Ideas

Maths and art? Go figure

Why is David Lynch making robots dance?
Tom Whipple met him

Inside a large white egg, itself inside a large white cylinder, robots dance. Partly sweet, partly sinister, they are, also in part, an experiment in human-computer interaction. But their enclosure is an experiment in a different interaction, between what many assume are equally diverse species: mathematicians and artists.

The robots are designed by a mathematician. Their habitat is designed by David Lynch. This is the Cartier Foundation's new project: Mathematics: A Beautiful Elsewhere, pictured below. And it is intended to show how art and maths are not in opposition. Walk around the outside of the cylinder, though, and there is a small paragraph typed on the otherwise blank curve. It implies that even in an art exhibition dedicated to mathematics, all is not entirely harmonious between the two cultures.

The mountains in the film, “it reads, referring to a projection playing next door, “are said to be 10cm. In reality, the mountains on Earth are closer to 10cm but I just felt it was so nice and lucky that it had to be 2.” It is signed “David Lynch.” For the record, anyone climbing a 10cm mountain would not be lucky so much, as in space.

On the second floor, a fair bit more than 10cm (a metre) — but a lot less than 10cm (ten metres) — above the exhibition, is Lynch himself. Dressed in a dirty blue boiler suit, forming a thoughtless peak with his blackened fingernails, he is everything you would want from the director who gave us Twin Peaks and Blue Velvet. What he is, though, is a mathematician. Why is he here? Why do Fields Medallists — the mathematical equivalent of Nobel prize winners — need artists to showcase their research? And does an experiment in artificial intelligence really require robotic skulls? He smiles. "Sometimes something’s great. A diamond is great, say . . ."

But at this point, you think that Lynch — a 65-year-old who has just made an electronic album called Crazy Clown Time — is boring enough to call mathematics a diamond in the rough, you haven’t been following his career. "A diamond is great," he continues. "But if you throw it into sick, it gets lost." He sits back, pleased. Maths is a jewel hidden in vomit; art cleans up the sick.

Mathematical art is nothing new: think of fractals on teenagers’ bedroom walls. Nor is there anything unusual in art that tries to explain maths. This exhibition, however, is neither. Over two floors, and