

Science and Poetry: a note

On 15 March I woke up to the news that Stephen Hawking had died the previous day. In the course of the following days and weeks tributes to him poured in from all over the world. I then knew very little about him. My interests were confined largely to religion and philosophy and the fine arts, whereas Stephen Hawking was a theoretical physicist and cosmologist of whose discoveries in connection with black holes I had heard but vaguely. In my teens, when I had read so much, the only book of popular science with which I was acquainted was Sir James Jeans' *The Mysterious Universe*, which touched my imagination more than my intellect. This did not mean that I was 'against' science, but as I came to know more about Buddhism I became aware that some modern Buddhists, in their eagerness to propagate the Dharma, were taking the name of science in vain. Buddhism was scientific, and the fact that it was scientific proved that it was true. Indeed some went so far as to claim Buddhism had in its own way anticipated important scientific discoveries. My own view was that Buddhism could be described as scientific only in the sense that it was based, like science, on reason and observation, rather than on authority, whether that of the Bible or Vedas.

Besides tributes to his achievements as a theoretical physicist and cosmologist there were also tributes to the courage and determination with which he had overcome extreme physical disabilities. He had even written books. One of these was frequently mentioned in the tributes paid him. This was the best selling *A Brief History of Time*, which had been translated into many languages and of which even I had heard. I therefore decided that I ought to read it and ordered an audiobook version. Having gone through it once, I decided that I ought to go through it a second time, for though the book was clearly - even beautifully - written the territory it covered was strange to me and called for more reflection. Indeed, I was about to go through it a for a third time, when a friend reminded me that *A Brief History of Time* had been published in 1988, more than thirty years ago, and that it was not the last word on its subject. He therefore recommended that I read Carlo Rovelli's *Reality Is Not What It Seems*, published in 2014.

This was even better written than *A Brief History of Time*. Moreover, in his preface Rovelli more than once speaks of the beauty of the world in a way that suggests he sees it aesthetically as well as scientifically. Later on, in the body of the work, he brings poetry and science closer together doing this by referring to Einstein's idea of the 3-sphere and a passage in Dante's *Paradiso*. 'I believe', Rovelli writes, 'that this example demonstrates how great science and great poetry are both visionary, and may even arrive at the same intuitions. Our culture is foolish to keep science and poetry separated: they are two tools to open our eyes to the complexity and beauty of the world. Dante's 3-sphere is only an intuition within a dream. Einstein's 3-sphere has mathematical form and follows from the theory's equations. The effect of each is different. Dante moves us deeply, touching the sources of our emotions. Einstein opens a road towards the unsolved mysteries of our universe. But both count among the most beautiful and significant flights that the mind can achieve'. This could hardly be better put, especially as he describes 'the flights of the mind' as beautiful. Nor is that all. When he comes to describe Faraday's discovery of the electromagnetic field he does so with the help of such terms as insight, intuition, inspiration, and imagination, all of which are as applicable to a poem, a painting, a musical

composition, as they are to a scientific discovery. The Buddhist may well wonder whether the insight or intuition of which Rovelli speaks in connection with Faraday's discovery is the same as the insight developed by the Buddhist in meditation. In other words, is it an insight that liberates from greed, hatred, and delusion? Perhaps time alone will tell, as Buddhists study science and scientists practise meditation.

Sangharakshita

Adhithana

26/6/2018 - 28/6/2018