This research is in the fields of interactive and spatial design.

The aim of the chief curator of the third Lisbon Architecture Triennale, Beatrice Galilee, was to position architecture as an ‘expanding field of critical spatial practice’, as ‘a force of occupation and transition’ and as something ‘mercurial and indistinct.’ Responding to its theme Close, Close, this project sought to extend existing research regarding the effects of air pollution, specifically the unpredictable and increasingly volatile urban atmospheres that oscillate around us, through an interaction between people, air and pollution.

The focus was the design of a prototype wearable computational device that measures air quality. Conceived as a ‘brooch’, the wearable device records air pollution levels through an on-line software platform that gathers and displays the data. The innovation behind the ‘brooch’ technology allows its wearers to become surveyors of the air they breathe, rendering both spatial and atmospheric typologies. With an emphasis on current air pollution levels in many Chinese cities, the ‘brooch’ was coupled with real-time visualisation of the air pollution levels from ten cities displayed on LED micro monitors.

Along with a focus on exterior conditions, an accompanying representation of the interior exchange between air and the body was conceived in order to bring further awareness to the quality of the air we breathe. Assembled from chest X-rays and formed into a sculptural ‘spinal’ curve, the spatial installation brought to attention the presence of the body. Conceived as a means to visualise the ephemerality of air and the effects of pollution, these medical recordings alerted viewers to the fragile interior of the body.
The exhibition detailed the main electronic components of the wearable device sensing technologies. Arduino microcontroller board, LED (Light emitting diode) PCB (printed circuit board), real-time GPS mapping and photoelectric sensors that enable immediate real-time rendering of air quality, the air particles per micrometre (PM 2.5).
Benedict Anderson, Nancy Diniz
Breathe: the air we share
Installation view
Benedict Anderson, Nancy Diniz

Breathe: the air we share

Installation view
Benedict Anderson, Nancy Diniz

Breathe: the air we share

Supporting evidence

Breathe: the air we share (CH/AU), Close Closer

THIRD EDITION LISBON ARCHITECTURE TRIENNALE: 12 SEP – 15 DEC 2013
Lisbon Architecture Triennale: strictly no buildings allowed

From sofas that swallow you up to a 3D-printed coral reef, the Triennale explores architecture beyond building. But is it all a bit too irreverent?

Oliver Wainwright
Tuesday 17 September 2013
20:37 AEST

Future Perfect? ... A model of a fictional future city features in Close, Closer, the third Lisbon Architecture Triennale. Photograph: Catarina Botelho/LAT

Financial crisis has an interesting effect on the perception of architecture. When the economy falters, buildings are among the first things to be put on hold, and architects among the first put out of work. The conclusion drawn by some is that buildings are simply not enough: to avoid extinction, architecture must claim renewed relevance by being more than a service for the production of walls, roofs and floors.

What often follows this reasoning is a kind of discipline envy, a desire for architects to be artists and philosophers, anthropologists and politicians, performers and cartographers – anything but people engaged in the tedious irrelevance of bricks and mortar.

In Portugal, where graduate unemployment currently stands at 40% and half-finished construction projects dot the landscape, it is easy to see why those trained to design buildings might question if they are better off doing something else.

“This is the generation of young architects who may ask if they should be designing the architecture of networks and systems, of societies or conversations, rather than buildings,” says Beatrice Galilee, the London-based curator of the third Lisbon Architecture Triennale, which opened this week with the aim of positioning architecture as an “expanding field of critical spatial practice.”

Titled Close, Closer, the three month-long event takes the form of three primary exhibitions, housed in some of the Portuguese capital’s most evocative palaces and industrial sheds, along with a bulging programme of over a hundred associated events scattered around the city. With these activities - all free to the public - the Triennale seeks to present architecture as “a force of occupation and transition, a speculator and a fantasist,” as something “exciting and intangible, mercurial and indistinct.”

Walking through the dreamy installations, the overriding impression is of nebulous fantasy. In The Real and Other Fictions, curated by Mariana Pestana, a 17th-century palace is filled with a number of “fictionalised re-enactments” of the building’s former lives. Over the years, the crumbling pile has been home to the Embassy of Spain and the Legation of Germany, served as the headquarters of a radical anarcho-syndicalists’ group, as well as been the base for the Portuguese Association of Landscape Architects. Each of these momentous episodes now provides a tenuous trigger for an installation by an invited artist or architect.

In one room, visitors can join a “parliament” of raked scaffolding seating to discuss a Universal Declaration of Urban Rights and add their ideas to a blackboard. Elsewhere you can help produce an architectural publication in a UFO-like “fanzine machine,” or sit through an hour-long play without actors – where you are encouraged to read the script to yourself in front of an empty stage set.

Each work, says Pestana, attempts to “engage the audience in intimate encounters with the space that envelops them.” It is an ambition interpreted to the letter by Alex Schweder’s Slowly Ceiling installation: two sofas appear to welcome unsuspecting visitors, before swallowing them whole, as the room inflates around their bodies like a malevolent Polanski film set.