

## Quantum of Mark and Least Event: the Interaction of John Latham's Art and Ideas

John started out as a very intuitive, experimental artist, who began increasingly to theorise about what he was discovering through his art. Around the early 1970s he started to write theoretical papers, and some of his later art involved elements that were intended to illustrate the theory. This essay offers my understanding of the metaphysical, epistemological, and practical aspects of his theory, and their relation to his art.

John's artistic voice began to emerge when he started to use the spray gun. He had been using one for weatherproofing the exterior of the house with creosote, and it suddenly struck him as a good way to take up an invitation by his friends Clive Gregory and Anita Kohsen to do a mural for Halloween. Gregory and Kohsen, an astronomer and psychologist, were working on the formulation of a unified discipline they called psychophysical cosmology. They were very pleased with the mural, which they saw as revealing structure, and made John an honorary founding member of their Institute for the Study of Mental Images. John always took this fact to be the most important entry on his CV, and saw it as their recognition of his role of artist working with a nonverbal medium as a vital complementary element to their partnership. John's own theory was greatly influenced by the system developed by Gregory and Kohsen, which they named the O-structure.

The defining feature of John's metaphysics is that it regards the universe as fundamentally time-based, not space-based. This gets its first major verbal expression in his *Time-Base and Determination in Events* published by the Kunsthalle, Düsseldorf (1975), and with a different ending by the Tate Gallery (1976). The universe is a system of events containing and overlapping with other events. Each event is related to an atemporal score, similar to the way that a musical performance is related to an atemporal musical score. The tendency of an event of a given score to recur, or just to complete itself, is its insistance (originally spelled with an 'a'). The duration or periodic time of such an event is its time-base. Later, talk of insistance dropped away in favour of regarding the atemporal score as the source of a goal-directed, motivational element in the event.

Several large works are conscious embodiments of this developing theory – the *Time-Base Roller* (1972), a performance piece *Government of the First and Thirteenth Chair* (1982), the *Story of the RIO* (1983), and the *N-U Niddrie Heart* (1991). There was less for John to discover in making these works; rather, they are the culmination of various artistic discoveries. But there is plenty of mystery for the spectator. And, as always, for both artist and audience there is the interest in the formal properties of the work.

The *Time-Base Roller* grew out of a number of John's artistic discoveries – first in using the spray gun to make paintings with stripes which struck him as reminiscent of the bands that appear in spectrographic analyses of light sources, second in using the contrast between the two sides of the painting, and third in introducing a temporal dimension by rolling up the canvas. The work consists of a large canvas divided into three sections that rolls up and down on a thin horizontal cylinder by means of a motor that can be operated by the spectator. At any point at which the roller is at rest, what is visible of the rolled up portion on the cylinder is a series of letters that do not appear to make any sense when read horizontally (when one is looking at a purely spatial relationship between the letters). But if one reads the letters at a position on the horizontal cylinder as the roller unrolls, one will discover a statement for a band on the roller that makes phonetic

if not semantic sense. This is a transformation of an English sentence that has a literal significance. The transformations are influenced by John's observations of things children say when they mishear or misunderstand something, and by the transformations in Joyce's *Finnegans Wake*.

Three fundamental aspects of time are represented on the *Time-Base Roller*:

(1) Passing time is represented by the movement of the canvas on the roller. The letters one sees at a given moment on the rolled up canvas pass from present to past as the canvas unrolls.

(2) Time-base is represented by the ordering of events on a spectrum divided into 36 bands running from the left end of the roller, which gives the shortest time-base, to the right end, which gives the longest time-base. (Only 19 of these bands are shown on the roller.)

(3) The atemporal realm and all its scores is represented by the flat plane of the canvas when fully unrolled.

John saw it as an advantage of his view of reality that it involved fundamentally only these three temporal aspects, as opposed to the less comprehensible eleven spatial dimensions of string theory, or the five dimensions of the O-structure. As all phenomena can be represented using just a temporal dimension and the two spatial dimensions of a sheet of canvas, John came to call this view 'flat time'. (Perhaps it was also a further response to Clement Greenberg.)

The lowest band on the roller represents the time-base of the Least Event, which John originally took, following the O-structure, to be  $10^{-23}$  seconds. This figure is not an essential feature of the system, and John was happy to entertain the idea that the lowest time-base might be much shorter, as urged by his friend the physicist Chris Isham. But temporal discreteness is essential – the Least Event, however short it is, is not infinitesimal. If one sets the roller running backwards in time there is a dramatic effect when the letters line up at the beginning of time and the roller stops. What happens at the end of time? This is left unspecified. John picked 36 bands somewhat arbitrarily allowing flexibility as to whether there is a highest band and what its time-base might be. It is band 34 (also labeled band U under the later lettering system) that is designated the time-base of *our* universe, not band 36. John thought our universe was one of many which had evolved from previous universes and would be followed by further universes. The *Time-Base Roller* in effect represents the universe of universes.

The roller unfolds like a determined system – what one sees on the roller is fixed so that every time it is rolled down or up the same letters are visible. But it is not John's view that the universe is a deterministic system. In a significant sense it's up to us in an undetermined way how it develops. John also took all the bands to have an autonomy – what happens at any band is not simply a function of what happens at a lower or lowest band, in contrast to the prevailing view of philosophers and physicists. The classification of all events, whether physical or psychological, according to time-base and insistence shows how all disciplines are related to each other and integrated into the Whole. The time-base spectrum can be used to give a kind of spectrographic analysis of a person, analogous to that of a light source, in which different bands motivating the person in question will show up with different insistances. The dominant band John called the Centre of Gravitas of that person.

The predominant view of the world, by contrast, John regarded as space-based. This is the way of seeing the world as fundamentally made up of objects

moving in space. It is the world-view given to us by the senses and reinforced by the authority of almost all respected thinkers and institutions. But building from spatial blocks inevitably leads to a picture of the universe that is fragmentary and unable to accommodate the real sources of motivation pervading the universe. While spatial relations undoubtedly exist, they are derivative and not fundamental. John offered a derivation of spatial features such as position and distance from patterns or “habits” of recurrent events in *Time-Base and Determination in Events*. And later in *Event Structure: approach to a basic contradiction*, published by Syntax, Calgary (1981), it’s both time and space that he attempts to derive from habits of a more primitive extendedness. Further principles, which John referred to as evenometry, are described in detail there in which more complex events are built up from simpler ones by way of patterns or habits. The idea that space and/or time might be derived from other concepts is something that has engaged the minds of several physicists of late, though it is mostly the derivation of time from spatial concepts that they have been exploring.

John took the revolutions in physics at the beginning of the 20th century concerning quantum theory and relativity to imply the inaccuracy of the space-based view. Nevertheless, contemporary physics failed to see the importance of the atemporal source of motivation in events, and couldn’t say anything interesting about the central bands on the spectrum. It also had a big problem in dealing with the singularity it postulated for the beginning of the universe, which did not arise for the time-based view.

An important consequence of accepting the time-based view and rejecting the primacy of the space-based view is that one is thereby open to picking up influences that are not apparent to the senses and whose transmission is not spatially governed. John followed Gregory and Kohsen in thinking there could be informational relationships accessible through intuition that would be dismissed by space-based thinkers.

In the *Story of the RIO* (reflective intuitive organism) a sequence of 18 panels depicts the development of a complex universe containing RIOs from a proto universe consisting of a Least Event. John used transparent glass for several of these panels to signify the atemporal state O score, which is probably best understood as the entire atemporal realm and source of motivation for all events. The final panels are book reliefs, and the full sequence of panels presents highlighted evenometric steps, culminating in the appearance of a reflective intuitive organism.

John’s principal book reliefs were made during the years 1958–63. They consist of books that have been cut, burned and sprayed in various ways in conjunction with scrap metal items, usually stuck onto a surface using plaster of Paris. Books were picked originally for their form, but were also seen by him as implying connection to human culture, and especially as embodying the idea of received information. In what he called the Observer series, he came upon the idea of interpreting different clusters of books on a relief as representing different types of person or different belief systems. The nonreflective person is driven by appetite. The rational person is capable of reflecting on such nonreflective individuals and of self-reflection, and can plan future action. They are both beholden to received opinion. The reflective intuitive person taps into sources that are unknown to the other two, and is capable of observing the others (in the sense of understanding and reflecting on them), while appearing alien and incomprehensible to both of them. John later dubbed these three figures Mitya, Ivan and Alyosha, having seen a resemblance to the central characters of Dostoyevsky’s *Three Brothers Karamazov*.

The method of the rational thinker is to rely on the senses and on the authority of received opinion. It is basically a matter of adjusting one’s beliefs to get the best fit with these sources. The intuitive thinker is one who is open to receiving input

from the nonspatial informational relationships among events. Seemingly crazy ideas pop into one's head all the time. The rational person doesn't pay attention to them or actively blocks them out, being concerned chiefly to attain a tidy coherence with the views of one's social unit. The intuitive person is prepared to try them out, see where they lead, and adopt them if they work.

When John started doing his *One Second Drawings* in 1970 he had the realisation that each dot produced by the spray gun could be understood as a "quantum of mark" representing in a nonlinguistic way the Least Event in its relation to more complex events, and eventually to whole universes. This is what he describes sometimes as a preliterate idiom, sometimes as a language that shall copy nature (adopting this phrase from Bertrand Russell) – a language whose syntax reveals its referents directly rather than by convention. One learns such a language by learning to "read form", as one needs to do in reading *Finnegans Wake*.

The verbal medium, or natural language, is essentially flawed if it is used in the standard way and not poetically or as form. It can't represent the relation between atemporal and temporal. It can't represent wholes. It is divisive. Why did John think this? Perhaps partly because its syntax is not directly suggestive of a referent (and so leads to problems of interpretation?). But more crucially, because he took language to have evolved as a vehicle for space-based thought. So when he spoke critically of verbal logic, I think he meant to criticise reasoning that uses space-based concepts.

John saw time-base theory as having enormous implications for action at both the personal and social levels. First, people grasping the theory would see how to classify their different aims and goals on the time-base spectrum. There need not be an algorithm for solving personal and interpersonal conflicts. But the radical rethinking in time-based terms would inevitably cause some change. One expected form of change would be an increased interest in longer time-based events. So conflicts arising from short term thinking would tend to be dissolved.

Not everyone would be capable of, or willing to, follow time-based thought. But this would not be a serious obstacle if society were structured in such a way that time-based individuals had authoritative positions in government and industry. This idea was pioneered and implemented by the Artist Placement Group (later Organisation and Imagination), of which John was a founding member. Their term for such an individual is 'Incidental Person' – not necessarily a visual artist, but at any rate a creative person who is time-based informed and most likely uses a nonverbal medium). Even though there will always be self-serving and exploitative individuals of the Mitya and Ivan types, the Incidental Person will tend to keep the organisation in tune with the Whole.

John hoped time-based ideas would be picked up by people able to read form from his art and that of other artists he saw as belonging to a time-based tradition. As this didn't appear to be happening, and as the verbal formulations of Gregory and Kohsen did not appear to have been picked up either, John came to see it as a task for him to write. But he recognised he was not skilled with the verbal medium as standardly used, which he saw in any case as inherently flawed for conveying time-based ideas. So he tried to use language in a distinctive way, using many of his own terms and using established terms in new ways to introduce time-based concepts. He used some metaphor and departures from standard grammar, and liked variety in type faces and layout on the page (so that it might be read as form?). This produced a tension between on the one hand something that resembled a philosophical/scientific treatise supported by evidence and argument, and on the other hand a piece of conceptual art that would achieve its effects by nonrational means. I don't think John ever expected he would convince Ivan by engaging him in rational discourse. Rather, he hoped to prompt Ivan into allowing intuiti-

tion to bring about a paradigm shift in his thinking. This was evident from his approach to personal communications and to his public debates with scientists and philosophers.

What made John think he was on the right track in his ideas and writings? The time-based view had great simplicity and elegance in its capacity to unify all natural and cultural phenomena. It explained well the consensus in the deliverances of moral intuitions in the form of conscience, and religious intuitions in the form of beliefs that the universe is purposive and personal. Furthermore, it was backed up theoretically by the scientists Gregory and Kohsen, whose professionalism he greatly respected. So it bore the marks of an intuition that had been tried out and found to work. Having discovered that the method of acting on intuition worked so well for an artist, it did not seem improbable that it should work also for a metaphysician, i.e. that the universe would reveal itself in the way that making art revealed things.