appendix C

spio

a de-generative installation by lucas bambozzi

It started with the telephone, the TV and the Internet, but imagine when your fridge begins to communicate with your palm pilot, updating the shopping list as you run out of milk, and perhaps even sending a notice to the grocer for home delivery. Or maybe the stove will alert the fire department because you didn't turn off the hot plate before rushing out. (Privacy is not the antidote to surveillance, Felix Stalder 2002)



description

SPIO is a 'self-surveilled' system based on a robotic vacuum cleaner modified for capturing and processing images from a different perspective.

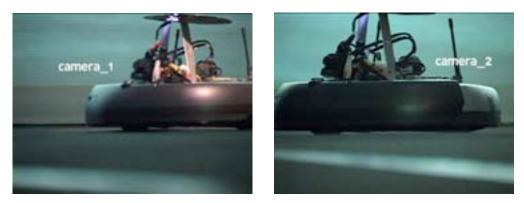


Equipped with high sensibility and infra-red CCTV cameras the installation scrutinizes the space through pre-defined movements and triggers sound and visual events.



Cameras track the robot's movements, configuring a system where the watcher is also watched.

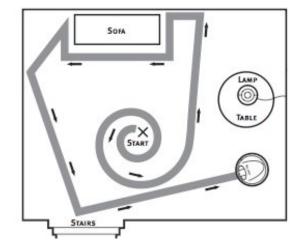
appendix C . Spio project



The CCTV cameras installed in the vacuum cleaner

The system is fed by light and sound interferences, which is produced by the presence of the audience, leading to chaotic movements and unexpected turbulences in the images, as well as in the sound - which generates feedback loops.

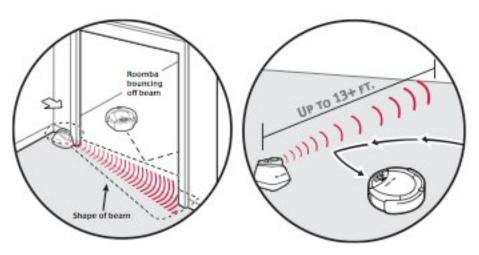
Picture from the Roomba's manual showing a typical cleaning pattern. The vacuum cleaner prevents itself to be stuck or fall into stairs.



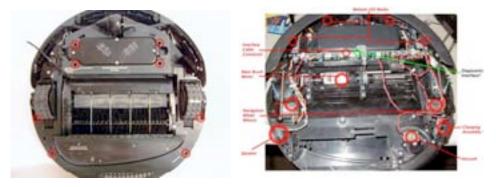
The position of the robot is tracked by two cameras, which send the parameters for processing images and sounds in real-time.



Two iSight cameras were used for tracking movements



An infra-red sensor can define virtual walls



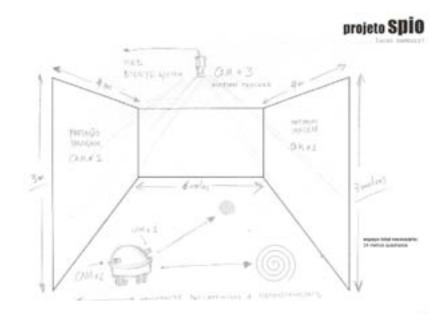
Hacking the iRobot's Roomba vacuum cleaner



A webcam was used for live streaming, showing the work in action

The set-up for Emoção Art.Ficial 2.0 at Itaú Cultural included also a web cam for live streaming. By the time it was being exhibited, it was possible to see the actions of the robotized sweep cleaner in real time as well as the images it produced. Thus, as in a graphic drawing, it was possible to visualize the tracing of the robot's tracks, starting with geometrical and precise lines and tending to a chaotic behavior, specially noticed when the exhibition was full.

catalogue page at Emoção Art.Ficial 2.0



[Lucas Bambozzi]

(Brasil) Projeto Spio, 2004 Instalação

Resultado de pesquisa desenvolvida por Bambozzi ao longo dos últimos quatro anos, a obra discute os sistemas de controle e vigilância na sociedade moderna. As imagens captadas por uma câmera instalada sobre um robô espião, que circula dentro da área da instalação, são tratadas e recondicionadas, revelando de maneira cômica o aspecto intrusivo das câmeras de vigilância.

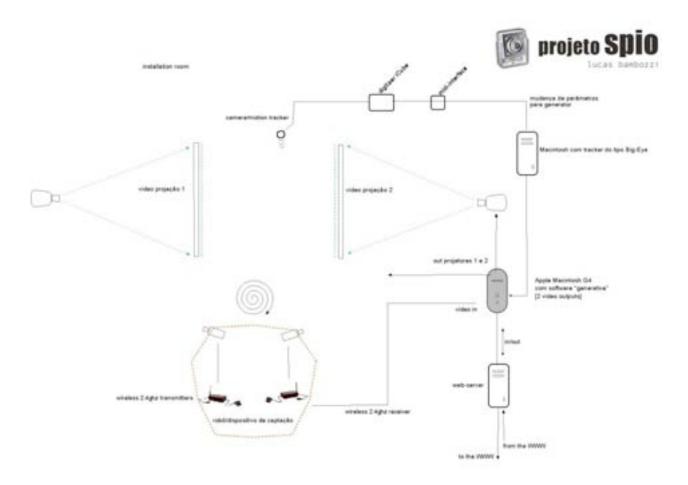
Lucas Bambozzi, jornalista formado pela Universidade Federal de Minas Gerais, desenvolve desde o fim dos anos 80 estudos e trabalhos artísticos em torno da expressividade da linguagem audiovisual, com énfase nos meios eletrónicos. Trabalha em várias midias e com diferentes suportes. Participou de exposições em mais de 30 países. (Brazil) Projeto Spio, 2004 installation

The result of research carried out by Bambozzi over the course of the four last years, the work discusses the control and surveillance systems in modern society. The images, which are recorded by a camera, are installed on a spy robot that moves around inside the installation area, are treated and reconditioned, revealing comically, the intrusive aspect of surveillance cameras.

Lucas Bambozzi has a degree in journalism from the Federal University of Minas Gerais. Since the 80's he has developed artistic studies and works around the expressiveness of audiovisual language, with emphasis on electronic media. He works in various media with different supports. He has participated on exhibitions in more than 30 countries.



Paik's performmances with robot K-456 at Parnass Gallery (Wuppertal, Gemrnay, 1965), an inspiring piece for Spio.



Drawing for Emoção Art.Ficial 2.0. The development turned out to be based on Macromedia Director and the Xtra plug-in Track Them Colors.

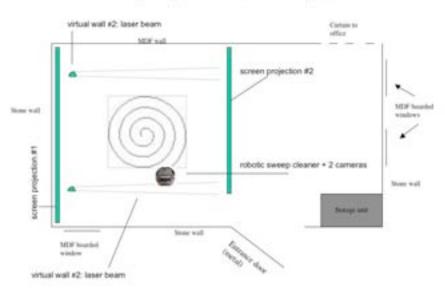
curatorial statement for the exhibition at HTTP Gallery, London

[...]

In the UK, one of the most visible interactions of place and hightechnology communications systems over the past 10 years has been the installation of Closed Circuit Television (CCTV). Designed to improve the economic fortunes of public, commercial street systems, such technologies are so widespread that it has been estimated that the average UK urban resident is now monitored more than 300 timesa day, making Britain the most visually surveilled nation on Earth.

Artists working in digital media are increasingly exploiting the subject of CCTV. Lucas Bambozzi's SPIO, now installed at HTTP gallery, is an autonomous vacuum cleaner equipped with high sensibility and infrared CCTV cameras. SPIO scans the exhibition space through pre-defined movements and triggers sound and visual events in the ambient. The work is making an ironical comment on the self-surveyor apparatus, based on apparently innocent gadgets that will be filling our homes and habits more and more.

Tobi Maier, Dosensos, for the HTTP Gallery, London 2005

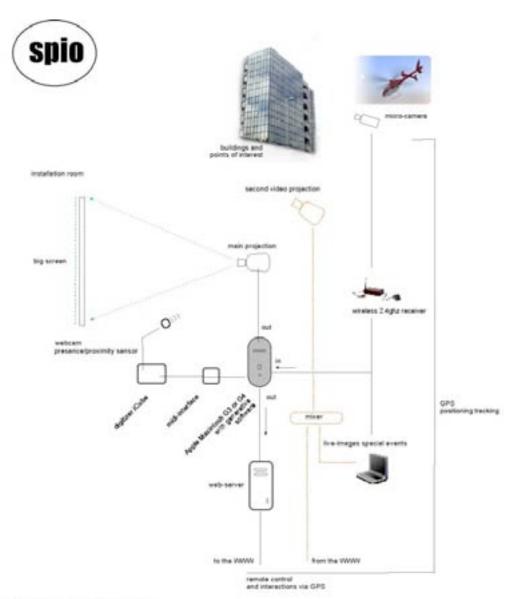


HTTP gallery, London, www.http.uk.net

Drawings for the HTTP Gallery

Original proposal [not exhibited at any venue]:

The original version of *Spio* consisted of a set of three different observation apparatuses, or 'spying toys', suggesting its use for civilian surveillance activities. They were: 1) a remote controlled helicopter; 2) an outdoor robot and 3) an empty bottle of wine, all equipped with small cameras and wireless video transmitters. The idea was to present a series of performances that would serve to collect data/images on the surroundings of the Itaú Cultural building.



general structure

this drawings is for ilustrative purposes only, the correct structure of the installation, its technical needings as well as some procedures will only be properly figured out after starting the work process, other resources could then be added and a better and more concise project may arise.

THE REAL PROPERTY.

proposal for a series of performances in the original version [snapshot form the project]

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SPIO robots:	terre and the second se

The installation is composed by the following eyes or platforms/devices:

Spio 1: helicopter Spio 2: climber/dog outdoor robot Spio 3: bottles [beer, wine, etc.]

The installation comprises a series of performances that will be produced as an inherent part of the system.

Basically the performances will simulate a ritual of 'espionage' around the building where the installation will be set up. The images transmitted during the flights, rides or the spying session [depending if it is the helicopter, the tractor or the spy object] will be sent to the processing generator and then viewed by the visitors. Viewers around the world will be able to observe the actions of the robots by accessing data visualization tools and graphics showing its position and movements. The images it captures will be also viewed and can be mixed according to some pre-defined parameters.

In addition to the performances, the present proposal foresees the production of 4 special events including live video improvisation and manipulation by the artist. The sessions [1 hour of duration each, in two consecutive days] should be adjusted according to the venue and its characteristics.

Other experiences with GPS can be performed, connecting the internet viewers in a more effective way with the system.

exhibitions:

Emoção Art.Ficial 2.0 Itaú Cultural São Paulo, Brazil July to September 2004 <http://www.itaucultural.org.br/emocaoartificial2>

HTTP House of Technologically Termed Praxis London, UK

April 5 to May 1, 2005 <http://www.http.uk.net>

HTTP is a non-profit organization run coordinated by Marc Garret and Ruth Cathlow from Furtherfield http://www.furtherfield.org

Spio exhibition was an invitation by HTTP's associated curator Tobi Maier, from Dosensos http://www.dosensos.org



Credits and technical details

Concept, creation and direction: Lucas Bambozzi

Music: Radboud Mens (HTTP/UK only)

Hardware and technical production: Fábio Seiji Massui Software development: Caio Barra Costa

Technical production in UK: Giles Pender for Furtherfield

Support: Itaú Cultural (Brazil) and Furtherfield (UK)

appendix D

Cubo

public intervention . multimedia action . mediating people

Despite the *Cubo* project is not part of the research, it was included in the dissertation as a collaborative model of non-corporative networking that succeeded as establishing a shared public environment. The project was created and performed collaboratively with the groups: by the groups *A Revolução Não Será Televisionada, Bijari, Cobaia, Contra-filé, Cia Cachorra* and *Perda Total. Cobaia* is the group I have participating actively since its creation in 2003.

A DVD containing the Cubo's making of is included. It shows the whole process of its creation, since the first discussions and all the public presentations.



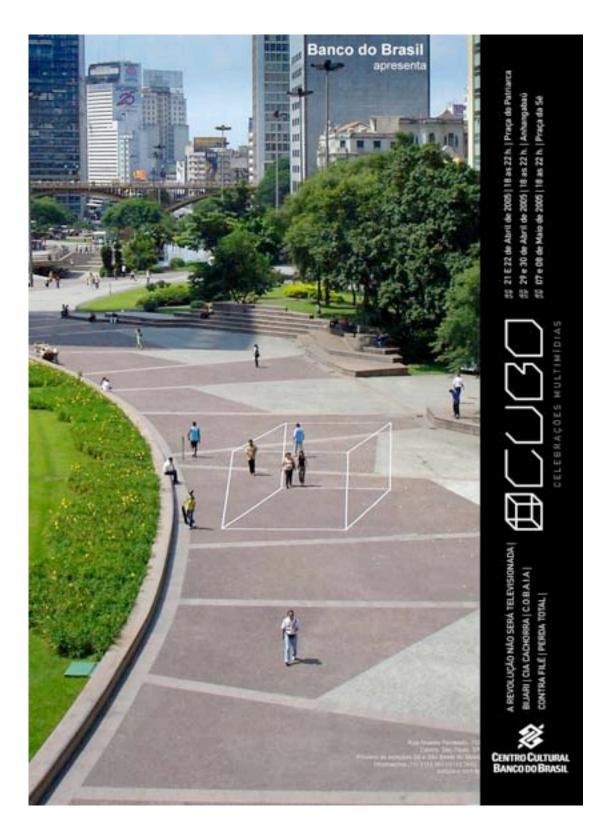
The groups working inside the Cubo

Cubo

public intervention . multimedia action . mediating people



Building up the Cubo, before the presentations



A poster inviting people for the presentations

Cubo

public intervention . multimedia action . mediating people

DVD . ntsc . [Portuguese dialogues] aprox 20 min.