

COLLABORATIVE LANDSCAPES OF GROWTH AND CHANGE

/THE CASE OF NICOSIA

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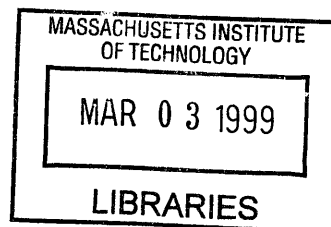
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to my parents for their encouragement, patience and support.
and friends, old and new/ Thank you

"A boundary is not that at which something stops but as the Greeks recognize the boundary is that from which something begins its essential unfolding...all places receive their essential being from locations and not from space" Martin Heidegger, Building Dwelling Thinking



illustration 1. site model 1/2500

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-THE CASE OF NICOSIA

by: TERESA TOURVAS

Submitted to the Department of Architecture on January 18th, 1999
in Partial Fulfillment of the Requirements for the
Degree of the Master of Architecture.

ABSTRACT

Continually changing information technologies and communication patterns have facilitated the spatial dispersal of production and consumption while, offering new affordances on physical and organizational structures. Within these new affordances, a larger context encompassing aspects, of identity, self-expression, and human interaction, is in seek of redefinition.

The new Europe is a direct result of both cultural and economic unification. As boundaries are beginning to blur, the role and definition of the public sphere ultimately leads us from a political to a social thus urban discourse. While this manifesto is not program, it nonetheless indicates a broadening of outlook. Instead of remaining inert architecture must react to the changes and renewal of the current developments emerging in other fields and capitalize on their dynamic nature. Architecture as a mediator, an activator of new situations.

Collaborative landscapes, locates itself in a series of strategies, as the primer for a possible future. The project takes its cues from the new work affordances and collaborative settings and examines the concept of crossover and interdependencies for addressing the border situation in Cyprus. Places for new types of social integration and trans-border integration. The project calls for radical if not utopian long-term solutions while placing new demands on the role of the architect, as an orchestrator and in the role of an active participator. By meshing political, urbanistic, and social issues new architectonic strategies and programs are developed whose virtual presence reaches beyond their locale, global yet intrinsically local.

Thesis Supervisor
Peter Testa
Associate Professor in Architecture

/THESIS OVERVIEW

The project consists of two parallel investigations: a theoretical programmatic research and an architectural investigation. Their parallel development produced an intertwined process allowing for the direct examination of assumptions, a testing ground for the proposed scenaria. Although the design process was not linearly defined, for the purposes of this book, the issues are separated in projects defined by their relevant scale. Crossover and overlap occurs throughout the investigation as the findings reach from a global setting to the laboratory and back. The site became an impetus for a wider search which incorporated socio-political and urbanistic issues, while the program opened up the research in specific but transferable notions: growth, change, flexibility, and new definitions of private and public space in a topology of an intervention.

- 1.00 on relational contexts/ trans-border integration
In a constantly changing context, how does the position of the architect begin to influence not only physical space, but also human relations and activations.
 - new operational contexts/ defining the problem domain
 - architecture as a mediator/ activator/
 - scenario 01. collaborative landscapes/ knowledge ecologies

- 2.00 site strategies/ grafted topologies
Collaborative landscapes investigates the operational possibilities in collaborative work as a catalyst of regeneration and reintegration of a hard border in Nicosia.
 - Nicosia International Airport
 - on grafting/ architectural intent
 - initial reactions/ strategies of infiltration studies at 1/2500
 - infrastructural affordances/ studies at 1/ 500

- 3.00 on macro and micro/ programmatic activations
 - gatehouses/ the highway
 - on moebius programs, studies at 1/500
 - the primer/ cluster 01, studies at 1/500

- 4.00 crossovers and overlaps
 - organigrams
 - the unit as the generator of change studies at 1/200
 - parallel research methods and contributions

- 5.00 conclusions
Motivation behind project. Redefining the role of the architect as an active participator rather than formalizing or disguising situations.

appendix 01 nicosia the divided capital conferenece

bibliography

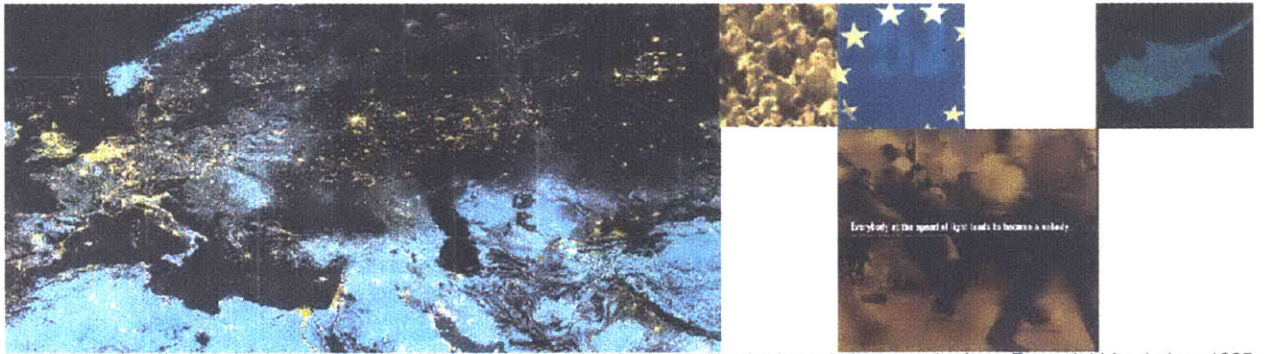
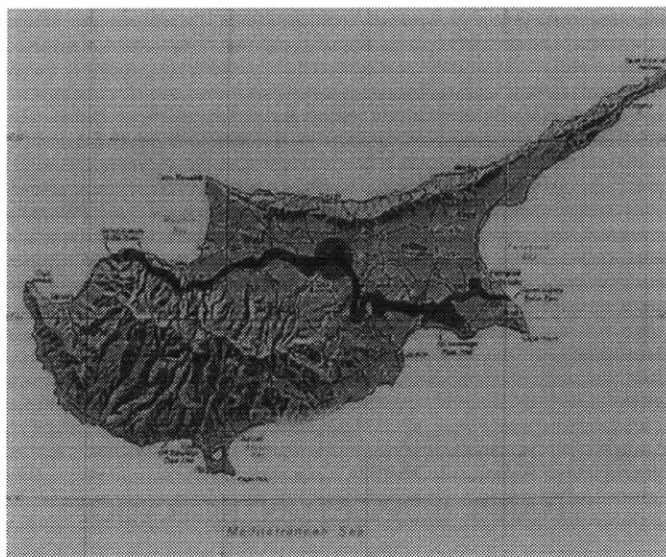


illustration02. memo-transborder integration/ selected photographs from Essential Mac Luhan 1995

1.00 /ON RELATIONAL SETTINGS
TRANS-BORDER INTEGRATION

"We are currently not looking at the introduction of new factors but infact their re-combination."
Manuel Castells,
Technopoles of the world

illustration 03.
map of Cyprus,
scale:1/2000000 m
the neutral zone runs from
east to west, Nicosia the
capital is indicated with the
circle



new operational contexts /defining the problem domain

Continually changing organizational structures, work processes and communications technologies, have developed new patterns of spatial and labor division. Trans-national cooperations are structuring economic processes on a planetary scale, allowing the formation of a global economy- by a global economy we understand one that works in real time as a unit in worldwide space be it capital, management, labor technology information or markets.¹ New possibilities in distributions and interrelations of neighboring countries have created crossings in labor, capital, information, manufacturing, markets, and a tendency in developing collaborative and joint projects which overlook geopolitical boundaries.

1. Manuel Castells
Technopoles of the world

New realities are also emerging on the metropolitan environment. The forces that have led to the territorial accumulation of services in the past is now modified by networking and a decentralized attitude. The emergent structures operate in a system of codependencies, networks which are malleable and open to change. The networking affordances are both physical and virtual.

The linear-time and place definitions of the past have been replaced by a lineal approach and understanding, a relational attitude of the many and the simultaneous, an attitude which has collapsed yet multiplied time, but infinitely expanded space. As communication technologies allow for more complex levels of information sharing, (remote collaboration, telecommuting) a larger social context which encompasses aspects, of identity, self expression, human interaction, leisure and recreation seeks redefinition.

architecture as a mediator /activator /an interface

2. The Nicosia masterplan is a joint project which has been running under the auspices of the UNDP since 1983 with the collaboration of Greek Cypriot and Turkish Cypriot architects, planners, and sociologists. The work has concentrated in rehabilitation in the old city, roadworks and the coordination of social projects, treating the city as a whole.

The site, Nicosia, a divided city, as a result of the Turkish invasion twenty-five years ago. The political situation of the island has lead to complete segregation of the two ethnic communities of the island, Greek Cypriot and Turkish Cypriots. There has been no communication between the larger communities until quite recently with the establishment of independent bi-communal projects². While a political solution to the problem is yet to be reached, a series of gradual small initiatives between individuals or groups from the two sides is beginning to create a positive climate for reintegration. Based on economic, scientific, but also a social will these interventions are gradually reestablishing relations between the estranged communities.

A hypothetical scenario is proposed here such as entry to the EU which implies opening of the border despite the internal political resolution of the problem. Issues of reintegration: reintegration of two ethnically different groups, and an urban fabric which has been significantly altered since the war. This process will require a period of time not only for the physical adjustment but also for psychological adjustment. Conflicting aspects and situations enter a metabolic exchange infecting, affecting, mutating. Political, urbanistic, social and architectonic aspects become meshed to yield a new type of space for educational exchange, and communication.

The aims of this proposal, speculative in its nature, is to develop operative models which allow for the reintegration to happen at different levels, different speeds in "multipli-city" avoiding a two dimensional extrusion of an over-generalized planning proposal, accepting the city as a dynamic entity, which cannot be preconceived in a top-down planning proposal. The problem does not call for a fixed solution, or infact a prescribed political solution at this stage, but a set of models which begin to work in coexistence, developing in a dynamic continuum. RE-integration, is a collaborative result as the different systems begin to inform one another.

1. The island has been divided for the past 24 years since nationalistic turmoil in 1974 resulted in the military invasion of Turkey, still present on almost 40 percent of the island. The results of this war was the separation of the then existing mixed community of Turkish Cypriots and Greek Cypriots to the Northern and Southern part of the island respectively. Since the separation, the two communities have had no interaction between them. Crossing the Green line, the Neutral UN Buffer zone, is restricted to diplomatic convoys and more recently bi-communal reconciliation meetings.

The neutral zone,¹ becomes a point of crossover, and overlap, social and programmatic, the grounding of interdependencies, and future flows. A bi-communal collaboration, in research, growth and leisure, forms the first active attempt for a positive reintegration. The program, itself a glimpse into a possible future, acts as a catalyst in redefining history and future of a place, and its inhabitants.

"...the rewriting of the text the multiplicity of readings the denial of the linear and the absolute, the multiple the nonlinear, the many and the simultaneous, the new cultural identity which does not deny, but allows for the multiple does not determine but enhances the possible..."

Sadie Plant, *The Virtual Complexity of Culture*

/note

The project does not seek to homogenize by diminishing differences, but seeks to find the overlaps and commonalities which form the connecting link. The notion of a national identity expressed in the architecture is problematic within a border condition but particularly at a point of a coaxed integration. The sense of otherness and identity are issues which are posed at an individual level within everyday relations rather than in the assumption of two solid bodies (the two communities) coming together. The terms and the diversity of positions and oppositions to the project makes this project a political act, an act that is reflecting my personal position.

/scenario 01-collaborative landscapes/ knowledge ecologies

The conglomeration of low and high tech research and development labs creates an artificial ground to locate crossovers, cultural, social, and interdisciplinary. A network of interdependent research labs, establishes Economic and Research links between the two sides, leading to a reevaluation of the border region despite of the current political stagnation.

These R&D incubator and training institutions include light manufacturing capabilities in microelectronics, medical engineering, agriculture and renewable energy.¹

The project is initiated by local pioneers who see the development of new industries, as a crucial factor in the definition of the country in a technologically advanced Europe. The project capitalizes on the use of natural and human resources from both sides of the island while creating jobs and income for both communities, in low tech and high tech fields, .

The combination of EU research funds, government, private local, and international research groups ensure the success of a collaborative effort. Smaller start-up companies gain from a parasitic relationship with the larger institutes, and place a different velocity in the development and change.

The research model is one of multiple agencies, rather than mega-corporations, relying on shared resources and optimization while allowing for exponential growth. Growth is anticipated, but not defined. An initial timeframe of ten years allows for closer study of the emerging patterns. The incorporation of some of the university facilities in the area nearby opens up new possibilities for overlap in facilities and personnel, actively connecting academic ongoing research projects and industry.

Within the first ten years of its establishment the Institute estimates to house 60 R&D companies, employing approximately 800 researchers and up to 800 unskilled labor in support personnel and services. The project aims at organizing an initial condition, set into motion with a hybrid program, and regulated by dynamic policies.

The physical location of the island is a crucial factor in the connectivity and success of the project on a territorial Mediterranean scale while the technological affordances ensure a location on a global scale. It is a major project that tries to reshape the technological landscape of the city in which it is located and with it the countries future. The premise is tested within the green line, the militarized zone dividing Nicosia. It is a politically loaded site where initiatives like the masterplan and the joint neuroscience centre are located.

1. The proposal for the expansion of these new industries is supported by recent government directives. The Ministry of Industrial Relations: recently placed new incentives for developing advanced research in biotech and high tech.

The decisions behind the selection of the program and specific direction arises from an analysis of local dynamics, involving political moves and new markets opening up with the creation of the new eastern European countries, the opening of a mid eastern market and the EU influence in the area. As Cyprus becomes a full member of the union a great emphasis is being placed on technology and developing new investments on the island.

The programmatic selection becomes vital in the reactivation of the site, a reactivation which spreads its effects to a larger context, no longer bound by distances but socio-psychological and economic effects.

Services and interdependencies used as catalyzers, are pertinent to the island as a whole, a symbiotic system not only in program but in service and infrastructure.



Illustration 4. Map of Eastern Mediterranean region, BREPOLIS, 1995



illustration 5. Nicosia International airport, Photomontage, current state.



2.00/ SITE STRATEGIES/ GRAFTED TOPOLOGIES

"Residual urban structures and ill defined links which are produced by modern transport networks are unresolved spaces within modern cities which create a confusing yet potentially liberating situation. For it is here in the in between that traditional planning methods become obsolete and that unconventional programs and new orders in relationships and types of urban spaces can be manifested" Gonzales Rene, Communication Barcelona UIA 96 p 128

A strange territory, casually unfolding on the already existing, a silent artificial landscape *"touching the historical time of the city yet neither canceling it nor imitating it."*
(New landscapes, E Bru)



illustration 6. aerial photograph: courtesy of James Brumswick, UN Forces

/nicosia international airport

The site, lies in the no-mans land, the green line which cuts the island and the city of nicosia into two. The neutral zone becomes the site for the regenerative healing. The airport, is seen as one of a series of interventions rather than an isolated in its specificity site response. The Nicosia International airport lies within the buffer zone in the western suburbs of the city. An uncompleted territory undergoing continuous mutation, recycling, and change (at one point also a military base) phenomenologically distant from the dynamic yet harmonious continuity of the classical city.

The airport has been disused since 1974. It is currently under UN jurisdiction. Despite its relatively good state proposals for its re-operation¹ as an airport have been rejected, as non economically viable. The site offers itself to redefinition. Once an edge condition, an abandoned gateway it becomes the conceptual and physical gateway for the two sides.

1. Two independent proposals for the rehabilitation of the airport
UNDP 1985
Government of Cyprus
Civil Airforce 1991

It is a site characterized by extreme dimensions, exceptional demands and high architectural quality requiring a careful and critical approach.

Negotiating between the dominant linear character of the site as a whole, brings into play a topology of landmarks, flows and a complex ecosystems. The new inhabitation calls attention to interrelated systems and proposes new definitions based on systematic integration of political, regional, and natural resources. The aim is not to reflect an existing situation but to set the parameters which begin to transform it. A utopian proposition is in order, one which speaks of scenaria rather than solutions, of strategies rather than plans. History and future of the place become redefined by the re-framing of the problem within new parameters. The solution lies in a critical definition of new rules.

on grafts /architectural intent

The site blurs the distinct separation between architecture and landscape. New conditions of surface, open fields for active participation, and a network of public programs are the components of the new intervention. The proposal does not seek to density or significantly physically alter the shape of the existing fabric, but takes its cues from it, and establishes new systems to engage the public and the program. The notion of the public realm is not dependent on monumental objects; it is rather, an architecture of fragments, of relations and associations ...a sampling process which is never the same, nonlinear in the subtle relationships between individual and collective. Its integration in the landscape is complete as it is inextricably woven into existing physical political and social conditions.

Given the impossibility of treating the entire region, I advocate soft surgery, working by sporadic delicate incisions, bases for new networks which begin to work in synergy and have effects which reach beyond their locale.

Anticipating change, places emphasis on the infrastructural affordances of the project.

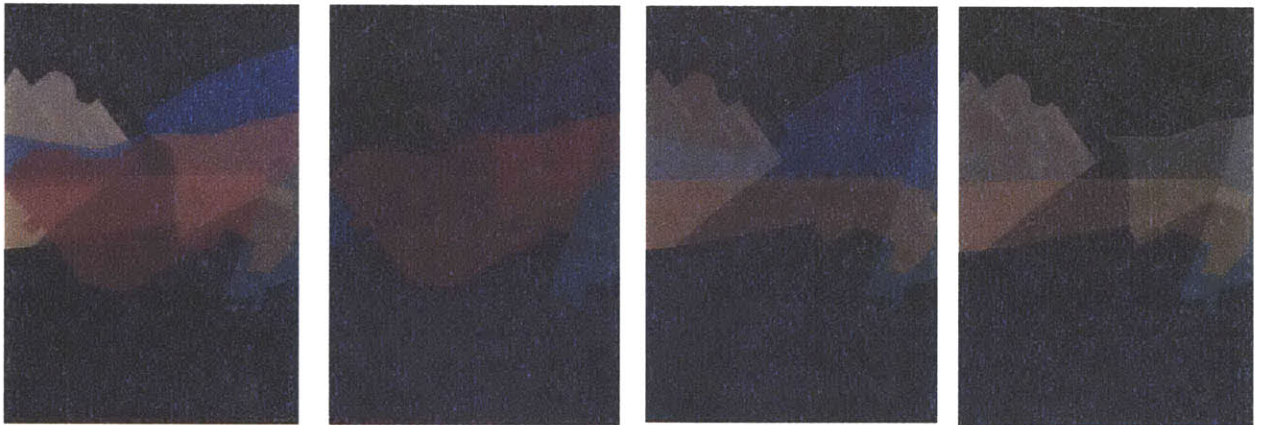


The airport is composed of a 4km runway, crossing north to south, the terminal building, a series of smaller hangar and service structures (most are severely damaged, those in good condition are currently used by the UN as temporary barracks.) Aerial photographs or plans of the site at a larger scale are very limited, complying to military and security regulations. These photographs and visit to the site were organized through the UN and were strictly monitored.





illustrations 7, 8, 9, 10, the site, current state



illustrations 10, 11, 12, 13./1.2500m studies

intention: Site studies based on topological distribution and interrelations between programmatic uses.

Fields rather than point or linear distributions creates relational networks in claiming a large territory with minimal intervention

initial reactions / strategies of infiltration.

The indeterminacy of the program, and the political setting, call for a series of strategies to be deployed as a catalysts rather than predetermined architectural entities. The problems of overspecialization and the lack of any public presence in other similar artificial settings -innovative milieux- places¹ emphasis on a simultaneous development of programs.

This approach ensures the project a life of its own. The solution proposed is incremental anticipating change: political, social, and technological. The approach is found in a hybrid, an a-typological architecture, of open configuration which takes superimpositioning and cohabitation.

In the architecture of such complexity in program and scale, which could be described as a micro city, materialization is not a final result but rather the first configuration of a process that will develop through time. The future condition of the phenomena are controlled by anticipating their change.

The vastness of site and the desire to create a public presence, calls for strategies claiming maximum areas for the first stages of the project:

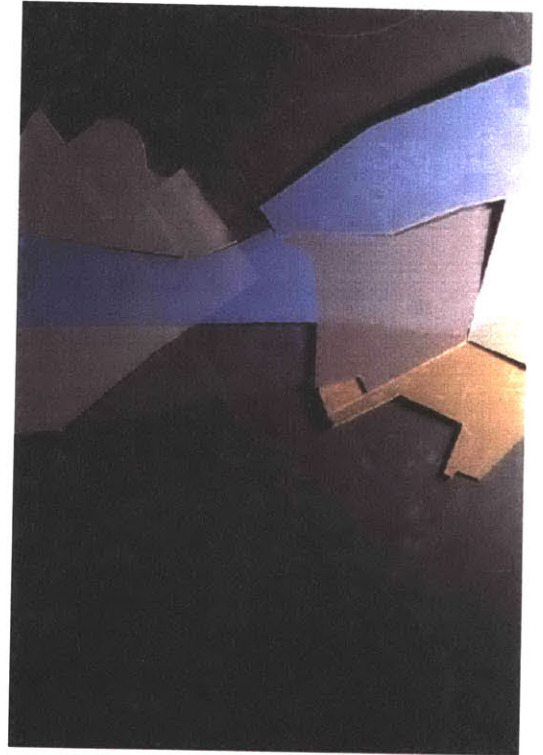
-Resources are allocated, temporal and open to diversions and intensifications according to the particular needs. The system is thus in dynamic equilibrium in a state of phase development redefined as external factors begin to activate new situations.

-Relational settings: the interstitial is composed by establishing relationships, the nodes are the collective settings for crossover.

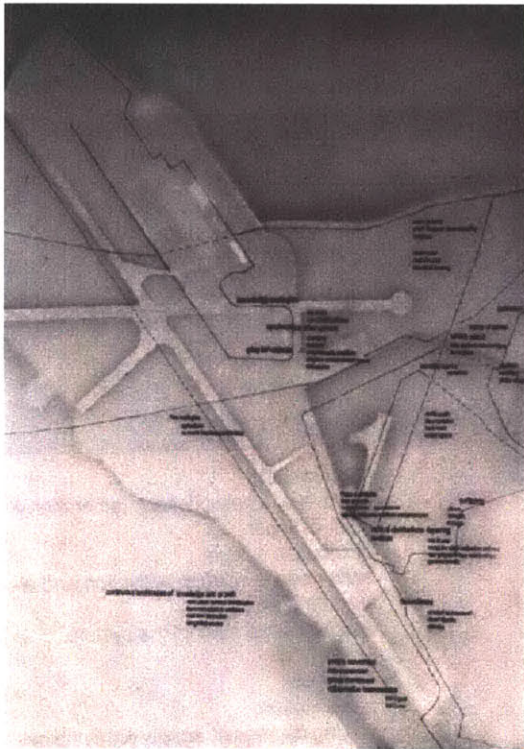
-Avoiding direct densification and top-down planning, but allow for long-term developments to take their course.



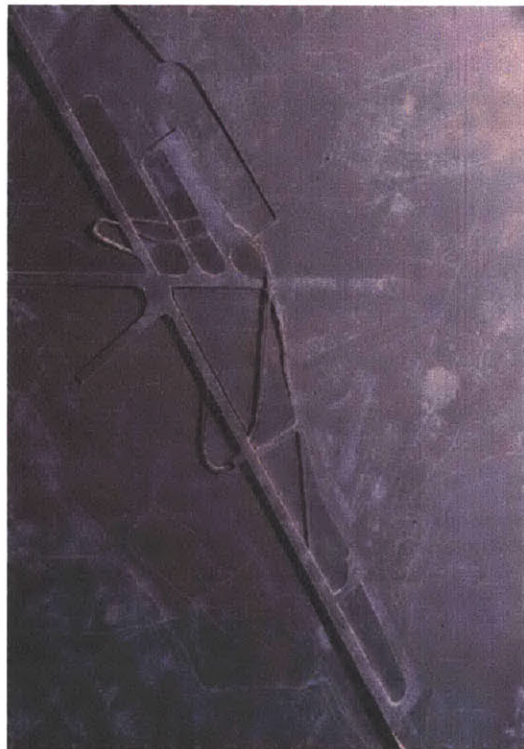
programmatic dualities/ multiplicities
recombinant networks
real-time interaction
seamless integrations



global villages
collaborative frameworks
the maze/

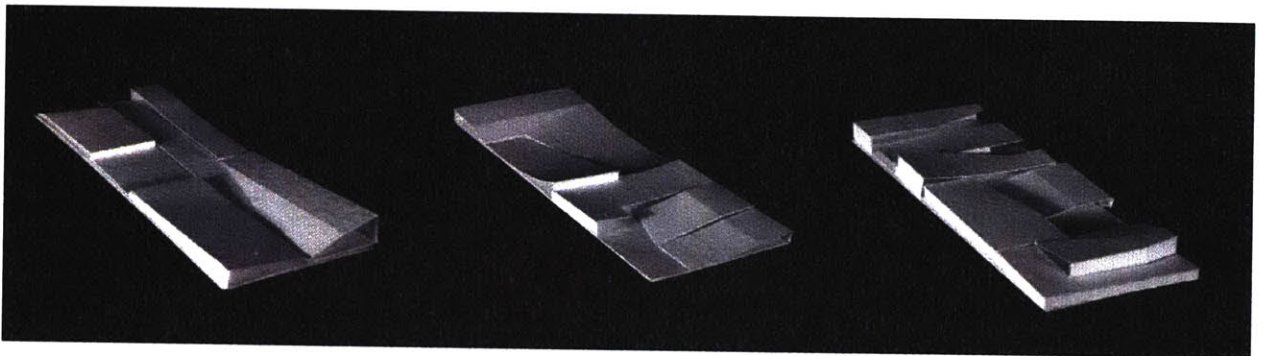


interstitial layering
info-port
open systems
synchronous urban growth



points of arrival
de-orient
new skylines new horizons

infrastructural affordances, on growth and change



diversion:
conduit metaphor,
diversion in the exchange of ideas
the process of collaborative design
navigation of ideas and processes in the
course of a project or product

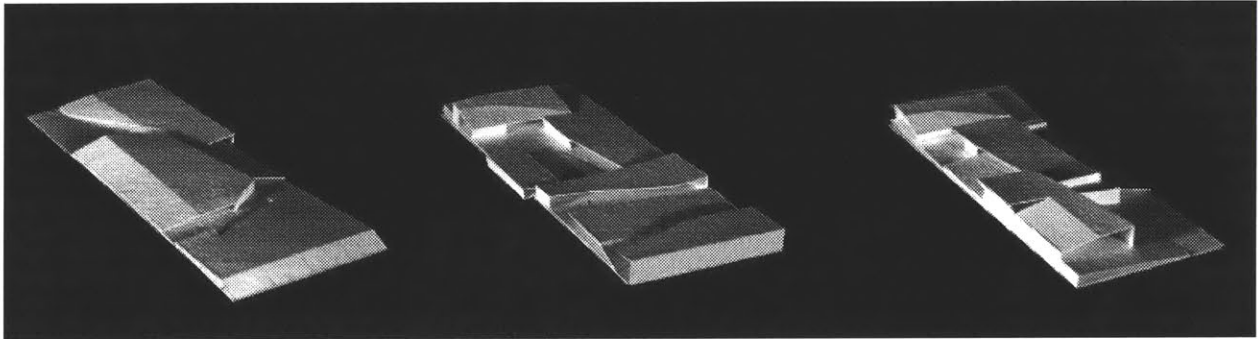
activation:
open fields, activated along an artificial
ground,
the grid/network field

navigation:
paths
arrive/enter
open nodes

interstitial spaces as part of
the continuous landscape,
become places for a
different type of exchange

open system:
creation of a network field rather than a
point-or linear
distribution system
each node is open to activation and al-
lows for flexibility
and adjustment within the system

scalability
densification:
varying degrees of activity within the net-
work



collaborative networks:
 intensification
 optimization
 woven
 continuous
 feed
 flow
 autonomous

disperse
 field
 node
 change
 growth
 share
 exchange

plug ins:
 different rates of change
 how long/
 predict future possibilities
 growth/ shrinking
 shared resources
 exchange
 optimization

open strands:
 inter-operate with new systems
 by consistent use of the grid, the system becomes
 systematized
 in distribution rather than the configuration
 intelligent networks:
 redistribution

Optimization = redundance/ multiple openings nodes
 connections possibilities rather than linear solutions
 which cannot adapt to change

precedent studies/ on growth and change

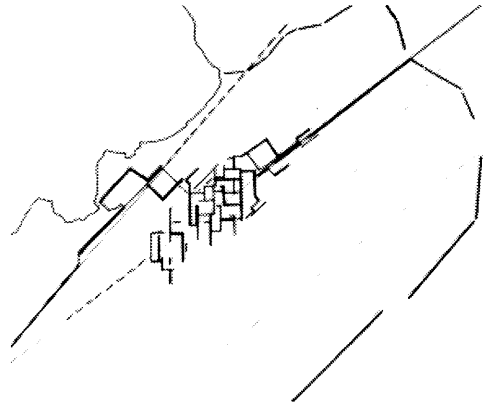
relational/ setting up the infrastructure, allowing for a polycentric growth, a growth which is not predetermined but free the new centres/ attractors open up to new possibilities. different centers affect one another's growth.

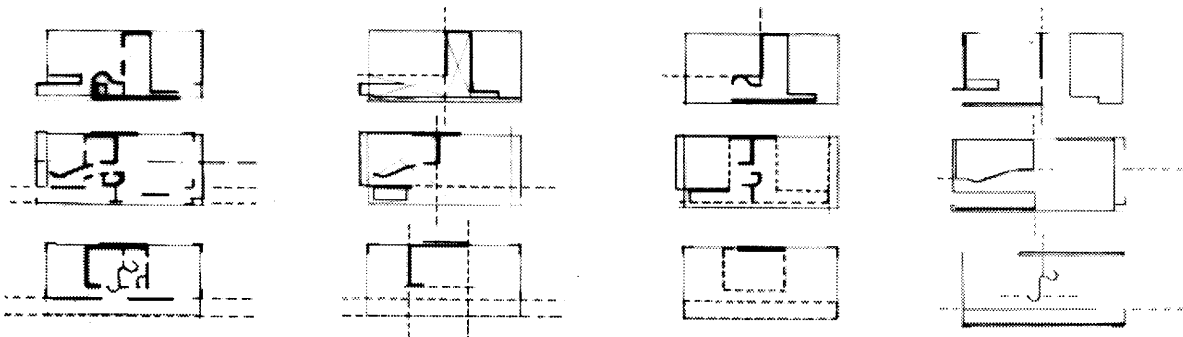
multi-nodal growth/ topological investigation of growth, systematize growth patterns, open endedness allows for new interpretations and new definitions, the infrastructure sets up the growth pattern while allowing variation to break the system.

lineal growth/ as new parameters enter the game, new growth patterns are possible.

synchronous urban growth/ establish infrastructure organizing possible future growth, urban movements, depending on greater urban forces. the openendedness of each layer allows for synchronous developments, the new mutations may collaborate with the previous patterns but keeps a degree of autonomy

interstitial layering/ shared resources creating a new weave, a new network which places the units as nodes of activity and creates a three dimensional mapping of the workplaces.





im/meuble/ the non mobile, the frame, the context, the constant against the variables,

skin as an infrastructure
 modularization at different levels, free space

interior landscapes/ fluid landscapes open for redefinitions,
 occupied vs. free space, open plan,
 mobile frames

topological densifications/networks/ service cores,
 de-territorialization, layer degrees of flexibility

the unit as a generator of growth/ can the system be reversed, freeing itself from the fixity of the infrastructure?

illustration 25/ precedent studies examining standardization and systematization in Le Corbusiers apartment proposals



3.00/ ON MACRO AND MICRO/
PROGRAMMATIC ACTIVATIONS

"The city is correlated to a route. It exists in relation to circulation and to circuits; it is the exceptional point on the circuits that creates or that create it" It defines itself by entrances and exits...It imposes a frequency. It creates a polarization of inert live or human matter: It makes flows go through one way or another, following horizontal lines. It is a phenomenon of trans consistency, it is a network since it is fundamentally related to other cities. It represents a threshold of deterritorialization since any given matter has to be sufficiently deterritorialized in order to enter into a network, it has to subjugate itself to the polarization, it has to follow the urban and road network recoding"

G Deleuze, F Guattari "L'origine de la campagne"

The Green Line, the UN buffer zone between the two parts of the city currently cuts through the heart of the old walled city running from East to West through its five kilometer circumference. An aerial photograph of the old city however will primarily reveal the perfect circle of the fourteenth century Venetian Walls rather than any separating wall, or "no-mans land". The "line" is infact a strip of varying depths and distances, creating the separation through build up or erasure of the dense urban fabric. A number of derelict and rundown buildings and the piling of sand sacks and concrete filled barrels act as the physical barriers between the North and South parts of the city.

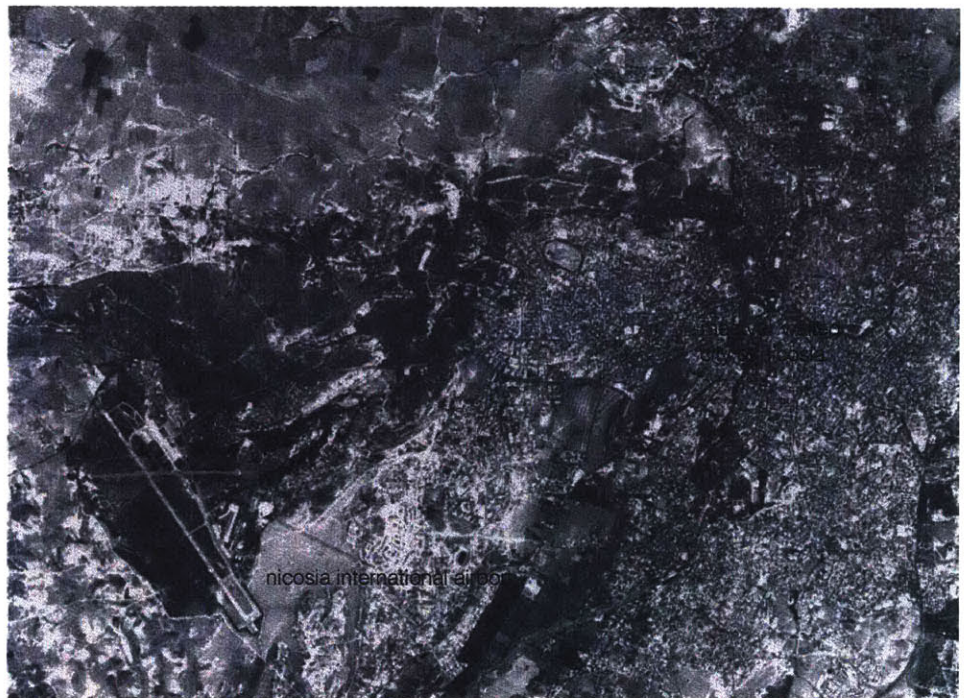


illustration 26/ photograph: terraserver.com, 1987

the line and the highway

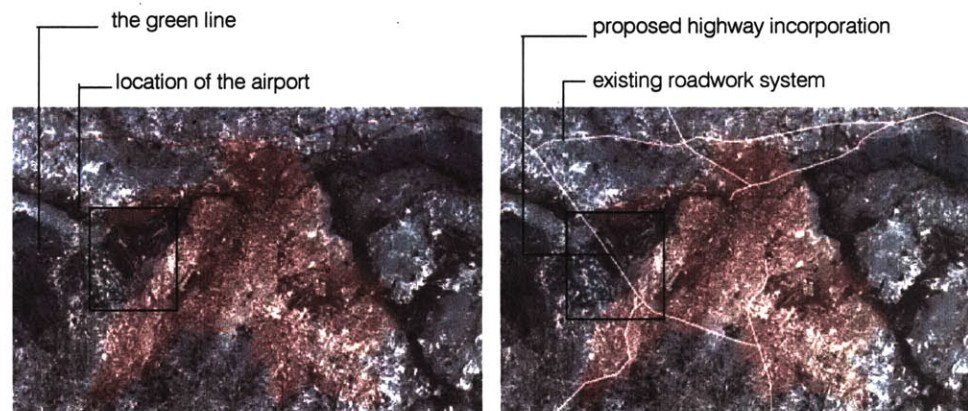
Urban topographies grow today in a milieu which is no longer structured on the city territory opposition, but rather on transport infrastructure as a vector of mobility. Technopoles, are constituted as constellations of attractors which defy urban traditional models developing poles of new but highly specialized inhabitations. The introduction of a hybrid program, which encourages a public presence instigates a localization and regionalization of an otherwise specialized program. The Institute is thus conceived within associations of overlapping programs, flows of energy and matter, and subtle interdependencies.

The search for an entry to the problem of the site, physical and conceptual, lead to the question of possible reuse of existing facilities and particularly the 4 km runway running from north to south. A study in the existing roadwork system of the area revealed the possibility of the incorporation of the runway into the existing highway system. Such a decision has strong social and political implications as the border opens up to the two sides. The highway becomes the physical mediator between north and south and the research center becomes the interface between two communities. At the initial stages of the reintegrative process, the Institute/highway serve as a neutral ground, while in the long-term, it is opened to connect and serve the island as a whole.

1. Manuel Castells,
Technopoles of the World

The line in Cyprus should not be identified with that once separating Berlin as both the problem and their solutions are dramatically different. The creation of a memorial ground in Germany was a feasible and appropriate address of memory. The two groups of people separated were in fact one. In the case of Nicosia keeping a strong memory of the line forms an obstacle in reintegration, keeping the differentiation and exclusion as a permanent scar on the urban fabric. The divisionary line must take on a regenerative role, seeping through to both sides taking up new dimensions while creating a web of connections, physical, and conceptual.

The highway as an initial design gesture, defines new ways of perceiving the site, and implies new topologies and new experiences. The design process is thus defined through shifts between the speed and scale of the highway, and the speeds and affordances of the work and public facilities.



illustrations 28, 29/ graphically manipulated aerial photographs

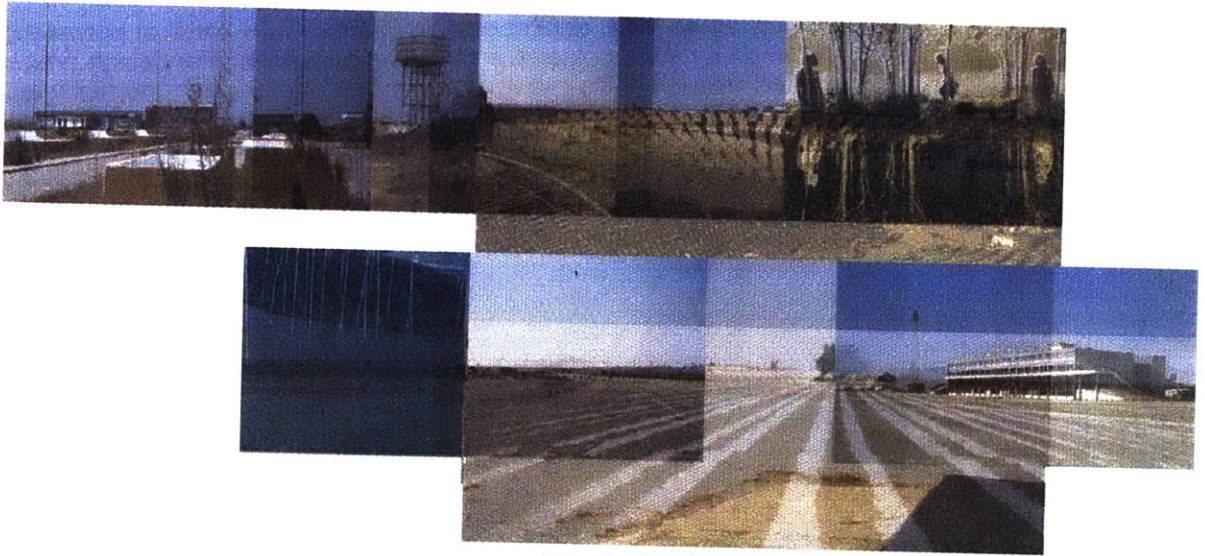


illustration 30/ photomontage of site and proposed fields

on macro and micro/ programmatic components

The institute is composed of a series of interventions in reaction to macro and micro settings. Scenarios in communication, leisure, creativity and research are investigated to develop new concepts and types of space for human interaction. They take into account translational aspects, both phenomenologically and literally, as different cultures (and subcultures) come together

The four kilometer long runway is now used as a highway, while the fiber-optic field speaks of a tangible presence on the site.

-The center for advanced research and development consists of the Moebius public structure, the agricultural fields and experimentation pads, the solar field and the renewable energy laboratories, the business promotion center, telematic facilities, and the laboratories (rentable space for research groups).

The strategies deployed in the organization of vast and open ended programs were:

01. infrastructural interventions: dispersal and collection of information, energy, pedestrian, and car movement
02. nodes: which set up networks of interrelate programs
03. field distributions: which claim a maximum territory, using minimal interventions to create a presence on the vast site.
04. landscape interventions: related to programmatic settings
05. flows: in a set of floating/ mobile programs which begin to activate new relationships on the site. (eg the educational program in collaboration with neighboring universities)

"A succession of individual images is punctuated by long slow fades to black. The image sequences, including fruit falling from a tree, a candle being extinguished, and a family having a flash photograph taken, appear as a series of openings of momentary glimpses into nature's essential gestures which, like thoughts are destined to fade and disintegrate into obscurity "

design concerns

new work environments/ controlling urban sprawl

Negotiating the effects of spatial dispersion turns the search to a critical assessment of the typology of the megastructure. Proximity, overlap and hybridization are the guiding forces for the new work environment. As confidentiality moves to a soft- level, on digital information, the necessity for the isolated R&D labs may be reassessed. The distinction and formation of the physical space is taking new form. Cluster situations, which allow for new levels of physical connections, but reject deterministic isolated megastructures. The flexible clustering organization allows for new collaborations and optimization of resources. Networks of places as well as entry-points/ throughout the complex create points of arrival and points of collective activities that are independent of research location and deterritorialize the extents of one team Vs another

- De-hierchisation
- free-lance/consulting models
- project based work
- short term contracts
- self-organized systems
- interdependencies
- symbiotic relationships

creation of a public presence on the vast site

Engaging landscape and agriculture, use of fields of technological and agricultural applications which begin to create an ecosystem of multiple layers rather than distinct components.

security

The use of the site and possible opposition to the project makes security an important concern in the design of the public facilities, and in the selection of the programs. A point of arrival and the awareness of the creation of a neutral zone for the reintegration is necessary to initiate the exchange. The implications of the locations as well as the politics behind the decision making will be a delicate matter encompassing social historical and economic aspects.

change/flexibility/duality

Desire to hybridize the system creating overlaps and possibilities for the

serendipid exchange of ideas and collaboration.

Changeability flexibility allowing for new partnerships anticipating new scenarios. The thesis uses infrastructural affordances to investigate issues of growth and change. By incorporating the infrastructural distribution in the architectonic and tectonic and programmatic components. Creating a dynamic understanding and operation of the infrastructure results in a dynamic distribution system accepting to change according to optimum requirements while its openness allows for growth or shrinking.

relationship to nature/ to technology

in agriculture in the embedded sensors,

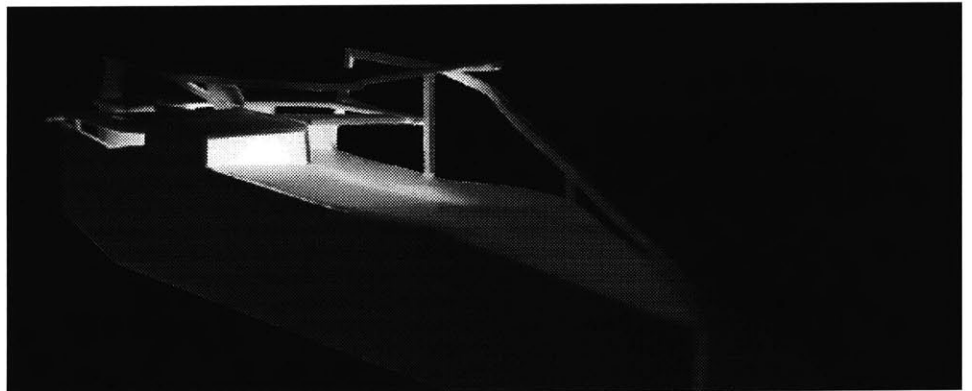
in the workspace introduction of nature

artificial nature in landscape/ fiber-optic field, solar field

navigation

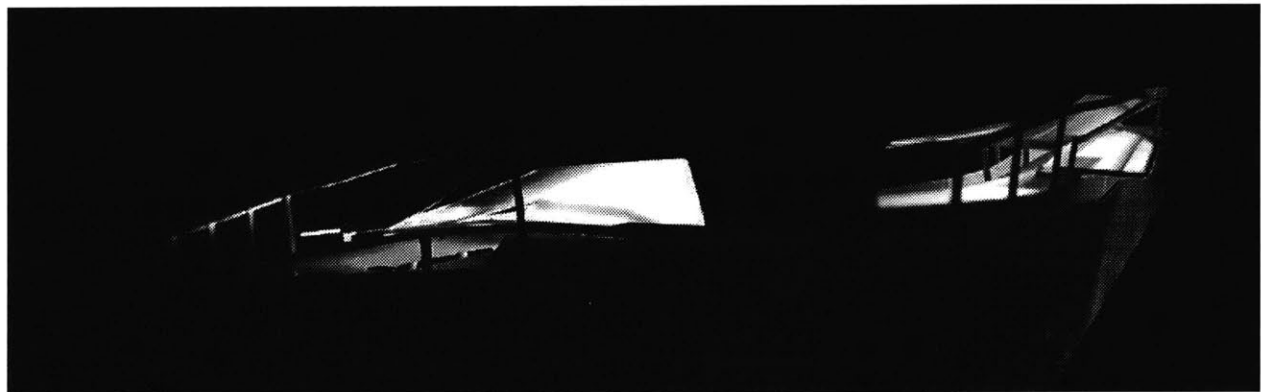
Navigational issues in the site, devices for strengthening the sense of orientation. The labs are interchangeable, so the emphasis is placed on public nodes, which develop particular identity according to programmatic use, proximity to agriculture, or public programs related to the Möbius, eg. amphitheater, fiber-optic park.

the moebius program/ parking- event space



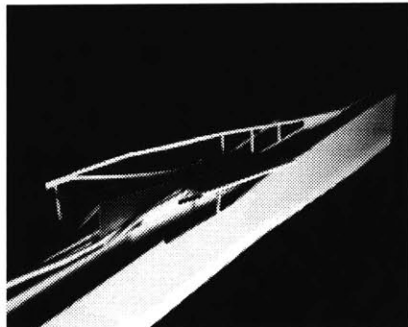
38

The moebius program A process of de-familiarization, of disorientation, of looking back at the city which is seen as one, where the highway acts as a joint an open vain of exchange, which in the future foresees freedom of movement

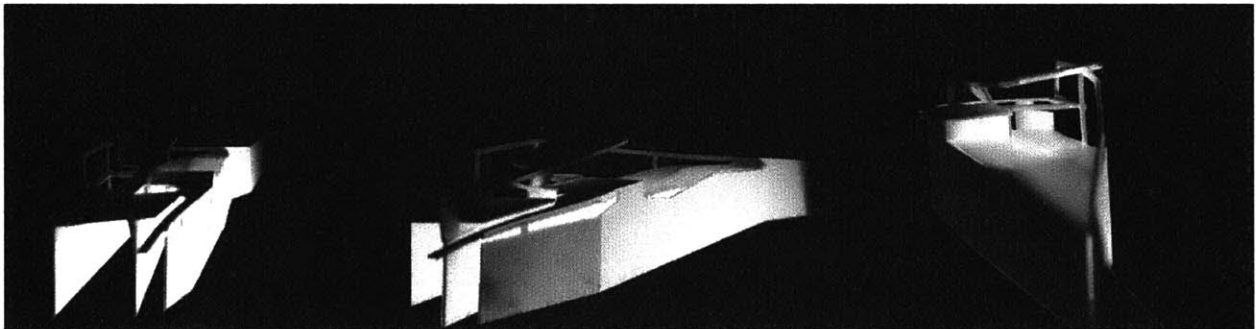


The use of the fiber-optic field creates a landmark field, noting the place from the highway, while rejecting deterministic symbolism behind monumental structures.

illustrations 31,32,33, scale 1/500, models developing the idea of roof parking, the interior loop, the interior street, and a structural concept.



Intense automobile use vs areas of pedestrianization/distance becomes the deciding factor, the regulator of the experience



The moebius incorporates the arrival by car/ and the immediate needs that arise, ie parking, congregation, dispersion. It incorporates public functions and investigates the idea of an internalized street, where cars people and digital information flow.

illustration 34, 35, 36, 37, 38, scale 1/500, concept models in developing the moebius

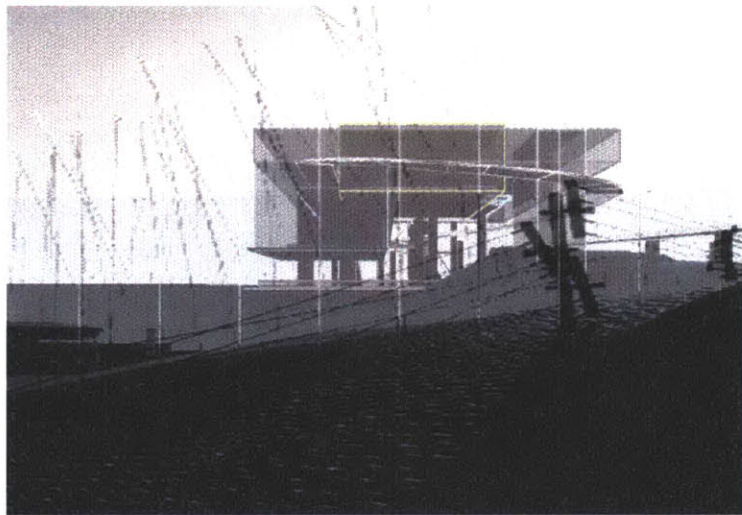
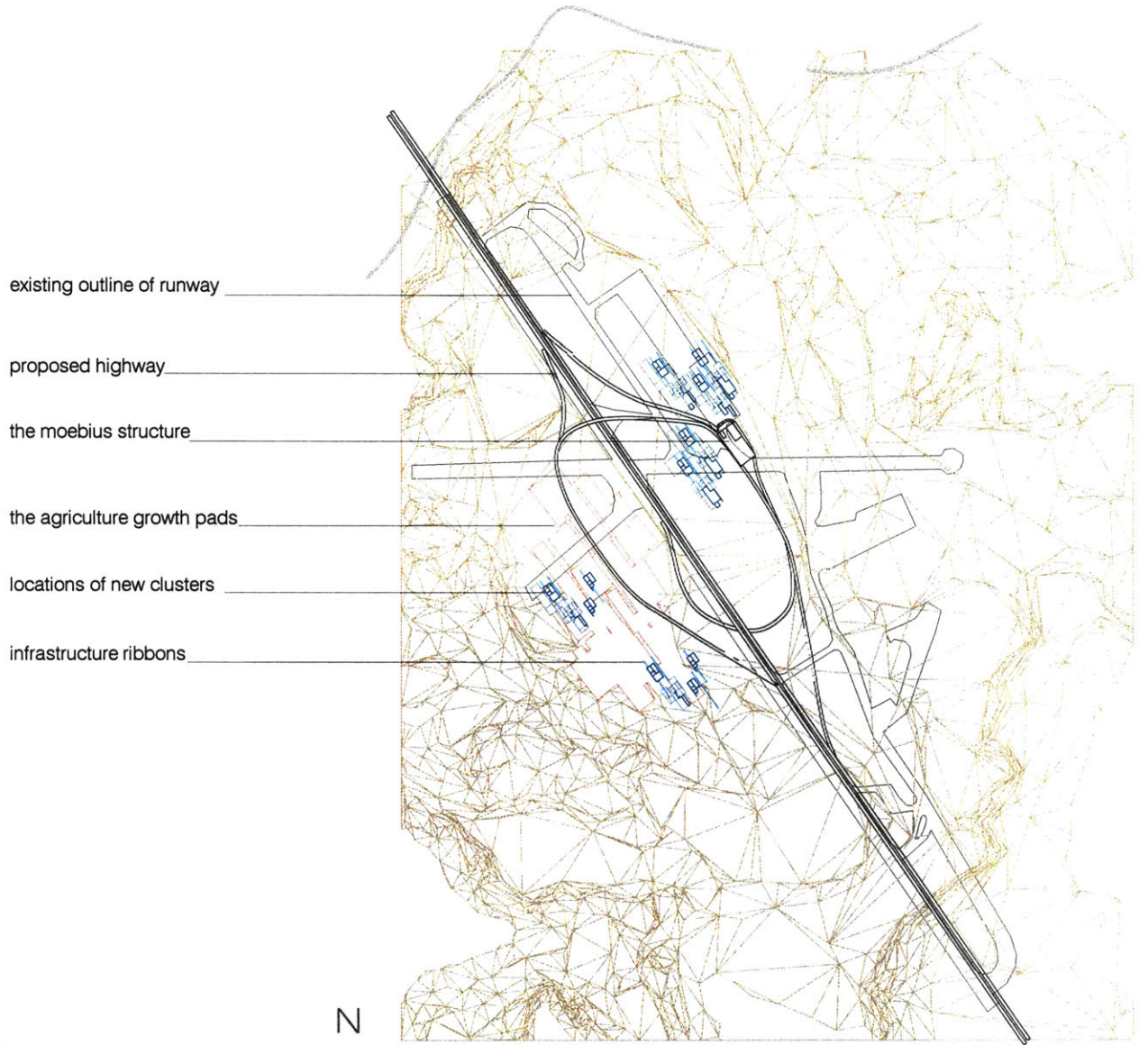


illustration 39, computer generated view of the moebius structure, in the foreground, the fiber-optic field



illustration 40, computer generated interior perspective of the ground floor of the moebius structure

/initial siteplan



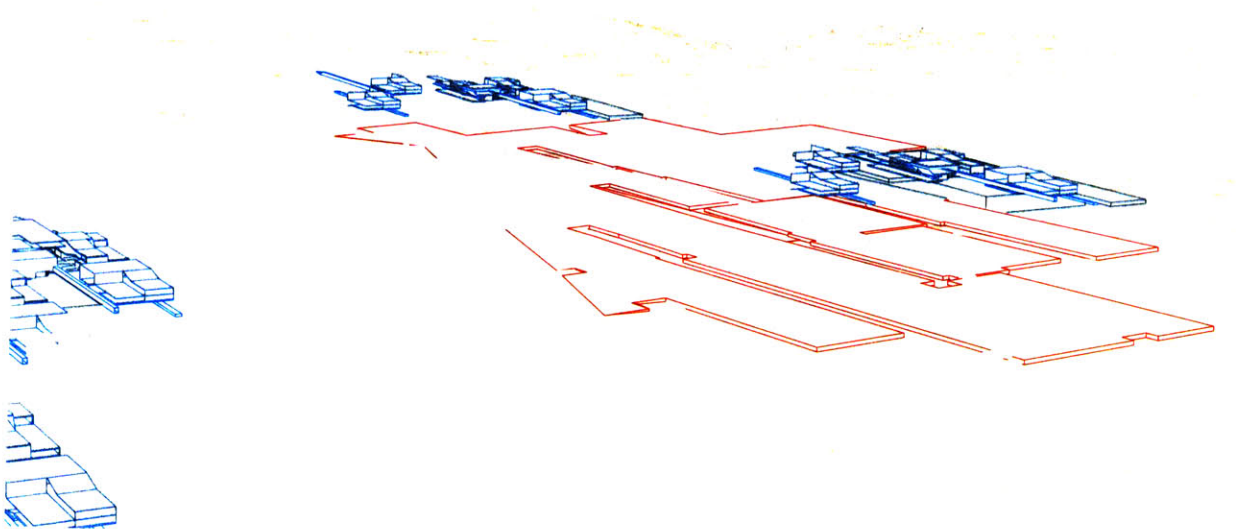
N
scale:1/ 25000

illustrations 41, 42, 43, 44, 45, 46, 47, 48, plan, and perspective views of the first set of interventions.

Proposed programmatic components

infrastructure

- The highway system
- The moebius parking structure
- Ribbons of infrastructural distributions/ for energy information and services
- Telematic centre
- Fiber-optic field
- intelligent networks/
- Network of (navigational) public spaces
- Dispersal points in parking and pedestrian distribution and series of pedestrian networks through shared facilities in labs



"Our definition is topological rather than geometrical To talk of topology means that there is no a priori there are no forms no underlying geometrical constructions, only relational contexts." *Frederico Soriano*, Manifesto injerstista in Fisuras n4 1-4 1997

Renewable energy

laboratories
networks of purification points
the solar fields

Agricultural research

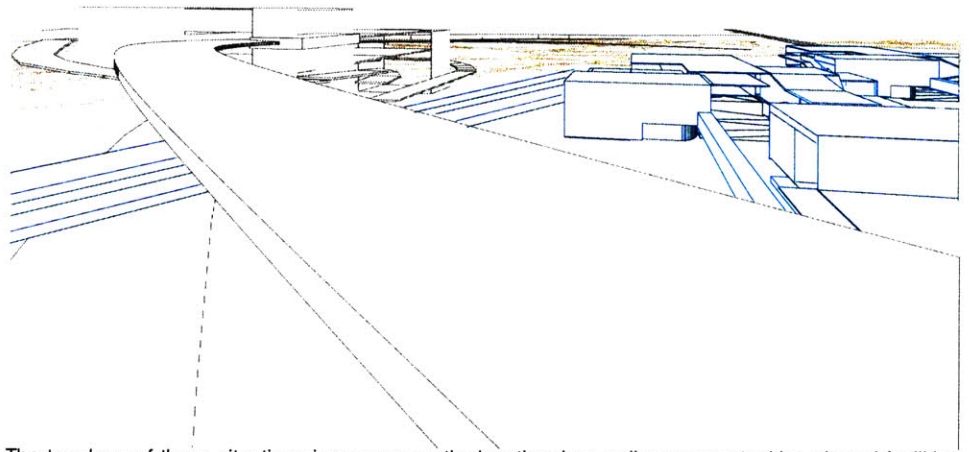
solar fields/ greenhouses
growth pads
gardens

Research and Development labs

A mixture of spaces for start-ups of small
and medium research groups light manufac-
turing facilities
plug-in labs

Networks of shared facilities:

prototyping/ milling facilities
engine rooms
meeting points



The topology of these situations is programmatic, locational as well as perceptual. i.e. shared facilities would create programmatic overlap, while location refers to proximity within a given context. Perceptual overlap might be achieved in visual contact though not necessarily physical proximity. Sectional investigations can open possibilities for linkage, crossings and pockets of otherness.

Leisure/The everyday

Eating/drinking/meeting

Cafe

Sports facilities

The playground

The amphitheater

The technology labs

The interstitial spaces are the storers of this shared activities they become translational devices of interdisciplinary operations social integration.

The gateway

The moebius arrivals/The issuing of the new identity/

Parking-for 2000 cars

The Educatorium/
class rooms

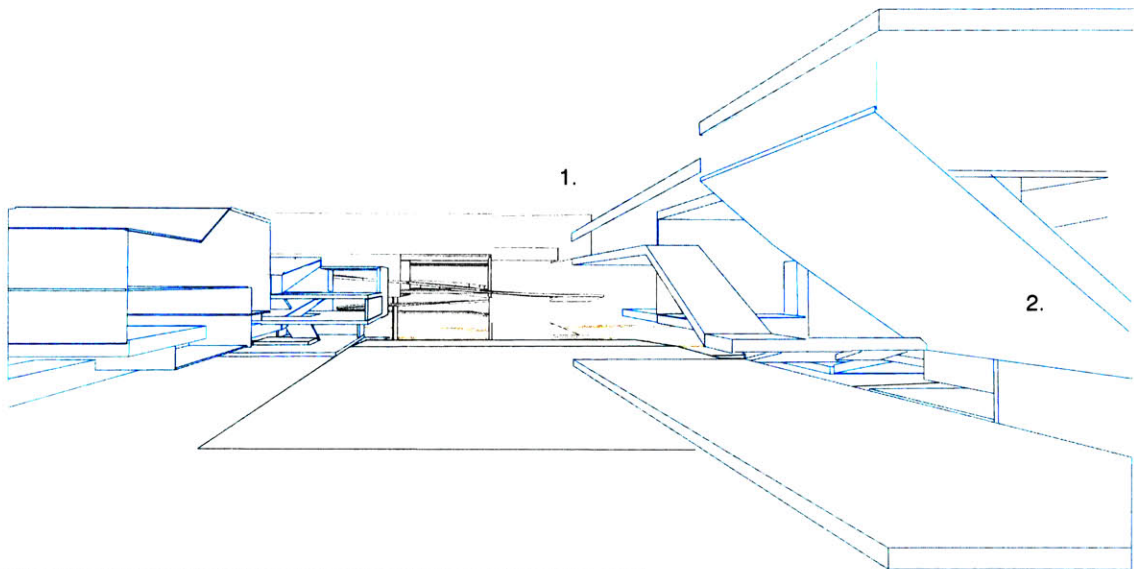
conference facilities

auditoria

training grounds/

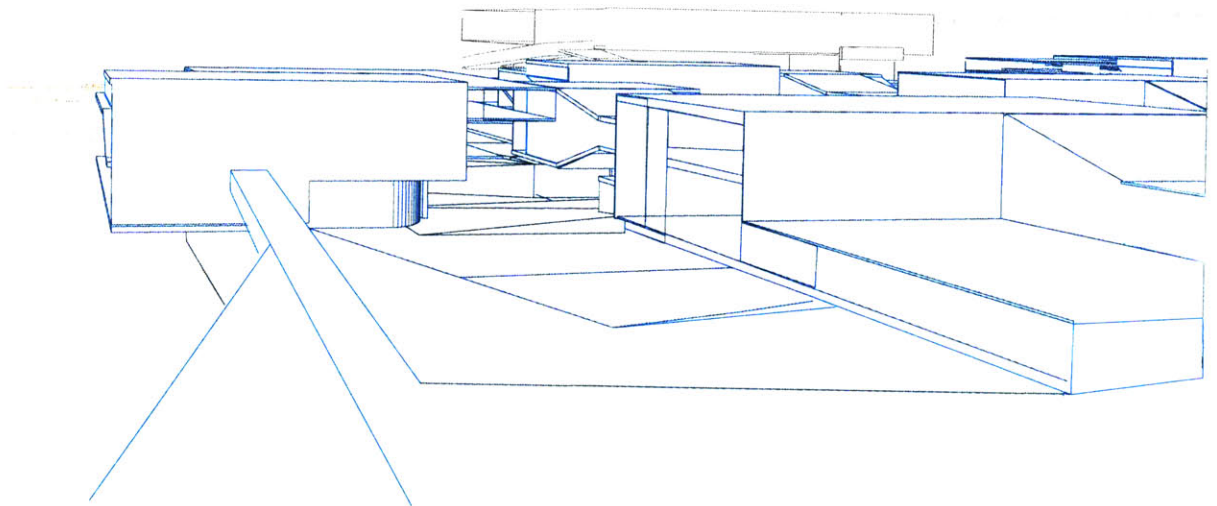
offices

studios

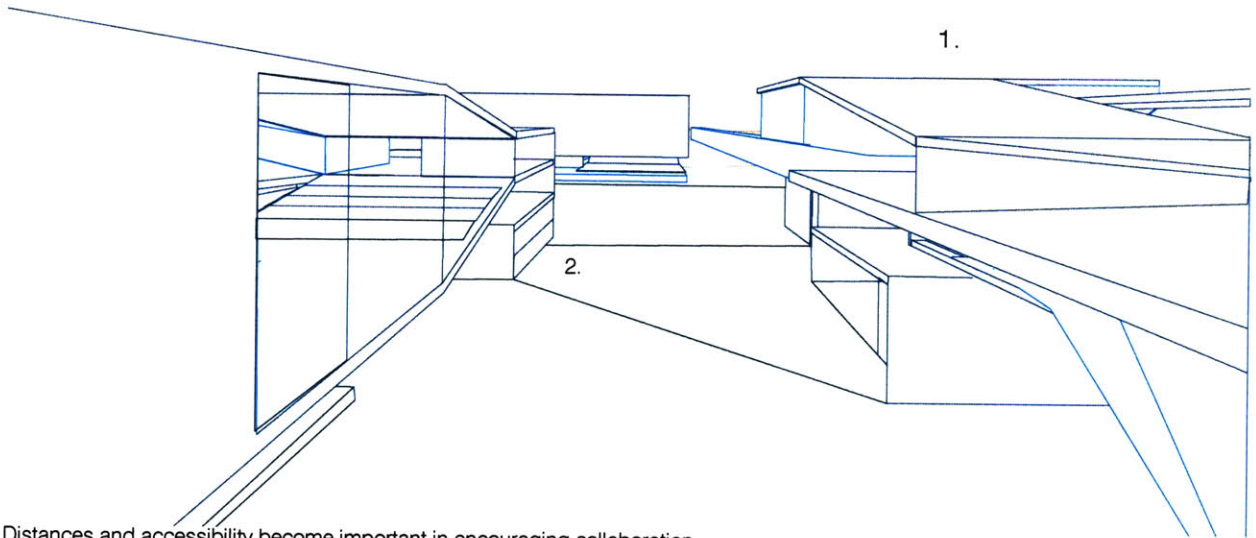


1. plug-in situations/ temporary expansions into the garden areas (interior or exterior)

2. swing structure, adaptable to growth shrinking or temporary connections in diagonal directions.

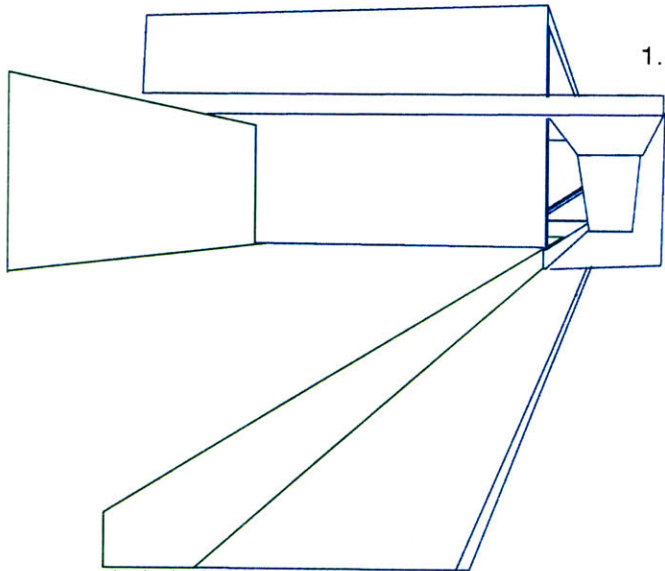


the periphery is never treated as a hard edge, but as the beginning of a new condition, more landscape bound, as the infrastructure ribbons become land interventions and new ground definitions.

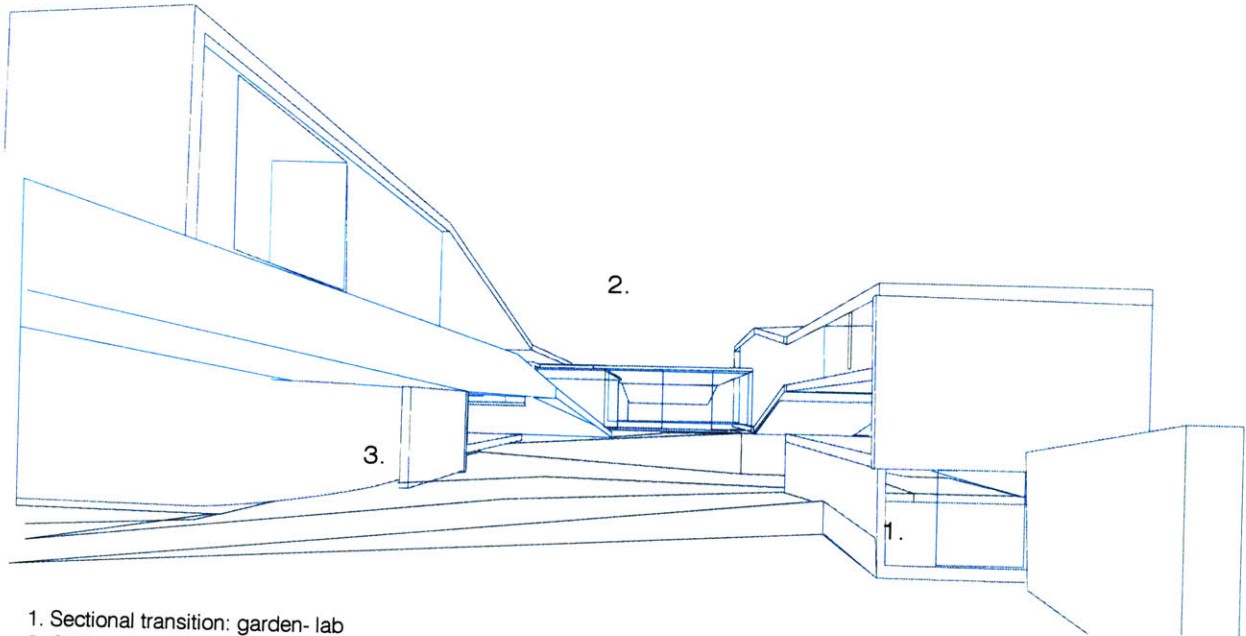


Distances and accessibility become important in encouraging collaboration
1. stacking rather than sprawling,
2. hybridization rather than overspecialization and rationalization.

1.

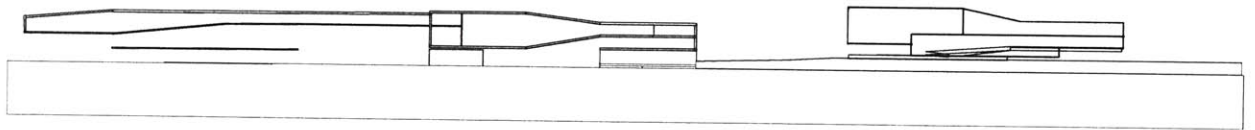
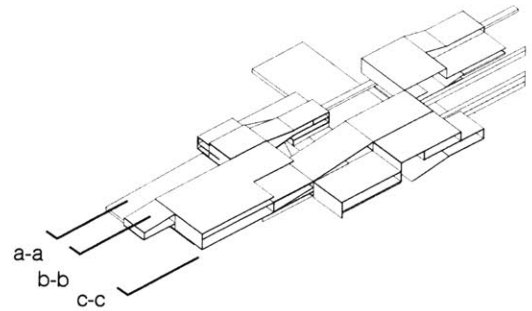


1. plugins/satelite projects

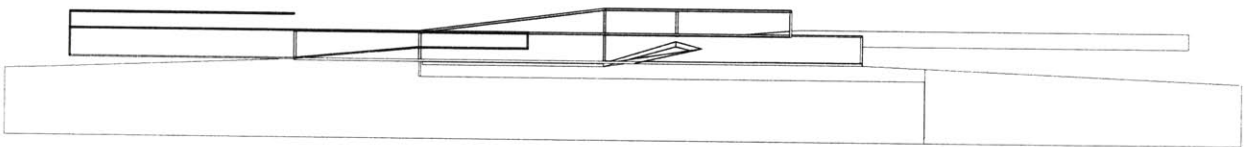


- 1. Sectional transition: garden- lab
- 2. Oblique transition: lab- lab
- 3. Open program: indeterminate areas, event structures

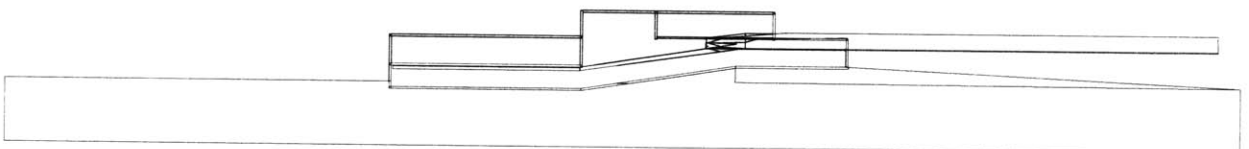
weaving the systems/



section a-a

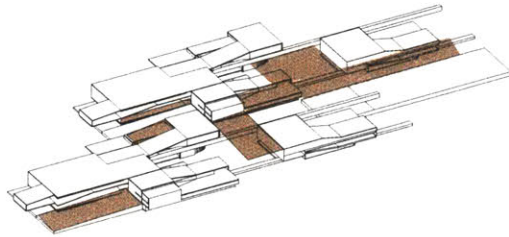


section b-b



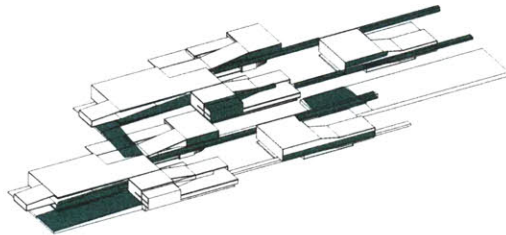
section c-c

The project develops horizontally, through a logic of accumulation (Venice hospital) There is no single focus, no unifying geometric schema. The overall organization is an elaboration of the conditions established internally and topologically. Growth is a movement which is produced horizontally rather than vertically. Interior landscapes where above and below are one and the same or where inside and outside are meshed into a continuous surface.



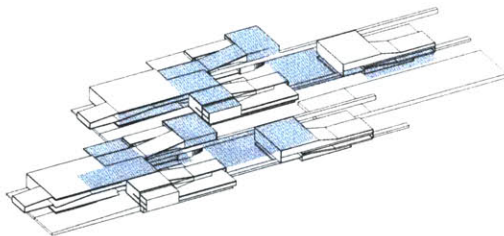
- networks of gardens/ interior and exterior

By establishing a system of rich nodes as the public navigation devices, they become points for exchange, intercultural and interdisciplinary, woven together through interdependencies which are the underlying necessity behind the project.



infrastructure ribbons creating a weave of co-dependencies

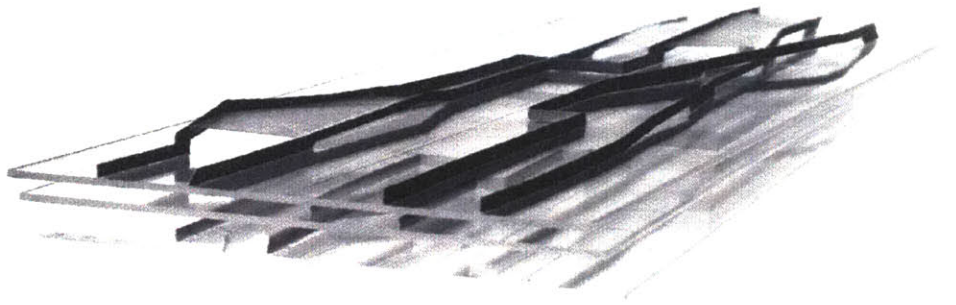
infrastructural distribution systems, using diversions and expansions. changes from a linear distribution to a field distribution open to configuration and adaptation.



swing spaces, open to new definitions

Swing spaces, are spaces for temporary expansion. Physical proximity with those with knowledge increases the likelihood of learning from them. Since it is not possible to constantly change the locations of likely collaborators, a dispersal of shared facilities, and points of satellite projects is proposed.

illustrations 49, 50, sections and axonometric diagrams breaking down the different systems used

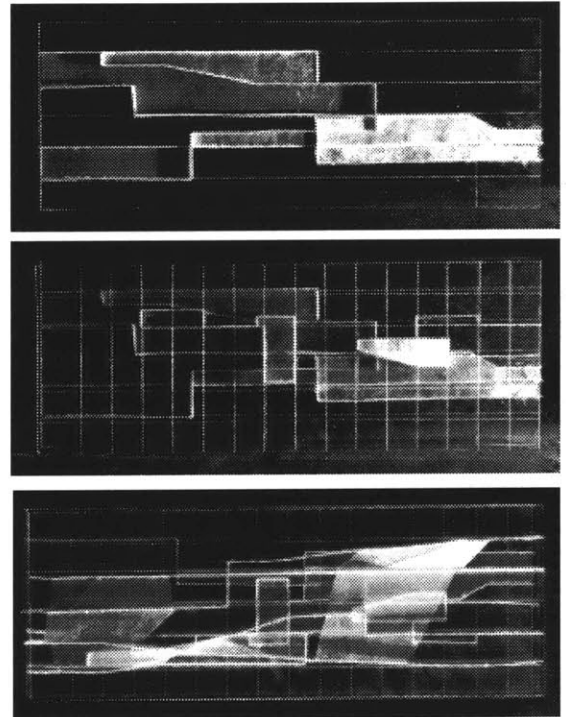


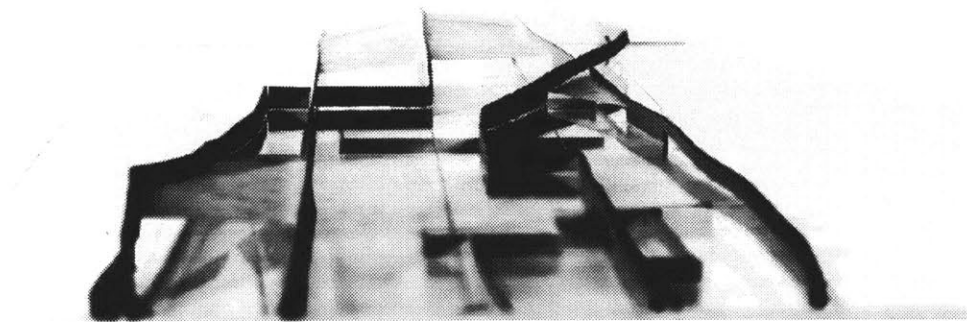
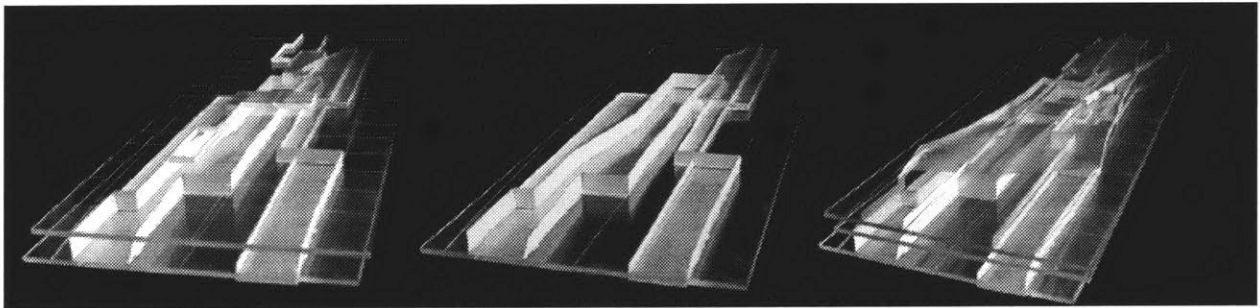
4.00/ CROSSOVERS AND OVERLAPS

INTERIOR LANDSCAPES

operational contexts/ project mappings/ role mergers
organigrammes in topological investigations

A series of organigrammes which assisted the development of ideas-spatial and conceptual-in concepts of overlap and redistribution of activities within the research, design, and development. Role intensification, mergers associations, closer linking and optimization where investigated in the chronology of a project. The introduction of possible collaborators at particular stages and parallel processes and dualities in projects begin to speak of synchronization, and multiplicity introducing the possibilities of plug-ins/ fast-track projects in parasitical relationship to the main line of research. The models also begun to introduce the problem of location in teams whose collaborators are working on many simultaneous projects. This places the emphasis on project based locations rather than team locations, allowing for projects to be developed in remote collaboration giving the researchers greater mobility, afforded in todays technologies.





illustrations 51,52, 53, 54, 55, 56, 57, 58, "organigrams" used to examine the overlap and mergings in roles, which begin to develop an architectural language of diversion and crossover.

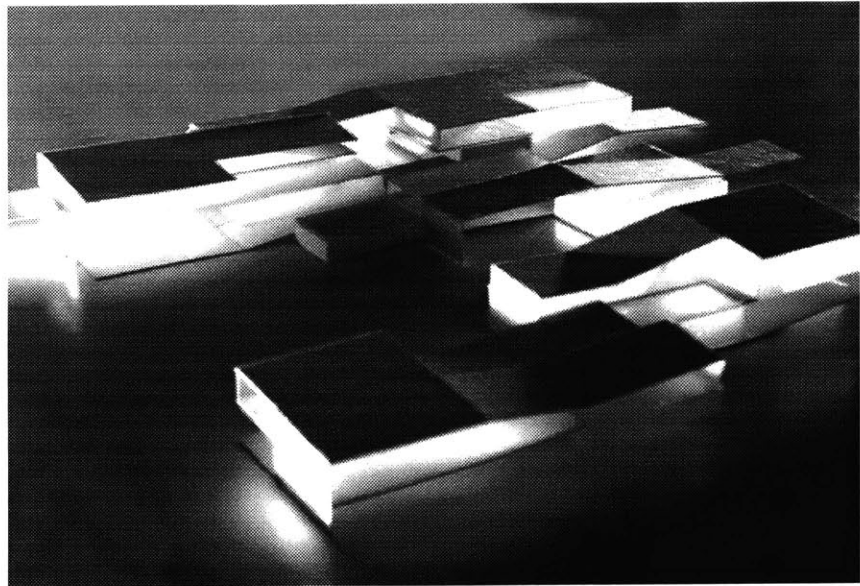


illustration 59, model at 1/500, developing the unit modules and patterns of growth

the unit as a generator of change, social and organizational

design intent

A continuous surface, an interior landscape of folded planes with new possibilities in expressing varying velocities and viscosities. The overall homogenizing open plan is rejected, to be replaced with an architecture of difference and variation.

Multiple projects, multiple identities in coexistence. The labs unfold to create spaces of higher connectivity and continuity, but not homogeneity. The architecture locates itself in borders, interdisciplinary, personal and public, digital and physical.

new models/ new affordances

The new networking capabilities have opened up windows to research in distant locations but often filter information from the office down stairs.

Proximity of collaborators is still vital to the success of the teams, but how can architecture accommodate and enhance connectivity in the microcosm of the technopole local and remote? With the new changes and attitude in the management, production methods in interdisciplinary or collaborative work, it is critical to assess all components, infrastructural and organizational.

The creation of a flexible but human scaled environment becomes a priority. Research is by nature a team-orientated endeavor, depending on a continuous accumulation of a body of knowledge. It is thus vital to create interdependencies which optimize human interaction between team members, but also external contributors. This will create a constant feed of change within the research teams and projects.

The organization is based on two criteria, the level of complexity and specificity of the architecture ie labs, and the mobility of work ie consulting.

Physical location or organizational location

Project location/ project platforms

Merging within companies or even temporary conglomerations and collaborations on particular projects becomes a common model. This demands that groups which would otherwise be independent create closer links and communication to enhance collaboration. The project is not solely addressing the chance encounters of unrelated actors, but of loosely linked groups which work in a dynamic setting of changing conditions and contexts. Spin off companies are highly mobile entering at a short life-span, in a parasitic relationship with the larger companies. They are positioned in the periphery for easy access to new resources while close to the centre of activity

Synchronization in technologies but also in teams members is created through greater frequencies of updates. If a team is in complete interaction with all its members despite location then we can assume that this will enhance the likelihood of smooth collaborative projects. The project proposes greater physical but also virtual connectivity, through the use of the large multimedia display units to share information and also connect work-teams by projecting the workspace to remote location. This creates a virtual connection which is open to social issues and is not restricted to selected data. It opens possibilities for new dimensions in teleconferencing as it takes place within the lab, within the research area and is possible at any time
It creates a social space in the virtual world.

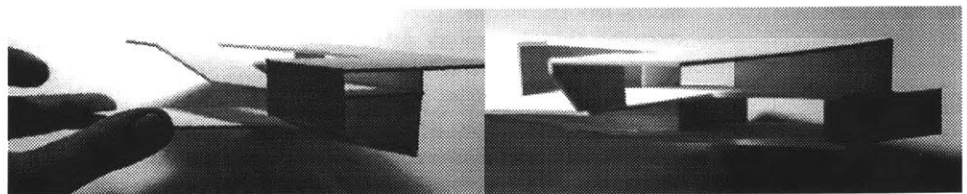
on continuous surfaces

what makes these spaces rich for interaction and what are the architectonic rather than programmatic qualities which enhance this interaction?

Informal meeting areas are seen as an essential part in developing new projects as well as clear communication in existing teams. The creation of these spaces in relation to the labs, are identified as gardens, slow places used for leisure or work, with networking capabilities and connection to the outdoors. They can be used for meetings, group or individual work, leisure time or informal congregation.

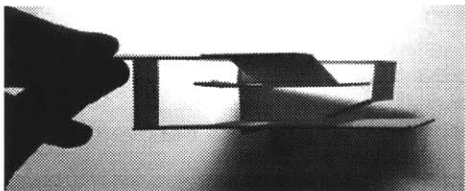
The patios are outdoor rooms, enabling events according to climate. Avoiding corridors and cellularization of workplaces, has lead to a continuous landscape in which different work settings are realized.

Obvious human attitudes like balance and imbalance and the unlikelihood of inhabiting sloping or transitional space creates a different speed both physical but also conceptual, what are the activities that are situated in this in-between transient space?



The concept of the corridor is transformed to a common interactive workplace, the in-between the interstitial, a news center, for reducing differences of sub-systems to an integrated whole.

The introduction of topology in the discourse of space, speed, and activity, affords new definitions for new workmodels and adaptable spaces.



illustrations 60, 61, 62, conceptual models at 1/200,
developing ideas for the work environments

strategies employed

Organizational: growth flexibility, clustering finding overlaps, shared spaces optimization

Architectural: use of diagonal connections, proximity, collective spaces for individual work, continuous landscapes open to redefinitions and change.

Operational: fast/ slow spaces /swing structures to create links/ overflows/ plug-ins

Infrastructural: Redistribution, diversion of resources, optimization. Integration of field and linear distribution. All services compose a continuous band/ a ribbon of services, which mutates accordingly to create volume, plane, skin, and tube as it envelops: AC, cabling, water, telecommunications, outlet points, WCs, sewage etc

By creating a systematized modular workspace, the proportion of open/ green/ public spaces is regularised, while the interdependency of the modules ensures connectivity between the units, and the creation of multiple depths through semi-transparencies, layering physical and virtual connections. The use of the oblique connection between the labs enhances connectivity, and creates new possibilities for overflow spaces.

developing the rules/ a simple grammar

A system of quadrens is developed, which organize the decision making and ensure the beginnings of a system, but not a standardization in the module.

The quadrens are developed through the examination of overlapping spaces from the first set of planar models. They afford a methodology in organizing public space, open spaces, outdoor covered or open areas, and a systematization of the interior ramps and circulation patterns.

The use of basic computer models allow for the examination of the overlapping shared spaces.

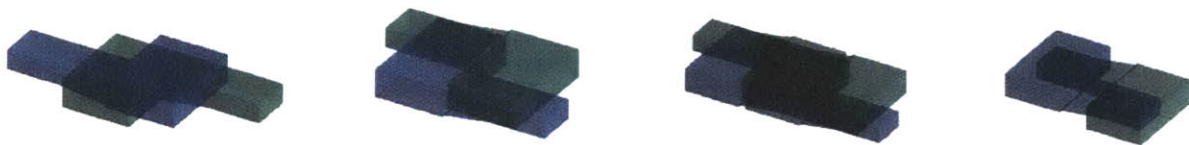
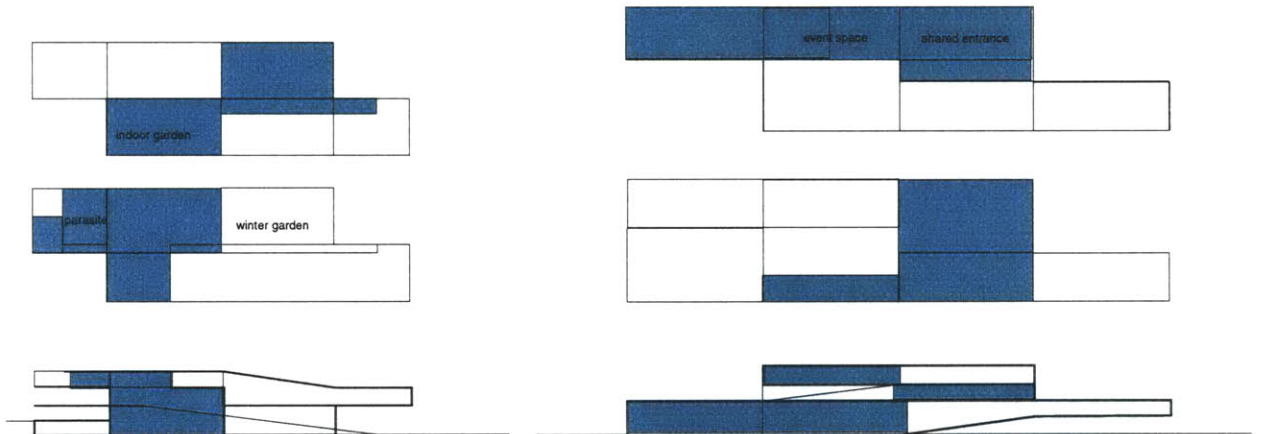


illustration 63, computer generated model of the simple geometric relationships between two labs

Within the quadrants design the necessary flexibility is created by allowing for swing spaces, spaces which are temporarily taken over but are seen as shared facilities, they can be used for spin off research teams, expansion of a project or intro of a new future project....their role is split between fast and slow spaces, spaces of interchangeable activities flexibility and minimal fixtures. Their connections to the other labs is flexible and can act as overflow space in an intense activity period

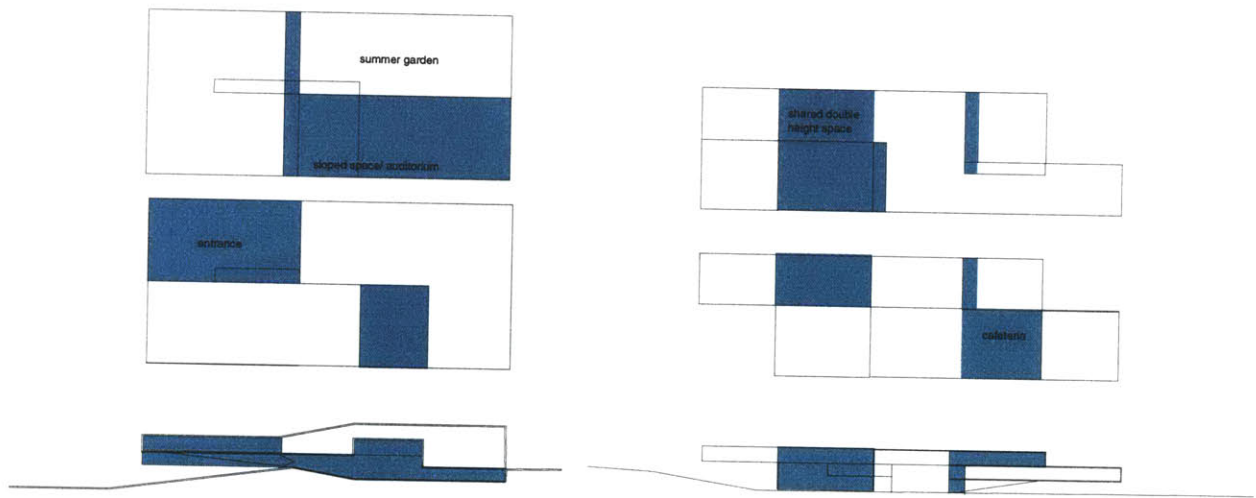


04

prototype 01/ two research groups

prototype 02/ three research groups/ closer interaction

Entering in a critique of the horizontal linearity or vertical stacking of existing structures, What is the new spatial model which will allow for lineal growth?
 Interstitial spaces are no longer problematic leftovers, but the opportunities for meshing the components.



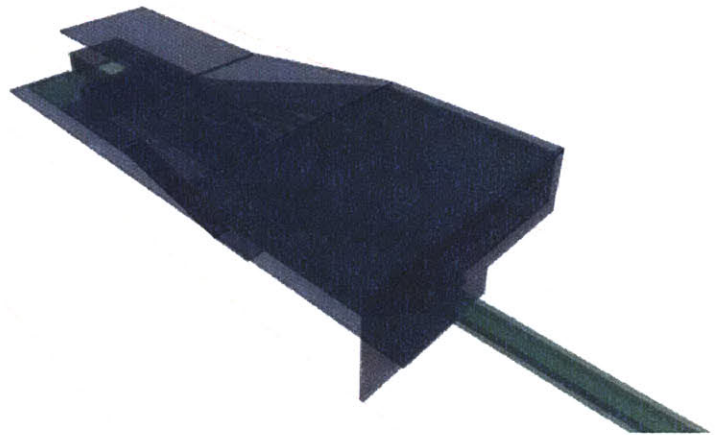
prototype 03/ two teams/ shared spaces, not projects

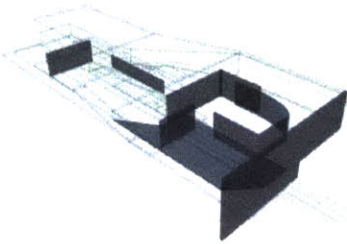
prototype 04/ independent researchers

illustration 64, plans and sections of the simple units, defining leisure and shared spaces within the labs. Gardens are proposed as alternative temporary programs

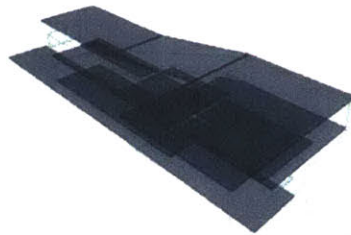
unit components/ the elements

These components were developed according to the infrastructural affordances in the development of structure, envelope, movement and shelter.
Continuous surfaces, mobile partitions, and the infrastructure, move from linear distribution to a field distribution give scalability to the clusters according to new needs and neighboring facilities.

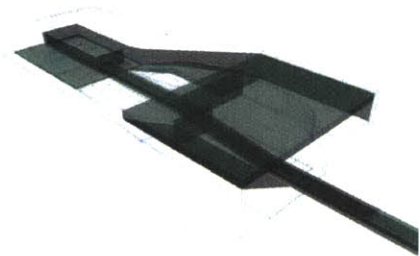




screens and mobile partitions break up the quadrens into smaller personalized individual and group work environments



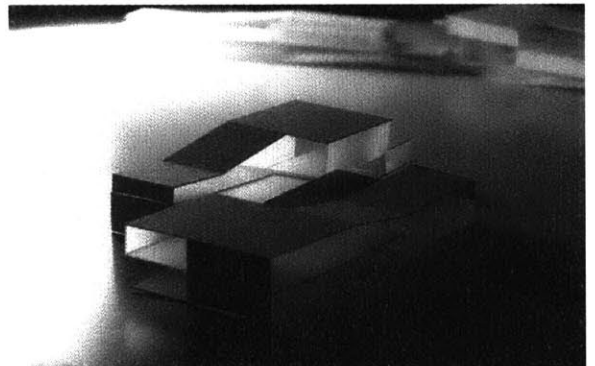
continuous surfaces create continuous work surfaces and introduce a topology to the workplace, allowing for diagonal as well as horizontal connections

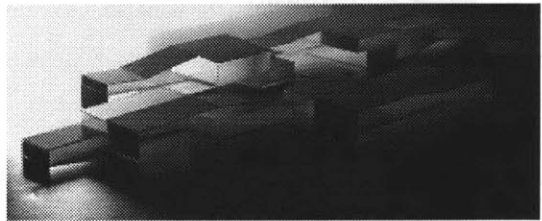
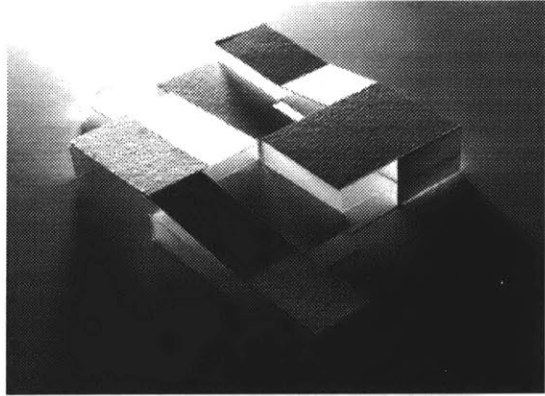
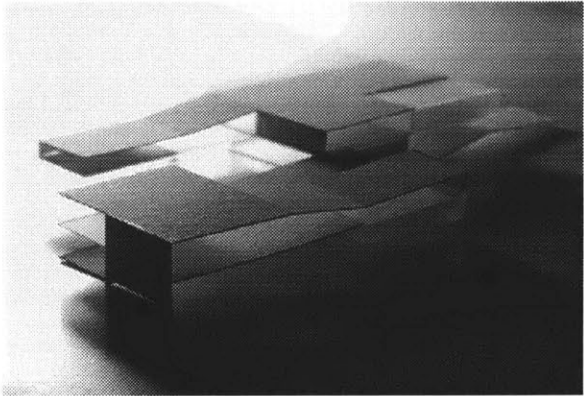


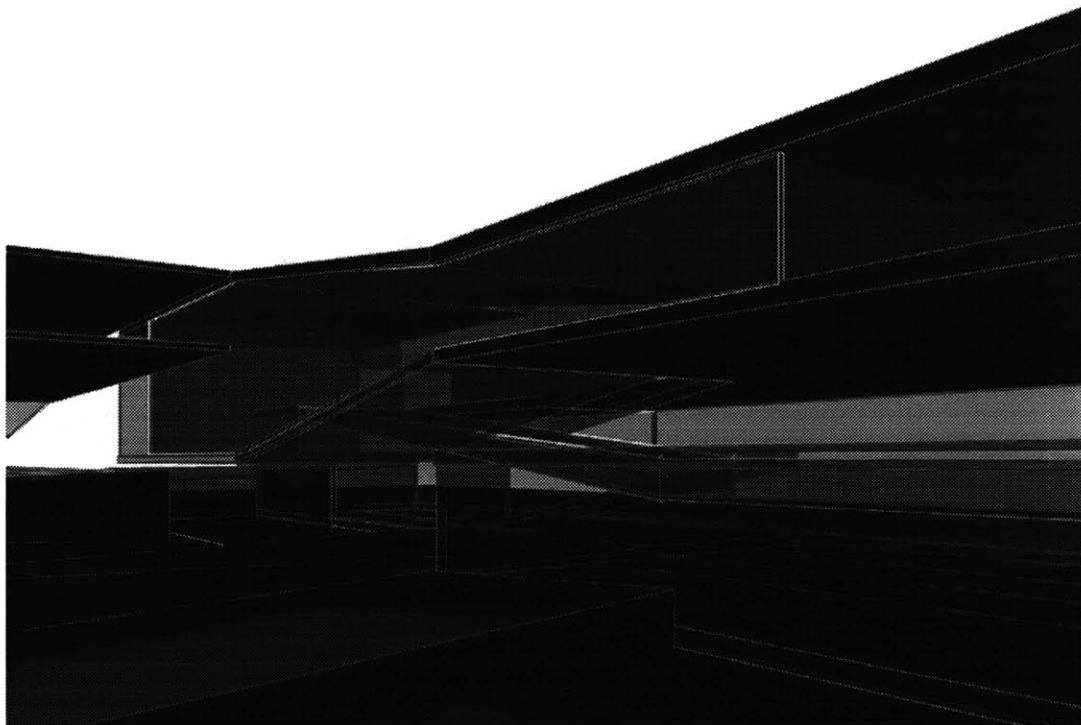
ribbon distribution system changing from planar to linear distribution and places infrastructure in dynamic relation to the programmatic and architectonic needs

illustration 65, axonometric diagrams a basic unit

illustration 66, 67, 68, 69, scale 1/500
complete set of the modules combining the two previous modelling methods, examining the recombinant possibilities in growth and the development of the swing spaces by juxtaposing programmes and surfaces.







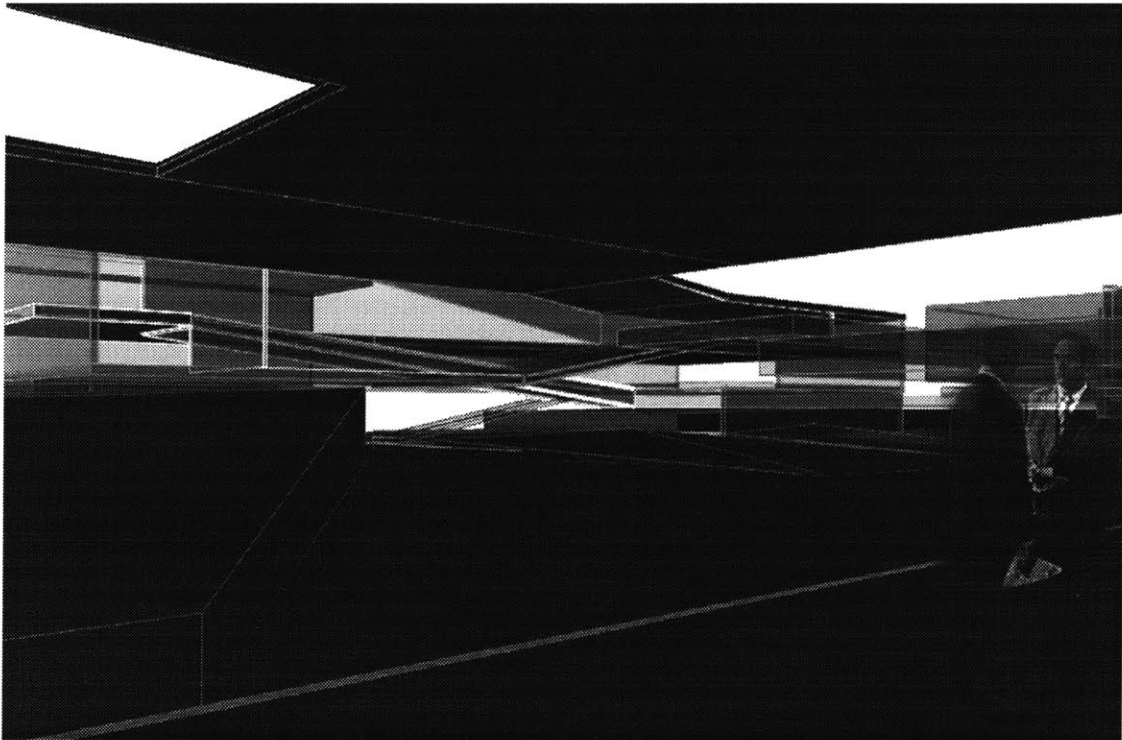
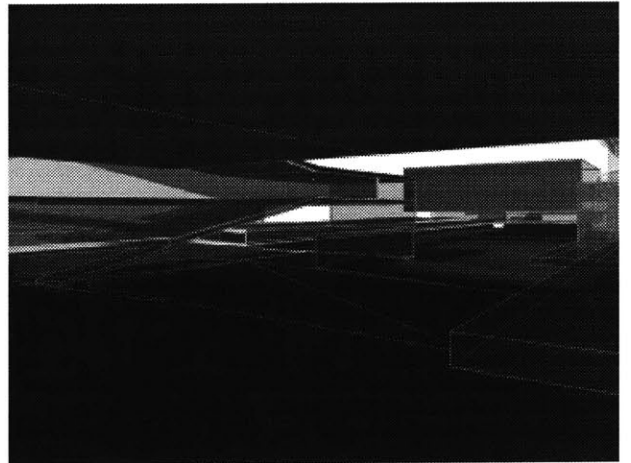
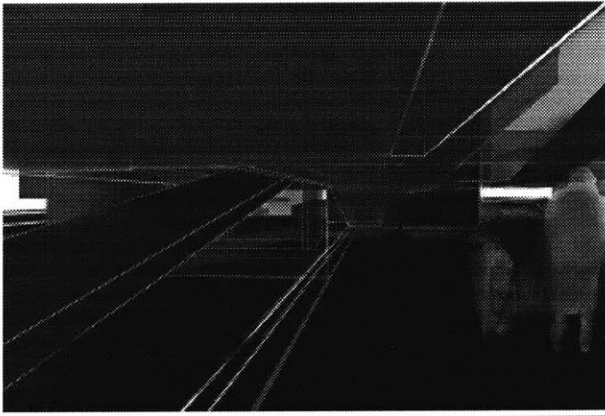
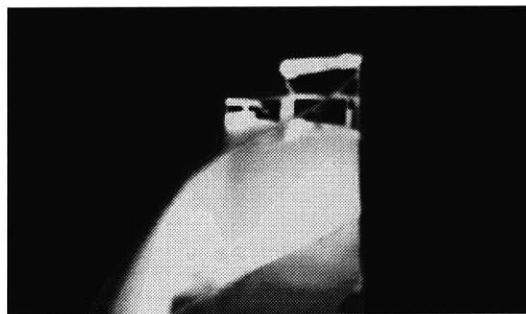


illustration 70, 71, perspective views of the first cluster. The digital display screens are indicated as translucent planes





illustrations 72, 73, 74, 75, perspective views of the gardens and above, the infrastructure ribbon as it changes from tube to surface to become an active display screen.



*"the radical impossibility of finding oneself of locating oneself,
of assuming ones interiority as identity"* Julia Kristeva

in lieu of a conclusion

How does one begin to assess a work at the end of its very beginnings?
The project is but a primer to a possible future,
a beginning to a condition, global in its modernity, yet local in its grounding.
The learnings, reach beyond its specificity, as I use it in my search to locate my
position as an architect, as a designer, as a person.

To speak of a solution was never an aim of this research.
It was used as an impetus in opening new doors, new possibilities, new ground-
ings, but also as a locus for ungrounding, for rejecting, for questioning, and
uncovering realities.

Inextricably tied to the search was an attempt to address one question: can
architecture solve problems beyond its scope? An answer, of course, is not
given here, but what is pertinent is the opening of possibilities and the process
establishing a framework upon which one can begin to locate a position.



illustration 76, a typical cafe in the old Nicosia

APPENDIX 1. NICOSIA THE DIVIDED CAPITAL CONFERENCE
april 23-25 1998

*THE ONASSIS PROGRAM IN HELLENIC STUDIES AT NEW YORK UNIVERSITY
in collaboration with the Dean for the Humanities, New York University, and the International centre for
Advanced studies (ICAS) project on cities and Urban Knowledge, present
"NICOSIA -- DIVIDED CITY" (April 23-24-25)*

*This conference will examine the effects of partition on the capital city of Cyprus, Nicosia, and on the lives of its
Greek and Turkish Cypriot residents since 1974. Topics: transformations in urban space and architecture;
island resource management; movements of population; the influx of immigrants into the city; new uses of
social space; changing concepts of center and margin. Also, a discussion of the impact of a bicomunal
cooperative project known as "the Master Plan," with its Greek and Turkish Cypriot devisers and participants.*

*Lellos Demetriades - Mustafa Akinci
Ertan Oztek (urban planner) - Agni Petridou (architect)
Gary Gumpert (Emeritus, Queen's College)
Peter Hocknell (University of Durham) - Adonis Florides (film director)
Sevina Zessimou (Limassol Representative, Union of Architects, Cyprus)
Susan Drucker (Hofstra University)
Yiannis Papadakis (University of Cyprus)
Vangelis Calotychos (New York University)*

*Conference Coordinators: Vangelis Calotychos (NYU)
& Yiannis Papadakis (University of Cyprus)*

The conference took place in New York City. It had a successful participation of Cypriots from both sides as well as Architects Planners Geographers and other scholars from the international scene. The conference was an excellent setting in raising a diversity of issues raised from both sides. The conference ended in a social note, with the optimism that there is the will to achieve first collaborative attempts for social urban and political integration. Following are brief transcripts of some of the issues addressed by the speakers.

Agni Petridou- Urban Planner/ The Mastreplan of Nicosia

Uncontrolled development taking place on both sides of the city, places the emphasis on the need for masterplan to accommodate a smoother and easier transition when the political problem becomes resolved.

- diagnostic survey
- creation of an inventory
- methodology of actions
- view exchange
- establish team situations
- abandonment of the city centre western sprawl
- disordered sporadic development
- lack of social cohesion

- avoiding political terminology, shifting the attention elsewhere to the practicalities of the city planning and long-term planning allowing for options and variations but acknowledging the realities of a city as a whole organic collaborative system
- interactions through the groups scientific capacity
- revive city centre which had been abandoned due to its proximity to the buffer zone
- historic city-edge zone socio economic decline deterioration of architectural and environmental qualities
- 1200 listed buildings in Greek side
- traffic one way hoops and pedestrianization
- university locations, artisan shops (who work and feed off each others contribution)
- revitalization of domestic areas
- commercial and business connections crossing the line in the opposite directions

Peter Hocknoil Oxford University-Department of Geography

- Durham University Phd
- Boundary and territorial conflicts
- conflicting and cooperative operations trust measurements
- Post partition management in cooperation coexistence and conflict resolution
- rethinking transboundary resource management in Nicosia
- different recognition of boundaries on either side

- superordinate goals appealing to both groups which cannot be achieved separately vs common unilateral objectives which each aim towards and may be
- disputed narratives
- new narratives?
- information for ethnic consumption
- heterotopia
- reverse stagnation
- remote sensing project
- avenue object based databases

achieved separately
island scale as the primary area of integration
the physical reality of the dimensions of the island almost forces us to see the
integration not only in nicosia but at a larger scale

cooperative transboundary projects involving:
socio, economic, ecologic, and political projects
natural and infrastructural transcending straddling migrating falling in both sides
electricity and watre sharing projects the sewidge and watre treatment solution

defacto border two capitals two coities infact the equivalent of two islands

water shortage: the second Cyp[rus problem
givingsds and takings an informal negotiation in the islands natural
resources...watre distribution and electricity, seen as humanitarian acts

what happens when the two sides develop their own resources sufficiently so as
not to need the help of the other side/
political situation became removed from the solution of a problem requiring
joint efforts

accomodating various possibilities in the solution
neofunctionalist view
participation and collaboration of both projects
libaralist spillover effect
urban management coordination
sewege project lead to masterplan...
as the technical urban issues are resolved what will be the next level of
problem

the solution is not a political solution but becomes a social problem which will
need to be adressed well in advance the political solution
over the past 24 years, the two communities have developed in complete oblivion
to the other side, nurturing other horror stories and narratives of the
situation

what are the problems but also the aims in the solution
why is it still pertinent to find a solution and whet might it imply in terms of
human relations?

infected with localised space specific details
technocratic corporation
boundaries have different impact, global, state local,
functional interdependencies
resulting in rationalising rather than transcending the problem
inextricably inmeshed in relations of political power

what language do the two groups communicate in?
how do these teams develop new methods in working with each other?
internet liberty, meetings are more limited while re the results of this
collaborations in relation to the actual solutions achieved?
need to create bridges between the two sides cannot constantly duplicate
resources, and ignore the other side...still part of a whole island

Sewina Zesimou-Representative of the LImassol Union of Architects

remote sensing project
avenue object based databases
is the solution hindered by these new collaborations
to what degree can there be further corporation while there is no solution?
not possible to go on incommunicado

social forces opposing unification
TRNC government
property owners
genuine fears
easy way out to ignore the other

emotional affinity of the city which determines the solution one way or the other
How are federations formulated?
what does it mean in terms of a viable living condition for both distinct
communities

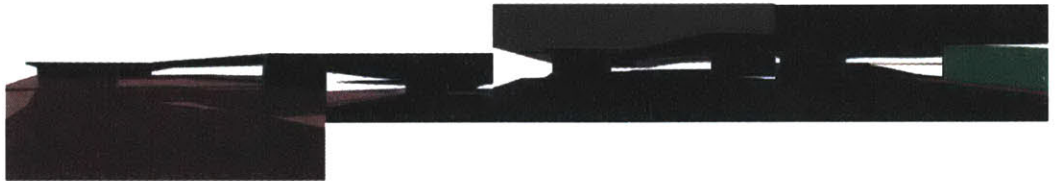


illustration 76, early models of the units/ framing the landscape, relationship to outdoor

MODE OF INQUIRY(part of initial thesis proposal prepared in April 1998)

- Develop the concept of a translational devices rather than information lockers, in work and leisure/points of exchange, of modification, of evolution, points of catalytic interaction, points where the parts enter a metabolic exchange
- Physical and virtual translational devices, (current project for New Technologies Class) new ways of communicating tactile and acoustic information, moving away from the predominantly ocular tendency to intensify the haptic and acoustic
- Creation of situations which become activated by the actors (people, technology, politics) rather than attempting to create custom made solutions that become obsolete as the variables change

INITIAL SCHEDULE

- Nicosia the divided Capital Conference April 1998
- Initial Research and Thesis Proposal completed May 1998
- Complete first translational device (Part of New Technologies class) May 1998
- Research organizational models in different environments June 1998
and develop notational and other diagramming methods to organize and translate information
- Site visits (as a Fulbright scholar, gain access to otherwise restricted areas) July-August
- Film, and photographic documentation of area, the airport the old city, the edge
- Creation of initial set of ideas in photomontage, and film, in further determining mapping methodologies for site and program August 1998
- Further develop translational devices, in alternative situations Sept. 1998
work and leisure related
- Develop spatial and environmental aspects of the project, Octob.-Novemb.
- Design and development Nov.-Decemb.

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