# DIAGRAMS

Architecture Forum | 03.14.2012



IKEA - HOMEMADE IS BEST



IKEA - HOMEMADE IS BEST

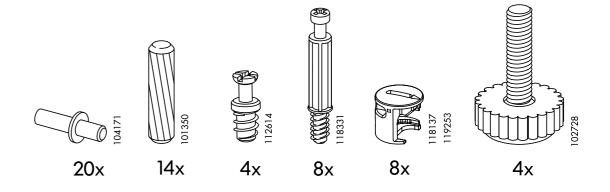


IKEA - HOMEMADE IS BEST

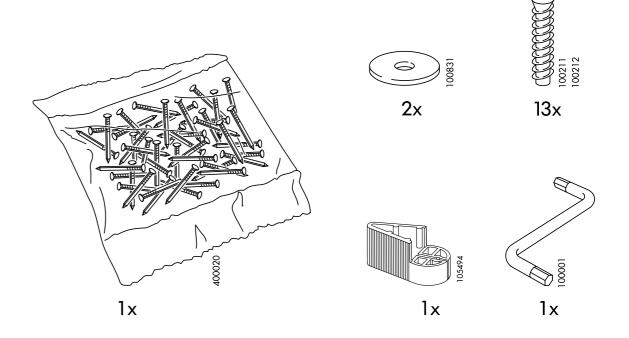


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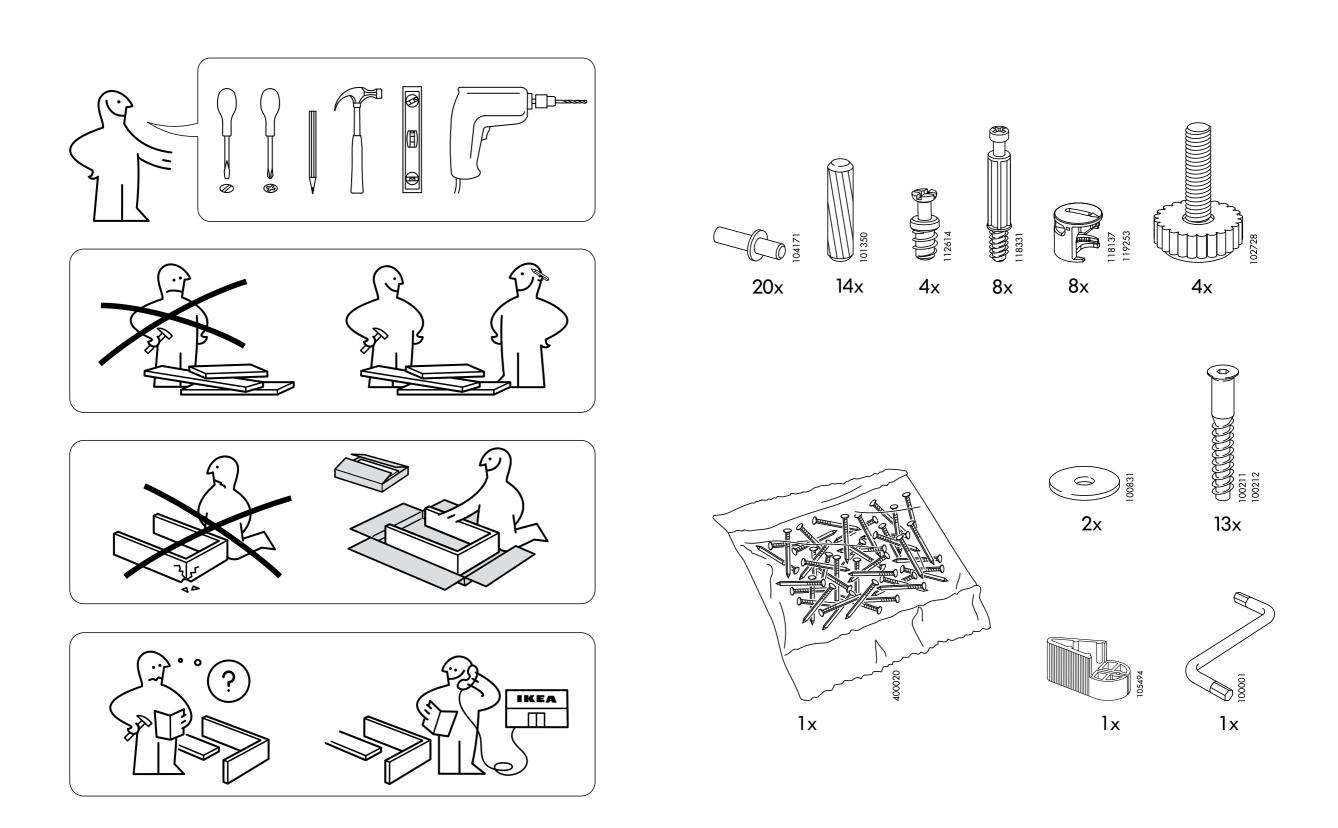








IKEA - HOMEMADE IS BEST



IKEA - HOMEMADE IS BEST

# DIAGRAMS

ABSTRACT MEANS FOR EXPLORING ORGANIZATION

Abstraction is achieved by intentionally leaving out irrelevant information to focus

on what is relevant is your concept

#### PREMISE:

#### INTEGRATING DESIGN DIAGRAMMING INTO OUR PROCESS WILL COMPEL US TO PRODUCE **BETTER ARCHITECTURE**

MORE CLARITY
MORE INSIGHT
MORE HONEST
MORE APPROPRIATE
MORE UNEXPECTED
MORE PURPOSEFUL
MORE THOUGHTFUL
MORE ORGANIZED
MORE INTEGRATED

#### DIAGRAMS:

REPRESENT COMPLEX IDEAS, SIMPLY

ALLOW YOU TO STUDY MANY IDEAS QUICKLY

CREATE A PLATFORM FOR DIALOGUE

ARE DEMOCRATIC

EMBODY OPPORTUNITY

FORCE DECISION MAKING

MOMENTS OF FOCUS PROVIDING PLATFORMS FOR INQUIRY

RECORD THE DESIGN PROCESS

MANY CAN MAKE UP A SINGLE BUILDING

# DIAGRAMS:

CLARITY REPRESENT COMPLEX IDEAS, SIMPLY

INSIGHT ALLOW YOU TO STUDY MANY IDEAS QUICKLY

HONEST CREATE A PLATFORM FOR DIALOGUE

APPROPRIATE ARE DEMOCRATIC

UNEXPECTED EMBODY OPPORTUNITY

PURPOSEFUL FORCE DECISION MAKING

THOUGHTFUL MOMENTS OF FOCUS PROVIDING PLATFORMS FOR INQUIRY

ORGANIZED RECORD THE DESIGN PROCESS

COHESIVE MANY CAN MAKE UP A SINGLE BUILDING



Not that I have a particularly high regard for diagrams, but this one is simply an illustration to enable others to understand our process. It's not at all a diagram, but a drawing that came after the fact. Hidden in it is a more simple reading of which elements of a particular kind of building can be stable, and which have to remain volatile. This is simply an end product, a retroactive illustration of what, in a more private sense, is a way of thinking.

The real diagram is the one that addresses stability and instability. In other projects there were diagrams, barcodes of stability and instability, or defined and undefined spaces.

REM KOOLHAAS

#### BUILDING DIAGRAMS

RETROACTIVE ILLUSTRATIONS REPRESENTING

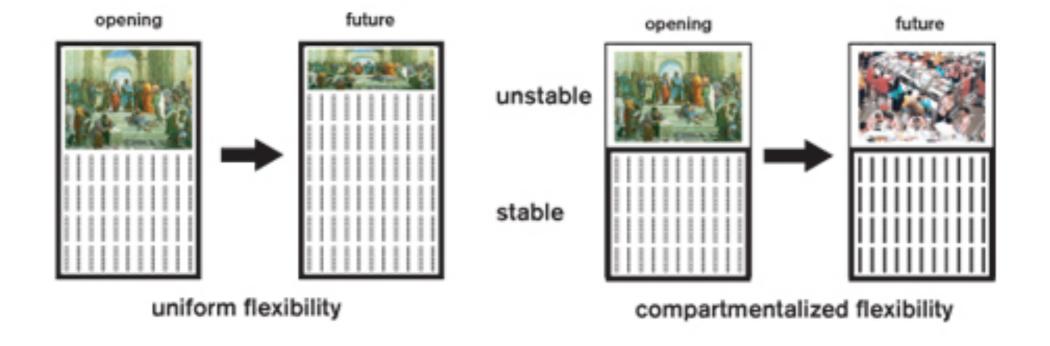
WHAT A BUILDING IS

vs

#### DESIGN DIAGRAMS

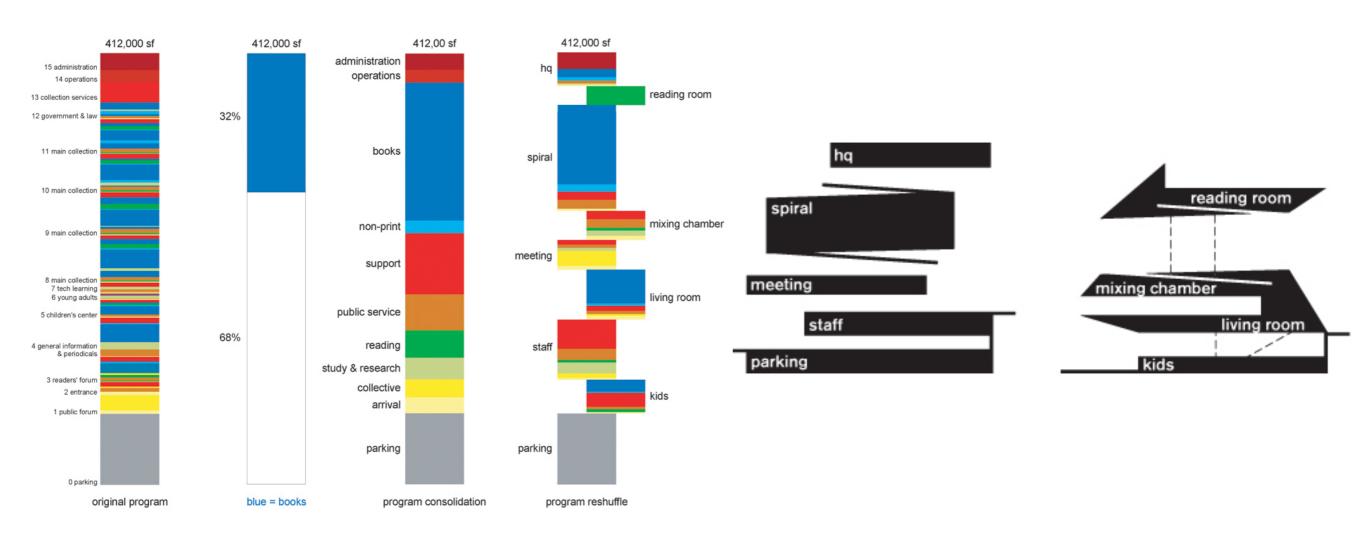
EXPLORATION & DOCUMENTATION OF CONCEPTS IN THE DESIGN PROCESS REPRESENTING

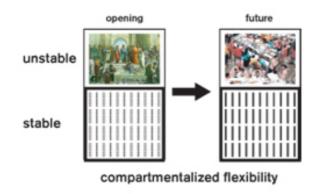
WHY A BUILDING IS

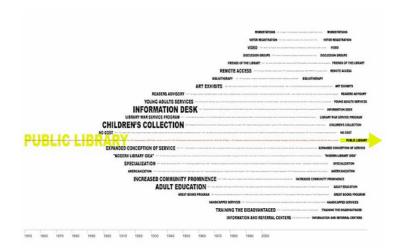


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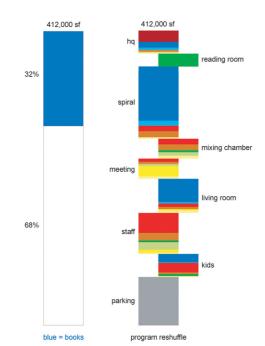
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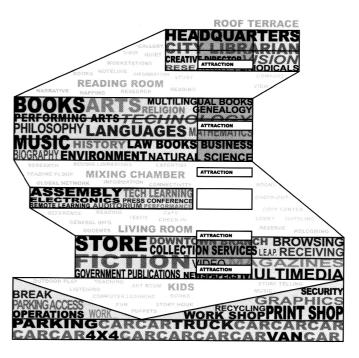












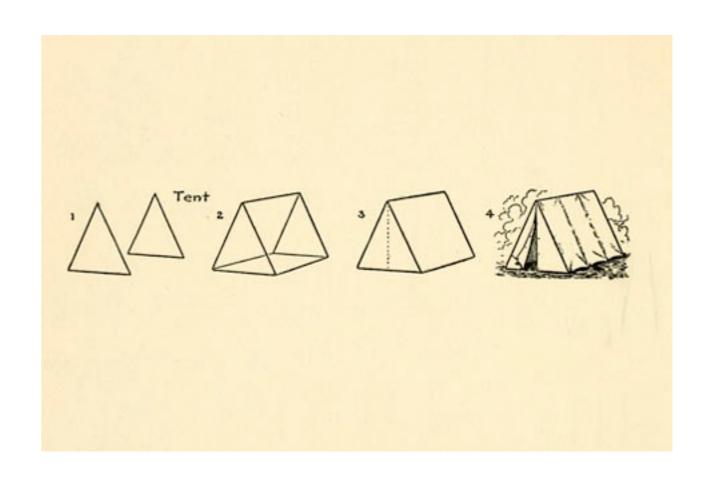




# DIAGRAMS

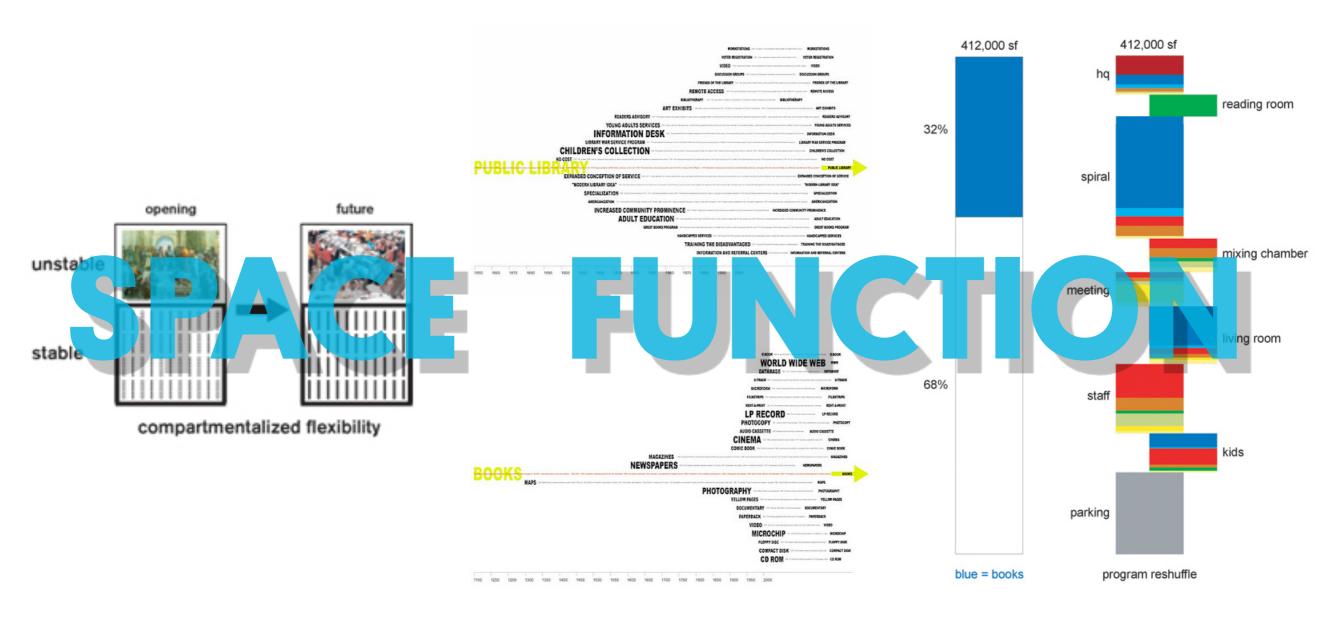
ARCHITECTURAL DIAGRAMS TEND TO EXPLORE THE ORGANIZATION OF FORM, SPACE AND FUNCTION





**FUNCTION** 

FORM | SPACE





# EXAMPLES

DESIGN DIAGRAMS SPEAK TO A WAY OF THINKING. HOW THAT TRANSLATES INTO ARCHITECTURE IS....

# EXAMPLES

CASE STUDIES: Seattle Public Library | OMA/REX

41 Cooper Square | MORPHOSIS

Research Centre for Université Pierre | BIG

Mobius House | UN Studio

Mercedes Benz Museum | UN Studio

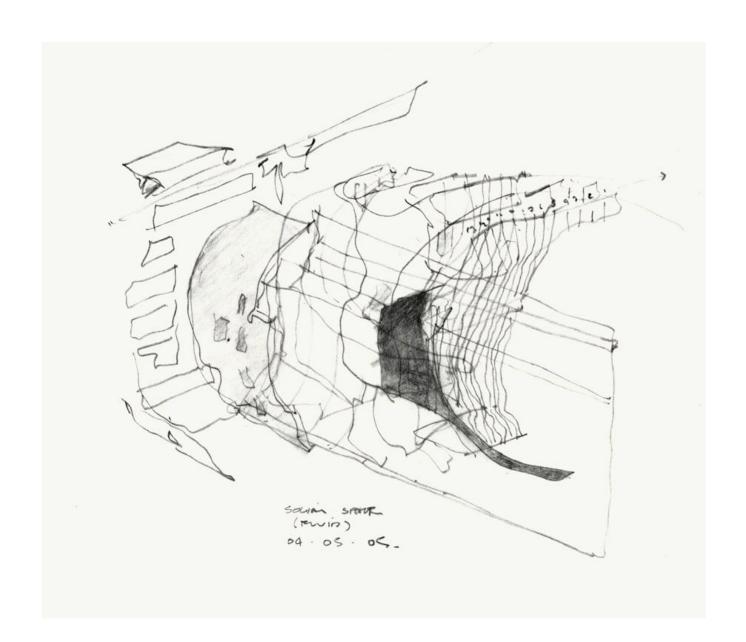
Toledo Glass Museum | SANAA

Teshima Art Museum | Ryue Nishizawa

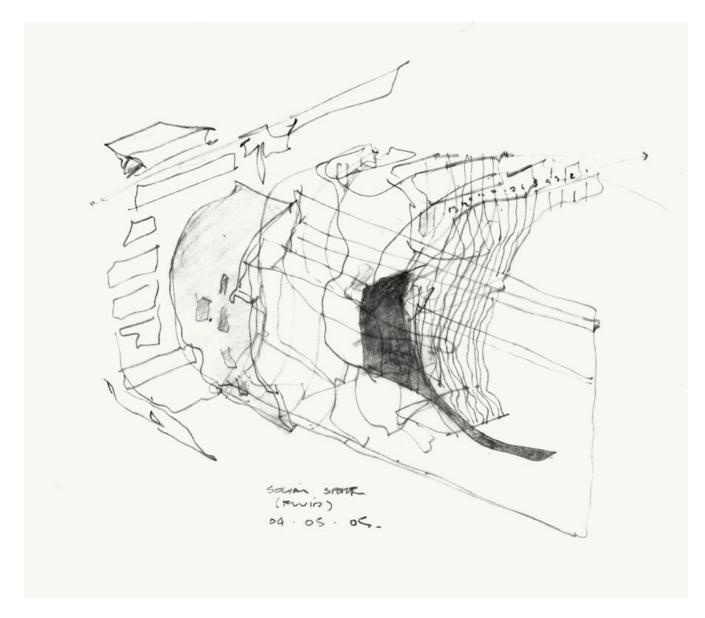
#### 41 COOPER SQUARE

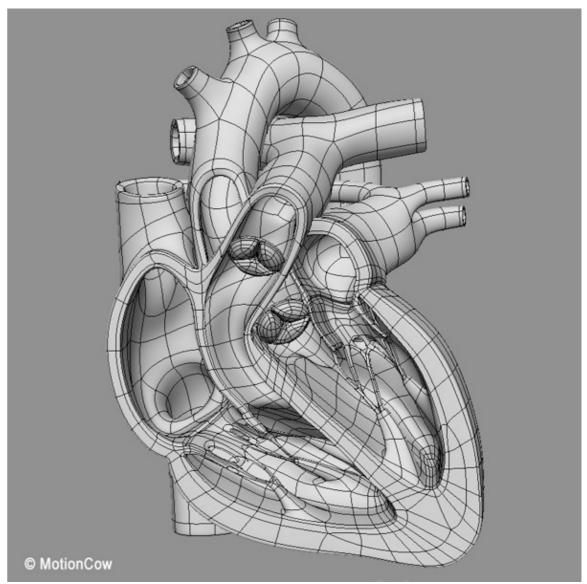
MORPHOSIS

CONCEPT BASED ON SPATIAL METAPHOR
DIAGRAMS AS GEOMETRICAL SPATIAL EXPLORATIONS

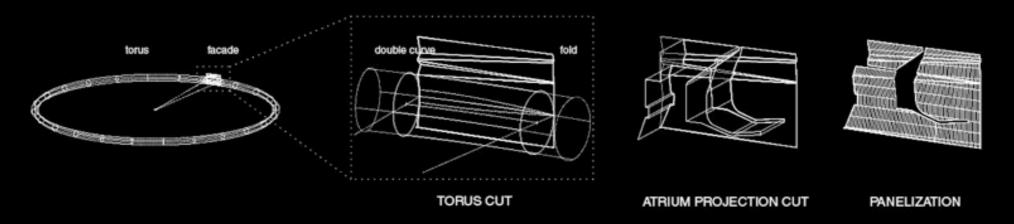


The building is conceived as a vehicle to foster collaboration and cross-disciplinary dialogue among the college's three schools, previously housed in separate buildings. A vertical piazza—the central space for informal social, intellectual and creative exchange—forms the heart of the new academic building. An undulating lattice envelopes a 20-foot wide grand stair which ascends four stories from the ground level through the sky-lit central atrium, which itself reaches to the full height of the building. This vertical piazza is the social heart of the building, providing a place for impromptu and planned meetings, student gatherings, lectures, and for the intellectual debate that defines the academic environment.

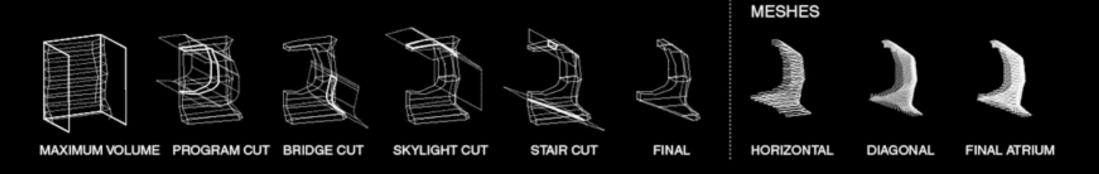




#### W. FACADE GEOMETRY

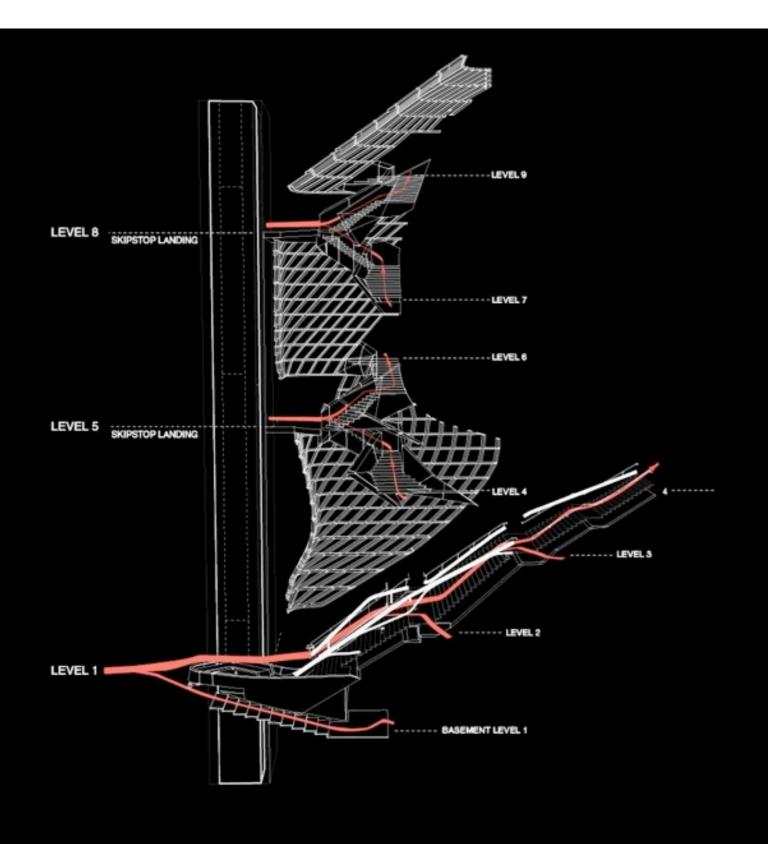


#### ATRIUM GEOMETRY



#### **FACADE AND ATRIUM GEOMETRY**

41 COOPER SQUARE

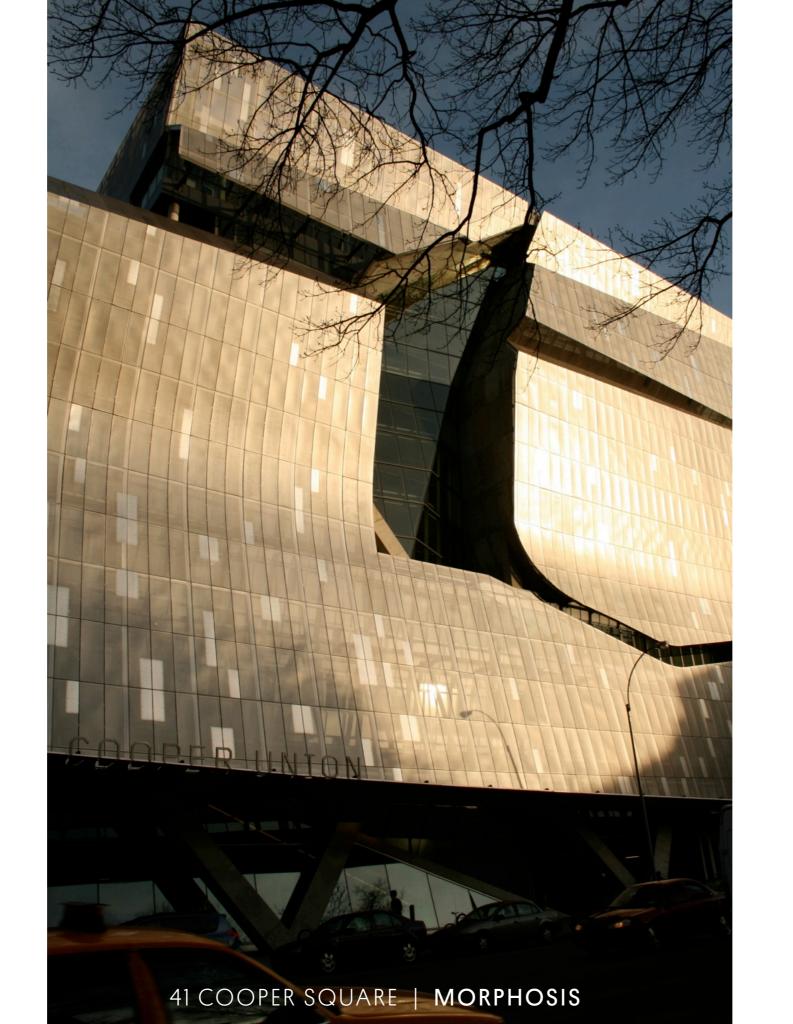


**SKIP-STOP** 

41 COOPER SQUARE









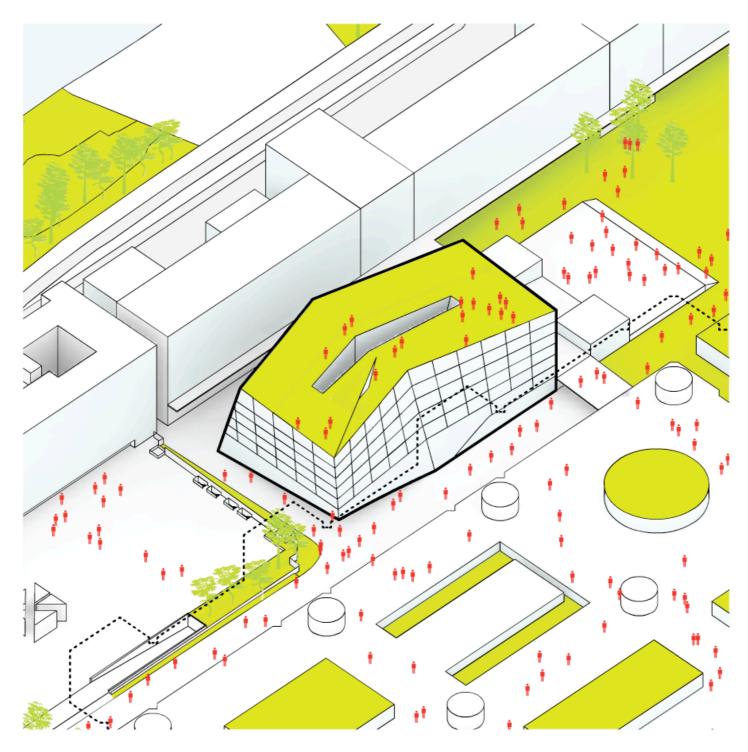




# RESEARCH CENTRE FOR UNIVERSITÉ PIERRE

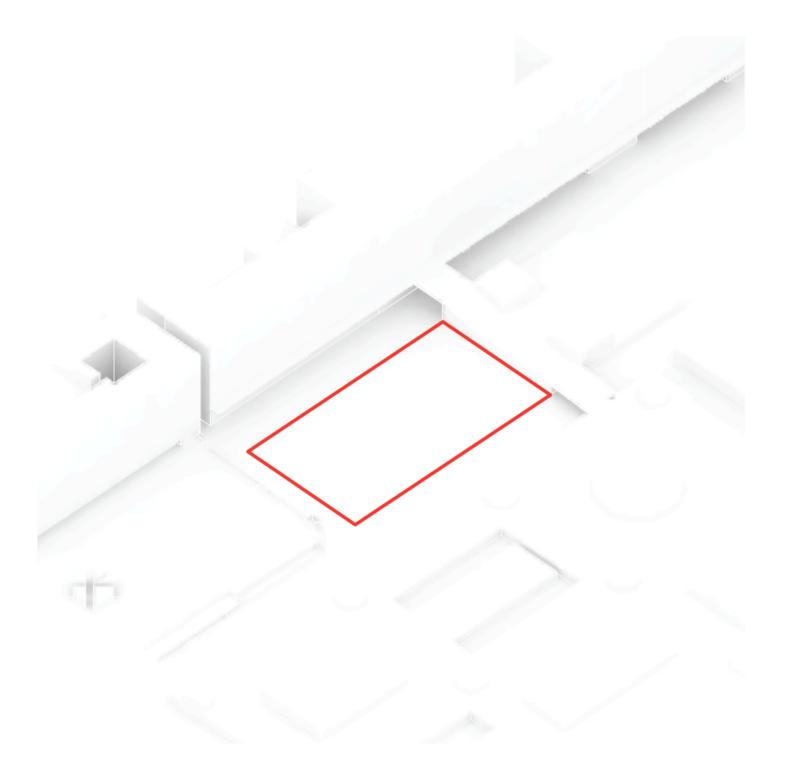
BIG | BJARKE INGELS GROUP

CONCEPT OF CONTEXTUAL FORM DEFORMATION DIAGRAMS REPRESENT JUSTIFICATION OF FORM GENERATION



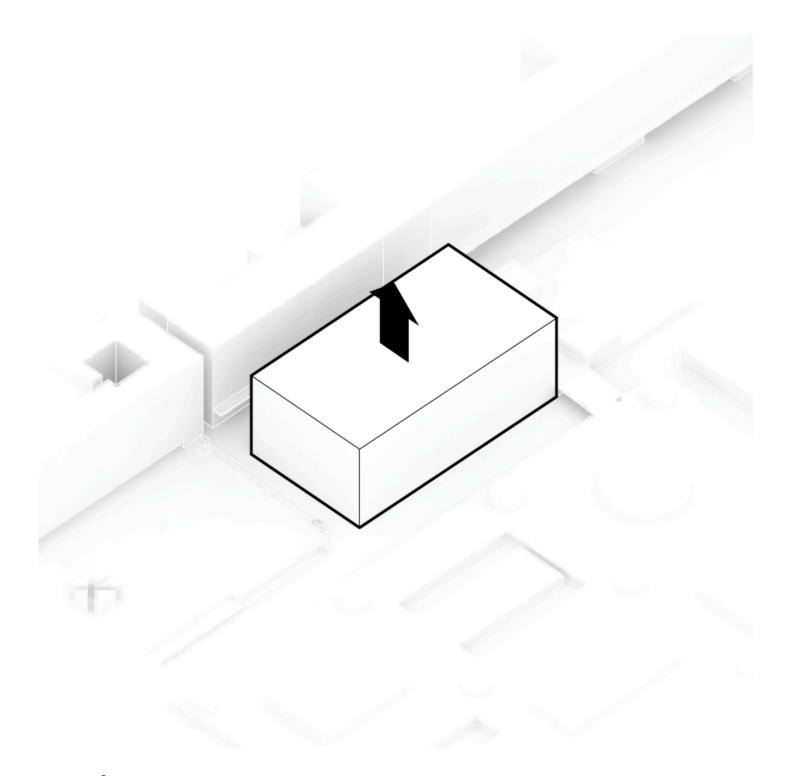
#### **Paris Parc**

The open space of the atrium and the public accessible recreational rooftop relinks the park and the square in a continuous green axis, following the original intensions of the master plan.



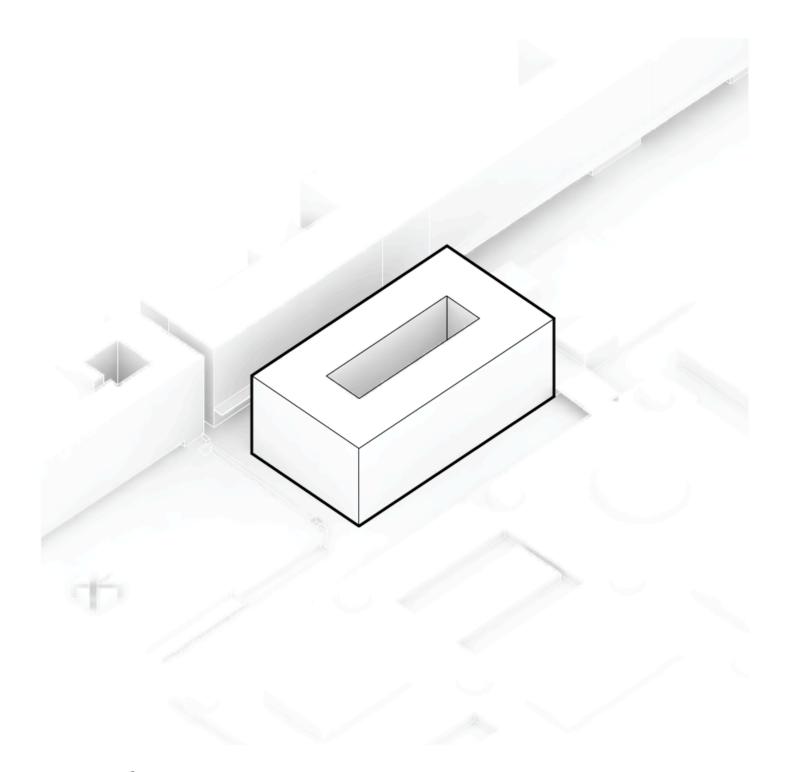
#### Context

The building site is wedged into a dense context between the emblematic architectures of the Albert Grid the Cassan building and the Institute Monde Arabe. The site connects the IMA square to the park, and fills the space of the originally planned green axis of the Jussieu Campus.



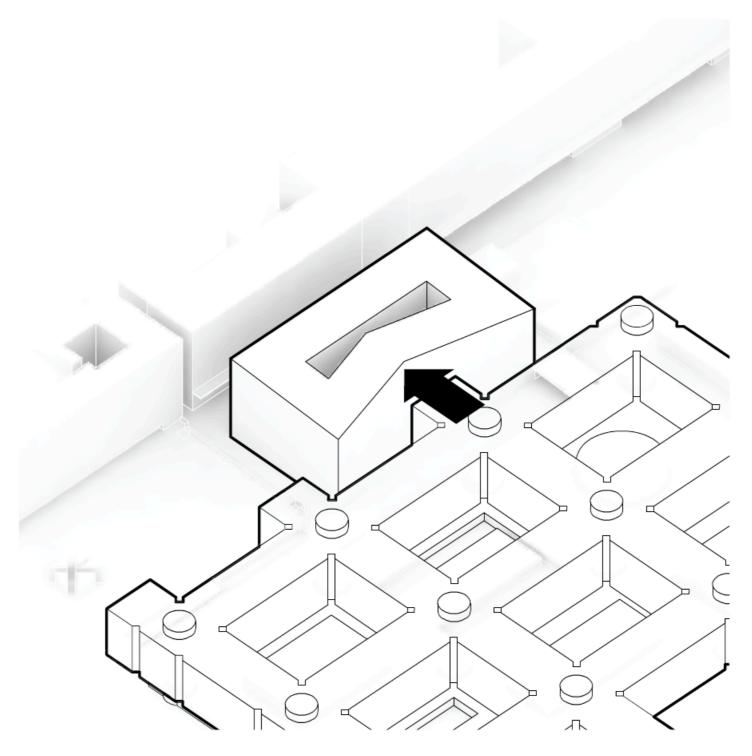
#### **Extrusion**

The maximum building envelope forms a building volume with deep floor plans and facades oriented directly towards the neighboring buildings with only few meters distance.



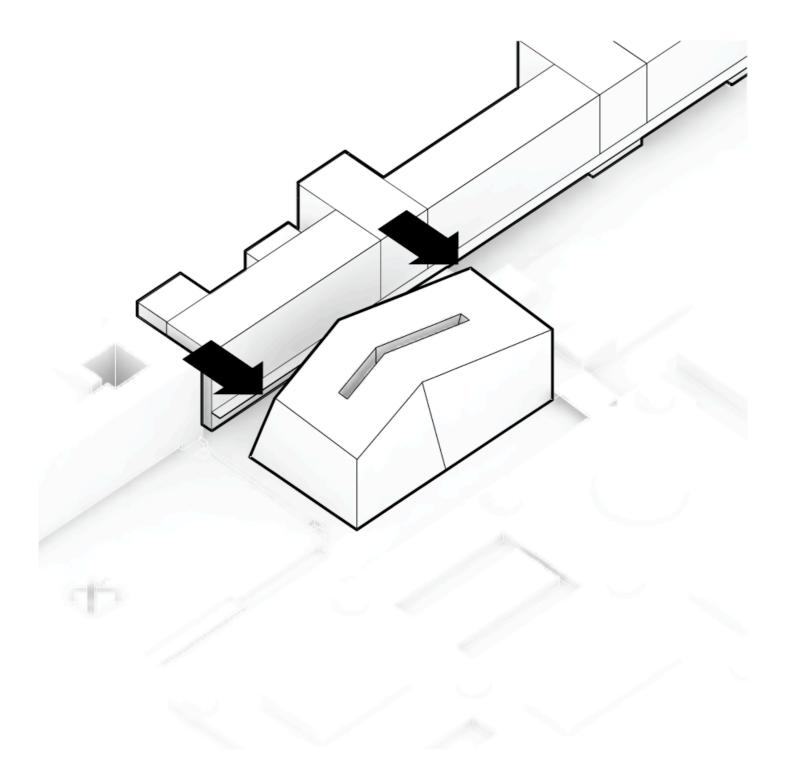
#### Courtyard

The center of the building volume is subtracted and become a grand atrium maximizing daylight and circulation in the building. Offices and are oriented outside with natural ventilation. Laboratories, needing mechanical ventilation, are organized towards the atrium forming a center of visually connected working spaces.



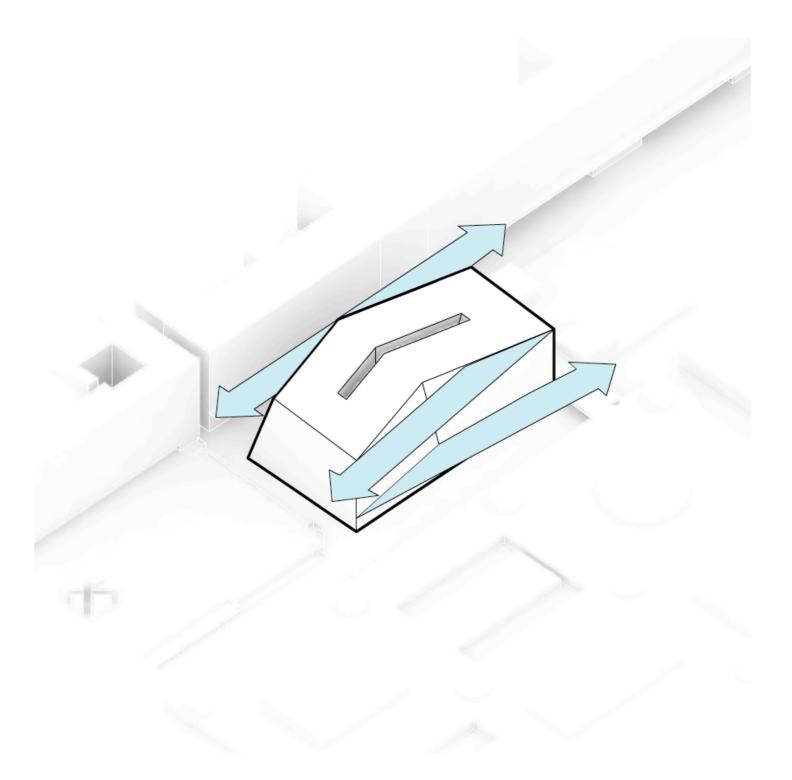
#### **Deformation towards housing**

The building envelope is pushed in to keep distance towards the apartments in the Albert Grid, improving the daylight and view conditions for both apartments and offices.



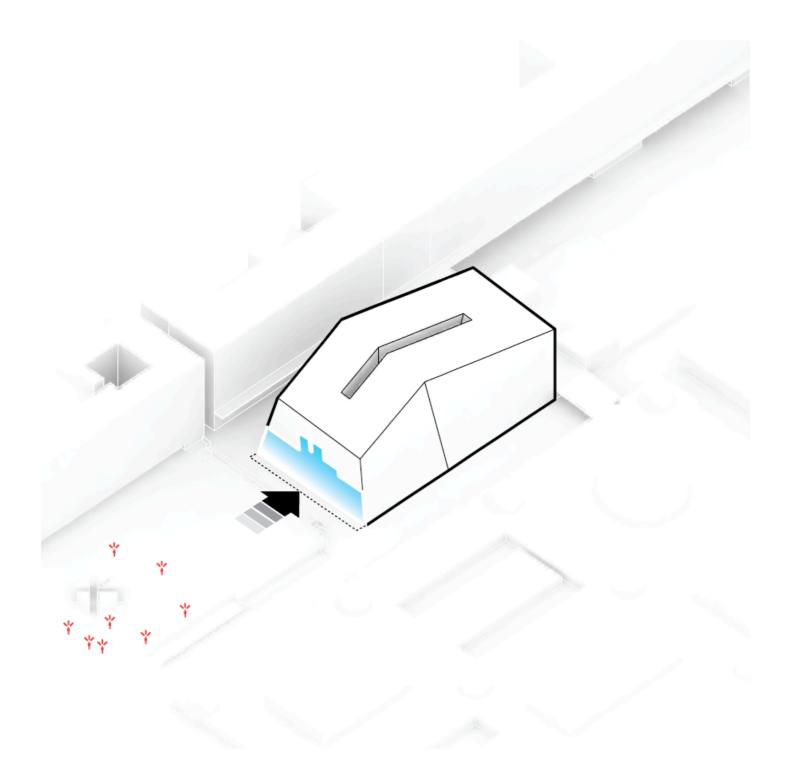
#### **Deformation towards the Cassan**

Towards the Cassan building the façade is PULLED BACK IN each corner in a similar way to keep distance, improve daylight and views for both buildings.



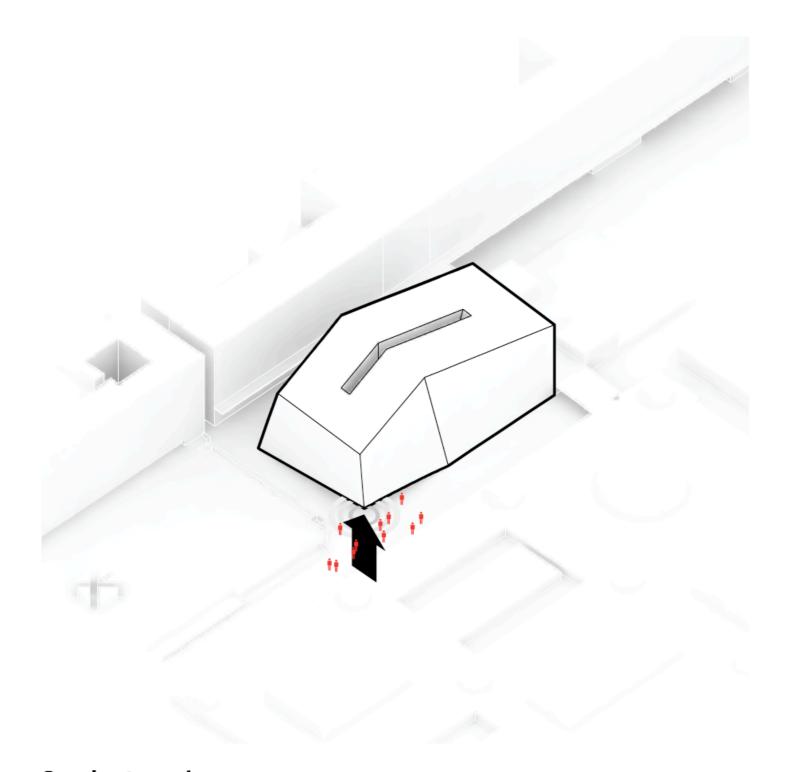
#### Improved daylight and views

Deformed by the pressure of the surrounding buildings, the resulting volume becomes wedged into the dense urban context, and avoids blocking the views of the green axis. The envelope creates sculptural passages on each side of the building with views towards the park and the Notre Dame Cathedral.



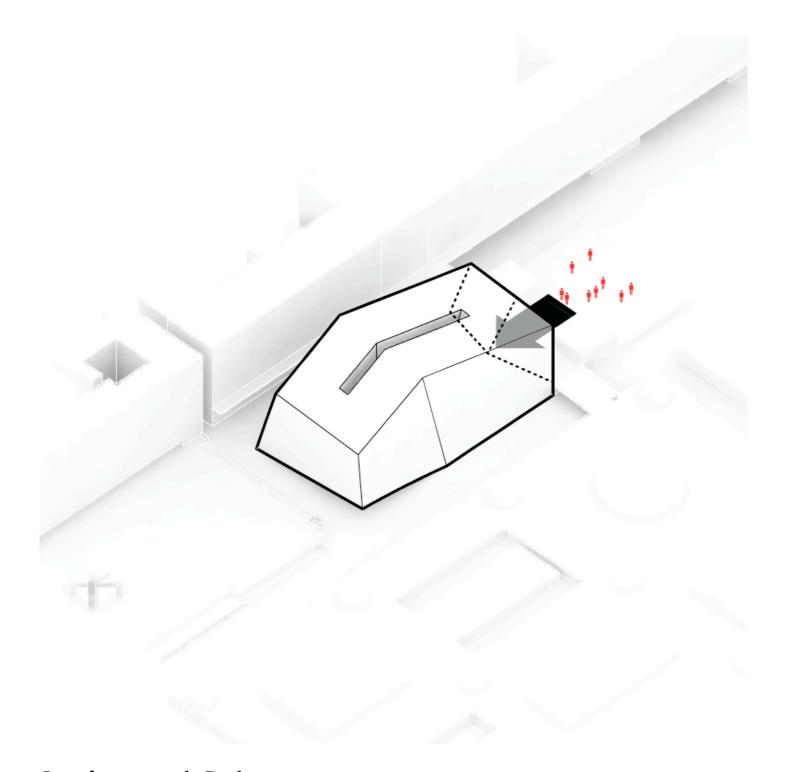
#### **Deformation towards Notre Dame**

The façade facing the square is angled 5 degrees, creating a mirror image of the skyline of Paris and the Notre Dame visible from the IMA square.



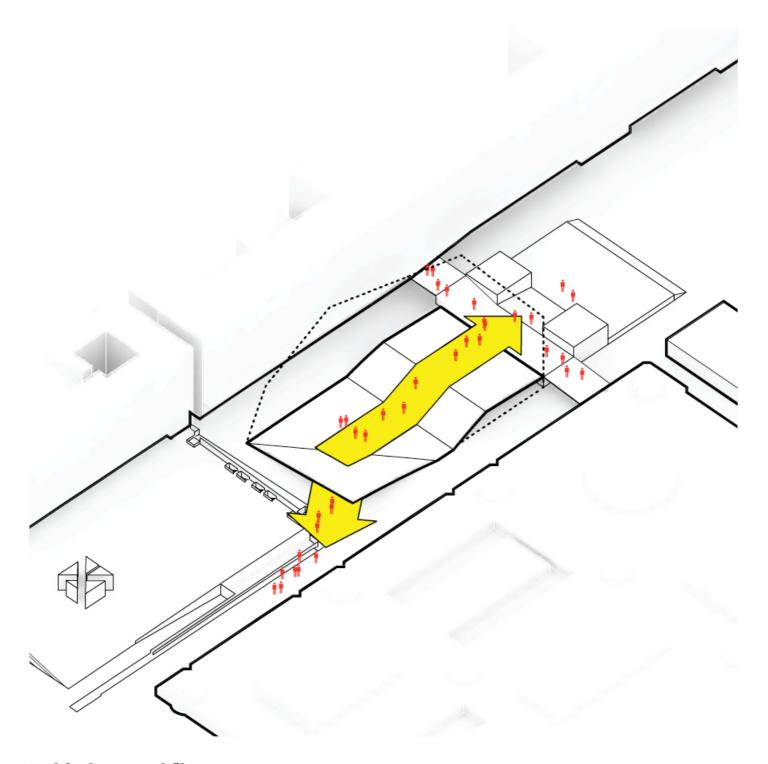
#### Opening towards square

The building volume is lifted in the corner creating a public entrance and visually connecting the atrium with the square.



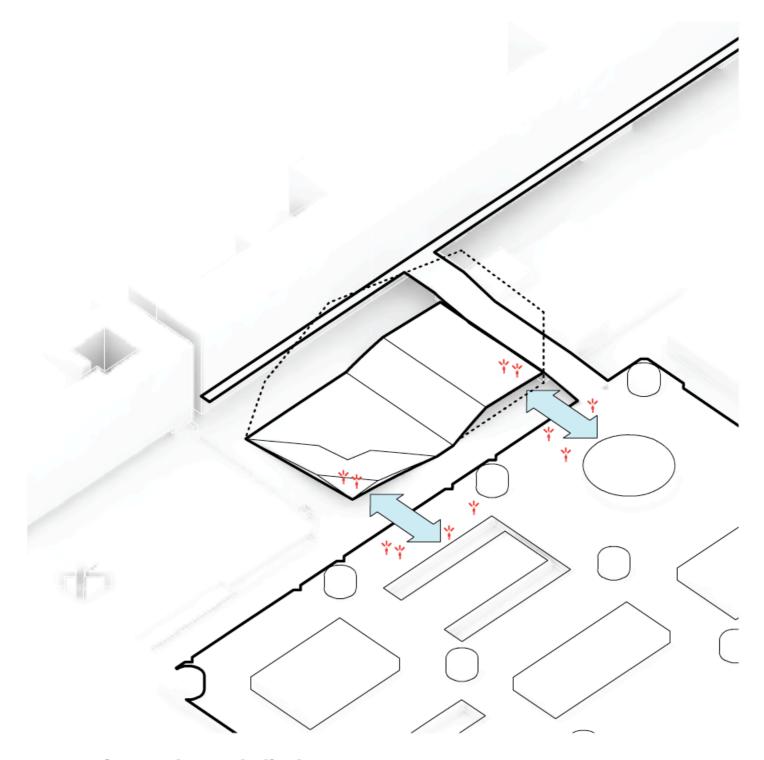
#### **Opening towards Park**

Towards the park the envelope is pushed in slightly to create a canopy above the entrance to the conference facilities.



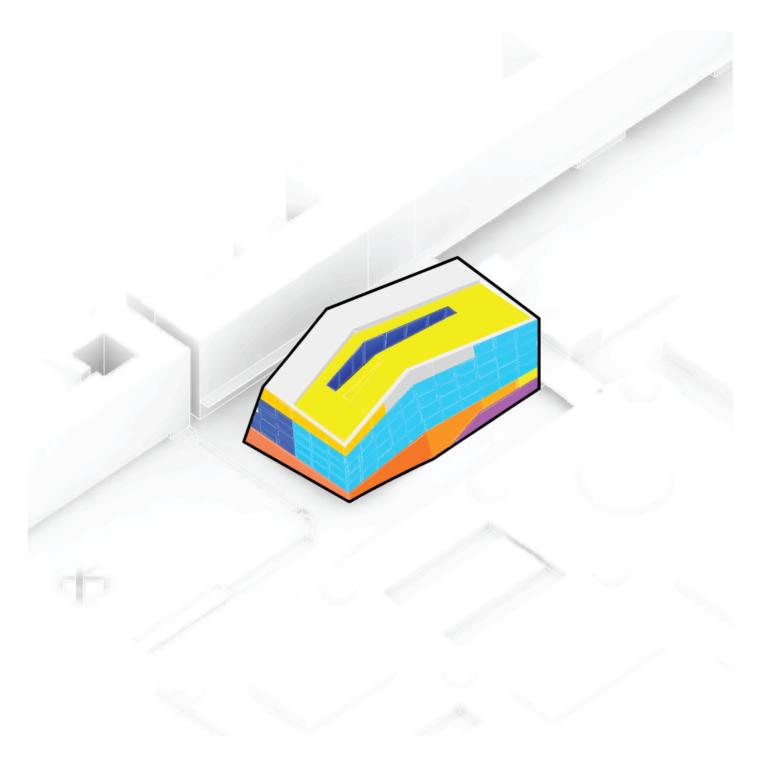
#### Folded ground floor

The public ground floor containing the café, the book store and conference facilities, becomes a folded carpet connecting the different height levels of the park, the plinth and the square.



#### Connection to elevated plinth

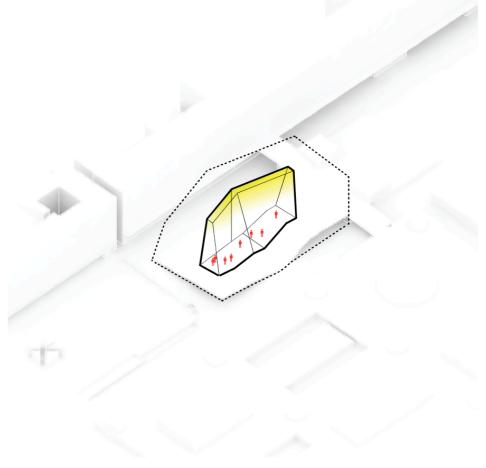
Visually the grundflor links the plinth to the street level, and strengthens the connection between the Jussieu Campus and the urban flow of the city.



#### **Functions**

The laboratories and offices are located on the regular floor plans between the public levels at ground floor and the roof.

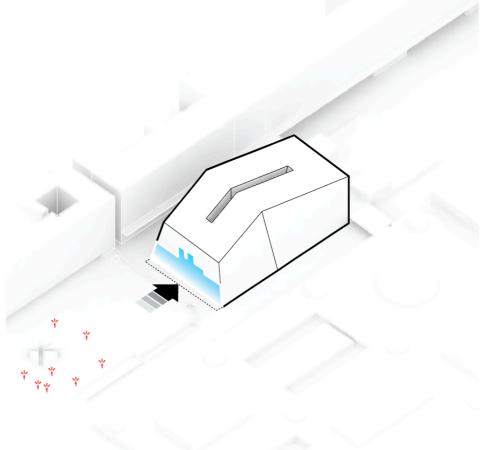




#### Canyon

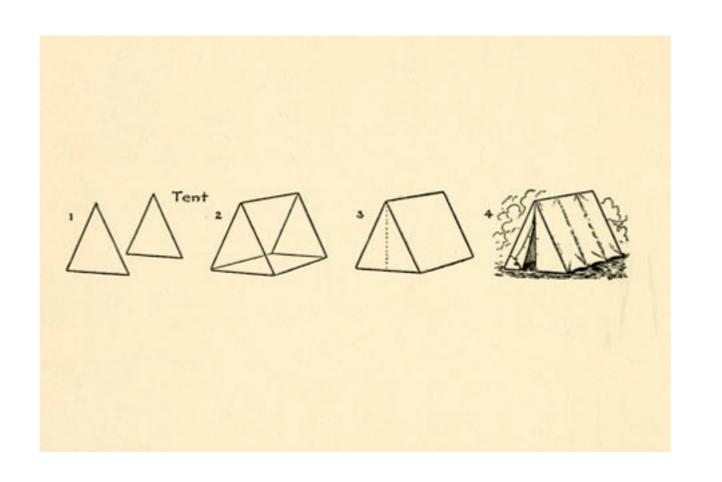
The grand atrium becomes a sculptural daylit canyon – a physical and visual meeting point connecting all users of the building, promoting exchange and sharing between researchers, companies and visitors.

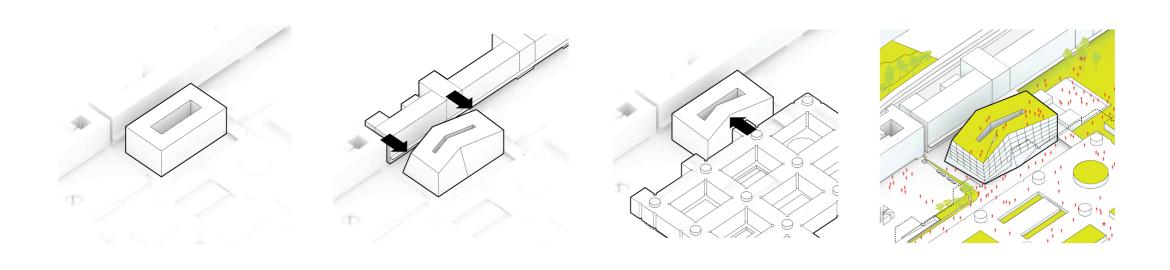




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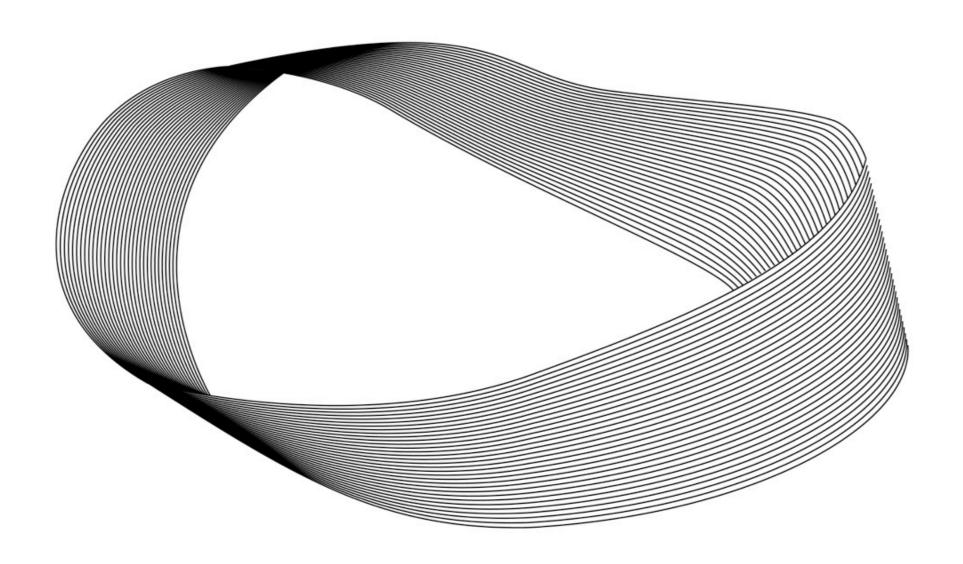


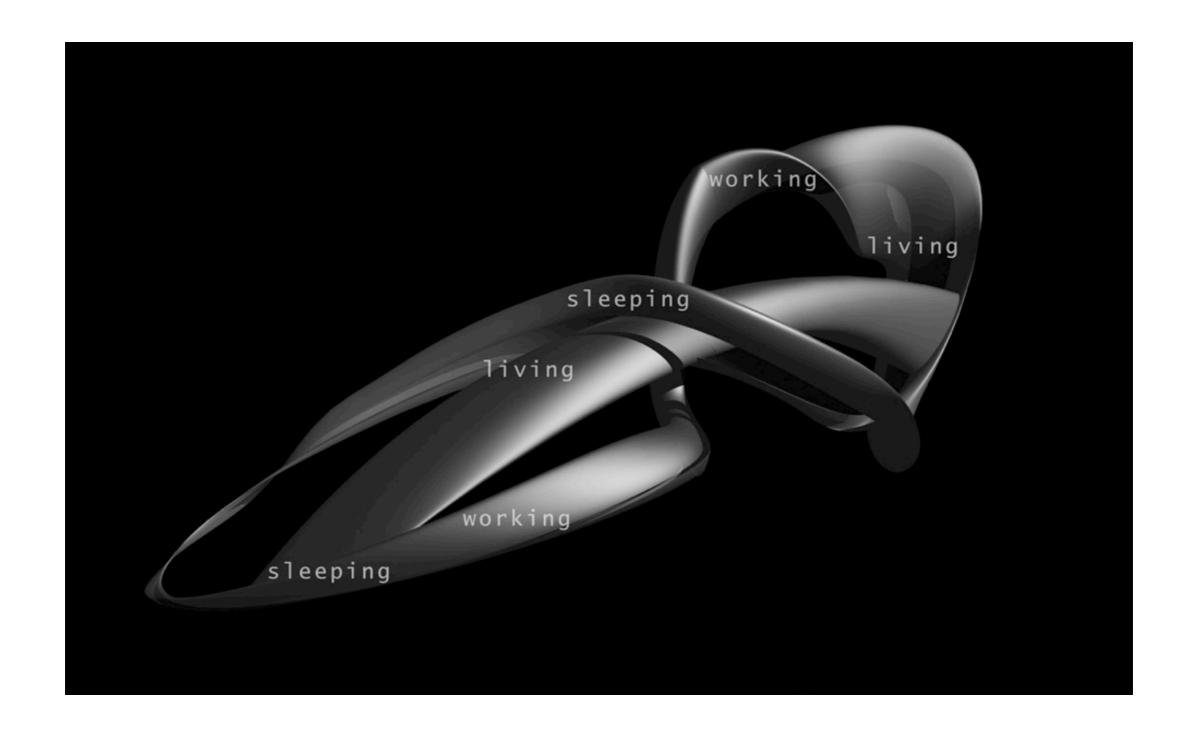


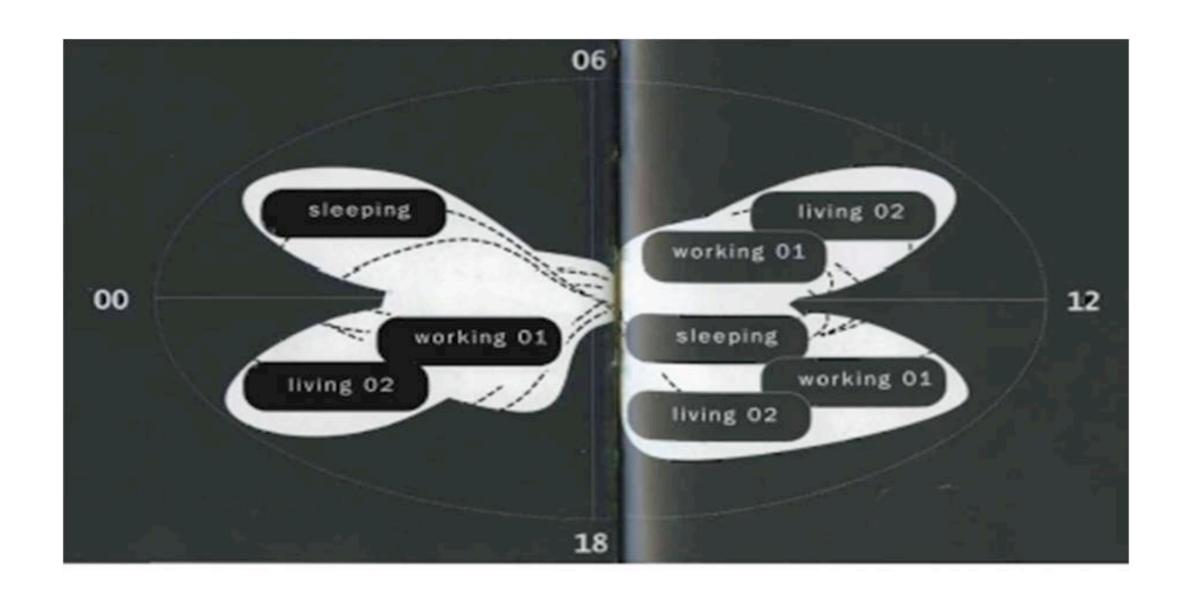
### MOBIUS HOUSE

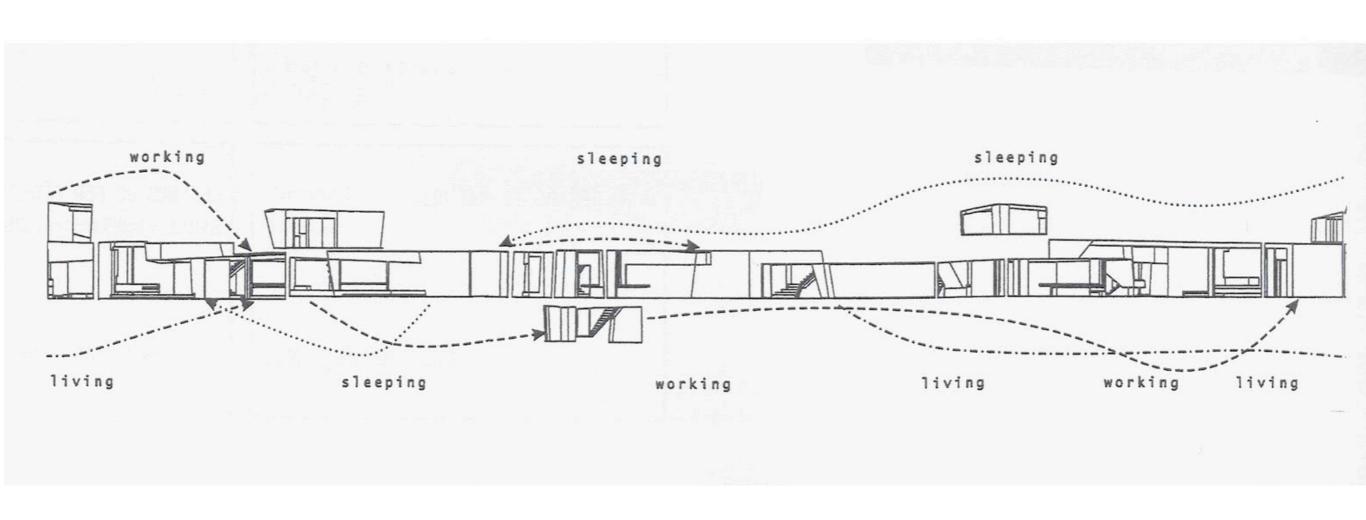
UN STUDIO

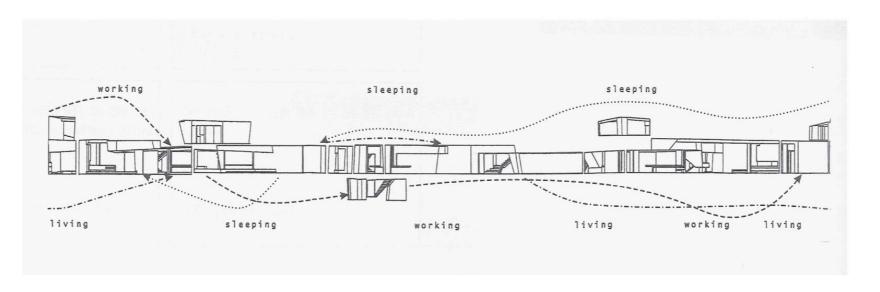
CONCEPT AS PURE ABSTRACT SPATIAL DIAGRAM DIAGRAMS AS TOOL FOR TRANSLATION

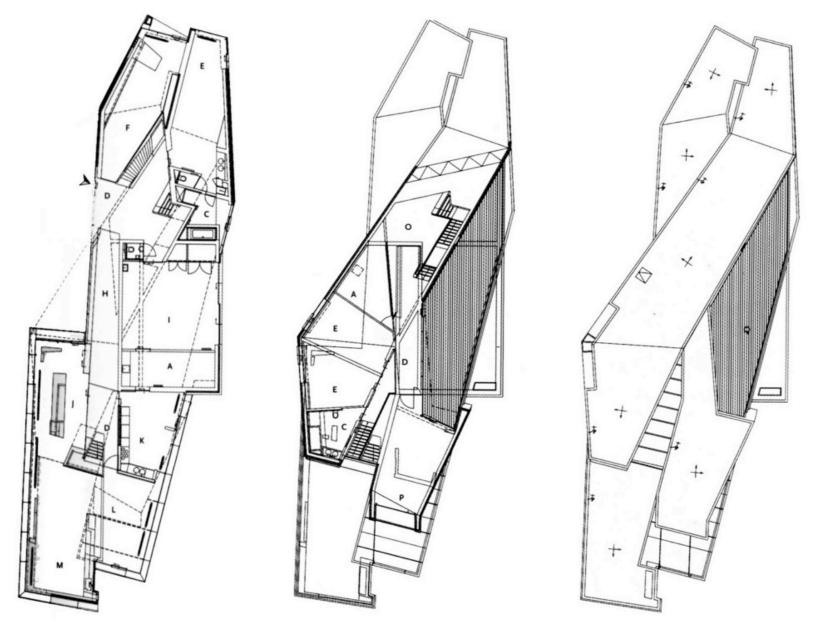






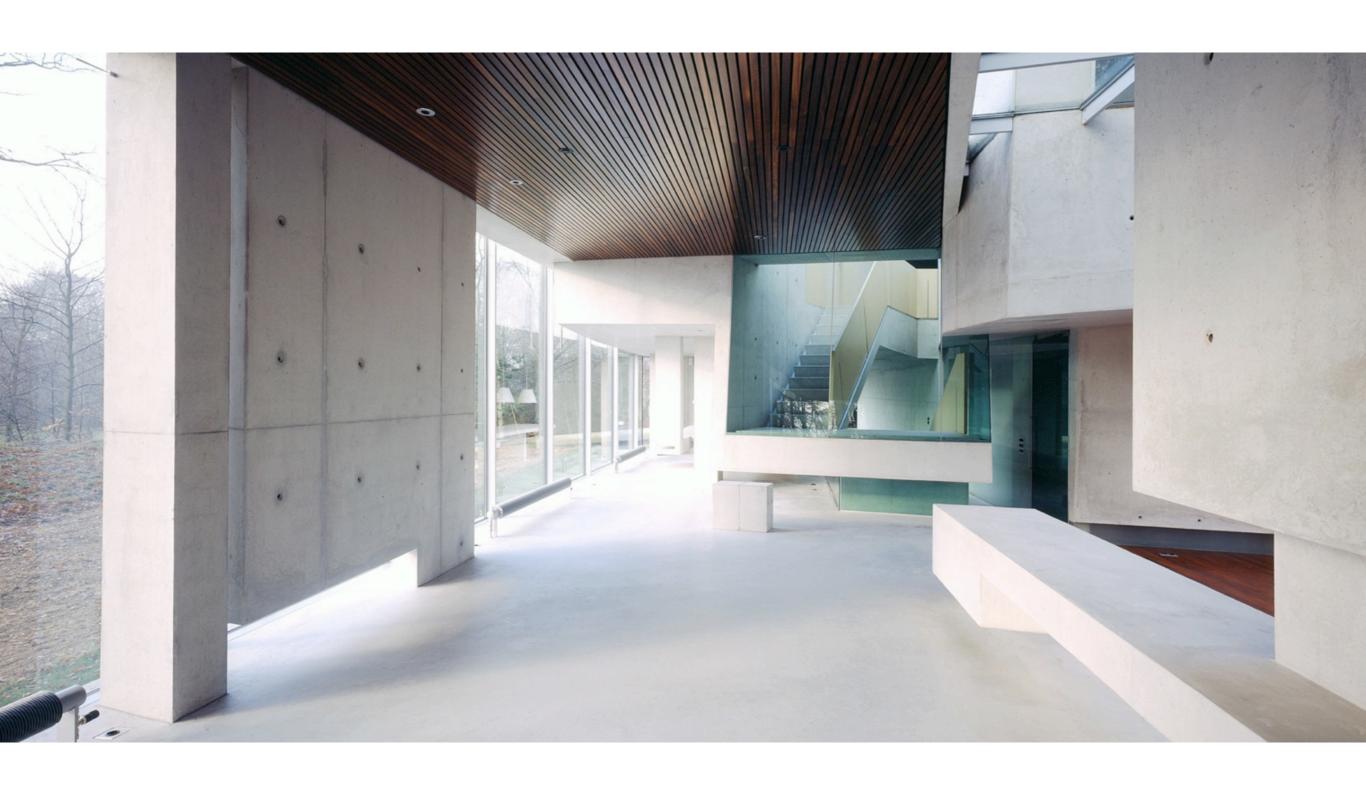


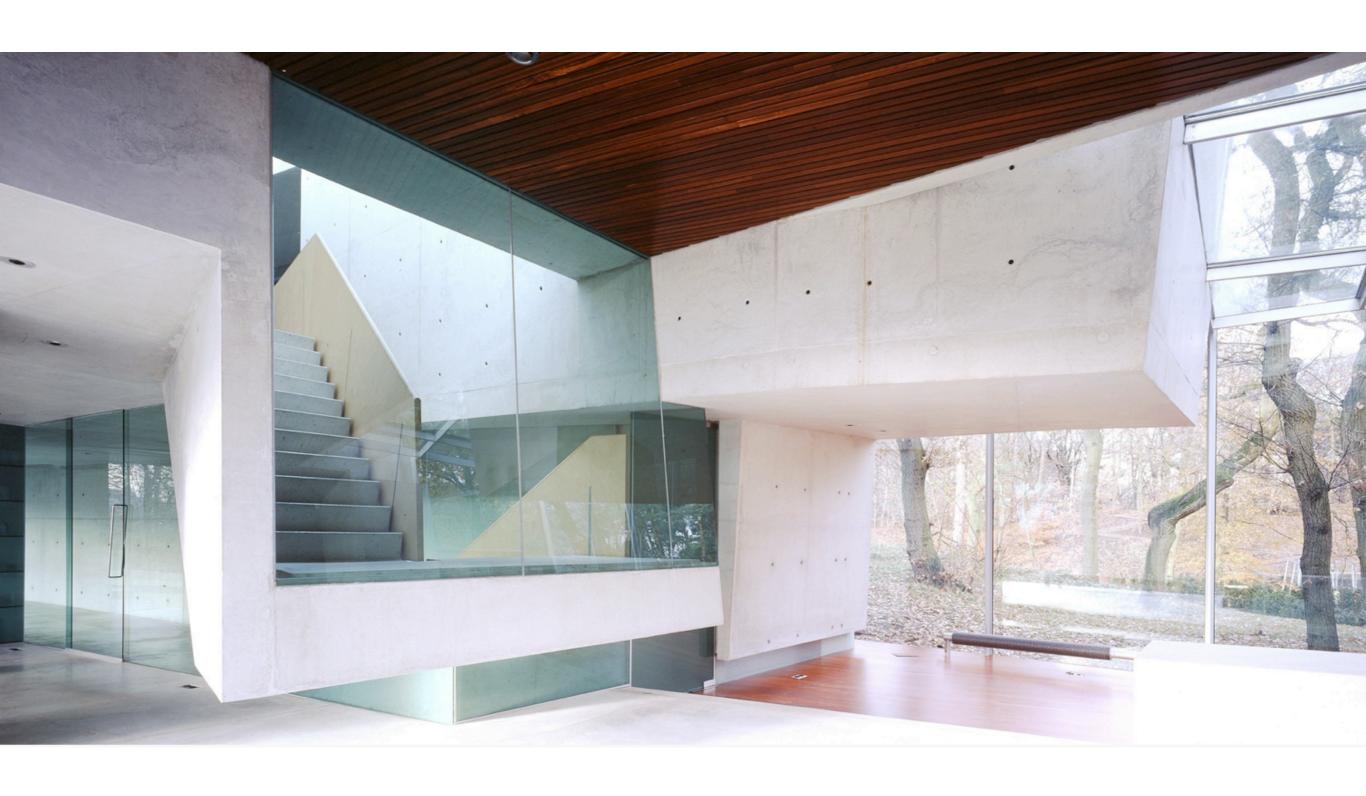




MOBIUS HOUSE | UN STUDIO



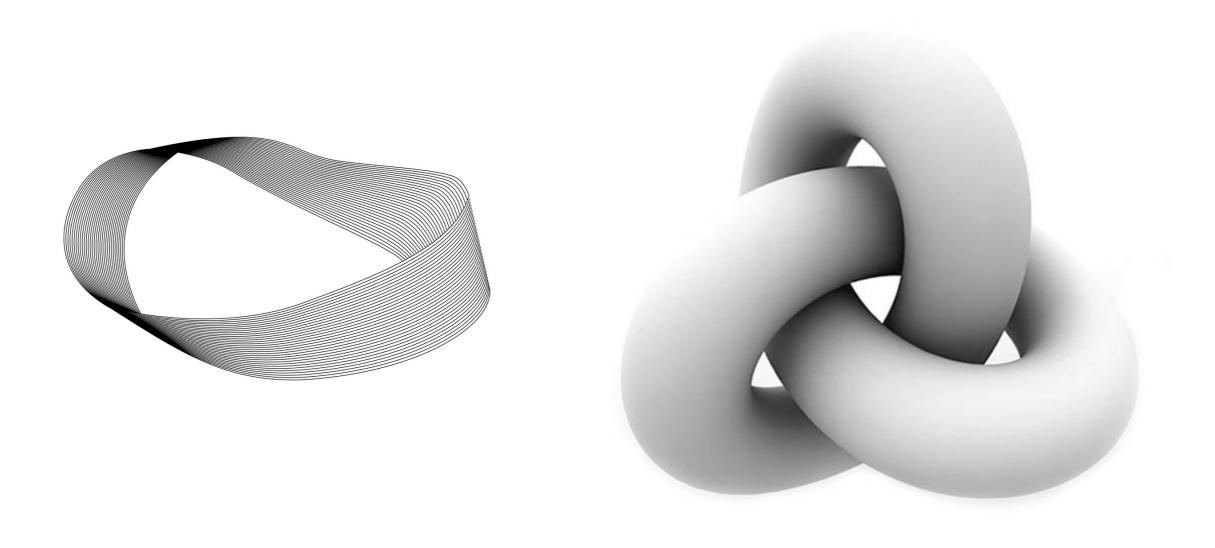


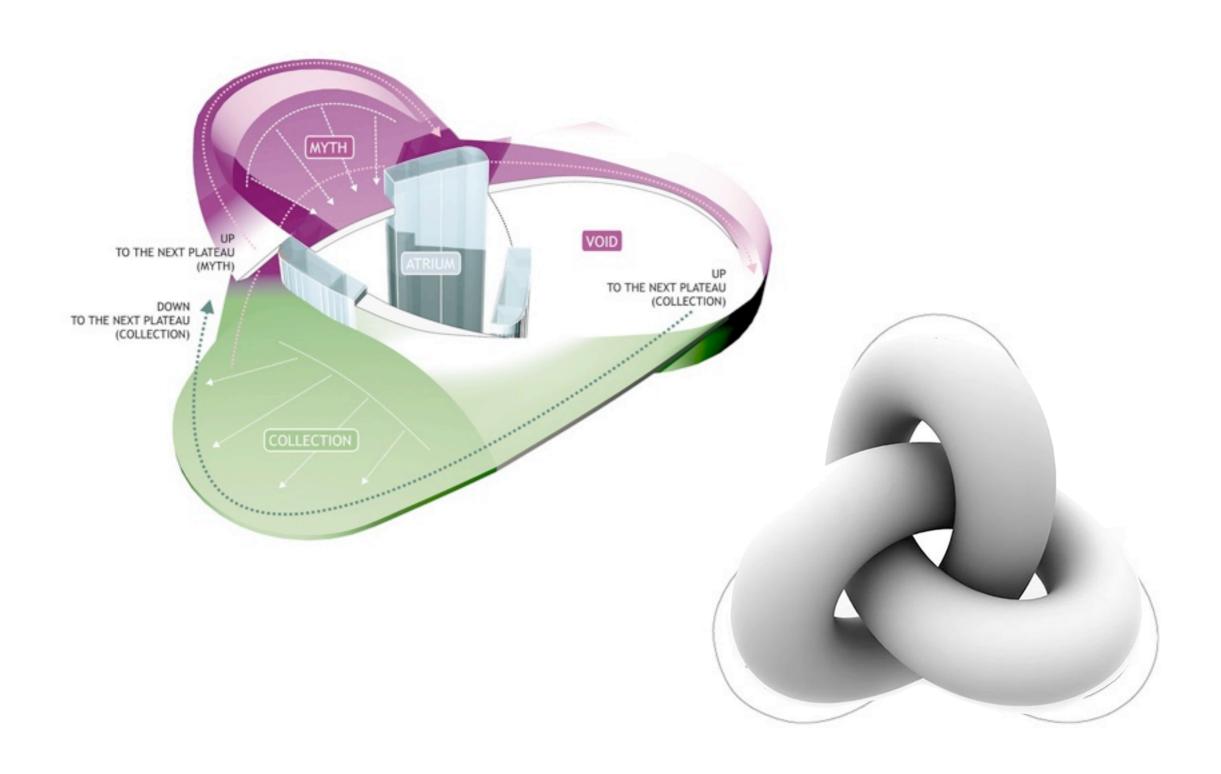


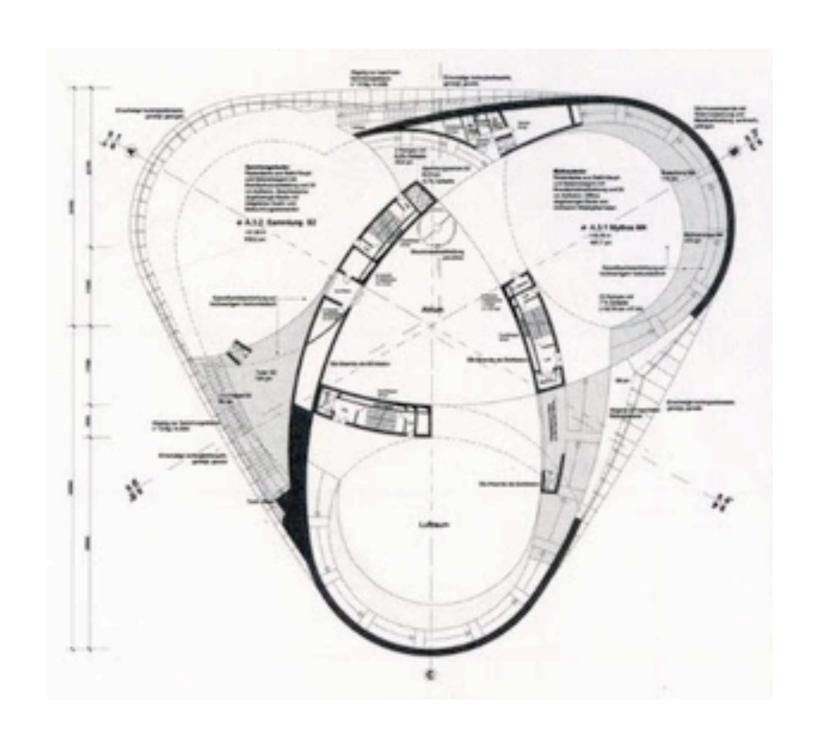
# MERCEDES BENZ MUSEUM

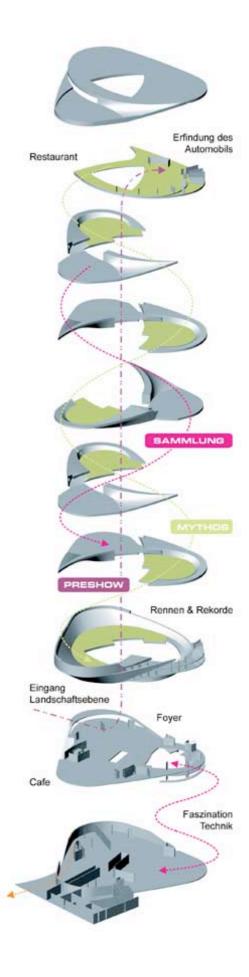
UN STUDIO

CONCEPT AS PURE ABSTRACT SPATIAL DIAGRAM DIAGRAMS AS TOOL FOR TRANSLATION





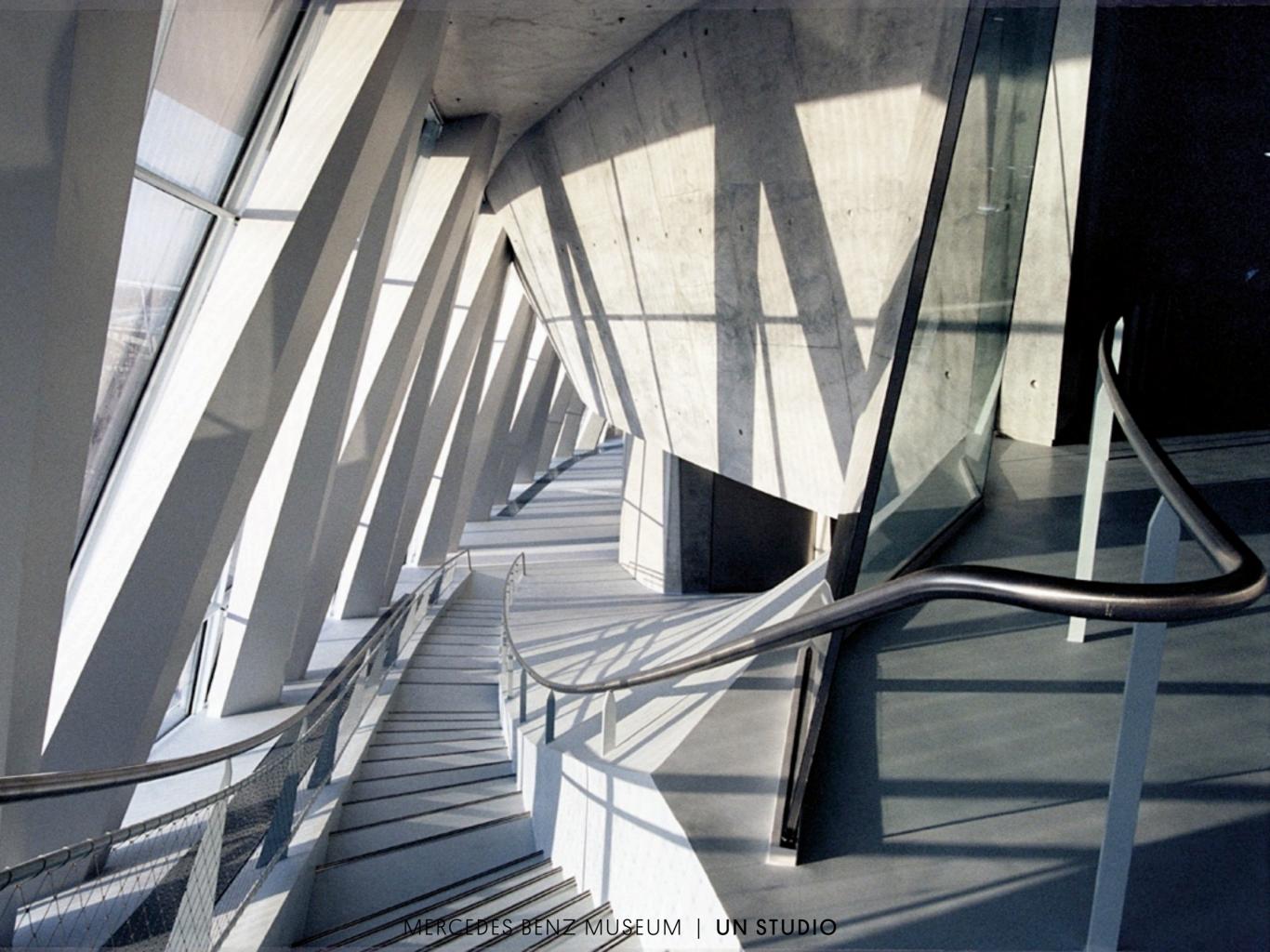










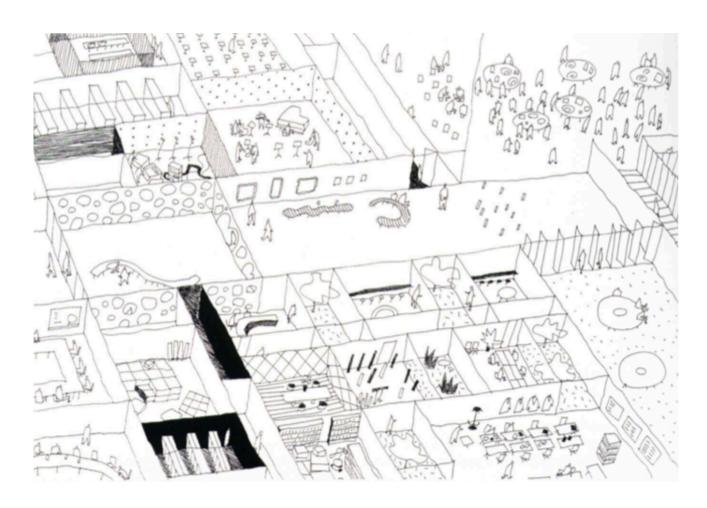


# TOLEDO GLASS MUSEUM

SANAA

### CONCEPT OF SPATIAL CONTINUITY DIAGRAM EXPLORES MANIPULATION OF PROGRAM TO ACHIEVE SPATIAL CONDITION

[NO TRANSLATION FROM DIAGRAM TO BUILDING]



"I see it (architecture) more as a kind of open stage that should serve to facilitate freedom of movement...

I believe an architect should put up structures that serve to mutually incorporate people, city, and information or media."

KAZUYO SEJIMA

open storage 5800	countywed	open storage 9500	courbant	homhop 1+2 2890 + 1290	cold shop 1 90
primary exhibition space 7506	oppe storage 3500	primary exhibition space 7500	spen storage SS00	contract	hotshop 1+2 2000 + 1250
of 160	primary exhibition spaces 7900	contyant	printary exhibition space 7500	hosehop 1+2 2000 + 1290	Sect. 1766. 400 Sundh 275
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No.01 1200	central loyer 2900	multimispon e110	soutpart	Full (1970) 100 (1970)	tectify charge 1450

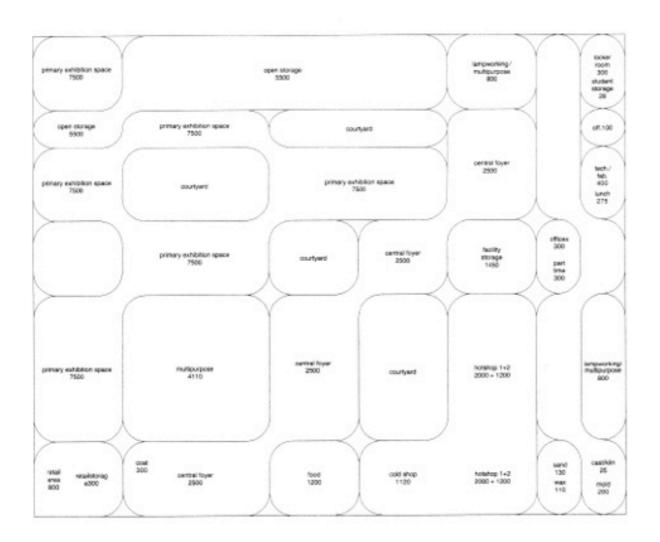
En el centro del parque proponemos una retícula modular. Las salas uniformes sobre retículas uniformes carecen de conexiones diagonales. Cuando esta relación resulta necesaria, se emplean las curvas para establecer una conexión en diagonal.

At the center of the park, we impose a modular grid. Uniform rooms on uniform grids do not have diagonal connections. Where this relationship proves necessary, curves are used to connect in the diagonal direction.

courtyand	primary exhibition space 7500	spen storage 55000	condys	lampworking' multipurpose 800	countyed	student storage 26
musy exhibition space	open storage 5500	premary exhibition Scane	open storage 5500		boker 1000 300	04.10E
sourpard	penary exhibition space TRIC	countries	primary substance space 7500	central toyer 2500		900.750 400
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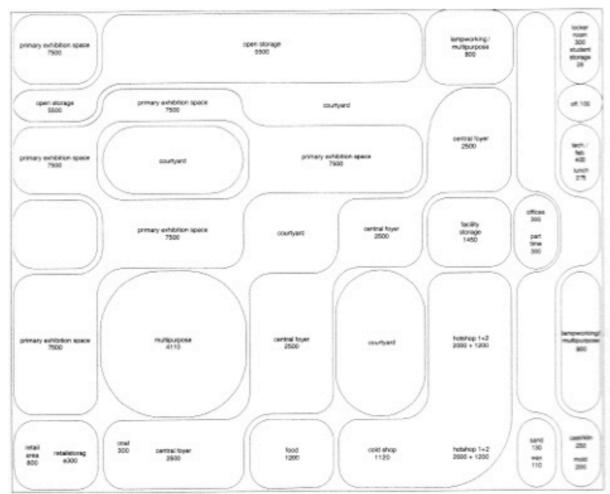
Para adaptarse al programa, la retícula uniforme se ajusta para transformarse en una retícula rectangular. Aquellos lugares en los que las salas rectangulares quedan conectadas por paredes curvas son buenos. Sin embargo, empezamos a pensar que una curva en una sola esquina de una sala es algo espacialmente desagradable.

To meet the program, the uniform grid is adjusted to become a rectangular grid. The places where rectangular rooms are connected by curved walls are good. However, we begin to think that a curve at just one corner of a room is spatially unpleasant.

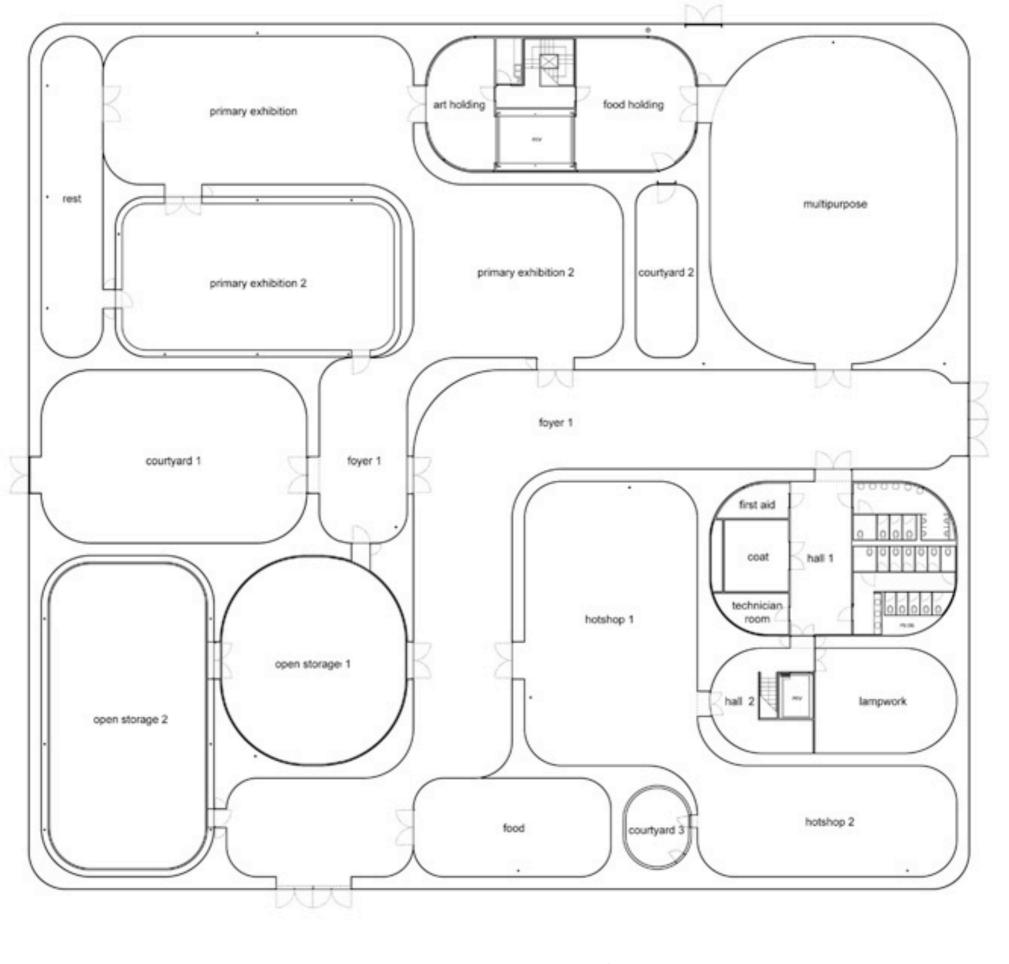


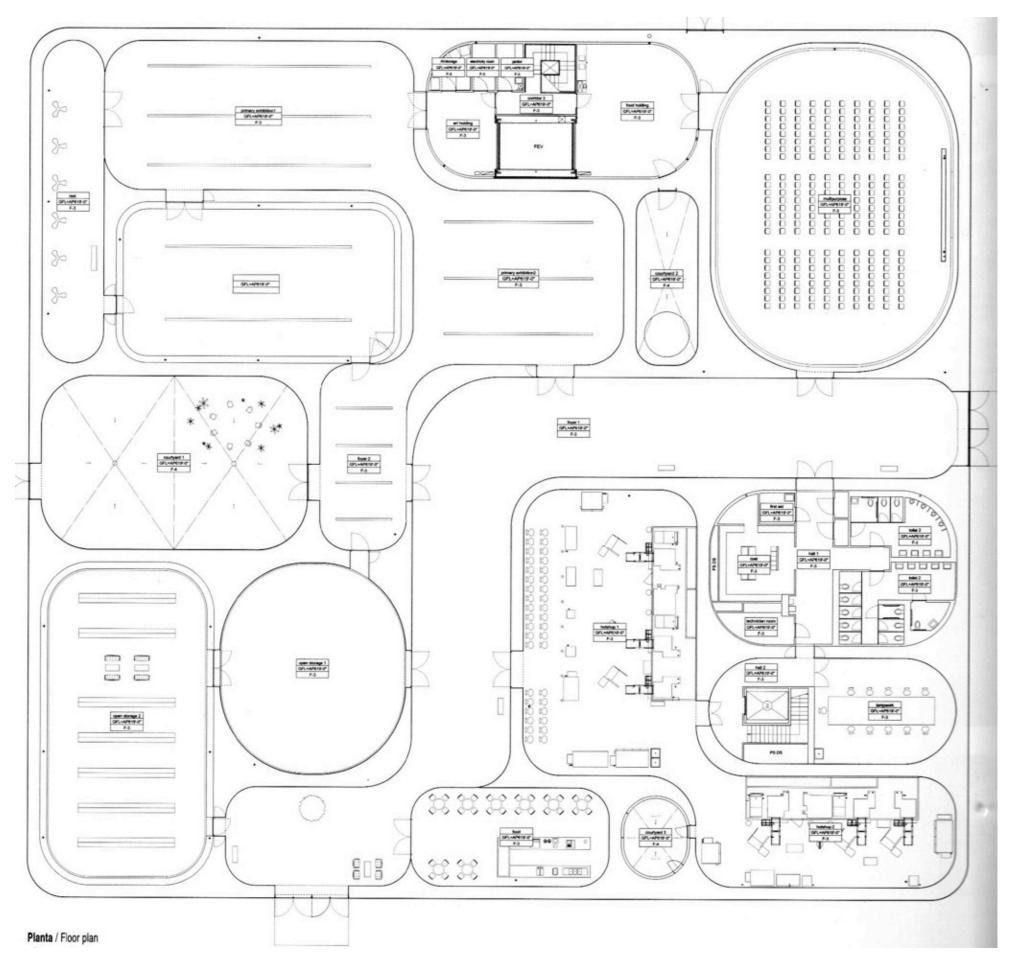
Todas las salas tienen esquinas en curva, y no en ángulo. Creemos que las salas con esquinas en curva son más independientes

All rooms are made by curved corners, not angled corners. We find rooms with curved corners to be more independent.



Originalmente, un muro era compartido por dos salas. Los muros dobles hacen que cada sala sea independiente. Originally, one wall was shared between two rooms. Double walls make each room independent.

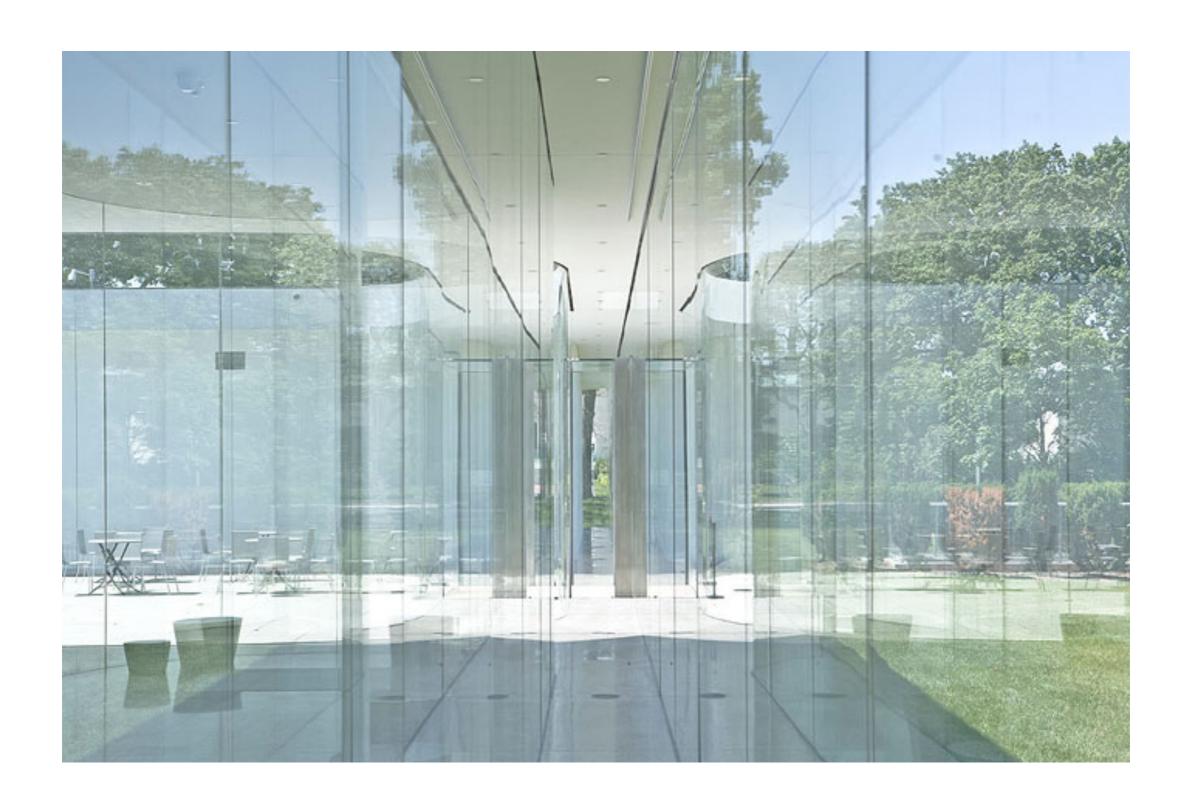




TOLEDO GLASS MUSEUM | SANAA











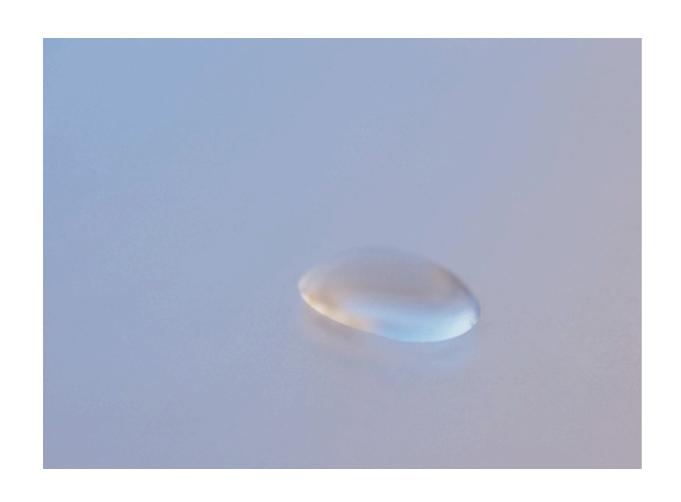


### TESHIMA ART MUSEUM

RYUF NISHIZAWA

## CONCEPT OF SPATIAL METAPHOR AS LITERAL SPACE DIAGRAM AS CONCEPT AND BUILDING

[CONCEPT=DIAGRAM=BUILDING]



"We proposed an architectural design composed of free curves, echoing the shape of a water drop. Our idea was that the curved drop-like form would create a powerful architectural space in harmony with the undulating landforms around it.

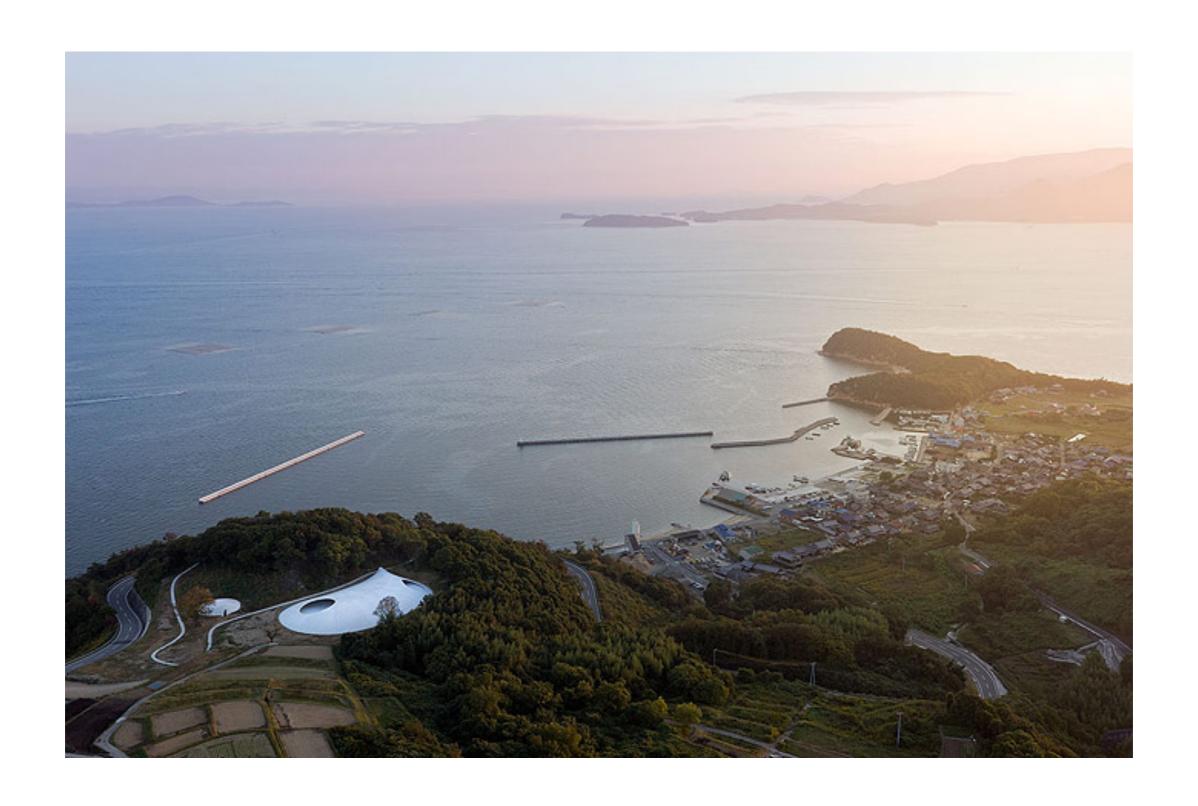
The architecture aims to create a dynamic space that is both closed for the work of art and the environment and open at the same time. Our goal is to generate a fusion of the environment, art, and architecture, and we hope these three elements work together as a single entity. "

#### RYUE NISHIZAWA









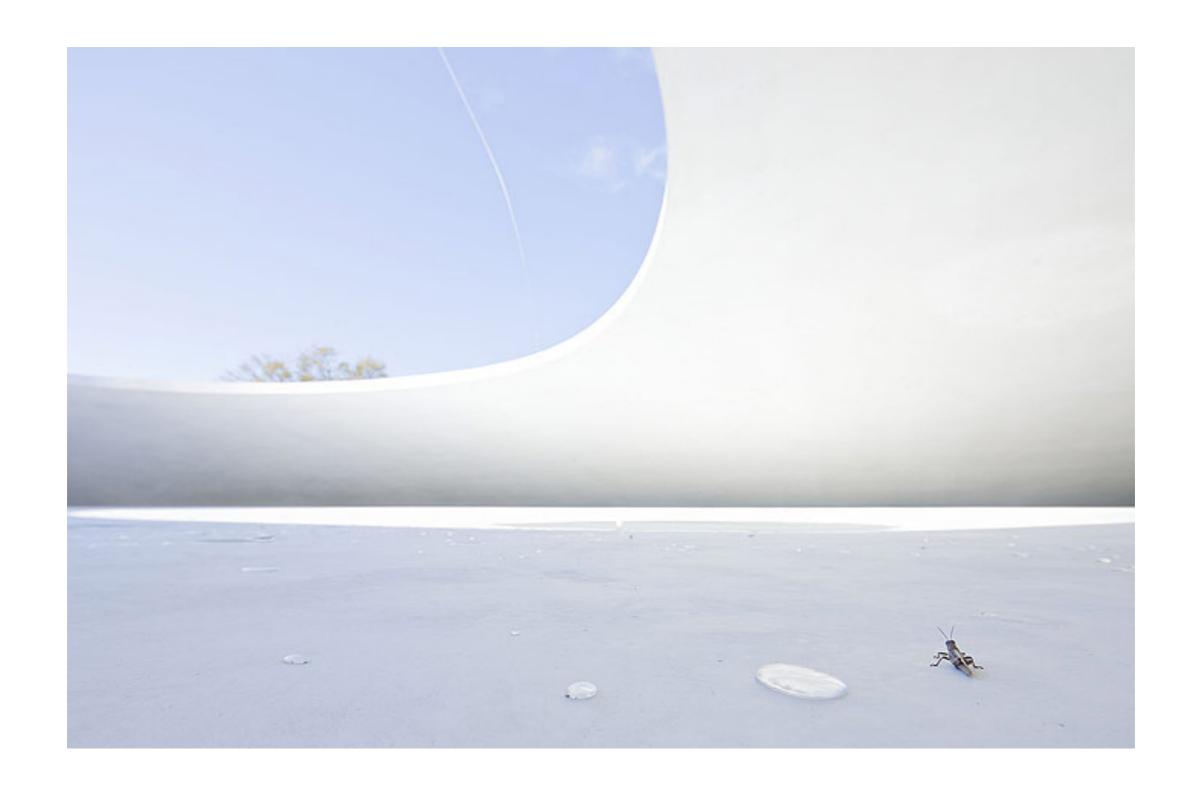


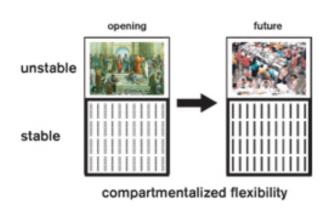




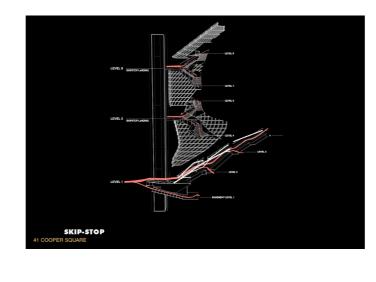




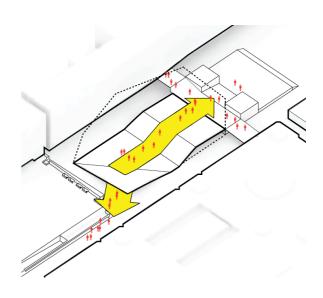




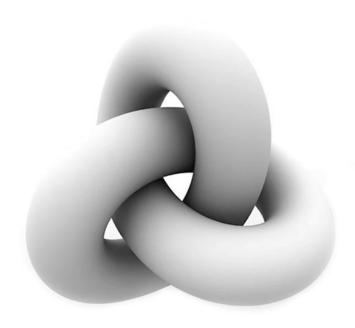
REPRESENTATION OF THEORY & RESEARCH



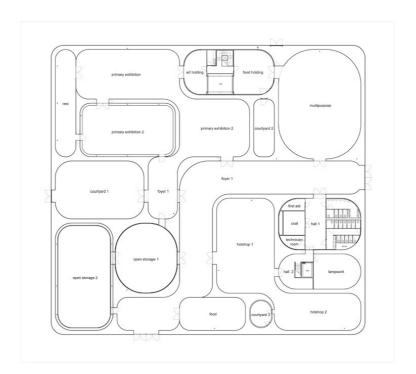
TOOL FOR FORMAL EXPLORATION OF CONCEPT



REPRESENTATION OF FORMAL PROCESS



IS CONCEPT AND TOOL FOR TRANSLATION



IS BUILDING AS REPRESENTATION
OF SPATIAL CONDITION



IS BUILDING, CONCEPT, & ART

# DIAGRAMS

#### ABSTRACT MEANS FOR EXPLORING CONCEPTS

REPRESENT COMPLEX IDEAS, SIMPLY CLARITY

ALLOW YOU TO STUDY MANY IDEAS QUICKLY INSIGHT

CREATE A PLATFORM FOR DIALOGUE HONEST

ARE DEMOCRATIC APPROPRIATE

EMBODY OPPORTUNITY UNEXPECTED

FORCE DECISION MAKING PURPOSEFUL

MOMENTS OF FOCUS PROVIDING PLATFORMS FOR INQUIRY THOUGHTFUL

RECORD THE DESIGN PROCESS ORGANIZED

MANY CAN MAKE UP A SINGLE BUILDING COHESIVE

THE ORGANIZATION OF

FORM
SPACE
FUNCTION