

Ars Electronica Futurelab at Tokyo Midtown DESIGN TOUCH 2010

(Linz, November 2, 2010) The 2010 DESIGN TOUCH exhibition that just opened in the Tokyo Midtown complex showcases the future of design. The high-profile event's venue this year is an architectural hotspot located in the center of the Japanese capital. Tokyo Midtown consists of six buildings situated in a park-like setting. The surrounding neighborhood features a wide array of stores, restaurants, office complexes, hotels and museums. Here, art and design are omnipresent.

Futurelab is This Year's Special Guest

As Special Guest 2010, the Ars Electronica Futurelab is spotlighting design methods with great future promise. They're being presented in workshops, lectures and the DESIGN TOUCH Exhibition at Tokyo Midtown's Galleria, where 11 prizewinning interactive works arrayed in three "cores" are on display. The Creative Core is the heart of this exhibition; it interweaves artistic works and workshops. Social Touch is the focal point of the next area, an encounter with the development of innovative interaction possibilities as a strategy to positively influence our society. The third area is Intuitive Touch; it's an assortment of projects designed in a way that anyone can intuitively figure out how they function, which enables them to make a contribution to users' quality of life.

DESIGN TOUCH Exhibition

In the Creative Core

Shadowgram / Ars Electronica Futurelab

A person stands behind an illuminated screen and is photographed. The result is a shadowimage in which a human silhouette is all that can be seen. This picture is then printed out as a miniature sticker and applied to a "map" whose topography has been derived from a cluster of topics including education, environment, health system and society, whereby the body language of the silhouette, a speech balloon containing a brief statement, and the respective thematic cluster coalesce into a message. For instance: the person behind the illuminated screen covers his/her ears with his/her hands while being photographed. This silhouette is then allocated to the Environment cluster and a speech balloon containing a remark about noise pollution is added to it. The upshot is a highly creative, graphic mode of "social brainstorming" and thus a means of identifying problems and bringing out potential solutions.

SWITCH / Ars Electronica Futurelab + ELEKIT (EK Japan Co., LTD.)

http://www.youtube.com/watch?v=-Q50_Hs0IHA

SWITCH is edutainment in the form of a self-assembly kit; it's meant to bring a bit of sophisticated entertainment into our lives. This research project was developed by the Ars Electronica Futurelab in collaboration with ELEKIT, one of the world's leading manufacturers of educational electronic self-assembly kits. SWITCH enables users to experiment with



experience design and to get a feel for the work done by interaction designers on a daily basis.

Oribotics / Matthew Gardiner (AUS)

Oribots are high-tech creatures that are the outcome on an artistically motivated synthesis of traditional Japanese paper-folding and state-of-the-art robotics. They feature complexly folded floral structures that open and close at the command of an ultrasonic sensor. The closer an exhibition visitor gets to one of the Oribots, the wider its shiny white fabric blossom opens. This is an interaction concept that is comprehensible by young and old alike; what's behind it is a highly sophisticated design. All 1,050 folds of a single Oribot blossom are mechanically interlinked. As soon as one single fold of a blossom is activated, all the others go into motion too. Oribotics mastermind Matthew Gardiner—until recently artist-in-residence at the Ars Electronica Futurelab—worked for three years developing the ideal folding pattern and material for his latest generation of Oribots. "I'm still fascinated by their extraordinary aesthetic and emotional quality, and I want to get this across to visitors," said Gardiner, who became infatuated with origami as a schoolboy.

The Social Touch

The EyeWriter / Zach Lieberman (US), James Powderly (US), Tony Quan (US), Evan Roth, (US), Chris Sugrue (US) and Theo Watson (UK)

[Golden Nica Interactive Art PRIX 2010]

http://www.eyewriter.org/

Inspired by the life of Tony Quan, a graffiti artist who was diagnosed with the degenerative nerve disorder ALS in 2003, Zach Lieberman, James Powderly, Evan Roth, Chris Sugure and Theo Watson developed "EyeWriter." A reasonably-priced eye tracking system and the software that runs it make it possible to draw on a computer screen just by moving one's eyes. This gives people who have contracted a neuromuscular disease—some of whom are completely paralyzed—a way to express their creativity in spite of their condition.

Telenoid / Hiroshi Ishiguro (JP), Osaka University and ATR

http://www.youtube.com/watch?v=bvfVznGU2CE

Hiroshi Ishiguro has been experimenting for years with Geminoids, anthropoid robots controlled by camera, microphone and data link. Professor of Robotics at Osaka University and director of the Advanced Telecommunications Research Institute at Kansai Science City, Ishiguro is currently working on Telenoid R1, a telepresence robot that can not only speak but also use facial expressions to reinforce what it's saying.



The Windowfarms Project / Britta Riley (US)

http://www.windowfarms.org/

Britta Riley's Windowfarms project is a rapidly-growing website that shows city dwellers how to grow food in their apartments all year 'round, and feeds their innovative ideas into an open design community focusing on the future of urban agriculture. The project's success has been considerable: more than 14,000 people have already installed this vertical, hydroponic, modular, low-energy, high-yield window garden, are contributing suggestions for modifications, and experimenting with various varieties of vegetables and other edibles.

Open Sailing / Open_Sailing_Crew

[Golden Nica [the next idea] voestalpine Art and Technology Grant 2009]

http://www.opensailing.net

"Open Sailing" is the vision of an organic architecture that constitutes a laboratory for techno-social experiments. As nothing less than a process for surmounting all possible natural and human-generated catastrophes, this ambitious undertaking's aims include fostering the human spirit of inventiveness and strengthening social solidarity. The ultimate mission of "Open Sailing" is to take on challenges like overpopulation, climate change and energy conflicts with do-it-yourself technologies: Instinctive_Architecture, Energy_Animal and Life_Cable are some of the new approaches that are being developed and tested. The immediate objective is facilitating R&D within the mobile, nomadic system of "Open Sailing"—a floating city consisting of solid, well-appointed buildings surrounded by oceanic fields. With navigation controlled by a Swarm_Search_Engine, the floating city is continually steered in the direction of what is at any particular instant the safest location. The physical configuration of the floating platform is constantly undergoing rearrangement to assure the most efficient management of information, energy and other resources. "Open Sailing" calls into question the way we are currently populating and exploiting our planet, and asks if it could be possible to coexist in a harmonious interrelationship with one another and with our environment.

The Intuitive Touch

hanahanahana /plaplax (JP)

http://www.plaplax.com/

"hanahanahana" is an interactive artistic installation that visualizes scents. The Japanese word "hana" has two meanings: it refers, on one hand, to the nose, the organ of smell, and, on the other, to a fragrant flower. "hanahana"—the name being a compound that brings together both meanings—visualizes transient fragrance-messages by projecting a picture of a flower onto the wall of the exhibition space. Each image varies in size, color and degree of transparency.

To immerse yourself into the world of "hanahanahana," you apply a fragrance to a leaf-shaped test strip, which you then attach to the flower stem standing in the nearby vase. The



image of a flower then proceeds to bloom at the end of the shadow of the stem projected onto the wall, whereby the blossom's color and form correspond to the intensity and type of the particular scent. If its intensity exceeds a certain preset level, the edges of a flower's image are surrounded by insects and animals as if they were attracted by the odor.

The technology that goes into this process of real-time fragrance recognition is based on an array of olfactory sensors commonly used for quantitative measurements in conjunction with chemical experiments and product evaluations. These sensors can identify odors and measure their intensity in real time. Through the use of multiple sensors, the system can also classify odors. The measured data are then fed into a computer that projects the corresponding picture in real time (about 60 images per second) onto the wall.

Jamming Gear / So Kanno, Kenichiro Saigo (JP)

[Honorary Mention Digital Musics PRIX 2009]

http://www.body-pixel.com/2010/02/06/interview-with-so-kanno-creating-sound-devices/

"Jamming Gear" is an innovative, playful way to compose and modify music. The core components of this device are intermeshing gears, each one of which generates its own specific sound. Since the rotation of one gear causes all the other gears to spin, what is set into motion is a totally unique form of mechanical and acoustic interplay. The speed at which the gears rotate exerts a major influence on the sound generated thereby.

i3DG / Jitsuro Mase, Tom Nagae (JP) / DIRECTIONS, Inc.

[Honorary Mention Interactive Art PRIX 2010]

http://i3dg.mobi/

"i3DG" is a playful analog attachment for the iPhone that transforms its 2D display into a multilayered 3D image. By recontextualizing the age-old method of holding a half-silvered mirror up to an image at a 45° angle, the project actually constitutes a timely critique of such popular memes as 3D displays and iPhones. As a peripheral device, "i3DG" supports a wide range of applications including 3D video, film animation and games using the accelerometer.

Frequtric Drums / Tetsuaki Baba (JP)

[Honorary Mention Interactive Art PRIX 2007]

http://tserve01.aid.design.kyushu-u.ac.jp/~baba

"Frequtric Drums" is an interface system that implements possibilities of communication via physical contact. It transforms audience members surrounding the performer into drums. Just like a percussionist, the performer can play the people connected to him/her. "Frequtric Game" lets players use skin contact to issue commands they would be unable to launch with their control devices alone.