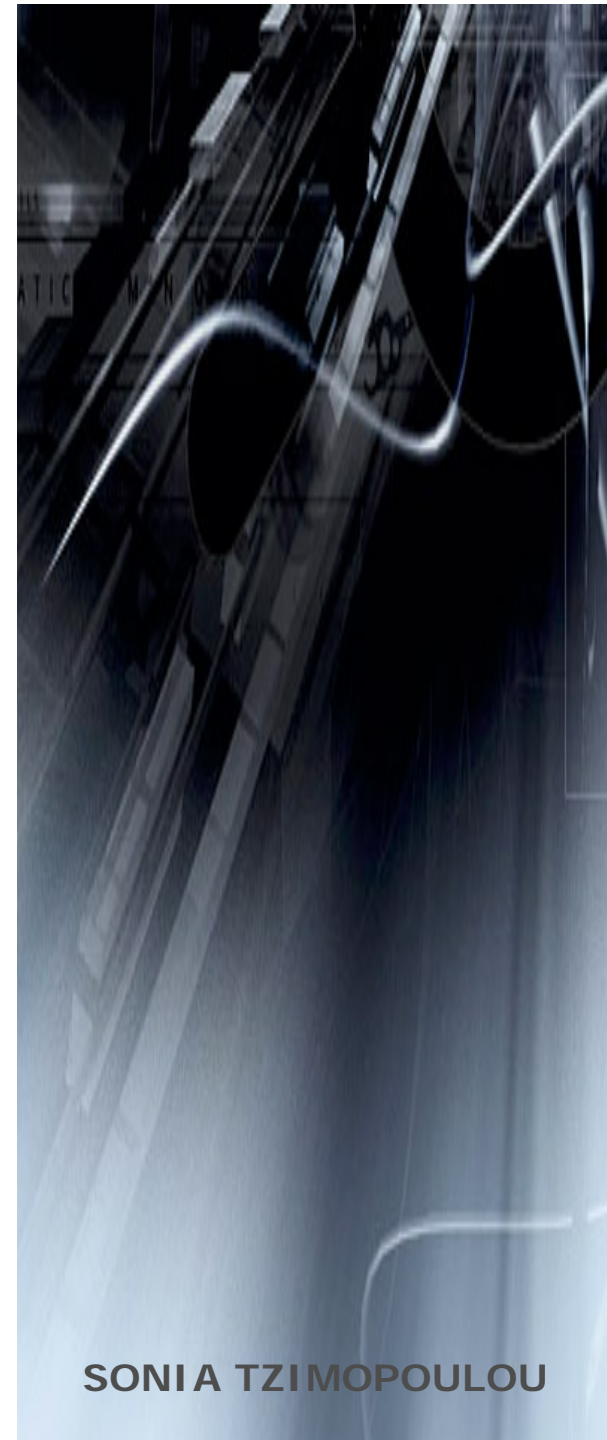# ASPECTS OF VIRTUALITY

A space of conversions

SONIA TZIMOPOULOU
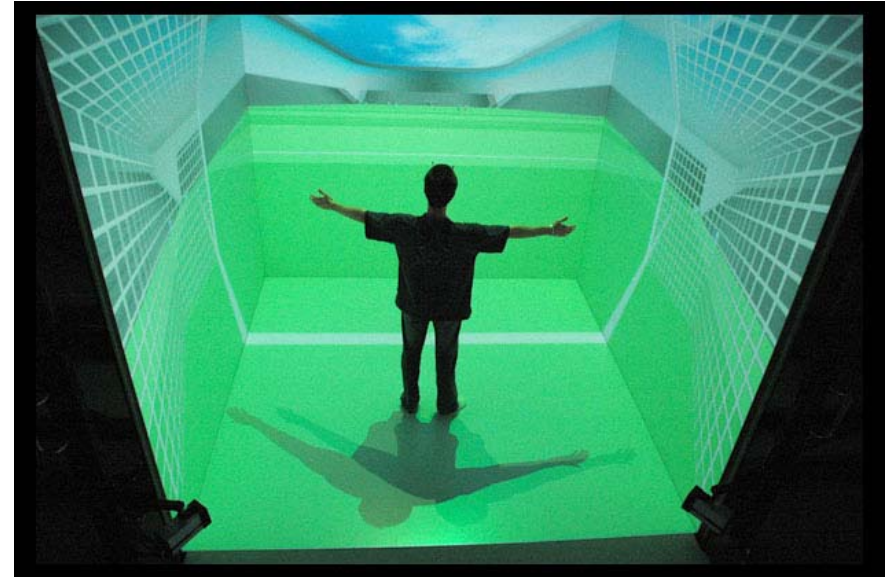
Transformation of the notion of virtual space

Virtual space: an autonomous reality

Merged reality of physical- digital

virtual reality is "the artificial world of three dimensional images that creates the computer and to which the user can participate and interact with the elements that consist that "world", by using his senses"

Nicholas Negroponte

90s

overwhelming enthusiasm for virtual reality as the materialisation of a distinct autonomous reality

simulation environments

cyberspace: an infinitely dense matrix of lines and connections

cyberspace: a non-material space
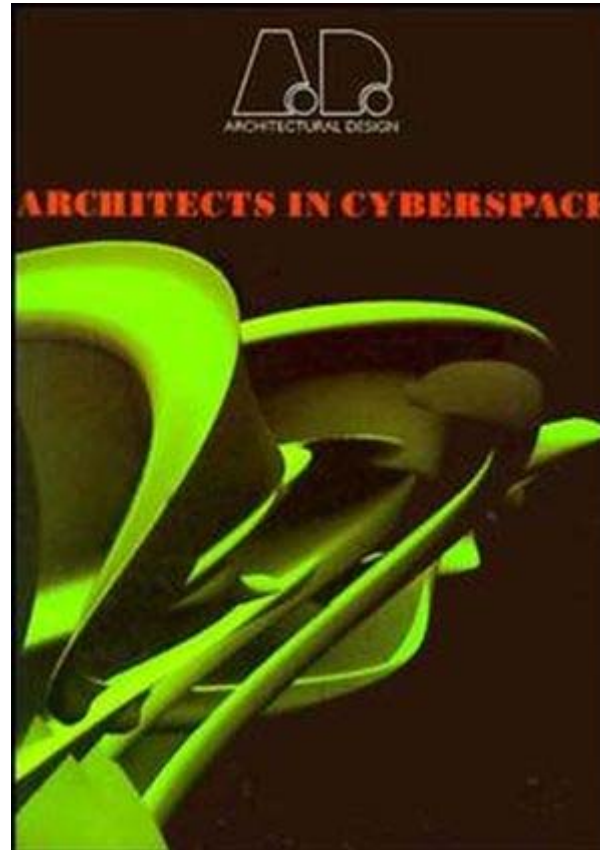

Gibson, W., 1984, Neuromancer, Voyager, London

Johnny Mnemonic by William Gibson

Cyberspace

"a consensual hallucination experienced daily by billions
of legitimate operators, in every nation…
A graphic representation of data abstracted from banks of every computer in
the human system. Unthinkable complexity.
Lines of light ranged in the nonspace of the mind, clusters and constellations of
data. Like city lights, receding… "

William Gibson in "Neuromancer"

CYBERSPACE FIRST STEPS

edited by
Michael Benedikt

AD
ARCHITECTURAL DESIGN

ARCHITECTS IN CYBERSPACE

The Virtual Dimension

ARCHITECTURE, REPRESENTATION, AND CRASH CULTURE   edited by John Beckmann
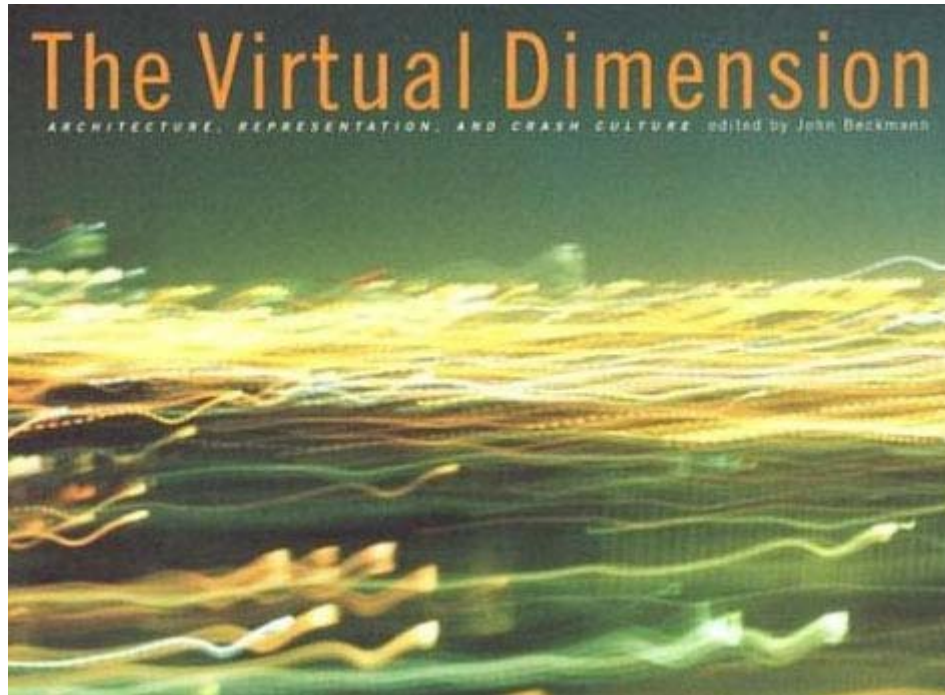
THE PEARLY GATES

a history of space from **Dante to the Internet**

OF CYBERSPACE

MARGARET WERTHEIM

'AN ELOQUENT, POWERFUL
AND ORIGINAL BOOK'
OLIVER SACKS

Wertheim

Stephenson

space of transcendence

Baudrillard

Virilio

Benedict

VIRTUAL SPACE

Picon

Rajchman

"Virtual" is not opposed to "real" but to "actual

Deleuze

Lévy

Massumi

Papalexopoulos

Baudrillard, J. (1983), Simulations, New York, Semiotext(e)

Benedikt, M. (1991), Cyberspace First Steps, MIT Press (1992)

Wertheim, M.(1999), The pearly gates of cyberspace. A history of Space from Dante to the Internet, New York, W.W. Norton & Company

Stephenson, N. (1992), Snow Crash, New York, Bantam

Deleuze, G. (1968), Difference and Repetition, New York, Columbia University Press (1994)

Lévy, P. (1995), Δυνητική Πραγματικότητα, Αθήνα, Εκδόσεις Κριτική (1999)

Παπαλεξόπουλος, Δ. (2002), "Ο επαναπροσδιορισμός της αρχιτεκτονικής αναφοράς στην τεχνολογία. Εικονικό ("εν δυνάμει") και πραγματωμένο (actual)"

Picon A., Ponte A. (eds.), Architecture and the Sciences Exchanging metaphors, New York, Princeton Architectural Press

Massumi, B. (2002), Parables for the Virtual: Movement, Affect, Sensation, London, Duke University Press (2005)

Constructions

John Rajchman Paul Virilio
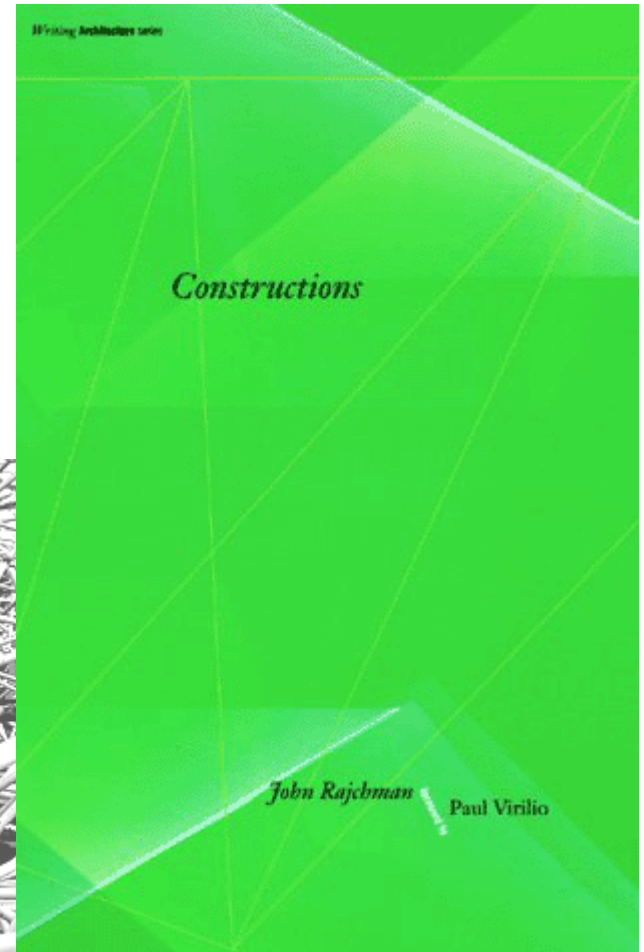
"the actual is what manifests
and effectuates the virtual,
but the actual never completely
shows or activates all that the virtual implies

"**virtual** mobilises as yet unspecifable singularities,
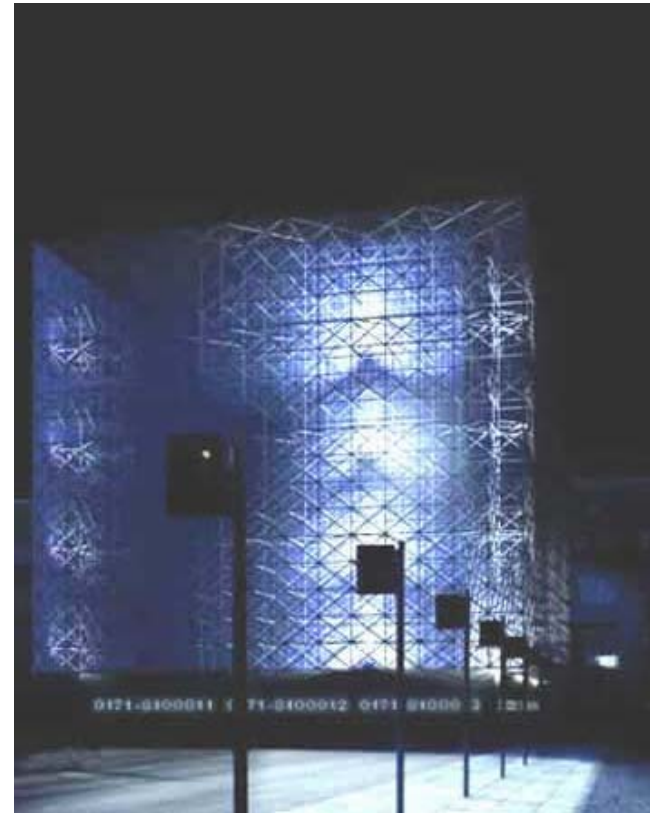bringing them together in an indeterminate plan"

today

computers tend to disappear

the boundaries between physical and digital space are blurred

digital spaces can adapt to our everyday world

"miniaturized instruments of displacement become extensions
of the mobile body"

Christian Möller-Kaleidophone_ interactive installation

Mitchell, W., 2005, "After the revolution-
Instruments of Displacement", in
Flachbart, G., Wibel, P. (eds), 2005,
Disappearing Architecture : From real to
virtual to quantum, Birkhaüser

Lev Manovich

augmented space

multiple levels of information in the physical space

Ubiquitous Computing

Augmented Reality

Tangible Interfaces

Wearable Computers

Intelligent Buildings

Intelligent Spaces

Context-aware

Smart Objects
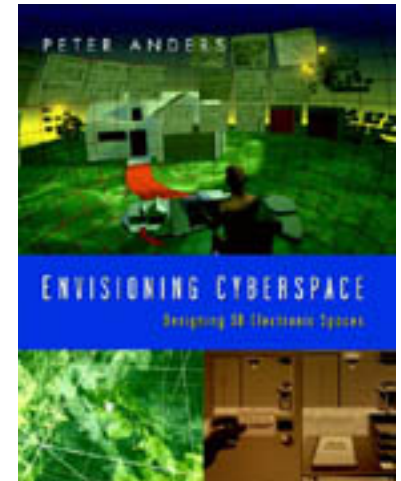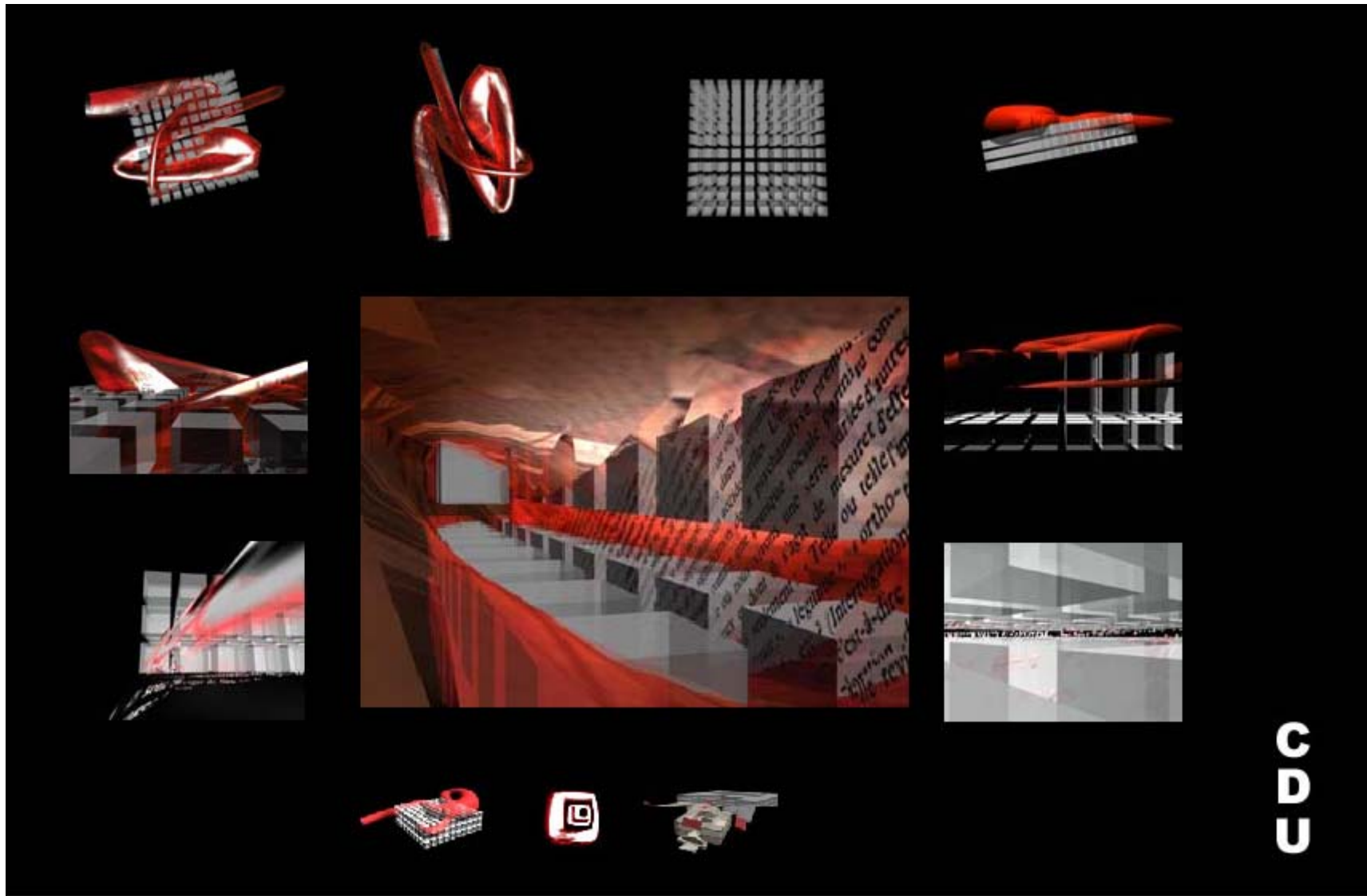
Wireless Location

Sensor Networks

E-paper

PETER ANDERS

ENVISIONING CYBERSPACE

Designing 3D Electronic Spaces

INFORMATION ARCHITECTURE

Gerhard Schmitt

Basis and Future of CAAD

BIRKHÄUSER

http://www.acadia.org/competition-98/winners.html

Body decoded to information. Self becomes transparent. What is personal when everything is obvious? Where is privacy?

Dense layers of interweaving information combined create a suffocating environment. Overexposed to information, we have little control over the amount that infiltrates our most private domain.

Information gradually infiltrates "self" and reaches subconscious. Where does our privacy reside when even our dreams are manipulated?

my_space_invaders

sonia_tzimopoulou_ > <<< giorgos_sinas

Fabio Gramazio and Matthias Kohler robotic aided construction.

…**materiality** will probably remain a fundamental feature of architectural production. …Beyond perception, our everyday gestures and movements are indebted to our machines and their specific requirements. In such a perspective the impact of the computer may more accurately be described as a reshaping of, rather than an estrangement from physical experience and materiality.

Antoine Picon

virtual

syntax of architecture

cyberspace
simulation
early conception
of virtual space

hybrid

physical
space

digital
space

responsive environments

digital materiality

new
materiality

AmI

tangible interfaces

fluid interfaces

ubiquitous computing

intelligent environments

embedded interaction