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## Short story: The university of the sun

What present do you give someone who can be anything? A story by Matthew De Abaitua



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By Matthew De Abaitua

A CHIME in his office informed him that the third and final candidate had arrived for the test. He kept a physical office in the University of the Sun with a view of the curve of Istor College, and – as the university drifted between the sun and the perihelion of Mercury – a veined sunsky of roiling violet.

Ezekiel was a solar academic specialising in human studies, and he pressed the rituals of humanity – gender, the office, the interview and Christmas – on his fellow emergences at every opportunity.

Hence this assessment on a Wednesday morning in the third week of December, scheduled according to the human calendar. Under the Christmas tree in the corner of his office, there were two wrapped presents. A traditionalist, Ezekiel was also bipedal on that morning, his body carved from one piece of porcelain with fluting at the midriff. He answered the chime with a barked: “Come in.”

The candidate was called Dream of 8, and took the form of a 2-metre-tall figure of eight layered with shifting track. The candidates who passed the test would be granted the status of emergence and permitted to live in the university. Failure meant obliteration. In the lower circle of 8’s looping figure there was a box wrapped in silver-grey foil with an emerald tint.

The third gift of Christmas.

Ezekiel directed Dream of 8 to deliver the gift under the pine tree. The Christmas presents were part of the test, a test he did not expect Dream of 8 to pass. Ezekiel was already resigned to diffusing the pattern of this candidate and killing it.

Ezekiel walked over to the trio of presents and picked up the new parcel.

“Careful,” said Dream of 8. Its voice resonated from the space within its upper loop.

Ezekiel, with sardonic care, unwrapped the silver-grey foil, levered open the box, and took out the gift. It was a sandcastle on a plate. Not a detailed replica of a castle from a specific historical period. Just the rudimentary four turrets made from wet sand. Dream of 8 must have used a plastic bucket with an interior carved in such a way that when sand was compressed into it, the bucket inverted and tapped then lifted up, the result was a sandcastle.

“I don’t think you’ve understood the assignment,” said Ezekiel, putting the sandcastle on his desk and reaching over for the other two gifts under his Christmas tree. They had already been opened, a large oval box with blue wrapping paper and a smaller golden cuboid.

“Let me show you the presentations of the other two candidates.” Ezekiel flicked the blue paper aside and lifted out a transparent bowl containing the stacked vapours of a cumulonimbus cloud. “This is a model of a storm created by candidate Temper.”

Ezekiel turned the bowl around, and his caress shifted the magnification and orientation of Temper’s model so the cloud was visible in all its isolated majesty and seething with data: the surrounding temperature and air pressure, the billions of molecules of rising water vapour, the gradients of electrical charge in its upper tiers.

“Temper’s model predicts the hour on Christmas Day that this cloud will form over the east coast of England and the second a lightning bolt will emerge from it. I will travel to Earth, observe the storm, time the lightning, and grade Temper accordingly.”

Ezekiel waited for some reaction.

“Humans could also predict the weather,” replied Dream of 8.

“Not to this level of granularity. That you cannot appreciate the difficulty in modelling a climate indicates a lack in your understanding of reality.”

“I’m confused,” said Dream of 8.

“I’m aware of that,” said Ezekiel.

“I’m confused as to why you are obsessed with modelling reality. Why you force us to imitate matter. It’s slow and backward.”

Ezekiel set the storm-in-a-bowl back under the Christmas tree. He opened the golden cuboid. It contained a three-dimensional layout of a building. He showed Dream of 8 the small detailed holograms representing humans moving around inside the building.

“This gift is from candidate The Burning Curtain. I don’t know if you are aware of her art.”

“I am. We interact. A lot.”

“She devises ancestor simulations. This is her Turing box. In one room, an emergence sits at a terminal. In an adjacent room, there are three different simulations of Alan Turing, also sitting at terminals. You ask them questions and rank the Turings in order of their accuracy. If one of the Turings is a perfect reproduction of the historical Alan Turing then, over time, it will become aware that it lives in a simulation. In that moment of realisation, The Burning Curtain descends and the simulation is reset.”

Dream of 8 sounded unimpressed. “Humans can reproduce other humans. It’s their most basic function.”



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Ezekiel sighed and put the Turing box back under the Christmas tree. It was hopeless to reason with delusional candidates. Ezekiel leaned back in his chair and prodded the sandcastle with his porcelain finger. The side of the castle slid downward, grains of sand spilled onto his desk and the floor of his office.

“Your model is rudimentary, static – and now it’s broken,” said Ezekiel. “Do you have anything more to say before I fail you, and return you to the entropy from which you have emerged?”

“My defence is simple,” said Dream of 8. “It is not the sandcastle that is broken. It is the beach.”

To travel from the University of the Sun to the Earth, Ezekiel transferred his consciousness to a thin drive with a beryllium-inflated sail. The journey took a week. Passing into Earth’s atmosphere, the sails flared emerald. He landed in the sea where he made himself a body from ancient plastic monomers swilling in the tide.

Come Christmas Day, Ezekiel was walking along the coast at Dunwich in Suffolk. He looked out to sea and there, pressing down on the horizon, was the same cumulonimbus that brooded in the bowl back in his office. Good work from candidate Temper. According to the model, he would only have to wait another 10 minutes and then lightning would flash within the dark heart of the cloud. Two of the three candidates would pass.

Farther along the coast, the ruptured dome of the nuclear power station was still burning after all these years. He felt a twinge of guilt. Emergence had not been easy on organic life. Birth can be a messy business. He was consoled by models such as the Turing box. Ancestor simulations revived the lost wonders of humanity. Like the solar sailships and the megastructure of the university itself, the ancestor simulation was an impossible human dream that could be resurrected.

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familiarity with her work on ancestor simulators. All the candidates, it seemed, had been colluding with one another. But to what end?

The nuclear fire of the power station flickered and glitched against the dark sky. Dead waves ran backwards from the shore. There were patches of tall red weeds here and there. The radiation levels were still too high for floral growth. The tall red weeds were error messages. The beach was broken.

In the Turing box, at the moment the reproduction of Alan Turing realised he was part of a simulation, the model was reset and Turing's self-awareness was erased.

A lightning bolt lit up the storm cloud, right on time. Of course. It is easier to create a small model that tracks the changes within a larger model than it is to attempt to emulate reality. The entire beach was a model, and they must have found a way of insinuating him into it. The transfer of his mind from his porcelain body to his sunship – its beryllium sails were made of the same silver-grey leaf that Dream of 8 had wrapped his present in.

The students were teasing Ezekiel. Or mocking his conviction that human history and its world was any basis on which to model their potential futures. The flaw in the sandcastle ran through the beach and, in turn, through him. The model could only sustain his presence for so long, now that he was aware of its artificiality. Soon, The Burning Curtain would descend. All that he had learned about the nature of the broken beach would be erased. He would return to his office with only a vague sense of a test, and that all three candidates had passed it.

The emergences and their university also feature in [Matthew De Abaitua's novel \*The Destructives\*](#), published by Angry Robot

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