

'I'd no idea how many dead stars there were'

Artist Katie Paterson has made a map of 27,000 'stellar corpses' for her startling new show, writes Jay Richardson

IF, AS THE late, great astronomer Carl Sagan maintained, we are all made of "star stuff", then Glaswegian artist Katie Paterson retains more than most. The 27-year-old Edinburgh College of Art graduate's work is conceptually simple yet monumental in scope, metaphysically profound yet startlingly immediate. Recently she won the first Creative 30 Award panel prize to identify the UK's most promising creative talent.

Paterson's projects to date include a show in which she posted her phone number in neon at a London art gallery, then camped out on Europe's largest glacier, in Iceland, next to a submerged microphone. Visitors to the gallery were invited to phone Paterson and listen to Europe's largest glacier as it groans towards destruction – she got 10,000 calls from 47 countries. For another project, she beamed Beethoven's *Moonlight Sonata*, translated into Morse code, to the moon as radio waves before playing the returned composition, distorted by the cratered surface, on an automated grand piano. For her latest show, at Tate Britain until April, she's plotted a map of *All The Dead Stars* – 27,000 "stellar corpses" as seen by humans since the dawn of time.

Snow is faintly falling when I join Paterson in London's Spitalfields for coffee, 24 hours before the map is unveiled as part of Altermodern, the Tate's fourth Triennial exhibition of artists deemed to be at the forefront of their generation. *All The Dead Stars*, she explains, follows on from two other space-inspired works – her Beethoven piece, *Earth-Moon-Earth* (*Moonlight Sonata Redirected from the Surface of the Moon*) and *Lightbulb to Simulate Moonlight*, for which she commissioned a lightbulb that replicated moonlight, bathing a gallery in an eerie glow alongside 289 similar bulbs on a storage rack. Each bulb was capable of lasting 2000 hours, together representing the disconcertingly small quantity of moonlight the average human being experiences in a lifetime.

"I had the idea in April," Paterson recalls. "It sprang from another work where I'd learned that when a star collapses and dies, it emits a sound like a middle C, like the chime you hear when you open the door into shops. I was playing it through the door of the gallery as people walked in, a really pathetic sound."

Paterson began hunting for supernova hunters on the internet. Despite the fact the map would have no scientific value – aside from stimulating interest in 2009 as International



Katie Paterson's work tries to use complex science in art

Year of Astronomy, perhaps – she found the scientific community eager to assist. The map was plotted by Dr Mark Sullivan, an astronomer at Oxford University, while Professor Ofer Lahav, head of astrophysics at University College London, will deliver an evening lecture on the death of stars outside the Tate on 6 March.

"When I began the project, I had no idea how many dead stars there were," Paterson says. Some of what we now know as supernovae, pulsars and white dwarves – dead and dying stars – might have been observed even before Galileo recorded the first telescope observations exactly 400 years ago. "It could have been one or ten billion. The first on the map is from 1006 AD but the map is only a tiny percentage of what exists in reality. They all die different deaths too. A supernova type Ia explodes with the force of a hundred billion suns. You can see that from the furthest point of the universe!"

Undoubtedly the reason Paterson has been so successful in persuading Japanese moon-bouncing enthusiasts, Slovakian lightbulb manufacturers and Icelandic customs officials to facilitate her elaborate, technically complicated visions is that the fundamental ideas behind them remain so straightforward and universal. "I like to make work that you can sum up in a sentence, like 'phone a glacier,'" she says, "yet with layers beneath that people can get to grips with themselves, rather than having preconceived notions of what I'm trying to do or having to read a long explanation."

From her earliest education through to the completion of her masters degree at Slade School of Fine Art in 2007, Paterson recalls she would be "coming to tutorials with no work, just saying, 'I've got this idea,' yet having nothing tangible and often feeling, 'What the hell am I doing?' It's only been in the last few years that it's fallen into place and I've felt it's been worth carrying out. The last few projects have worked so well and it's given me much more confidence."

With representation from a London gallery and the £10,000 she won for the Creative 30 award, Paterson now intends to move to Berlin. Without pressing deadlines for the first time in several years, she is contemplating a project

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focused on nanotechnology, the control of matter on a molecular scale, and another involving the submergence of a wave machine beneath the sea.

She's also been invited by Professor Richard Ellis CBE to study

the earliest galaxies at the WM Keck Observatory on Hawaii's Mount Kea, volcanic home to the largest optical telescopes on the planet, where it's possible to see back some 13.2 billion years, effectively 95 per cent of the way to the Big Bang. "I've applied for funding, so fingers crossed," she says. "It would be incredible to see the moment the stars switched on. I can't quite get my head around seeing things that lived and died before the Earth even existed."

● *All The Dead Stars* appears as part of Altermodern at Tate Britain, London, until 26 April. You can find out more about Katie Paterson's work at www.katiepaterson.org