A MIRROR TO NATURE

John G. Harries

The Movement Notation Society
44/7 Hermon Street, P.O.Box 85412
Mevasseret 90805, Israel

The non-figurative video sequence is composed in Eshkol-Wachman (EW) Movement Notation. The main connective principle involved in the composition is that of symmetry, manifested in transformations of well-defined motifs which, because of the universally recognisable nature of simple symmetry relations, can be intuitively grasped even without a knowledge of the detailed compositional structure.

The formal and visual sense of the sequence addressed to the viewer, is wittingly based upon the human capacity for detecting regularities in perceived images. Because of this deliberate appeal to seemingly inborn and thus virtually *natural* properties of our perceptive faculty, it is not essential for the viewer to be conscious of the exact compositional means employed - although he will probably sense that the rather precisely designed processes must have involved some sort of definite planning, and could not have been the result of improvisation. A full understanding of the compositional structure would be obtained through a reading of the EW score. The notational system is here held up as a cognitive mirror, to some of the most general patterns that are found in that part of nature which resides in the human brain with its capacity for appreciating relations of regularity and harmony. A study of the score would of course require familiarity with EW notation; it is possible, however, without relying upon the reader/viewer's possessing such literacy, to give some idea of the way in which the generation of visual images is approached in this work based upon movement notation.

The movements (and thus the shapes) are formulated in the symbols of EW notation. The shapes of the motifs are formed as the paths traced by the (notated) movements of generating lines. The symbols of EW notation can be manipulated in many ways, and in accordance with any ordering principle, or none. Certain procedures produce what are likely to be perceived as symmetrical shapes, and these shapes are *sometimes* produced as the result of recognisably symmetrical movement combinations - but sometimes by movements which are less obviously symmetrical, or perhaps not symmetrical at all. Conversely, the symbols which express movements may be subjected to variations of pattern which in themselves clearly possess symmetry, but when realised as movements generating shapes, do not reveal easily identified transformations.

Do all symmetrical combinations of movement necessarily produce symmetrical shapes? And does the fact that some apparently symmetrical movement combinations produce variations that are not identified as symmetry transformations mean that they are not really symmetrical; or does it mean rather that we have difficulty in recognising them as such because we have no names for the transformations? How can we tell? Not by taking a vote, and preferably not by relying 'blindly' upon the patterns seen in the score. This is perhaps the point at which intuition must be followed so as to learn subsequently from repeated viewing and increasing familiarity, whether the visually displayed variation of an image is comprehensible as a transformation the only name for which may, in the absence of any currently available verbal label, be its symbolic formulation in terms of the notation.

References

Eshkol, N., Wachman, A. (1958) *Movement Notation,* London: Weidenfeld and Nicolson.

Harries, J.G. (1969) *Shapes of Movement*, Israel: The Movement Notation Society.

Harries, J.G. (1978) A proposed notation for visual fine art, In Malina, F., Ed., *Visual Art. Mathematics and Computers,* New York, Pergamon Press.

Harries, J.G. (1981) Personal Computers and notated visual art, *Leonardo,* Vol 14 .

Harries, J.G. (1983) *Language of Shape and Movement,* Israel: published by The Movement Notation Society, for the Research Centre for Movement Notation, Tel Aviv.

Harries, J.G. (1985) *Symmetry and Notation,* Israel: Tel Aviv University, 1985).

Harries, J.G. (1986) Symmetry and Notation: regularity and symmetry in notated computer graphics, In *Symmetry,* ed. Hargittai, I., New York: Pergamon Press.

Harries, J.G. (1989) Symmetry in the movements of T'ai Chi Chuan, *Computers, Mathematics and Applications,* Vol.17, No. 4-6, pp.827-835, 1989.

Yanai, Z. (1974) Notation for the liberation of movement, *Ariel* (Israel) 37.