

Selected Solo Exhibitions: 1999 'Vectorial Elevation', Zócalo Square, Mexico City 2001 'Airport Cluster', Galerie Kaelte Kollwitz, Berlin; 'Grounding', V2_Organisatie, Rotterdam 2002 'Vectorial Elevation', Basque Museum of Contemporary Art, Vitoria

Selected Group Exhibitions: 1995 ARCO International Art Fair, Fundación Telefónica, Madrid; 'European Media Art Festival', Kunsthalle Dominikanerkirche, Osanbrück 1997 Architecture and Media Biennale, Landeszeughaus, Graz; 'Arte Virtual Realidad Plural', Museo de Monterrey, Mexico; 'Fleshfactor', Ars Electronica Festival, Linz 1999 'Yo y mi Circunstancia', Musée des Beaux Arts, Montreal 2000 7th Havana Biennale 2001 7th Istanbul Biennale 2002 'Eroçao Art.ficial', Itau Cultural, São Paulo; 'Fragilities', Festival Printemps de Septembre, Toulouse; Liverpool Biennale; 'Unplugged', Ars Electronica Festival, Linz

Selected Bibliography: 1997 Pier Luigi Capucci, 'Presenze remote e relazioni insiuate', *Domus*, May; 1999 Mathew Mirapaul, 'Online Art Lights up a Square in Mexico City', *The New York Times*, 30 December 2000 Arturo Cruz Bárcenas, 'El Zócalo se convirtió en una escultura de luz interactiva', *La Jornada*, 7 January; Roberta Bosco, 'Lozano-Hemmer indaga con las palbras en la Bienal de la Habana', *El Pais*, 7 December; Rafael Lozano-Hemmer (ed.), *Vectorial Elevation*, Conaculta Press, Mexico City; José Jiménez, 'Un sitio si lugar', *El Mundo*, 28 October; Geert Lovink, 'Interview with Rafael Lozano-Hemmer', *Archis*, No. 9; Yukiko Shikata, 'Relational Architecture', *Bijutsu Techo*, November 2001 Merel Bern, 'Daar duiken schaduwen op vanuit het niets', *De Volkskrant*, 1 September 2002 Alex Adriaansens/Joke Brouwer, 'Alien Relationships from Public Space', *Transurbanism*, V2/NAI Publishers, Rotterdam; Randy Gladman, 'Rafael Lozano-Hemmer: An Interview', *Canadian Art*, Winter; Carlos Jiménez, 'Historias virtuales, intercambios y revelaciones', *Revista Lápiz*, No. 182; Gregory Volk, 'Back from the Bosphorous', *Art in America*, March

RAFAEL LOZANO-HEMMER

Rafael Lozano-Hemmer uses various media as catalysts to transform viewers into active participants. His projects play out both through inter-relating networks formed in cyberspace and through interactive communication environments created in real spaces. In the 'Relational Architecture' (RA) series, he projects text and images onto historical buildings and other structures, drawing observers into an interaction with the latent memories of the location.

In installations like *Tivo Origins*, *Relational Architecture 7* (2002) Lozano-Hemmer projects texts that are specifically related to the actual history of the site. However, this is not always the case. *Body Movies*, *Relational Architecture 6* (2002) projected onto buildings portraits of thousands of people photographed on various city streets. The people walking in front of the building become the creators of the work when their shadows block the floodlights illuminating them and allow the projections to be seen. Depending on the distance of the participants from the light sources, the sizes of the shadows and the images they reveal can be anything between 2 and 25 metres, and can appear in a myriad of different shapes.

Vectorial Elevation, *Relational Architecture 4* (1999–2000) makes a connection between the information environment of the Internet and real urban spaces in a provocative work that opens up the potential for the actions of individuals to become public art. *RA4* was a millennium celebration project for Zócalo Square in Mexico City, a space surrounded by monumental buildings, and a symbol of Mexico's discontinuous historical memories. Lozano-Hemmer installed searchlights on the tops of the buildings so that

their criss-crossing beams would form an ephemeral structure made from the mid-air intersection of light. People around the world could access the project's website and move the beams to change the design of the structure. Conceived in the tradition of *son et lumière* spectacles, the project linked the people gathering in the square and those on the Internet into one global and virtual information space, and became a pointer to the potential for new creation by a collective intellect working through cyberspace.

33 Questions per Minute, *Relational Architecture 5* (2001) asked philosophical questions about authorship and the relationship between machines and people. Lozano-Hemmer used software programmed to create a generator capable of using grammatical rules to combine words from the dictionary, creating fifty-five billion different questions. These were presented on tiny LED screens at a rate of thirty-three per minute, mingled with other questions entered by participants so that observers were unable to distinguish between them. The screens were sited in the Hagia Eirene Church in Istanbul, a structure dating back to the time of Emperor Justinian. The solidity of historical time and the context of the Orient bathed the project in a special philosophical significance, giving it the atmosphere of an interactive Zen dialogue. Not knowing whether the questions were machine- or manmade brought in the issue of individuality. In querying the collective memory buried in the history of place, as well as the potential of collective intelligence, Lozano-Hemmer's work represents a new type of media catalyst.

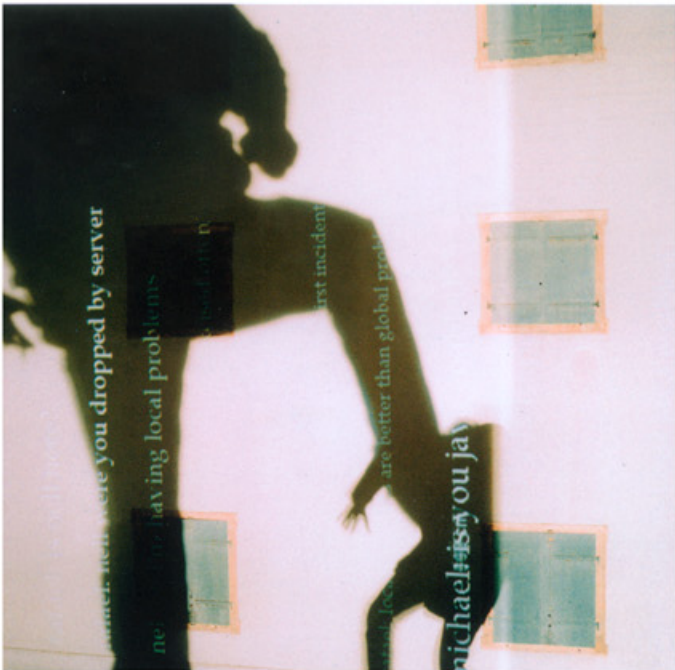
Yuko Hasegawa



Vectorial Elevation, Relational Architecture 4, 1999-2000
18 robotic 7kW searchlights, 3 webcams, DMX:TCP/IP converter, Java interface, GPS tracker, web server, light sculptures up to 15 km high
Installation millennium celebrations, Zócalo Square, Mexico City, 2000



Vectorial Elevation, Relational Architecture 4, 2002
 18 robotic 7kW searchlights, 4 webcams, DMX/TCP/IP converter, Java interface, GPS tracker, web server, light sculptures up to 15 km high
 Installation 'Artium Opening', Basque Museum of Contemporary Art, Vitoria, 2002



Re:Positioning Fear, Relational Architecture 3 (with Will Bauer), 1997
 2 robotic 7kW xenon film projectors, 2 Barco projectors, webcam, custom IRC Java client, 3-D ultrasonic tracking system, PA system, control computers, 900 m² of projections from an online symposium on the concept of fear
 Installation Architecture and Media Biennale, Graz, 1997



33 Questions per Minute, Relational Architecture 5, 2001
 21 liquid-crystal displays, laptop computer, piezo electric tweeters, video projector, each LCD screen 6 x 10 x 3 cm
 Installation 7th Istanbul Biennale, Hagia Eirene, Turkey, 2001



Two origins, Relational Architecture 7, 2002
 4 robotic 7 kW xenon film projectors, computer controller, mirrors, 1,000 m² interactive projection of the *Book of Two Origins*, a heretic thirteenth-century manuscript; with the assistance of Jennifer Laughlin
 Installation 'Fragilities', Festival Printemps de Septembre, Place du Capitole, Toulouse, 2002



Body Movies, Relational Architecture 6, 2002
 4 robotic 7kW xenon film projectors, custom-made shadow tracking system, 1,200 portraits on duratrans film, PA system, control computers, mirrors, 1,000 m² interactive projection
 Installation 'Unplugged', Ars Electronica Festival, Linz, 2002