

Merz's maths

Mario Merz seeks to take art beyond the aesthetic and into the realms of experimentation. A favourite subject of his has been the mathematics of growing populations.

Martin Kemp

Mario Merz, born in Italy in 1925, has been one of the pioneering artists who have aspired to transform the art gallery into something resembling a laboratory for the experimental interaction of visual imagination and intellectual enquiry. A major focus of his own intellectual enquiry has been the Fibonacci series of numbers: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55....

Whether working with paint on canvas or with the materials he uses in his constructions — stone, clay, wood, fruit, metal, liquids, glass, neon tubes, fabric, paper — Merz presents a consistency of purpose that can be recognized in his dialogues between shape, structural principles, physical forces, the enclosure and expansion of space and the mathematics of growth, in the context of human existence.

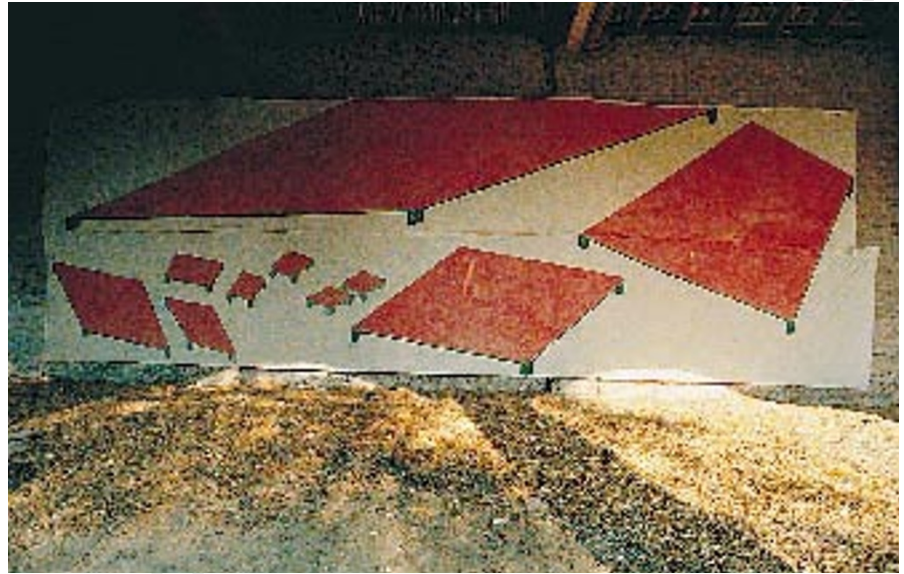
Put in this way, Merz's agenda seems both pretentious and unrealizable. But a series of themes has opened windows on to how it might be realized by a programme extending beyond his own production. Two such themes are his "tables" and his "igloos".

His tables, closer to Japanese than western examples, envisage a population growing in accordance with Leonardo da Pisa's famous thirteenth-century series, which was formulated as a model of rabbit populations.

It is as if we are planning a canteen for proliferating bands of factory workers. As Merz wrote in his accompanying poem:



Merz's Igloo di Stoffa, 1968–81.



Merz's Tavole con le Zampe Diventano Tavoli (Boards with Legs Become Tables), 1974.

"I reject the linear, one by one, or assembly-line fabrication of spaces...

The space grows like a bunch of grapes.

For a growing number of people it is necessary to make tables that grow like a bunch of grapes.

For one person.

For two people then..."

He takes the series as far as 34, but its potential is boundless.

The Fibonacci series signifies life beyond the apparent inertness of numbers. The lower numbers remain implicated within the larger terms, and the progression embodies

the principles of organic growth: "the numerals in PROLIFERATION have in themselves the power of SUCCESSION or PROPAGATION".

Expressed in such figures as a cone or logarithmic spiral, the series exhibits a power of propagation to infinity through morphologies that are self-similar at every stage.

The structure of Merz's igloos — the form of primitive houses in many cultures — expresses the interplay between growth and structure in terms of volume.

The number of wall units needed to fill the interstices — whether Merz's stone, clay and glass or the snow and natural materials of actual dwellings — both enact a process of numerical growth in each instance, and register the exponential increase with each successive enlarging of the radius of the structures.

The igloos strike a balance between gathered strength at their summits and precarious equilibrium as they reach out to cover ever larger areas. The tension is nicely encapsulated in the paradoxical aphorism of the Vietnamese leader, General Giap, who inspired one of Merz's igloos: "If the enemy concentrates it loses ground; if the enemy disperses it loses force." Such paradoxes, for Merz, permeate not just structure and growth but also the operations of human society. □

Martin Kemp is in the Department of the History of Art, University of Oxford, 35 Beaumont Street, Oxford OX1 2PG, UK.