

Music of the Spheres

Many years ago I went to Sydney's magnificent Opera House to hear the city's symphony orchestra and massed choir perform Beethoven's Ninth. As the house-lights dimmed and the orchestra launched into the first movement I became aware that I was listening, not just to human beings, but to a congregation of very talented chimpanzees. With instruments and voices these astonishing apes were recreating a glittering tapestry of sound that had been conceived in the brain of a middle-aged, deaf chimp who had died almost 180 years earlier. Meanwhile, another two thousand chimps, moved by the majesty of the music, sat with me in silent awe beneath the soaring ceramic sails that housed the chimp-designed auditorium.

As I grew accustomed to the view through this strange evolutionary window I became aware that it opened on to a far grander landscape than I had ever seen before. I could look inside my inner ear to the hair-like cilia, quivering to Beethoven's climactic chorale, and I knew that they boasted bacterial origins that were half the age of the planet. Meanwhile, my eyes were plumbing the depths of the darkened auditorium via a multitude of reddish rod cells embedded around the fringe of each retina. Loaded with the highly sensitive pigment rhodopsin, those cells are the modified descendants of purple bacteria that evolved their crucial chemistry during the birth of life on Earth almost four billion years ago when the Sun was young and much weaker than today. Similarly, the stew of neurotransmitters that flooded my brain and stirred my emotions were midwifed into existence by 14-billion-year-old hydrogen atoms embedded in my DNA. Born of the Big Bang these smallest of atoms are the original building blocks of this thermodynamic universe of ours and they remain the basic coinage of its chaotic energy flows. It is hydrogen that fires the stars and lights the deepest recesses of the universe; and it is hydrogen that fires us and all life into existence via the replicative tango performed by the bacterial DNA within each cell of our bodies, every second of our lives.

The years have rolled on, yet I remain transfixed by the splendour of that vision—to the point where I'm now unable to retreat to the naive notion that we are fundamentally distinct and separate from all other life.