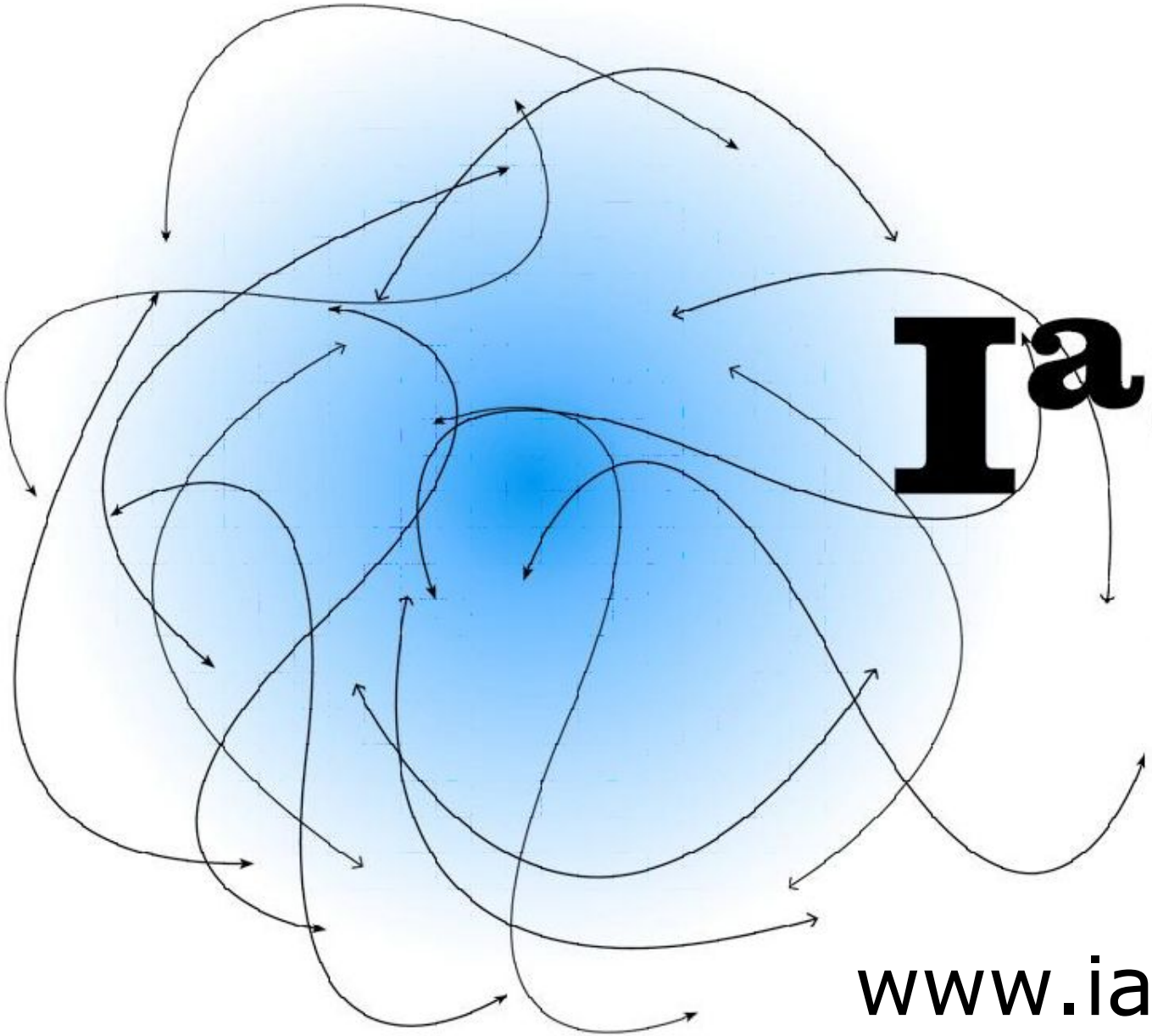


Iaac

Institut
d'arquitectura
avançada
de Catalunya

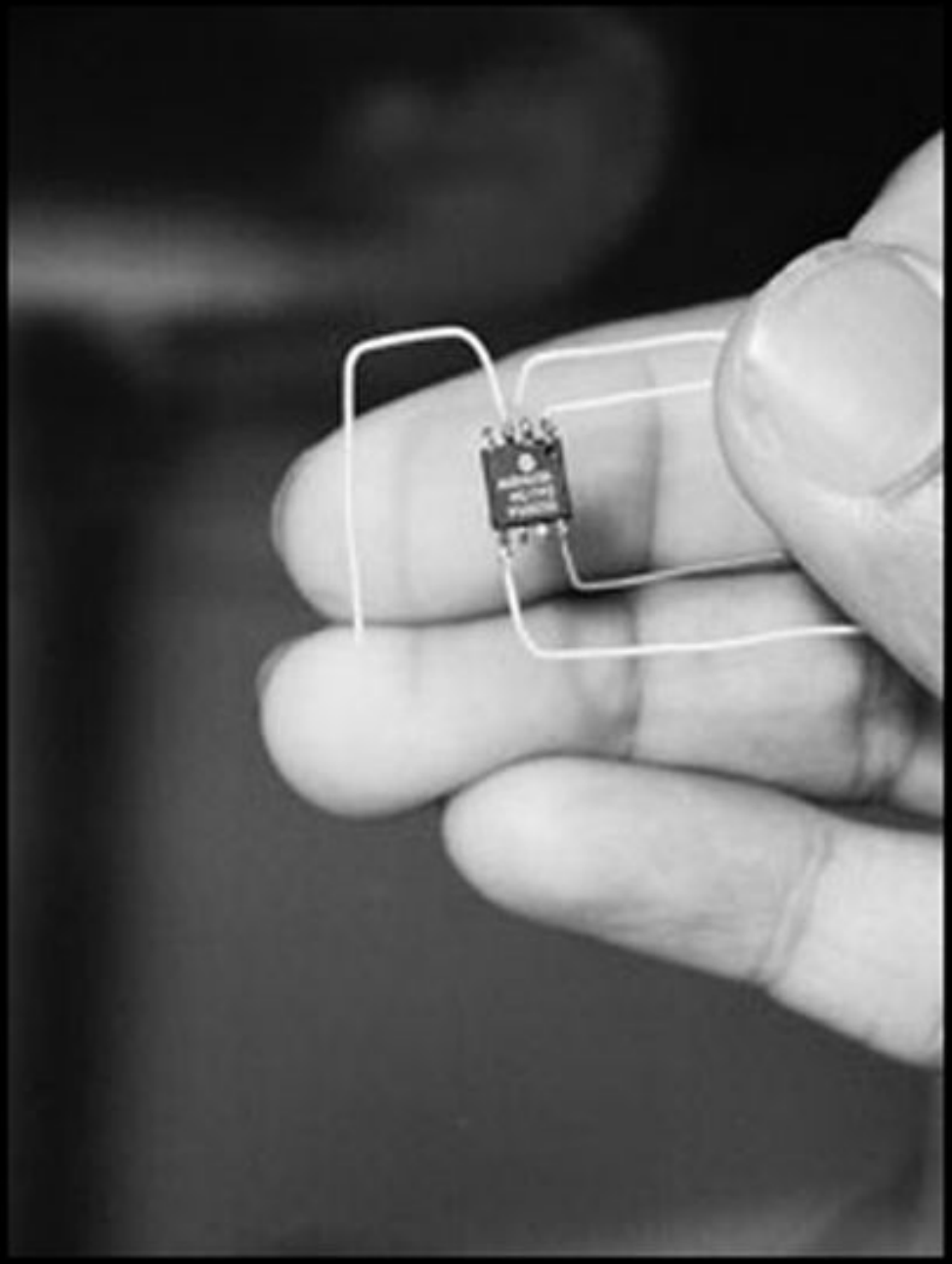
www.iaac.net

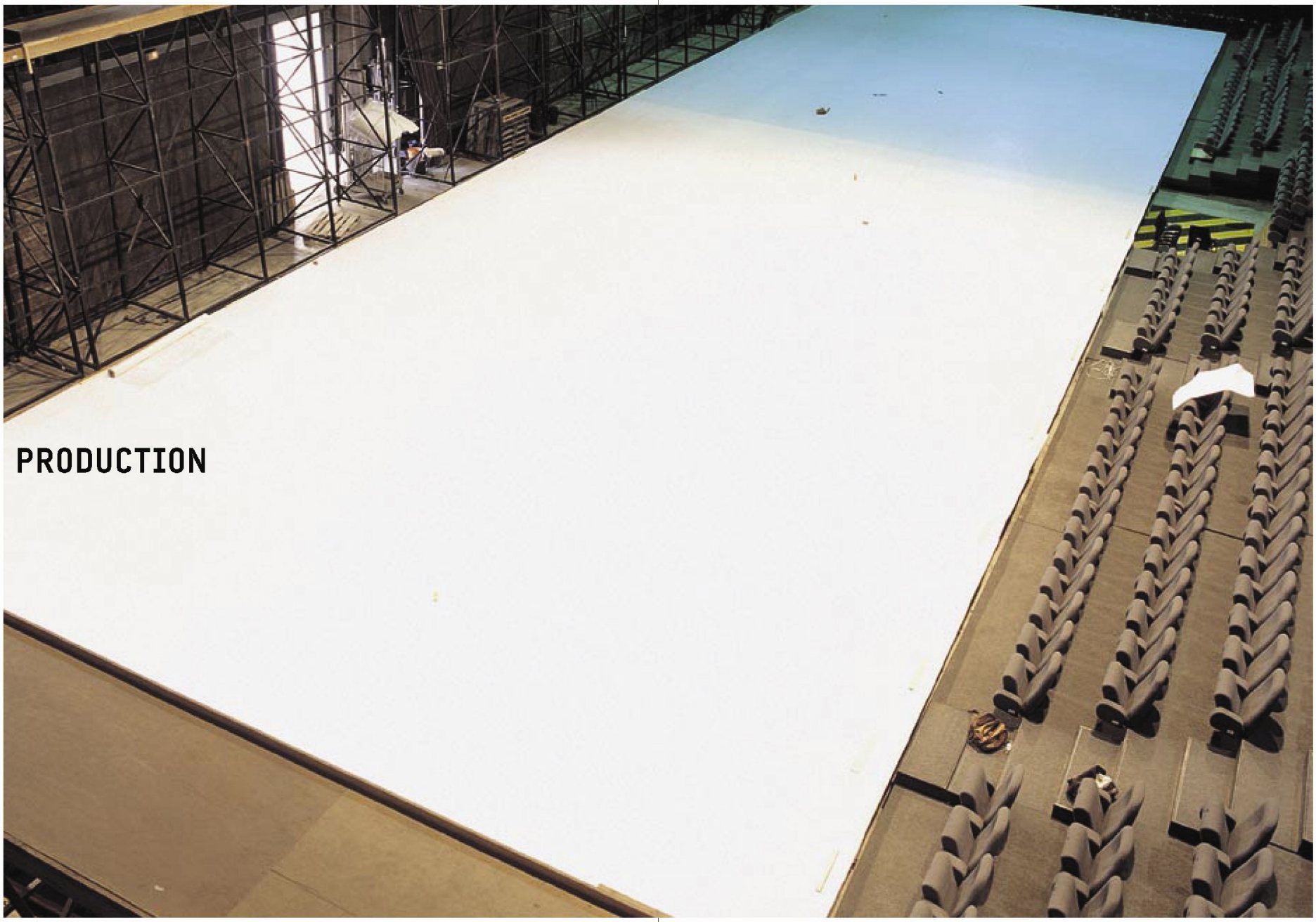
MEDIA HOUSE

PROJECT

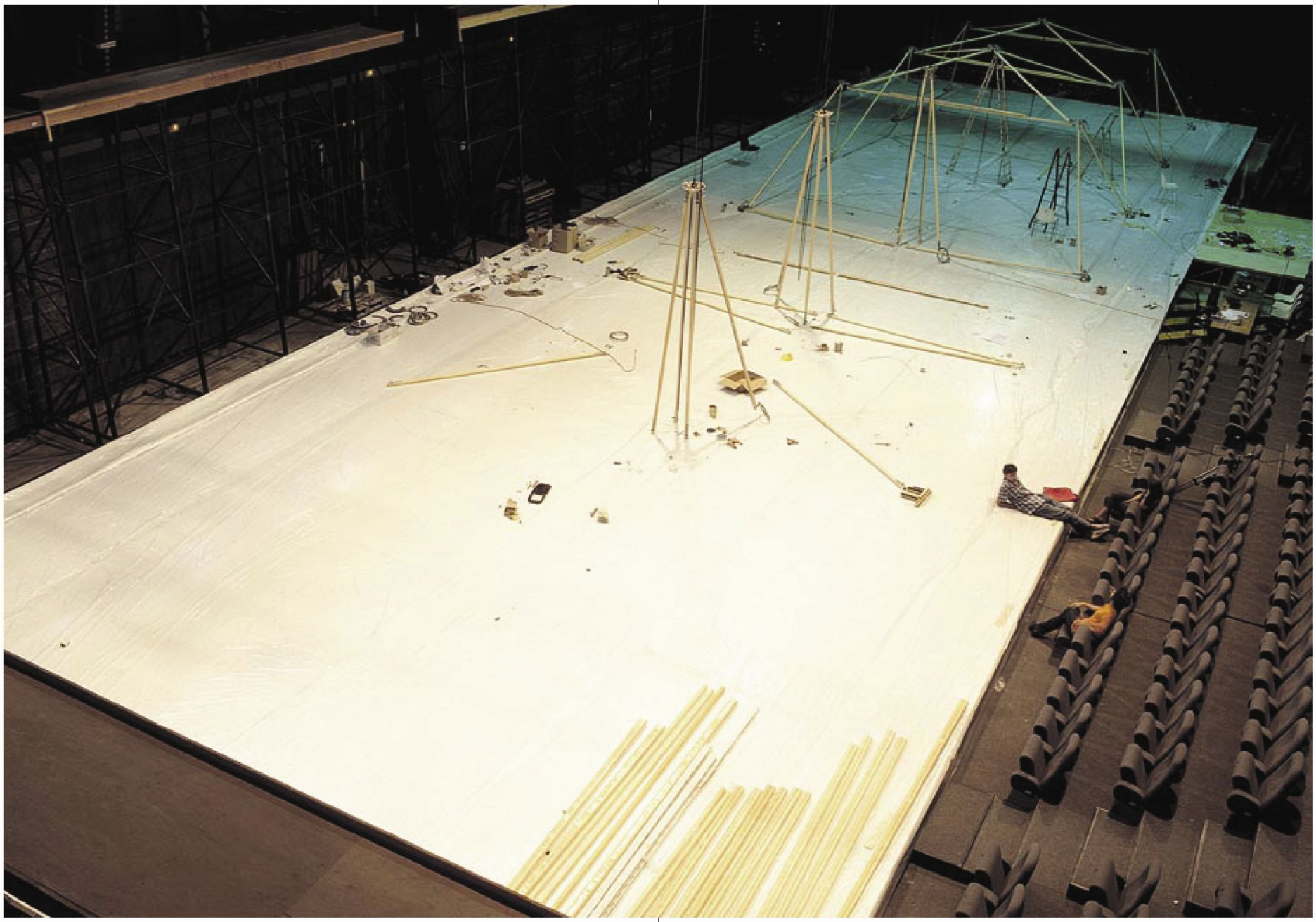
BCN 26.09-06.10

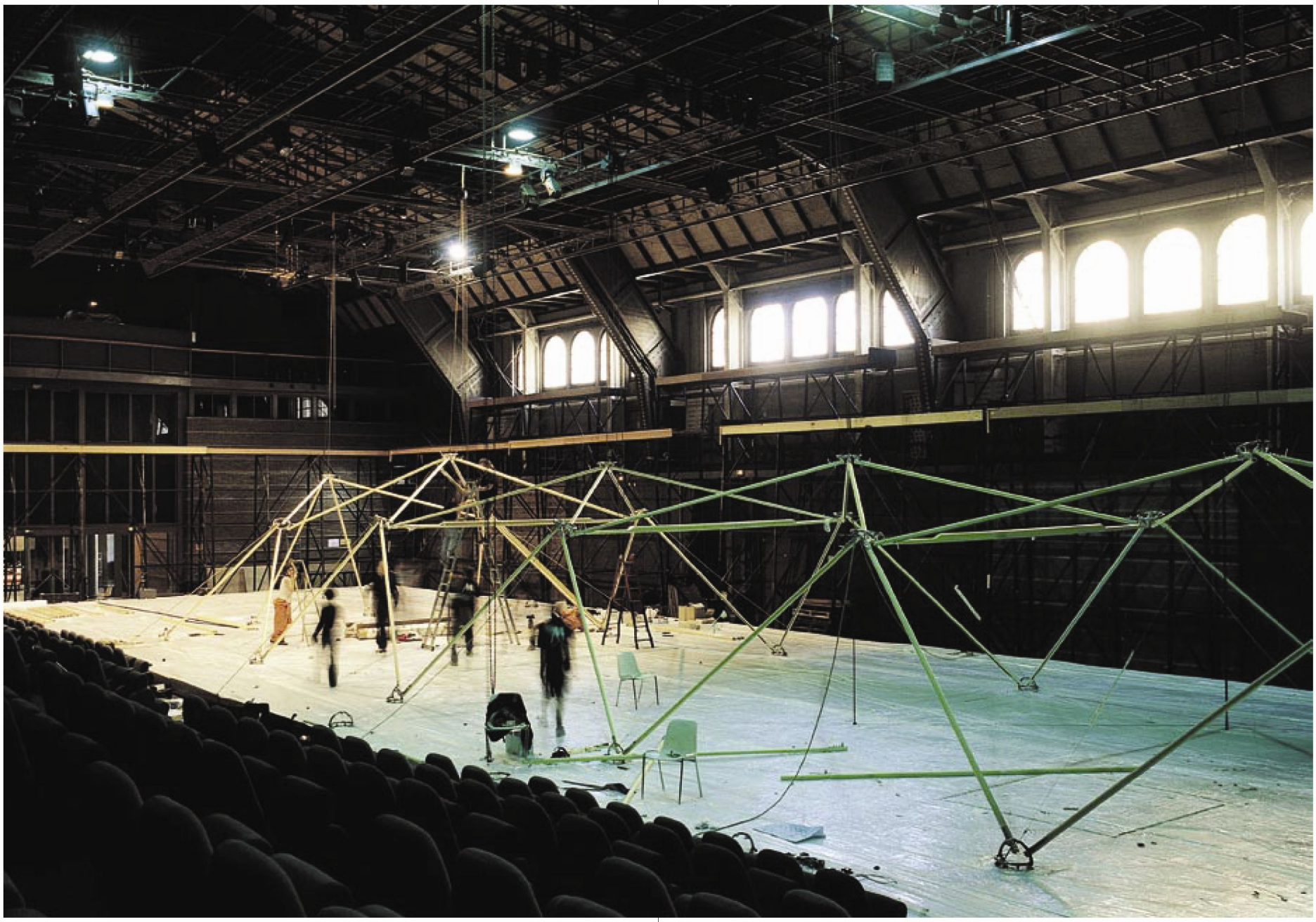
MERCAT DE LES FLORS 11.00 - 19.00 h.





PRODUCTION



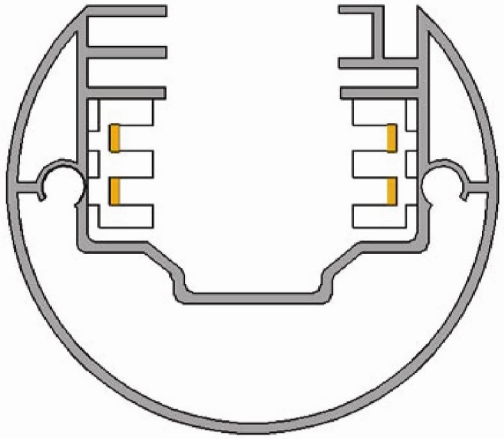


SECTION

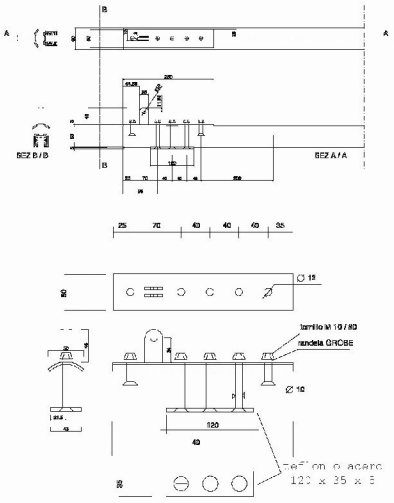
We found the answer when we came across a profile produced by a small firm in Germany, called EUTRAC. Unlike standard lighting profiles, such as ERCO, in addition to the electrical cables this track incorporates two lines for the low-speed transmission of information.
The standard wall lights allow any element that can be connected to an EUTRAC element (such as a lamp or a switch) to be connected to, disconnected from and moved at will on this profile.

The result is a doubly hybrid profile – structural (wood) and informational (aluminium) – which also incorporates data and electrical networks.

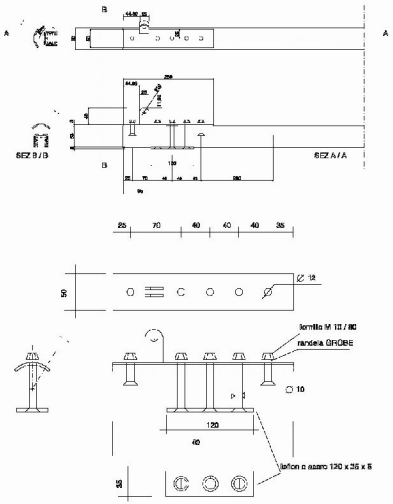
Special parts were manufactured incorporating a EUTRAC connector and a board with a microserver produced by the Media Lab.

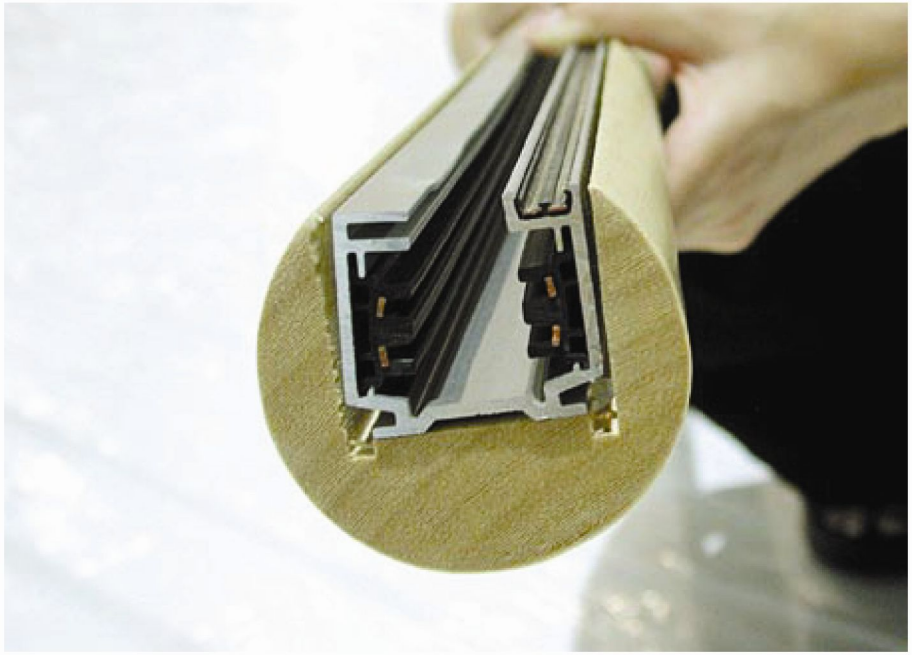


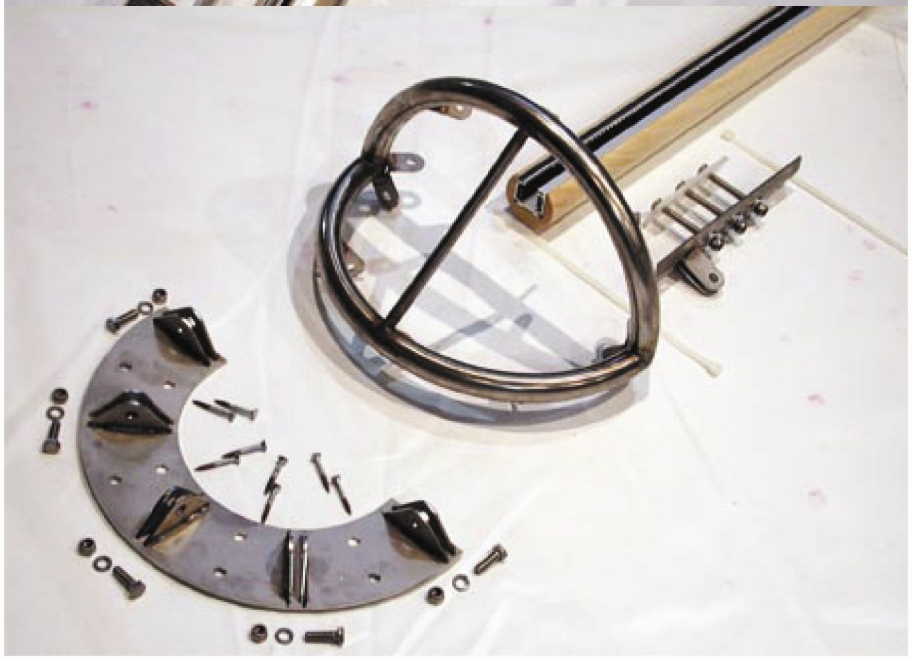
Tipo a

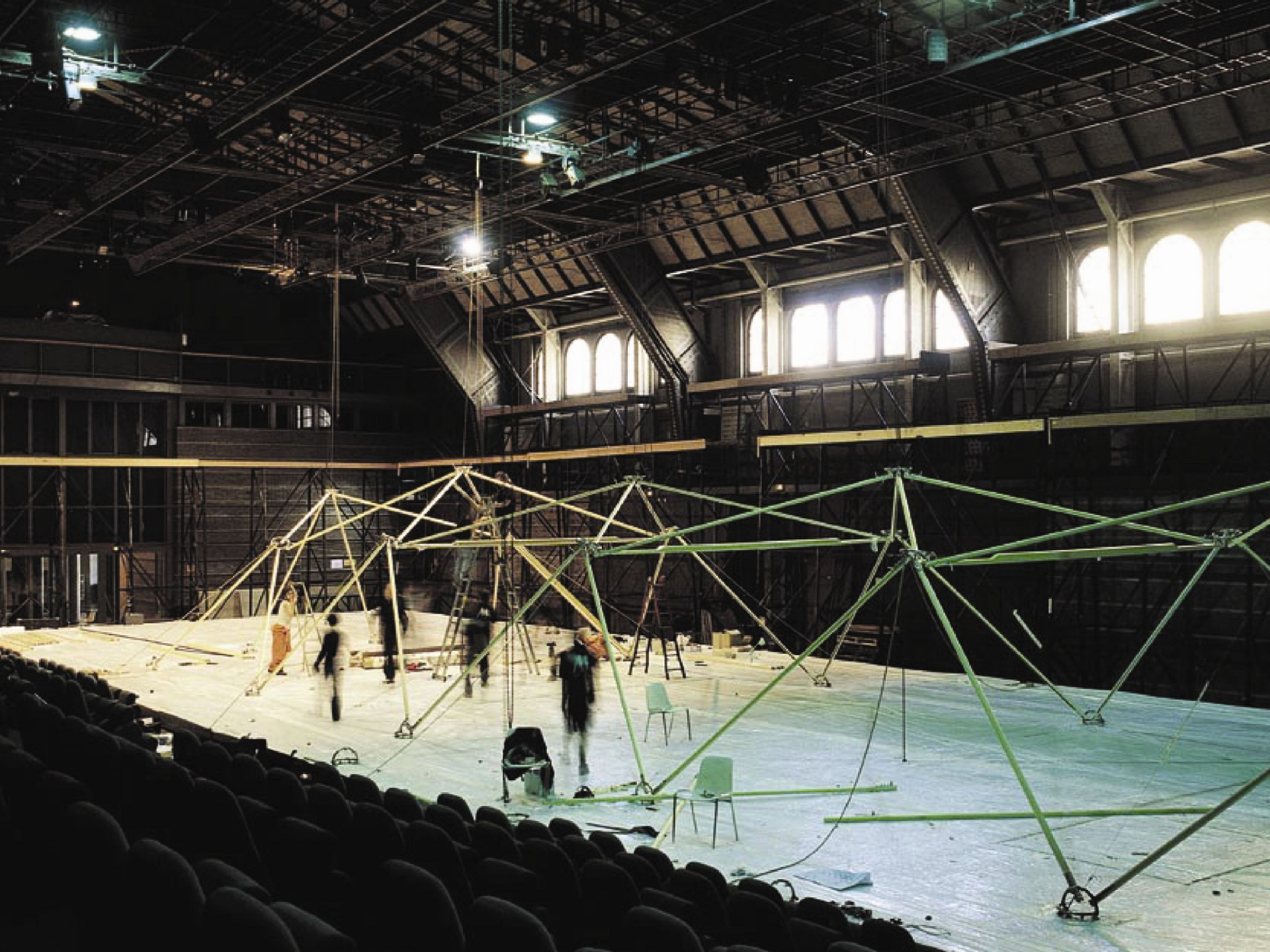


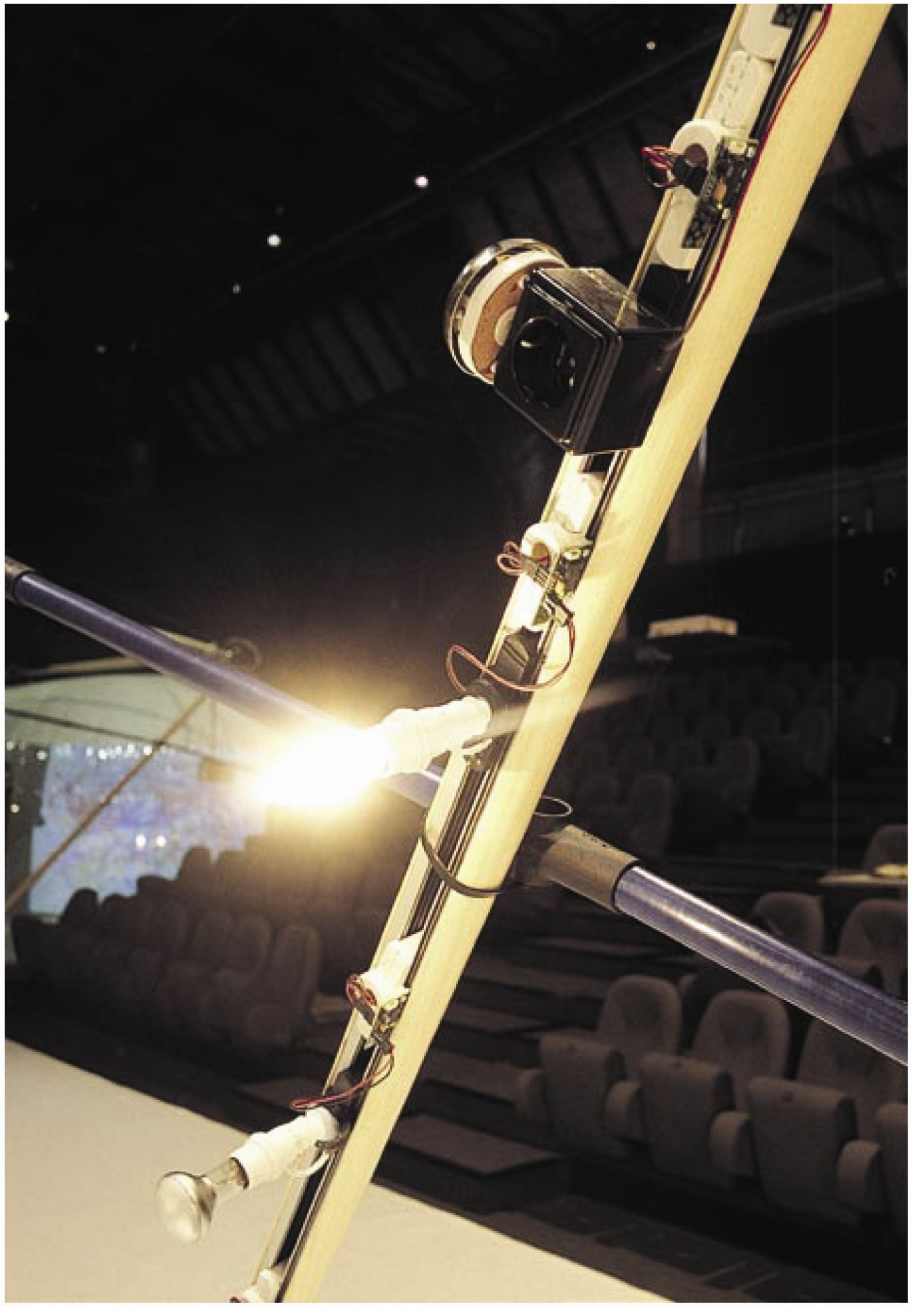
Tipo b









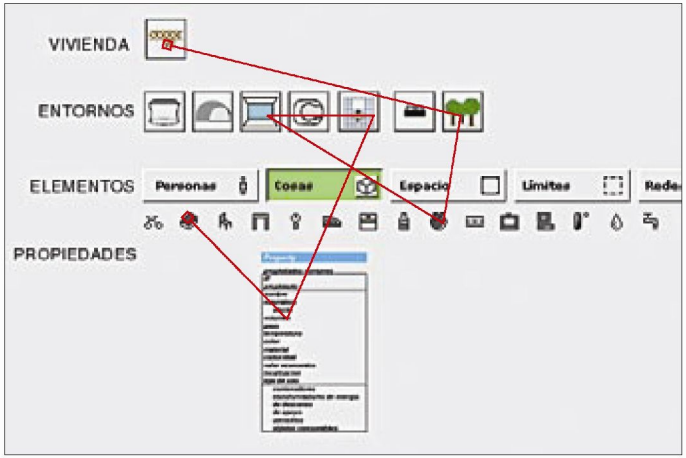


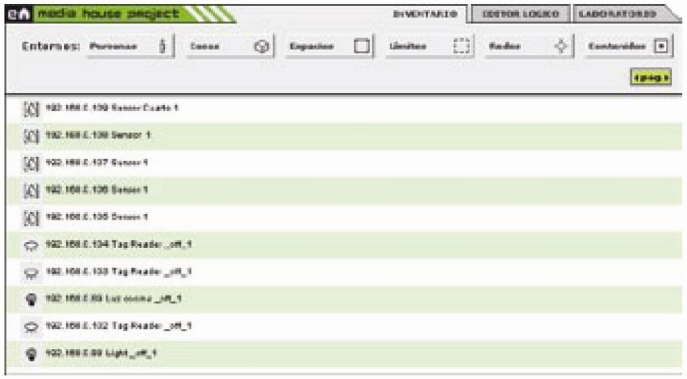
HOME WEB

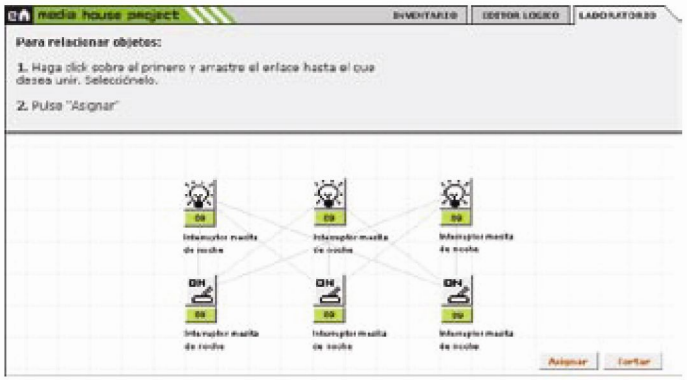
Each element of a home potentially has their equivalent in the digital world, which can be shown with data or as a virtual representation of physical space. In the case that all of the elements have the appropriate interface, the home web would provide their status and be able to link them using logical phrases.

The computing facilities distributed need, on the one hand, to have micro servers installed in the elements that compute the information provided by the interfaces (sensors and others) and on the other hand a network to transmit the information which links them. From an information perspective, hierarchies do not exist in physical space in order to link data. If someone wants to flick a switch in a bathroom of a home, they have to enter the building, climb the stairs, enter the home, walk along the corridor, open a door and flick the switch. The possible links which exist in a person's and a home's world have an arborescence structure. In order to access one level, another superior level always has to be passed through first. In the case of the digital world, the structure is flattened out. The sequential hierarchies of the physical world do not exist. The property of an object can be linked, which then directly affects the property of the whole home or city.

In the future we should be able to qualify the relations that we create between things.





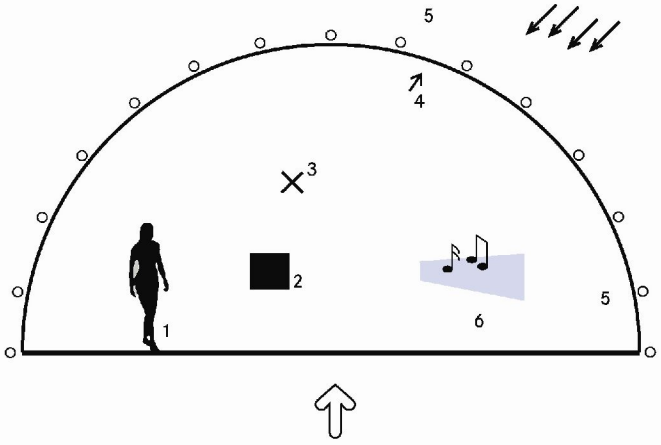


CâmRemota

ENVIRONMENT

If we produce micro servers which can be installed into everything that exists in a home, the first step is to think what is 'everything' in a home. What kind of completely different elements are there in the home which contains different parameters, and therefore the way in which they measure inputs and outputs are different.

Following a reality study, we would propose the deconstruction of habitable environments into six layers:



1_People

People and by extension living beings. Animals and plants. Those entities that in their most developed state have intelligence. They have a metabolism. They have an internal flow of biological material which allows them to function. In the case of people they have a body temperature which reflects their physical state. People are the reason for the home's existence.

2_Space

Free space allows us to live in a home. It is measured in metres qubic. It has a chemical composition (oxygen) which allows us to breathe. If this factor collapses (a gas leak etc) human life is not possible. We can measure the space's temperature, humidity, and the intensity of sound contained in each section via the interfaces which are mainly installed in its limits. Air conditioning, based on being able to measure and manipulate some of the characteristics of the space, has been provided by the industrial age which changed the operation of inhabited spaces.

3_Objects

They are elements which occupy a volume in the space, and which in many cases exist in order to enable the development of specific functions in the home. Electrical appliances exist, which in their initial conception already incorporated electricity and an interface which allows people to relate to them. There are more and more objects which have historically existed in a home which incorporate new functions, adding electrical and information providing systems to the home. Each object (a table, a chair, a container, a picture etc) can potentially carry an interface.

4_Networks

The networks allow information to be structured and distributed in the space. They are defined by means of section and a path. Energy, water, gas, and data networks, and in the case of structures with porticos, hardware networks exist in the home. The networks can be constructed with different paths, integrating themselves in more complex sections where there are various networks.

5_Limits

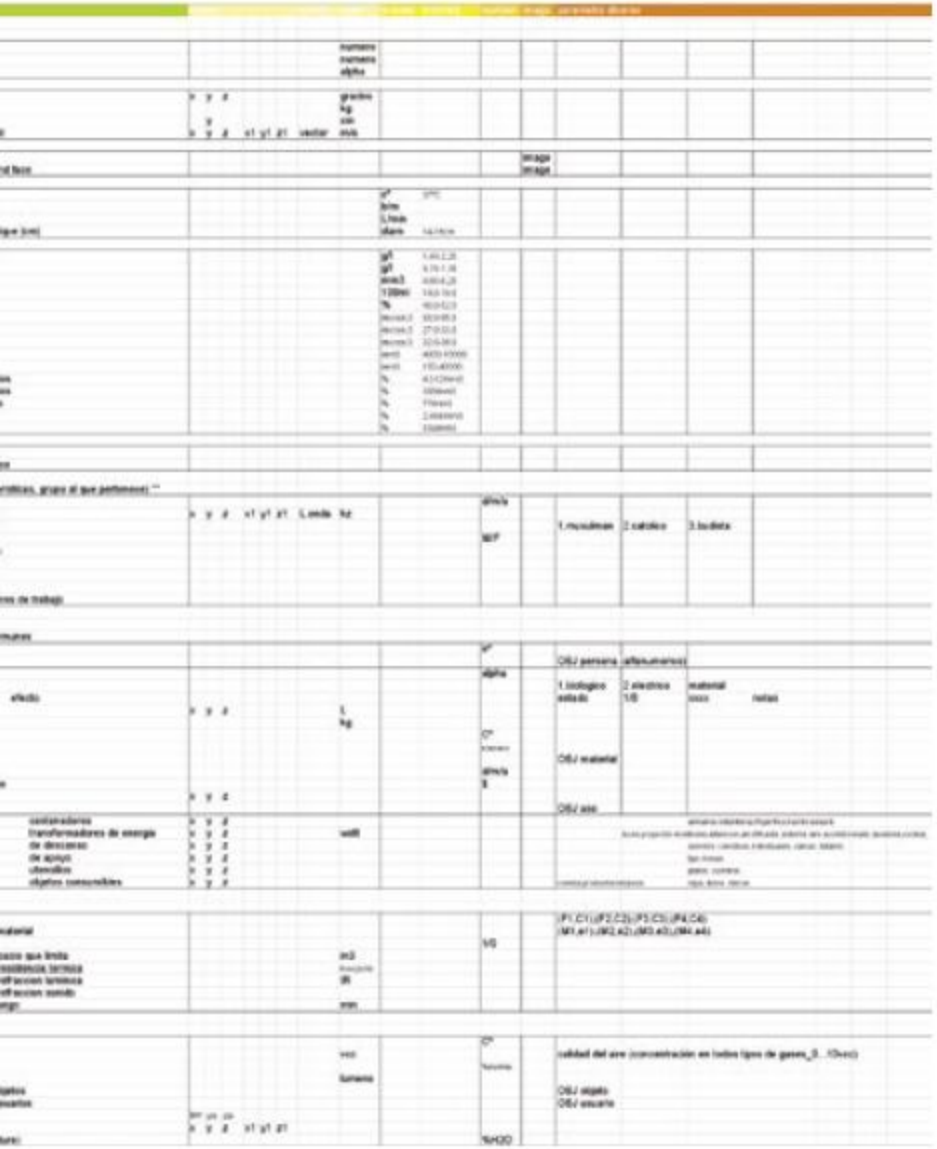
The limits are constructed in order to create certain living conditions different from those of the natural environment. The limits are measured in metres squared and are generally continuous surfaces made up of layers of different material (bricks, insulation, paint etc) in sections. The limits of a home or a space have traditionally been static, but the search for more and more flexible functionality has led to the development of flexible or dynamic limits.

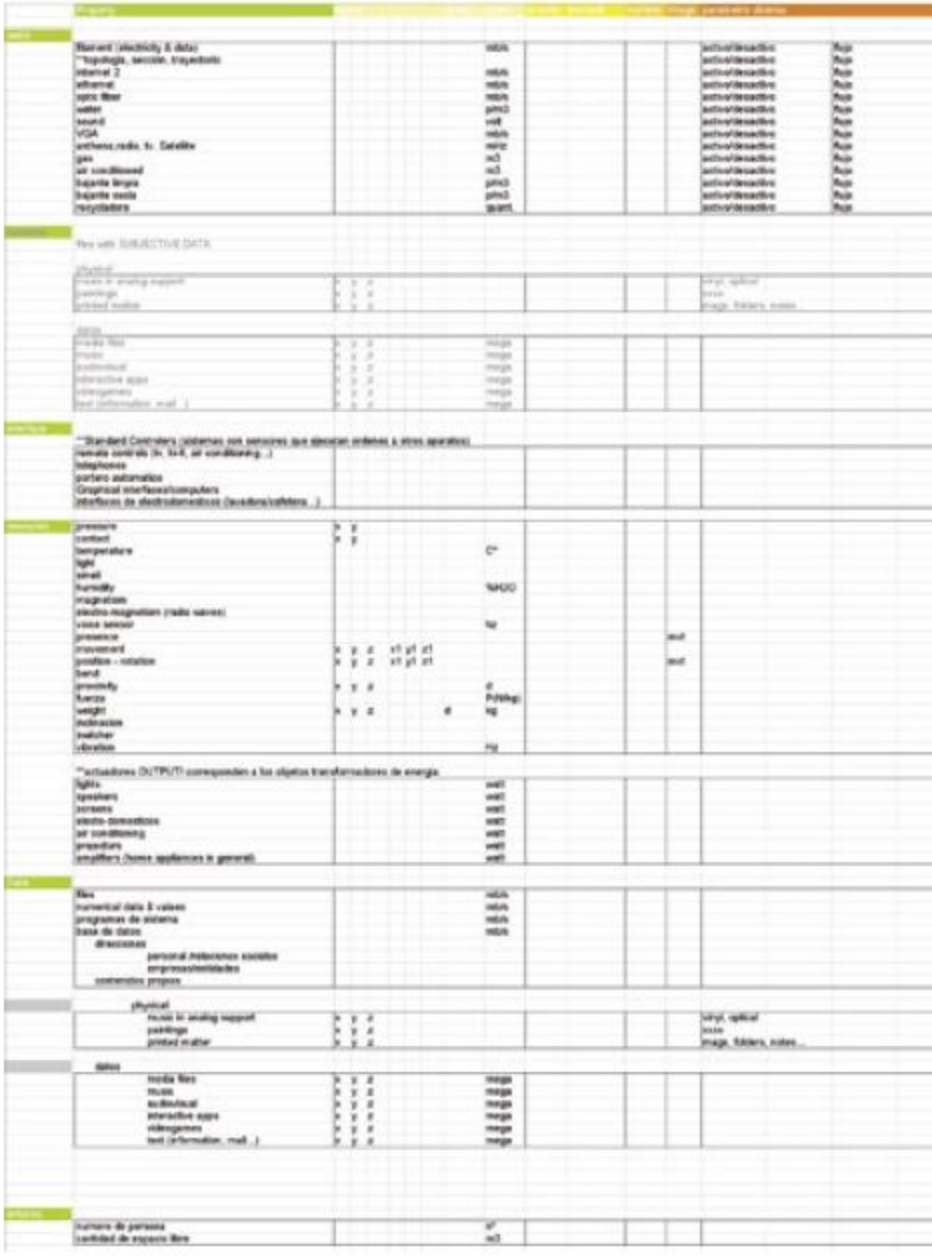
6_Contents

The contents are the subjective information which become apparent via various formats in a home. A radio emits a sound with an intensity and a tone which can be physically measured. The subjective value of this information, which depending on the cultural value of each individual, is the content. A light, a sound, a video, or a painting provides a subjective content to the space. Today, computers easily recognise physical fact and are starting to recognise subjective values.

ERTIES OF ENVIRONMENTAL LAYERS

OGUERO + SOPHIE CORNANGUER

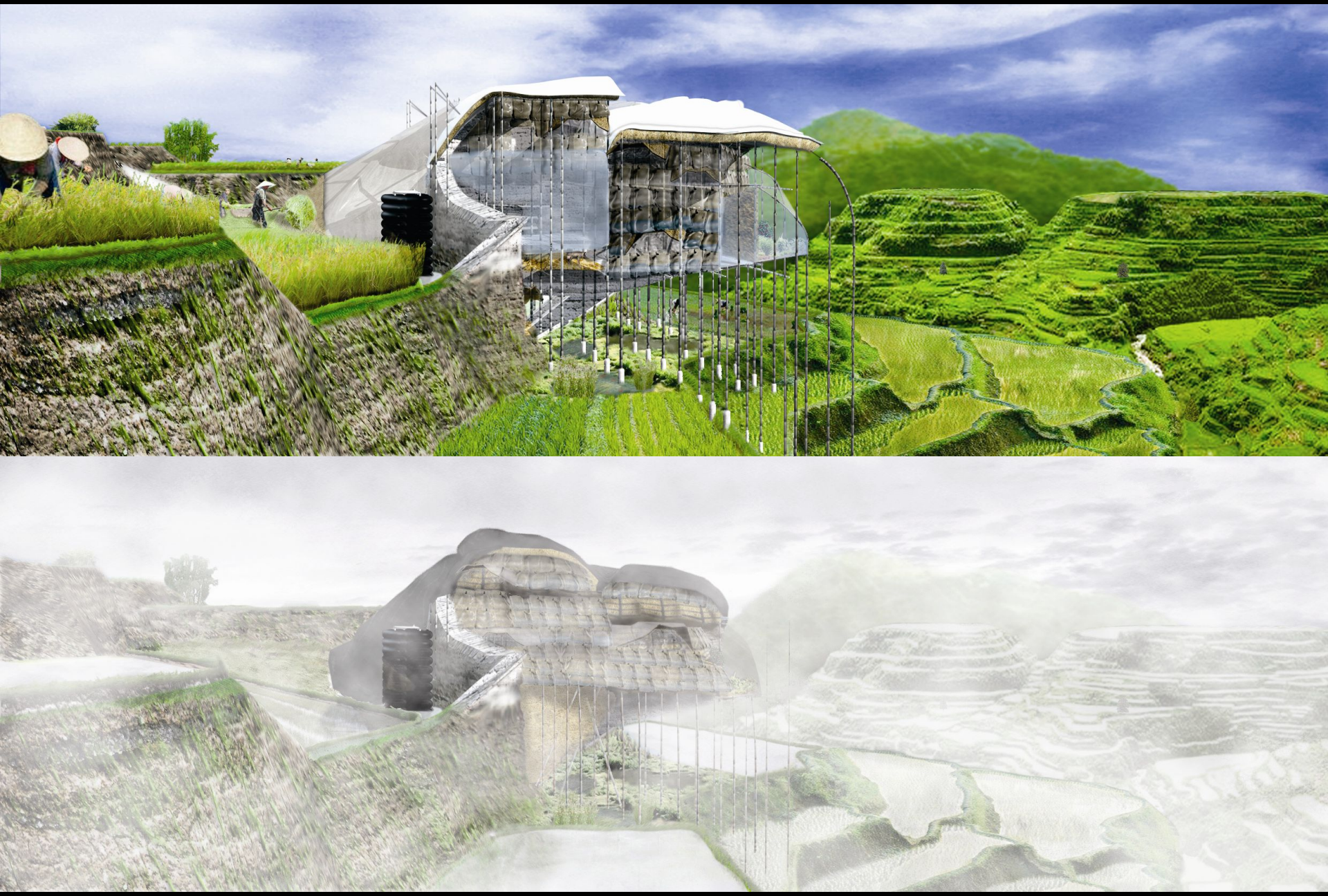




SELF-SUFFICIENT HOUSING

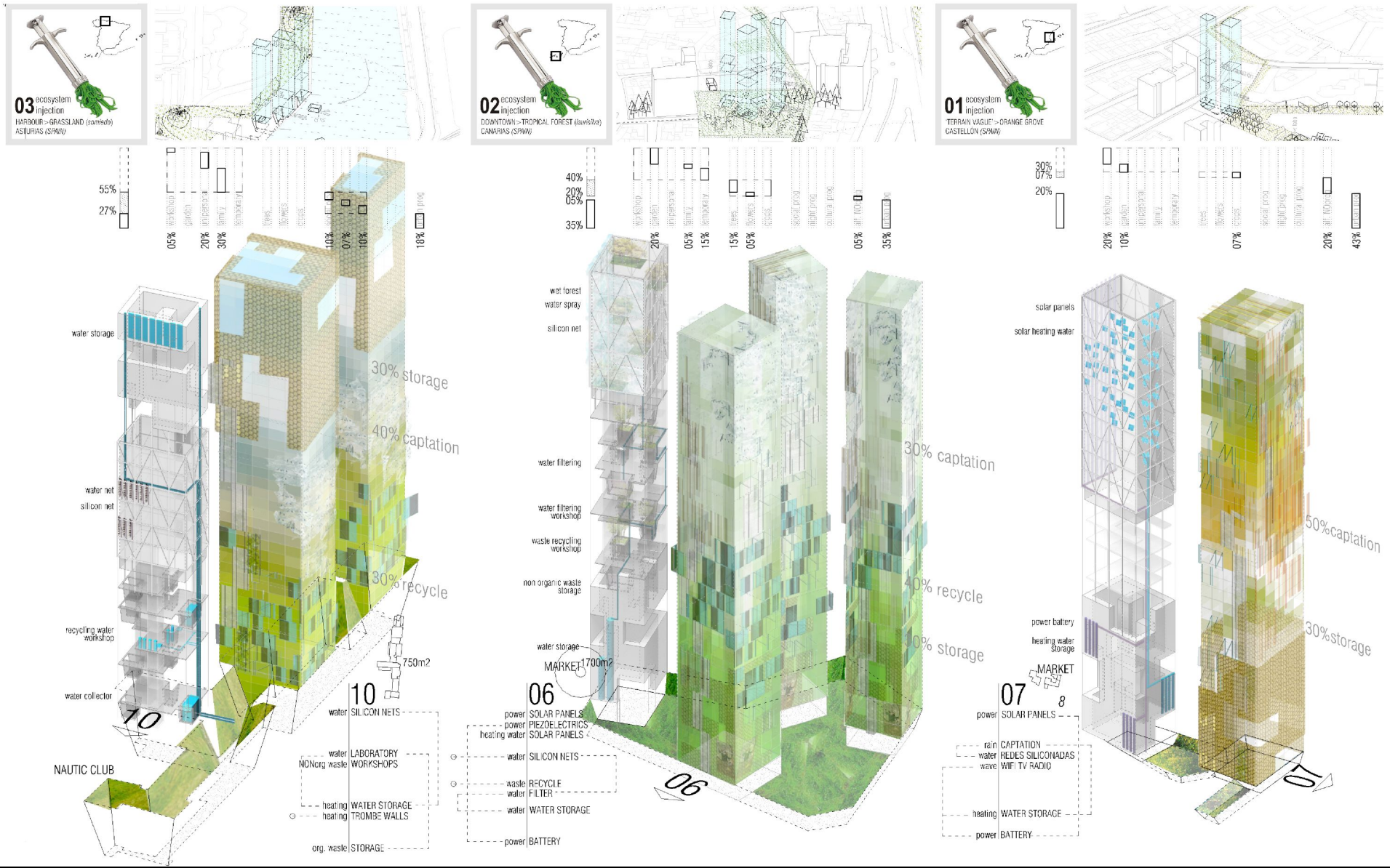
IAAC 1st Advanced Architecture Contest

1st Prize Single Housing



MicroCosm-House | France | Gaetan Kohler

1st Prize Collective Housing



Ecosystem Injections | Spain | Daniel Ibañez Moreno, Rodrigo Rubio Cuadrado, Alberto Alvarez Agea

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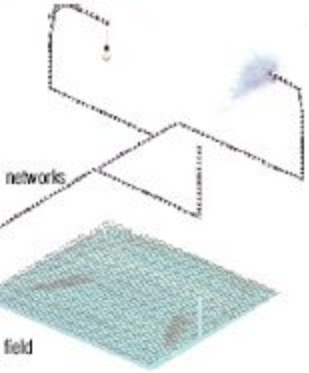
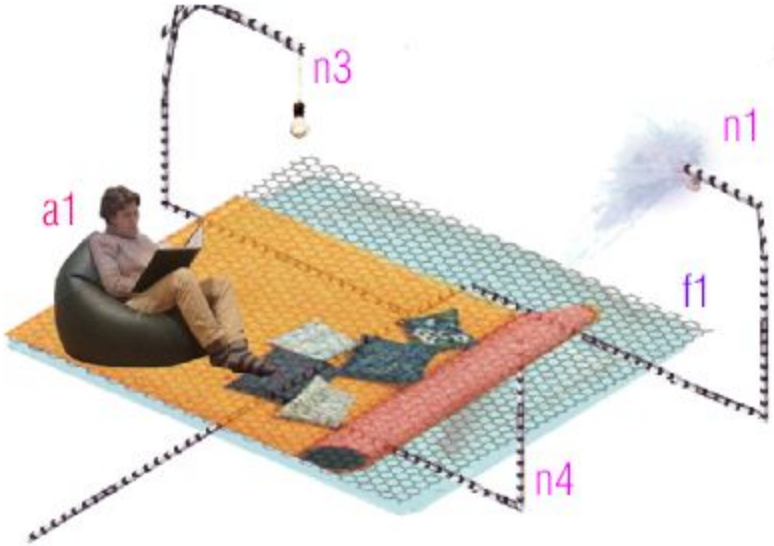
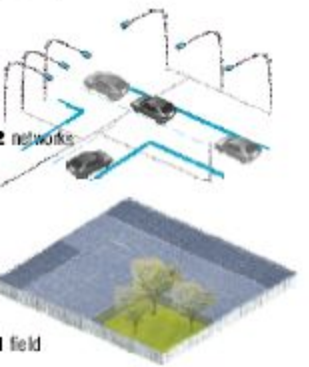
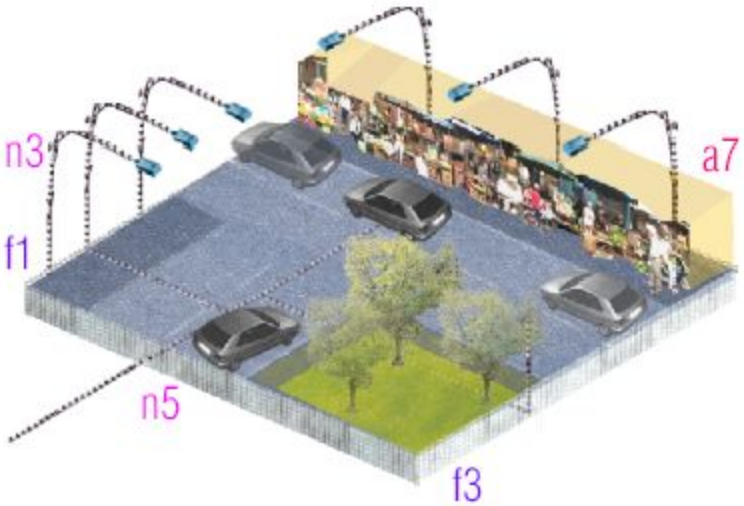
MULTIPL









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tut
quitectura
nçada
Catalunya

hyper-habitat

C 06
JS!!!

laaC research 06-07

tructure matrix

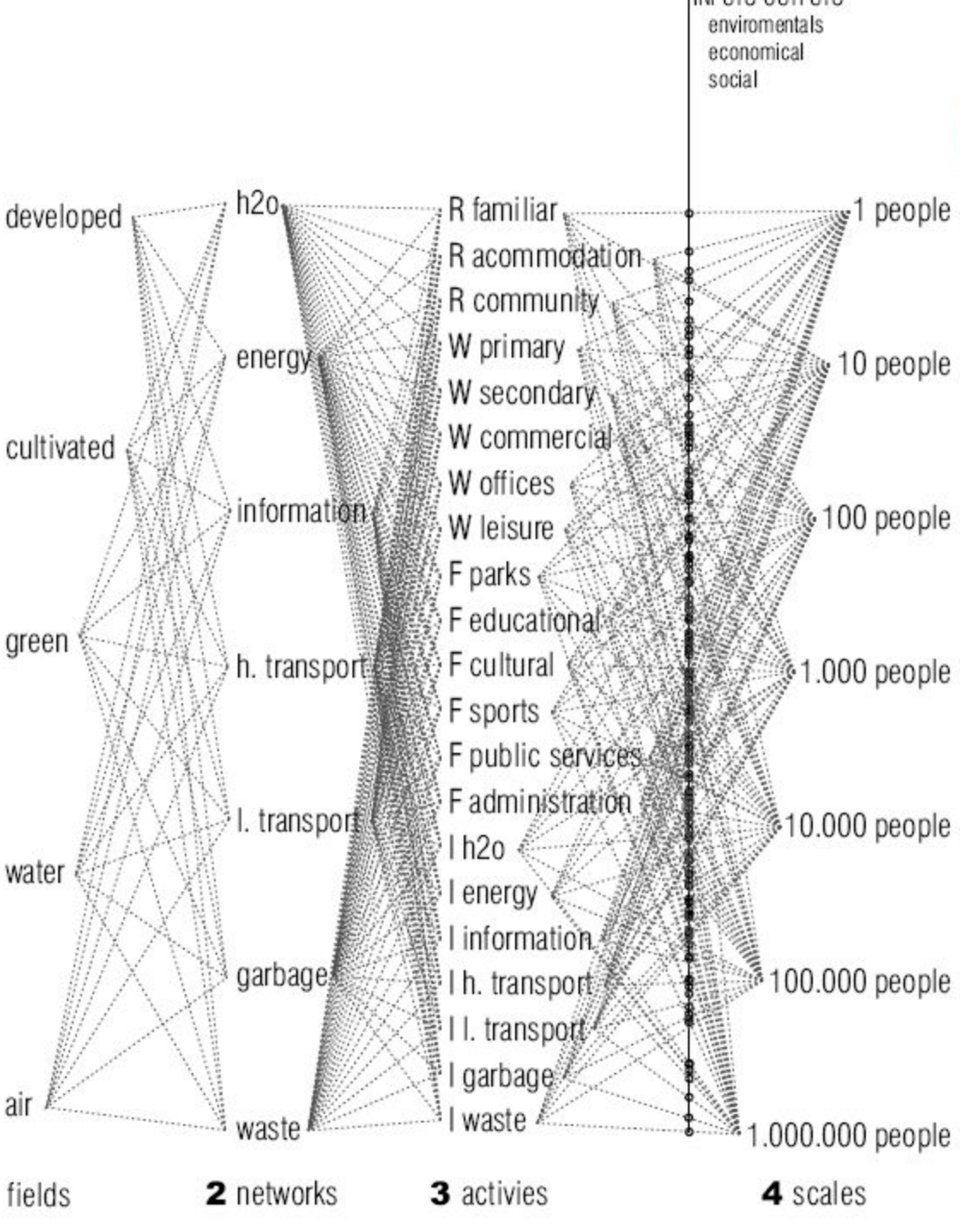
class programatic + network + fields

function genetic analysis of the city
hybridation
generate new proposals

paciality 3D knowledge of the city
overlapped layer & scales

ritations the matrix allows a huge
range of hybridations

groups 3 > 7
bgroups 22 > 0
TOTAL ∞



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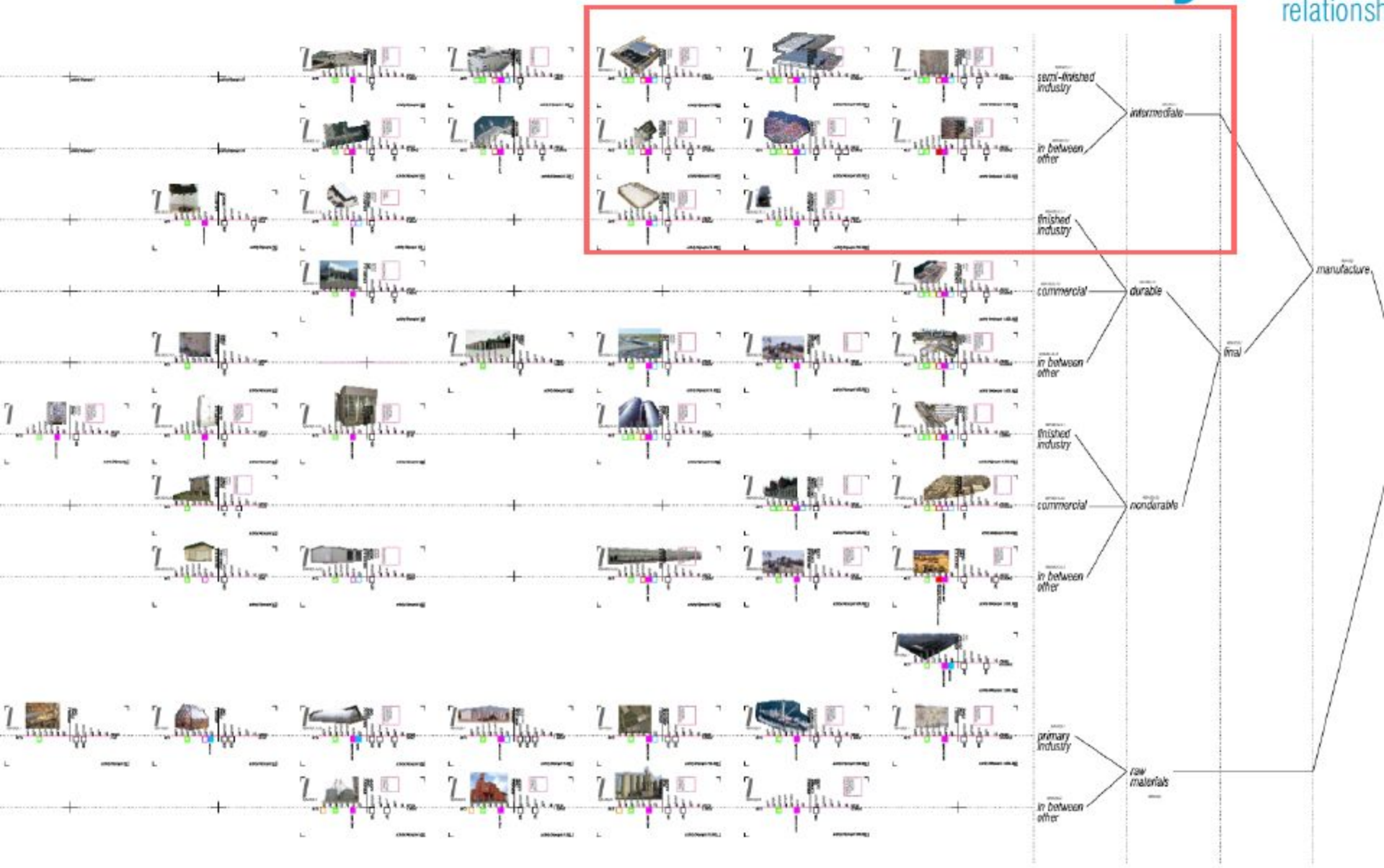
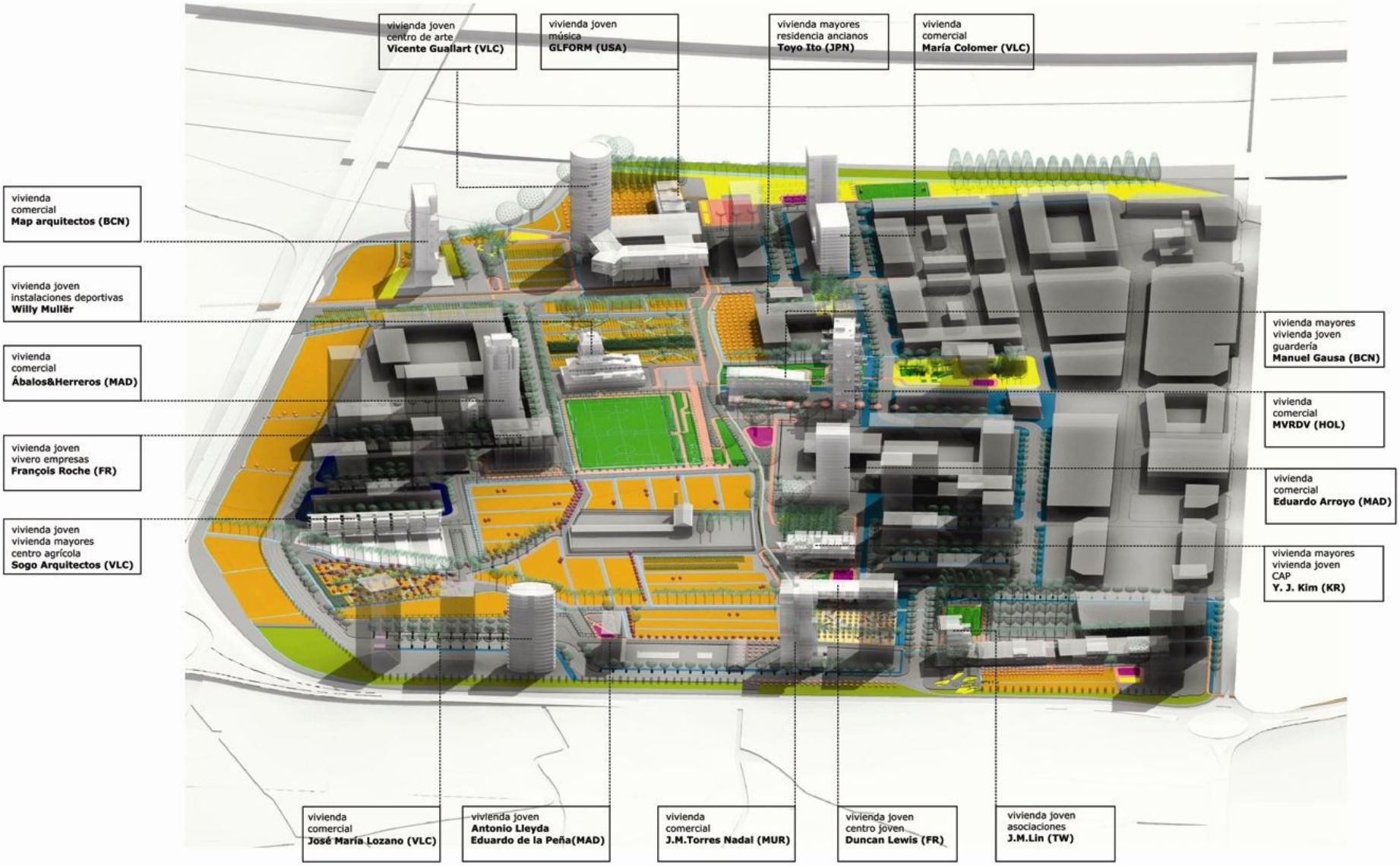


HISTORICAL CENTER
AMERICA´S CUP
CITY OF ARTS
AND SCIENCE
SOCIOPOLIS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centro de arte
Vicente Guallart (VLC)
vivienda joven
música
GLFORM (USA)
vivienda mayores
residencia ancianos
Toyo Ito (JPN)
vivienda
comercial
María Colomer (VLC)
vivienda
comercial
Map arquitectos (BCN)
vivienda joven
instalaciones deportivas
Willy Mullër
vivienda
comercial
Ábalos&Herreros (MAD)
vivienda joven
vivero empresas
François Roche (FR)
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vivienda mayores
centro agrícola
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comercial
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vivienda joven
CAP
Y. J. Kim (KR)
vivienda
comercial
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vivienda joven
Antonio Lleyda
Eduardo de la Peña(MAD)
vivienda
comercial
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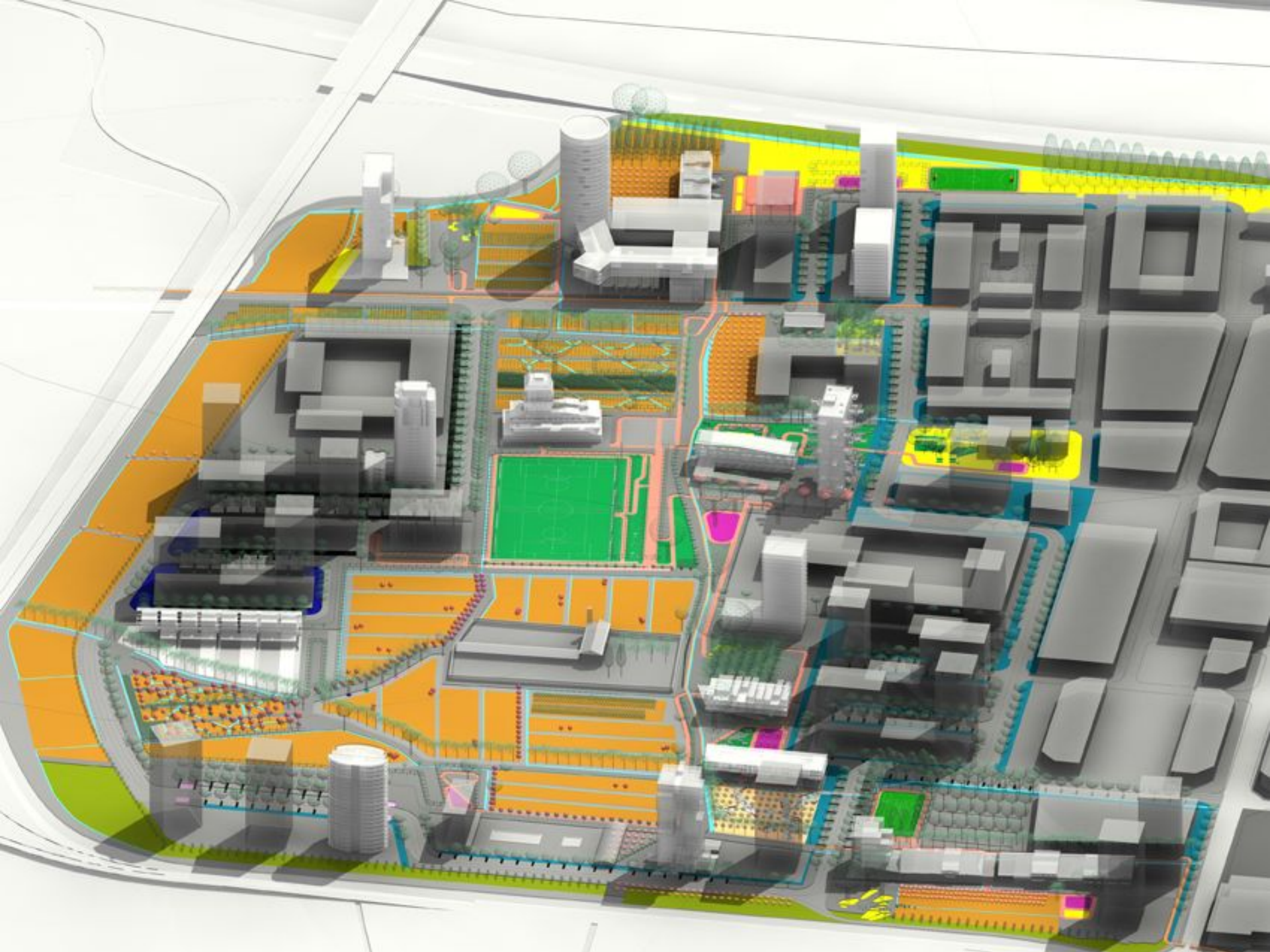
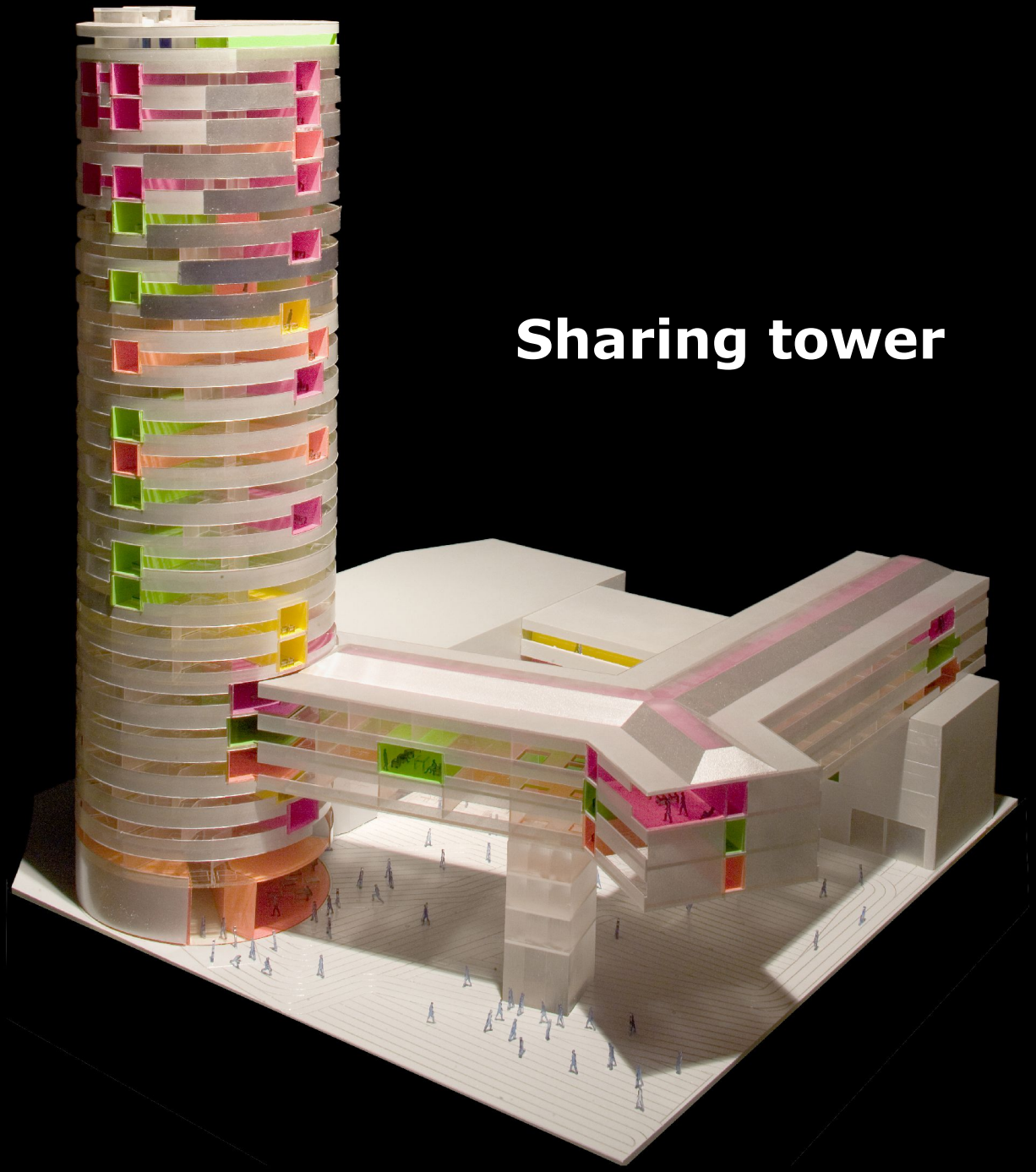
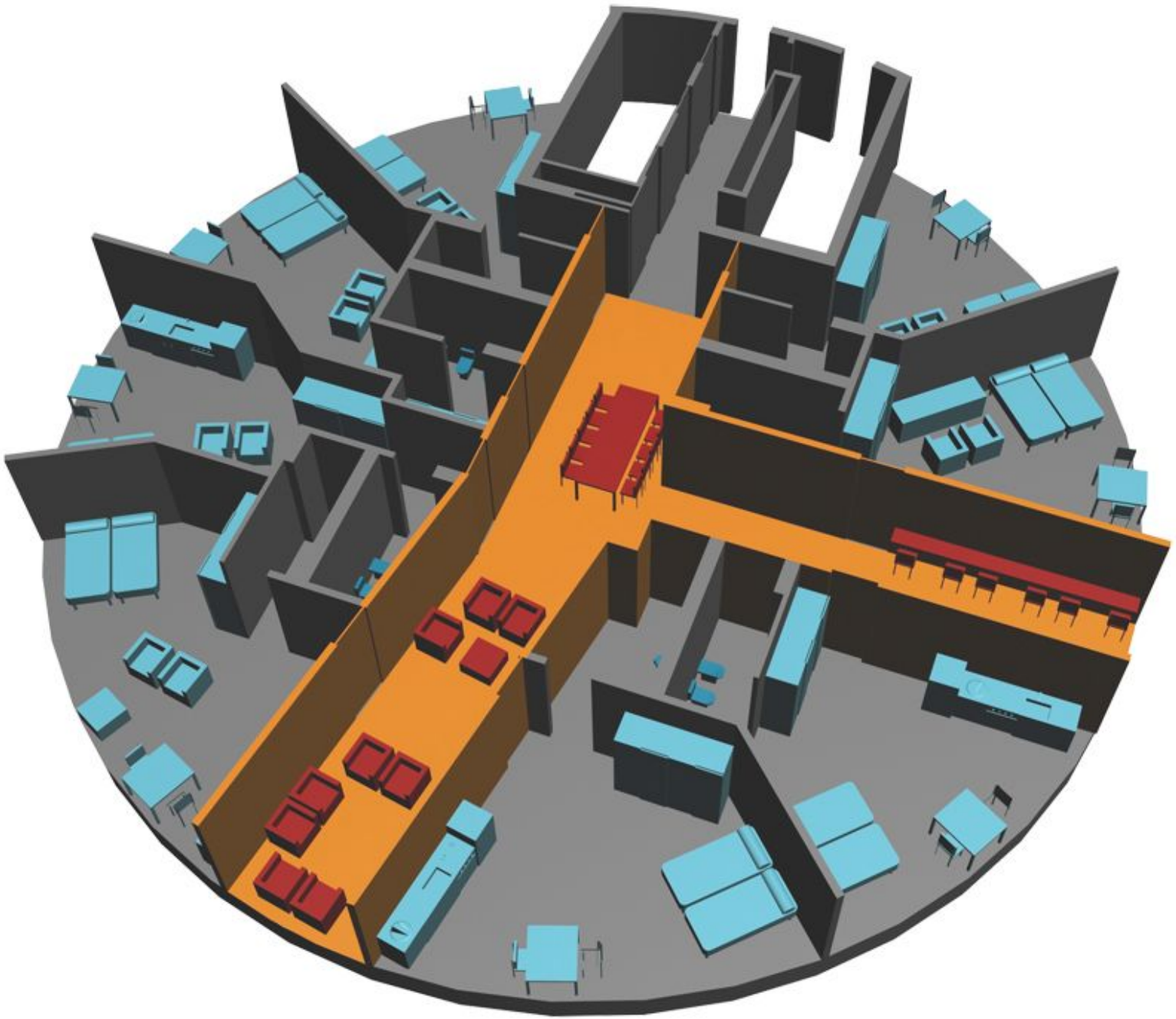
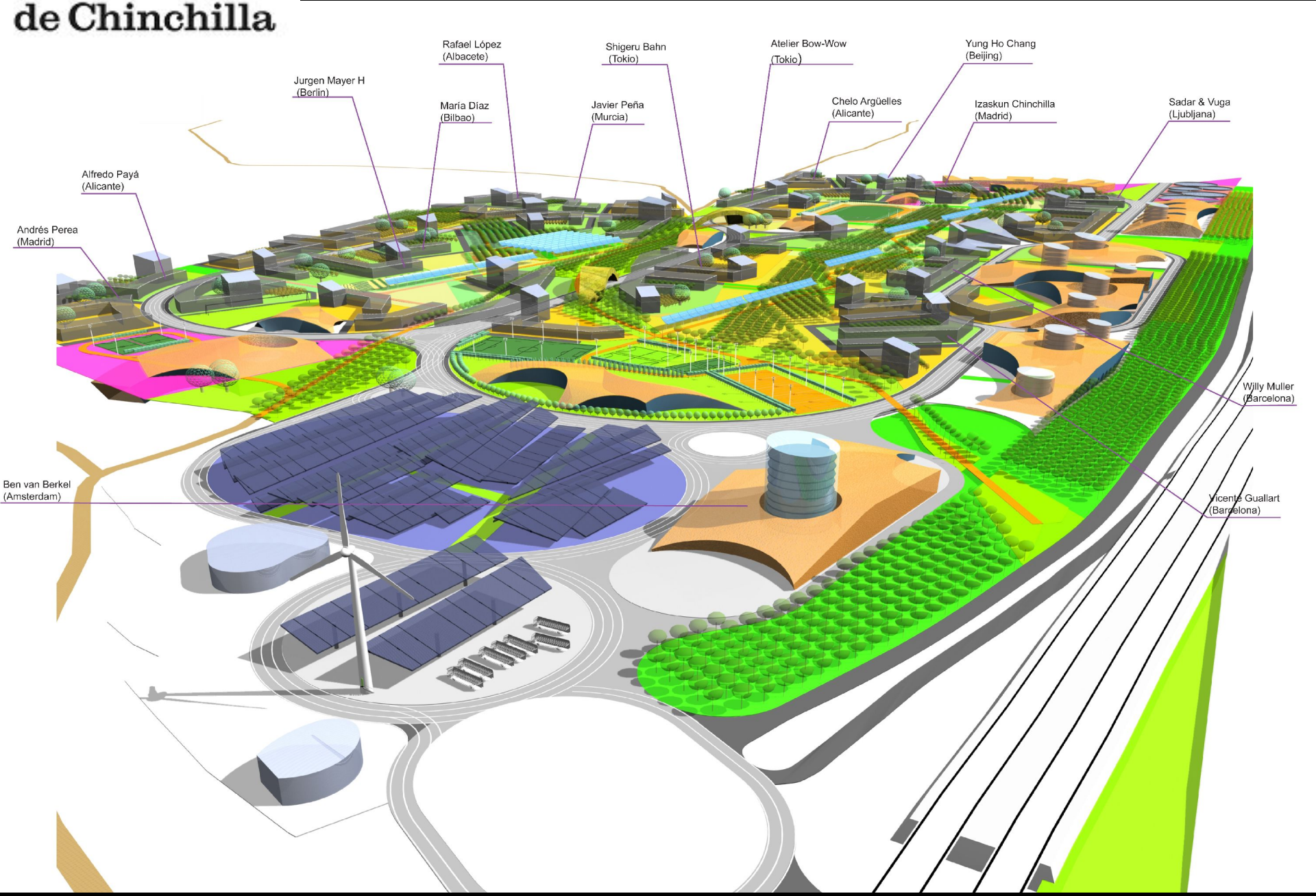
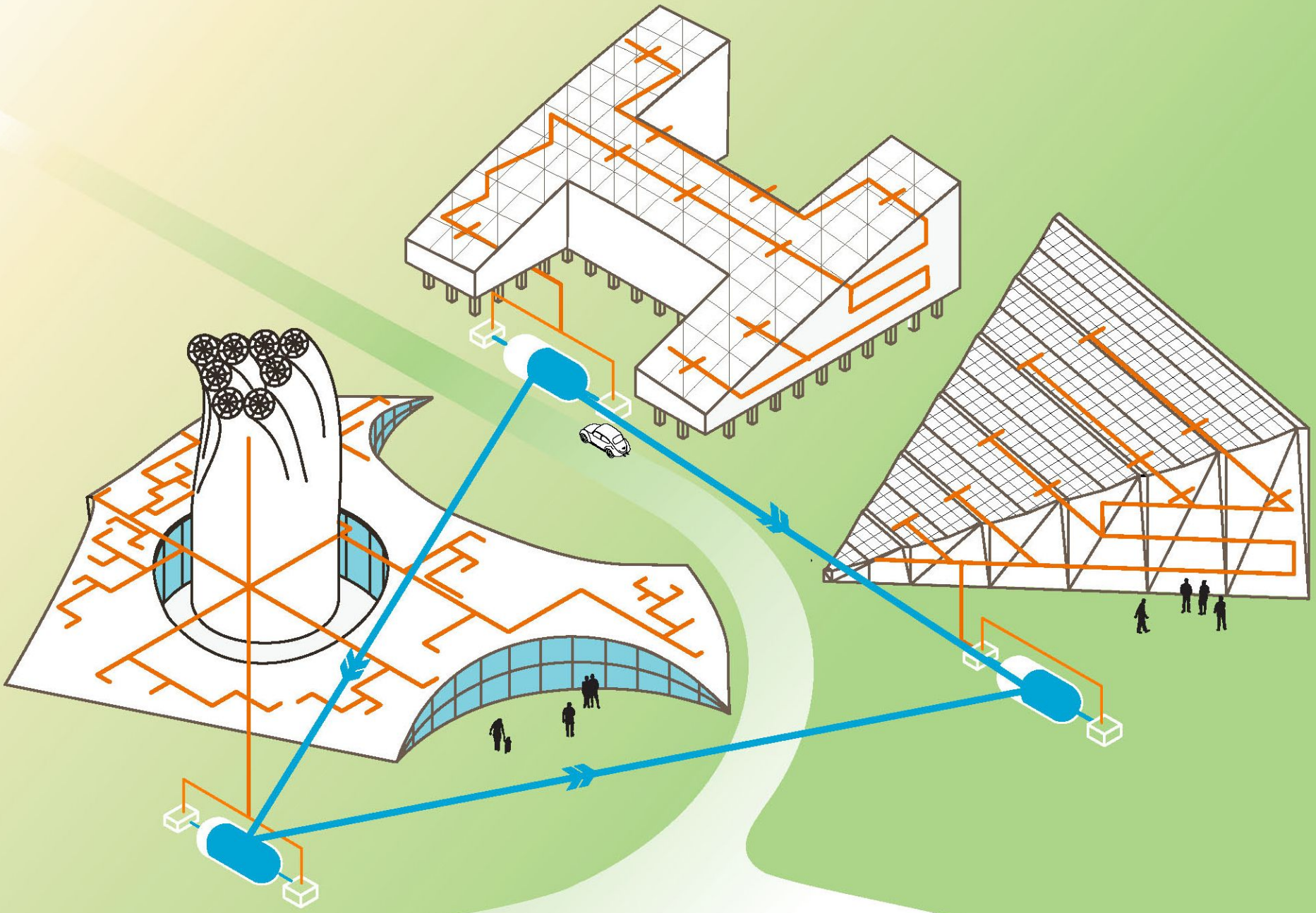
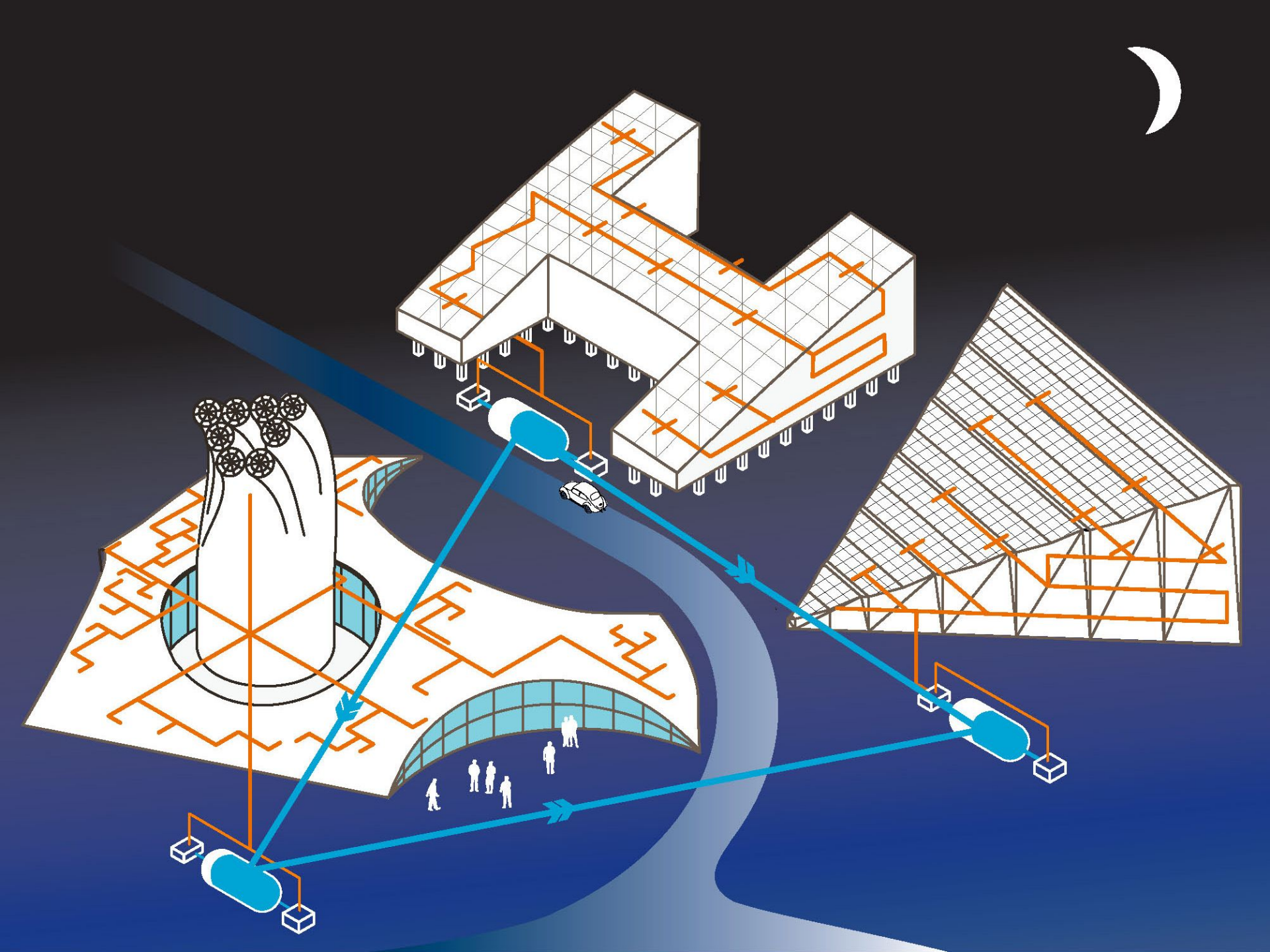
vivienda joven
asociaciones
J.M.Lin (TW)

GARAZ



Sharing tower





Aldeas Bioclimáticas de Chinchilla