Opinion **Artificial intelligence**

An AI genre in its infancy questions the nature of art

Delhi gallery probes what differentiates the human mark from the machine one

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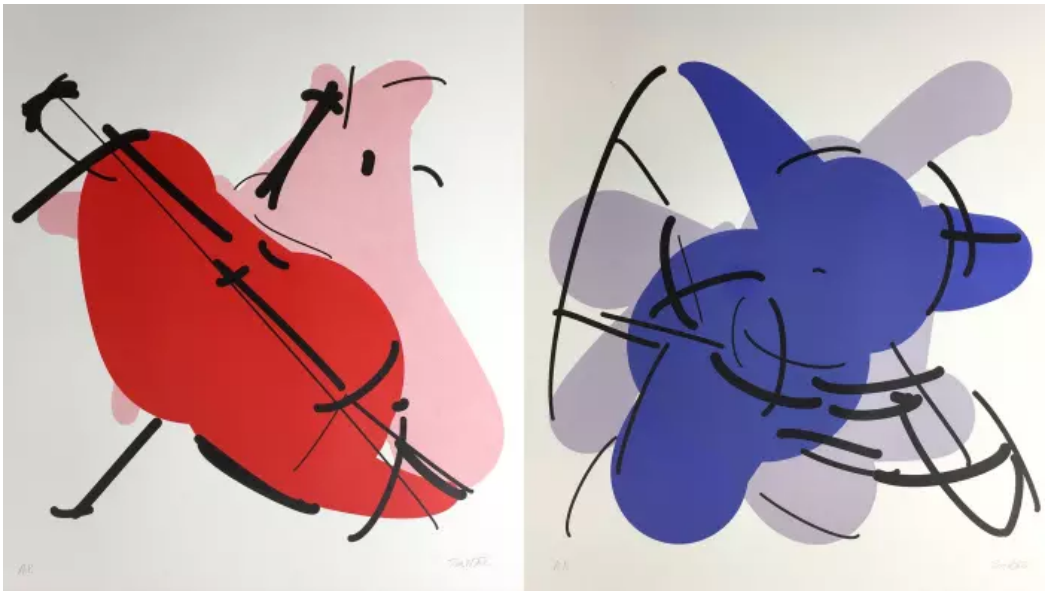

Tom White's AI artworks 'Cello' and 'Electric Fan': 'I think of the computer as a tool or — if I'm being gracious — as a collaborator' © Tom White

Amy Kazmin in New Delhi AUGUST 27, 2018

The 20 images hanging at Delhi's Nature Morte gallery are almost nausea-inducing: the dark red, meaty texture of human flesh — seemingly the innards of a leg, or a shoulder, or unrecognisable innards.

These disquieting images, together entitled "The Anatomy Lesson of Dr Algorithm", were created by artificial intelligence (whether or not they show the influence of Rembrandt, as the name implies, we can leave to the critics). They are one piece of a show entitled Gradient Descent, which consists entirely of original works generated by AI with seven international artists.

For Dr Algorithm, Bangalore-based artist Harshit Agarwal, who has a masters degree from MIT's Media Lab, trained his computer on video images of surgical dissections. The AI then generates its own original images of (anatomically incorrect) surgery.

"Humans are always thought of in terms of cognition and machines are always thought of in terms of hardware," Mr Agarwal, 26, told a rapt audience at a salon on the eve of the opening. His piece, he says, "is opening up the black box of the human hardware to the machine".

With predictions of cognitive computing taking over human jobs, leading to unemployment, Gradient Descent questions the nature of art.

"This is a genre in its infancy," curator Karthik Kalyanaraman told the salon. "Everyone needs to start asking what differentiates the mark of the human from the mark of the machine."

Many artists have explored the implications of AI's pervasiveness. But Mr Kalyanaraman says this is one of the first group shows entirely of original art made by algorithms. Little wonder the opening was packed.

"Creativity is the climax of humanity. To see that taken away from us is a little unsettling," said UK-based digital artist Jake Elwes, whose work "Closed Loop" is a video of a 200-minute conversation between two AI models: one generating abstract images, one captioning them.

"Closed Loop" was interesting to watch for a while — a kind of a Rorschach test for the machines, which clearly don't see eye to eye about what's what. But the show raises an age-old question: is it art?

If yes, then who is the artist? The human who trains the machine with visual data, or the algorithm? Of course, the subtext of all these conversations is whether AI will, in some essential way, replace us.

For New Zealand-based artist Tom White, who showed appealing, machine-created abstract representations of objects such as a cello, a ceiling fan, a bug and a hammerhead shark, the answer is clear. "I think of the computer as a tool or — if I'm being gracious — as a collaborator," he tells me at the opening.

"I'm setting up a system where the computer can express itself," he said. "But the intent is my own. I want people to understand how the machine sees the world."

Munich-based Mario Klingemann, a pioneer of AI art, agrees: AI is just a tool, which he trains and directs. "I am the artist," he told me. "There is no question at all. Would you consider a piano the artist?"

But Mr Klingemann anticipates the day when algorithms can make art independently. "My final goal is to make myself redundant," he says. "But first you have to identify, what makes an artist?"

At the root of art, he says, is inspiration through human interactions with people, places and ideas. That, I say to him firmly, is simply not possible with machines. But, he counters, in an increasingly digital world algorithms have an ever bigger pool of material.

Yet, he says, art has a second aspect: its scarcity value. I recall the "The Sorcerer's Apprentice" sequence in Disney's *Fantasia*, where Mickey Mouse is menaced by an army of relentless

identical broomsticks come to life. AI artists, I laugh, would never know when to stop — and human artists don't seem so endangered after all.

But Mr Klingemann has a parting thought: we may not be as different from AI as we think. "We are all products of the information that comes into us," he tells me. "We process it, and put out something else."

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