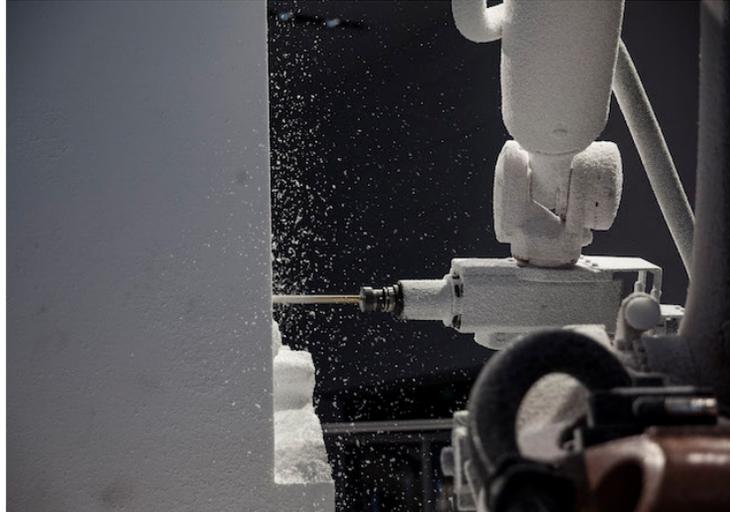


The Creators Project

Robotic Art Sculpts Like a Manufacturing Michelangelo

DJ Pangburn



For the last several years new media artist Quayola has been using industrial robots to sculpt what he calls "unfinished objects." These are basically digital, glitchy remixes of classical sculptures—ones with no end, stuck in a gorgeous artistic purgatory.

In his latest work, *Sculpture Factory*, part of Ars Electronica's *HUMAN FACTOR: Endless Prototyping*, Quayola flips the script. Instead of simply exhibiting the unfinished results, he has made the robotic sculpting a type of performance art. For eight weeks a robotic milling machine will become the "sculptor's apprentice," churning out a serial production of unfinished works inspired by Michelangelo's non-finito sculptures in the the Laocoön Group.



"This project has a very different outcome but still belongs to the same realm of research where I look into history, and look at these objects of perfection and study them," Quayola says. "This is a project I've been running for three years already, but this is the first time I've worked on the more performative aspect of the project. It's a sort of homage to these unfinished sculptures.

Quayola believes that once a viewer looks at the unfinished objects the focus isn't so much on the figures or the historical narrative, but on the articulation of matter itself. More than that, it's about the idea of an object that has its creation embedded within it, and the space between the figure and the edge of the block. In Sculpture Factory, viewers get to see the robot sculpting objects but never finishing them.



“The interesting output is really observing the inability of the machine to ever reach the end and the aesthetics of that,” Quayola says. “Like a sculptor leaving the marks of their chisel, here you have the marks left by the machine’s cutting process.”

Although the sculpting process is subtractive like a traditional sculpture, says Quayola, the results are vastly different. Whereas a sculpture by Michelangelo reveals subtle chisel marks, the robot’s marks are heavily grooved, patterned and almost futuristic looking. Another way of looking at them is as a terraced landscape or topography.



“There is a very complex geometry to it, but actually this is really determined by the size of the drill bit and how it is moving through the block,” Quayola explains. “This is not something that has been designed on 3D software. It’s just a result of a series of operations and the process of the machine.”

Originally, Quayola wanted to work with various drill bits to refine the sculptures in different ways, but because of the project’s complications they settled on a medium tool that is cylindrical with a spherical tip. This allows Quayola’s robot to produce a combination of coarse and refined textures.

“It’s quite a different process from how I have been working with the previous sculptures,” he adds. “This is something I’m really starting to like—to be able to get intimate with the machine and to really speak more and more the language of the machine and develop an aesthetic that is really narrated by the limitations of how this thing works.”



Sculpture Factory launched with two pieces. When a block is finished—or rather, unfinished—it is moved to and displayed upon a big rack, and a new block is moved into place to be carved by the robot. While viewers will see a pretty slick operation, the creation of it was anything but. “This was a really fucking challenging nightmare,” Quayola says, laughing in exhaustion as he and a team were putting the finishing touches on the show. “These machines are very, very unfriendly and difficult. Just to load this machine took a team of 30 people, cranes and trucks, so there has been a naive approach where I didn’t realize the full scale of the operation.”



Despite the logistical challenges, Quayola isn't about to abandon Sculpture Factory. He says, "I'd like to get more intimate with this machine and be able to tour it around a bit more," adds Quayola. "So I think this will be the beginning of a new trend that I will develop over the next few years, which will be these performative installations."

Sculpture Factory will be at the DRIVE Volkswagen Group Forum through August 27th. [Click here to see more of Quayola's work.](#)