



Technology tamed

Trends at this year's Design Miami/Basel demonstrate the new personality of digital design, writes Nicole Swengley

Just as digital technology is shaking up the scientific world it is also revolutionising design thinking. And, as designers swing away from creating tangible objects towards digitally produced artworks and interactive installations, not only are processes and production methods changing but typologies, too.

"Computers are offering artists and designers more opportunities to develop new media artworks for private residences and corporate collections," says Steven Sacks, director of New York and Seoul-based Bitforms Gallery, which specialises in new media art. "iPods are being used to show and drive certain artworks and artists will continue to integrate these low-cost, accessible forms of technology. With the development of new OLED [organic light-emitting diode] technology, screens that were once rigid will be able to cover objects and walls, allowing the next generation of screen-based works to be more sculptural and architecturally integrated."

Ambra Medda, director and co-founder of Design Miami/Basel, agrees. "Technology is increasingly seeping into the art and design world," she says. Three of the four Design Miami/Basel Designers of the Future 2010 award-winners are pioneering, "new-tech" studios while a talk at the show will focus on collecting technology. Nor is it inappropriate that the awards are sponsored for the first time by W Hotels. "The award creates a platform for W to showcase what's new and next in the design industry to our guests," says Eva Ziegler, global brand leader for W Hotels Worldwide. After the fair two award-winning installations – Ziegelbaum & Coelho's "Six-Forty by Forty-Eight" and Graham Hudson's "Innovative DJ Booth of the Future" – will travel to W Hotel locations worldwide. "Their creations will live beyond their initial showing at Design Miami/Basel and, in certain cases, we might work with these designers to create site-specific projects for W Hotels," says Ziegler.



To anyone who argues that digital technology – unlike furniture – has no "personality", Hannes Koch, of award-winning studio Random International, replies: "That's the gap we're trying to fill. Technology is intangible – you can't see software – and people miss that relationship between themselves

and an object. All our work comes from the same perspective: how humans interact with technology and the emotional responses generated when a space or an object responds to people."

Koch set up his London-based studio with Flo Ortkrass and Stuart Wood in 2002 to develop experimental designs embracing technology, art and engineering. Their best-known work includes "Audience", an interactive installation of 64 floor-mounted mirrors that respond to passers-by (shown by Carpenters Workshop Gallery at Design Miami/Basel last year) and "Study for a Mirror", a wall-hung "picture" that takes temporary, fast-fading portraits of passers-by (now in the V&A collection). The latter, produced in an edition of eight, has sold out to collectors.

Random's installations for Design Miami/Basel 2010 similarly aim to engage viewers with inanimate objects. "Swarm" is a chandelier, custom-designed with 15,000 LEDs, that employs artificial intelligence to react to people, either by shying away or moving towards them. "Creating specific behaviour in the object influences the way people engage with it," says Koch. Produced in an edition of eight, the chandelier comprises three separate cubes positioned 50cm apart and covering a five-metre space in total. It's sufficiently compact for a private residence and, says Koch, "suits a domestic environment".

An enhancement of "Study for a Mirror" that portrays more of the body will also be launched. Meanwhile, Carpenters Workshop Gallery will show Random's "You Fade to Light". Using Philips' OLED technology, the design comprises dozens of small mirrors that light up when activated by an electric current and follow movements in front of it. Sensors, camera-tracking and computer algorithms underpin the design's technology yet its effects rely on human interaction.

This engagement with technology is a trend Koch believes will increase. "It comes down to research into human behaviour," he says. "I think digital media will have a much more physical quality in future. Lighting could be activated by gesture-recognition with a space 'reading' your body movements, for example. We're laying the ground with our designs but you'll soon see it coming through in commercial products such as Microsoft's Xbox 360 hand-free Project Natal. Which is good because we need to bring body and soul into technology and put a smile on people's faces."

Design, technology, science and art are similarly straddled by Los Angeles-based Jamie Ziegelbaum and Boston-based



Character From top: 'Audience' by Random International; 'Six-Forty by Forty-Eight' by Ziegelbaum & Coelho; 'Mind Chair' by Beta Tank

Marcelo Coelho, who met at the Massachusetts Institute of Technology Media Lab. Their award-winning design comprises 220 magnetic lighting tiles, each of which is an independent computer capable of displaying thousands of colours but only one at a time. Visitors can modify colours and patterns by touching the screens.

"Digital processes and materials continue to gain currency," Ziegelbaum says. "Their role in design feels increasingly natural. The future is a place where the designer's palette of materials is expansive and bridges media formats. We've always felt that transistors fit just as well as hot wire-

'Lighting could be activated by gesture-recognition with a space 'reading' your body movements'

cutters in the designer's hand."

A third award-winner, Berlin and London-based Beta Tank, describes itself as a "think-and-make tank positioned between technology, science, design and art". Founded by Michele Gauler and Eyal Burstein, its work is predicated on mixing seemingly incompatible concepts and materials – an outlook that Burstein says "comes from a deep interest in how humans adopt/adapt technologies in their everyday lives".

Its design portfolio includes the "Mind Chair", in which users are invited to close their eyes and focus on images vibrated into their backs via a movie camera

attached to a grid of 400 solenoids, thus encouraging sitters to "see" with their brains and not their eyes. Just as exploratory is "Bubble Screen", which uses air and water as a display medium. The screen is a tank of water and the pixels are individual bubbles that are released from a mechanism at the base. This enables the screen to display characters typed on the computer to which it is connected. As the bubbles rise, the message floats upwards and disperses on the surface.

Beta Tank's Design Miami/Basel project is, however, more conceptual than technological. "We've created a series of objects made in response to tax laws or court rulings discussing what art or design is," says Burstein. "If a table is non-functional, it is classed as art and subject to lower taxes. If it is functional, it is classed as design and incurs higher taxes. As the objects travel to Basel they will have to be classified by accountants, bookkeepers, customs officials and the fair's organisers. We're interested in the paperwork and discussions generated by the objects."

Still, design technology is high on the show's agenda. Gallery Libby Sellers will present new work by Dutch designer Simon Heijdens that builds on his earlier interactive digital installations such as "Tree" and "Lightweeds".

Bespoke software programming and various sensors allow Heijdens' digital plant-forms to mature and grow like a canopy over a ceiling in response to externally monitored data such as human movement or outdoor weather conditions. With its technical elements gathered into one unit, wirelessly connected to outdoor sensors, the design is not site-specific and could be used in private residences.

As Heijdens puts it: "I see digital technology like any other material, such as paint, with increasing applications domestically."

Meanwhile, digital design specialist Moritz Waldemeyer has created an innovative showcase for two iconic Audi car models (Audi is a principal show sponsor) in which the light flow of LEDs simulates motion. For homeowners keen to recreate the experience, similar technology is used in Waldemeyer's "Disco" coffee-table, with built-in sound system, which employs laser lighting to transform it into a virtual dance cage.

As London design gallerist Rabih Hage, who represents Waldemeyer, says: "The future is digital".

Design Miami/Basel, June 15-19, Hall 5, Messe Basel, www.designmiami.com