commute between code systems with such a freedom and creativity that ~~just~~ staggers me. Some people are just very good on numbers, even lingual expressions of codes - these people will be very much at ease with binary systems of computers. But I'm not one of them. But I see the necessity of dealing with it. Because otherwise I would find myself avoiding the issue in fact.

STEINA: <sup>What</sup> ~~Where~~ did you <sup>define</sup> ~~find~~ temporal art?

JON: That which occurs in time.

STEINA: And what's the other?

JON: Static. That which the realization of the art is viewed in time, it's realization occurs in time. No that's not right.

STEINA: What is a static art then?

JON: Painting.

STEINA: No.

JON: One views it in time, of course, but there is a flat-out picture...right there  
<sup>It could be argued.</sup>

STEINA: So painting's the only one that's not.

ROBERT: ~~Sculpture~~ Sculpture.

<sup>Video is temporal, right? Of course.</sup>

STEINA: That's very temporal. I was wondering where to put computer into this thing. That's why I <sup>'m</sup> ~~was~~ asking. Is it temporal, is it static, what is it?

JON: Well it's realization, it's printed out in time. That which is displayed on a monitor or <sup>heard</sup> through speakers, if it's to be audio generation, are temporal.

WOODY: That's an interesting possibility. It probably has to be...temporal.

<sup>Plus</sup>

JON: ~~Unless~~ there's a clock...

WOODY: Yes, there's a clock...

STEINA: See you were putting up like that - you talked about the interpretive and ~~the~~ temporal like interchangeably in a way.

JON: Prior to mechanized or electronicized materials all the temporal arts were in some sense improvisatory. In one way or another. \*

WOODY: But listen. It's an interesting dilemma <sup>which</sup> ~~that~~ you're bringing because is this - can argue about this image - it's temporal...

JON: But I saw this being made in time (Bart Robbett's Extended Images).

WOODY: Indeed. You saw a sequence. <sup>We would</sup> ~~that~~ say the whole structure was a table of functions performed in time. But as a single element or a single sequence, it still <sup>is</sup> of course ~~is~~ scanned. When you look

\*STEINA: So now it has been frozen.

at it on the screen it is stable. But if we understand the process, then it is temporal. But I guess if you say that light propagates, and we see ~~it~~ because of the changes \_\_\_\_\_.

So I ~~guess~~ <sup>don't think</sup> it is ~~not~~ a sensible definition to that. But there are obviously temporal arts like music is, <sup>image,</sup> ~~which~~ ~~it~~ does not exist in this form. Image <sup>which</sup> is dynamic but by its existence <sup>is</sup> suddenly translated to a pictorial static form of a photographic image in which we in fact... and that is in fact the whole content of that presentation. But in music, of course you cannot suspend sound. It just doesn't exist in the same form. We can suspend the image somehow.

STEINA: But not only the image, we can suspend everything, we can like freeze everything permanently, <sup>just</sup> like deep freezing. Because once you have a score, that's ~~like~~ absolute. It's different from this interpretive, <sup>as</sup> ~~what~~ you were saying. Scoring and scoring ~~become~~ in this case <sup>become totally</sup> two different things because computers have absolute scoring.

WOODY: How different? I don't think there is much clarity.

JON: You mean how different is the punched tape <sup>than</sup> ~~from~~ the musical score?

WOODY: Again, it probably depends on binary literacy.

STEINA: Because the punched tape is being interpreted by a machine whereas the score is being interpreted by a live being.

WOODY: But some people can read binary numbers.

STEINA: There are also some musicians <sup>that</sup> ~~who~~ can read absolutely mechanistically a score - totally like a computer. But we know it's different things.

WOODY: Everybody has a different approach to a computer. It's interesting because everybody brings the strongest discipline of his background to it and then interprets this ambiguous or unambiguous instrument from that very precise viewpoint. And it works because it really accommodates vast possibilities of concepts. As I said, I see no discipline that cannot be expressed through - or assimilated through a computer.

JON: Because ~~to~~ ~~quote~~ Woody Vanulka: "You have to bring your data structure, let's say you bring your camera obscura with you on a piece of paper punch tape." That's not the same thing.

WOODY: Why not?

JON: ~~It's not~~ <sup>But</sup> You see, you speak of the computer as everything. That there is now no longer any need for analog specific devices and yet to use the computer in the various ways you <sup>may</sup> use it is inevitably going

<sup>DICTATE</sup>  
to ~~change~~ your world-view immensely. I mean you speak of it as that which through its binary resolution, can resolve a simile - everything - off and on.

WOODY: As long as it contained the ability, your ability to organize data structures or whatever, in order to model the particular instrument you want to perform, or the particular concept you want to perform through this system. You have to be equipped or it has to be given to you - through software for example. You have the software program to create for that time through which you realize this particular model. You have to bring it to the machine, or you have to construct it with the machine as a program.

(can?)

WOODY: In a way, the computer I think can't escape this finite account. Again, it's because I'm trying not to nail myself down into a serious statements which I would have to eat all the rest of my life. But I found out reading ~~Wells~~ Nekes' article in Afterimage that he still finds this discipline of <sup>film</sup> camera extremely challenging and he brings certain new observations which should have been done many decades before. And that interests me as well, but I think computers are different - <sup>a</sup> <sup>animal</sup> - totally different systems so I think I'm <sup>totally</sup> sold on the possibility of this being permanent. Not being a tool for one century. I think it will survive, but I may be wrong. It's an interesting dilemma.

Since I cannot foresee what the next tool would be, that's a problem.

In video I could still understand there was a computer at the end somewhere. Because I was born into that era of the computers somehow became sort of term. <sup>a</sup> <sup>This</sup> ~~a~~ common mythology that there is something after the knowledge you have. And now I don't see through any instrument - I don't see ~~the~~ next medium at all.

STEINA: Do you see computer being able to write their own algorithms?

WOODY: That's all kind of automatic of course. It's all the modes - how it's behaving, how it's progressing - I think it's self-evident.

STEINA: What? That they can?

WOODY: Systems can eventually acquire a lot of possibilities, design certain parts of it by its own accumulated experience. <sup>which,</sup> Of course



It has to be organized, reorganized. It's a total dialogue between us and the machine. But I don't see ~~the~~ <sup>this</sup> machine, I don't see it being replaced by anything greater. Even if the technology advances it's still the concept of a code as being superior to let's say a certain value located in material or value located in experience. I think it's inevitably the most permanent...it can assemble itself into infinite libraries. It can actually exist as man-made contribution to the universe.

JON: So this may be the technological ~~status~~ stasis of our culture then. You <sup>are</sup> suggested to us.

WOODY: But it is not technological any more. It <sup>only</sup> resides in technology, but the problem I think is just cross-cultural. Which many people still <sup>are</sup> don't separate. They think computers are technological systems which they are by their physical existence - but by the content ~~that~~ they handle or ~~that~~ they can handle I think they just escape this narrow definition of technology.

JAN: ■ Do you have any specific reasons why you think that people can't accept the computer?

WOODY: I have only one simple idea about it. It is very difficult. It's very frustrating in the sense of acquisition of that particular craft...

JAN: Because at the level it ~~is~~ <sup>is</sup> at now it's only accessible to people who know the technology, but what about the home computers?

WOODY: There are at least two basic levels. One is that you accept computer as a social utility and you incorporate knowledge that exists - languages or whatever - and you never examined the system as a machine. You only examine it as a response, culturally responsive apparatus. The other level is that you really examine analytically how the code is assembled and how it's moved within the machine - how it's translated from one function to another, how it's in fact rationalized on its primary level. That is today practiced only by technologists ~~who~~ <sup>that</sup> design the system or improve, but it's being rapidly obscured by packaging this lower level into higher systems. Already on the level

of industries. Like ~~buy~~ structural sets which become property of a particular chip, particular enclosed system - black box. I think that the obstacle is to translate <sup>this</sup> ~~the~~ necessity of dealing with this <sup>progress,</sup> from the industrial domain which is the competitive <sup>into</sup> a cultural - like synthesis of art for example, or analysis of art. That transition is fascinating to me because <sup>as</sup> I observe it this transition is natural <sup>only</sup> to certain people or to a certain generation. Let's say <sup>within</sup> ~~my~~ own generation it has assumed <sup>rather</sup> the role of a necessity and a duty. Different people react differently. Some <sup>people</sup> would probably choose to work with computer ~~e~~ on the primary level of appreciation. But I found out if you work on the basic level <sup>that</sup> the punishment you have to take in order to learn about the system is greater than the esthetic satisfaction you get. So I think this proportion has to be dealt with or may ~~never~~ appear again. It's possible that the industries, <sup>and</sup> computer sciences will remove that necessity from the ~~the~~ general public forever by piling together ~~was~~ systems that are purely cultural utilities with no relevance to the organizing principles <sup>within the</sup> machine. Maybe I mentioned <sup>that</sup> ~~this~~ before, I think it's the only period in which people like we can be concerned with the workings of the machine of that kind for two reasons: One, it's still visible, <sup>we</sup> can still understand it because it's not complex. Secondly it has to us some level of meaning. Next periods it may never become relevant if ~~we~~ understand it or not because it may already be transferred into a whole different cultural level. The Bible existed throughout the centuries and it was first - as you know in Europe during Medieval time was forbidden to read for the general public...

JRM JON: It was forbidden to translate it.

WOODY: Even read. I think in a certain period it was a forbidden book, period. It was only for the establishment to perpetuate the unity of doctrine. Because people could always interpret Bibles in very ambiguous ways and that could even lead to heresy, as it did. Then the Reformation brought this new ~~a~~ demand on the subject. So suddenly the book which was already packaged as a doctrine has become source of analytic thinking. So maybe I'm wrong. Maybe the computers, after being packaged ~~and~~ and institutionalized or status quo...it suddenly

became revised. I see in kind of a strange way that kind of system.

STEINA: or to quote somebody else, (?) The printing press was invented to print the Bible and then eventually also it printed other things. The computer was invented to do one thing and eventually...

STEINA: Isn't the algorithm just the thing that says "is it done, is it done, is it done, yes, no, go back, go this way"?

WOODY: I guess we all somehow understand it, but we understand it in different ways. I think the algorithm is a particular sequence of events which on their own signify let's say some development.

JON: A formal structure.

WOODY: Yeah, or it could be formula, or it could be a loop, cyclical... ~~is~~ or it could be simply a mathematical equation.

JON: I thought it was the formal structure of the steps necessary to <sup>perform</sup> ~~for~~ the operation the operator had in mind.

WOODY: I think it comes from the mathematical sciences in which certain formulas are actually algorithmical. But algo is a sign, is that so?

As I understand,

Algorithm and program differ from...let's say program is the specification of the whole operation from the beginning to the end. And algorithm is usually a function ~~of~~, or it is a sub-program which contains a particular arrangement which makes a unit, unified statement on it's own.

JON: It's one portion of that program.

WOODY: Like increment certain kind of number is expressed by a certain algorithm but it could be sub-part of a program which ~~could~~ then doesn't have such a clear...

JON: All right. So if I were to ask the computer ~~to~~ to count from one to ten...

WOODY: If you would construct an algorithm which is like increment and test...

JON: What happens is that you would say "computer, count one" and then it will say "check if ~~it~~ <sup>this</sup> is ten" and <sup>then</sup> if it is not go back and

increment to two...

WOODY: Exactly. <sup>What</sup> You just described <sup>is</sup> a loop.

STEINA: A typical algorithm is if I want to go and pick up this cup. You have to make a program for it so the program is "move to this cup" and then it is "have you done it" "no", "have you done it?" "No", "have you done it?" "No"...And now it's "yes". Program ended unless there <sup>-and</sup> is a comment to me to take a jump, or branch. When I <sup>have</sup> reach this the <sup>I go in</sup> ~~is~~ some way like that. And the branch goes to another program that says "this way" or whatever.

As I was telling Woody yesterday that's the difference between the computer and ~~we~~ us, that we are <sup>in</sup> a continuous state of writing algorithms, ~~we~~ everything we do - whenever we finish one function we go to the ~~the~~ next one and we create them. Whereas the computer they <sup>in</sup> all have to be specified ahead of time.

JON: So that there seem to be a finite number of instructions <sup>that</sup> an algorithm may have.

WOODY: ~~Oh~~? Then there are algorithms that are continuously being found. Like I'll give you an example. This \_\_\_\_\_ algorithm  
....

JON: Hold it. So you speak now of algorithms as being something in some sense natural.

WOODY: Evolutionary to computers, yes, very much. But suddenly let's say, algorithm <sup>which</sup> has no meaning to the other systems or in other contexts - came into existence in the context of a computer special-task performance. Like what we call hidden line removal, that means if you specify an object for <sup>the</sup> a computer to program, there has to be specific instructions, what lays in the proper what, the hierarchical depth structure. And then there's a program which takes care of these priorities and removes lines which are not supposed to be seen. And there is a special algorithm to do that which is developed only for this particular purpose.

JON: Why is it that it seems that the processes that are acquired here are very simple processes? You see if something is at such and such a state, for instance. Correct?

WOODY: Say it again?

~~JON:~~

JON: That what the computer does it — say e if this line is at this state, and if it says it's not, to drop it out completely. Why is this considered to be a special distinguished algorithm?

WOODY: Because no other task needs it.

JON: The principles of the algorithm are common, seemingly, to <sup>many</sup> ~~other~~ algorithms, *if not all of them.*

WOODY: Not necessarily. Because it acquires a name. Usually name <sup>They</sup> these algorithms by the names of the inventors of the algorithms. If you open any graphic languages book, you'll find <sup>a</sup> ~~this~~ very evolutionary perpetuation of <sup>this</sup> ~~the~~ tradition of a human contribution to the bank of knowledge through assignment of algorithms to <sup>particular</sup> persons <sup>they</sup> ~~who~~ maintain <sup>that</sup> ~~them~~. That's also, compared to learning and teaching, the contribution to the bank of algorithmical expressions of culture may be the culture <sup>credits</sup> ~~critics~~ of the future, or near future. People suddenly would establish themselves as artists or -----. That's correct. Which means a bizzarred kind of twist from pure ~~ly~~ the biological manifestations of art to binary-specified or algorithmically specified art.

END OF TAPE

E. H. W. A.

WOODY: Unfortunately I have a lengthy answer. First of all, I was interested in video because ~~video~~ it was a phenomena that in a way did not ask these questions. It was a phenomenon that could have been done in a group; because there's no personalization of control yet. It could have been done in team; ~~because~~ everyone <sup>body</sup> was in a way perceiving with equal respect. The triviality of it was ~~very~~ important because that's sent through a feedback, which is a system performance. Suddenly these relationships were minimized. Of course you could also say that it was a certain degree personalized by certain set of choices. But as a phenomenon, to observe this was beyond what's called... aesthetic appreciation. It was simply a much stronger urge. In a sense of a computer it's about the same. But what I'm trying to find <sup>out</sup> are the inner-~~most~~ modes, which, again in a way the in a feedback. In which the system would perform or ~~I would~~ in which I could observe these inner modes of ~~some performance~~ <sup>sub-performing</sup>. That's why again...from this personal...<sup>after</sup> video phenomena we went into specification ~~in~~ <sup>of</sup> video <sup>in</sup> ~~on~~ kind of a more personal basis, in that moment we ceased a teamwork. She cannot work in a team once it becomes a controllable tool. And this stage again, this is a team work. In fact I haven't produced a one piece of video except a few test programming. Most of the other people they do actual work because they find some reason for working with it, ~~see~~. I have none. All I'm doing, I'm trying to find this particular mode, feedback loop in which I could observe and indeed \_\_\_\_\_ control it. But in the next stage it will probably become a personal tool of mine, as other people's when suddenly the confrontation of these questions will come. But I have always managed to avoid these questions which seem to be <sup>rather</sup> moral, or ~~rather~~ moralistic, or of a nature of a struggle between the creation and material and...so I don't know.

STEINA: See, it is like image and sound ha<sup>ve</sup> always been very distant through <sup>out</sup> ~~our~~ history, they have been very distant, different mediums,

and with moving image it started <sup>being</sup> ~~getting a little~~ closer because it was an image in time and there have been a lot of attempts made to make moving image into film. Video came already a lot closer to it by being instant like music is. That whatever you make you instantly hear back, you can feed back to it. And ~~here~~ video brought with it the same things as music has: the group performance, the improvisation; But also there was a ~~yearn~~ <sup>yearn</sup> for a score-making -- because that's where music <sup>always</sup> is at its highest -- as a composition, as a score. And video couldn't do that. Now, that's where computer comes in and I don't know...

WOODY: It's too clear, it's too clear a model...

STEINA: ...it's clear... but...

WOODY: What you are describing is indeed an evolutionary process of the tool, you know?

STEINA: Yes, but in that way ~~video~~ <sup>visual</sup> has always been so envious of sound, of music, and has always yearned to join that media.

WOODY: ..to disclose. Because the music is much, maybe structurally manageable, of course. So that might have brought the emergence of score in music in such a mastery. But I'm <sup>ed</sup> ~~interesting~~ in observing the phenomenon much more than any creative process which would be in fact culturally defined materials. That means your question is the same as Jan's. What is in fact the cultural placement of this activity or image within the whole culture. I cannot refuse to deal with these things. I don't have to in a way be... I know other people who do it like Grauer, all his life he is trying to define ~~the~~ structure as a definition of a cultural product but when you ask him "hey what is the result, what is the composition, what idea does it carry?" he cannot answer. I guess it's not up to us to define the cultural content... we can try, but...

JON: You know, the thing that intrigues me about these tools is the fact that in a sense they're objective and they're not cultural. That they exist outside of culture, to a degree they're automatic in that they will operate on their own. That they will carry out a process that you can to a degree specify or set up the parameters of it, and that these things exist outside of culture. Within that cultural intervention that exists ~~when~~ in the construction of the particular machine...

(side one ends)

JON: ...esthetic creation, content viewing, they're all the <sup>thing</sup> same in a way. That there seems to be an implied and to a large degree fairly well-stated attempt to...to relate these modes of esthetic to these things ~~which~~ that are real, which are illustrated and specified to a degree by this equipment. And this has to do with the range of possibilities for looking at, process or phenomenon or whatever you did and some other people <sup>are doing</sup> ~~did in video~~. So there's <sup>is,</sup> this kind of cohesion that's there but it's only sparked by the fact that we have this hardware. And now we have this machine, the computer which will do almost anything if it lies within its parameters. And the hardware is no longer a problem, the problem becomes the software, which means that in a way you're in the position of having <sup>almost</sup> to define the phenomenon under investigation. at the same time as trying to observe it and that puts you in maybe a <sup>fruitful</sup> ~~critical~~ position, maybe not. But it's certainly a difficult one. And it's potentially a very creative situation.

WOODY: But let me go back to what Grauer said which was -- maybe we should be formalists, because it's really the most difficult position to take. Because if you say that the tools around us provide naturally structures ~~inside~~ fact, and the computer is the tool which is the most open or least defined and then the structure you build in becomes



the relevant one, then I think it's the perfect tool to exercise formalism. But at the same time it is part of the evolution which is natural and any product being assembled through this tool...

JON:...can be seen as natural...

WOODY:...can be seen as natural, or naturalistic. And I think this is a dilemma in which there is a total violation of these natural, or naturalistic processes towards the intellectual one<sup>in</sup> which formalism is supreme, in a way. It ~~Maybe~~ more ridiculous, maybe not misunderstood, it may be unrewarding, it may be unsellable, it may be asynchronous to the rest of the art, but I guess it is the highest exercise of any duties of us. Yet so many of us, including myself, I wouldn't be able to take a stand <sup>as a</sup> formalist. I would not be able to explain myself...I do~~n~~ not believe in form. <sup>because</sup> Form of course indeed is a content and it presents an idea which I would have to defend, and I don't have those ideas to be defended. So I guess it is the most difficult position to take. I think some people do it, like Tony is trying to in a way define <sup>a particular</sup> formalism as a school of thought and activity.

STEINA: So what is the formal today? in arts? Is it formalism or naturalism or hybrid? How is the world oriented toward art right now?

WOODY: It depends what we all understand <sup>by</sup> ~~as~~ formalism.

STEINA: Victor was saying that he thought the world was coming back to formalism, away from naturalism. And I think it is formalism that reigns now. I find people very much down on totally emotional expressionism... in art.

WOODY: Why do you think emotional expressionism has anything to do with formalism?

STEINA: Okay, good. Define formalism.

WOODY: We have to create this term, or interpret that term of formalism in our own minds. I think formalism is always to me anyways, the least natural to my own mind. Or something that I cannot reach. And I guess formalism must be

defined in other people's minds somehow similarly. Because you have to make a special effort to violate your naturalism to create a formalistic work and defend it as the most artificial. Because what's natural...the anti-pole to natural is artificial. So the least natural is the most formal.

JON: It is a specifically constructed framework that is, comes, it's a system ~~that comes~~ of ideas that is constructed by the mind of the maker, unlike in some sense naturalism which is investigating some properties that are outside of the maker.

WOODY: Construct it <sup>or</sup> and defend it. Put as the content. You can never fall back on anything.

STEINA: All right, so ~~there~~ it has nothing <sup>to</sup> do with rationalism versus emotionalism or any state of mind or anything. It has to do with artificiality versus naturalism.

WOODY: As I say, if we divorce ourselves from what we are as part of the nature, as living beings or as societies <sup>ies</sup> or colonies, if we say we are deep individuals, or individualistic beings which have their own synthesizers in their own heads then we are entitled indeed indeed to perform formalization of such a process. I don't know. <sup>It depends</sup> How would you define it? That's what I understand by it. And also if you take people like Grauer has, taken like Mondrian. Of course you can apply his theory because Mondrian's work <sup>was in</sup> ~~was~~ a way formally defined as least naturalistic.

JON: Except that Mondrian was always representational in a way. He always kept that. And he went back to it <sup>in</sup> ~~in~~ the end of his life. But he always used those squares as a kind of direct representation of some <sup>kind of</sup> essence or whatever... rhythm or whatever that he saw.

WOODY: ...space, which is almost object-like treatment of squares

JON: So Mondrian's a bad choice. But...

(break)