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# **INTERACTIVE FURNITURES COLLECTION**

**A COLLECTION OF INTERACTIVE TABLES, LAMPS, CHAIRS, PARTITIONS AND OTHERS, FOR THE HOUSEHOLDS BUT NOT ONLY.**

**Interaction Design Institute Ivrea - Exhibition Unit**

First Release - July 2005

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## Introduction

This booklet is an extension of the intellectual experience we have been exposed to during the 'CAIF - workshop on interactive furnitures for collaborative learning' that we have been attending.

In our research we have come across various projects that did not fit any simple categorization. However to keep structure in the documentation we have broadly classified the projects found into the following categories: Tables, Chairs, Partitions (Ceiling, floors, walls), Lamps and Others.

Many of the projects might fall into more than one

category however they are mentioned in one of the categories which defines those projects respectively.

To briefly introduce our research, we found interactive furnitures to have quite a history. Even though there are Interactive architectural projects dating from the early 1940's like the Automatieks' of Amsterdam, our documentation holds the earliest project as another architectural wonder called 'Wind Towers' but Japanese architect Toyo Ito as the qualities captured in these pieces of architecture are comparably sophisticated to the qualities that define interactive projects of today.

Furthermore we have also tried to query the commercial viabilities of the projects we have found as we both, being designers, find this quality of a project important to know and to discuss.

The following booklet stores each project in a unique template with the following pieces of information: a main title, a brief description, an image, the name of the designer, the company and/or institute involved, the date of its conception, if it is commercialized or not, URL's to useful links about the respective projects and notes from us about any important or interesting information we could add.

Each project is laid into its category in alphabetical order by project name. Please view accordingly. Furthermore, the project descriptions are taken from the websites (referred in each card).

# **INTERACTION DESIGN INSTITUTE IVREA**

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**COLLECTION**



# Share Aware

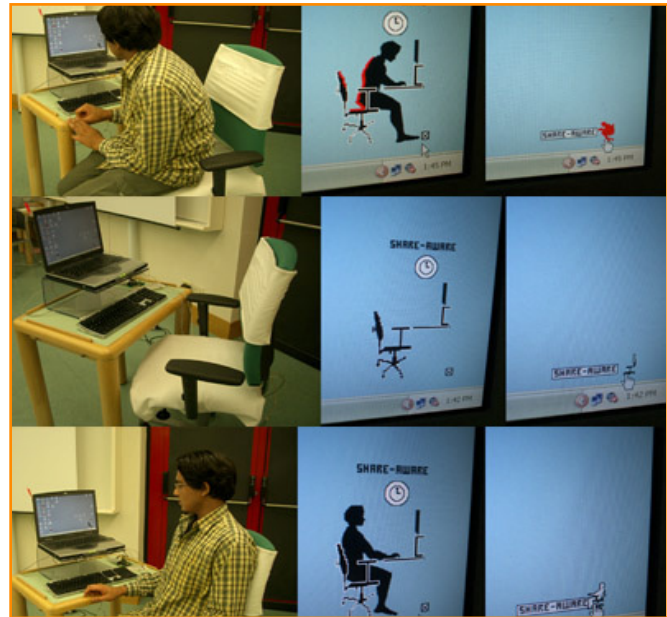
**Share Aware: An interactive system using real-time feedback to ring the awareness of preventing computer-related injuries**

Targeting on computer related injuries, a screen-based application connected to a sensor seat pad, and, comprehended with a service system is designed to help office workers to have awareness of preventing computer-related injuries and assist them to develop good computer-using habits in long run.

**Notes:** Graduated 2005/ International Patent

**Patray Lui, Anurag Sehgal**

2004 © Interaction Design Institute Ivrea



**Home:** <http://people.interaction-ivrea.it/p.lui/Share-Aware/index.htm>

**Video:** Check website at page 4 of 'service idea' section

Updated - 07.2005

# Smart Skins

## Smart Skins - Intelligent skins for dumb objects

This project aims to customise everyday objects - such as books, chairs and key rings - by means of electronic devices. The idea is to work on a new layer of electronics for objects we use normally every day, and try to stimulate new forms of communication (direct and indirect) between people. This set of devices adds emotional and social value to the customised objects; they are intended for possible industrial production (and therefore at low cost), using already-existing technologies.

**Notes:** Graduated 2003/ Exhibited in: Salone Del Mobile 2004 in Milan (Italy), 'This is Today' show at Triennale/ NEXT 2004 Copenhagen (Denmark)

Rikako Sakai

2003 © Interaction Design Institute Ivrea



**Home:** <http://www.interaction-ivrea.it/en/gallery/smartskins/index.asp>

**Other:** <http://www.designboom.com/snapshots/milan04/idii.html>

Updated - 07.2005

# Collabolla

## Collabolla

In Collabolla, two players share control of a single character's movement to play a classic arcade game (pacman). The joystick is replaced by two space hopper balls – one for the x axis and one for the y axis. Players can use the space hopper balls however they wish – bounce, roll, rock back and forth, one moving pacman up and down, and the other left and right. Players have to communicate and cooperate with each other to move pacman around the screen. It's a hell of a lot of fun.

**Notes:** Graduated 2005/ Exhibited in: Bu.net internet cafe in Turin (Italy)/ Salone Del Mobile 2004 in Milan (Italy), 'This is Today' exhibit at Triennale/ MediaHouse at Fabbrica Europa, Florence (Italy)/ NEXT 2004 Copenhagen (Denmark)/ 'Touch Me' exhibit at Victoria and Albert Museum, London (United Kingdom)

J. Bove, S. Pia, G. Stilwell, N. Waterhouse  
2004 © Interaction Design Institute Ivrea



**Home & Videos:** <http://www.collabolla.com>

**Other:** <http://www.designboom.com/snapshots/milan04/idii.html>

# Tableportation

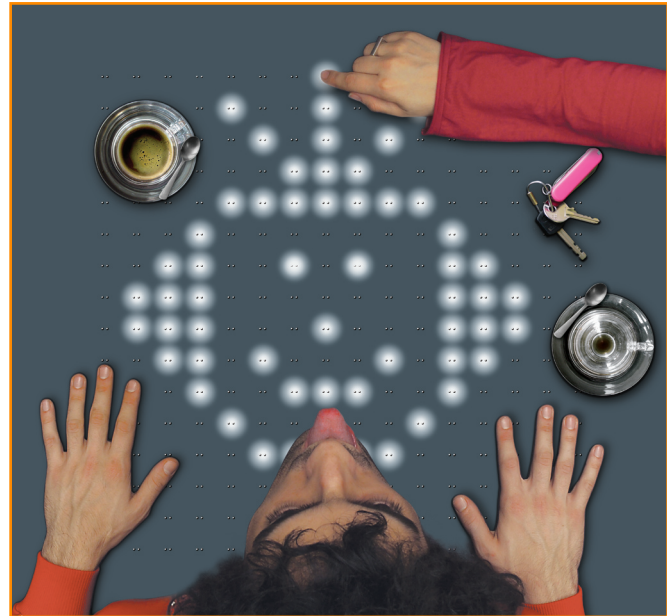
## Tableportation

Tableportation is a local media system designed to fuse mediated and physical space, to experiment and play with social boundaries, to encourage and allow new forms of interplay between people at different tables in the café. Video cameras monitor the table surfaces, allowing patrons from different tables observe each other, be observed and get in touch. Interactive light table surfaces enhance, stimulate and provoke self-expression, collective creations and playful communication. The café becomes a collective playground where the user is participant and producer rather than merely consumer of space and time.

**Notes:** Graduated 2004/ Exhibited in: Bu.net internet cafe in Turin (Italy)/ Salone Del Mobile 2004 in Milan (Italy), 'This is Today' show at Triennale/ NEXT 2004 Copenhagen (Denmark)/ CAIF Workshop on Interactive Furnitures, Chateau D-Oex, (Switzerland)

Giorgio Olivero, Peggy Thoeny

2004 © Interaction Design Institute Ivrea



**Home:** <http://www.interaction-ivrea.it/theses/2003-04/tableportation/index.html>

**Video:** [http://www.interaction-ivrea.it/theses/2003-04/tableportation/tp\\_downloads\\_01.html](http://www.interaction-ivrea.it/theses/2003-04/tableportation/tp_downloads_01.html)

# Message Table

## Message Table

Message Table is a desk merged with an answering machine, which receives, plays and stores phone messages. When a message is left, a box representing that message slowly rises from the desk; the box's height depends on the message's length. When you return home you quickly scan the tabletop to see how many messages have arrived. Opening a box's lid enables you to hear the message. Pushing that box back down into the desk deletes the message forever.

**Notes:** Students/ Exhibited in: 'Strangely Familiar' show, AB+, Turin (Italy)/  
TECNO Exhibition at Salone Del Mobile 2005 in Milan (Italy)/ 'Touch Me' exhibit  
at Victoria and Albert Museum, London (United Kingdom)

Shawn Bonkowski, (with Dana Gordon)

2005 © Interaction Design Institute Ivrea



**Home:** <http://www.interaction-ivrea.it/en/news/press/photos/2005/strangely/index.asp>

**Other & Video:** <http://projects.interaction-ivrea.it/exhibitions/ex1.asp?s=6>

# Not So White Walls

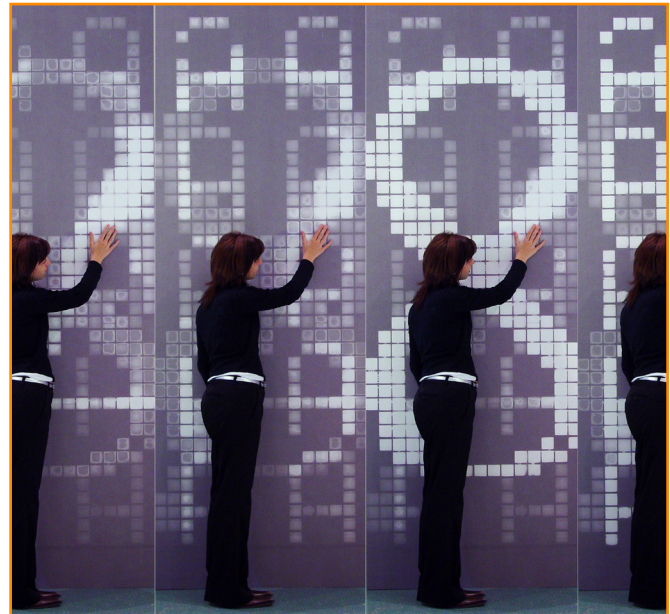
## Not So White Walls

Stop looking at your TV and Mobile screen! Look at your walls instead. The surface of the wallpaper can display text and images according to the input received from a computer. The wallpaper works like a low resolution and low refresh rate display, giving you the possibility to change patterns and contents on your walls. For example you can read your emails or SMS, but also view the images taken with your mobile phone camera. The function is that of decorating our home environments in a new and constantly changing way.

**Notes:** Graduated 2004/ Exhibited in: Bu.net internet cafe in Turin (Italy)/ Salone Del Mobile 2004 in Milan (Italy), 'This is Today' exhibit at Triennale/ 'Tecnologia, Tecnologie' exhibit, Genoa Science Festival, Genova (Italy)/ NEXT 2004 Copenhagen (Denmark)/ TECNO Exhibition at Salone Del Mobile 2005 in Milan (Italy)/

Dario Buzzini

2004 © Interaction Design Institute Ivrea



**Home:** <http://www.nsww.org>

**Other:** <http://www.interaction-ivrea.it/en/gallery/notsowhitewalls/index.asp>

Updated - 07.2005



# Creative Collision

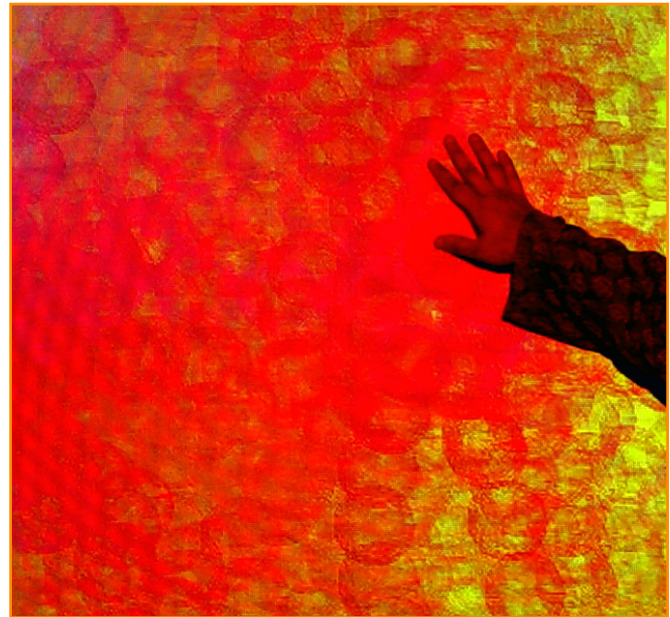
## Creative Collision

Painting digital pictures by throwing rubber pebbles against an inflatable equipped with suitable sensors. The shape and size of the pictures depend on the intensity and the way in which you throw the pebble. The same operation can be repeated several times, using different colours, enabling you to create your own graphic. The surface is also touch sensitive, so that you can also paint by hand. If you prefer sound there is also a more poetic version which allows you to create audio landscapes, with water ripple visuals.

**Notes:** Graduated 2005/ Exhibited in: Bu.net internet cafe in Turin (Italy)/ Salone Del Mobile 2004 in Milan (Italy), 'This is Today' exhibit at Triennale/ MediaHouse at Fabbrica Europa, Florence (Italy)/ NEXT 2004 Copenhagen (Denmark)

Giovanni Cannata, Anurag Sehgal

2004 © Interaction Design Institute Ivrea



**Home:** <http://www.interaction-ivrea.it/en/gallery/creativecollision/index.asp>

**Other & Video:** [http://people.interaction-ivrea.it/g.cannata/CC\\_DIS2004\\_2m\\_low.mov](http://people.interaction-ivrea.it/g.cannata/CC_DIS2004_2m_low.mov)

Updated - 07.2005

# **INTERACTIVE CHAIRS**

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**COLLECTION**



# Posture Sensing Apparatus

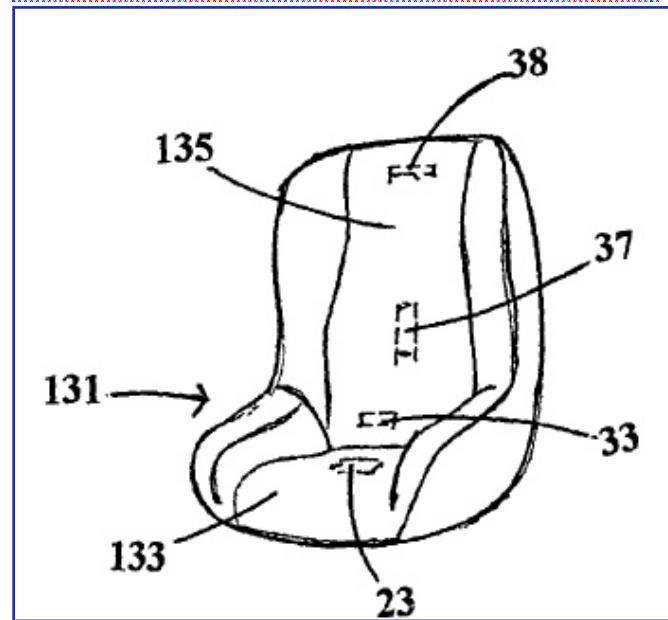
## Posture Sensing Apparatus

Project for notifying an occupant of the posture of the occupant comprises a sensing device and sitting means for infants, babies and children. The sensing device comprises sensors, microcomputer, responding means, switch part and power supply that are electrically interconnected to one another. The apparatus checks if the occupant is sitting properly or not, and gives an alert if the occupant is not sitting properly.

Notes:

Cho Myoung-Ho

2003 © European Patent



Patent Page: <http://v3.espacenet.com/textdoc?DB=EPODOC&IDX=WO03072953&F=0&QPN=WO03072953>

# Smiles In Motion

## Smiles In Motion

Smiles in Motion is designed for augmented relationships between two people. Two chairs link two visitors that enable them to converse with each other in a very special manner. This construction might be called a “relation apparatus” and is able to transform speech into movement. Speech and sounds produced in the audible spectrum by the two visitors are converted into vibrations, through motors placed in the seats of the chairs. As a visitor is perceiving what is spoken in the form of vibrations, he is also shown the mouth of the other visitor on a monitor fixed in a globe. And so may converse through vibrations and smiles.

Notes:

Boxiganga

2000 - Boxiganga



Home: <http://boxiganga.dk/english/enmilet.html>

Updated - 07.2005

# CommChairs

## CommChairs

The CommChairs represent the next generation of office furniture. They combine the functionality of a modern office desktop computer environment with mobile chairs and with the comfort of armchairs. Thus, the Communication Chairs allow working in a standard personal computer environment without being bounded to desks. The CommChair is an example of a roomware® component and constitutes an important part of the i-LAND environment.

**Notes:** Contact person Dr. Norbert Streitz ([streitz@ipsi.fraunhofer.de](mailto:streitz@ipsi.fraunhofer.de)). Thorsten Prante who participated to CAIF worked with him.

Fraunhofer IPSI  
Fraunhofer IPSI



**Home:** <http://v3.espacenet.com/textdoc?DB=EPODOC&IDX=WO03072953&F=0&QPN=WO03072953>  
**Other:** (i-LAND) [http://www.ipsi.fraunhofer.de/ambiente/english/projekte/projekte/i\\_land.html](http://www.ipsi.fraunhofer.de/ambiente/english/projekte/projekte/i_land.html)

# Singing Benches

## Singing Benches

Robotic benches and bins with Sirius Cybernetics Corporation GPP (Genuine People Personalities) straight out of Douglas Adams' Hitchhiker's Guide to the Galaxy have been created by Greyworld, a group of London artists.

Robotic bins that move and chuckle, benches that flock together and sing when the sun comes out, have been unleashed in Cambridge.

The Junction, one of the city's arts venues, unveiled the public arts display in the Plaza on Thursday.

The "interactive" technology will allow the street furniture to respond to members of the public.

**Notes:** The project cost £110,000 and was funded by the Arts Council and the National Lottery.

Greyworld  
Greyworld



**Other:** [http://www.livescience.com/scienceoffiction/050614\\_benches\\_bins.html](http://www.livescience.com/scienceoffiction/050614_benches_bins.html)

**Other:** <http://news.bbc.co.uk/1/hi/england/cambridgeshire/4077680.stm>

# Boom Chair

## Boom Chair

Feel sound rumble through your body with the Boom Chair™. This interactive multimedia chair is the ultimate add-on accessory for game systems, home theater, MP3 players and more. Immerse yourself in sound as you interact with every crash and explosion!

**LumiSource Inc.**

© LumiSource Inc. - Commercial



**Notes:**

**Home:** [http://www.lumisource.com/product\\_details.asp?product=furniture&product\\_id=278](http://www.lumisource.com/product_details.asp?product=furniture&product_id=278)

# WiFi Chairs

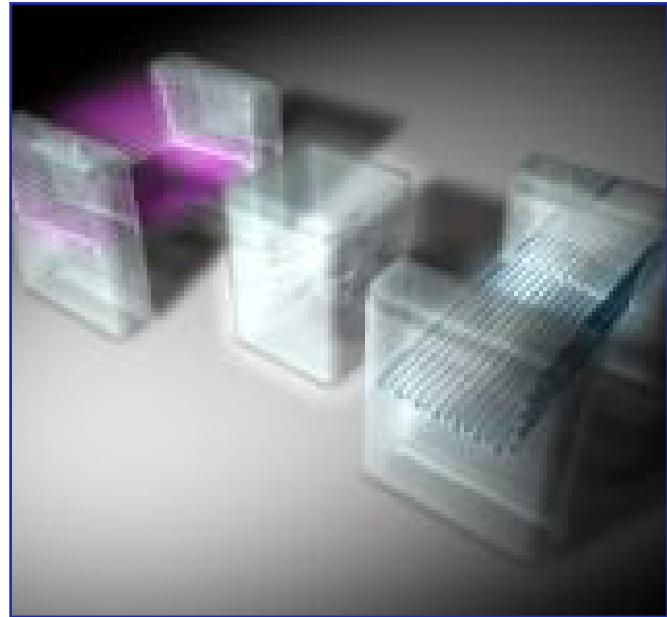
## WiFi Chairs

To promote its line of Centrino wireless chips in Britain, Intel has commissioned the Design Laboratory to create a line of WiFi-enabled furniture with wireless access points built-in. The chairs themselves are made of computer cables encased in clear resin (which is meant to make good use of all the cables we'll be throwing away now that the wireless era has arrived) and are intended to be setup in places like train stations and hotel lobbies so people can get online.

### Notes:

Design Laboratory

2003 © Intel



**Home:** <http://gizmodo.com/gadgets/wireless/intels-wifi-chair-006968.php>

**Other:** [http://www.theregister.co.uk/2003/08/13/intel\\_unveils\\_wifi\\_chair/](http://www.theregister.co.uk/2003/08/13/intel_unveils_wifi_chair/)

# Remote furniture

## Remote furniture

Two rocking chairs are installed on the floor facing each other. The audience sees no interactions between chairs. The interaction is triggered when two people from the audience sit in the chairs and rock.

Each chair has a sensor and motor. These devices enable mutual interaction between the chairs. They allow one to feel the other's rocking action. The aim of "Remote Furniture," then, is to create direct and tactile touch.

**Notes:** SIGGRAPH 2004

Noriyuki Fujimura

1999 - Carnegie Mellon University



**Home:** <http://www.andrew.cmu.edu/user/noriyuki/artworks/remotefurniture/>

**Video:** <http://www.andrew.cmu.edu/user/noriyuki/artworks/remotefurniture/rfmovie-wm.wmv>

Updated - 07.2005

# Glowing Places

## Glowing Places

Shopping malls, subway stations and most other artificially-lit indoor spaces are usually pretty dull and dreary places to be. But that might be about to change. Philips Design, in collaboration with the Helen Hamlyn Research Centre at the Royal College of Art, has studied a novel solution: public seating that glows, dims, flashes and changes color in response to people sitting on it throughout the day.

**Notes:** Megumi Fujikawa (fujikawa\_rca@hotmail.com) studied at RCA. Roger Ibars, who attended CAIF (roger.ibars@gmail.com), has been her classmate.

**Megumi Fujikawa**

2004 © Philips Design - Commercial



**Home:** <http://www.design.philips.com/about/design/newvaluebyonedesign/section-13662/>

**Other:** (Philips Design Dinamic Lighting) <http://www.design.philips.com/about/design/section-12825/article-14530.html>

Updated - 07.2005



# Interactive Chairs

## Interactive Chairs

The interactive chairs project was developed for the collaborative authorship project 'Embrace the Swarm' presented as part of the Ars Electronica 'Unplugged' Festival in September 2002.

A video played dependant on the combination of chairs that were in front of the screen. An individual's chair would trigger their own video; however, if different combinations of chairs, representing members of a particular group, were combined, different videos would play, showing the interactions between these people. With 5 groups containing a total of 9 people there were 16 videos that could be triggered.

Notes:

Someth;ng

2002 - Someth;ng



Home: [http://www.somethingonline.org/txt/d\\_chairs.html](http://www.somethingonline.org/txt/d_chairs.html)

Updated - 07.2005

# **INTERACTIVE PARTITIONS**

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**COLLECTION**

# I Think You - You Think Me

## I Think You - You Think Me

It permits visitors to create relationships between real and virtual personalities.

Two virtual beings, Robert and Roberta, are having a conversation. They are only present in the room through their faces which appear on two computer screens while their voices emanate from loudspeakers. Sensors permit Robert and Roberta to become aware of the movement and presence of real human beings in the room. When this happens, they speak directly to the visitors. However when no one is in the room, they fall asleep and snore loudly.

**Notes:**

**Boxiganga**

2000 - Boxiganga



**Home:** <http://boxiganga.dk/english/enjeg.html>

# Foot-Based Mobile Interaction With Games

## Foot-Based Mobile Interaction With Games

Interaction with mobile applications is often awkward due to the limited and miniaturized input modalities available. Our approach exploits the video capabilities of camera equipped smart-phones and PDA's to provide a fun solution for interaction tasks in simple games like "Pong", "Breakout" or soccer.

Notes:

Volker Paelke, Christian Reimann, Dirk Stichling

2000 - University of Paderborn, C-LAB



**Paper:** [http://www.whni.uni-paderborn.de/publikationen/download.php3?id=2188&filename=paper.pdf&paper=RPS2004.pdf&parent=%2Fpublikationen%2Fpub\\_search.php3%3F](http://www.whni.uni-paderborn.de/publikationen/download.php3?id=2188&filename=paper.pdf&paper=RPS2004.pdf&parent=%2Fpublikationen%2Fpub_search.php3%3F)

Updated - 07.2005

# Paper Clock

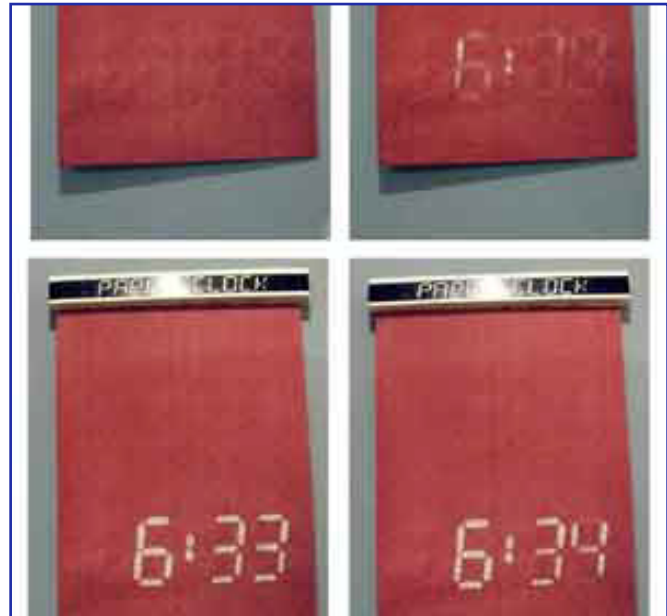
## Paper Clock

This is a fully functional clock that is printed onto ordinary paper. Using a heat sensitive coating, the minutes and hours blur from one into the other in a very subtle, warm and organic way. The ornamented wallpaper was used to contrast the digital interactivity with our perception of traditional, static wall space. The graphic surface however could be changed to display any graphic or photographic motive. WATCH PAPER is the first of a number of products that we are developing for a range of different applications. Interactive walls, display systems and customised, made-to-order installations.

**Notes:** Exhibited at INTERACT1 in London in September 2004/ Exhibited at INDEX2004 (Denmark)/ Will be on show at the ARAM Store in London in February 2005, at the Designmai in Berlin in May 2005 and at Tokyo Designers Block in October 2005/ Link through Giovanni Cannata

**Hannes Koch**

2003 - Royal College of Art



**Home:** <http://www.random-international.com/news/2004/11/9/watch-paper.html#comments>

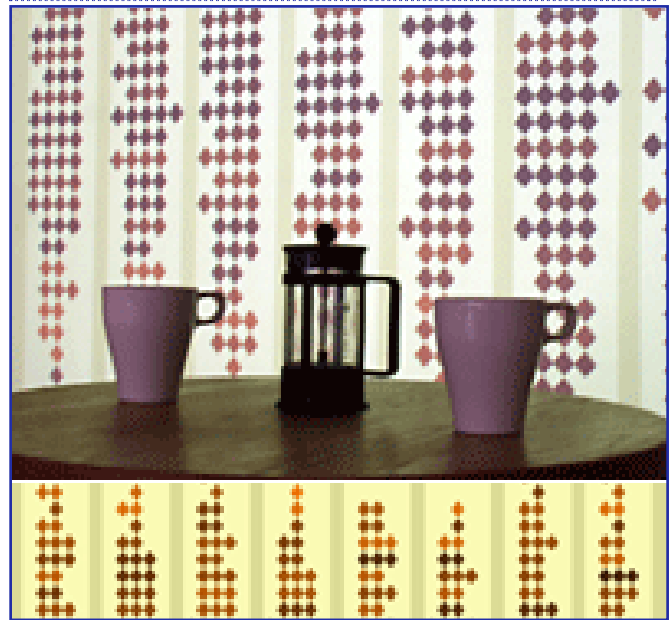
# Activity Wallpaper

## Activity Wallpaper

With Activity Wallpaper we explore how a place can be provided with an electronic “memory” of how it is inhabited, i.e., how people move around, socialize, make noise or in any observable way spend time there. We do this by collecting activity data using various sensors, and then displaying an interpretation of this data, in the form of an ambient visualization, back into the place.

**Notes:** Sara Ljungblad, researcher at the Viktoria Institute, participated at CAIF

The Viktoria Institute  
2003 - The Viktoria Institute



**Home:** <http://www.viktoria.se/fal/projects/infoart/actiwall.html>

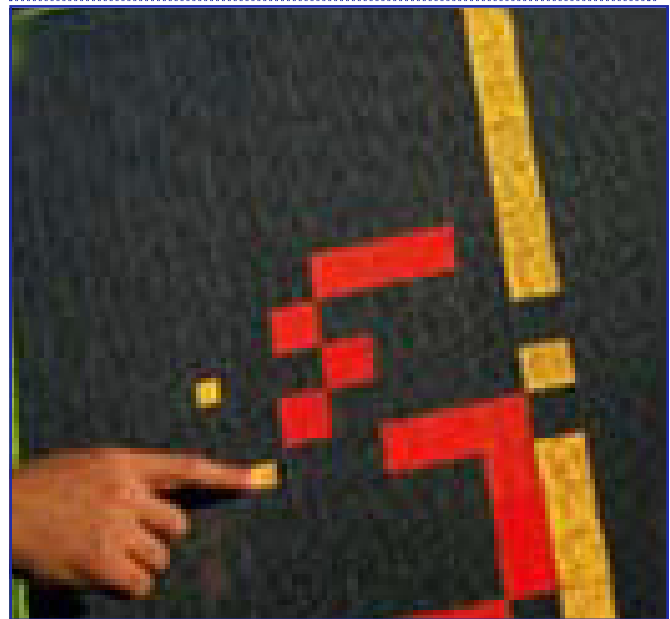
## BioWall

The BioWall constitutes a major step towards the creation of intelligent, bio-inspired electronic tissues, capable of evolving, self-repairing, self-replicating and learning. The current BioWall is a mosaic of several thousand transparent electronic modules. Each of these enables the visitor to communicate with the surface simply by touching it with their finger, calculates its new status and indicates it immediately on an electronic display. This extraordinary ability is demonstrated through a number of applications.

**Notes:** The center which organized the CAIF, called CRAFT, is part of EPFL.

EPFL

EPFL



**Home:** <http://islwww.epfl.ch/biowall/>

# The Onomy Interactive Digital Wall

## The Onomy Interactive Digital Wall

The Interactive Digital Wall is an ideal display for chronological information, for executive briefings, and for putting a “magic lens” onto otherwise static material. The combination of a bold printed background (or vitreous containing artifacts) with a glowing user-movable high resolution LCD display is an irresistible draw to visitors of all ages. The dynamic and progressively revealed content allows you to include a very large amount of information in a small space. The Interactive Digital Wall is ideally suited for the presentation of linear spatialized information, such as signal flow, project paths, and topographies.

**Notes:** Scott Minneman, key person in the company, participated at CAIF and worked during the workshop with Giovanni Cannata and Anurag Sehgal.

Onomy Labs Inc.

2001 - Onomy Labs Inc.



**Home:** <http://www.onomy.com/blue/wall.html>

**Video:** <http://www.onomy.com/video/SUNTimeWall.mov>



# Messa Di Voce

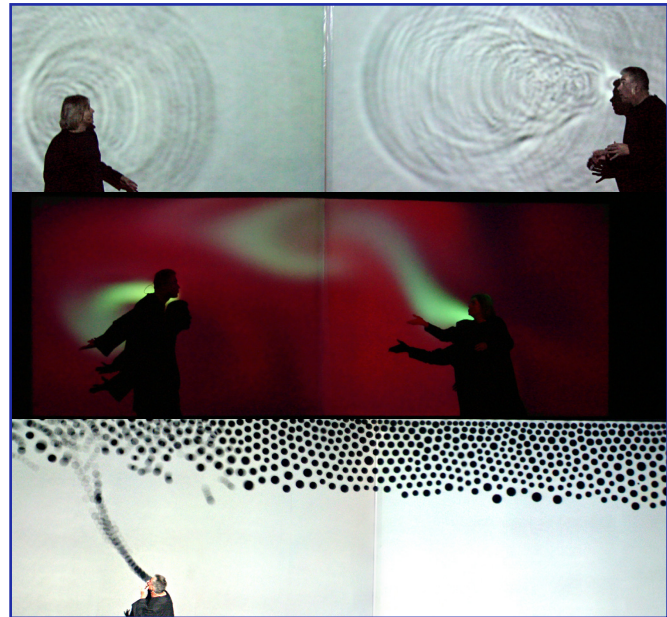
## Messa Di Voce

Messa di Voce (Ital., “placing the voice”) is an audiovisual performance in which the speech, shouts and songs produced by two abstract vocalists are radically augmented in real-time by custom interactive visualization software. The performance touches on themes of abstract communication, synaesthetic relationships, cartoon language, and writing and scoring systems, within the context of a sophisticated, playful, and virtuosic audiovisual narrative.

### Notes:

G. Levin, Z. Lieberman & J. Blonk and J. La Barbara

2003 - Thema



**Home:** <http://www.tmema.org/messa/messa.html#overview>

**Videos:** <http://www.tmema.org/messa/messa.html#videos>

# Walls With Ears

## Walls With Ears

A traditional textile heritage is celebrated with flocked wallpaper that comes to life as it reacts to ambient noise levels. The louder the space the brighter the wallpaper glows. It explores the experience of human presence and action having a tangible effect on space and provides a direct and analogue reflection of this by addressing the point where ambient space ends and surface begins. A new depth and language is brought to otherwise dormant decorative materials that simply surface and contain space.

Notes:

Loop.ph

Loop.ph

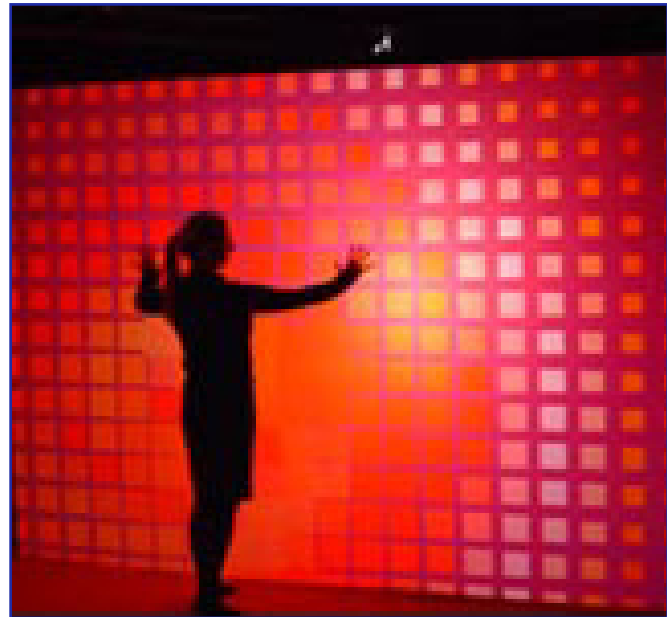


Home: <http://www.loop.ph/new/wallpaper.html>

## Mediate

The aim of this project is to design, produce, build and validate an intelligent, immersive, multisensory, interactive environment that reacts to the unique user, and allows that user to create expressions of their own sensory experience: creations which can be replayed and communicated to others. This environment will be a transportable one.

**Coordinators: C. Creed, P. Newland, S. Kunath**  
2001 © University of Portsmouth



**Notes:** The MEDIATE Project gratefully acknowledges the financial support of The European Commission/ MEDIATE is funded under the FP5-IST Systems and Services for the Citizen. Persons with special needs (including the elderly and the disabled).

**Home:** <http://www.port.ac.uk/research/mediate/>

**Other:** (IST) [http://www.cordis.lu/ist/ka1/special\\_needs/](http://www.cordis.lu/ist/ka1/special_needs/)

# EnhancedWall

## EnhancedWall

Currently large information displays can be found in many places in town, such as in shops, banks, stations, or on the wall of the buildings. Although they provide people information, people cannot give any feedback to those information. We are developing novel interaction techniques using users' gaze information. The system recognizes where people are seeing using computer vision techniques without attaching any devices or markers to users. We developed a prototype system called EnhancedWall which allows users to interact with information displayed on the wall using gaze information.

Notes:

Hideki Koike

University of Electro-Communications



Home: <http://www.vogue.is.uec.ac.jp/~koike/wall/wall.html>

# Bubbles

## Bubbles

The multi-user installation 'bubbles' enables participants to interact with the realtime simulation of floating bubbles. By entering the light beam of the data projector, the participant casts a shadow onto the projection screen. The screen area is captured by a video input system and each bubble is able to independently recognize both the shadows' touch and its direction. Defined as autonomous objects, the bubbles' behavior and their response to any user-interaction follows a set of simulated physical laws. Both the overall state of the complex system and the shadows' interaction with the bubbles create nonlinear musical structures, [...].

### Notes:

Muench & Furukawa  
2003 - ZKM Karlsruhe



**Home:** <http://hosting.zkm.de/wmuench/bubbles>

**Video:** <http://hosting.zkm.de/wmuench/bub/video>

## DynaWall - An Interaction Space for Computer-supported Cooperative Work

The objective of the DynaWall®, one of the roomware® components of the i-LAND project, is to represent a computer-based device that serves these needs. It can be considered an “interactive electronic wall” represented by a touch-sensitive information device.

**Notes:** Contact person Dr. Norbert Streitz (streitz@ipsi.fraunhofer.de). Thorsten Prante who participated to CAIF worked with him.

Fraunhofer IPSI  
Fraunhofer IPSI



**Home:** <http://www.ipsi.fraunhofer.de/ambiente/english/projekte/projekte/dynawall.html>

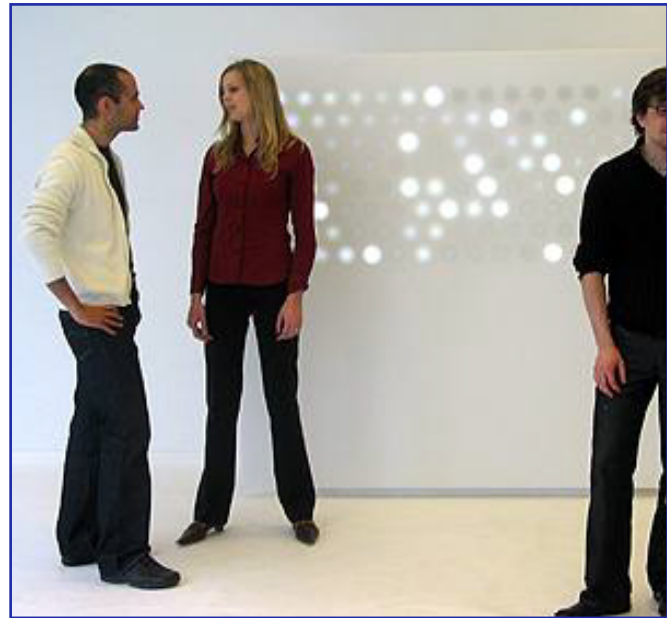
**Other:** (i-LAND) [http://www.ipsi.fraunhofer.de/ambiente/english/projekte/projekte/i\\_land.html](http://www.ipsi.fraunhofer.de/ambiente/english/projekte/projekte/i_land.html)

# Hello.Wall

## Hello.Wall®

The Hello.Wall® is an XL-size compound artefact without its own display.

Muench & Furukawa  
2003 - Ambient Agoras



**Notes:** Is one of the projects in the new proactive initiative The Disappearing Computer/ Partner Fraunhofer IPSI/ Contact person Dr. Norbert Streitz (streitz@ipsi.fraunhofer.de). Thorsten Prante who participated to CAIF worked with him.

**Home:** <http://www.ambient-agoras.org/main/artifact/HelloWall/HelloWall-p0.htm>

**Other:** (Disappearing Computer) <http://www.disappearing-computer.net/>

# Interactive Cube

## Interactive Cube for Vodafone - Wireless-controlled interactive sculpture

In early 2002, Vodafone approached IDEO to design a reception area within an 80-meter glass enclosure in their new headquarters in Lisbon, Portugal. IDEO wanted to connect the outside space -- a vast expanse of water -- with the inside space, and encouraged Vodafone to consider using mobile phone technology to allow lobby visitors to interact with objects outside the building. IDEO designed a four-meter cube that acts not only as a distinctive landmark but also allows visitors to play interactive games using their own mobile phones anywhere within the building.

**Notes:** 2004 IDEA Gold

IDEO & YDREAMS

2003 © IDEO & YDREAMS



**Home:** <http://www.ideo.com/portfolio/re.asp?x=50189>

**Other:** [http://www.ydreams.com/ydreams\\_2005/index.php?version=2](http://www.ydreams.com/ydreams_2005/index.php?version=2)



# Natural Interaction

## Natural Interaction

Natural Interaction solutions allow computation to enter the real world. Real-time computer vision algorithms and RFID allow common people to easily interact with digital interfaces projected in the physical space. These solutions are reliable, robust and easy to maintain; these interactive spaces boost content communication by arousing visitors' curiosity and interest. Natural Interaction offers four base solutions: Interactive walls/ Interactive floors/ Interactive surfaces/ Interactive tables.

**Notes:** Italian based company (Florence)/ Contact: Alessandro Valli (av@naturalinteraction.org), PhD, engineer. He is currently Principal Investigator on Natural Interaction at Media Integration and Communication Center, University of Florence. Teaches Info Systems and Interaction Design in Bachelor and Master courses.

## Natural interaction



**Home:** <http://www.naturalinteraction.org/solutions.html>

## CyberWalk - Unconstrained Walking in Virtual Worlds

A European project called CyberWalk is about to develop a walking platform which will allow unconstrained movement in virtual worlds. The platform will be used to study human spatial cognition and movement in space, but later will also allow visits to historical sites or help improve training for athletes in virtual environments.

### Notes:

Max Planck Society

2005 © Max Planck Society



**Home:** <http://www.mpg.de/english/illustrationsDocumentation/documentation/pressReleases/2005/pressRelease20050426/>

**Other:** <http://www.we-make-money-not-art.com/archives/005549.php>

# The Coventry Wall of Light

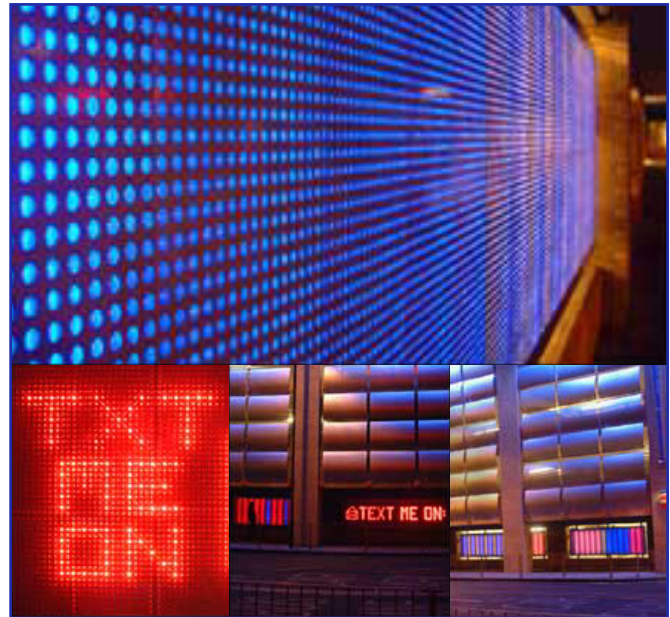
## The Coventry Wall of Light

The Coventry Wall of Light artwork is the most popular - and extraordinary - multi-media artwork ever to have been erected in Coventry. This is triggered by pedestrians, via motion sensors, so as people walk by, the neon lights come on. An added delight is that the marbles spin when you run your hands across them and few passers-by can resist it!

From 7pm the wall displays any messages sent by mobile phones. The invitation “text me on 07817970907” is shown and the public can send anything they like.

**Notes:** The Wall of Light is a 6 x 1.2 metre LED display panel, mounted on the Lower Precinct Car Park, in Queen Victoria Road. The front is clad in perforated steel sheets, sandwiching 20,000 glass marbles.

Adrian Baynes & G. Crowley (anim.), P. Hudson (sw.)  
Coventry City Council Competition



**Home:** <http://www.bbc.co.uk/coventry/culture/stories/2003/05/wall-of-light.shtml>

# Prada RFID Closet

## Prada RFID Closet

Once inside the dressing room the customer can directly access information that relates to their particular garment selection. [...] the information is automatically displayed on an interactive touch screen, enabling the customer to select alternative sizes, colors, fabrics, and styles, or see the garment worn on the PRADA catwalk as slow-motion video clips. The dressing rooms also contain a video-based “Magic Mirror” [...]. As the customer begins to turn in front of the mirror the image becomes delayed, allowing the customer to view themselves in slow motion from all angles.

**Notes:**

IDEO

2001 © IDEO for Prada



**Home:** [http://www.ideo.com/case\\_studies/prada.asp?x=5](http://www.ideo.com/case_studies/prada.asp?x=5)

# Tower Of Winds

## Tower Of Winds

[Operating since the '86] During the day the Tower of Winds stands as a 21m tall opaque object, its aluminum cladding shielding the mirrored plates and lights within. At night the lights and reflective surfaces dance to the music of the city, computer-controls reacting to both man-made and natural forces: ambient sounds, wind forces, time of day and season. The images that follow illustrate the variety of patterns and degrees of transparency achieved by a combination of over 1,000 lamps, twelve neon rings, and thirty flood lights, the last situated on the ground and directed upwards within the tower.

**Notes:** Other projects: Egg of Winds (1990), Dreams (1991), Health Futures (2000), Mediateca di Senday (2000)

**Toyo Ito & Associates**

1986 - Yokohama (Japan)



**Home:** <http://www.archidose.org/Apr01/040901a.html>

**Other:** [http://www.noemalab.org/sections/specials/tetcm/2002-03/toyo\\_ito/architettura\\_citta.html](http://www.noemalab.org/sections/specials/tetcm/2002-03/toyo_ito/architettura_citta.html)

# Light Brix

## Light Brix

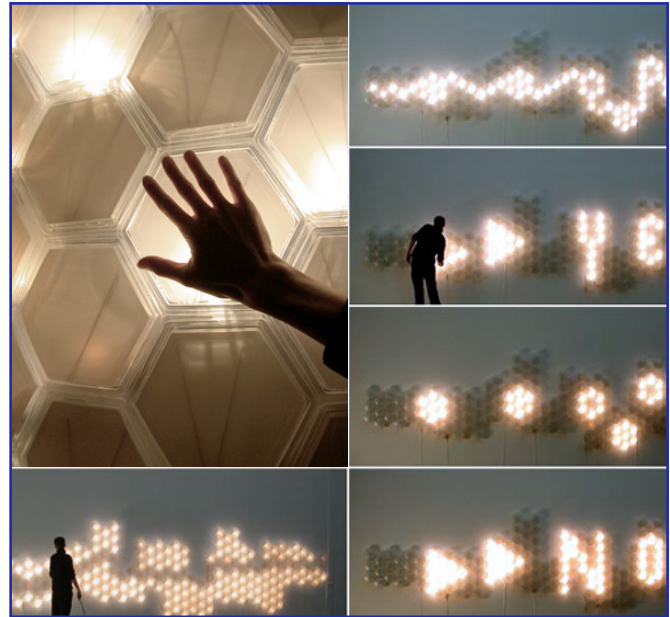
This project looks beyond the computer screen to explore what makes up the screen itself: the individual pixel. The light system is made from a network structure of 220 independent modules that respond to touch. By gently touching the surface, each lamp will slowly light up or down, stimulating the experience of drawing with light.

Light Brix is an ongoing project currently being developed for manufacture. The concept explores new ways of structuring information within architecture and intends to inject a sense of performance into urban interiors.

**Notes:** The project was conceived in 2001 in collaboration with Graham Plumb during a research fellowship at Interaction Design Institute Ivrea/ An edition of 220 brix was made with Z-Interface for Federico de Giuli and AB+ Torino/ HeHe have developed many more interactive furnitures.

Helen Evans & Heiko Hansen

2001 © HeHe



**Home:** <http://www.hehe.org/picturepage/index.html>

**Other:** (HeHe interactive other furnitures) <http://www.hehe.org/picturepage/index.html>



## BIX

BIX is a permanent light- and media installation for the Kunsthaus Graz in Austria by realities:united architects from Berlin.

A matrix of 930 fluorescent lamps is integrated into the eastern acrylic glass facade of the biomorphic building structure of the new Kunsthaus in Graz, Austria. Through the possibility to individually adjust the lamps' brightness at an infinite variability with 20 frames/second images, films and animations can be displayed - the Kunsthaus' skin is transformed into a giant low resolution computer display.

**Notes:** Available on the website other interactive furniture projects.

**Realities:United**

2003 - Kunsthaus Graz (Austria)



**Home:** <http://www.bix.at/>

**Video:** [http://www.bix.at/e/main\\_video.html](http://www.bix.at/e/main_video.html)

# **INTERACTIVE LAMPS**

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**COLLECTION**



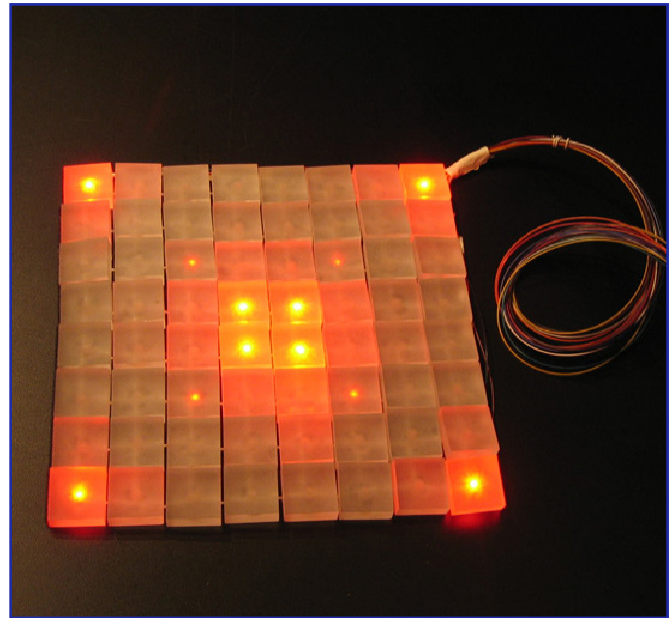
# Flex grid

## Flex grid

A flexible LED display developed to be embedded on a dress for the Milan Triennial 2005.

**James Clar**

2004 - James Clar



**Notes:**

**Home:** [http://www.jamesclar.com/index\\_old.htm](http://www.jamesclar.com/index_old.htm)

**Video:** Available on the website.

Updated - 07.2005

# 3D Display Cube

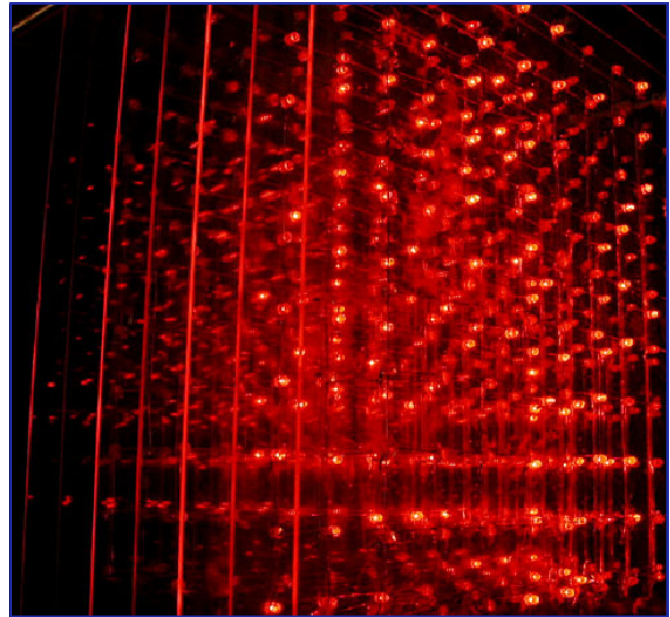
## 3D Display Cube

[patented] The 3D display cube was hand built and constructed from one thousand individually controllable LEDs soldered into a 10x10x10 freestanding cube matrix. Each LED acts as one pixel in the spatial array and can be refreshed at a rate of over 60 frames per second creating a low resolution 3D TV.

Notes:

James Clar

2004 © James Clar



**Home:** [http://www.jamesclar.com/index\\_old.htm](http://www.jamesclar.com/index_old.htm)

**Video:** Available on the website.

# Ambilight

## Ambilight

Ambient Light Technology is a unique theater lighting system that actively adjusts both brightness and color based upon picture content. Integrated into the television cabinet, Ambient Light Technology enables your eye to see more picture detail, contrast and color while eliminating on-screen reflections for a better and more immersive viewing experience.

- Improves the perceived picture detail, contrast and color
- Enables relaxed viewing conditions
- Establishes the TV set as a design element

**Notes:** Possible link with Philips Design through Giovanni Cannata, Dario Buzzini

**Philips Design**

1998-2004 - Philips Electronics N.V. - commercial



**Home:** [http://www.flattv.philips.com/index.cfm?event=main&cat\\_id=1&subcat\\_id=2](http://www.flattv.philips.com/index.cfm?event=main&cat_id=1&subcat_id=2)

**Animation:** [http://www.flattv.philips.com/index.cfm?event=main&cat\\_id=2&subcat\\_id=0](http://www.flattv.philips.com/index.cfm?event=main&cat_id=2&subcat_id=0)

# WAKE n' BACON

## WAKE n' BACON

An alarm clock that wakes you up with the smell and sizzle of cooking bacon. This prototype illustrates a concept for a plugin-based waking system built around an alarm clock that triggers various add-on modules. This is the “Bacon Baker” module. A frozen strip of bacon is placed in the Baker module the night before. Because there is a 20 minute cooking time, the clock is set to go off 20 minutes before the desired waking time. We hacked it such that the signal is re-routed by a microchip that in responds by sending a signal to a relay that throws the switch to power a halogen lamp in the “baker module” that slow-cooks the bacon.

**Notes:** Attended only one year of the IDII Masters Program

Matty Sallin

2004 © NY University Interactive Telecommunications



**Home:** <http://www.mathlete.com/portfolio/wakeNbacon.php>

Updated - 07.2005

# The Watt? Light

## The Watt? Light

To switch on the Watt? Light, by Paul Cockledge (designed in 2003), you need to draw a pencil line on a sheet of paper in order to complete the electric circuit. The switch is based on the natural conductive properties of the graphite found in pencils. Rub the line out to switch the light off.

### Notes:

Paul Cockledge  
2003



**Home:** <http://www.designboom.com/snapshots/milan03/cockledge.html>

**Video:** <http://www.design-unfolds.com/events/milan2003/paulcockledge/video2.html>

Updated - 07.2005

## B.L.O

A lamp which that can be switched on and off by blowing on it.

**Marcel Wanders**

2001 © FLOS - commercial



Notes:

Home: <http://www.designboom.com/eng/interview/wanders.html>

# Spotlight The Music And Touch The Light

## Spotlight The Music And Touch The Light' - Audio System Interfacing With Lighting

Audio system interfacing with Lighting, combines a CD player with a lamp to create a dynamic interactive listening experience. Simply insert the CD into the lamp. An LED-generated control panel is then transmitted onto the surface below. No remote control nor panel of buttons is needed. Pause, fast forward or skip tracks with the virtual control pad all while using the lamp to read by.

**Notes:** Gold Award, Student Designs, IDEA 2005.

Suk-woo Lee

2005 © Hong-ik University



**Home:** <http://www.we-make-money-not-art.com/archives/006250.php>

Updated - 07.2005

# On-Edge

## On-Edge (from Surprise! series)

The Surprise! series explores the use of surprising elements in design and the effect the surprise can have on emotional attachment and the memory of the experience. On-Edge is a lamp which only switches on when it is off the edge of the table. When it is fully on the table, it goes off. Besides, from far away the lamp resembles frosted glass. So the first reaction of people seeing it hanging off the edge of the table is “Oh no! It’s going to fall?”. The lamp is made of rubber, so if it falls it won’t break, but even knowing this the gut reaction is so engrained that it will still be present.

Notes:

Silvia Grimaldi

2004 © Central Saint Martins University



Home: [http://www.designandemotion.org/memyforum/memy\\_view.php?id=27](http://www.designandemotion.org/memyforum/memy_view.php?id=27)

Updated - 07.2005



# I like football (on sunday afternoon)

**I Like Football (On Sunday Afternoon) - part of the  
'Manolo Is gonna Have Fun' series**

A lamp that you can play with as though it were a large beach ball, kicking and shooting it while it lights up the room. Feel like Rivaldo in your own home.

**Hector Serrano, Lola Llorca**  
2001



**Notes:** Link through Dario Buzzini/ Exhibited at NEXT2004, as well as some IDII projects.

**Home:** <http://www.we-make-money-not-art.com/archives/006250.php>

**Other:** (Manolo) <http://www.hectorserrano.com/manolo/>

# Jellyfish

## Jellyfish

Jellyfish is a stool containing a light and a thin water tank. When you pat the seat, ripples are projected onto the floor beneath, giving a feeling of floating on water.

Materials: Glass Fibre, Steel, MDF, Acrylic, LED, Cell Batteries, Water.

**Notes:** Is it interactive?

Kota Nezu  
2005 - Znug



**Home:** <http://www.znug.com/coex/works/kota/kota.html>

**Video:** <http://www.znug.com/coex/works/kota/kota.html>

# Push/Pull lamp

## Push/Pull lamp

A lamp that need to be pushed down or pulled up to diffuse more or less light

Marie-Louise Gustafsson's  
2005



**Notes:** Link through Giovanni Cannata. Studied with her at Konstfack University & Exhibited at Salone Del Mobile 2004 and 2005.

**Home:** <http://www.we-make-money-not-art.com/archives/006250.php>

**Other:** <http://www.marielouise.se/>

# Progetto 2501 lamps

## Progetto 2501 lamps

This studio have been presenting a line of interactive lamps at Salone del Mobile 2005, generating a lot of buz and media interest.

One lamp would turn on and off if kicked, another one if caressed, another if you blow on it etc...

**Notes:** This lamps generated interest from companies and buzz from media. They were featured on the Italian national TV Rai/ Now commercialising/ Link through Giovanni Cannata.

Progetto 2501  
2005



**Home:** <http://www.progetto2501.com/satellite2005/>

# Waterproof

## Waterproof

the archetype of a table lamp now floats in a swimming pool. Is a ready-made project based on a traditional lampshade and an emergency light in use on the seaside.

in 'off' position, outside of the pool, the lamp has to be placed upside down (during the day), in the 'on' position the lamp can float on water facing upwards (at night). The lamp can be recharged after 8 hours of use. rotation-molded polyethylene.

(E-10 4,8V 0,75A IP 67 Classe III)

**Notes:** Link through Dario Buzzini/ Exhibited at NEXT2004, as well as some IDII projects.

h ctor serrano

2004



**Home:** <http://www.designboom.com/contemporary/serrano.html>

# Flower Lamp

## Flower Lamp - part of the 'Static! Project For Increasing The Energy Awareness'

Household lamps typically have very basic functionality with respect to energy - expressed in lit states of 'on' or 'off' or somewhere between. In the 'Flower Lamp' example, it is not just the light of the lamp but its very form that reflects energy used. The lamp 'blooms' – changing its shape and thus lit expression – when energy consumption in a household has been low for some time, thus reflecting the cycles of local energy use. In order to make the lamp more beautiful, a change in behaviour is needed.

**Notes:** Other projects available on the website.

S. Lagerkvist, C. von der Lancken, A. Lindgren

2005 © Interactive Institute



**Home:** <http://www.tii.se/static/flower.htm>

**Other:** <http://www.tii.se/static/index.htm>

# D-Tower

## D-Tower

D-tower is an art piece, commissioned by the city of Doetinchem in the Netherlands, that maps the emotions of the inhabitants of Doetinchem. D-tower records HAPPINESS, LOVE, FEAR and HATE daily using different questions.

D-tower consists of:

1. a tower, 12 metres tall, in the centre of Doetinchem
2. a website
3. a questionnaire

D-tower collects its information on a statistical basis and converts them in light behaviours.

Notes:

Q.S. Serafijn, Lars Spuybroek

2004 - NOX-Architekten



Home: <http://www.d-toren.nl/site/read.htm>

# Katana Nomadic Lamp

## Katana Nomadic Lamp

The Katana Nomadic Lamp has a pressure sensitive spine which responds to touch to move the light up or down the lamp for optimum placement. Not only does this allow the lamp to be altered, but it responds naturally to being picked up by turning on.

Notes:

Buro Vormkrijgers  
Buro Vormkrijgers



**Home & video:** <http://www.burovormkrijgers.nl/docs/katana.html>

**Other:** <http://www.idfuel.com/index.php?p=322&more=1&c=1>

Updated - 07.2005



# Gravity

## Gravity

The Gravity from Front is a concept design (at least, I think it's just a concept) for an interactive lamp that reacts to your presence. When you're not in the room, it lays down and goes to sleep. When you enter, it wakes up, stands and turns on to give you light.

**Notes:** Link through Giovanni Cannata, classmates at Konstfack.

**Front**

2004 - Front



**Home:** <http://funfurde.blogspot.com/2004/09/gravity.html>

**Other:** <http://www.frontdesign.se/>

Updated - 07.2005

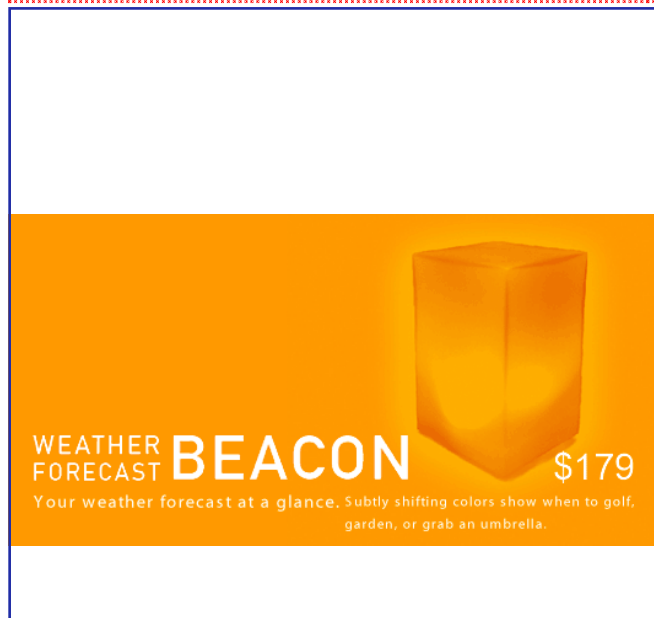
# Ambient Devices' Weather Beacon

## Ambient Devices' Weather Beacon

Know what to wear today, if it'll rain this weekend, or virtually any weather information, all in a calm glanceable display of color.

Ambient Devices

2004 © Ambient Devices - commercial

The advertisement features a white background with a blue border. At the bottom, there is a solid orange horizontal band. On the right side of this band is a 3D rendering of a translucent orange cube. To the left of the cube, the text 'WEATHER FORECAST BEACON' is displayed in white, with 'BEACON' in a larger font. Below this, the price '\$179' is shown. At the bottom of the orange band, a line of smaller white text reads: 'Your weather forecast at a glance. Subtly shifting colors show when to golf, garden, or grab an umbrella.'

Notes:

**Home:** <http://www.ambientdevices.com/cat/beacon/index.html#2a>

**Other:** <http://www.gizmodo.com/gadgets/gadgets/ambient-devices-weather-beacon-018851.php>

Updated - 07.2005

# The LED Balloon Lamp

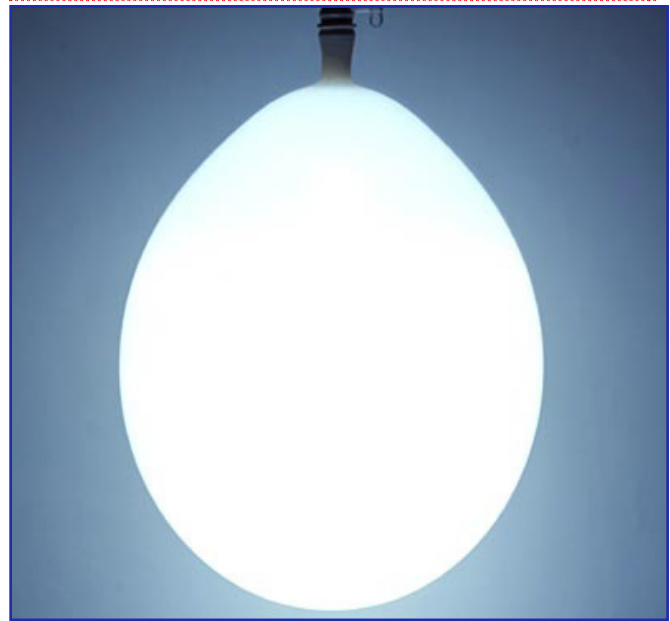
## The LED Balloon Lamp

The LED Balloon Lamp is based on the Japanese Chochin; a portable lamp which was illuminated by candlelight, from the EDO period. Designer/musician Kouichi Okamoto has updated this lamp by replacing the candle with a LED and the paper lantern with a standard rubber balloon. Since the LED light source does not generate any heat the balloon is safe from being damaged or melted. The balloon also makes a great diffuser for the bright LED. The BalloonLamp is very portable and can be used indoors or outdoors for decorating, camping or backyard parties. It can be deflated after use and easily stored.

**Notes:**

**Kouichi Okamoto**

Sold via Think Geek - commercial



**Home:** <http://www.thinkgeek.com/gadgets/lights/7421/>

# Salvalavista TV

## Salvalavista TV

Salvalavista TV it is a lamp that reduces TV caused sight stress and enhances the experience of watching the TV. This appliance turns on automatically when your TV turns on, or you can turn it on with a button.

**Beghelli & Centro Ricerche Fiat**

2001 © Beghelli - commercial



**Notes:** Realizzato in collaborazione con il Centro Ricerche Fiat e con universitari specialisti di ergonomia visiva/ Disponibile anche la versione PC.

**Home:** <http://www.beghelli.it/default.asp?ipag=67&dx=in&linea=2933&cat=2955#>

**Other:** <http://www.beghelli.it/default.asp?ipag=67&dx=in&linea=2933&cat=2953#>

# **INTERACTIVE TABLES**

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**COLLECTION**

# Cabinet

## Cabinet

The Cabinet can help designers collect and organize the images they have on their computers together with the physical visual artefacts they have collected in the context of their design work.

Ianus Keller & IDStudioLab Team  
IDStudioLab - TU Delft University



**Notes:** Link through Giovanni Cannata, contact at 3AD.

**Home:** <http://studiolab.io.tudelft.nl/cabinet/>

## Scoop

Table to support nomadic information exchange. It is an information reactive table with memory, a message board to be used with portable devices. Layers of content on the table build a history from messages and information about events.

Placing your portable device on the table, the information aura of your personal device appears.

Placing objects close to each other enables information exchange. The table works as a tool for visualising the anonymous exchange.

### Notes:

**Anna Hiltunen**

2001 - Royal College of Art



**Home:** <http://myweb.tiscali.co.uk/anna.hiltunen/scoop/concept.htm>

**Photos & video:** <http://myweb.tiscali.co.uk/anna.hiltunen/scoop/gallery/>

# Electronic Furnitures for the Curious Home

## Electronic Furnitures For The Curious Home

Design proposals simultaneously point to directions for domestic electronic furniture as a topic for design and for weight sensing as a tool for interaction. We considered the ways that furniture can be made responsive to people, and emphasised existing behaviour to promote reflection or disruption. The furniture also took on their own behaviour to become semi-autonomous agents within the home, acting as thresholds into virtual or real spaces. We have disseminated these design prototypes to a selection of the original probes volunteers.

Notes:

Royal College of Art  
Royal College of Art



Home: <http://www.interaction.rca.ac.uk/equator/index.html>



# Future Office Table

## Future Office Table

The prototype features a personal workspace for each member of the group as well as a shared virtual working domain that enables participants to organize, process and exchange documents with one another. This project, conceived as a design study, is an attempt to bring together projection techniques and state-of-the-art digitization procedures on one hand and commercially available hardware and a familiar software environment on the other.

Notes:

Gerfried Stocker & Ars Electronica Futurelab

Ars Electronica Futurelab



Home: [http://www.aec.at/en/futurelab/future\\_office\\_table.asp](http://www.aec.at/en/futurelab/future_office_table.asp)

# Dialog Table

## Dialog Table

Dialog Table is a shared interface where you use hand gestures to discover more about any data set. Several people can gather around and together explore the table's movies, narratives and 3D journeys. The table provides an opportunity for people to discuss with each other their thoughts on what they have seen, whether it be an artwork or a service.

**Notes:** Dialog Table was commissioned by the Walker Art Center as a permanent installation in their museum.

**Marek Walczak, Michael McAllister, Jakub Segen**  
Walker Art Center



**Home:** <http://dialogtable.com/about.html>

# Tabletop Display

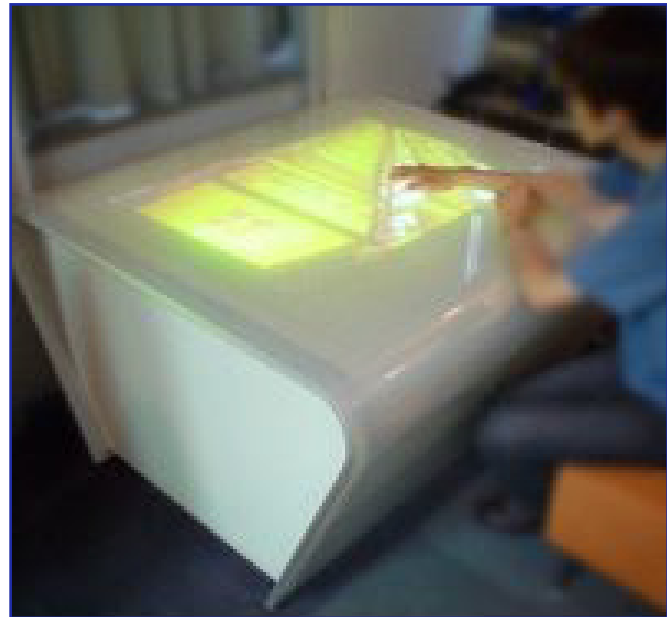
## Tabletop Display

Hitachi has developed a new display that is embedded in a table-top. The touch-sensitive unit can be drawn on and can even respond to gestures, so that drawing a circle around something, for instance, could trigger a zoom in on an image, or inscribing the sacred pentagram could automatically call your principal and tell him you're skipping Algebra. It's not an LCD, but instead an acrylic-topped piece with a projector underneath and an infrared system to recognize motion. Hitachi plans to commercialize the tables next year, starting with the bargain basement price of \$20k.

### Notes:

Hitachi

2004 © Hitachi



**Home:** (Japanese) <http://www.hitachi.co.jp/New/cnews/month/2004/11/1115a.html>

**Other:** <http://www.gizmodo.com/gadgets/home-entertainment/displays/hitachi-tabletop-display-025954.php>

Updated - 07.2005

# Habitat

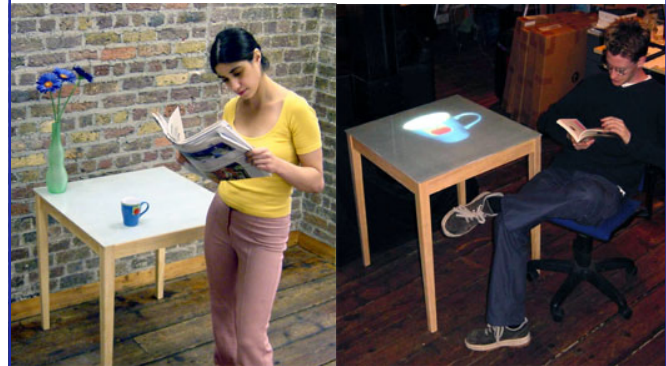
**Habitat - A range of connected furniture for awareness of daily routines and rhythms between distant family members**

The current Habitat system comprises two geographically separate, networked café or kitchen tables. Placing [specific tagged] items on the table causes messages to be sent to the remote table, which displays a graphical representation of the objects. The system operates in both directions, conveying impressions of presence and activity around the tables at each site. When items are removed, their representations at the far end fade away slowly[...].

**Notes:**

**Dipak Patel, Aoife Ní Mhóráin, Stefan Agamanolis**

2003 © Media Lab Europe



**Home:** <http://web.media.mit.edu/~stefan/hc/projects/habitat/>

# Philips Cafe Table

## Philips Cafe Table

The Café Table displays a selection of community content relevant to the café it is in and allows browsing as well as the creation of new content. Users can store content on a physical token by placing it in the ceramic bowl in the centre of the table.

**Notes:** Link through Giovanni Cannata and Dario Buzzini/ Contact person Lira Nikolovska (lira@mit.edu) - she also participated at CAIF

Philips Design

2001 © Philips Electronics N.V.



**Home:** <http://www.design.philips.com/about/design/section-13507/index.html>

**Other:** <http://www.design.philips.com/assets/Downloadablefile/lime-12959.mov>

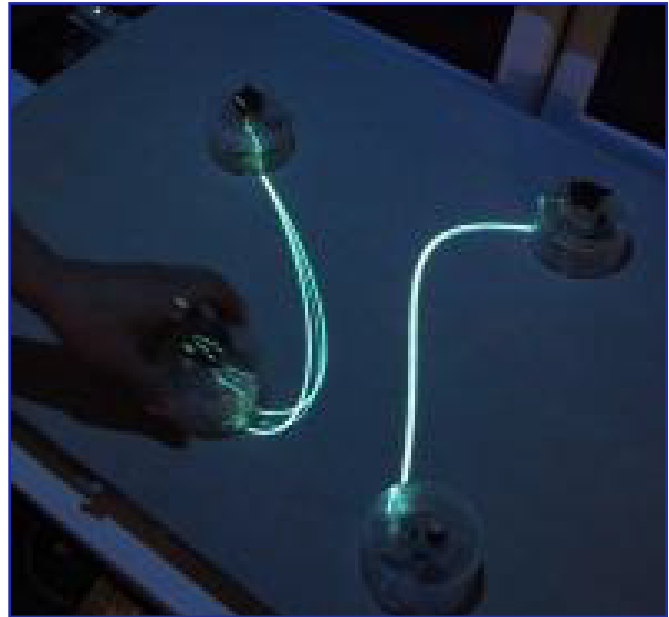
# Sensetable

## Sensetable

System which tracks the positions of intelligent objects on a tabletop surface, and projects information onto the objects themselves. The applications I've applied Sensetable to include business supply chain management, urban planning, interactive visual art, and the performance and composition of electronic music.

Notes:

**James Patten**  
Mit Media Lab



**Home:** <http://web.media.mit.edu/~jpatten/sensetable.html>

# Floating Numbers

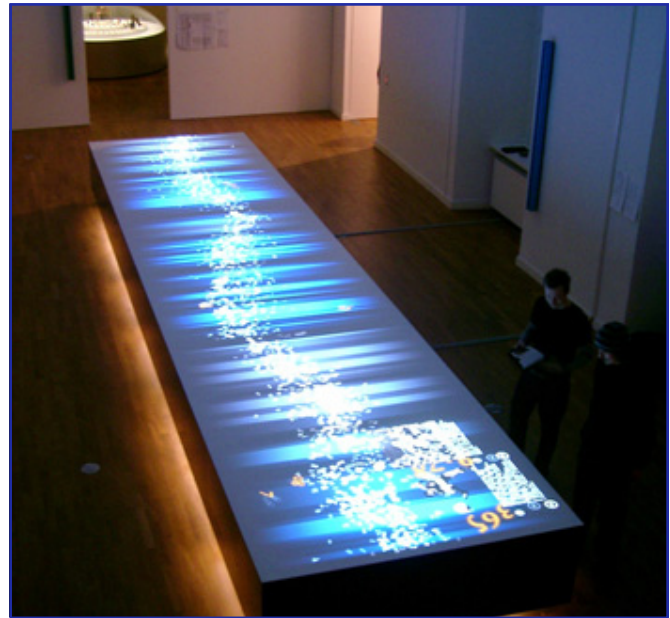
## Floating Numbers

The central element in this exhibition is a 9-metre long interactive table with a mass of numbers flowing in a continuum on its surface. Individual digits appear randomly at the surface of this stream of numbers and, once touched by a visitor, surrender their secret in text, pictures, films and animation. The significance of the numbers materialises from the various perspectives of science, religion, art or one's outlook on everyday life. A large-scale projection system and a touch-sensitive table surface form the elements of this media installation. Visitors' exploration of the world of numbers is a fascinating hands-on experience.

### Notes:

ART + COM

2004 - Jewish Museum



**Home:** [http://www.artcom.de/index.php?option=com\\_acprojects&page=6&id=14&Itemid=144&details=0&lang=en](http://www.artcom.de/index.php?option=com_acprojects&page=6&id=14&Itemid=144&details=0&lang=en)

**Other:** [http://www.artcom.de/index.php?option=com\\_acprojects&page=5&id=14&Itemid=144&details=0&imageRequestToggle=0&lang=en&selectedimage=](http://www.artcom.de/index.php?option=com_acprojects&page=5&id=14&Itemid=144&details=0&imageRequestToggle=0&lang=en&selectedimage=)

Updated - 07.2005

# Rogue Ambience Table

## Rogue Ambience Table

RAT allows its users (called “the Deceivers”) to fool the person on the other end of the line, pretending that their situation is different to their true location.

Users select the background sound of their choice (in a disco, on the road, etc.) via one of the six sound cubes, phone friends, family and colleagues and let them know how full your life is.

Notes:

KDR (Kitchen Rogers Design) & Dominique Robson

2001



**Home:** <http://www.krd-uk.com/krd.html>

**Video:** [http://www.krd-uk.com/web\\_ready\\_Films/RAT\\_QT\\_2.html](http://www.krd-uk.com/web_ready_Films/RAT_QT_2.html)

Updated - 07.2005



# Diamond Table

## Diamond Table

DiamondSpin is an interactive, and platform independent, Java Tool Kit that allows multiple users to work on a digital tabletop simultaneously, in a truly around-the-table setting. DiamondSpin is a core project that has enabled a range of research investigations into large shared displays and off-the-desktop human computer interaction. Currently, MERL's own UbiTable project, and several research projects in other universities are based on DiamondSpin.

**Notes:** Chia Shen participated to CAIF. During the workshop worked in team with Giovanni Cannata and Anurag Sehgal.

Chia Shen, Clifton Forlines

© Mitsubishi Electric Research Laboratories



**Home:** <http://www.merl.com/projects/diamondspin/>

# Self-Service Drink-Ordering Tables

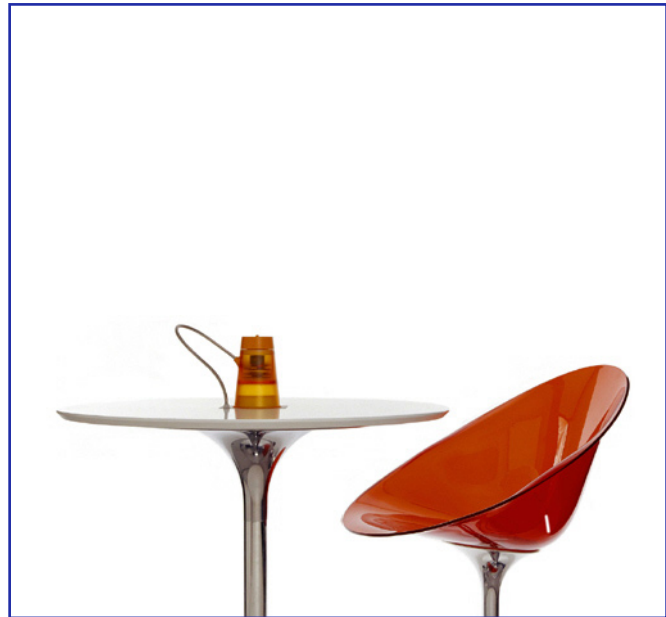
## Self-Service Drink-Ordering Tables

The mobile-phone service provider Orange PCS commissioned IDEO to help create an experiment in wireless technology in Manumission, the famous club in Ibiza. The result is a networked table that allows VIP visitors to order drinks from where they sit in a playful and cool way. The round tables are built with a translucent cup sitting upside-down on the top surface in the center [...]. To order a drink, the guest picks up the cup and turns a disk displaying numbers from 0 to 99. The choice is then ordered by pressing the Buy button in the center of the table, which transmits the order wirelessly to a PC behind the bar [...].

**Notes:**

IDEO

2002 - © IDEO for Orange PCS



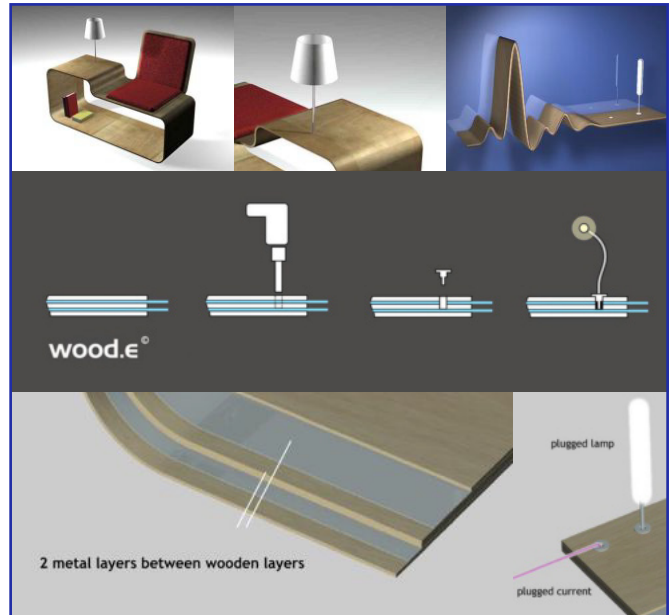
**Home:** <http://www.ideo.com/portfolio/re.asp?x=50187>

## Wood.e

preformed wooden elements with metal layers for integrated current to plug different elements without any cables.

**Bjorn Blisse, Folker Konigbauer, Reinhard Zetsche**

© Transalpin - commercial



Notes:

Home: <http://www.transalpin.net/>

# Aurora Cocktail Table

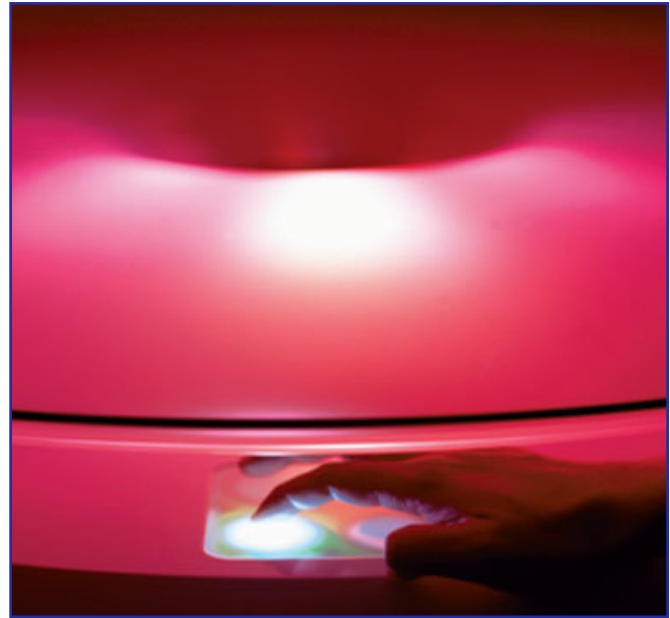
## Aurora Cocktail Table

The Aurora cocktail table is a 42" diameter frosted acrylic vortex secured to a 1" thick, high-gloss white body with eight embedded PixCells. The resilient tempered-glass surface sits above the vortex for drinks, snacks and beverages, and a chromed tulip-shaped base supports this elegant piece. The colors and patterns are controlled via a simple four-way touch sensor or an optional feature-enhanced wireless remote control.

**Notes:** Orange22 also sells other designer's works, i.e. James Clar

**Dario Antonioni, Aaron Rincover**

2005 - © Orange22 Design Lab LLC - commercial



**Home & Videos:** [http://www.orange22.com/common\\_pages/product\\_view.php?idRout=&idCatLst=1&idCat=138&id=27&tmb7=1](http://www.orange22.com/common_pages/product_view.php?idRout=&idCatLst=1&idCat=138&id=27&tmb7=1)

# Lightable

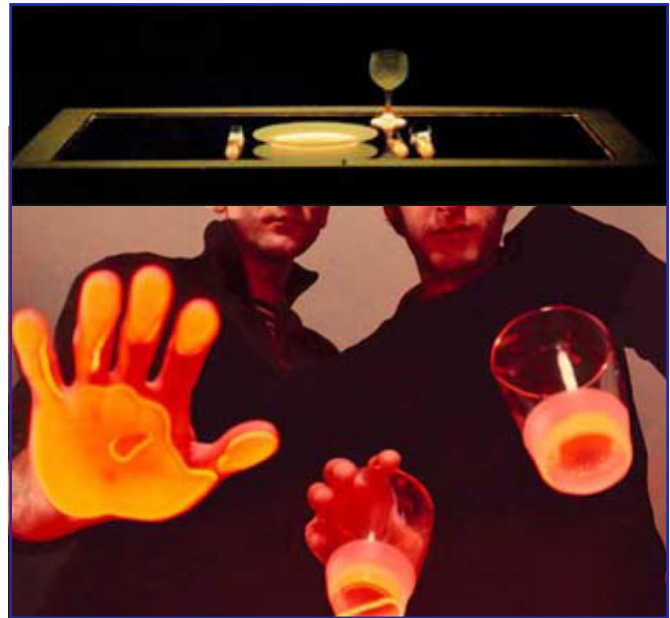
## Lightable

Light (LEDs) is transmitted through the glass top, not visible for the human eye. Placing an object, capable to transmit light, on the glass surface, by neglecting the meeting surfaces through complete flush contact, light emits from the glass surface and enlightens the object. Think of Lightable as a shopfront display system addressing a major market of highstreet retailers, department stores, perfumerys, flag ship stores etc. Products such as glass table ware, perfume flacons, plastic items etc. could be lit and create a more particular attention.

Notes:

Julian Appelius, Fabien Dumas

2001©



Home: <http://www.julianappelius.de/website%20engl./frameset%20engl.html>

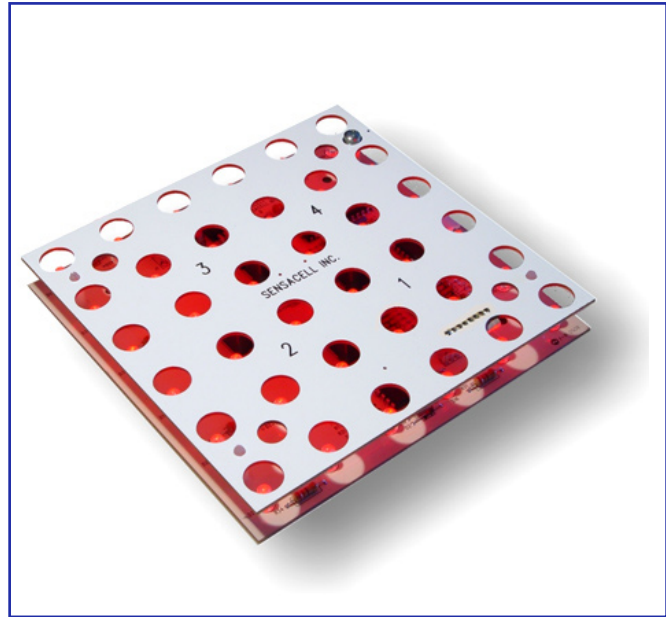
## Sensacell

The Sensacell system is a human interface technology. It's ideal for smart architecture, interactive multimedia, retail entertainment, and a host of exciting new applications.

Notes:

**Leo Fernekes, Joakim Hannerz**

2005 - © Sensacell (L. Fernekes, J. Hannerz) - commercial



Home & Videos: <http://www.sensacell.com/>

# Smartskin

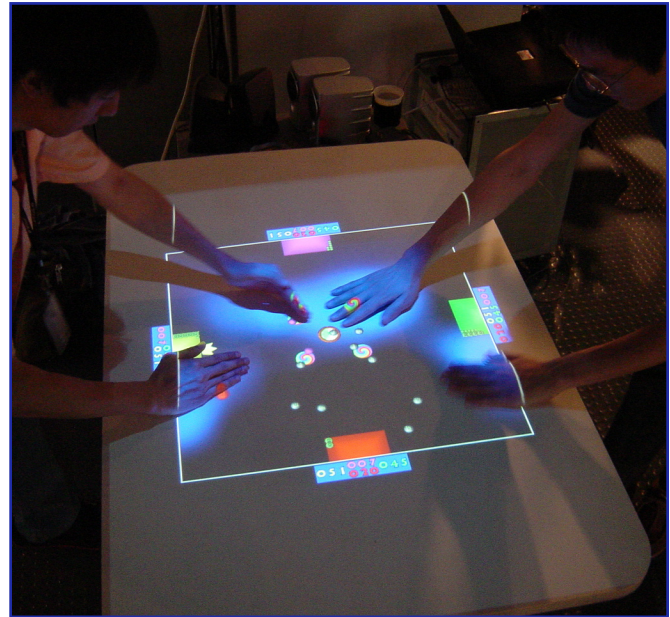
## Smartskin

This project investigates a new sensor architecture for making interactive surfaces that are sensitive to human hand and finger gestures. This sensor recognizes multiple hand positions and their shapes as well as calculates the distances between the hands and the surface by using capacitive sensing and a mesh-shaped antenna. In contrast to camera-based gesture recognition systems, all sensing elements can be integrated within the surface, and this method does not suffer from lighting and occlusion problems.

Notes:

Jun Rekimoto with T. Ishizawa, K. Fukuchi, A. Toda

2002 © Sony CSL



Home & Video: <http://www.csl.sony.co.jp/person/rekimoto/smartskin/>

# UbiTable

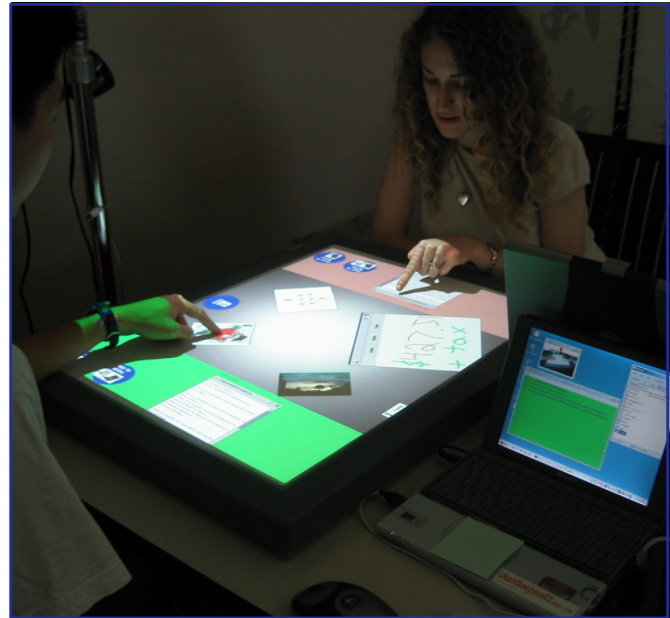
## UbiTable

UbiTable allows one to walk up to an interactive table, connect laptops, cameras, and other USB devices to the table; so that people can fluidly share, manipulate, exchange, and mark up their contents with each other on a large tabletop surface. At the same time, each user can still maintain explicit control over the accessibility and interactivity of his/her own documents displayed on the tabletop.

**Notes:** Chia Shen participated to CAIF. During the workshop worked in team with Giovanni Cannata and Anurag Sehgal.

Chia Shen, Clifton Forlines, Kathy Ryall

© Mitsubishi Electric Research Laboratories



**Home & Videos:** <http://www.merl.com/projects/UbiTable>



## ECHOES - Encouraging Companionship, Home Organization, and Entertainment in Seniors

It is a two-part system designed to help seniors use the potential of new communication technologies to interact with family and friends. It includes:

1. the TeleTable, a virtual extension of the kitchen or family table. Its top surface contains touch sensitive computer monitor screens which function as display and interface.
2. the Pitara, a portable device to house digital media and mementos. Its name comes from a Hindi word meaning a “small box of interesting objects that grandparents share with their children.”.

Notes:

Justin Donaldson, Josh Evnin, Sidharth Saxena

© HCI Design - Indiana University Bloomington



**Home & Video:** <http://design.informatics.indiana.edu/echoes>

**Other:** <http://www.we-make-money-not-art.com/archives/005255.php>

# Sur La Table

## Sur La Table

Sur la table revisits the domestic situation of the table. Events that normally occur on/over a table (the placing of objects, the eating of food, hand gestures, etc...) are amplified through projection and become the basis for interactivity, ultimately changing the visitor's relation to the table.

Notes:

Osman Khan

2004 © Osman Khan



Home & Videos: <http://www.osmankhan.com/surlatable/>

# Froggies

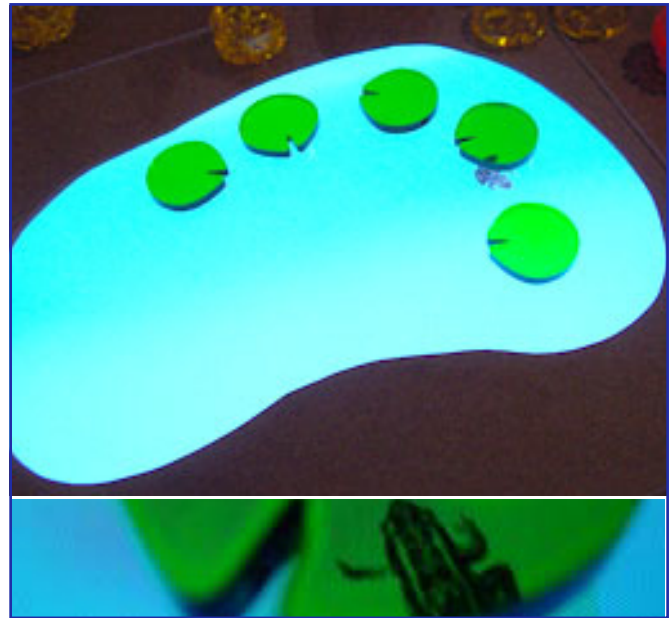
## Froggies

Froggies is a play-testing prototype for a children's digital play environment. A table with a screen embedded into the surface acts as an arena for virtual life. Children react with the virtual life by placing various symbolic markers on the table and sliding them around. The result is a musical rhythm of animal noises.

Notes:

Danny Rozin

2004 © Tisch ITP



Home & Video: <http://www.jtnimoy.net/itp/froggies/>

Updated - 07.2005

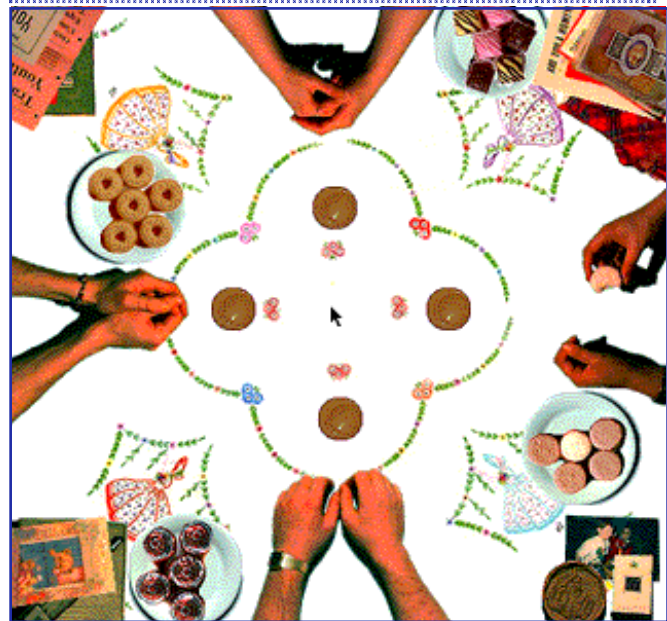
# Individual Fancies

## Individual Fancies

On the table, a teapot, four cups and four fixed chairs. If nobody sits down, a voice invites people to take a seat. If a viewer sits down, then in their place at the table a pair of projected arms appear in slow animation [...], the fingers start to drum, the voice sighs, and suggests that they invite someone else to sit. Once two guests (at least) are sat, the conversation starts. By rotating the teapot and pouring participants can fill each others' cups by video projection, and then that character starts to talk about his/her isolation, showing objects (snaps, leaflets, toys) and revealing their story by a series of clues [...].

### Notes:

Beryl Graham  
2003



**Home & Videos:** <http://www.berylgraham.com/cv/sub/fancies.htm>

**Home:** <http://www.we-make-money-not-art.com/archives/004207.php>

## Misto

Hewlett-Packard is showing the Misto Table prototype, a touch-screen computer built into a (very ugly) coffee table. Misto has been designed to allow much greater social interaction than a vertical screen. Groups of people would gather around the electronic table to play games, view maps and photos, and more.

Hewlett-Packard

2004 © Hewlett-Packard



Notes:

Home & Video: <http://www.we-make-money-not-art.com/archives/005793.php>

# Chatter

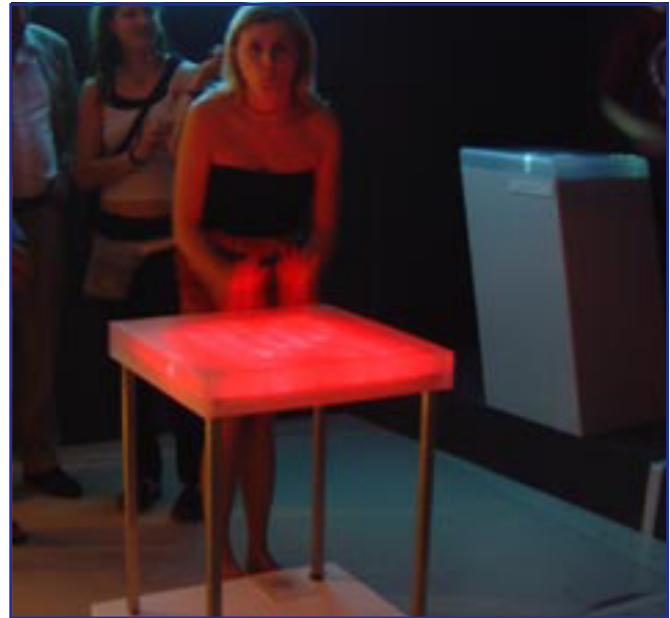
## Chatter

Chatter reacts to sound frequencies with a change of light pattern and to volume with brightness. It allows the user to enjoy their audioenvironment in a new way. People with hearing problems can associate a pattern with a familiar sounds such as doorbell or alarm.

### Notes:

Anna Hiltunen

2001 © Royal College of Art



**Home:** <http://myweb.tiscali.co.uk/anna.hiltunen/chatter.htm>

**Other & Video:** <http://myweb.tiscali.co.uk/anna.hiltunen/cshow4.htm>

# Audiopad

James Patten, Ben Recht

© MIT Media Lab

## Audiopad

Audiopad is a composition and performance instrument for electronic music which tracks the positions of objects on a tabletop surface and converts their motion into music. One can pull sounds from a giant set of samples, juxtapose archived recordings against warm synthetic melodies, cut between drum loops to create new beats, and apply digital processing all at the same time on the same table. Software translates the position information into music and graphical feedback on the tabletop. Each object represents either a musical track or a microphone.

Notes:



Home & Video: <http://www.jamespatten.com/audiopad/>

Updated - 07.2005

# Visible City

## Visible City

Visible City interface consists of a large table, 1 metre square, the top of which is suspended from its base via a large spring. The perspex face of the tabletop receives an image from the projector, positioned approx 3 metres from the ground. The tabletop is sensitive to alterations in its angle, therefore for participants to interact with the projected virtual environment they are required to tilt the surface of the table, in order to influence and experience the virtual world.

Notes:

Chris Nelson

© Coldlight



Home: <http://www.coldlight.co.uk/visiblecity.html>



# Sunlight Table

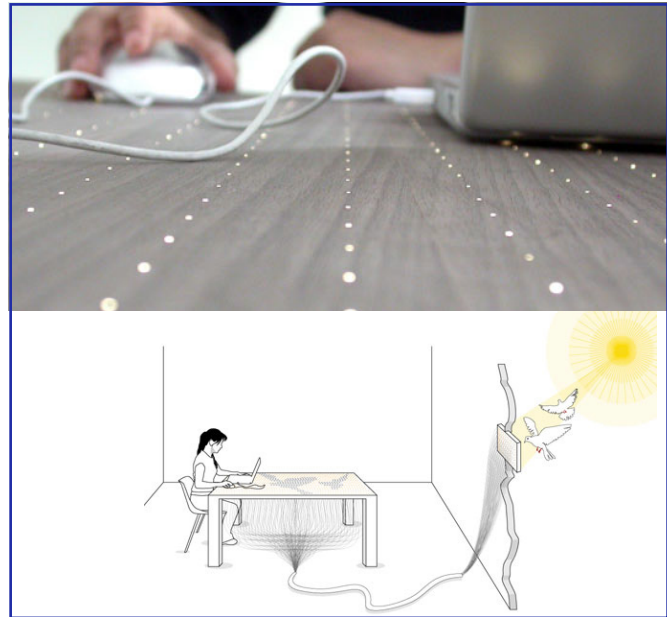
## Sunlight Table

The Sunlight Table brings natural light into workspaces and creates unspoken, ambient interactions while working. By doing so, it encourages a dialogue between work and nature and re-establishes a connection with the outside world. The table is populated with optical fibres creating a “sunlight display grid” on the surface of the table. The fibres are connected to a second input grid placed on a window. Light and shade are transmitted from the window through the fibres and into the table.

Notes:

Anab Jain

2004 © Royal College of Art



Home: <http://www.anab.in/sunlight-table.html>

Updated - 07.2005

# DissemiNET

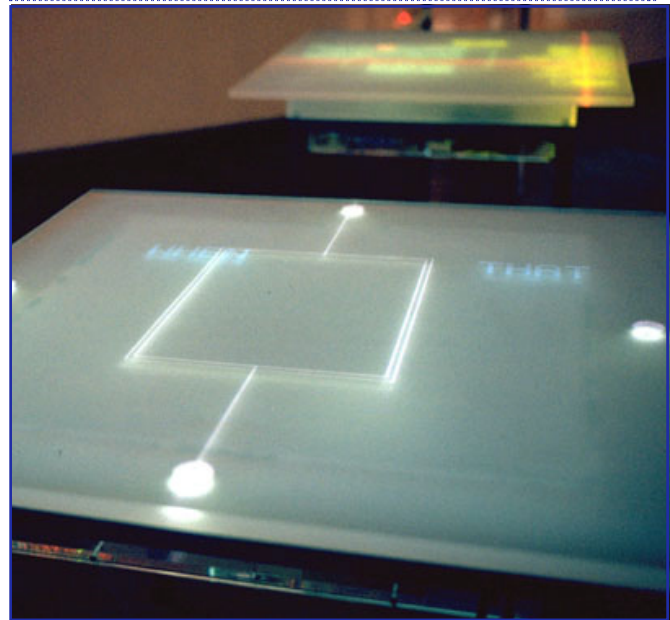
## DissemiNET

Designed as a Java-based client-server system, dissemiNET is a curated and public participatory system conceived to elaborate a diaspora on the web. Creating a repository for personal and social memory, dissemiNET uses Internet technologies to give visual form to the transactions (deposits, retrievals, and loss) through which we experience memory. Disposed on a boundary between identity (i.e. national and personal) and its dispersal over the web, dissemiNET is conceived to trace connections between people in terms of “digi-texts,” creating a cross-linked, communal storytelling space.

Notes:

Sawad Brooks, Beth Stryker

1998-2001 © Sawad Brooks, Beth Stryker



Home: <http://www.utensil.net/disseminet/doc/>

# Smart Table

## Smart Table

Smart Table is a table that can track and identify multiple objects simultaneously when placed on top of its surface. The table has been designed to support a smart problem-solving environment for early childhood education in a project called Smart Kindergarten.

Notes:

Philipp Steurer

2002 © Networked & Embedded Systems Laboratory



**Home:** <http://nesl.ee.ucla.edu/projects/smarttable/concept.htm>

**Video:** <http://nesl.ee.ucla.edu/projects/smarttable/demo.htm>

Updated - 07.2005

# Turntable

Stefan Moritz

## Turntable

With Turntable you can draw, write, and explain your ideas directly on the table. You are able to turn the interaction ring around and move it to create a better understanding. Since a special technology is integrated into the tabletop, it is possible to save data directly on digital media or erase it quickly. It is a table, which can both stand alone or be integrated into existing furniture systems.



Notes:

Home: [http://www.stefan-moritz.com/e\\_p\\_humantec\\_02.htm](http://www.stefan-moritz.com/e_p_humantec_02.htm)

# MidiBalls

## MidiBalls

MidiBalls is based on Markus Quarta's Interactive Surround Sound (ISS) cube, an interactive table that tracks luminous objects on its surface. midiBalls is a musical interface that you can touch, feel and play with. The aim is to keep a few "virtual balls" under control, which are flying around the screen, emitting various sounds as they bounce off each other and the physical elements on the table surface. Each ball's parameters (volume, speed, etc.) and the sound it makes can be adjusted. Up to four people can play together with it.

### Notes:

Markus Quarta  
Something



**Home:** <http://www.we-make-money-not-art.com/archives/005568.php>

**Video:** <http://www.somethingonline.org/index.html>

## iTheremin

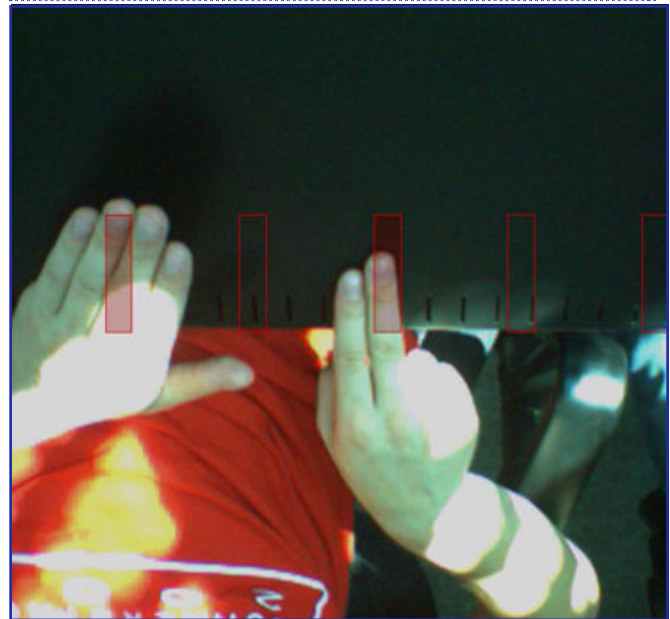
The idea of our project is to convert the well known “drumming-on-the-edge-of-a-table” into something more musical. One should be able to play simple tunes by knocking on the table. The system should output MIDI-data so that you can play any instrument you like.

The name of the project was inspired by the Theremin, an early synthesizer constructed by Lev Sergeivitch Termen in 1917. The Theremin could be played without being touched by the artist in which it resembles our first prototype.

### Notes:

**Thorsten Karrer, Daniel Beck**

Media Computing Group at RWTH Aachen University



**Home & Video:** <http://www-i10.informatik.rwth-aachen.de/materials/dis2/ss04/itheremin/>

# Tilty Table

## Tilty Table

MidiBalls is based on Markus Quarta's Interactive Surround Sound (ISS) cube, an interactive table that tracks luminous objects on its surface. midiBalls is a musical interface that you can touch, feel and play with. The aim is to keep a few "virtual balls" under control, which are flying around the screen, emitting various sounds as they bounce off each other and the physical elements on the table surface. Each ball's parameters (volume, speed, etc.) and the sound it makes can be adjusted. Up to four people can play together with it.

**Notes:** Link through Anurag Sehgal and Giovanni Cannata/ Scott Minneman, key person in Onomy, attended the CAIF workshop, joining the IDII group for the design sessions.

Onomy  
© Onomy



**Home & Video:** <http://www.onomy.com/blue/tilty.html>

# **OTHER INTERACTIVE FURNITURES**

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**COLLECTION**



# Letto ZZZ

## Letto ZZZ

Bed system with LCD ceiling projector, DVD and speakers incorporated in the headboard. The system is made of anthracite or white magnolia mat lacquered panels. The headboard is the same for all bed sizes.

**Philips Design**

200-2003 © Cappellini & Philips Design - commercial



**Notes:** Possible link with Philips Design through Giovanni Cannata, Dario Buzzini

**Home:** <http://www.design.philips.com/about/design/newvaluebyonedesign/numbertwenty-april2004/section-13405/index.html>

# Mirror TV

## Mirror TV

[...] a bathroom mirror that incorporated an LCD display. Anyone washing, brushing their teeth or shaving could also watch television or information channels.

Philips' Mirror TV was launched last August. The versatile LCD display integrated into a mirror transfers close to 100 percent of the light through the reflective surface. First targeted to the hotel business, the TV can provide a range of functions beyond TV programming, such as bill payment, pay-per-view movies, or as a desktop application, providing a large display for presentations or surfing the web.

**Notes:** Possible link with Philips Design through Giovanni Cannata, Dario Buzzini

**Philips Design**

1995-2003 - Philips Electronics N.V. - commercial



**Home:** <http://www.design.philips.com/about/design/newvaluebyonedesign/section-13390/index.html>



## **Colophon**

**Interactive furnitures collection - a collection of  
interactive tables, lamps, chairs, partitions and others,  
for the households but not only.**

Edited and printed by:

Giovanni Cannata and Anurag Sehgal

Printed in Ivrea (Italy)

at Interaction Design Institute Ivrea

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