Symmetry: Culture and Science

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Editors:
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EXPERIMENTAL ANIMATION

Larry Cuba
1803 Mission St. #123, Santa Cruz, CA 95060, U.S.A.

Calculated Movements by Larry Cuba

(1985)
6 minutes
16mm, B/W
optical sound

Distributed by:
Chicago Filmmakers
1229 West Belmont Ave
Chicago, IL 60657
(312) 281 8788

DESCRIPTION:

A choreographed sequence of graphic events constructed from simple elements repeated and combined in a hierarchical structure. The simplest element is a linear ribbon-like figure, that appears, follows a path across the screen and then disappears. The next level up in the hierarchy is an animating geometric form composed of multiple copies of the ribbon figure shifted in time and space. At this level the copies are spread out into a two-dimensional symmetry pattern or shifted out of phase for a follow-the-leader type effect, or a combination of the two. The highest level is the sequential arrangement of these graphic events into a score that describes the composition from beginning to end.
3/78   
by Larry Cuba  
(1978)       
6 minutes    
16mm, B/W    
optical sound

Distributed by:  
Chicago Filmmakers     
1229 West Belmont Ave  
Chicago, IL 60657  
(312) 281 8788

DESCRIPTION:

Sixteen 'objects', each consisting of one hundred points of light, perform a series of precisely choreographed rhythmic transformations. Accompanied by the sound of a Shakuhachi (the Japanese bamboo flute), the film is an exercise in the visual perception of motion and mathematical structure.

Two Space  
by Larry Cuba  
(1979)       
8 minutes    
16mm, B/W    
optical sound

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Chicago, IL 60657  
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DESCRIPTION:

Two dimensional patterns, like the tile patterns of Islamic temples, are generated by performing a set of symmetry operations (translations, rotations, and reflections) upon a basic figure or tile. Two Space consists of twelve such patterns produced using each of nine different animating figures (12 x 9 = 108 total). Rendered in stark black and white, the patterns produce optical illusions of figure-ground reversal and afterimages of color. Gamelan music from the classical tradition of Java adds to the mesmerizing effect.