SXSW kicks off with vision of a 3D printing revolution

March 9 2013, by Robert Macpherson

Banners hang in the atrium of the Austin Convention Center on March 7, 2012. The 27th edition of South by Southwest kicked off Friday with a bold prediction that desktop 3D printing will unleash a new industrial revolution guided by "creative explorers."

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Inventing or replicating everyday objects in three dimensions using laser beams and molten plastic is a major theme of the interactive segment of the 10-day SXSW festival that also celebrates independent film and music.

Delivering the opening talk, Makerbot co-founder and CEO Bre Pettis unveiled his Brooklyn-based start-up's latest shoebox-sized desktop 3D copier that will carry a $2,200 pricetag when it goes on sale this fall.

It can recreate objects up to eight inches (20 centimeters) high and eight inches tall—including concepts from Thingiverse, an online treasure trove of designs just waiting to be downloaded and turned into objects.

Speaking to a capacity crowd in a vast darkened auditorium, Pettis said 3D printing for the masses has the potential to rewrite the rules of manufacturing by obliviating the need to make things in large quantities.

In the future, he said, if you need something—from children's building blocks to a prosthetic hand—it can be made at home, or in a small workshop, in as few quantities as necessary.

"There's a renaissance going on right now," Pettis said. 'It's never been easier to make and share actual things. Creativity is much more accessible now in the thing world."

Makerbot boasts NASA as one of its biggest customers. The US space agency uses its products to create prototypes, or prototypes of prototypes, of new designs at its jet propulsion laboratory in California.

But Makerbots have also been used to create individualized smartphone cases, scale model stage sets for Broadway productions and a "robohand"

prosthetic for a child in Africa born with a deformed hand.

Someone has even used a Makerbot to copy a Makerbot, or at least the components that make up a Makerbot. Pettis didn't seem bothered at all about that novel twist.

While Pettis stopped short of anticipating a 3D printer in every home, Makerbot foresees a day when every classroom will have one to help teach the principles of science and technology.

Baptized the Digitizer, the latest Makerbot product consists of two lasers, a webcam to keep them aligned and "a bunch of electronics" in a toy-like box conceived to give the device a user-friendly appeal.

Pettis acknowledged teething issues with 3D technology—any dust on a copied item, for instance, risks reappearing on the copy—but he said the endless list of possibilities will inspire a generation of "creative explorers."

Thingiverse, he said, already has 40,000 designs ready for Makerbot owners to download and copy. Alarm bells were sounded recently when it emerged that a few of those designs were for assault rifle parts.

"More people are going to get access to the manufacturing process," Pettis said alongside a working prototype of the Makerbot Digitizer that had turned out a faithful copy of a humble garden gnome.

"You can make as many copies as you need," Pettis added. "You can fill the world with garden gnomes if you want—because you have the power of replication."

SXSW Interactive shifts into high gear this weekend with its trade show, gaming exposition and innumerable talks and networking opportunities.

The film side of the festival runs in tandem, while music begins later next week.

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