

## **A place that exists only in moonlight: Katie Paterson and JMW Turner**

James Attlee

At some time during their visit to Turner Contemporary the eyes of most visitors will be drawn to the view from its sea-facing windows, through which they will look out towards a distant, seemingly infinite horizon. In this case, the direction of their gaze is entirely appropriate. The location of this exhibition of Katie Paterson's work, in the very spot where Turner kept watch from Sophia Booth's boarding house, has been central to its conception from the beginning. As Paterson explains, when she was first approached "it was the context of the place, the sea, the sky, the light— all those relationships were on my mind; not only the beauty of the architecture of Turner Contemporary but everything around it and what it represents."

At first sight there seems little to connect Paterson's work with that of Britain's greatest watercolourist. Fluently moving between technologies, marshalling collaborators from the worlds of science, architecture, literature and space travel, she explores the complex relationships between human existence and the vastness of space and time. Yet despite the fact his field of operation was paper, canvas and the engraver's plate, Turner too was engaged with wider ideas; a trained architectural draftsman, he was friendly with a number of the leading scientists of his day and followed developments in disciplines including geology, chemistry, palaeontology and astronomy. He and Paterson would have had much to discuss: they are both sky-watchers; connoisseurs of lighting effects and constellations; restless experimenters and students of the sublime.

The process of selecting works by Turner for the exhibition came at a time when Paterson had paused artistic production to concentrate on her book *A place that exists only in moonlight*, which will be published at the same time as the exhibition. The book, its cover printed with cosmic dust—a mixture, Paterson tells me, "of Mars, the moon, shooting stars, meteorites and asteroids," she has ground herself in a pestle and mortar— contains over 100 short texts, a selection of which will also be shown on the walls, cut into sterling silver. Book and silver texts together are part of the on-going *Ideas* series, which lies at the heart of both the exhibition and her practice: works that may or may not ever be realised in the physical realm but which, expressed in this distilled form, take shape as 'idea-images' in the imagination of those who read them. "Many of my ideas begin as a few words in my mind; that is how they're written in the *Ideas* series," Paterson says. "For me those that work best always seem to come out of nowhere— really of course they come from a whole number of things I've been thinking about and digesting over years, but it feels like a bolt out of the blue when they arrive." These purely conceptual works are not as far from Turner's concerns

as might be supposed: one of the sketchbooks the artist compiled during his stays on the Kent coast, containing sketches of rough seas and a peaceful harbour, is simply called *Ideas: Folkstone* (sic). “As I worked on the book I was sending my *Ideas* to Ian Warrell, a curator and Turner expert who knows the vast Turner Bequest at the Tate very well,” Paterson explains. “He began making a long list of Turner works that might have relationships with them that I could delve into. He was a connector, finding paintings I might never have come across otherwise.” As the selection process continued, her sense of affinity grew. “I’m increasingly drawn to Turner’s works which are extremely abstract. Some are so light, so ephemeral they are almost floating away. One of the watercolours I selected has just three or four brushstrokes; while looking at it I was seeing the *Idea ‘Venus’s sky recreated on earth’.*”

The *Ideas* often encompass such radical realignments of space, time and matter, in proposals that render the fleeting permanent:

*All the shadows  
at this moment  
carved into the earth*

or restore what has been lost;

*Everything  
once evaporated  
returned*

One, included in the book but not on the walls of the exhibition, seems to offer a way out from the seemingly intractable problems facing our world

*A reset button  
for the universe  
pressed only once*

The *Ideas*, like much of Paterson’s work, are shot through with both awe and a sense of loss; a combination that was also powerfully present in the work *Vatnajökull (the sound of)*, in which gallery visitors were given a phone number to ring that connected to a distant Icelandic glacier, enabling them to hear it melting at the other end of the line; or *History of Darkness*, her growing

archive of slides recording the nothingness that encircles us, beyond, before and after the existence of our planet. In the face of such cosmic melancholy, humour and pathos are weapons; creativity itself an act of defiance. Her piece *The Dying Star Letters* is made up of letters of condolence sent by the artist each time she heard of the death of a star, a process she admits came close to taking over her life. “Everywhere I travelled— and I travelled a lot— I had to take a stationery kit with me; I became obsessed with stationery. Whenever a star died I received an alert and had to focus myself on getting the letter written and posted. In the beginning they were few and far between, but over the years technology advanced and telescopes observed more and more of these events. By the final year I was posting hundreds upon hundreds of letters, trying to keep up with advances in technology and the speed of the universe.”

In the 18<sup>th</sup> and 19<sup>th</sup> centuries, painters and poets flocked to lectures on the latest scientific discoveries, as interested in geology and optics as they were in theories of aesthetics. In this, Paterson is perhaps more akin to her artistic forbears than to many of her contemporaries. As adept at mathematics at school as art, for a time she felt torn between the two; but after a formative time spent in Iceland, where she was profoundly affected by the landscape, the midnight sun and the depth of the sky, she chose the path of an artist. Despite her incorporation of the latest science into her practice, 18<sup>th</sup> century aesthetic ideas still resonate. “The concept of the sublime definitely interests me,” she says; “the correspondence of the vastness of the universe with the human being in the face of enormity. But my interest is more relational: looking at how interconnected we are; how when a star explodes in the distant universe, the material it gives out forms other planets and becomes a component flowing through our blood.”

Turner was similarly inspired to seek out connections by the science of his day, observing in a lecture he gave at the Royal Academy around 1818 that “the Cell of the Bee and the Basaltic mass display the like Geometric form, of whose elementary principles all Nature partakes.” Ruskin’s account of Turner’s last days paints a picture of a man whose relationship with such things was quintessentially Romantic, verging on the mystical, famously recording Turner’s proclamation that “the Sun is God.” What is less often reported was the artist’s interest in the science of astronomy. A note in the Lowther sketchbook, primarily in use in 1809, includes contemporary calculations regarding eclipses:

*The Sun 95 millions of miles distant The Earth equal to 8 seconds of a degree*

*The 1200 seconds The Moon nearly the apparent size of E.<sup>i</sup>*

The moon Turner mentions, so long the muse of artists, composers and poets, had been rendered almost banal by the mid-20<sup>th</sup> century, its impact in the night sky diminished by the spread of

artificial lighting. When it returned to the centre of human consciousness it was through the rocket launches from Cape Canaveral in the late 1960s, spectacular events that were attended by huge crowds, leading up to the blast-off of Apollo XI in July 1969. It is this technologized moon that Katie Paterson addressed some 30 years later in *Earth-Moon-Earth (Moonlight Sonata Reflected from the Surface of the Moon)*. Taking one of the best-known cultural artefacts of the Romantic era, Beethoven's *Moonlight Sonata*, she translated it into its musical letters and then into Morse code, before bouncing it off the moon using a somewhat marginal technology beloved of amateur radio enthusiasts known as Earth-Moon-Earth radio. At a stroke, the contemporary moon is reconnected to the Romantic age via a 20<sup>th</sup> century technology; but in the process, Beethoven's music has undergone a change. New hesitations, ellipses and silences have been inserted by the craters and shadows on the moon's surface, giving Paterson's lunar remix a fresh and haunting quality.

Like many other painters of the 18<sup>th</sup> and 19<sup>th</sup> centuries, Turner researched pigments, papers, colours and grounds in his search to recreate moonlit effects in the picture plane; several of the results of his restless experimentation are included in the exhibition. Paterson has conducted her own investigations. In one of the many collaborations that define her work she contacted the light-bulb manufacturer Osram and persuaded them to make a light bulb with the same frequencies as moonlight, allowing gallery visitors to enter a moonlit space powered by the very technology that has robbed us of moonlight in the urban environment. Electric bulbs are only one of the mundane objects she has utilised to transmit vast concepts: in other works a confetti cannon is loaded with paper dyed the colours of gamma-ray bursts, the brightest of cosmic explosions; a disco mirror ball beams images of 10,000 eclipses around a darkened room; and sand piles have been cast in the shape of five of the world's mountains for a unique public participation piece that will take place at twenty-five coastal art centres around the entire United Kingdom during 2019.

For most of us, time remains an elusive subject, perhaps because denial of its true implications makes everyday life possible. For Paterson, it is raw material. In *Fossil Necklace* she has taken nothing less than the entire history of the planet and fashioned it into a wearable accessory, its beads made from fossils that include a Giant Lizard's tooth from the Atlas mountains, the toe-bone of a Woolly Rhino discovered in England and a starfish from the Sahara; objects that far predate the current boundaries of our oceans, icecaps, jungles or deserts, let alone our national borders. The on-going work *Future Library* extends in the opposite direction. Paterson has partnered with the city of Oslo in Norway to plant a forest of 1,000 trees, from which an anthology of books will be printed in the year 2114. Each year a writer is invited to create a work for the library. So far

Margaret Atwood, David Mitchell, Sjón, Elif Shafak and Hang Kang have agreed to donate manuscripts that are being held in a sealed chamber as a treasury for the future, inaccessible until their publication a century from now.

However, it is the newest work in the show that deals with time in the most ambitious way of all. Artists of Turner's generation were familiar with diagrammatic colour wheels that explained theories of colour; Turner was particularly interested in Goethe's writings,<sup>ii</sup> which among other things explored the effect of different colours on human emotions. The subject clearly had a profound fascination for him; throughout his career, his works explore the ways in which abstract shifts in tone and light define the fleeting impressions and sensations that make up human experience. Katie Paterson's *The Cosmic Spectrum* (2019) draws on scientific research to achieve an aesthetic result in a not entirely dissimilar way. The colour spectrum of the universe is changing as the hot blues of young stars shift after billions of years towards red, its current state described by scientists from John Hopkins University as "cosmic latte". *The Cosmic Spectrum*, like a vast colour wheel, will chart the universe's entire past and future history through its average colour, from the Big Bang, through the primordial era, the dark ages and our own era of stars, continuing on into the far future. Spinning fast enough for the colours of different eras to blend it will still allow viewers to see flashes of colour, like signals from vanished aeons; when they blink, those standing in front of the piece will see the full colour range in a fortuitous optical effect. Researching the piece, Paterson discovered that while the distant past is continually under investigation few seemed to be working on the predicted end of the universe, an event that to an artist accustomed to making vast leaps through space and time powered only by her imagination appears close enough to picture. "In that era the stars will have faded away," she says; "even the black holes will have evaporated. *The Cosmic Spectrum* brings together data charting the life of the universe: it's a history of starlight."

Once again we are reminded that however vast the concepts Paterson deals with—existing in material form or as weightless images conjured in a few words in the mind— they are rooted, like Turner's watercolours, in sensory experience; in landscape, colour and light.

Quotations taken from conversations and emails with the author in 2018, unless otherwise stated

James Attlee's most recent book is 'Guernica: Painting the End of the World'. He lives in Oxford.

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<sup>i</sup> A.J. Finberg, *A Complete Inventory of the Drawings of the Turner Bequest*, 1909, volume 1 p. 309, CXIII Lowther Sketchbook, p. 48a

<sup>ii</sup> Johann Wolfgang von Goethe, *Theory of Colours*, first published in English in 1840. The comments and notations Turner made in his copy were transcribed by John Gage: 'Turner's Annotated Books: "Goethe's Theory of Colours"', *Turner Studies*, Winter 1984, vol.4, no.2, pp.34-52