CAMBRIDGE CYBORGS

We are a group of artists, engineers and scientists in the Boston/Cambridge area who have formed a company called Cambridge Cyborgs. Our purpose is to make the concept 'cyborg' and its implications known.

As human intelligence extends itself more and more via electronics, people will be able to use little thinking machines, or electronic companions, to perform a variety of tasks for them. It is then only a step to cyborgs: cybernetic organisms, men with machine attachments which monitor, modify, or take over bodily functions. We use the word 'cyborg' to designate not only the man but the machine attachment itself. Each is actually just a part since the true Cyborg is created only in their combination.

We are manufacturing cyborg attachments for commercial distribution and we are planning cyborg exhibits for art shows. At the present time we are primarily involved with the type of cyborg which monitors some internal physiological activity. It gives you immediate feedback of changes in the activity being monitored. Your increased awareness of these changes allows you to gain control of the activity. With use, the device becomes an electronic extension of your central nervous system.

Some physiological activities related to physical health which can be monitored and changed are blood pressure, body temperature, and muscle tension. Those related to emotions and states of consciousness are brain waves, emotional arousal (skin resistance), and the electrical field around the body.

How feedback gives control can be illustrated by the Alpha Cyborg which allows you to control your states of consciousness by monitoring your brain waves. There are four distinct states of consciousness in man which can be monitored in terms of his physiology. These are waking, sleep, dream, and the Alpha state. The Alpha Cyborg filters out the Alpha frequency from your brain waves, amplifies it, and displays it as a modulated sound. This feedback lets you know what thoughts or feelings are leading you in the direction of the Alpha state and which are not. The Alpha state is one of profound relaxation and yet the mind is quite alert. It is a sort of first step towards any inward experience. It has been theorized that just as sleep and dream are natural states necessary to relieve stress and fatigue, so is the Alpha state natural, its function being to relieve deeper stress and to allow the consciousness to renew itself. Once you have knowledge of the Alpha state, you have opened doors within your mind which perhaps you did not know existed.

Through the use of bio-feedback equipment, we are learning that the mind and the body are not separate in man. Physiological functions that for centuries were thought to be beyond conscious control can be within our command. The overall effect of the use of these devices is not known. Instruments capable of measuring physiological changes (the electroencephelograph, the polygraph, the electrocardiograph) have been confined to use in hospitals and laboratories. Only as people begin to use machine attachments and to realize the possibilities in man-machine combinations will the social impact of cyborgs be felt.

VIDEO CONEXION

THOUGHTS OF THE VIDEO CONEXION

It is the responsibility of REVOLUTIONARY MEDIA groups to create a new life through a medium, rather than to duplicate the old one with a medium.

Experiment is a major prerequisite to any Revolutionary Art, merely to document Revolutionary life is not enough. That is characterisitcally the goal of the 'Pig Media,' usually occurring after the fact, usually attempting to reproduce the fact, and generally seen to be counter-revolutionary. Changing the Media from its present situation is revolution.

To build a new society from the framework of the old. Theme of the I.W.W.

> One Big Common Carrier major goal of the V.C.

GEOFFREY CHRYSLER

There has been a change in economic thinking lately from the gold standard to the energy standard. However, the true standards of wealth are human intelligence, human energy and energy from the sun. Men are now realizing under the energy standard that solar energy conversion machines will make an amazing new world but without the intellect of men these machines will never be built and without human energy the intellect is futile. Youth possesses the energy and the intellectual initiative. The men who now control the economic processes are fully in the grasp of the Neolithic culture process where tremendous profits are being made in the manufacture of instruments of death.

Excerpted from The Enduring Past is What Prevents the Future from Being Made Durable.



What did you like the most in AC/DC?

NAM JUNE PAIK

Dear Ira and Beryl ..

we enjoyed your video demonstration at Cal Arte ... especially show shine man's monologue by Feople's Video ...

Foul Valery mer or so said that there are only two poles in poetry ... abstract and remantic) and postry is swinging between these poles like a pendlun.... Do you think, that we .. fafter three warr and 4 technological break-throughe. ... found one more poles ... (that

was in my head watching your show) ... and with all new mannipulative pormibility in the time-parameter of video tape (eg., feedbacks, instant or delayed palybasks, loop, speed-changes, and sync pulse and reanning mannipulations) etc etc..) ..did we find a new pole in TIME # besides the one way flow of time from Past to Present and future ??? That we never have freedon, but on illumion f freed ... and . inail illusion is freedom and vice verna... all this fateful that comes from this it..

with thir comp insted rentiment (a right of) old man) I am remaine you for the reprint, of an ill-fated old paper , which was printed to be a flier at my 1567 February concert with Charlotte Boorman ... In that night of Opera Bextronique, we ended up in New York's now famous asses: "Indecent supposure" case ... long long time ago before "hair".

Time goes fast .. since Li Tal-Po ..

Accerelation of time a la Toffler is a mythe ..

I hope Time goes obliquely ...

neither fast , nor slow ... nor "rerun" ...

As dipe Sycle of you and frunk Gillete demonstrated, Time puraplease, closit correct Eighth Error, Joh lags said so.

AC/DC, Heathcote Williams' new play, opened on February 23 for a limited run at the Chelsea Theatre in Brooklyn, N.Y. The story interweaves Williams' comments and reaction to our Media culture with an extensive use of video. Presented as a piece of theatre, the play starts on a high energy level and stays there throughout the performance. . . as five actors representing a combination of astral freaks flash on their feelings and interactions. Certainly three new epithets have hit the media nunity..."media rash," "media turd" and "media sludge." Although the acting and language create and sustain a series of verbal overloads, the anticipated use of video is generally unsatisfying. So, Art Gimberg and Skip Sweeney of Video Free rica, who created and operate the video elemen

How was AC/DC proposed to you?

AC/DC ... THEATRE VIDEO

Well in a way, we proposed to them. We've worked with the Chelsea before, and we thought that here was a chance to explore the video medium through this play. This past December, we read the play and thought that the way to do it right was with lots of video delay, lots of live video action from different camera points of view, and lots of feedback to illustrate another timespace dimension. The final director's concept was more traditional, and we were relegated to being the 'cosmic wallpaper.' We wanted to explore the relation of the live actor to video, so this was a great disappointment not to be able to do so. Equipment delays played a heavy role here, since we didn't get the equipment until the last moment, and it was to act as a bridge between the live actors and the video medium. So it was impossible to have the video working while rehearsals were inprogress... which was where the creative video-actor would be turned on to being amplified through video. But they wanted the total attention and we ended up supporting them. In a sense, we were considered a distraction. However, we put together three one hour tapes for use in the show in a couple of days.

Well, the end. Feedback is the window into the fourth dimension, which we felt would be perfect for the last ten minutes of the play. Here, we did go far out with it, especially when the lead actor blows his mind, and a feedback series is shown on all tors. Also, when one of the characters speaks of schizophrenia, the use of the live video image, shown in different points of view is very reinforcing. . . it amplifies the information beautifully, the first act's use of video is basically an overintensified sentinel surveillance system, which is a pretty low key use. Perhaps the most far out feature of the play was the creation of the most elaborate matrix of live, feedback, and delay system. It's a 6 x 8 matrix, with minimum loss over 135 feet of cable. Inputs are three cameras on stage plus one in the control room, an SEG used as an input, and three running VTR's. We superim through the SEG box into monitors on stage. It's a passive switching system where any one of the inputs can be put on any one of the 18 monitors. In terms of potential, we ocassionally use the maximum, such as during an epileptic fit by one of the actors when we use a heavy mix of violence images taken from all kinds of tapes, films and photos. In the final analysis, we plugged video into the theatre production in a way like a light designer does. It works moderately well, and now we want to go further. So we've been thinking of writing our own play, and at this point, we have a lot of thoughts along these lines. By the way, we would like to thank the general alterate video community in New York. Everybody was cooperative, and we felt that had needs arisen, we could have gotten the use of many tapes, equipment and help. We ended up using tapes from Global Village. We got a good "deal" from CTL electronics, even though they didn't provide technical support for their stuff. Jackie Cassen, Peoples Video Theatre and Raindance offered lots of good tapes, but we weren't able to use them. Lee Kaminski and Sandy and Jim Video Access have been great, too. They are helping technically run the show. . . they came around to help right when we needed that physical assistance. So, dissension non-withstanding, we just have a sense of being in a 'family.'

PAUL SILBEY.

LOUISJAFFE

An Appeal to the Wandering Eye

There is a malady which ruins more tapes than all technical malfunctions put together Somebody has just shot a half hour tape of, say, a rock recording session; and after all that is a very hip subject, and there will be music on the sound track. But if the photographer had the wandering eye I can't even watch it.

Somebody comes into a situation with his fantastic recording device and prints out his vision of the situation. So often his vision consists of a constant casting around for something to see. He is afraid to settle on one aspect of the situation, one operation, one detail, and just watch it and let it develop. He fears that by letting the camera's vision simply rest on one thing for a period of time he will miss something vital going on somewhere

So I am watching the screen and I see something like this: A sweeping pan across the studio in wide angle (burely enough time to make out that there are musicians standing around with instruments) going into a rapid zoom into an out-of-focus close up. As the focus is pulled in, the picture resolves into someone's hand runing a guitar, just as the camera pulls away zooming back into a semi-wide angle of someone bending over doing something to an amplifier. As he stands up the camera moves on this face comes into view just as he goes off the edge of the screen). Meanwhile, the camera zooms into a telephoto of fuzzy hair and two eyes, while all the time the tuning of the guitar which was seen briefly early in the sequence is heard off screen.

I appeal to the wandering eye-show me that first wide angle shot of the studio long enough for me to register what kind of a room I'm in. Take it in a slow, slow, gliding pan, and take a leisurely zoom up to that guy's hand; take time to gradually concentrate my attention on this closeup detail of the general scene I just saw. Pull the focus if you can while you are zooming (slowly) so that when you reach that hand tuning the guitar it will already be in focus. And now that you have this beautiful, precisely-framed closeup of the hand, STAY WITH IT. Just hold the frame on this simple scene and let me see his fingers turning the tuning keys while my ears hear the pitch of the notes changing. Then at last knowing that it has been long enough for me to really see the gesture, pull slowly away.

Probably you stayed with the tuning scene long enough to miss the guy bending over his amplifier, but that's all right, it doesn't matter, just watch the image panning through your finder, and let your next moves be shaped by what comes into view. If an out-offocus face suddenly comes in on the right side of the picture SLOW your pan gradually while pulling the face into focus, and once it's in focus, STAY WITH IT. If the owner of the face up and walks across the room, follow him and do a controlled zoom while changing the focus so that he stays framed and sharp as he walks.

Granted, this is a specific shooting situation, rather low key, and this is a specific way of responding to it with tape. Sometimes you have to break the flow and reorient yourself suddenly to catch a new development in the situation. But please, for my sake, don't just let your eye wander. Pick something, hold on to it, and let me really see it.

