

Ian Munro's Interpretation

I have described the *Time-Base Roller* in "A Discussion", "Quantum of Mark", "The Story of the RIO", and on the DVD "John Latham's Universe" you can see it in action. Here I want to make one further point. The two-dimensional canvas of John's *Time-Base Roller* can be thought of as representing a complete history of all the events that ever occur, arranged by way of their time-base. And shapes on the canvas can be taken as representing events that are part of that history. John often wrote that this canvas represented the atemporal. This complete history and its component events can be seen from no particular point in passing time, i.e. *sub specie aeternitatis*, so they can be regarded as atemporal in a sense. But they are not atemporal in the sense that scores are atemporal—outside time entirely. The score for Beethoven's *Moonlight Sonata* can be regarded as an atemporal entity, singled out and brought to our attention by Beethoven. This is very different from a presentation of the complete history of performances of the sonata from the standpoint of eternity.

This capacity to represent and measure any phenomenon in terms of the region it takes up on the *Time-Base Roller* particularly impressed Ian Munro. He suggests in his "Flat Time" paper (discussed in "Memoir") published in 2009 in *Third Text*, 23:2, 127–134, that it could be fruitfully explored by constructing computer models of such processes. That was one of the projects Ian was hoping to pursue as part of the research proposal for which he, John, and Chris Isham applied for funding from NESTA (National Endowment for Science Technology and the Arts). As I mentioned earlier, the interest in such representation would depend on there being event scores of different time-bases that have autonomous features, and I have argued that there is no evidence for this.

I shall take a couple of paragraphs here to comment on several places where I think Ian's interpretation of Flat Time, and specifically how he takes it to be represented on the *Time-Base Roller*, departs from John's. First, he gives Flat Time an idealistic reading by saying that the boundaries of events are assigned by consciousness. My impression of John's view is that the process of accretion yields events with clear cut boundaries that exist independently of any awareness there might be of them. Second, Ian says that history is represented by the vertical edges of the blind as they descend under the influence of gravity. This is puzzling since the blind, or Roller, is operated by a motor, not by gravity. And John does not say that gravity somehow drives the passage of time. I also don't see why Ian takes it just to be the edges of the Roller that represent history. Rather, I would say that the history is apparent for events of all time-bases so that it is not only the vertical edges but also all the vertical bands between them that represent history. Third, Ian says that the width of the bands represent their time-base. According to John the bands on the Roller are of equal width. It is the distance from the left hand edge that is indicative of the time-base of the band.

Fourth, and what strikes me as the greatest mistake in Ian's interpretation, is his claim that the left hand edge of the Roller represents the beginning of time. The left hand edge of the canvas represents events of the shortest time-base, namely Least Events. It is true that there was a single Least Event at the beginning of time on John's view, but there are also Least Events throughout history, so the left hand edge doesn't represent anything especially definitive of the beginning of time. Rather, it is the unfurling of the Roller that gives the passage of time and it is the fully wound up state of the Roller that represents the beginning of time. Related to this, Ian also says that the events at the left hand edge concern just a point while events at the right hand edge concern the whole universe. It is fair enough

to think of Least Events as small, especially in comparison with the universe, but they are not strictly speaking points as they have a finite duration. Ian takes these claims to indicate that the Roller must in fact be a cone on its side. He seems to want to make the Roller represent the difference in size between the Least Event and the cosmos in a more literal and graphic way. Instead John accomplishes this representation diagrammatically by having different points along the horizontal axis represent different time-bases. For convenience John divides the spectrum into 36 bands of equal width. John says that each band is specified to cover a range of time-bases 14–15 times that of its smallest time-base. (This range would need adjusting in accordance with varying estimates for the shortest and longest time-bases.) So each successive centimeter on the band does not correspond to a difference in time-base of the same number of seconds but rather of some exponentially increasing number of seconds. Ian takes this exponential scale to provide a further reason for thinking that the Roller is really a cone rather than a cylinder when he suggests that a logarithmic change in scale would allow the simpler imagery of a cylinder to be retained. Again, it seems to me that the width of the cylinder is playing no representational role in John's idea of the Roller, and Ian is trying to make it play a graphic role that John takes to be accomplished by a diagrammatic specification of scale.