## James Turrell Born Los Angeles, 1943 Resident Venice, California

See Irwin section, page 127

Victor Vasarely Born Pecs, Hungary, 1908 Resident Paris

Before going to Europe in the Fall of 1968, MT wrote to Victor Vasarely in Paris to inform him of the A & T project, mentioning specifically IBM, and to arrange an appointment to see the artist in his studio. By the time MT met with the artist in October, Vasarely had written up a proposal for an art work involving computer technology. The statement he formulated for us is as follows:

From my youth, impregnated with the teachings of Bauhaus, I have felt a strong attraction for the linear and corpuscular structures. My past studies, namely *Tigres, Zebras, Martiens*, and *Echiquiers* bear witness.

In 1953 begins my Kinetic period in black and white where the structures are freely developed. At this time, my thoughts are taken up with the idea of a binary plastic language which could be introduced into an electronic circuit.

Towards 1960, my method of plastic units exists in its final form, a method I have developed in numerous works and writings. The application of this binary black and white, positive-negative system to the wider field of colour and monochromic games revealed a mine of riches hitherto unsuspected. The Folklore Planetaire (1962), Permutational (1965) series and also the more recent 1966 structures based on the perspectivist and axonometric hexagon are representative of this.

I now have in my possession a matchless primer for combining plastic units and I become more and more involved in my studies in cybernetics. In fact, as of this period all my works are programmated; colours, tones and forms all being reduced to a simple code.

My attention is drawn to the possibility of creating an electronic machine working in collaboration with persons specialized in this field. What a formidable and costly enterprise! My first contacts are encouraging but it is difficult to get assistance and the delays are long.

But what exactly is this proposed device? It is a large lumino-cybernetic screen that can send out millions of different colour combinations. Practically speaking, in my mind I see a metallic box about 312.5cm x 312.5cm with a depth of 10 to 20cm varying according to necessity.

This box is subdivided into a net-work of 625 compartments each measuring 12.5 x 12.5cm and each containing a circle 10cm in diametre. This structure of squares as well as the individual circles therein should be made of thin solid metallic strips about ½ a millimetre thick. This infra-structure contains the multi-coloured electric device which functions by electronics and a complementary rheostat.

I start with six basic colours, RED, BLUE, GREEN, MAUVE, YELLOW and GREY. Each colour is subdivided into 12 tones which makes 72 colour variations. Each individual compartment must be able to put out alternatively the 72 color variations. It is the perfect isolation of the compartments (and of course the circles in them) and the opaque screen that renders the tones clearly and makes them visible. Taking as a base any one of my programmations, we are now able to recreate the work and a countless number of other compositions the machine proposes. In this way, the limitations due to the artist's method of working in a studio would be overcome.

There are enormous possibilities. Firstly, by filming the pictures projected on the screen, we can compile a repertory of composition references which is inexhaustible. The artist chooses among the best of the compositions the machine has proposed and then recreates the work in the form of a painting, a tapestry, a serigraph, a fresco, a stage setting, a setting for a film or television.

Without a doubt the most important of the possibilities the machine offers is that involving architectonic experimentations. The requirements are immense for the integration of plastic beauty in future constructions be it a question of urban or rural habitat or public monuments. Based on the *Informatic* and the *Prospective*, the prefabrication of polychrome elements for architecture cannot be decided without bringing in cybernetics. This will interest many technical branches such as construction, chemical dyes, synthetics without mentioning traditional materials such as metals, glass, cement or ceramics.

Lastly, thanks to our machine, we will be able to conduct human experiences of the highest importance in the domain of Experimental Psychology. In offering this spectacle to the masses and in asking them to express their preferences, we will obtain statistic truth of esthetic values of an entire population. From this time on, art can freely enter the general circuit of production-consumption.

MT returned to Los Angeles at the end of October, and immediately contacted Dave Heggie, our contact man at IBM, about Vasarely's proposal. IBM's initial response to the Vasarely idea was to convey definite interest; we hoped they would send an engineer to Paris to talk directly with the artist, but they elected first to study the written statement in terms of a cost estimate for its realization before involving themselves more deeply. The figure they arrived at was about \$2,000,000; this was regarded as prohibitively high, and they declined to pursue it further.

We then submitted the Vasarely proposal to RCA and Teledyne for study. RCA kept the matter pending for months without making a definite statement as to their possible willingness to execute such a work, and finally replied negatively, again on the basis of the expense represented. Teledyne analyzed the proposal carefully, and even suggested a way of executing the work which might be within reasonable technical means to pursue, but by the time this developed, that company was already in collaboration with Robert Rauschenberg.

By the Fall of 1969, a year after our original connection had been made with Vasarely, we wrote to inform him finally that we were unable to elicit a commitment to fabricate his proposed work under A & T.