

The Turner-tipped artist who's literally out of this world

Fossil beads, future forests, dying stars: Katie Paterson tells Mike Wade how space and time have inspired her work

Like an excited buyer in a jewellery shop, Katie Paterson is casting a loving eye over a particularly valuable item. "I love the detail on some of these beads," she says. "There are some bony ones, an extinct rhino and the cave bear. And I love the blue coral from west-coast Africa. If you look closely, some of them are like mini-Saturns, tiny planets, the cosmos in miniature."

Fossil Necklace, like all the works in Paterson's new show in Edinburgh, is out of this world in its ambition. Formed from 170 beads, hand-cut from fossils, it spans, as she breezily notes, "the whole of geological time".

The work begins with archaic butterstone stromatolite, the 3.5-billion-year-old fossil of a single-celled organism discovered in what we now call Africa. The story of the necklace plays out along a silken string through every era of deep time, from the colonisation by plants of the sea to the first forests through to the collision of continents to form Pangaea, the great land mass. Late on, towards the very end of the thread, the moment at last arrives when human beings first appear, marked in a bead of copal amber from Kenya.

It seems a wondrous creation, even to the artist herself. "Our DNA

literally links back to the very first thing," she says, almost to herself. "We are just as related to trees as to other species on Earth."

Paterson, 32, has already been tipped as a potential Turner prizewinner by this newspaper. Her big themes of time and space and the specks of humanity that inhabit them clearly resonate as much for her as they did once for Douglas Adams.

“There’s the beginning of time, right there in front of us

She admits that she never excelled at science at school, but as a child would daydream as "a kind of sanctuary" and set aside time to enter her own little world. "I should probably do more of that now," she thinks. These days, stimulated by a succession of scientific artists-in-residences, the Big Ideas are presented to her by astrophysicists and geologists, astronomers and mathematicians, and she never ceases to wonder at their revelations. "Something that made a very strong

impression was going to the Mauna Kea observatories in Hawaii," says Paterson. "The telescope is on a mountain above the clouds, and is looking back billions of years in the universe to a fraction after the Big Bang. You can look live on the screen and say, 'There's the beginning of time, right in front of us.' That kind of thing is so immense, so incomprehensible, and yet we can see it. That's what astonishes me."

The exhibition records a life-changing period ten years ago when Paterson left Edinburgh Art College and found work as a chambermaid near the village of Laugar in remote northern Iceland. She had a room with a view over the Arctic Circle through the never-ending, ice-blue days of summer. It was "like nowhere else on Earth" as Paterson describes it, the ground "formed with the lava in front of you, and the strata, the layers of time building up, in a way I had never seen before".

She came to visualise the planet anew, "from something that was underneath us to something that was revolving around the Sun. There were other suns in other galaxies, part of a wider universe. I felt this is a planet that is erupting, that is full of energy."

Eight months later she had packed her bags and arrived at Slade School of Fine Art in London, with the



Artist Katie Paterson and top, at the Ingleby Gallery in front of her work Timepieces (Solar System): nine clocks showing the "time" on each of the planets in the solar system. Right: some of the hand-cut beads used to make Fossil Necklace

confidence to convert her new ideas. Inspired by Europe's largest glacier by volume, Vatnajökull, she conceived an underwater microphone ("I thought 'Dial-a-Glacier'") that could link people all over the world to the melting giant where it plunges into the sea in a great ice lagoon. "I picked up the phone to Virgin Mobile and they sponsored it." In the event 10,000 people from 47 countries rang up to listen to sound of the glacier. She had arrived as a world figure.

Since then her ideas have had free rein. Once, inspired by a residency at University College London, she made a map of all the dying stars in the universe, all 27,000 of them.

"I am quite obsessed," she says, unnecessarily. "Something that always stuck with me was that when a star dies all the material it ejects in that huge explosion has made the Earth and all the other planets. They are actually in our blood, the elements from an exploding star, millions of years ago. I am interested in these interconnections that seem incredibly distant and out of touch, because



we are all related in the most intimate way through a stellar explosion, and through fossils from millions of years ago. I get drawn to these distant events."

This summer Paterson's obsessions manifest themselves all over Edinburgh. To the west of the city, at Jupiter Artland, her *Earth-Moon-Earth* transmits Beethoven's *Moonlight Sonata* to the Moon and back, playing out its lunar-altered score on a self-playing grand piano. In the city centre, confetti cannons will mimic gamma-ray bursts, the brightest explosions in the universe, blasting out all 3,216 colours that correspond with the colours of these astonishing astronomical events.

The main exhibition, her show at the Ingleby Gallery, has a certain universality. "This whole ground floor is material, earthly works." She takes in the space with a sweep of her arm. "Upstairs it becomes cosmic; climb the stairs and go on a journey into space."

The effect is mind-boggling. Among the earthly delights, the curious visitor can attempt to engage with the notion of a grain of sand from the Sahara, carved by nanotechnologists into "a minute version of itself, just a couple of atoms", and then re-released invisibly into the desert, the moment caught on camera.



Katie Paterson: Ideas is at Ingleby Gallery, Edinburgh from Friday to Sept 27. Part of the Edinburgh Art Festival, *Earth-Moon-Earth* is at Jupiter Artland

In the gallery above are scores of images of darkness, captured at the edge of the Universe. On one wall, set out as they might be in the foyer of an hotel, nine precisely calibrated clocks tell the time on the planets of the solar system; scattered across the floor are meteorites found in the Campo del Cielo area of Argentina, older than the Earth itself, cast, melted and recast by the artist, "imbued", as the guidebook says, "with cosmic history".

Details of Paterson's latest work hang in an annex. *Future Library* is a collection of 100 manuscripts, one to

be commissioned every year from a well-known writer until 2114. Managed by a trust, the works will remain unread until a century hence. At that moment, each will be printed on paper from a Norwegian forest planted this year by the artist near Oslo. It goes without saying that most of the authors will never see their writing published; nor of course will Paterson witness her work come to fruition. That does not matter, she says. A "quite contemplative" room is being incorporated on the fifth floor of the new Oslo city library to house the collection. She says: "People can come in and sit with the manuscripts and, even though they can't read them, they can make the imaginative leap over the century, over the decades, to the future."

Those out of love with contemporary art may find the show challenging — unpublished books, an invisible grain of sand, photographs of blackness will spell futility to some. Paterson sees her worlds very differently: interconnected, full of hope and beauty, mysterious and awe-inspiring and in its scope utterly universal. Above all, her art shines through, not the science. She says: "I have not got close to answers, but I don't think I've ever been looking for the answers."