

He is putting his imprint on textiles

By Eils Lotozo

Inquirer Staff Writer

December 8, 2006

Home and Design, The Philadelphia Inquirer

Textile designer Hitoshi Ujiie is a man of two worlds.

In one, he is a fine artist, drawing on nature to create exquisite, painterly fabric patterns that have an almost luminous quality.

In the other, Ujiie (pronounced ooh-GEE-ee-ah) is a globe-trotting prophet of new technology, working to advance the development of digital ink-jet printers for use in the textile industry.

This week, the Philadelphia University professor will be recognized for his achievements in both worlds by Cooper-Hewitt, National Design Museum in New York, which has selected his work for inclusion in its National Design Triennial, "Design Life Now."

Opening today, the exhibition showcases the most innovative design projects of the last three years, and features 87 designers and firms working in such fields as architecture, animation, product design, furniture, and fashion.

"Design Life Now" puts Ujiie in some illustrious company. Among those chosen for the show are Nike, NASA, Pixar Studios, Apple Computer's iPod, legendary book designer Chip Kidd, and menswear star Thom Browne.

"Hitoshi is a true pioneer in ink-jet printing," says Matilda McQuaid, a Cooper-Hewitt curator who was part of a team of four who put the show together.

"Two of the three pieces in the show are actually part of our permanent collection," McQuaid says. "It's extraordinary work. He really takes the technology to the limit and gets these incredible gradations."

A standard accessory of personal computers for years, the ink-jet printer offers designers almost limitless possibilities for textiles, says Ujiie, whose own recent designs have combined drawing, photography, effects created by PhotoShop software, even freeze-frame video clips.

"Any image you can create on a computer can be produced on fabric, and the colors can be unlimited," Ujiie says. "That is amazing for the industry."

By contrast, the most common textile technology in use today, rotary screen printing, requires a separate engraved screen for each color, usually limited

to 12. The pattern size is also limited to the size of the screen, and fine detail to the size of the screen's mesh.

So far, the industry has embraced ink-jet printers mostly as a cost-effective way to print samples and short runs of fabric for fashion and home collections. Available ink-jet textile printers are still too slow for the needs of big producers, says Ujiie, who has high hopes for a new dream machine, to be introduced next year, whose Dutch makers say it can print 20 meters of fabric per minute.

Possessed of a thick shock of long black hair and an easy laugh, Ujiie, 45, has been waging his own passionate campaign to advance the technology. After teaching for a decade at Parsons School of Design in New York, he moved to Philadelphia University, which gave him the opportunity to found the Center for Excellence of Digital Inkjet Printing of Textiles.

Supported by subscriptions, loans and donations by manufacturers, the center tests machines, software and ink, and offers printing services and educational seminars. One project involves printing something called nano metal colloidal inks.

"It will make textiles conductive, so you could have electronics displays on your shirt," Ujiie says.

Ujiie, who lives in Langhorne with his wife, Heather, a fellow textile designer who teaches at Philadelphia University and Moore College of Art and Design, also has become a sought-after speaker on ink-jet printing. He is regularly flown around the world to offer his PowerPoint pitch to gatherings of printer makers, ink producers, and textile firms.

So sharp is his technical grasp of the field, he recently found himself in the role of editor for a new book about scientific research on the subject, *Digital Printing of Textiles*, to which he contributed a chapter. Yet he has no formal training in engineering.

A native of Kyoto, Japan, Ujiie studied fine arts at Kyoto Seika University and has a master of fine arts degree in design from the University of Georgia.

He was introduced to textile printing as a college student working at his family's kimono factory, where patterns are created with an ancient wax-resist method and hand-painted dyes.

"I hated it," he says of the exacting process. "It was a nightmare. With that [technique], you have to become like a machine to make the line perfectly. I want the machine to work for me. I want the work to be idea-driven."

Ujiie has big ideas about the possibilities offered by ink-jet printing.

"Fifty percent of textiles are now manufactured in China," he says. "When I go down to the South to give talks to textile companies, I tell them, 'If you don't go digital, you are going to die.' "

Ink-jet printing could give those old-line manufacturers a chance to develop a new niche and compete in the realm of design, he says: "Design will never go overseas."

Ujii also has a vision of ink-jet printing sparking what he calls a "neo-cottage industry" of young designers printing one-of-a-kind textiles to be made into bags, clothing, home furnishings - whatever inspires them.

"But I tell manufacturers they have to get the machines down to under \$10,000, including software. Then anyone can have it. It's cheaper than a car."

He hopes the technology will inspire others as it has him.

Recalling years running his own textile studio in New York, selling designs to such companies as Maharam, Knoll and Pier 1, Ujii says, "Clients would say, 'That's a nice design, Hitoshi, but how can we print that?' And then they'd say, 'You have to change it.'

"With digital printing, anything is possible. We don't have to duplicate what was done. We have to use this technology to create something new."

Contact staff writer Eils Lotozo at 215-854-5610 or elotozo@phillynews.com.

Digital ink-jet printing on fabric can be viewed at a show of work by Philadelphia University students opening today and running through Dec. 19 at the Design Center, 4200 Henry Ave. Reception: 4-7 p.m. today. Exhibit hours: Monday to Friday, 10 a.m-4 p.m. Information: 215-951-2860.