



## 3D-printed art: the future is now

*How the development of new machines is pushing artists in ancient forms to new creative heights*

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**3D PRINTING** is a revolutionary technology that could end up being the invention that defines the first half of this century. *New Scientist* has boldly claimed that 3D printing heralds the 'second industrial revolution', facilitating huge advances in the fields of architecture, construction and even medicine. But what about 3D-printed art? Few endeavours foster creativity and imagination in the way that art does, and combining the unbridled creative spirit and lateral thinking of the artist with the huge – and still largely untapped – potential inherent in 3D printing certainly seems like an exciting prospect. And a number of artists from across the world are already pioneering the use of 3D printers to realise their artistic vision.

Belgium-based Nick Ervinck is one such artist. His mesmeric, 3D-printed works seem to undulate with ornate organic patterns. They resemble the archaeological finds of an alien tribal culture and exude a haunting, hypnotic and otherworldly allure. Why 3D printers? 'I want to search the borders of what is possible. I want to see where I can put an extra element in the history of sculpture. The technology feeds my mind with new possibilities that are truly inspiring,' says Nick.

A 3D printed artwork doesn't just involve the artist who designs it; often, it will be produced in collaboration with a fabrication company. One of the leading lights in all things 3D printing is iMakr. It not only sells 3D printers, it also offers fabrication services to a range of clients. 'There has definitely been an uptake in the demand [of artists using 3D printers]' says iMakr's

Rees Calder. 'This is probably due to the fact that artists are becoming more aware of what 3D printers are capable of and how they can be effectively applied to their creative process.'

We asked Rees what he thought was the appeal of 3D printing to artists: 'You are now able to have a physical representation very quickly, and it is affordable to make even very slight changes. This is slowly but surely revolutionising

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the design process.' So, although Nick is excited by the new possibilities afforded by 3D-printing, time-saving and the ease of adjusting the work in progress is also highly important.

Despite reflecting on some fruitful collaborations with artists, Rees envisages a day when people won't need to use fabrication companies for their 3D-printing needs: 'The whole point of this technology is to bring the manufacturing process into the hands of the consumer. At this point we are happy to fabricate on demand,

as the prices of printers is still relatively high and the learning curve somewhat steep. As these two factors come down we hope that everyone will be printing things for themselves.'

The idea of an artist designing a work on a computer program before sending it to a machine to spit it out seems quite far removed from the traditional notion of an artist working closely with materials like clay or marble. But Nick's process is not as cold or clinical it might sound. He sometimes carries out as many as 800 sketches for a single series of work and the pieces are born of an understanding of more traditional materials, a sense of scale and an understanding of colour. Once the pieces are printed, he might spend weeks polishing and painting the work to finish it off. 'My method of 3D printing is just combining the knowledge of old craftsmanship with new design and printing methods,' Nick explains. 'In my opinion, sculpture has always evolved because of new materials and technologies.'

It's a salient point. It would be easy to dismiss 3D-printed art as nothing more than a high-tech gimmick destined to remain a niche preserve of arty technophiles. But it's easy to forget that acrylic paint didn't come into use until the early 20th century, and that screen-printing wasn't utilised in the art world until Andy Warhol's work in the 1950s. In decades to come, it's possible that artists like Nick and companies like iMakr will be seen as early pioneers of a commonplace technique and these early 3D creations will be vital artefacts from the history of art.