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ST. OLAF INFLATOS

INSTALLO ON LACKEMASE, CHICAYO

DAN SANDIN FROM THE UNIVERSITY **SPACE** OF ILLINOIS, CHICAGO CIRCLE CAMPUS, WILL EXHIBIT IN SPACE IN THE COURT YARD OF 2700 KNAUSS **SPACE** COLLEGE OF GEN. STUDIES Thank you for your request for information etc. I think an info request of this sort is a very valuable approach for radical soft ware.

My response is in three parts. Part One is about Videopolis in collaboration with Anda Kogsts (under separate cover). Part Two is a description of events with Phil Morton at St. Oldf college, and Part Three is a description of a machine I have been designing (the Video Image Processor).

I hate to write, if video and audio tapes are OK feedback let me know.

Hi.

PART TWO

Phil Morton and myself did a Video Inflato event workshop at St. Olif College in Northfield, Minnesota, October, 1972. The event was done in an inflatable structure drawn



The equipment was rearranged for different functions such

as:

ר (ר	showing	tapes	(group)
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- 2) showing tapes (individual)
- 3) work with I.P. (individual)
- 4) performance with I. P. (group)
- 5) editing
- 6) sleeping
- 7) eating
- 8) talking
- 9) anything else that happened

IMPORTANT

Living in your own building...make your own rules. The atmosphere would have been very different if it was performed in a standard class room. ECONOMICS

Money came from St. Olif media center (to train people in the use of T.V. stuff) and from the para college (an experimental college).

As a whole, we probably broke even. NON ECONOMICS

Human return of energy was very high; people had a good time, learned alot, got zapted--

I think a playback environment for V.T. alone is not very interesting, but a play-environment with good doing-personal and electronic connections--where several things can go on at once is interesting. Ad hoc high density short term dissolvable event seem more important than ongoing V.T. playback at least for my experience as a video doer maker. But maybe this is not as good for the V.T. watcher.

PART THREE

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THE VIDEO IMAGE PROCESSOR

In brief, the Video Image Processor (i.p.) is a patch programable general purpose analog computer optimized for the real time processing of video images. I have been designing and building it over the last year.

The IP accepts naturalistic images, modifies and combines them in complex ways, and displays or stores the result. A television camera, film train, video tape recorder or similar device can be used to decode moving images into a form which the image processor accepts. A television monitor decodes the signal and displays the modified image. The processor itself is composed of modules which do specific modifications of the image. The instrument is programmed by routing the image through various processing modules and then out to a monitor or tape recorder. The modules are designed to maximize the possibility of interconnection, thereby, maximizing the number of possible modifications of the image.

This description of the image processor may sound like a sophisticated special effects board in a television station. There is, of course, a similarity. A good analogy would be to compare a desk calculator to a general purpose digital computer.

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Both the desk calculator and computer can add and subtract numbers. The computer, however, can also store a program (which it executes in time) and more importantly can modify its program based on results of the program. The image processor has, in addition, the power to modify images, the power to execute a program in time, and more importantly to modify what modification is done based on the content of the input image and the program. The image processor is a general purpose machine and the special effects generator is not.

Another level of description of the I.P. is to say it is a member of a special class of educational machines called design tool learning machines.

A tabular comparison of teaching machines and design tool learning machines follows.

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Learning Machines

MOTIVATION

The user is able to do what he considers to be something worth doing. A problem or project of his own choice.

DIRECTION OF ACTION

The user acts on the machine by structuring it to do a task. Teaching machines usually depend on aversive external rewards, i.e., grade threats of failure to encourage user to use the machine.

The machine directs the user along prescribed paths with little options left to student discretion.

AVAILABILITY OF STRUCTURE

The structure of the machine is accesible to the user. This allows him more control of the learning situation. The structure of the machine (the program and logic behind the program) is inaccesible, contributing to the users lack of control of the situatio

Teaching Machines

Learning Machines The user is in control. He may take as long or as short as he likes. May investigate an area to any depth.

Teaching Machines

Although the user may go along at his own pace, he cannot skip sections in which he is not interested in (and come back to them later), and can usually not investigate one area to much greater depth than other user's executing the same program.

PROBLEM OF VARYING LEVELS OF COMPETENCE

PACING OF USER

Because of its generalized structure, users of varying levels may interact with the machine profitably. Must have separate programs tailored to various levels of competency with

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a tentative placement of problems.

REPERTORY OF STUDENT RESPO	DNSES
(input to machine)	
Large and varied, including	Limited to a small number of
keyboard, joy sticks, bio-	specific operations, i.e.,
logical and environmental	pushing one of 5 or 26 buttons.

sensors.

Learning Machines (outputs of machine which respond to student's action) Immediate, multi-sensual, unambiguous, and varied. Includes colored kinetic

events, tactile audio and FNVIRMENTAL FELDBACK

The machine can accomplish many tasks and can be restructured to accomplish new tasks under user control.

The machine is capable of sensing small variations of input. (much information is carried in small variations of intonation, gesture, etc.)

Teaching Machines

Often delayed and usually limited to correct-incorrect with perhaps some additional information or a program branch.

The machine is usually designed for a particular subject and requires reprogramming by other than the user, to new things.

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Only the teaching machine is sensitive to gross ordering of input information.

NEW ONE

FEEDBACK

GENERALITY

At yet another level the image processor and allied machines are designed for the express purpose of modifying consciousness, increasing awareness, centering, learning (non linguistic) etc. Machines whose primary function is this consciousness modification are not new. A musical instrument is a good example of a machine designed to modify consciousness! (What else is it used for?)

And finally at the most immediate level it has been a joy working with the instrument; I have learned a great deal from it.

The image processor is not finished but it is functioning. It is still restricted to black and white and not many input devices have been built. Expansion is slow but steady.

For more information I would recommend ordering copies of the video tape instructions for the image processor. Two $\frac{1}{2}$ hour tapes cost \$20.00 per tape or bulk tape +\$5.00 per $\frac{1}{2}$ hour. Order from:

> Dan Sandin University of Ill. at Chicago Circle Department' of Art Box 4348 Chicago, Illinois 60680

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