

Exeter U3A: University of Exeter, Written in the Stars – Victorian Literature and Astronomy

Twenty-five Exeter u3a members attended this talk by **Jason Hall**, Professor of Modern Literature and Culture, in January.

Jason started by stating he had an interest in the forms which poetry takes, and then looked at their history, describing himself as a literary historian, looking primarily at literature and poetry in the nineteenth century.

Part one of his talk focused on the conceptual framework. He quoted from Cicero's *The Dream of Scipio* (c. 51 BC), from a nineteenth century translation, where the Cosmos was seen as a series of celestial spheres. Also, the journey through space would resonate with modern astronauts having experienced the subjective of what might be to the objective of what is, the overview is to see how everything is related. The bible's Genesis describes the Earth similar to a snow globe, with the advent of space travel we now know that it is a globular shape. When *Star Trek* actor William Shatner went into space, he described it as the most profound experience he could imagine. Thomas Nagel highlighted the philosophical dilemma of abstract and subjective from within and from outside, that there was a need to look through a transcendental perspective.

Jason took us through several slides demonstrating how our understanding of the Universe has expanded as the human race has developed technically, from the first photos of Earth in the 1940s, to the Apollo photos, then a photo taken from Mars (33.9 million miles from Earth), and the photo taken from the Voyager 1 Space-probe *The Pale Blue Dot* taken 3.7 billion miles from Earth. Jason then played a YouTube video *Powers of Ten* starting with a couple picnicking on a one metre square, and expanding out at a rate of ten times each frame to give a view of the Milky Way. This was described as a fantasy of 'Earth Looking' as there is currently no technology to get a view this far away.

Part two of the lecture concentrated on literature and poetry. Dante Gabriel Rossetti would often write a poem then paint an illustration of it. An example of this is *The Blessed Damozel*, which references the seven stars of the Pleiades. In the poem the Damozel is taken to the heavens and for each day that passes for her, ten years go by for those she left behind. Although in the painting there are six stars in the Damozel's hair rather than seven. It is thought that the Damozel herself represents the seventh star. It is believed that six stars could be seen with the naked eye. As our technology has increased and telescopes have got better, we now know that in the M45 Pleiades Star Cluster there are thousands of stars in the constellation of Taurus.

Rossetti wrote a follow up version of the 1850 poem in 1870. In this version he describes the Damozel's eyes as more reflective as in a pool. It is thought that this might reference improvements in telescopes. How far can she see? Thomas Hake estimated this at 2 billion miles, which is similar to the distance to Neptune which was discovered in 1846. However, the Pleiades star cluster is around 2 quadrillion miles away. Also in 1846, Felix Eberty, in his book *The Stars and the Earth*, wrote about 'Lookback time'. Given that the poem is about how long she has to wait, we could consider Einstein's work on time dilation, where he proposes that time slows down for those in motion. We can see from all these bodies of work that there is an overlap between science and humanities where poetry can be the imaginary tool to help describe the unknown.

Andrew Mackay