

Katie Paterson, the cosmicomical artist

At her shows you can hear the sound of a star dying. Brian Dillon on the surprising charms of her art

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guardian.co.uk, Friday 6 April 2012 22.45 BST

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Katie Paterson, with her 2008 work *Lightbulb to Simulate Moonlight* at the Haunch of Venison gallery, London. Photograph: Richard Saker

Just how small an object, or intervention in the world, can an artist make before the idea of a "work" drifts away on the wind? A couple of years ago a curious postcard landed on my doormat. The photograph was a monochrome view of desert dunes, sharpened into parallel knife edges in the foreground, fading to a stormy void at the horizon. On the reverse was written: "Inside this desert lies the tiniest grain of sand." I was flummoxed at first as to who could have sent it. Enigmatic junk mailer? Stoned tourist friend? Gnomic stalker? It was a day or two before I twigged that it had to be a work by the Scottish artist [Katie Paterson](#).

Katie Paterson
100 Billion Suns
Haunch of Venison,
London
W1 1ST

Starts 9 March 2012

It turned out that for one of her typically laconic though vastly (in fact cosmically) suggestive projects, Paterson had asked experts in nanotechnology to carve from a grain of sand an almost infinitely smaller fragment – just 0.00005mm across – which,

Until 28 April 2012
[Venue website](#)

stuck for safekeeping to a normal-sized grain, she had then deposited somewhere in the Sahara. Another photograph shows the artist silhouetted atop a distant dune, loosing a handful of sand into the wind. With its throwaway references to relative dimensions in time and space, *Inside This Desert ...* is a neatly ambitious example of the scale and tone of Paterson's work. Hers is an art with a casually humorous take on metaphysical themes and material wonders, based always on sedulous (sometimes gruelling) research. Though the work is often dreamt up in lengthy collaboration with scientists around the world, its poetic economy is what truly intrigues.

Paterson was born in Glasgow in 1981, studied at Edinburgh College of Art, and spent a year living in Iceland before embarking on a master's at the Slade. She is not the first artist (Roni Horn springs to mind) to have been inspired by the ancient and active desolation of the Icelandic landscape. Her graduation piece at the Slade in 2007 was titled *Vatnajökull (the sound of)*. On the gallery wall was a mobile phone number – 07757001122 – in white neon; if you called the number you were put through to the Icelandic glacier of the title: Paterson had submerged a microphone in its lagoon, so that one could hear the trickle and rush of water, the creak of the river of ice as it melts and retreats. Ten thousand people called to listen during the lifetime of the project, while a related work involved recording the glacial soundscape on to two LPs made of refrozen Vatnajökull meltwater: the records were played, and filmed, once before they deliquesced for good.

Since then, Paterson has pursued projects that they have seen her engage a variety of scientific specialisms – notably astronomy and astrophysics – and broach subjects at the edges of current scientific knowledge. The scientists with whom Paterson works – she's been an artist-in-residence at University College London, and is in regular contact with academic departments, observatories and amateur astronomers around the world – have to accept that the work she ends up making may be quite remote from, at odds with or obliquely related to their own research. So far the relationships have been productive, though one has the sense she must baffle some collaborators with her deadpan redeployment of their work.

In 2009 she worked with scientists at the Mauna Kea volcano telescope, in Hawaii, to amass images of darkness from the most ancient and distant portions of the universe, and then broadcast one minute of the resulting blackness – a 13bn-year-old void, to be exact – on the New York public-access TV channel MNN. A more expansive, though still pretty austere, instance is Paterson's "lifelong project" *History of Darkness*. For some years she has been collecting discrete photographic images of darkness at disparate points in the universe and turning them into 35mm slides (each one numbered, and

annotated with distance in light years from Earth) and latterly into photographic prints. The slides are both haunting and comically frustrating: the viewer is invited to pluck them from a box and hold them to the light: although they depict examples of emptiness from unthinkably distant and ancient points in the universe, they are all exactly the same.

You could read *History of Darkness* as a slyly literal displacement of the modernist monochrome painting – a reminder that the blank canvases of Kasimir Malevich or Yves Klein were also emanations of those artists' mystical or cosmically oriented sensibilities. But it hints too at Paterson's effort towards a kind of rigorous but wry sublimity, the sort of pleasurable bewilderment and wonder that writers on the sublime attributed to darkness in the 18th century. Paterson's work seems keenly aware of this tradition of the void, with its romantic corollary of poetical night thoughts.

Among her early works is *Earth-Moon-Earth*, for which she translated Beethoven's *Moonlight Sonata* into Morse-code radio signals and bounced it off the Moon: in a gallery, a player piano recited the sonata as it returned to Earth, complete with sudden gaps where the signal had degraded en route. In 2008 she hired a lighting company to produce a halogen bulb that exactly replicates the qualities of moonlight. The resulting work, *Lightbulb to Simulate Moonlight*, involves a bare bulb in a darkened gallery, and includes a lifetime's supply (based on the average human lifespan of 66 years) of these beautiful blue orbs: 289 bulbs, each one lasting 2,000 hours.

Paterson's current exhibition at Haunch of Venison gallery in London showcases several works with a similar atmosphere of almost naive wonder, though in some cases the durations and distances are much vaster than in the Moon works. Take *100 Billion Suns*, which gives the present show its title: conceived initially for the 2011 Venice Biennale, the piece is based on images of gamma-ray bursts that Paterson found on the internet or were sent by her now numerous scientific correspondents. Gamma-ray bursts are the brightest phenomena in the known universe, explosions of intense radiation believed to accompany a supernova when a star dies. (As Paterson's gallerist Ben Tufnell notes in an accompanying essay, they were first spotted by US military satellites in 1967, while on the lookout for covert Russian nuclear tests.) Paterson took 3,216 patches of light from these images and produced sets of colour-matched confetti to be released by small confetti guns at 100 points around Venice in the opening days of the biennale. For the London exhibition, where photographs of the Venice detonations are also on show, one of these guns is set off daily in the gallery and the resulting constellation of polychrome dots swept to one side of the room: the most astonishing spectacle from the depths of space reduced to a pile of after-party litter.

Elsewhere, distance and duration are invoked with a minimalism whose modesty is as

comic as it is cosmic. A record player has apparently stalled while playing the spring movement of Vivaldi's *Four Seasons* – in fact it is moving and playing through headphones, but at the same rate that the Earth turns: at one revolution per 24 hours, the whole record would take four years to play. Such works have something in common with Italo Calvino's *Cosmicomics*: his 1965 collection of short stories in which scientific fact or conjecture is the occasion for playful allegory bordering on whimsy. Paterson's art often begins, she says, in writing, though these texts are never published or exhibited. Curious minimal narratives do sometimes evolve, however, as in *The Dying Star Letters*: she is on an academic email list that alerts her each time scientists note the death of a star, and she writes a letter of condolence, in this case to a member of the gallery staff. At Haunch of Venison, the letters are arrayed in a long vitrine, and they include several that are black-bordered (unintentional, says Paterson) like memorial cards. One imagines a dark comedy in which Paterson's correspondent is heartbroken to read: "I'm sorry to inform you of the death of the star, SN 2011kd."

It's this admixture of the galactic and the mundane that properly characterises Paterson's work, and not merely its origins in her scientific collaborators' inquiries at the further reaches of time and space. The word "poetic" is a treacherous one to apply to any artist, but Paterson's is a poetry of knowledge and mystery, cosmicomically rendered. Visitors to her current exhibition, pushing open the gallery door, will hear an odd muted whoosh in place of a door chime – it is the sound of a star dying somewhere far away, and long ago.