

Machine man: Douglas Tausik Ryder on AI and coding sculpture

ART | 14 JAN 2017 | BY CHARLOTTE JANSEN



Installation view of 'Metamorphosis' at Jason Vass

In 2006, the sculptor Douglas Tausik Ryder heard that an obsolete 5-axis router was being sold in North Carolina, by a company who manufactured aluminium aircraft parts. The machines had fallen out of use – replaced by faster, new technologies – so the machine wasn't expensive. There was a problem, though: it weighed 16,000 lbs and was the size of a room.

Ryder was determined to master the machine however, and to apply it to his art. 'This undertaking plunged me into two years of trial and error, frustration, midnights in my studio, and despair,' he told us. The machines have a cutting tool controlled by G-code: a programming language controlled numerically, and which allows people to instruct automated tools to build things. 'I find it very interesting that an object can be described as a code, and the code remain the same though the object be big or small, made of wood plastic or metal, etc.'

As far as anyone knows, Ryder is the only person using the machine to make sculptures in this way. It allows him to create objects of any complexity and size, and on any scale and at any speed he wants. His process does still demands some more conventional woodworking and metalworking skills – like using his bare hands – but

conventional woodworking and metalworking skills – like using his bare hands – but machines have the potential to do things no body can muster. ‘It might be possible one day to fully automate the making of art using AI, so the possibility exists that my studio could go on after my death.’



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The resulting bronze and wood sculptures are the results of a process that is both digitally programmed with mathematical process, and a more intuitive way of sculpting. This dyadic process also perfectly reflects the sculptor's conceptual ideas. ‘There is always present in my work a struggle between the geometric (the pure, the ideal, timeless) and the body (flawed, mortal).’ He told explains. ‘An object begins in a dream. It is a figure, a person or archetype in my life. A series of operations occurs on the figure, for example, stretching, pulling, hollowing, etc. These operations are an intersection of a geometric form with the figure.’

Despite his fascination with technology, the clue to achieving the perfect geometric balance might come from a more primordial place: a woman's body. This manifests itself beautifully in *Venus* (2015) — inspired by the sculptor's pregnant wife, with formal references to the spherical sculptures of the Venus figures in Paleolithic times, by Willendorf and Lespugue.

‘Working with a figure in my studio, I imagined its belly enlarged and rounded into a 5ft diameter ball.’ After playing around with various shapes, Ryder says, ‘Then it came to me – the form to express the feelings and ideas that came from contemplating this child growing inside, must be the perfect geometry of a sphere.’

He adds, ‘I visualised the space inside the mother figure as a sphere and expanded this space until it intersected the deep concave curves of the mother figure and created openings. This is how all the openings were made. The unfilled sphere remains inside as an idealised space.’



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