

On Target: Trends in Textiles and Technology

by Deborah Corsini

Silicon Valley—nicknamed for the geographic region stretching from San Jose, California, north to San Francisco—extends far beyond its small peninsula to the entire planet. More a state of continual technological innovation and development than a geographic location, the advancements and excitement of high tech are influencing evolution in every aspect of society, business, science, and the arts.



JANICE LESSMAN-MOSS #432 Cotton, wool, digital jacquard, woven on an industrial power loom, 75" x 67", 2012. Photo by the artist.

Recognizing that technology is actively changing the way many fiber artists are engaging with their practices, the **San Jose Museum of Quilts & Textiles** (SJMQT) launched its signature exhibition the **International TECHstyle Art Biennial** (ITAB) in 2010. It was conceived to reflect the museum's prime location in Silicon Valley and to provide an opportunity to showcase developing trends by textile artists who use technology in their process, content, or materials. The exhibit has now had its third incarnation. Similar to other international textile exhibits (notably *Fiberart International* in Pennsylvania and *Quilt National* in Ohio), the SJMQT chose to design a juried show with one clear focus. Thematic juried exhibitions like ITAB create a platform for trends in the fiber-art field to be curatorially investigated. They offer artists a channel to share and consider the merits of new work while encouraging greater experimentation that expands the definition of contemporary textile and fiber art.

Tuning into Technology

Jacquard-woven pieces, digitally embroidered works, and digitally printed works using computer design programs were expected entries. But in what other ways were fiber artists using technology to challenge their practice?

In ITAB's history, about 20 percent of the overall entries were jacquard woven, done by hand on a Dobby or TC-1 loom or at a commercial weaving mill. The images ranged from abstract to landscapes and incorporated materials such as reflective yarns that glow in the light, hand-cut and folded aluminum foil, or LED lights.

Janice Lessman-Moss's jacquard weavings are graphically complex with intertwined layers of pattern. Composed on the computer and then woven at a commercial mill, these visually stunning pieces are the epitome of what is possible in the hands of a savvy designer. Her designs build on the relationship between the pixels on the computer screen and the threads on the loom. She explains that these "compositions are created using networks of geometric forms that engage the iterative capabilities inherent to both tools." A hand-felted blanket backs each piece and extends beyond as a supplementary border, creating a perfect frame. The complementary contrast of dense wool material to the multi-patterned woven design



MELISSA ENGLISH CAMPBELL *Our Sons*

Cotton sateen, decommissioned text books, glue, 2,640 layers of digitally printed fabric and book pages, 12.5" x 12.5" x 12.5", 2014.

Photo by the artist.

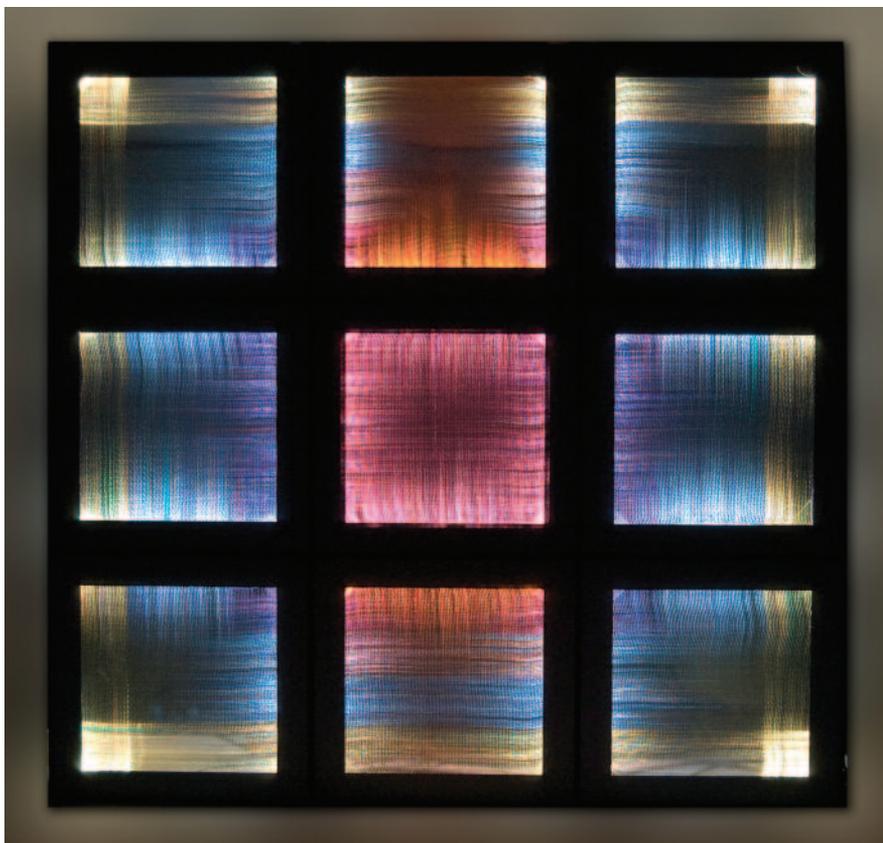
poses a fascinating pairing of both high- and low-tech processes.

Of the many computer-generated and digitally printed works, *Our Sons* by **Melissa English Campbell** is an optical and visual tour de force. Created using decommissioned text books, this foot-high stack of 2,640 digitally printed layers of cotton sateen reveals a boy's face on all sides. Amazingly, the image on the frayed side of the cube reads just as clearly to the eye.

Teddy Milder's *Berkeley Rumble 2* literally shines. Printed on recycled metal cans, her original composited photographs of the destruction of a building being torn down are an unsettling reminder of the fragility of earthquake-prone California. The sculptural aspect of curving cans and metallic shimmer, paired with the ruinous imagery of rubble, make this a powerful work. Viewing the piece from different perspectives, as gallery lights cast reflections and shadows, creates an added dimension of disquieting beauty.



TEDDY MILDER *Berkeley Rumble 2* Composed original photography, metal cans, metallic thread, steel plate, composited images digitally printed with archival pigment ink on recycled metal cans, piecing and hand stitching, mounted on steel plate, 24" x 24", 2013.
Photo by the artist.



NORA LIGORANO AND MARSHALL REESE *50 Different Minds (Homage to Josef & Anni Albers)* Plexiglas, RGB LEDs, MAC Minicomputer, Internet connection, handwoven fiber optic thread, custom electronics and software, 48" x 48" x 3", 2010.
Photo: Nora Ligorano.

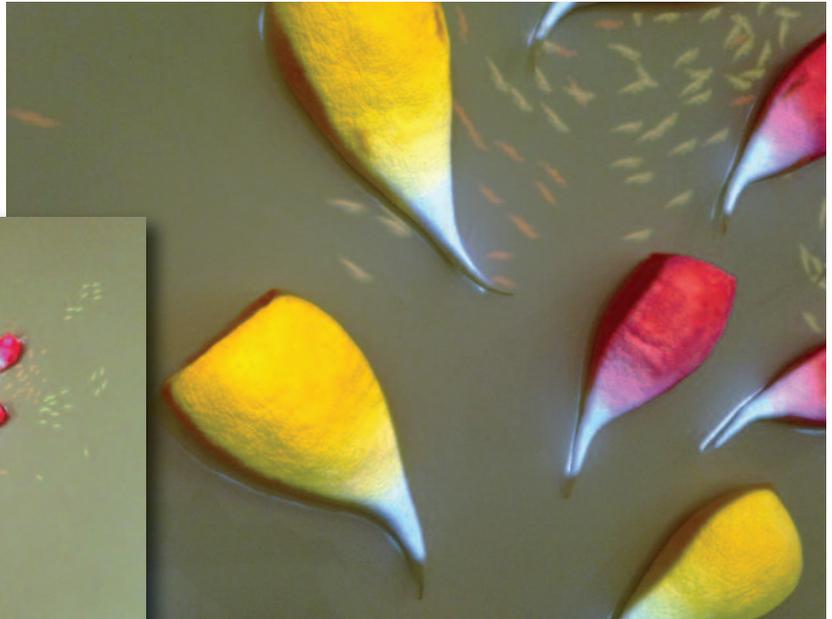
Power!

Over the course of the three ITAB exhibits, there have been many works that needed electricity and incorporated LED lights as an aspect of the work, either static or on a circuit. Artists designed their own circuitry and embedded them into traditional kimono-shaped garments, sculptural works, and various netted knotted pieces. A variety of videos have been exhibited, ranging from projections onto a floating fabric screen, to smaller animations of jacquard weaving, and a weaver's blog in a breathless onslaught of textile imagery.

Perhaps the ultimate and most seductively mesmerizing piece in ITAB's history was *50 Different Minds (Homage to Josef & Anni Albers)* by the collaborative duo **Nora Ligorano and Marshall Reese**.

in the gallery for viewers to "tweet" a color sequence, such as red, green, violet, blue, yellow, etc. Depending upon how many tweets were in the cue, one would see the piece change color through crowd sourcing.

The artistic team of **Rob Gonsalves and Anna Kristina Goransson** created the playful interactive piece *Swarming*. Thirteen red and orange wall-mounted, hand-felted "pods" are home to flocks of animated *boids*—or lights. The animation comes to life as visitors approach the sculptures. The light boids dart around the sculp-



ROB GONSALVES AND ANNA KRISTINA GORANSSON *Swarming*

Wool, computer with custom software, Kinect interface, projector, speakers, hand felting, dyeing, computer animation programming, sound design, motion sensing, 77" x 102" x 4", 2014.

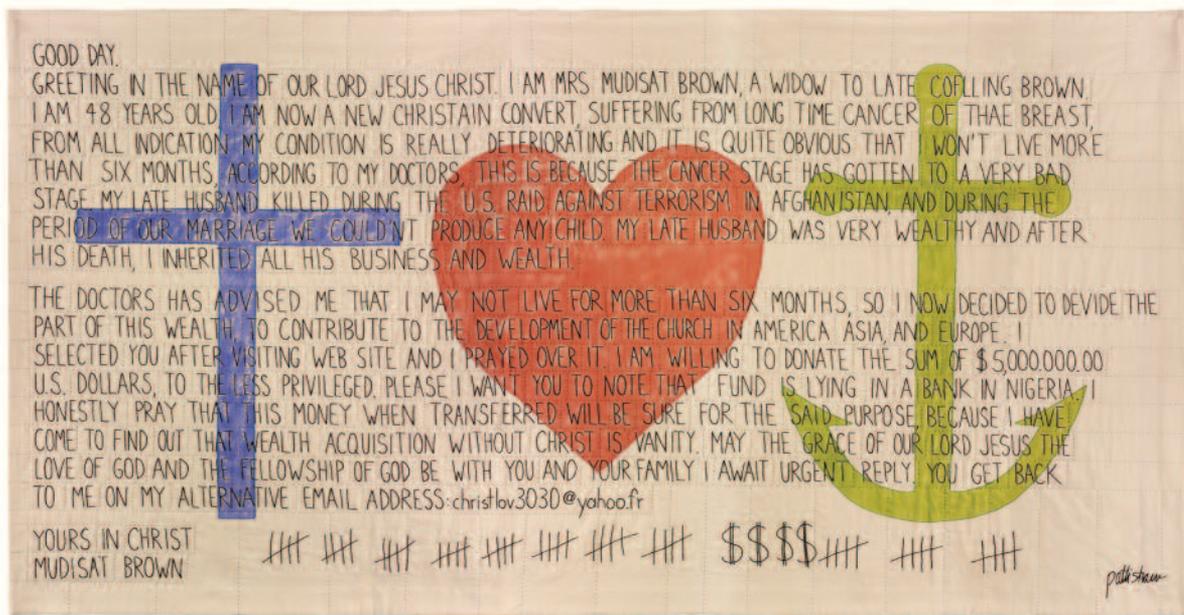
With detail. Photos: Rob Gonsalves.

This piece, inspired by Josef Albers' famous *Homage to the Square* series (of paintings, drawings, prints, and tapestries), looks like a glowing Amish quilt in a simple nine-patch configuration. The ever-changing colors that undulate from one block to the next in subtly shifting patterns are transfixing. Ligorano and Reese write, "It has been a challenging project, to imagine developing an artwork bound by tradition (weaving) on the one hand, yet to be a totally new invention on the other." Woven of fiber optic threads with custom electronics and software, the piece maps patterns and luminosity by scraping data culled from Twitter and air traffic dispatches to create animations of color. While this piece was on display during the first ITAB in 2010, a computer was set up

ture, exhibiting behaviors reminiscent of flocking and feeding. A computer rigged with a Microsoft Kinect interface (programmed by Gonsalves) monitors the motion of human visitors, which then controls the video projection and immersive soundscape.

The Internet as Muse

Everything from confessional blogs to downloaded images from NASA has been transformed in various ways by artists. **Patti Shaw's** *Spam Scam* is inspired by the thousands of outrageous scam letters that clog our email in-boxes. In this case, an actual spam letter from her collection has been carefully hand-embroidered—with typos included—and preserved like a 21st century



PATTI SHAW *Spam Scam* Cotton fabric hand-dyed using coffee as dye, textile paint, embroidery floss, hand-embroidered text, hand-painted symbols, hand quilting, 42.5" x 82", 2009. Photo: Art & Soul.

sampler. The comparison of the time it took Shaw to embroider this urgently unscrupulous appeal vs. the speed of typing a letter and sending it out to the world via the Internet is not lost on the audience, making an intriguing commentary on the pace of modern life.

QR (Quick Response) codes—those pervasive black and white squares of patterned dots—have been reinterpreted in woven, hand-embroidered, printed, and quilted textiles. The loveliest ITAB example is **Barbara Nephom's *Fine Art High Technology***, rendered in Korean bojagi cloth. The graphic black and white hand-stitched squares, paired with the translucency of the silk, create an ethereal view of this familiar symbol. The scanned QR code links viewers to the artist's website.

Alternative Materials

Many artists find inspiration in the materials from tech production. **Eszter Bornemisza** embeds keyboard buttons, wires, and plugs into hand-made paper in her map-like work *Technopolis*, which juxtaposes cultural history with contemporary highway grids and maps of her home city of Budapest. Discarded CD's combined with dried leaves and discharged fabrics in **Regina**

Benson's *Evolutionary Design* make a gorgeous iridescent wall hanging that speaks of data storage, both digitally and biologically. Shiny black VCR tape is twisted and coiled into a refined small basket, *Elegance* by **Alicia Woods**. Certainly a conscious decision by these artists and an added benefit is that in their choice of raw materials—recycling and upcycling—they are also diverting all of this refuse from the high tech waste stream and landfill.

High and Low

As an expansive curatorial endeavor, ITAB is a study of contrasts. Some artists use the computer, digital photography, 3D rendering filters, animation software, and manipulated images to design and create traditional tapestries, quilts, or even hand-made Hawaiian kapa bark cloth. **Wendeanne Ke'aka Stitt's *Niho Manō II: To You, Año Nuevo Great White*** was designed from a digital photo of an earlier piece and transformed on the computer with a rendering filter to create a sphere from a flat image. Kappa is a laborious process, and this piece is an especially provocative marriage of traditional methods with modern technology.



WENDEANNE KE'AKA STITT *Niho Manō II: To You, Año Nuevo Great White* Artist-made Hawaiian kapa (bark cloth), California black walnut hull dye, hili kukui, Kaula'i red dirt, 34" x 34", 2012. Photo: Thomas Burke and others.



ESZTER BORNEMISZA *Technopolis*

Vilene (nonwoven fabric), glue, paper pulp of rush and sedge, keyboard buttons, wires, plugs, thread, organza, glueing, paper casting, burning, machine sewing, 63" x 35", 2014. Photo: Tihanyi & Bakos.

Other artists use hand embroidery of code, sequences, or circuits to create works that speak of information overload. The slow hand work of these textile processes is a stark opposite to the rapid speeds of technology, and possibly an appealing antidote for the need to be continually connected to the Internet and social media.

Fast Forward

Technology is intertwined with our contemporary world. The anticipation is that artists will continue to embrace, experiment, refine, and remain fascinated with it in imaginative ways. These ITAB exhibits have established a baseline for a variety of connections between technology and artistic expression. Undoubtedly, many more adventurous achievements lie ahead.



REGINA BENSON *Evolutionary Design*

Discarded CDs, dried leaves, seeds, garden grasses, weeds, hand-dyed and discharged cotton, silk, rayon fabrics, embroidery floss, monofilament line, aluminum slat, polymer coatings, paint, heat-press lamination, hand embroidery, braiding, knotting, soldering, and painting, 114" x 47" x 6", 2012. Photo: John Bonath.

The next *International TECHstyle Art Biennial* is scheduled for the fall of 2016 at the San Jose Museum of Quilts & Textiles; www.sjqmiltmuseum.org.

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