INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700  800/521-0600
NOTE TO USERS

The original manuscript received by UMI contains light print. All efforts were made to acquire the highest quality manuscript from the author or school. Microfilmed as received.

This reproduction is the best copy available
URBAN ACUPUNCTURE
URBAN PARK FOR HOUSTON DOWNTOWN TUNNEL SYSTEM

Joonsuk Ahn

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
MASTER OF ARCHITECTURE

APPROVED, THESIS COMMITTEE:

David Brown, Director
Assistant Professor
School of Architecture

Albert Pope, Reader
Gus Session Wortham Professor
School of Architecture

Mark Wamble, Reader
Visiting Critic
School of Architecture

Houston, Texas
May, 1999
This thesis is an investigation of Urban Meridian; the structure formed through relations rather than material and stimulation of it by inserting a park into everyday life.

Houston Downtown Tunnel System has been selected as a site because of its accessibility, controlled climate and slow speed. Although it is not a typical park, its characteristic rhizomatic labyrinth presents the system as a museum-like park which is interwoven among the system of tunnels. The tree may be the same as one found in a typical park, however, this context changes the tree into an object in a cultural exhibition, working as a acupuncture needle to stimulate the relationship between people and the things in their everyday life.

Although Urban Meridian has been forgotten, it continues to form the real life of the city. Understanding the city through this invisible structure can give us a clue to acupuncture and healing; because existence is always beyond the object itself.
ACKNOWLEDGMENT

I would like to express my gratitude to the following people for their kind help and support:

David Brown,
Albert Pope,
Mark Wamble,
William Cannedy,
Kathleen Roberts,
Hans Krause,
Mary Springer,
Lucia Cheung,

and my family.
CONTENTS

ACKNOWLEDGEMENT

CONTENTS

MERIDIAN

ACUPUNCTURE

RELATION  1

UNUSUAL IN THE EVERYDAY  2

ACUPUNCTURE  3

INSTALLATION ART  3

SITE  4

TUNNEL SYSTEM

LAYERS

STRUCTURE OF THE PARK  5

PLANS/SECTIONS

ELEMENT/EVENT  8

SEQUENCES

SEQUENCES  15

BIBLIOGRAPH
These Chinese words illustrate a philosophical concept embedded in Asian culture: that the world is considered as a relation of events rather than a composition of materials. Using that concept, oriental doctors and acupuncturists work through the management of an invisible object – “chi”.

**QUANTUM THEORY**

One may consider Quantum theory as an adequate model to attempt an understanding of the concept of “chi”. It remains, however, in the realm of the intangible, because the theory is beyond the concept of existence and non-existence.

In the words of Robert Oppenheimer,

“If we ask, for instance, whether the position of the electron remains the same, we must say ‘no’; if we ask whether the electron’s position changes with time, we must say no; if we ask whether the electron is at rest, we must say ‘no’; if we ask whether it is in motion, we must say ‘no’.”

The city also contains an invisible structure which cannot be adequately described as an object. Understanding the city as a distinct entity is an idealization without fundamental significance. It can only be defined in terms of its connections to the whole, and it appears as a web of relations between the various parts of a united whole.

We must place emphasis on the world of relation (*creatura*: the living) rather than on the world of object (*pleroma*: the non-living).
ACUPUNCTURE

UNUSUAL
IN THE EVERYDAY

On a clear autumn afternoon I was sitting on a bench in the centre of Santa Croce square in Florence. Of course, it was not the first time that I had seen that square. But I had just got over a long, painful intestinal upset and I was in a state of morbid sensibility. I then had the strange impression of looking at those things for the first time and the composition of the painting revealed itself to my mind’s eye.


De Chirico found the unusual in the everyday. It always exist but is hiding in the shadow of objects. It is revealed whenever something in people (memories, traces, emotions, etc.) sympathize with it. I devised elements that evoke the sympathy between people and the urban meridian. Those elements are exhibited in the glass boxes formed by paths. Most of them are the same elements the ones which can easily be found in daily life. However, the context affected by changes of weather, time and movement of passengers, change them into events. These events will act as acupuncture needles and we would find the unusual in the everyday though them.

Our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmest of screens, there lie potential forms of consciousness entirely different.

William James, The Variety of Religious Experience, p.388

Italian Square with Equestrian Statue, 1936, oil on canvas

Right. Peter Moore, Inverse Panoramic Portrait of Any Human Subject, planned in 1966, made in 1967
ACUPUNCTURE

An attempt to map onto the city another urban structure of association and recall based upon the banal and everyday; the uneventful, the personal, and the intimate rather than the public. It proposes a reminder of what may constitute the real life of the city, the multiple, unseen connections within the tissue of its existence…..Inventions in the city that might have a more profound and measurable impact elsewhere, other than the site of invention…. travelling along what might be seen as the meridians of the city to transfer their effects.


INSTALLATION ART

In an era of fluid identities, mobile lifestyle and undefined relationships, installations are islands of refuge. They allow us to connect with the world through materials, providing the empirical reality that our society craves…. Installation is an art of connections, which is experience as a whole. The unity of components is greater than the sum of its parts.

Kate Davidson and Micheal Desmond, Islands: Contemporary Installations, p.4
TUNNEL SYSTEM  SITE
HOUSTON, DOWNTOWN

The automobile is the finest expression of transportation-individualism ever devised.

Joel Garreau

In Houston, a person walking is somebody on his way to his car.

Anthony Downs

Houston lost its normal relationship with people because of its temperature, humidity and the speed of cars. It became the first major city without pedestrian streets in the world. Given this situation, the public park has become a big open space that accommodates various events. Public parks are not a part of public's everyday life.

Left: "Contemporary City for 3 Million Inhabitants" (1922), Le Corbusier
Right: Houston Freeway 610 loop at the Post-Oak, Galleria Area

In the summer when temperatures sizzle and the downtown streets are deserted, a newcomer wonders, where have all the people gone? Natives know the people of Houston are underground.

http://houston.sidewalk.com/link/10819

Retailing and all of the elements that contributed to the formal and social continuity of the traditional street have been introverted in Houston, and people's paths have either been relegated below grade or into the air, where they can be airconditioned.


Downtown of Houston is organized on a simple, rigid but functional grid. Underneath this extremely rational system, the tunnels have been extending and growing due to local demands, without an overarching masterplan. It is the only rhizomatic figured urban structure and it is the only structure which serves as a pedestrian network in Houston. It has a controlled indoor climate and it maintains a slow speed. This is the only place to insert a park the lives of everyday citizens.
To describe what has happened, one has to cross out that old word 'observer' and put in its place the new word 'participator' in some strange sense, the universe is a participatory universe.

John A. Wheeler, in Fritjof Capra, The Tao of Physics,

I established 4 different levels of observation. These levels show that objects have to be defined by the relation between observer and the objects.

What we observe is not nature itself, but nature exposed to our method of questioning.


Observation Levels
1. Tunnel
2. Street
3. Skyway
4. Surrounding Highrise Buildings
PLANS / SECTIONS ELEMENT / EVENT
TUNNEL LEVEL PLAN
I designed 4 animated sequences within the computer environment as a process and a method of investigation of the relationship between pedestrian and the park.

3D Model Software: Form-Z
Animation Software: Cinema-4D
Editing Software: Adobe Premiere
BIBLIOGRAPHY


Benedikt, Micheal For an Architectre of Reality, Lumen Books, New York, 1987

Capra, Fritjof The Tao of Physics, Shambhala, Berkeley, 1975

Davidson, Kate Island: Contemporary Installations, National Gallery of Australia, 1996


Freshmen, Phil Public Address: Krzysztof Wodiczko, Walker Art Center, 1992

Holtzkay, James Asphalt Nation, Crown Publisher, New York, 1997

Jacques, Nicolas (ed) Yves Brunier, Birkhauser, 1996

Jennings, Jan (ed) Roadside America, Iowa State University Press, Iowa, 1990

Kellein, Thomas Fluxus, Thames and Hudson, New York, 1995

Kim, Yong-Ok How to do “East Asian Studies”, Tongnamu, Korea, 1986

Kuhn, Thomas S. The structure of Scientific Revolutions, University of Chicago Press, Chicago, 1970

Lee, Jong-Keon The existence and meaning of Architecture, Kimundang, Seoul, 1995


Oxley, Nicola and Petry, Micheal Installation Art, Thames and Hudson, London, 1994


Weilacher, Udo Between Landscape Architecture and Land Art, Birkhauser, Germany, 1996