

To many, music is the highest art form. The purity and yet the power of these abstract structures in time seem to cross cultures and ages and are often at the centre of, or perhaps pointedly excluded from, religious worship. Not surprisingly, painters quite frequently aspire to being composers or musicians. Formally, the distinction between seeing and hearing aside, the key difference between painting and music might be seen to be the lack or presence of time as an integral element or dimension. Vertov's characterization of his film 'The Man with the Movie Camera', as an experiment in 'visual music' perhaps captures the visual artist's interest in time. However, other influences have also been active in the 20th century. For example, in art that uses geometric or other systems, it has been common to produce series of work that often have a natural sequence. It is only a small step to think of them as stills from a movie. Another closely related development was the early use of computer programs to generate drawings. Works of this kind lend themselves to the automatic production of series because the computer program is a kind of general structure or form that can apply to a class of works, each a small variation of another. When the American artist who invented the mobile, Calder, visited the Paris studio of the pioneering abstract painter Mondrian in 1930, he conceived of making the visual elements he saw move. That was another inspiring moment. One way or another, adding time to the kind of visual art to which structure was important seemed appealing, even tempting, to me. This led to my development of what I have called 'Video Constructs' which use logic programming to construct time-based work.

Colour is central to my work, as it is for many visual artists. Matisse, a great colourist, influenced me in his use of colour as much as anything else about his work. I developed a desire to use colour as Matisse did, but the way he did it eluded me at first. In time, as I began to explore theories of colour, I came to understand its inherent structure. That colour has structure has been famously exploited in making art. This is what I too came to do in my own way. In much of my art, colour is the defining element. Subjecting it to the systems treatment used in the rest of my work has been both a natural and necessary thing to do.

I am interested in seeing how computer generated art systems can interact with the most purposeful enquiring systems - human beings. I am also interested in how humans react to artworks that behave differently because of their presence and whose form and appearance change over time. Artworks that are purposefully dynamic and ever changing in our world are a novel dimension to the centuries old relationship between human experience and the

art form. When I first started exploring interaction between audiences and artworks, the means to make participative art were limited especially with computer technology as it was. Back then I was asking questions about the nature of such interaction and what its form might be. I was wondering what kind of relationships might exist between audiences and this new type of artwork. Now I am able to make works that hang on a wall like a conventional painting but with the crucial difference that the works, like the human, are programmed to respond to events in the environment around it and through learning, develop their own long-term memories.

Our appreciation of visual art depends on seeing it in context. The atmosphere, the light, the space, the audience are all part of the experience of a work. When we view an oil painting screened by plate glass, the glass is a component of the experience of the work. When we peer through to a work surrounded by a crowd, the audience becomes part of that experience too. In interactive art, the audience is deliberately made a component of the work: the person in the art space becomes an active participant. In participative interaction, the artefact is just one element of the whole experiential space. But what exactly do we mean by interaction? I believe that the words influence, stimulus, interchange are more evocative and appropriate for my works. If we add a layer of meaning to the situation, we can say that the influence of the human system on the art system comes about as a result of stimulus, interchange or even co-operation and conversation. The artwork and the audience are interacting systems that influence one another. Generative art systems like Shaping Form are open to influence and develop over time as a consequence of that influence. This kind of computational generative art is an open system at the very heart of its design.

In Shaping Form, images are generated using rules that determine the colours, the patterns and the timing. These are generative works that are changed by the influence of the environment around them. Movement in front of each work is detected and leads to continual changes in the program that generates the images. People can readily detect the immediate responses of the work to movement but the changes over time are only apparent when there is more prolonged, although not necessarily continuous, contact with it. A first viewing followed by one several months later will reveal noticeable developments in the colours and patterns. The Shaping Form series are the latest works arising from my preoccupation with interaction and time expressed in a wide range of abstract generative forms over many years.