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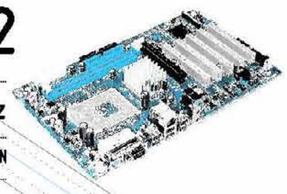
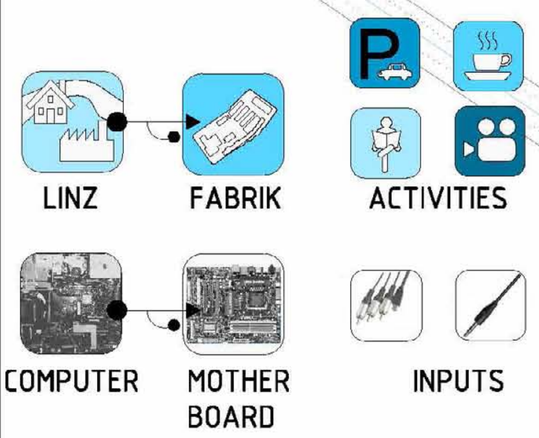


ÖSTERREICH-Linz

MOTHERBOARD RECONFIGURATION

01_RECONNECTION

FIRST STEP



The city of Linz wants to change the image of the city. Wants to shift from a post-industrial city to a creative and technological image.
The aim is to transform the factory into a kind of snuff magma of culture, creativity, art and technology A focus that enhances the interaction between science and culture and to propose a new space for the city as a catalyst in the growth of the city towards the west.
Most of the complex is under protection because it is considered highly representative of the industrial era of Linz and the city in general.
Many program proposals have been done.

Our role, therefore, is not to provide a particular architectural project. We can not raise a rehabilitation project on the basis of future activities that we don´t know.
If we can not work on a project of reconstruction / modification of existing space, what's left?

We understand the Tobacco Factory as a motherboard. A moderboard whose inputs have been disconnected. Now it is an empty multifunctional item, configurated for an industrial use (industrial inputs) which will no longer work as an industrial building. Anyway, its outputs (spaces, rooms) are still there. We are not going to propose a final project, nor a fixed program. We are going to analyse the characteristics of these outputs, so that we can reconfigurate the connections attending to the compatibility of those outputs with several activities.

The project will be developed in trhe phases:

1_ RECONNECTION
2_ ANALYSIS
3_ RECONFIGURATION

A
Bruckner university

A
Train station

A
Ars electronica

A
Kunstuniversität

A
Linz university

A
Old townhall

A
Cultural area donaulände

A
Tech-center

A
Parkbad

A
Tobacco factory

A
Concert hall

A
Regional court

A
Cultural area

A
College

E
Boundary conditions
The perimeter of the plant responds to different urban contexts.
The integration of the complex in the city's public space must be the result of the custom dialog with each of these "fronts" in a joint operation.

D
Interior spaces
Recognize different formal features in the interior space of the factory. These characteristics define spaces with a certain identity within the whole. Each of these spaces is related to the building in particular, establishing

C
New project area
We understand that we must treat the whole plot, join the existing annex to communicate inside and outside of the parcel as one piece. Arise new forms of communication and relationship.

B
Project area
The plot comes with an attachment is a hard edge that prevents the continuity of public space. The possible connections between the inside and outside the plot as north-south axis are reduced to "0" given that there is a physical barrier

F
Current conexions
The current connections are limited to specific access to traffic and pedestrians. All the factory is surrounded by a gate that closes the perimeter allowing entry only through those points. Points that act as shortcuts to the

Our first step proposes a cross operating to provide the river with the residential environment remained hidden behind the Tobacco Factory. This walkway comes to widen the existing interior space, which currently functions

H
Second action
Our second operation removes the two magazines intermediate directly connecting the interior space created in the previous operation with the most significant interior spaces in the set. Visual points are set to Kraftwerk, thereby enhancing

I
Third action
The third operation removes the two buildings located at the southwest corner, belonging to the "new complex". This operation sets a new space filler, which talks directly to the XXXX street and adjacent residential fabric. It provides a space

Finally, regardless of the future use, we achieve a piece of city completely integrated. It generates a footpath that already offers recognizable spaces with the possibility of being colonized by the pedestrian. Transitional spaces are produced in dialogue directly with the city, and offer access sequenced within the plot.
The plot appears as a permeable offering different routes and visual experiences as we walk in one direction or another, always taking as reference the Kraftwerk, which is the center of all perspectives open.

C.1
C.2
C.3
C.4
FS.1
FS.2
FS.3
FS.4
FS.5
IS.1
IS.2
IS.3
IS.4
IS.5
IS.6
IS.7
IS.8

N
E: 1.1000
0 10 50 100 m

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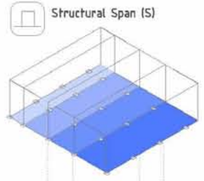
MOTHERBOARD RECONFIGURATION

02_OUTPUT ANALISIS

Next step consists in analysing the spaces inside the buildings to find out what kind of rooms could be located in the complex.
Currently, the building is empty. Rooms in it have different characteristics and used to allow different activities (all of them related to an industrial use).
If we understand the complex as a motherboard, we can compare all these empty rooms to empty outputs. These outputs used to be filled whith industrial inputs that are now disconnected.
Every output is designed to receive a certain input. That input can be used with different purposes (uses/ activities). But its geometrical features are very specific. If the geometrical features of the input doesn't match whith the output's, then they can never be connected.
Our aim is to recognise those outputs. Record them and group them by their spatial characteristics.
Analysing them we can get to know the range of uses that are suitable in these spaces.
We are going to work on this ranges, not on the activities themselves. What we are interested in are the spacial features of the rooms in the building. They will let us know how to reconfigurate the relations between them (because we know the range of possible activities that are compatible whith these rooms)

SEPARATED ANALYSIS

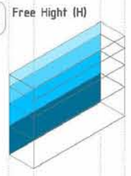
Structural Span (S)



The first parameter studies the structural span. It affects mainly the volumes configuration due that structure is the same (most of the times) all along the building

- <3m
- 3-5m
- 5-7m
- >7m

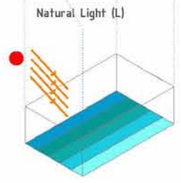
Free Hight (H)



The second parameter studies the free heigth in every floor. Added to the first study, we get a geometrical descripion of every space

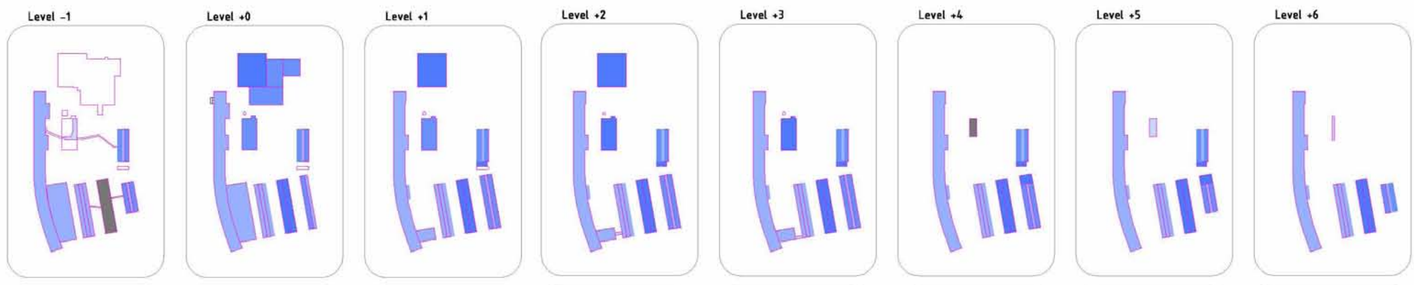
- 2-3m
- 3-5m
- 5-7m
- +7m

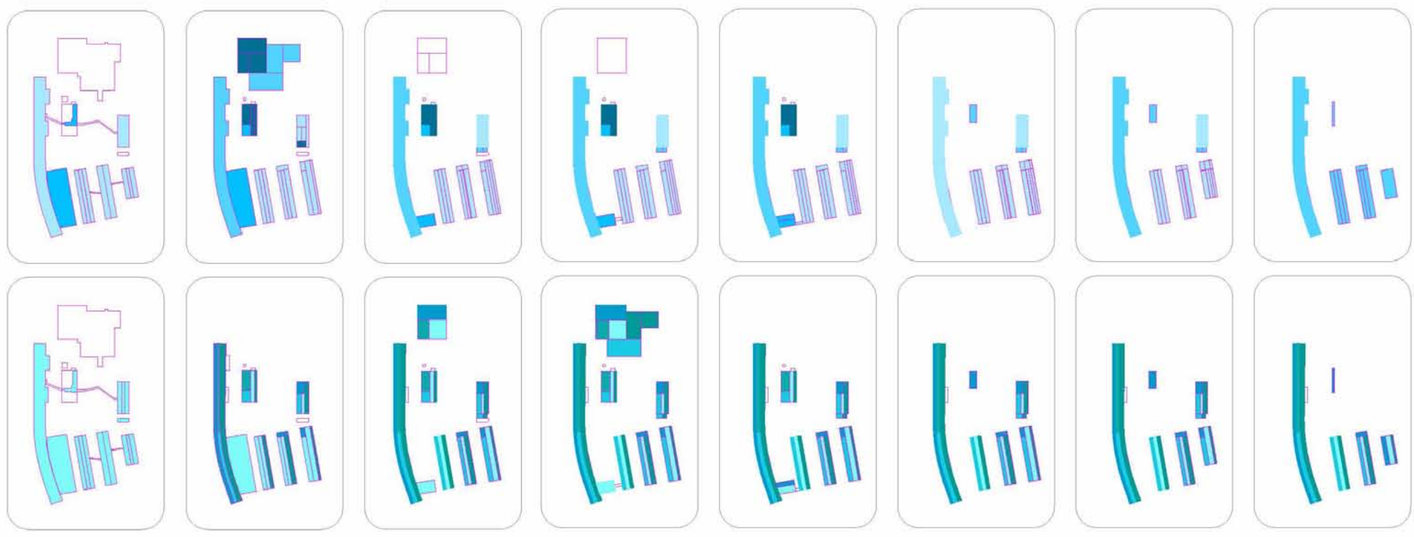
Natural Light (L)

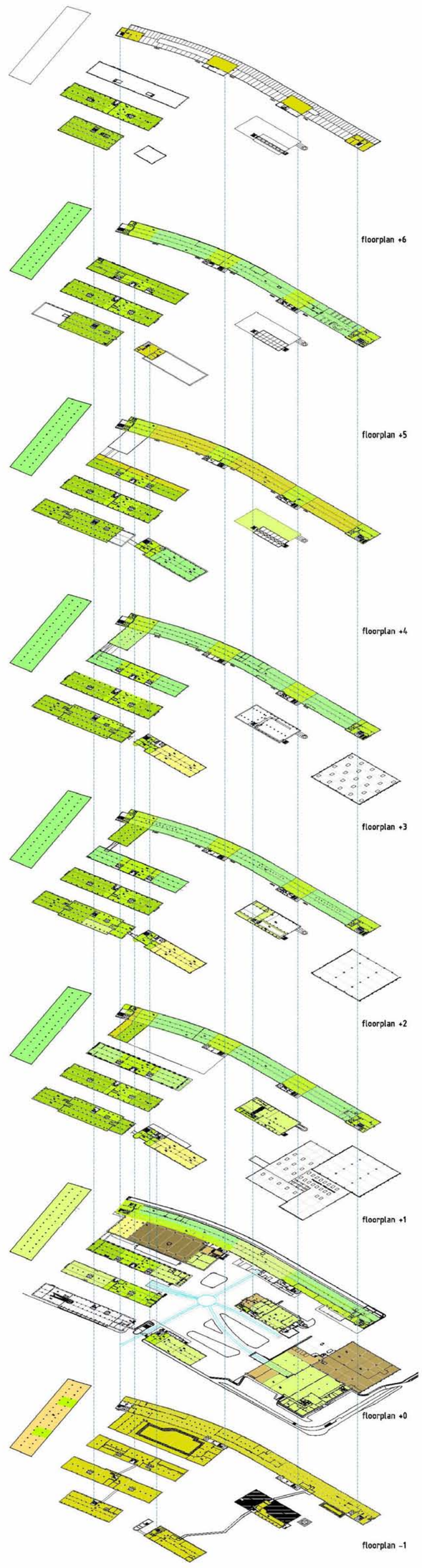


The third parameter studies de direct narural lightning. It will determine in the future which activities can be developed in any space

- 0 hours
- 0-2 hours
- 2-4 hours
- 4-6 hours
- > 6 hours







TYPES OF SPACES

The analysis we have made consists on three parameters.

These parameters have been chosen to cover every dimension that defines a space.

With the first one (span) we distinguish different volume configurations among the complex.
Span is (almost always) the same from the bottom to the top. This way, we get 'slices' out of a volume.

The second parameter works on the free height.
From the slice we've got after the span analysis, we can pull out different pieces (floors). Now we have a space defined by its heigth and its span. We have a spatial definition of every area.

The third analysis studies the natural lightning.

Knowing the spatial characteristics of a space, the element that stablish its real compatibility with a precise activity is the light. There are activities that need light. Others don't.

Rooms with similar spatial features will be sparated into differnt groups attending to their natural lightnin conditions. Eventhough they are similar, they cannot accomodate the same range of activities. That will change their identity and their position in a theoretical spatial secuence.

As a result of putting all the analysis toghether, we can recognise several kinds of space located all around the complex and will be able to accept specific inputs.

TYPES OF SPACES

After analysing the building we find 39 different areas. They are described by their spatial characteristics and their lightning conditions.
Now we know the building, we ask ourselves: what are these areas suitable for?

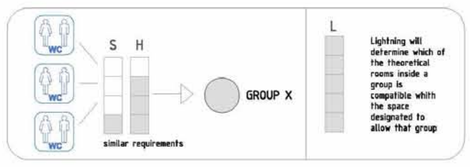
We analyse a certain range of 'type rooms' examples through the same parameters we used to study the whole building. Each of these 'theoretical rooms' has specific spatial requirements.

Yet our aim is not to plan a concrete program, we group these theoretical rooms by their minimum requirements so that we can work on spatial issues, nor programmatic. We extract the coincidances to define spatial identities (groups 1 to 11). The groups we have made are based on the structural and heigth requirements.

Groups made, natural lightning will determine the compatibility between a specific room inside a group and any of the resulting areas in the building destined to home that group.

S H L

minimum spatial requirements for any room to be developed



GROUPS BY COINCIDANCES

GROUP A
GROUP B
GROUP C
GROUP D
GROUP E
GROUP F
GROUP G
GROUP H
GROUP I
GROUP J

GROUPS´CONNECTIVITY DEGREE

1st DEGREE

Rooms that are directly connected to the road. Their characteristics make them suitable for loading activities, parking, technical rooms and similar

2nd DEGREE

Direct connection to de public space inside the plot or among interior spaces. The spaces whith these characteristics will work articulating other spaces.

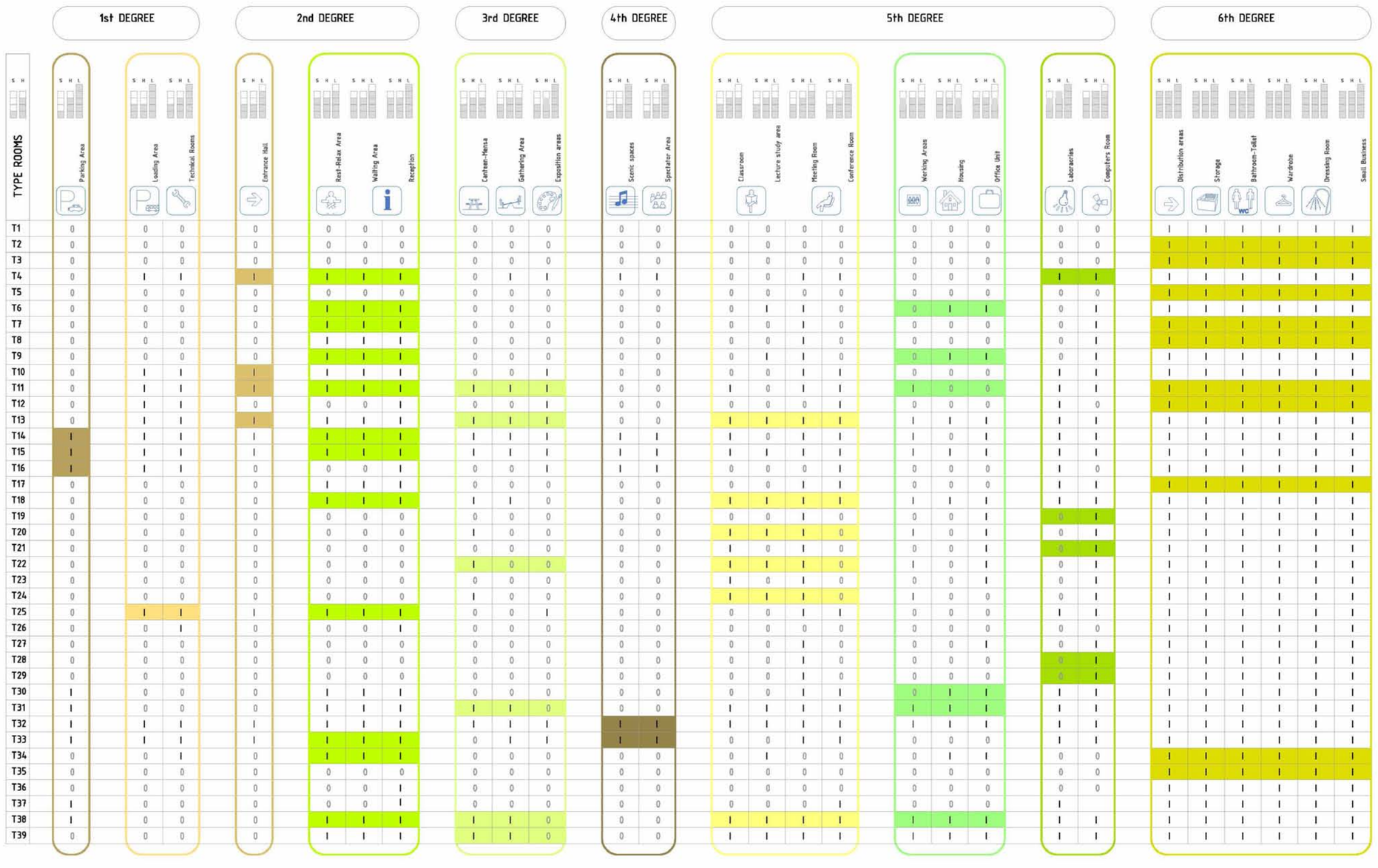
3rd DEGREE
Gathering areas. Connected by degree 2 spaces but can be related directly to public space

4th DEGREE
Public audience spaces. Sports, cinema, theater...

5th DEGREE

Functional spaces. Spaces whose characteristics allow specific uses such as dwellings, classrooms, working areas, workshops, meeting rooms, etc. These spaces are served by spaces with upper connectivity degrees

6th DEGREE
Full compatibility. These areas can be located wherever in the building. They work as complements to other spaces.



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MOTHERBOARD RECONFIGURATION

03_RECONFIGURATION

Finally, the last step is to reconfigurate the motherboard.

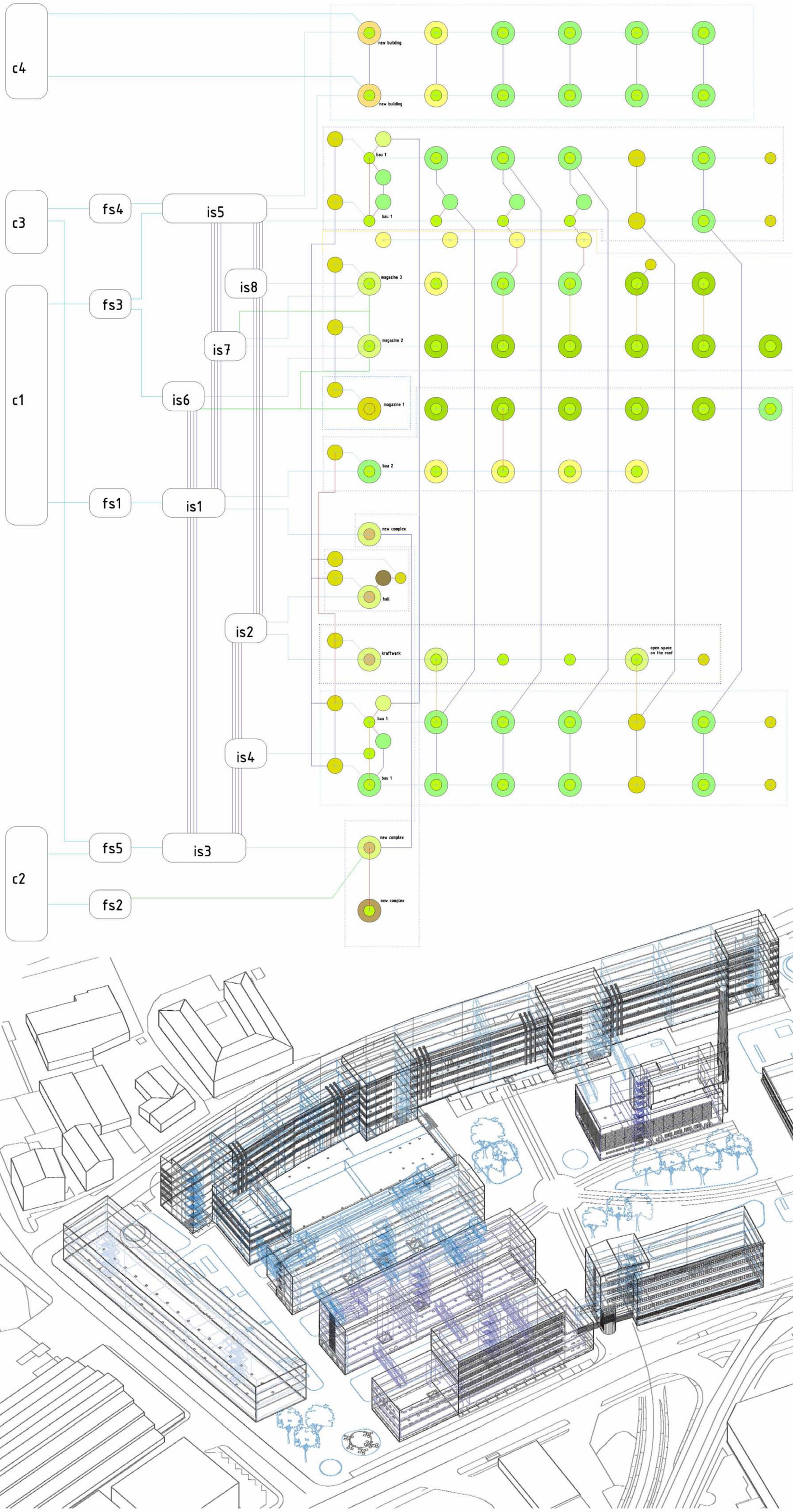
We have conected it to the city. We know which kind of outputs are there, and we also know the type of inputs that fit in those outputs. Now we have a general idea of the future behaviour of the building. We can relate the spaces we have listed into spatial secuences.

The criteria for designing this secuences is to relate spaces that are complementary one to each other. We have notised spaces that are good for several (similar) uses, for connecting other spaces, for connecting the complex to the street... Each secuence has its own identity, and relates to the public space through specific connections.

Our aim is now to set out several spatial secuences trying to make the most of the spaces in the building. Connect them in a way that the building can be activated in different moments. Each secuence is independent from the others. Each one can be developed separately.

By the way the secuences are developed, the complex will get richer. More connections will apear, communicating, if necessary, those secuences one to each other.

The point is that every secuence has all the spaces required to allow a complex activity (investigation, bussiness, teaching, working, shopping, theater, cinema...) Not every secuence is able to develop every activity. As we said before, outputs only accept inputs that match geometrically. We don't offer a fixed program. We set up a relationship scenario based on the spatial characteristics of the spaces in the complex.



RECONFIGURATION DIAGRAM

DIRECT CAR ACCES FROM STREET
VERTICAL CONNECTION (COMUNICATION CORE)
COINCIDENT SPACES
HORIZONTAL CONNECTION
PROPOSED HORIZONTAL CONNECTION
DIRECT ACCES
INTERIOR SPACES RELATION
SPACIAL SEQUENCE

SERVED SPACE (3rd-5th DEGREE SPACES)
SERVER SPACE (2nd DEGREE SPACES)
RELATION BETWEEN SPACES TROUGH THEIR SERVER SPACES
DIRECT RELATION BETWEEN SPACES
SERVED SPACE (1)
SERVER SPACE WHEN DIFERENT SPACES IN THE SAME FLOOR
SERVED SPACE (2)

GROUP A
GROUP B
GROUP C
GROUP D
GROUP E
GROUP F
GROUP G
GROUP H
GROUP I
GROUP J
S H L
1st DEGREE
2nd DEGREE
3rd
4th
5th DEGREE
6th

fs0 FILTER SPACES
c0 CONTEXT (PUBLIC SPACE)
is0 INTERNAL SPACES (INSIDE THE PLOT)