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in the Spotlight



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Pushing Granite

By staff reporter **PENELOPE COLVILLE**



Yellowstone by Daniel Henderson; he doesn't want people to just use technology to talk, he wants them to talk about technology.

IF you want to look at what it means to be transformed by technology, what better fast-track, hothouse case to consider than China, a society that has morphed itself in an alarmingly compressed window of time. That's what inventor and stone sculptor Daniel Henderson concluded. You likely use a piece of Henderson's work regularly; he holds the patent for wireless transmission of photos and video from cell phones. Having made a

solid fortune manipulating the ethereal, it's not so surprising that he then gravitated towards stone.

Technology remains the obsession of his second career: he renders larger than life versions of iconic Western devices: the Princess phone, the Viewmaster, or the early, clunky mobile phone – all in smooth, luxurious marble, warm bronze and molded glass. No one alive when the Princess phone came on the market can forget it – it is the first instance of technology naming and branding. “The notion

that we make temporal technology with manmade materials – this is what drives me to memorialize it with more permanent materials.”

Intimations of technological mortality notwithstanding, Henderson isn't engaged in reproducing the quaint and cute, or catering to a shallow nostalgia in people with deep pockets. The long-term impact of technology on humanity is the turf of his forms and their memes; his sculptures insinuate “we should be careful what we make, how we make it, and with what – basically dig a little deeper into our decision-making process and think through the outcomes as much as we can. China, the West, everybody needs to ask themselves these questions.”

Henderson came here as one of the collective of digital sculptors invested in Beijing Tomorrow Gallery. He had an epiphany: “I have to make Chinese products in stone because there's a different technological language for people in China – objects have different meanings.” He plans to do Beijing TV, a stone recreation of a black and white analogue television manufactured in China in the late 50's. This one will be “airing” Chairman Mao's image, Andy Warhol style. “One of my favorite literary items is a children's series on Tom Swift and his wireless telephone, nuclear submarine and other ideas about the future of our world ... What



I want people to think about when they look at my stone technologies is where we came from technologically, where we are headed, what the good things are, the bad things, and the unintended consequences that its use and development have presented to us all."

This unintended consequence of technology challenged him to think beyond his own ego and of his drive to be creative.

"When Saddam Hussein was executed, the prison guards' used my invention to video the moment, which now can be found by my children on the Internet. A very unsavory consequence."

The "side effects" of transforming technologies sometimes just present themselves. Henderson's roles on the boards of educational institutions revealed some fallout: the instantaneous environment that communications technology creates, and the consequently short attention span of youth. Among these educational colleagues conversations still rage about how to communicate with people who can't maintain eye contact. This suggests technology and its impacts will be around while its discarded husks languish at garage sales.

Despite the flash-in-the-pan nature of his muse, or perhaps because of it, his irresistible sculptures are sensual, and speak to permanence. The carving of technology in stone is saying what Henderson wants to say about the erosion of tactility in our world. Henderson went to Stonehenge and notes that while some of his sculptures are 6,000 pounds, the largest trilithon at Stonehenge, that ancient Western technology, is 40,000 tons; it's been around for a long time and continues to be a magnet for speculation and

mystery. By contrast, Henderson shrugs, "My 11-year-old and my 14-year-old have completely different experiences. The cultural language of objects is different between 11 and 14 years of age! There is no unifying force of objects around us because they are always changing." Looking from the outside, today's youth are fragmented, even youth who are technically of the same generation.

"Stone is stored human capital – it will be around for thousands of years." A very Chinese condition.

Our temporary manmade plastic gadgets, Henderson's work suggests, are, in some unseen dimensions, ubiquitous and enormously influential. There are social consequences. "The cellphone has become the remote control for our lives – we use it for electronic banking, purchases, mail and many other applications. Thanks to this convenience we do much less face-to-face, and have much less contact, especially with the common person on the street."

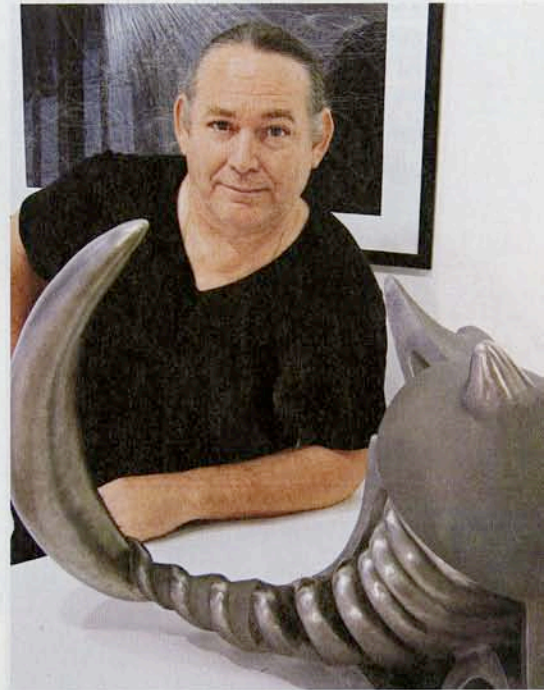
He reflects on China's challenges through the lens of his own history. Kazuo Hashimoto, a Japanese inventor and Henderson's mentor until he died in 1995, was responsible for bringing the answerphone and Caller ID to the world in the late 1950s. "Japan was not really inventive, Henderson notes, but brilliant at realizing other people's ideas. The situation is not the same for China; China invented many things a long time ago that we take for granted. As China becomes more dependent on trading relationships it will care more about intellectual property rights. But it started out counterfeiting, copying and importing like Japan; I believe they will become innovators in their own right." The beauty of this work in stone as versus his work in picture messaging, is that it doesn't spawn intellectual property rights litigation.

In the meantime he feels what we really need to work out now are the ethics, because "once it's out there, we are all affected much the same way by technology. The challenge is great for China as a nation, and this elbows down to us individually when we consider the changes wrought by technology that are complete-

ly out of our control."

The ethics we develop to guide the use of technologies and how we resolve the problems they create will determine their ultimate value to civilization.

This is Daniel's first trip here but won't be his last. "China has a wonderfully rich history of stone work, some of



Robert Michael Smith of the Digital Stone Project in his Beijing Tomorrow Art Gallery in front of a sculpture realized with computer graphics.

it quite astonishing": he is referring to the Hui'an culture of women stone carvers. "That was a surprise to me – I thought of stone carving as a macho thing, a man's art, but I've met amazing Western female sculptors too."

Robert Michael Smith is Henderson's link to China. Smith was one of four sculptors behind the Digital Stone Exhibition that toured four Chinese cities between the fall of 2008 and the winter of 2009, and spawned a gallery collective in Beijing this year. He arrived in China a month after his friend Bruce Beasley, whose sculpture *Gathering of the Moons* is permanently installed in Beijing's Olympic Park. They were checking out dozens of large-scale stone carving facilities in and near Chongwu just north of Xiamen that might be able to produce his huge outdoor sculptures. The facility they

selected would work from the products of a "3D printer" – a machine that looks a little like a prop from a low budget sci-fi movie; it takes the artist's computer-generated designs and delivers a small scale model in plastic, meaning that designs can be done anywhere in the world, then rendered in miniature for shipping. Carvers anywhere in the world then take the model, or rapid prototype, and produce in granite the final piece at the scale specified by the artist.

China's artisans promised to be a great alternative production method for the sculptors, because the CAM technology

Smith was using in New Jersey, he explains, "was costing about as much as if I had gone to Italy and paid some carvers to do it. One day these technologies will become cheaper – that's how technology works, but right now they are prohibitive for many sculptors." Most of us are familiar with CAD (computer-assisted design) but CAM refers to computer-assisted manufacturing where computers running tools actually carve the stone. Dingli Stone Carving Co., Ltd. offered the perfect solution as far as Smith and Beasley were concerned, "They offer a robust palette of stone, the quality of their

work was very high, and the intricacy of what they were achieving in granite was very impressive. I realized I could design sculptures that were more and more complex, pushing granite to the point where most people wouldn't expect it to be able to go." Smith knew that when he used a machine to carve, that like any machine it has a slight vibration and he would risk breaking some of the finer design details he planned for a piece – a hazard far less likely with hand carving. Of their collaboration with Dingli, Smith notes that he and Bruce Beasley were the first Western artists to work with the company.

Then their activities scaled up in a big way, becoming the Digital Stone Exhibition. The sculptors met Carl Bass, the CEO of the world's largest computer-assisted design company Autodesk Inc., and he was just as fired up as they were about the possibilities lurking in the merger of thousands of years of interaction with stone that China's culture offered, with the advanced design and manufacturing technologies of the West. Two more pioneers in digital sculpture, Jon Isherwood and Kenneth Snelson, rounded out the quartet of granite pushers, and Autodesk funded a documentary of the production work in Chongwu and exhibits in Shanghai, Beijing, Chongqing and Wenzhou. Digital Stone Exhibition: The Intersection of Art and Technology is a book commemorating their four-city tour and works.

"The influences in painting have gone back and forth for some time, but I see the influences of the East even in our first show, specifically the influence of Chinese culture."

Another triumph – they each sold a piece to China National Museum of Fine Art, of which Smith says, "That's a first really, for Western sculptors to each sell a piece into the museum's permanent collection from a single exhibition." The show was intended to go around the world, then the financial crisis hit, and Smith speculates, "If we had started the Digital Stone Exhibition even two months later than we did, it would never had happened. Autodesk suffered like everyone else, and even though they are surviving this thing,



Now in the permanent collection of China's National Museum of Fine Art: *Paradise Bird Burlesque* by Robert Michael Smith shown in Chongqing (opposite page); *Moon Shot* by Kenneth Snelson shown in Beijing (above left); *Fish Out of Water* by Jon Isherwood shown in Wenzhou (above right); and *Challenge* by Bruce Beasley shown in Shanghai.



they are doing it with their shares at half the value, so corporate sponsorship isn't there for now."

Smith is a calm, compact man who exudes a certain strength, and like the stone he shapes to his dreams and desires, he looks like he'll weather a lot of change. The sculptor, who already has multiple responsibilities, went on to open the Beijing Tomorrow Gallery in the Pingod complex in Beijing's southeast quarter. Beijing Tomorrow is a gallery with a timeshare apartment that the artists he represents carry the cost of, plus a social center. When he is out of Beijing the gallery and its promotional activities are run by two arts-educated and capable Chinese managers. His tenured professorship at the New York Institute of Technology, and a family plot in Sonoma County in California where he grows lavender and keeps bees to make lavender honey, are two other things that keep the energetic sculptor busy.

Then there is his sculpting, inspired

by computer-manipulations of images driven by mathematical principles. What he is working on now is scaling down his meditations on the wonder of manifest and inherent organic forms into jewelry-sized pieces.

"The influences in painting have gone back and forth for some time, but I see the influences of the East even in our first show, specifically the influence of Chinese culture."

The influences unleashed by the Digital Arts Exhibition he views as a phenomenon that has just begun. Of the

prospects for Western artists in China he notes, "There are a lot of public buildings in China and of course public art is in demand." But beyond that, Beijing Tomorrow represents artists that Smith knows and has worked with, all of whom are "interested in this great marriage of art and science. We are engaged in discussion about how and where to make CAM technology available here. China is very interested in this whole notion of design by computer and computer-driven manufacturing." Presumably it fits with economic necessity — meeting China's challenge to scale the value chain in mass or multiple production services. What started with personal introductions of sculptor friends to Dingli has mothered more than mere economic backscratching. "We broke in at a time when the interest in Western art was just starting. Of course the influences in painting have gone back and forth for some time, but I see the influences of the East even in our first show, specifically the influence of Chinese culture." ■