Utterance 4  Relational Architecture

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Relational architecture can be defined as the technological actuation of buildings and public spaces with a human memory. Relational architecture disorganizes the master narrative of a building by adding and subtracting audiovisual elements to affect it, effect it and recontextualize it. Relational buildings have audience-activated hyperlinks to pre-determined spatio-temporal settings that may include other buildings, other political or aesthetic contexts, other histories, or other physics.

Virtual architecture could be differentiated from relational architecture in that the former is based on simulation while the latter is based on disimulation. Virtual buildings are data constructs that strive for realism, asking the participant to 'suspend disbelief' and 'play along' with the environment; relational buildings, on the other hand, are real buildings pretending to be something other than themselves, masquerading as that which they might become, asking participants to 'suspend faith' and probe, interact and experiment with the false construct. Virtual architecture tends to miniaturise buildings to the participants' scale, while relational architecture amplifies the participant to the building's scale, or emphasizes the relationship between urban and personal scale. In this sense, virtual architecture tends to dematerialize the body, while relational architecture tends to dematerialize the environment.

Virtual and relational architectures are not opposing practices, nor are they mutually exclusive. They are similar in that both are largely participant-centred, computer generated, and less expensive, permanent, sheltering and territorial than physical architecture. They are also fundamentally perspectivist (in Ong's commotion of indeterminacy and interconnection, not in the Renaissance sense of privileged vantage point): there is always a self-acknowledged point of view which underlines the partiality and performativity of the construction. In both virtual and relational architecture, the increasingly irrelevant notion of the 'site specific' – which becomes an oxymoron in our age of non-location – is replaced by the notion of the 'relationship specific'.

Relational architecture need not be inscribed within postmodern particular or symbiotic practice nor post-structural self-referentiality: it is not necessarily engaged in deconstruction, but does it need to use the language or structure of the building itself. It distances itself from the notion of art in 'public space' proposing instead art in 'relational space' where the public becomes an actor, in the theatrical sense and in the sense of 'taking action'. Relational architecture events venerate their synthetic, artificial qualities, and reserve the right to be 'effortless', improvisational and non-functional.

But apart from special effects, beyond plasticity, the real motivation behind relational architecture is the modification of existing behaviour: the artist creates a situation where the building, the urban context and the participants relate in new, 'alien' ways. The piece can be considered successful if the artist's intervention actively modifies the point of dynamic equilibrium between the public's actions and the building's reactions, and vice versa. There can be a variety of causal, chaotic, telepresent, predetermined, or emergent behaviours programmed into the piece and the uncertainty of the outcomes is one of the main motivations for doing such a piece.

Although relational architecture is a relatively new field within media arts, its precursors can be traced back to classical Greece (Simoës' discovery of enneametric) and to the use of the art of memory in Chinese, Hermetic and Renaissance traditions of rhetoric. In these traditions architecture was used as a repository of relatively located memories which could be recalled by a speaker through a mental "walk-through". A significant number of contemporary artists can also be said to have been, and continue to be, influential in the practice, among them Kaysen, Wodiczko, Archigram, Gordon Matta-Clark, Yona Friedman, Jenny Holzer, Rem Koolhaas, the Situationalists, Christian Modler, Caruso, Peter Greenaway, Vito Acconci, Dennis Adams, Knowledge Research, Dan Graham, César Martínez, Richard Serra, Stephen Petreski and Rachel Whiteread.

Rafael Lozano-Hemmer and Will Bauer are collaborating in the development of a series of relational architecture pieces to be presented over the next few years. These pieces entail the development of novel architectural interfaces using real-time computer graphics, 3D sensors, electro-acoustic music and robotic lights. The events, which take place after dusk, are being presented in a dozen cities around the world.

During the third international Film + Arc Biennale in Graz, Austria, a ‘relational architecture’ piece transformed the courtyard façade of one of Europe’s largest military arsenals, the 356-year-old Landeszeughaus. 'RE:Positioning Fear' used a website, webcams, 3D trackers, and customized projection technology to display a very specific instance of Austrian history and architecture with remote and local participants.

The piece was loosely based on the medieval fresco ‘The Stresses of God’ in Graz Cathedral, which depicts the three fears of the people of Graz: the locust plague (which destroyed the fields in 1777), the Black Death (an epidemic that fortunately never had a devastating outbreak in Graz), and the fall of the city to Turkish invaders (which never happened). The fresco, which shows the oldest view of the city, has been raised by inclement weather and incompetent restoration attempts, but is surmounted by a reproduction which can be seen at the Landeszeughaus. Using the fresco as a departure point, ‘RE:Positioning Fear’ related several historical transformations and displacements of fear, particularly as parts of the world enter a post-industrial, post-human era.

'RE:Positioning Fear' had a program of Internet Relay Chat (IRC) sessions discussing salient ‘contemporary fears’ which featured thirty artists, theorists and critics from seventeen countries, some of whom also contributed texts used as conceptual background. There were six basic thematic threads:

- 'Fear at the end of Geography' – edentulous; cultural construction; border war; borders; tourist clones; placeless vs. multiple; refugees and refuges
- 'Fear at the end of Biology' – body Djs; human genome and other endotemplates; microevolution and bioterrorism; identities
- 'Fear at the end of Architecture' – vampire buildings; special effects home; architecture; site-specific isn’t; the internal exterior; domesticity
- 'Fear at the end of Art' – resistance of net content; bandwidth denial; ‘retooling’; the long wait; the search for ‘otherexposure’
- 'Fear at the end of Technology' – ‘disenchanting’; baby walkers; persistance of the human cyborg; all intelligence is artificial
- 'Fear at the end of ‘The End’' – paranoia and postopia, St Augusteine, apocalypsis, ‘hope’

During the Film + Arc Festival, the IRC sessions were projected in real-time on the Zeughaus arsenal’s courtyard façade, the projections covering a total area of 15 x 20 metres. The building was thus taken over by a determinantal dialog or ‘source code’, creating a ‘building with subtitles’. A webcam expanded the event every second and allowed the internet participants to see their contributions as they appeared on the building.

The IRC sessions reflected on contemporary fears as deteriorated, distributed phenomena or ‘synchronies’ more than invasive global
warning, AIDS, terrorism, economic violence, surveillance society, genetic tampering, refugees, etc. This mirrored the nature of IRC text which does not have a clear textual ‘backbone’ but is rather composed of textual ‘tribes’. The proceedings of the IRC sessions, in the form of slightly edited logs, can be found in the ‘IR:Positioning Fear’ website, where participants also submitted notes, quotes, and other texts that entered the discussion on ‘fear’ from the realm of the abstract to very specific instances within geopolitical, architectural, philosophical, biological, etc. discussions.

Even though the IRC sessions could have been projected onto the facade by covering most of the facade, an interface was designed to prevent all of the text from being visible at once. The interface was called ‘tele-absence’ and it consisted of an ‘active’ shadow that revealed the text on the building. To read the building, a participant standing in front of it had to wear a small wireless sensor and walk around the courtyard. As he or she walked, light sources tracked their position and projected their shadow onto the facade of the Zeughaus. By using robotic lighting control, the shadows were focused dynamically so that regardless of the participant’s proximity to the lamp the shadows were always crisp and well defined. The final effect was a ‘dynamic screen’ whereby the shadow of the participant was an architectural element which ‘revealed’ the IRC texts that appeared to be within the building, as though the shadow were a cutout or an x-ray of the building.

‘Tele-absence’ was defined as the technological acknowledgement of the impossibility of self transmission. Tele-absence was proposed as a celebration of where and when the body is not. The shadow was not an avatar, an agent, nor an alias of the participant’s body; it was remote absence, the exclusion of the body, effected through the body-double, the cut-out, the not-transmitted, the shadow. The tele-absence interface benefited from the impossibility of positioning the body within its shadow. Just as contemporary physics has discovered that a vacuum is indeed a place with intense quantum mechanical activity, here the shadow, a supposedly immaterial form created by the absence of light, became a site of schematic activity.

As it travelled over the building, the shadow was deformed by the windows and crevices of the facade as well as by the characteristics of the movements of the participant. This added to the anamorphosis of the projection and underlined the building’s performative quality. By calculating when, where and how the shadow intersected the Zeughaus, the installation’s computers triggered audiovisual events which used the texts contributed by the people on the IRC sessions. The piece emphasised the fact that the shadow is formed by a collaboration between light, building and participant. The Zeughaus, built out of a fear of Turkish expansionism whose looming presence was felt only as a shadow, became a repository that performed the transformation and repositioning of the Fears.