



The Chronos Pro

Malcolm Le Grice

'Chronos Fragmented' by Malcolm Le Grice, with music by John Eacott and Stewart Louis de Canonville, is a programme based on Video-8 and Hi-8 material shot over six years. Chronos is the Titan – the time god who rules the universe – the flux in which events are born, mature and decay. The work explores video as a creative form of memory. It moves outwards from the particular and personal images of a diary — the fragmentary and inconsistent building blocks of memory — towards their transformation into more fundamental symbols in the cycles of days, seasons, birth and death. This transforming symbolic memory is all placed in the context of the social and political events of the world – particularly China and the Balkans – as they are encountered in the artist's personal space. Le Grice has applied his experience with computers to develop programs which both manipulate the images and select from the video 'memory bank' to produce the ultimate subjectivity of the final programme. In addition to exploring these new ideas 'Chronos', like Le Grice's previous work for TV, is a visually poetic and musical experiment. Editor's note.



Chronos, the Titan who came to rule the universe, is Time - not the clock-tyrant measuring every quartz-accurate second as commodity, but the one-way flowing medium in which events come into being, mature and decay. It is the separator of moments and the reminder of mortality. We sense it indirectly through the rhythms of our bodies, the rotation of sun and moon, and the ever-quickening cycle of the seasons. The passage of Chronos is cursed by the unrelenting process of ageing but celebrated through music, dance and song.

We deny and at the same time confirm Chronos through memory – we resist it through making images, but these also fade, shatter and decay. The fear of loss and the desire to hold and make permanent are latent in every image, every representation. In ecstasy, presence, sensual experience, colour, pitch, tone, Chronos seems to be ignored or at least forgotten but returns in the trace, representation and symbol.

I have just completed a TV production (an Arts Council/Channel 4 commission) entitled 'Chronos Fragmented'. It is a one-hour programme intended for a normal 'linear' transmission. However, this is just one outcome of a much broader project which already has alternative versions and remains 'open-ended'. And it is related to developing technologies like CD-ROM.

In the same way in which the project has no prospect of a completion, it is also impossible to define a clear origin to the work.

Questions of Art and Technology

The most important issues remain the aesthetic, philosophical and theoretical questions which the work raises. These are difficult to approach directly, especially for the artist who has made the work. Choosing to start from questions of technology is due partly to the simpler approach to some of the artistic issues which this offers. But it is also because the artistic choices and opportunities in this project are fundamentally tied in with technological matters. I have always contended that form (or language), content and technology are inseparable.

Two major technological shifts in my work are crucial to the development of the Chronos project.

One is the increasing involvement with computers applied at a variety of levels, from the merely technical control of editing to the

were cheap, lasted 90 minutes, could be reused; the camera was small, light and recorded good quality sound as well as vision. It came in a soft bag I could slip over my shoulder and carry with me even if I had no particular purpose in mind. When shooting, I was unobtrusive – like any home-video-maker – attracting no particular attention. In addition to all these virtues, I liked the image on the screen. It was sharp, contrasty, strongly coloured and bright. Even before Hi-8, I used Video-8 material on 'Sketches for a Sensual Philosophy' without encountering any problems with transmission engineers.

I found I did not hanker after the big-screen film look. On the contrary, video and the TV screen provided me with the lower-key, less pressured context that I wanted. They satisfied the need I felt, and continue to feel, to bring the making of work closer to lived life. This was not a desire to make myself overtly the primary subject of the work – in a sense this is unavoidable, however existentialist or abstract the starting point – but it was an attempt to close the gap between life experience and the subject of the work and, in particular, to re-enliven my investment in the shot image. I remain fully aware that the immediacy and convenience offered by video is no more 'natural' or neutrally un-mediated than working with film; the choice is symbolic as well as technical, bringing its own established discourses and interpretive codes.

Though this technology created some new conditions for me, it did not involve a completely new departure from my previous work in film, particularly in the area of image manipulation. It replaced laborious photochemical processes with electronic and digital methods and represented a continuity with one major aspect of experimental film history – that which stresses individual authorship through the act of 'writing' with the camera.



synthesis of image and sound and the selection of sequences in the editing process. Although I made a computer-generated film and some other computer art pieces in the late 60s, the first serious work I did of this kind was incorporated as three of the sections in 'Sketches for a Sensual Philosophy', all of which involved writing programs to generate or manipulate picture and sound directly on the computer (an Atari ST) in 'real time', subsequently recorded on to video for the programme.

The second technological shift is the availability of acceptably highimage resolution from light, portable video. In 1988, I bought one of the first Video-8 cameras. Although as a film-maker I have shot most of my own film, I had never enjoyed the weight and wait involved in film production. What Video-8, and later Hi-8, achieved for me was a less intrusive and more spontaneous way of recording images: the tapes Formy own practice and psyche, working with Video-8 answered my needs at the level of recording or collecting (sequences, images, sounds) but it did not in any direct way answer other questions concerning the next level of selection, order, synthesis, symbol, metaphor – the structures taken on in making this into a work in public discourse. I resist the diary interpretation which places the 'life' rather than the constructed, symbolic work at the centre of interpretation.

So there are at least two issues: one is the raw material, the video sequences on tape, their meanings and interpretation; the other is the structuring and transformation of this material through juxtaposition and reworking. The first issue spins theoretically around understanding how meanings enter and are inscribed in the recorded material, the second depends on what structures for connection or models for experience we can bring to bear on the ordering of the material.

The Material

The raw material (some 60 hours of video images, growing in both directions – forward as I shoot new material and backwards as I incorporate earlier film images) is not a 'diary'. It ranges from near 'home movie' to almost camera-edited short video poems. In between is a range of sequences recorded on impulse or according to some very tentative idea of a theme to which it might relate.

Almost everything has been recorded with an attitude of 'low-key' intervention in the profilmic – a reluctance to intervene and an awareness that what seems 'charged' at the moment of shooting may not seem so in the subsequently screened image, and vice versa.

Though the material has been deliberately shot to resist any overriding preconception, it is nonetheless motivated and organised within causal chains, some personal and some derived from circumstances of which I am an 'agent'. This motivation or causality is inscribed in the material as latent meaning which may be more or less dominant.

This inscription of meaning can be located in:

 the signification of the events themselves occurring before the camera

why I am where I find myself at the time of recording

• the details of the act of recording as traced through the choices made like framing, centring, camera movement or when to start and stop recording

• the technology and its in-built technological/language discourse (lens structures, colour biases, auto aperture, recording level limiters, etc.)

In addition to the meanings inscribed in the individual sequences, certain sets of sequences are themselves already determined within

questions it asks; to find amongst a mass of possibilities the correct, the necessary fact to solve the theme.'

And again:

'Montage – when I decide upon the order in which the filmed material will be presented (to choose from amongst the thousands of possible combinations the one that seems most appropriate, bearing in mind the nature of the filmed material itself or the demands of the chosen theme).' (*Afterimage* No.1, Apr 1970).

However, for the Chronos project there were some distinct differences from the assumptions made by Vertov. Coming from a background of formal/structural experiment, I could no longer assume a singular form of resolution to thematic notions, nor their full consistency with the 'nature' of the filmed material. This view emerged out of the anti- or non-narrative concepts which have accompanied my filmic exploration of repetition, improvised variations on visual themes, the notions of 'verticality' proposed by Maya Deren and the awareness of programmable, permutational or multiple solutions to structural problems. It also emerged from the actual possibility of exploring complex multi-connectiveness or multiple variation implicit in the use of computer technology.

For my project I sought, and continue to seek, structural models which have a high degree of flexibility and correspond more adequately to the fluidity and uncertainty which pertain to the way in which the mind works on remembered or learned experience. I have thought of these structures in terms of a 'memory model' where, at the risk of oversimplification, the shot sequences represent perception and structure, and juxtaposition the act of memory.

From my experience it seems clear that in memory, images from one



themes or have other kinds of coherence (geographical – all shot within a short time; similar subjects – shot intermittently over a period of time; psychological coherence and so on) even if these are not consciously predetermined.

The Structure

There is an evident parallel between the problem of structure I faced and that implicit in the concepts of Dziga Vertov. His Kino Eye theory similarly assumed a structuring process aimed at 'making sense' of material which had been recorded beyond the confines of a narrative or documentary script.

On montage Vertov said: 'Kino Eye, flinging itself into the heart of the apparent disorder of life, strives to find in life itself the answers to the source are linked with others in a continuing variety; they are used and reused and constantly transformed in the process. In other words, meanings are not locked into the initial form of the memory, but develop through re-juxtaposition. This is an active rather than nostalgic (or 'factual') notion of memory.

The new computer technology applied to video makes it possible both to develop structures for single 'linear' works and more radically, to produce works which remain open in their form of presentation, either through permutational options or interactive responses with the user.

The most challenging concept relevant to cinematic structure to emerge from computer technology is Random Access Memory (RAM). Conceptually, RAM represents a system of information storage where the sequence in which information is retrieved may be entirely different from the sequence in which it has been recorded, with no additional cost in time or energy. In all print, film or tape systems, the retrieval sequence is linear – shot one must be passed to get to shot two. In a RAM-based system, the location addresses of any data are equidistant – location one is as close to location 100 as it is to location two. Of course, various constraints create gaps between concept and technological realisation. On the other hand, what is taken to constitute a unit of the data (a pixel, a frame, a sequence) is a matter of choice (and technological capacity).

For the Chronos project these gaps are of no great consequence. What is of importance is the concept of RAM as a model for memory and a structuring principle for the video source material, together with sufficient technical opportunity to exercise this in an artistic work. The philosophical and artistic implications influencing the structure of the work are more important than the actual technology employed (which has to date been hybrid). But I take the concept of Random Access. Memory as a reference point because it offers me a more appropriate basis for following my artistic intention than other available models.

The Work

I am faced with a very large source of recorded material, in all of which I have a strong personal interest. It is intrinsically confused and confusing (it would be of no interest if it were not). While I am trying to make artistic (creative) sense of this material, I do not believe in the hyper-significance of the single artistic solution, but seek levels of symbolic generality beyond the idiosyncratic and randomly made connection. I adopt the concept of Random Access Memory to explore flexible and multiple interconnections between the material, but RAM needs a program (or programs) on which to base connections. This has led me to concepts of clusters and themes, where both take different forms in different conditions.

The description line is subjective rather than schematic, but includes abstract factors like colour and movement. It was not necessary to predefine categories for description, as a 'lexicon' of terms used was derived automatically from the database.

This is a short section of the lexicon derived from reel 31 section 1: snow children play mountain cold grey winter windy pan zoomin oliver sera hill whirl gesture jiggle wind car hand wheel driving vcu drive window landscape passes road lights trees trackleft clouds sky blue white mist panright valley tiltdown autumn waterfall splash noise power beehives basket spiral craft zoomout still orchard cu leaves tree sun branches trunk bark moss sway green trunks tractor

This made it possible for the computer to sort the material by word, either on a simple basis or using Boolean logic ('and', 'or', 'not-and', 'andor' etc.), and to convert these sorts into edited video sequences by compiling Edit Decision Lists. (The process, thanks to the number of procedures that could be invented for selection, is endless. It could also be generated by so-called Artificial Intelligence programs or 'expert systems'.)

Again, as my concern remains entirely artistic and not technological, wherever I have felt it appropriate (which is frequently), I have shortcircuited the procedures in favour of building on them subjectively. They have, nonetheless, provided a number of connections and starting points which I would not have arrived at otherwise. Most importantly, because the computer selections were based on subjective description and a preference value for the shots (also subjective) these selections reflect various potential coherences, and the clusters resulting from the process have thematic tendencies. Thus themes have mostly been emergent not imposed, related to the connections which may be said to have been intrinsic to or latent in the material.



In fact, my approach has been to catalogue all the video material as a database of shots where each shot has a description line. For example, here are the first three shots from reel 31 section 1, showing the time code start and end and the description line, including an 'image preference value' (the highest value given to any shot is 15):

31 – 1 shot # 1 snow children 16:04:13:08-16:04:31:10 children play snow mountain cold grey winter windy pan zoomin 2

31 – 1 shot # 2 play snow 16:04:37:03-16:05:57:20 oliver sera play snow hill whirl gesture jiggle wind cold children 4 31 – 1 shot # 3 car 1 16:06:13:07-16:06:21:17 car snow hand wheel driving vcu 5 Different kinds of theme or cluster which have emerged from the process: • themes which emerge from the strong and particular content of the material itself

These include some of the material shot in China and Croatia, for example, though material in this category finds itself in constructions which followed another theme.

 following through an idea where the material was shot 'as a piece', in some cases almost edited in camera

Examples of this are 'TV Song' (an interaction between video of watching TV and birds singing on the TV aerial); 'Weir' (a water cascade transformed through shutter speeds and freeze superimposures); 'Warsaw Window' (shots of events during the day and at night below an old hotel window)

• sequences which lent themselves, through their image or sound qualities, to computer or electronic manipulation in a way that relates to the material itself, such as the gestures and costumes of the Peking Opera material shot off Chinese TV

• themes working outwards from the evocative basis of the original image subjectively described in poetic terms

• general but open themes drawing on material across the whole sequence 'bank'. Examples are earth, air, fire and water, seasons, childhood, age and death, East and West

Review

It is difficult and unwise for artists to be their own interpretative critic, therefore some of the more interesting questions about the meaning of the work which I am doing and the completed aspect of it are beyond the scope of these notes. I have tried to discuss the process in relation to some general theoretical concerns about meaning and structure.

It seems clear to me that one major part of my motivation in this work has been related to the problem of how general significance can be constructed from the very particular building blocks of one's own daily, lived experience. In one sense these video-recorded building blocks are highly idiosyncratic. They are special, particular and arbitrary, and can represent the general only through inference (for example, the inference of economic causality), or through juxtaposition which transforms the experience into metaphor. Nonetheless, this is the only way through which individuals can approach any understanding of their place in history or society. And, encountered by my camera. These events have been minimally structured as symbolic at the time of shooting. But all carry latent meanings and potential links with other sequences which remain as 'layers' of interpretation, provided the form does not close off these 'responses to image' through over-determination by closed meanings.

One approach to the potential layers of meaning (and 'layering' is a concept, not a 'reality') is through the treatment and reworking of the material. By editing, montage, juxtaposition, superimposition, matte (key) and visual image transformation, the idiosyncratic image eases its way towards communicative generality – becomes symbol, metaphor, allegory.

In this sense, one single sequence – the electromagnetic trace on videotape – may contribute to a range of themes. The meaning in the image is always latent – it becomes fixed temporarily as it contributes to a theme, as (so it seems) does a transient particular human memory held in an electro-chemical bond in the cells of the brain.

The structural aim of the work lies in retaining a trace of the movement from the idiosyncratic towards the allegorical. This is to hold on to the concept (reading) of the material as raw and latent – available for new juxtapositions and new transformations – or perhaps as remaining insignificant and trivial. Not all the themes opened up have matured and survived in the single version of the work, but I hope the form implies the possibility of other connections, explorations and variations.

In keeping with the concept of non-linearity, the sequences and themes of the TV version have been thought of as simultaneous rather than sequential. In other words, the form of editing and the episodic structure seek to imply that themes not currently available to view



it seems to me, the only way in which any reliable sympathy with the experience of others can be constructed. It is that which makes up the individual life – the direct place of our knowledge, experience and crucially felt reality.

It is also untidy. The intersections between the personal and the historical are unpredictable: when filming a sunrise in Corfu, a refugee from strife-torn Albania, swimming on a tractor inner tube, became a small speck traced in the magnetic fields of my video tape. I can control the camera, more or less, but little of what takes place in the real world in front of it.

All the material which makes up the Chronos project is at base idiosyncratic. In its raw state it traces, in recorded fragments, my momentary impulses and reactions to events in the world might be continuing 'underneath' (as in the unconscious memory) and could be made available by traversing the current visible material. In a non-linear interactive form like CD-ROM, this movement through layers of simultaneous development could be actualised, preserving other versions and variations.

The project continues.

Malcolm Le Grice started making films in 1965, and quickly became known internationally as one of Britain's leading experimental filmmakers and theorists. In the last ten years he has concentrated on video and computer art, completing 2 major TV commissions and publishing theoretical articles on the implications of digital concepts for cinematic structure.