

THE VASULKAS:

TAPELIST UPDATE  
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FROM 1979 TO PRESENT

CANTALOUPE, MAY 1980  
TIME: 27.50 MIN.

THIS TAPE IS ABOUT THE STRUGGLE TO DEFINE THE BASIS FOR COMPUTER CONTROL OF A DIGITAL IMAGE DEVICE, FOR A DESCRIPTIVE LANGUAGE AND NECESSARY PROGRAMMING LANGUAGES.

THE DEVICE WAS DESIGNED TO BE LOW RESOLUTION/ HIGH SPEED FIELD BY FIELD OPERATING TOOL. ITS MICRO-PROCESSOR BASED ARCHITECTURE IS A CONCEPT WHICH CAN ACHIEVE TRANSFORMATIONS BETWEEN TWO IMAGES AT VIDEO FIELD RATE, PIXEL BY PIXEL (PIXEL = PICTURE ELEMENT).

THE TAPE CONTAINS SEQUENCES RANGING FROM THE FIRST ARTIFACTS OF THE MACHINE TO MORE PROGRAM DEMANDING IMAGE TRANSFORMATIONS. FOR EXAMPLE, WORKING WITH DIGITIZING AND STORING THE IMAGE IN MEMORY, GIVES THE OPTION OF MANIPULATING IMAGE IN VARIABLE TIME. ANOTHER SEQUENCE (THE ZOOM), SHOWS THE MICROPROCESSOR AT WORK AS IT MUST RECALCULATE THE POSITION OF HORIZONTAL AND VERTICAL ADDRESSES FOR EACH POINT WITHIN THE VIDEO FIELD, IN ORDER TO ACHIEVE MULTIPLICATION OF IMAGES ON THE SCREEN.

CANTALOUPE WAS MADE POSSIBLE WITH PUBLIC FUNDS FROM NEW YORK STATE COUNCIL ON THE ARTS, AND IS A PRODUCTION OF THE TELEVISION LABORATORY AT WNET/THIRTEEN.

ARTIFACTS, OCTOBER 1960  
TIME: 22 MIN.

"ARTIFACTS" IS A SECOND IN A SERIES OF TAPES: "SYNTAX OF BINARY IMAGES", "ARTIFACTS" AND "TRANSFORMATIONS". ARTIFACTS, AS THE TITLE INDICATES, IS A COLLECTION OF IMAGES INITIATED BY BASIC ALGORITHMIC PROCEDURES, TO VERIFY THE FUNCTIONAL OPERATION OF A NEWLY CREATED TOOL.

THE "DIGITAL IMAGE ARTICULATOR" OR SIMPLY "IMAGER" WAS DESIGNED AND CONSTRUCTED BY SCHIER/VASULKA SPECIFICALLY FOR THE PURPOSE OF STUDYING REAL TIME VIDEO IMAGE PERFORMANCE. (FOR MORE INFORMATION, SEE "CANTALOUPE" A VIDEO TAPE REPORT ON THE DESIGN, CONSTRUCTION AND USE OF THIS TOOL).

BY "REAL TIME" IT IS MEANT HERE THAT ALL OPERATIONS ARE PERFORMED ON FIELD BY FIELD BASIS, (60 FIELDS PER SECOND OF TELEVISION STANDARD) AND FURTHER INDICATES A SEVERE TIME COMPETITION FOR PROCESSING OF EACH PICTURE ELEMENT. MAINLY FOR THE SAME REASON, IMAGES ARE REDUCED TO 4 BIT DENSITIES (16 STEPS OF GRAY SCALE) AND APPEAR ON T.V. SCREEN AS A MATRIX OF 128 BY 128 ELEMENTS.

"ARTIFACTS" PORTRAY RATHER SIMPLE FUNCTIONS, MOSTLY IN THE RANGE OF BOOLEAN PRIMITIVES AND SIMPLE ARITHMETIC OPERATIONS, OR WHERE MORE COMPLEX CALCULATION IS NECESSARY, A MODEST AMOUNT OF NUMBERS IS CALCULATED FOR EACH NEW FIELD, FOR EXAMPLE 256 OF X AND Y NUMBERS, CONTROLLING FUNCTIONS OF ZOOMING.

THE WORK SUCCEEDING ARTIFACTS IS CALLED "TRANSFORMATIONS".

"ARTIFACTS" WERE MADE POSSIBLE WITH SUPPORT FROM NEW YORK STATE COUNCIL ON THE ARTS.

URBAN EPISODES, JUNE 1980  
TIME: 8 MIN. 35 SEC.

IN THE SPRING OF 1975 I STARTED TO WORK ON A SERIE OF INSTALLATIONS AND TAPES, ALL INVOLVING MECHANIZED MODES OF CAMERA CONTROL. THE EFFORT RESULTED IN A COLLECTION OF WORKS WHICH I CALL "MACHINE VISION."

ORDINARILY THE CAMERA VIEW IS ASSOCIATED WITH HUMAN VIEW POINT, PAYING ATTENTION TO THE HUMAN CONDITION AROUND. IN THIS SERIE THE CAMERA CONFORMS TO A MECHANIZED DECISION MAKING OF INSTRUMENTS, WITH THE MOVEMENTS AND ATTENTION DIRECTED TOWARDS THEIR OWN MACHINE VIEWPOINTS.

URBAN EPISODES, SHOT IN DOWNTOWN MINNEAPOLIS, IS THE LATEST IN THIS SERIE. IT WAS PRODUCED FOR KTCA, ST. PAUL, MINNESOTA, WITH FUNDS FROM NEA.

STEINA

SELECTED TREECUTS, MARCH 1968  
TIME: 9.50 MIN.

THE MOVEMENT IN THIS TAPE IS PRODUCED BY  
AN AUTOMATIC IN/OUT ZOOM LENS AND ROTATING PRISM.  
IT IS COMPOSED OF A RYTHMICAL COLLAGE OF  
IMAGES OF TREES, CONCEIVED EITHER DIRECTLY FROM A  
CAMERA OR FROM CAMERA IMAGES HELD BRIEFLY IN A  
COMPUTER MEMORY.

"SELECTED TREECUTS" WERE MADE WITH FUNDS  
FROM NATIONAL ENDOWMENT FOR THE ARTS.

EXOR, MARCH 1980

TIME: 4 MIN.

THIS IS A SATISFYING PIECE - BEAUTYFUL GRAY TONAL PATTERNS AND RICH ELECTRONIC TRANSFORMATIONS OF COMMON TEXTURAL IMAGES. THE WORK WAS VERY CONVINCING WITH DIRECTION AND PACE OF SOUND AND GRAPHIC MATERIAL FROM THE BEGINNING TO THE END.

9-30-80, ABNER JONAS.

VERY MUNDANE IMAGING. CONTENT?! - AUDIO INTERESTING, BUT DOESN'T CARRY THE PIECE.

9-29-80, NAT HIMMELSTEIN

QUIET TAPE FOR ALL ITS ACTION, SLIPS IN AND OUT OF REPRESENTATION ENVIRONMENTAL TO COMPUTER LANDSCAPE. ALL FORMAL ELEMENTS FINE, A STRONG CONCISE AND INTERESTING WORK.

10-16-80, KAREN S. NULF

I LIKED THE WAY THE CAMERA BECAME LIKE AN ELECTRONIC FIRE THROWER. READY...AIM...FIRE...

THE LANDSCAPE BECOMES ELECTRONICALLY SHATTERED AND RECONSTRUCTED ON THE SURFACE OF THE SCREEN. HOWEVER I WOULD HAVE PREFERRED MORE CONCEPTUAL ELABORATION WHICH DROWNED A BIT UNDER THE SEA OF ELECTRONICS.

10-25-80, ROGER WELCH

EXOR WAS MADE POSSIBLE WITH FUNDS FROM NEW YORK STATE COUNCIL ON THE ARTS.

VIOLIN POWER, 1970-78  
TIME: 10 MIN.

"VIOLIN POWER" IS A DEMO TAPE ON HOW TO PLAY  
VIDEO ON THE VIOLIN.

IN SEARCH OF THE CASTLE, FEBRUARY 1981  
TIME: 11:30 MIN.

ORIGINALLY A STUDY OF WIDE ANGLE LENS PERFORMANCE, THE  
VIDEOTAPE BECAME LATER SUITABLE FOR VARIATIONS OF ALGO-  
RITHMICAL PROCESSING THROUGH THE "VASULKA IMAGE ARTI-  
CULATOR".



PROGENY, FEBRUARY 1981  
TIME: 18:30 MIN

AFTER SEEING AN INSTALLATION OF STEINA'S  
"MACHINE VISION," SCULPTOR BRADFORD SMITH SUGGESTED  
THAT HIS WORK SHOULD BE EXPLORED IN VIDEO. WITH WOODY  
VASULKA AND STEINA, A VIDEOTAPE "PROGENY" WAS CREATED.  
AS IN "MACHINE VISION", ALL CAMERA MOVEMENTS  
ARE PRE-PROGRAMMED MECHANICALLY AND OPTICALLY AND  
EXECUTED WITHOUT FURTHER INTERVENTION. THIS SAME  
PRINCIPLE OF PRE-PROGRAMMING WAS APPLIED TO THE ELEC-  
TRONIC PROCESSING LATER.

"PROGENY" WAS REALIZED THROUGH FUNDS FROM  
NATIONAL ENDOWMENT FOR THE ARTS.

S I X P R O G R A M S F O R T E L E V I S I O N  
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WITH A 1978 GRANT FROM THE NATIONAL ENDOWMENT FOR THE ARTS AND CORPORATION FOR PUBLIC BROADCASTING, WE HAVE EDITED SIX HALF HOURS OF BROADCAST ORIENTED PROGRAMS CONSISTING OF OUR EXPLORATORY AND EXPERIMENTAL WORKS WITH VIDEO FROM 1969-1978.

THESE 1/2 HOUR PROGRAMS, WERE PRODUCED AND BROADCAST (NOV 1979) AT WNET CHANNEL 17, BUFFALO, N.Y.

EACH PROGRAM LASTS 29 MIN. AND CENTERS ON A SINGLE THEME AS INDICATED IN THE TITLES.

MATRIX	1969-72
VOCABULARY	1973-74
TRANSFORMATIONS	1974-75
OBJECTS	1975-77
STEINA	1975-77
DIGITAL IMAGES	1977-78

THE CHARACTER OF THE PROGRAMS IS INFORMATIONAL AS WELL AS AESTHETIC AND COULD BE USED IN CONTEXT OF TECHNOLOGICAL ART SERIE.

THESE PROGRAMS ARE DISTRIBUTED BY THE VASULKAS,  
1600 OLD PECOS TRAIL, SANTA FE, NEW MEXICO, 87501