



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA





EVERYDAY ITEMS EVOLVED FROM BEING RE-USABLE TO DISPOSABLE. A DISPOSABLE CULTURE DEVELOPED ALL AROUND THE WORLD. TECHNOLOGY ADVANCES BRINGS RAPID CHANGE TO THESE EVERYDAY ITEMS.

ARCHITECTURE DID NOT EVOLVE THE SAME WAY AND CAN NOT ADAPT TO TECHNOLOGICAL ADVANCES IN THE SAME WAY AS ABOVE MENTIONED EVERYDAY ITEMS.

THIS DISSERTATION EXPLORES A WAY FOR ARCHITECTURE TO BRIDGE THE GAP THAT FORMED BETWEEN A DISPOSABLE ADAPTABLE SOCIETY AND THE 'SLOWNESS' OF ADAPTATION IN ARCHITECTURE. THIS WILL BE A FURTHER DEVELOPMENT FROM WHAT HAS ALREADY BEEN RESEARCHED BY EARLIER PIONEERS LIKE ARCHIGRAM AND THE METABOLISTS OF JAPAN.



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ABSTRACT:

THE INTERNATIONAL STUDIO UNDER BANG LEE (NEW YORK) HAD THE APPROACH OF 'DESIGN BY RESEARCH'. THE STARTING POINT WAS DOING WHAT IS CALLED 'SAMPLING', THIS GIVES YOU AN IDEA OF WHAT HAPPENS IN AND AROUND AN AREA OF RESEARCH. FROM THIS 'SAMPLING' A DIRECTION FOR RESEARCH WAS CHOSEN FOR THE DESIGN DEVELOPMENT.

A SIMILAR APPROACH WAS TAKEN IN THIS DISSERTATION BY MAKING USE OF THE 'SAMPLING' METHOD AND 'DESIGN BY RESEARCH' APPROACH.

THE SAMPLING FOR THIS DISSERTATION WAS TO INVESTIGATE WHAT THE NEEDS ARE WITHIN THE WORLD REGARDING ADAPTABILITY AND THE 'SLOWNESS' OF ADAPTATION WITHIN ARCHITECTURE. THESE NEEDS GAVE THE PLATFORM FOR INVESTIGATING AND LOOKING INTO EXISTING SYSTEMS AND ELEMENTS IN THE WORLD. BY IDENTIFYING THESE SAMPLING OF SYSTEMS, RESEARCH WAS UNDERTAKEN TO CONNECT POSSIBLE SYSTEMS TO CREATE A TECHNOLOGY PLATFORM. THIS SYSTEM BEING ONE POSSIBILITY WITHIN IDEAS ALREADY THOUGHT OUT FROM GROUPS LIKE ARCHIGRAM AND THE METABOLISM GROUP UNTIL TODAY WITH ALL THE DEBATE FROM CONTAINER ARCHITECTURE TO PREFABRICATED HOUSES AND BUILDINGS. THIS IS NOT AN EFFORT TO PROPOSE NEW WAYS OF THINKING IN ARCHITECTURE, BUT COMBINING IDEAS AND SYSTEMS OUT IN THE OPEN TO CREATE A SYSTEM AND A BUILDING, BEING ABLE TO FIT INTO CONTEXT IN AFRICA AND ALSO IN THE SYSTEMS AND CONTEXT OF THE BIGGER WORLD.



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"sampling"

Sampling gave us the direction the project steered towards and that was Graffiti. With the concept defined we looked at the lifestyle behind graffiti and how its a non-permanent form of art.

eindhoven - design capital



up-coming lifestyle



temporary



mobility



movements



Every structure has limits in how it will be able to move, the human bone structure is the perfect example for that, the same application was given to our project with the site, horizontal and vertical reference being the limits.

limits & rules



basic conceptual movements

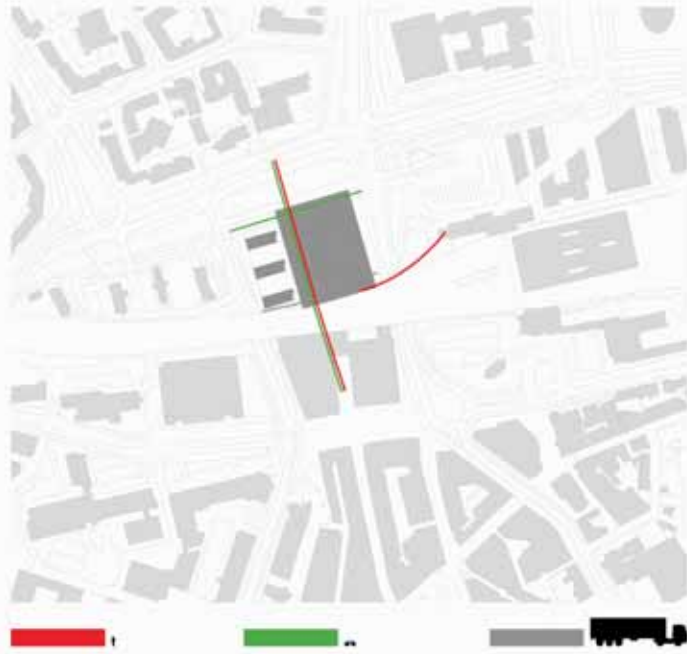


able to adapt to certain needs

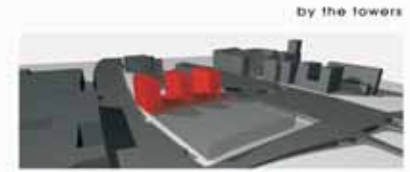
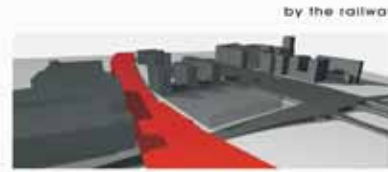




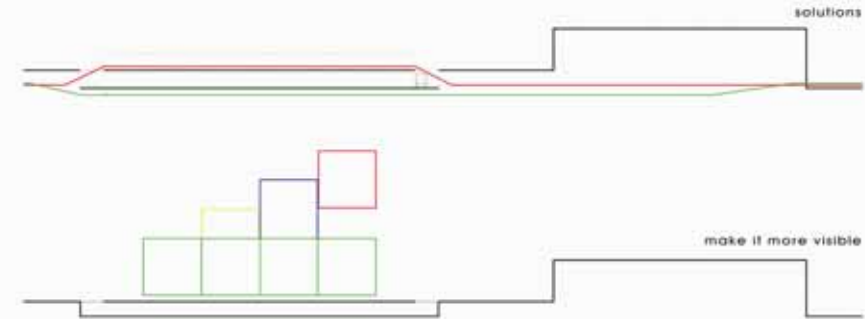
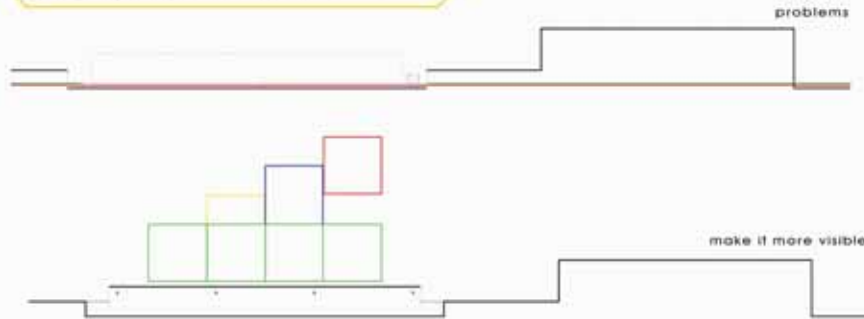
site analysis



The site analysis indicated that the site is cut off from the city by the topography, its lying lower than the rest of the city level. Access to the site is also a big problem, and human involvement on the site is non-existing.



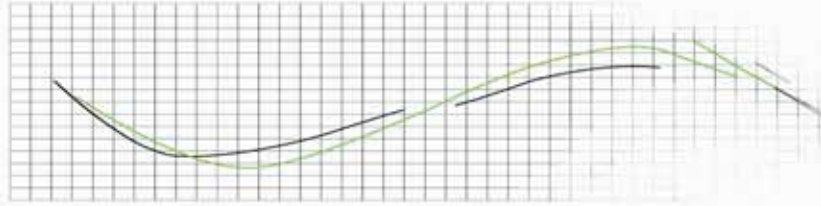
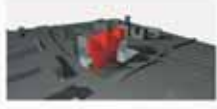
We resolved the access to the site with access-rampade as indicated on the sections. The topographical problem was resolved by lifting the site onto the existing city level. Human involvement is improved with the structural elements on street level and the quick access from the mainstation. Visibility of the building is improved by the multifunctional bases.



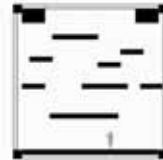
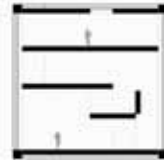
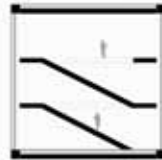
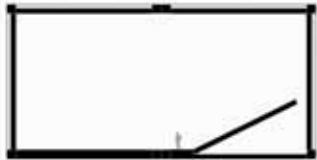
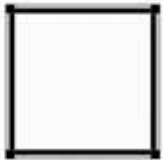


facilities

The movements and combinations of the boxes are flexible to whatever needs has to be met. The box was chosen as the shape for the space as it can accommodate the vertical and horizontal spatial elements optimally, forming the space.



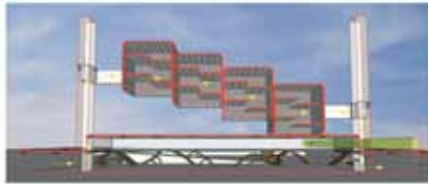
Movements of the multifunctional boxes will provide the possibilities to change the function. When in upright position the vertical walls can be used to define required space, and if tilted the boxes can be placed in different levels to define areas. Access is provided to the boxes via adjustable access lifts.





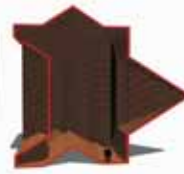
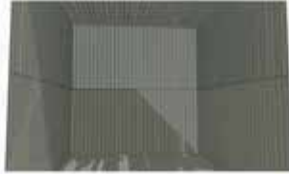
perspectives

The access tunnel from the trainstation is set in place to improve direct access to the site from an important activity node of Eindhoven. Access from the street to the site's city-level is provided by access towers and a pedestrian ramp next to the railway lines.



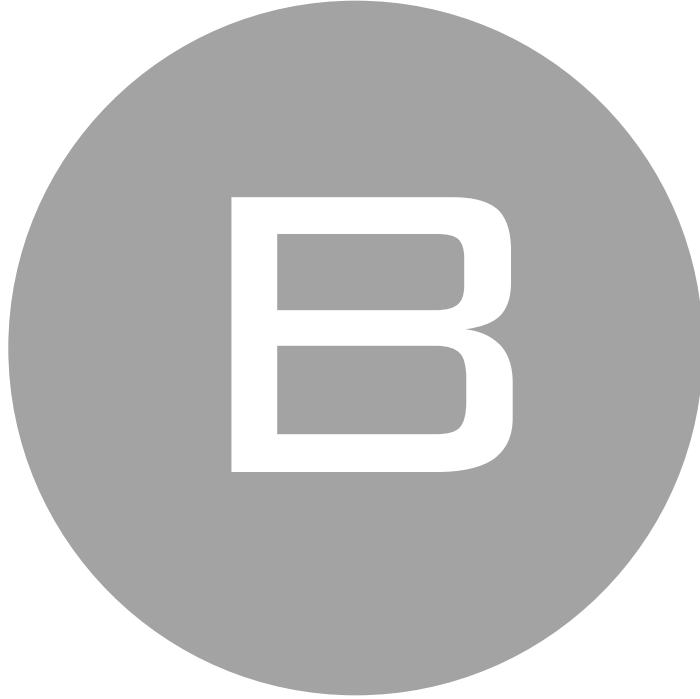
visions

Working against gravity and turning usefull spaces and areas is what every boy provides in any direction it is turned. We have some examples of how a boy can be structured to provide spaces in any given direction the gravity point is placed.





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THEORETICAL INVESTIGATION



TRANSPORT

INTERNET

THIRD WORLD

TENT

TIME

DISPOSE

WIRELESS

TRAIN

SHIPMENT

DISASTER

NOMAD

DISASTER

CRANE

MOBILE

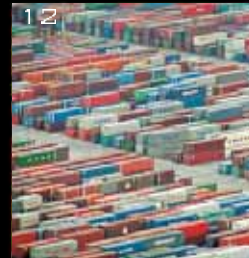
TRAIN

AIRPLANE

FASHION



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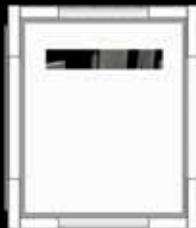




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Rear view



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Front view



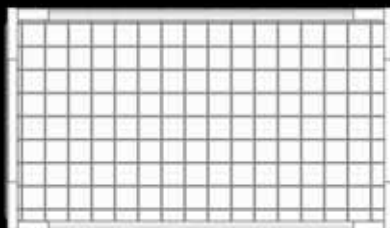
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Window panel front view



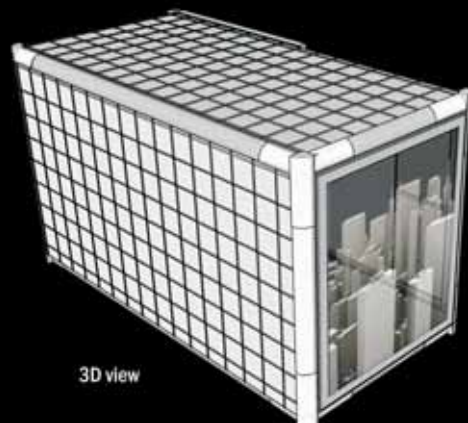
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Side view



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Side view

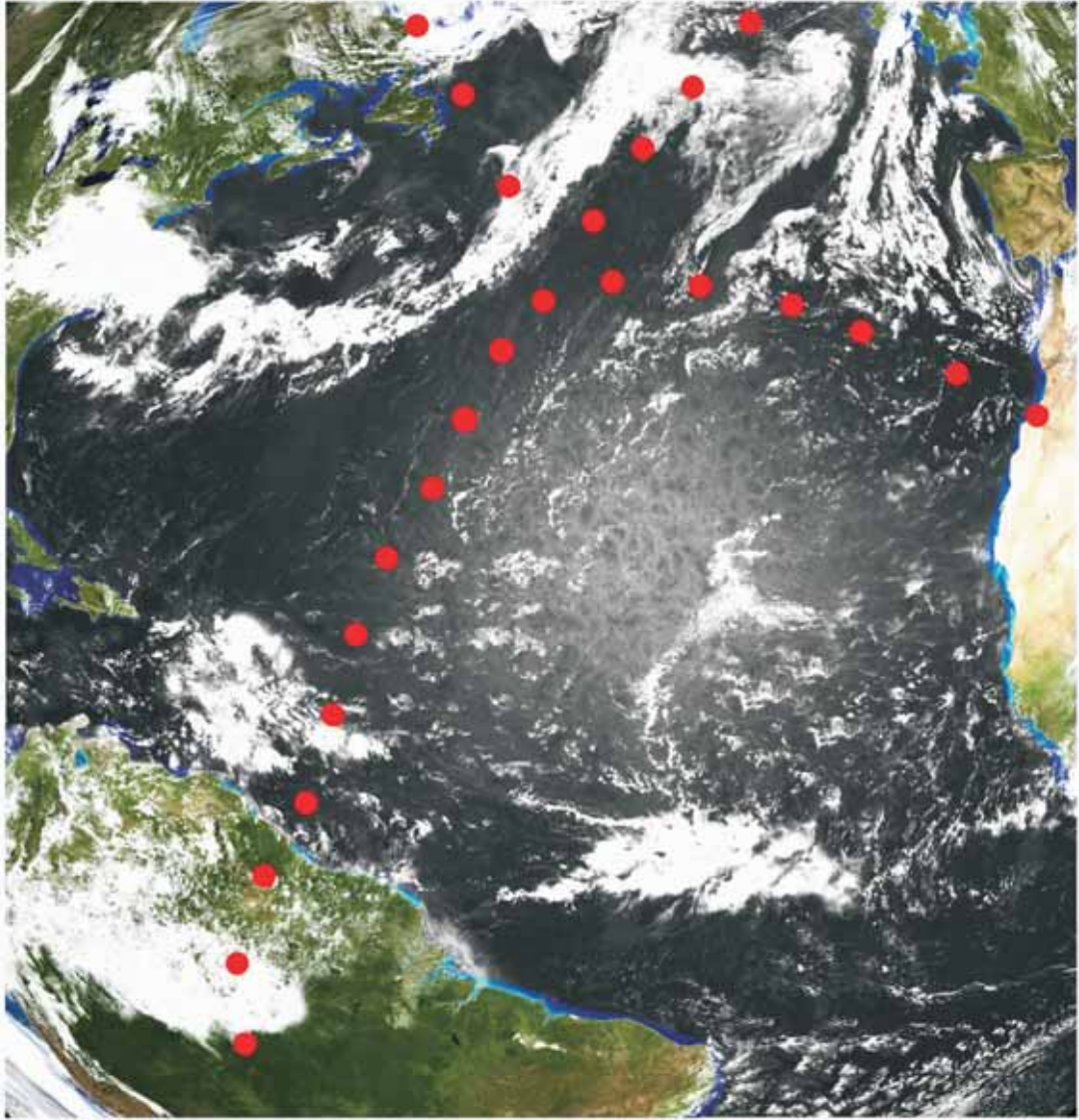


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3D view

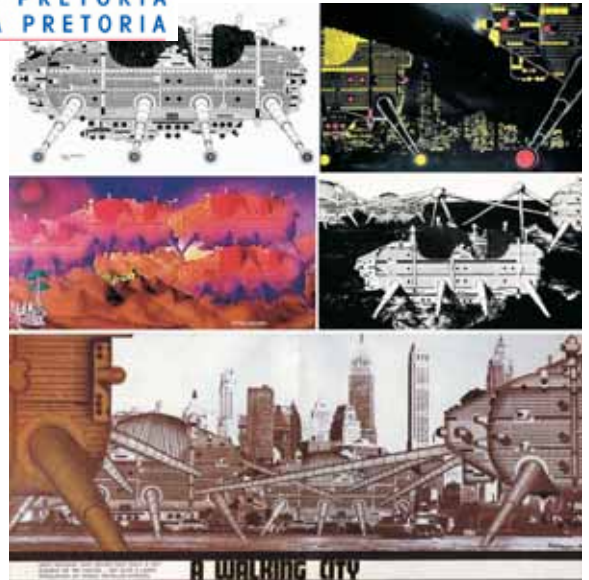


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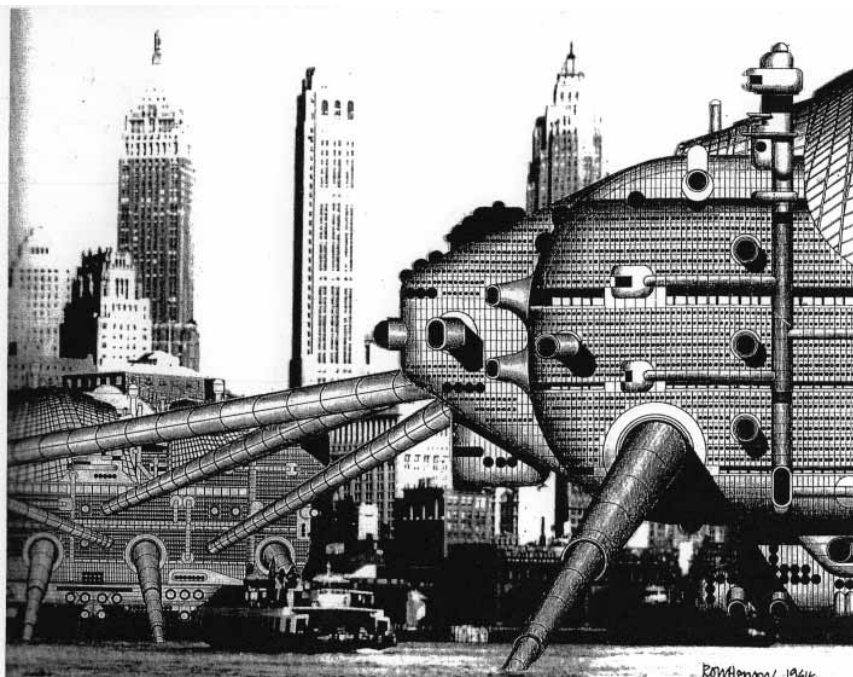


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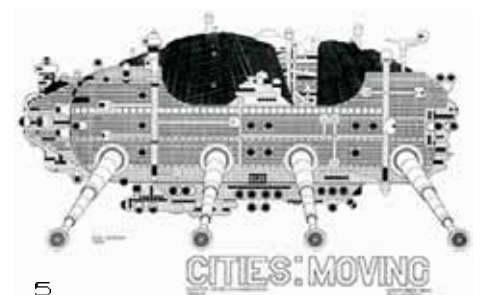
'THE REASON I VALUE ARCHIGRAM'S WORK OVER ALL THAT WHICH HAS BEEN PERFORMED DURING THE LAST TEN YEARS TO DISMANTLE THE APPARATUS OF MODERN ARCHITECTURE IS THAT IT HAS BEEN CONSISTENTLY COUNTER-CULTURAL IN CHARACTER. ARCHIGRAM HAS NOT LIMITED ITS AREA OF PLANNING TO ARCHITECTURE ALONE. AT TIMES ITS WORK HAS BEEN GRAPHIC. AT TIMES IT HAS BEEN PLASTIC. AND AT TIMES IT HAS TAKEN THE FORM OF NEW TECHNICAL PROPOSALS. IN EACH CASE, HOWEVER, THE WORK DONE HAS BEEN TOTALLY DIVORCED FROM THE PATTERNED LOGIC ARCHITECTURE HAS CREATED WITHIN ITSELF. WHEN ALL VALUES HAVE THUS BEEN TURNED TOPSYTURVY, ARCHIGRAM HAS ESTABLISHED A NEW STRUCTURE OF VALUES, A NEW SYNTAX, AND DEMONSTRATED THE POSSIBILITY OF AN INDEPENDENT SUBCULTURE. JAPAN'S METABOLISM GROUP, IN CONTRAST TO ARCHIGRAM, LACKED THIS PERSPECTIVE ON THE NECESSITY OF DISCOVERING COUNTER-CULTURAL VALUES. AS A RESULT, IT MADE THE EASY IDENTIFICATION WITH THE IDEAS OF MANAGERIAL PLANNING IN THE RAPIDLY EXPANDING CITY ECONOMY," AND ULTIMATELY FOUND ITSELF BEING MANIPULATED IN THE INTERESTS OF THE GOVERNMENT'S MERETRIGIOUS POLICIES. ARCHIGRAM'S WORK IS BEING ASSESSED AND APPRECIATED A NEW TODAY BECAUSE, NOT MERELY IN ARCHITECTURE, BUT IN A FAR BROADER SPHERE, PRE-ESTABLISHED SYSTEMS OF EVERY KIND ARE DISINTEGRATING BEFORE OUR EYES. WHAT ARCHIGRAM HAS DONE IS TO DEMONSTRATE CLEARLY ONE PART OF THIS PROCESS. IT IS MY HOPE THAT WITH THE PUBLICATION OF ARCHIGRAM'S WORK OF THE LAST TEN YEARS AN EVER MORE INTENSE EXCHANGE OF COMMUNICATION WILL TAKE PLACE, THAT THE MALIGNANT CELLS OF THE COUNTER CULTURE WILL BE TRANSPLANTED TO EVERY PART OF THE WORLD, TO EVERY AREA OF CULTURE, AND THAT THE PROCESS OF DISINTEGRATION WILL BECOME INCREASINGLY VIOLENT AND UNIVERSAL.' (ISOZAKI, 1999: 4)



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IN SPITE OF THE NATURAL PROCESS OF INEVITABLE CHANGE THAT OCCURS TO IDEAS THROUGH THE YEARS, SOME CENTRAL IDEAS DEVELOPED BY METABOLISM ARE EXTREMELY TOPICAL: FIRST OF ALL THE MATTER OF HOW TO LINK THE JAPANESE TRADITIONAL CULTURE (THAT IS AN ASIAN CULTURE) TO THE WESTERN MODELS, AS WELL AS THE NECESSITY TO BLEND MODERNITY WITH THE HERITAGE OF THE NATIONAL CULTURE AND TO CREATE AN ENVIRONMENT THAT COULD PROMOTE THE HARMONIZATION AND THE COOPERATION OF THE DIFFERENT ASPECTS OF THE CONTEMPORARY SOCIETY.

THE IMPORTANCE OF A LINK BETWEEN CULTURE AND OTHER MODELS IMPOSED FROM OUTSIDE ALSO PLAYS AN IMPORTANT ROLE IN SOUTH AFRICA, AS ONE SHOULD ALSO CONSIDER CULTURAL ASPECTS WHEN AIMING TO IMPLEMENT ANY NEW SYSTEM OR IDEA.

FOR THE METABOLISM GROUP THE CITY IS CONCEIVED AS A METAPHOR OF THE HUMAN BODY, AND IS SEEN AS A STRUCTURE THAT IS COMPOSED BY ELEMENTS (CELLS) THAT ARE BORN, GROW AND THEN DIE, WHEREAS THE ENTIRE BODY CONTINUES LIVING AND DEVELOPING.

METABOLIST ARCHITECTS BELIEVED THE ARCHITECTURE SHOULDN'T BE STATIC, BUT CAPABLE TO UNDERGO "METABOLIC" CHANGES, AND INSTEAD OF THINKING OF FIXED FORMS AND FUNCTIONS, THEY DEVELOPED STRUCTURES AND PROJECTS COMPOSED OF MOBILE AND FLEXIBLE ELEMENTS.

"WHAT WILL BE THE FINAL FORM? THERE IS NO FIXED FORM IN THE EVER DEVELOPING WORLD. WE HOPE TO CREATE SOMETHING WHICH, EVEN IN DESTRUCTION WILL CAUSE SUBSEQUENT NEW CREATION. THIS "SOMETHING" MUST BE FOUND IN THE FORM OF THE CITIES WE ARE GOING TO MAKE: CITY CONSTANTLY UNDERGOING THE PROCESS OF METABOLISM". (PERNICE, 2004, 359)

