

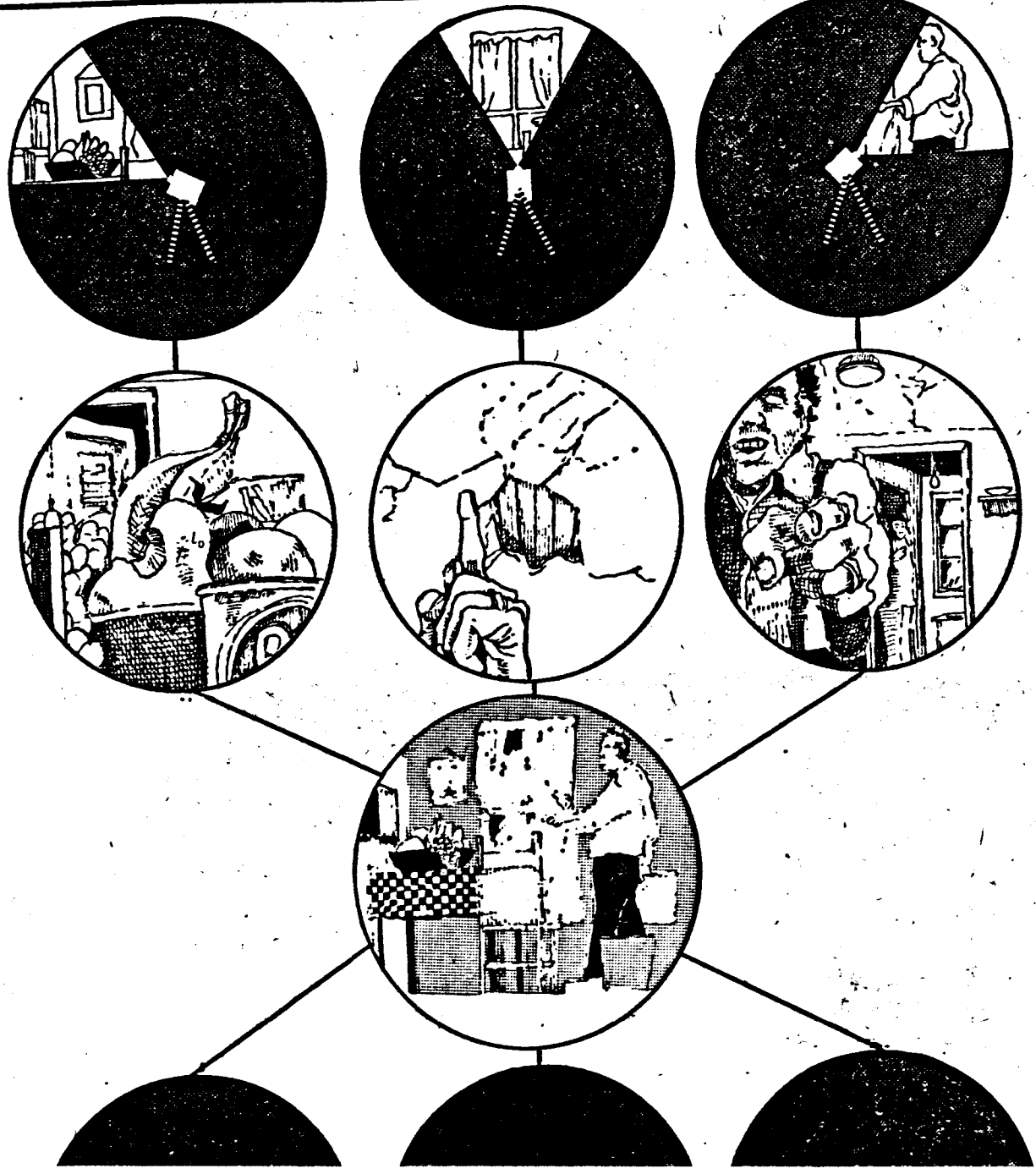
Creative artists are turning to different means of expression. In the interest of providing artists a new opportunity and of providing the reader with insight into the current state of artistic thinking, The Buffalo Evening News will publish artistic expressions on its Lively Arts Page from time to time. Artists will work in co-operation with The News staff members to execute the piece.



**WOODY VASULKA** is a video artist and Buffalo resident who recently was awarded a grant for an artist's residency at WNED-TV with his wife, Steina. An associate professor at UB, Vasulka's reputation is in complex technical and esthetic innovation.

He believes that "artists of today should provide various models — of consciousness, of electrical systems, of design — which the public can examine, incorporate, reject or establish."

This year, Vasulka has lectured on basic principles of perception and image-making. His concept for The News continues that theoretical inquiry, suggesting the implications of several perceptual choices among many possible ones.



as-Theater-Music

Belle Star

Waters Fathoms True Blues

By ANTHONY BANNON
A bit of strong walkin' blues at the Belle Starr and out came Muddy Waters to a rafters-packed crowd, long cheers, leaping around, fists in the air. But Muddy's waters are calm; calm as can be, as he sat down on the red stool like somebody's grandfather.

ged in the Chicago blues sound, and the amplified waves of that move touched the shores of Britain, where the Rolling Stones stole a line from a Waters song and made it into their name. As a song writer and stylist, he's the Dylan of the blues.

and three at the end, were given to his band.

Absent from the first set Tuesday was his famous "Mojo" and "I Just Wanna Make Love to You." And what he did sing, he delivered without the cascading surprises of classic blues.

But it was enough, enough for howling applause and yelps of delight at the slightest slide along the frets, and there was another set yet to come - and two more this evening.

The first set goes on about 11 p.m., but for a seat, get there about 9. Located on the Holland-Glenwood Road.

The irony is that cool as he was - with only an occasional flourish of the hand or twitch at the eye - he's the man who made the sound move into the idiom known to the young audience in the Belle Starr.

For it was Waters, up from the Mississippi Delta, who plugged

In a vest over a red-print shirt, the 63-year-old blues man drove home with his famous "Hoochie Coochie Man," laid back with "I Gotta Love Somebody" and filled in with another classic, "Baby Please Don't Go."

The rest of the hour-long set, three songs at the beginning

supplied by the
Friday Night Fever,
age of the Pink
ook and Zorra, G.
Night Fever, R.
MA 1: Damish-
7:30, 9:55 p.m.
MA 2: The Cheap
10, 3:25, 5:25, 7:58.
MA 3: Grosse-
15, 9:40 p.m.
m, PG, 7:30, 9:45
of the Pink Pan-
3:30, 8 p.m.
of the Pink Pan-
30, 9 p.m.
ok and Zorra, G.
9:15 p.m.
een, R, 2, 4:30, 7.
R, 1:30, 4:15, 6:30.
rs Bears Go to
2:15, 4:30, 7, 9:30
Over Space and
G, 12:15, 3, 5:45.
Night Fever, R, 2.
NEMA 1: Heevy
0, 3:30, 5:30, 7:30.
CINEMA 2: Soul
10, 9:50 p.m.
me, R, 7:15, 9:35
ills, PG, 7:30, 9:25
Can Wait, PG, 2.
PG, 2, 4, 6 & 8.
arm, PG, 2, 4:30.
-Omen II, R, 2.
PG, 2, 4, 6 & 8.
y, PG, 2, 4, 6 & 8.
Encounters of
7, 9:30 p.m.
MA 1: Capricorn
p.m.
MA 2: Jungle
7, 9:15 p.m.
Mr. Klein, PG.
House Calls, PG.
News Bears Go
10:05 p.m.
An Unmarried
m.
Z PG, 2, 4, 6 & 8.
ort, 8 p.m.
Night Fever, R.
NEMA 1: The
5, 1:30, 3:30, 5:30.
MA 2: Revenge
7, PG, 1:30, 3:25.

SHOWPLACE: Saturday Night Fever, R, 7, 9:15 p.m.
TECK: Sister Street Fighter, R, 2, 4, 10 p.m. Features: The Street Fighter, R, 2:20, 7:25. Return of the Street Fighter, R, 4:40, 8:45 p.m.
THRUWAY MALL CINEMA 1: The Cheap Detective, PG, 1:30, 3:30, 5:30, 7:40, 9:45 p.m.
THRUWAY MALL CINEMA 2: An Unmarried Woman, R, 1:45, 4:15, 7, 9:30 p.m.
THRUWAY MALL CINEMA 3: The Goodbye Girl, PG, 2, 4:30, 7:30, 9:55 p.m.
TOWNE: Saturday Night Fever, R, 7:30, 9:30 p.m.

Theater
TWO FOR THE SEESAW, comedy, dinner at 7, Mister Anthony's.
THE BURLEY-QUE BOYS, vaudeville revue, dinner at 6:30. Packet Inn.
THE TEMPEST, Shakespeare in the Park production, 8, Delaware Park at the Rosa Garden. Free.
OKLANOMAL, musical, 8, Artpark, Lewiston.

Entertainment
BURY BACHARACH and ANTHONY NEWLEY, singer-entertainers, 8, Melody Fair.

Music
PHILHARMONIC Parks Series, conductor Peter Perret, works of Prokofiev, Borodin, light selections, 7:30, Amherst's Bassett Park.

Pop Music
MUDDY WATERS, blues guitarist and singer, 10, Belle Starr, Coiden.

Artist's Tapes To Be Presented

Steina Vasulka, a Buffalo video and computer artist, will present and discuss the videotapes she has made during the past 10 years at 8:30 this evening in the Kiva Room, 101 Baldy Hall, Amherst Campus, State University of Buffalo. Steina-the artist now prefers to be identified by her first name only-was concert violinist in Prague and her native Iceland prior to her career as a video artist, which includes residencies at KQED-TV, San Francisco; Television Laboratory, WNED-TV, New York, and WNED-TV in Buffalo. She was co-director and co-founder of the Kitchen, a major electronic arts exhibition center in New York, and now is an adjunct faculty member of UB's Center for Media Study. In 1977, she was awarded a Guggenheim Fellowship for video art.

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**ANTHOLOGY  
FILM ARCHIVES**  
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Video

Thursday (at 8 pm)

**STEINA,**

in person,  
showing Violin  
Power,  
Urban Episodes,  
Selected  
Threecuts, and  
other tapes

Saturday (at 2 pm)

**MARY IDA**

**BONADIO**

(in person) and

**SHIGEKO**

**KUBOTA**

(in person)

Films

Wednesday (at 8 pm)

**JAMES**

**BROUGHTON**

Friday (at 7:30

and 9:30)

Documentary  
profiles:

Brice Marden; Duane  
Michals  
(1939-1997);

The Climate of  
New York;

Aaron Siskind  
(premiere) with  
film-makers,  
in person,

**EDGAR HOWARD**  
and **TED HAIMES**

Saturday (at 8 pm)

Documentary  
Profiles

Sunday (at 8 pm)

**JAMES**

**BROUGHTON**

Tuesday (at 8 pm)

Documentary  
Profiles

Five Month Schedule Available  
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Membership Available  
Assisted by NYSCA and NEA

**WEDNESDAY (Oct. 14):**

**The Potted Psalm** (1946), by James Broughton and Sidney Peterson, Broughton's **Mother's Day** (1948), **Four in the Afternoon** (1951),



**Loony Tom, the Happy Lover** (1951), **The Bed** (1968), Anthology Film Archives, 80 Wooster, 226-0010, 8 p.m. (\$3);

**THURSDAY (Oct 15):**

**Napoleon**, by Abel Gance, Radio City Music Hall, 50th and 6th Av, 7:30 p.m. (\$10-\$25);

**The Red Shoes**, with Moira Shearer, Pacific Lbry, 4th Av at Pacific, Bklyn, 6 p.m. (free);

Films-talks, Steina, **Violin Power; Urban Episodes; Selected Three-** cuts; and other digital works, Anthology Film Archives, 80 Wooster, 226-0010, 8 p.m. (\$3);



**FRIDAY (Oct 16):**

Films-talk, Ed Howard and Ted Haimes, "Documentary Profiles: **Brice Marden; Duane Michals; The Climate of New York; Aaron Siskind**, Anthology Film Archives, 80 Wooster, 226-0010, 7:30 and 9:30 p.m. (\$3);



**SATURDAY (Oct 17):**

Video program-talks, Mary Ida Bonadio's **What Are You Doing? Was There a Voice?; Recan; Endless Soul; Cross**; Shigeo Kubota's **Broken Diary**; Hiromu Saiki's **Building Blocks 1 and 2**, Bonadio and Kubota will be present, Anthology Film Archives, 80 Wooster, 226-0010, 2 p.m. (free);



Documentary Profiles: Ed Howard and Theodore Haimes's **Brice Marden; Duane Michals; The Climate of New York; Aaron Siskind**, Anthology Film Archives, 80 Wooster, 226-0010, 8 p.m. (\$3);



**SUNDAY (Oct. 18):**

**Nuptiae; The Golden Positions; This is It; The Pleasure Garden**, by James Broughton, Anthology Film Archives, 80 Wooster, 226-0010, 8 p.m. (\$3);



**TUESDAY (Oct. 20):**

Video program-talk, Dara Birnbaum "Pop-Pop Video: Reinvesting in the American TV Image," Museum of Modern Art Founders Rm, 11 W 53rd, 956-6100, 7:30 p.m. (free ticket);  
Documentary Profiles, see Sat, Oct 17;





# BINARY IMAGES

LOOK AT THE TABLE

The analysis of the phenomena of electronic tools and the sequence in which they appear in an art context, from audio synthesis through video as art and craft, has been a preoccupation of mine for some time.

The images in this article are the result of my first encounter with digitally-organized imaging. This process provides clues to more complex types of electronic imaging, more complex in the methods of control and of codifying imaging systems.

The definition of a cultural or a system code has been talked about with various degrees of success. I want to point to the primary level of codes, notably the binary code operation, as a principle of imaging and image processing. This may require accepting and incorporating this primitive structure (the binary code) into our views of literacy, in the form of binary language, in order to maintain communication with the primary materials at all levels and from any distance.

The dramatic moment of the transformation into a binary code of energy events in time, as they may be derived from light, or the molecular communication of sound, or from a force field, gravity, or other physical initiation, has to be realized, in order to appreciate the power of the organization and transformation of a code. The process of analog-to-digital and digital-to-analog conversion envelopes the internal digital-code operations, the state of the world, which is exclusively man-organized and cross-disciplinary. The unity of the coding structure has laid down an astonishingly versatile material from which codes are constructed and from which the hierarchical order of codes can originate.

These states of transformation exist in as many time domains as the generation, organization, or processing of codes require, for the media they represent. (A complex sound, for example, can operate in a lower time domain than a complex dynamic image, while other media—for example, printed text generation—seem more time-immune.)

In this way, time assumes a new compositional meaning, a microcompositional one, where control over the generation of an image can be exerted even in short or very short lengths of time. That in itself signals an urgency to define the craft, in which the notion of time dominates.

## THE ARITHMETIC LOGIC UNIT (ALU)

The arithmetic logic unit (ALU) is not an image-producing device by its concept. It is a basic component of a digital computer, and performs a set of functions based on Boolean logic primitives and their arithmetic combinations. These functions are listed in the table reproduced below.

The purpose of these picture tableaux (numbers 1-13) is to observe and identify changes which occur when two coherent structures, (A,B), when used as inputs to the ALU, interact in a number of ways: when they are compared, and one input is given priority over the other; and when they are combined in both linear and discrete ways. These

interactions are determined by the Boolean (and some arithmetic) functions incorporated in the ALU. Taken together, these operations provide a universal, unambiguous score of the image, which can be reproduced, identically, through a notational code created in this way.

In practice, the ALU is an electronic circuit, packaged into a 22-pin chip (74181). It can operate on two sets of four-bit inputs simultaneously. These sets are called (A,B). In addition, the ALU needs a four-bit control "word" to select a function, and two other bits as well: one to set the carry bit, and the other to select either the logic or the arithmetic mode of operation. The ALU is capable of real-time (video) operation.

The input elements (A,B) are organized in three steps of complexity, expressed through groups and associated densities of one bit (two screen divisions); two bits (four screen divisions); and four bits (16 screen divisions).

The images in each tableau illustrate the operation of each of the sequence of functions listed in the following table.

In the second variation (Tableaux 2, 4, 6, 8, and 10), the vertical component (input B) is exchanged for an image from the TV camera, showing a sphere and a cup. The camera image is digitized, delivering a binary code of zero, one, two, and four bits to the ALU input, representing two, four, and 16 densities of grey scale of the image (one, two, and four bits of resolution).

—Woody Vasulka

## BOOLEAN PRIMITIVES PERFORMED BY

M=H  
LOGIC  
FUNCTIONS

$\bar{A}$	$\bar{A}B$
$\bar{A} + B$	$1$
$A + B$	$B$
$A \oplus B$	$A \oplus B$
$A \cdot B$	$B$
$A + B$	$0$
$A \cdot B$	$\bar{A}B$
$A$	$A$

•Each bit is shifted

Where A = unit  
 $\bar{A}$  = inverted value  
 $\bar{A}B = A$  and  $B$   
 $A + B = A$  or  $B$   
 $A \oplus B = A$  xor  $B$   
that has a value present

