

FIG. 4.0 Two Libraries at Jussieu Paris, OMA 1992-1993 (Photo: Hans Werlemann)

# 4 Two Libraries at Jussieu, Paris

---

OMA – Rem Koolhaas

1992-1993 **unbuilt**

The lack of OMA's Jussieu project in the reference literature could easily be interpreted as a sign of unimportance. However this design for a university library holds essential keys to our question how architecture is spatially composed using landscape strategies. This unbuilt design is an influential work at the turning point of the discipline, where new principles are explored. A whole series of projects by many architects in contemporary architecture could in some way or another relate to this project.

In the first section of this chapter I will introduce the argumentation of our various reasons for the choice of the Jussieu project as an example of architecture designed as landscape in regard to existing research in reference literature (4.1). Then I will explain the project in its larger context (4.2). Although Jussieu is an unbuilt design, I will describe the building in a guided walk through from my reading of the design in the sources and the specific 'pro-construction' imagery (4.3). I will describe the steps that lead to this imagery later in the chapter. I keep a brief a paragraph about the design (4.4) to explain more about why this project was not built. To analyse the Jussieu project's workings I display the account of the 4-layer method with all relevant drawings (4.5) and our interpretations of them. As a specific method for this project I chose virtual representations of the design that will be explained in 4.6.

I will then test the concept of landscape in our framework of landscape architectural attitudes (4.7) to conclude with a theoretical framing of the essential contribution of proprietary design instruments of this project to architectures emerging landscape design strategies (4.8).

## 4.1 Choice of Jussieu for Architecture with Landscape Methods

---

The Jussieu project is significant to this thesis because:

- Firstly landscape is introduced as a manipulation of the urban ground plane that responds to complicated requirements of the program specified by the competition.
- Secondly, the project, by means of the above manipulation, explores spatial effects of the multi-fold floor and the fluid horizon by introducing an undulating plane as space divider in a deliberately open building with very few vertical dividers.
- Thirdly, it introduces into the architecture of a library single urban landscape elements like the collaged site plan to the nearby Jardin des Plantes. With this a building is positioned in the Parisian context of urban garden design. An aspect to this point hardly noticed, as these parts of the competition design were not pursued in later, published versions of the project.
- Lastly, the project exemplifies how a “grand projet”<sup>100</sup> could play the role of a catalyst in making Paris Universities public spaces again. This is a larger programmatic dimension with a political note. It includes an explicit critique of modern architecture present on the site with the Jussieu Campus (1962-1973, see chapter 4.2) which dogmatized the university’s building culture. The project incorporates a fundamental critique of architectural discipline and its conventions by incorporating landscape design strategies. The Jussieu project presents an idea of solving architectural tasks with the creation of landscape. It is relevant to my thesis also because of the impact of its multi-fold understanding of landscapes appearance in the 1990s against the backdrop of a key project of French modernist architecture: The 1960s Jussieu Campus design. From there the project takes a novel approach to solve a complex problem of an architectural program and urban situation at once. In order to understand this unbuilt project however we need a synthesis about the scattered sources.

This project can be called a discovery. It was a “kind of fusion of the city and a building, of urbanism and architecture, and (...) in a more contemporary mode what you would call Landscape Urbanism. We (the designers, note author) didn’t really have that term at the time (but) I think that is precisely what it was about,...”. (From the interview with Christophe Cornubert, Appendix A1.1.1). However in the reference literature to this thesis the only mention of the Jussieu project is Ruby’s: “... the project became famous as the first use of topological geometry to spatially organise an interior.” (Ruby 2006 p. 26). I aim to expose here, that the case of Jussieu is significant to the observation of landscape design strategies in architecture. It explicitly introduces landscape as a means of solving a design problem: It activates landscape as public space. A quality is being introduced, that was lost in previous dogmatic dealings with public space, a dogma that has separated landscape and architecture both physically and intellectually. As a case it directly intervenes on a theoretical problematic of Architecture and Landscape as separate disciplines as explained in Chapters 2 and 3.

---

<sup>100</sup> Literally translated a major project. A specific French term used for public architecture of national importance since President Mitterand as explained in chapter 4.2.

The choice of this project for analysing with landscape methods is connected to a jump or paradigm shift, that seems relevant not only to OMA's oeuvre but to the development of the discipline in general. In an Interview in 1993 Koolhaas himself expressed great interest in building the Jussieu libraries in particular (Kuhnert e.a. 1994 p.16). Koolhaas considers aspects of this project as an unexpected break or jump (Dutch: 'sprongen' op. cit. p.16) in development of the discipline. Of particular significance at Jussieu is a new kind of connection made between the city, the building and the program using the idea of landscape. Exactly the separation between space and program in a new type of order is particular in this introduction of landscape (op. cit. p. 21) as we shall see in later analysis. Through original source material and analysis I intend to reestablish this project as a turning point in architecture towards landscape strategies

## 4.2 Context of Jussieu

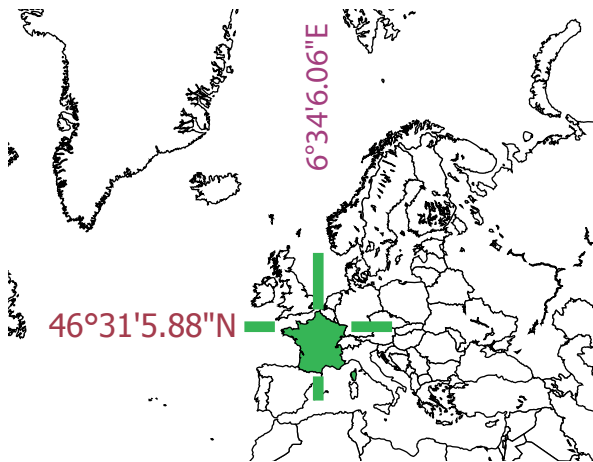


FIG. 4.2.1 Global Position Paris, France



FIG. 4.2.2 Jussieu in Paris Region Scale: 1.250'000

The OMA project for the two libraries of Jussieu in 1992 takes part of its strength from the interaction with its urban context between Haussmann's Paris on one side and of the late-modernist design of the 1960s Jussieu Campus on the other. This urban context is essential to the contribution to landscape strategies through OMA's design.

The site of Jussieu University Campus in Paris's 5th arrondissement is on the South Bank of the River Seine. In the 17th century, the area just south of Île St. Louis was originally occupied by low rise sheds along the Seine, and on the outskirts, the abbey of St. Victor in the 18th century Faubourg St. Victor. (Fig. Saint-Victor & Halles aux Vins from Plan Félibien 1734).





FIG. 4.2.3. Paris' 5th arrondissement, Jussieu (centre) Sorbonne / Pantheon (bottom) and Jardin des Plantes (bing.com 2012)

Next to the abbey was the Jardin du Roi - today known as Jardin des Plantes. The gardens were installed here by Louis XIII in 1635 and are one of the oldest public gardens in Western Europe under the Sorbonne University.

While Jardin des Plantes was blossoming after the French revolution, the abbey of St. Victor was demolished in 1811 and replaced by the Halle aux Vins. Around 1860 Baron Haussmann restructured Paris and traced the most important intervention on the Rive Gauche - the Boulevard St. Germain - in a long bow across the Seine from Concorde to Bastille, crossing the Pont de Sully (1877) just west of the site.

In the 20th century the university showed interest and acquired parts of the site for expanding the nearby Sorbonne, where Paris university had resided since 1257 (Murray in Campus... 1993 p.34). With the vicinity of the Jardin des Plantes the area was predestined for the natural sciences, hence the naming of a street and the later campus after the Botanist Jussieu (1748 – 1836).

After WWII, evolving demographics and high university attendance trends within the baby boomer generation led to the expansion of the Paris university. The first two university buildings of more than 200 meters in length were built here in 1957 along the river Seine and orthogonally along Jardin des Plantes.

Still today, the most dominant building on the site is the giant faculty complex, the so called Grille Albert (1962-1967) which has a size and impact comparable to the largest buildings in Paris, such as the royal palace of the Louvre or the Hôtel de Invalides (Fig. project Albert in undated tourist map source Scarif 1992). The structure is nick-named Grille because of its large scale shape and the use of steel. It was designed by beaux-arts architect Eduard Albert (1910-1968).



FIG. 4.2.4 Plan de la Ville, Cité, Université, Faubourgs de Paris (Tavernier 1630 after Merian 1615)



FIG. 4.2.5 Paris. Halle aux Vins. (Postcard ca. 1907)

Albert was commissioned in 1962 by the minister of culture, writer and art theorist André Malraux (1901-76, in office 1945-46 and 1958-69) to design the Faculty of Sciences as an extension to the Sorbonne. He designed a giant complex of 277 x 333 meters with six crossing parallel and lateral bars. The rigid grid is only interrupted by one entry at Rue Jussieu and the tower opposite to it. The whole complex originally was to contain 5 x 5 courtyards of which four were joined to an entry plaza around the tower (Hottin 1999 p.6). The six-floor bars have round staircases at their intersections and elevators that are numbered 11-16, 21-26, ..., 61-66 in big letters on the big round tons. Albert's gigantic structure is said to be inspired by the 16th century Escorial complex outside Madrid (reprint of 1967 technical project description in Campus... 1993 p.16). On a footprint of 126,000 m<sup>2</sup> the whole Grille Albert complex has an enormous surface of 350,000 m<sup>2</sup> of roughly 10 times the net surface of the current TU Delft Faculty of Architecture (OMA 2009 as compared to Fokkema 2012).

The crossing buildings of the Jussieu complex are entirely lifted from the continuous pedestal -named parvis<sup>101</sup> by Albert - except for slender steel columns and round tons at the crossing points following a doctrine of modern architecture by the influential Architect Le Corbusier (1887 - 1965). He named it the 'pilotis' (Engl. Pilars) in his five points towards a modern architecture (Le Corbusier 1923) stressing the continuity of an ambiguous continuous green (3.1.7.). This principle was adopted by Albert (Albert's project reproduced in Scarif 1992). The Jussieu complex is in many ways a manifestation of modernist architectural ideology. It's almost stubborn rigidity (though not yet it's scale) also recalls the Ville Radieuse (Corbusier 1925) that had been described by Koolhaas as Anti-Manhattanism in *Delirious New York* (1977, 1994 p.225). It is the reproduction of Corbusian rules through Albert. Under the idea of continuous public green space under buildings on 'pilotis' under the 'Grille Albert' is led ad absurdum through its realisation. But the crucial space of the new campus was realised quite differently from Albert's initial ideas. Soon after Albert's death came the May 1968 student revolt in Paris. Both events would turn around the development of the campus site and the university organisation in general. In consequence the giant Grille was never finished.

<sup>101</sup> The French (and old English) word parvis usually describes "an enclosed area in front of a cathedral or church, typically surrounded with colonnades or porticoes." (Dictionary.com : parvis last access March 2018). It was introduced by Albert to describe the continuous platform at Jussieu Universities, that is partially a series of courtyards and partially covered by the soffits of the elevated buildings. OMA adopt this term from the competition program (Scarif 1992) and use it throughout project descriptions (i.e. OMA 1995). I will keep it as a project related term in this thesis.





FIG. 4.2.6. Jussieu Campus Aerial View (bing.com 2012)

According to Rem Koolhaas, then a journalist for the *Haagse Post* who was “critically” reporting from Paris during the student occupation of the Sorbonne in May 1968, the Jussieu Campus was an important centre for the students at the time, as he recalls in an Interview in *De Architect* (Koolhaas 1994 p.16). OMA’s own publications connect the Jussieu site to “1968” with the depiction of a street barricade (Koolhaas 1995 p. 1306). The 1968 clash between students and the establishment led to a major reform of universities. They would never become the large, popular and open institution Malvraux had imagined with Albert’s design at Jussieu. Instead, the Sorbonne was split up between 1968 and 1970. This made the concept of a large central unit at Jussieu useless for the no longer existing Central University of Paris.

The building was later occupied by two differently structured faculties of science and humanities. In 1971 the site became Université Paris VII “Denis Diderot” and Université Paris VI “Pierre et Marie Curie”. The two different universities not only have different subjects but follow diverging pedagogical and also political concepts and diverge in labour organisation of the scientific staff. This makes living together difficult (Hottin 1999 p.11). The once intended flagship of the Sorbonne has become subdivided with negotiations among diverse institutions.

Besides these institutional changes, at Jussieu the repression of the ‘68 revolt also had built consequences. The campus entry was strategically reduced to one controllable and centralised access point from Rue Jussieu and fenced off on its large perimeter. For apparently practical reasons (namely parking facilities) the important parvis had been raised above a line visible from the streets. Albert’s idea that the level change would lead to a “ha-ha” effect of visual connection between city and the deck with many bridges connecting across the level jump completely abandoned. The closed edge is to this day the most difficult zone (Marray in *Campus...* 1993 p.46). Marrey suspects that the openness of urban space simply was undesirable after 1968, as University campuses became strategic fortifications that could be gated and controlled during potential moments of unrest.

Officially the science faculty project stopped, unachieved, in 1973. By then minister Malraux and dean Zaminsky had left office. Architect Albert had died in 1968, leaving oversight of the work to

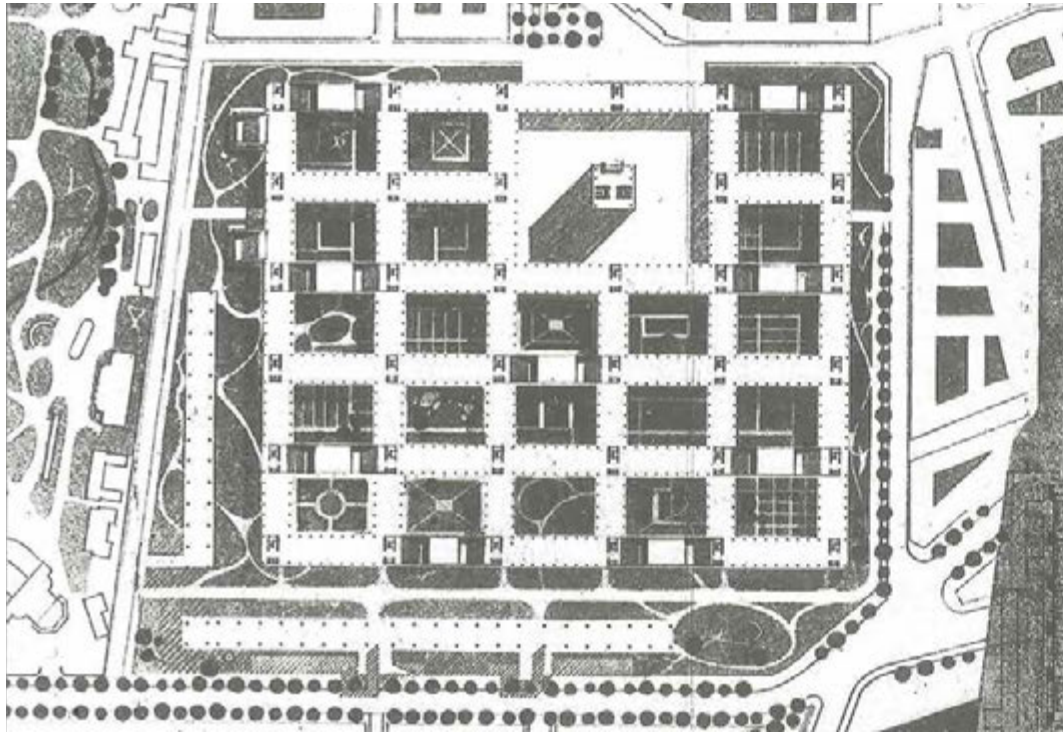


FIG. 4.2.7. Project of Albert. Not realised are the park-like surroundings connecting to courtyards and Seine-side wing (Jussieu 1993)

Urbain Cassan, René Coulon and Constantin Gortchakoff. The tower was built in 1970, and at 90 meters, became 5 meters higher than planned by Albert. The Art budget reserved by Malraux for courtyards was never fully used. At the unfinished edges, the temporary perimeters were never solidified. Numerous technical and spatial problems, including partial drafts in the parvis, frequent elevator failures, orientation problems and bad acoustics made Albert's buildings very unpopular and many occupants of the building complained about or attacked the design. The parvis space to this day is highly problematic as a public space - rarely activated, even with today's large student populations.

In 1980 the neighbourhood changed (significantly for the OMA project) with the design of a new building. The construction of the Institut du Monde Arabe IMA by Architecture Studio AS and Jean Nouvel created a new entry-square to the south on the backside of Jussieu. The IMA was opened in 1987. It became famous for the southern glass façade with a square pattern of iris diaphragm shutters that are reminiscent of arabic ornaments - a symbolic juncture of French modernity and Arab tradition. The new square south of the IMA towards Boulevard St. Germain suddenly opened a new grand perspective - a vista at Haussmann's scale across the site with a new informal access point for students. This vista remained important for OMA's Jussieu Libraries project.

The IMA was the first of a series of 'grand projets' (1980-1995) that altered Paris with a series of important public buildings. Paris had been an important place for contemporary architecture through the grand projets under François Mitterrand (1916-1996, President 1981-1995) (see i.e. Chaslin 1985, Nizon, Carloni e.a. 1988). A series of key public projects of transformative character to the city not only involved French architects like Nouvel, Chemetov, Portzemparc and Perrault but also involved leading foreign Architects including I.M. Pei as the architect of the Louvre Pyramid (1984-89). International competitions were held anonymously until the Bastille Opera (1983-89), won by previously unknown architect Carlos Ott. Later competitions were mostly on invitation. Foreign observers of the grand projets (Nizon, Carloni e.a. 1988) compared it with the



tradition of Royal and Imperial French representative architecture in Paris, such as Place des Voges (under Henry IV 1605-12) , The Tuileries Gardens (Le Nôtre 1664-72) and Tuileries Place (later Louvre 1664-1872) or even the much larger urban restructuring of Paris (1854-68) under Baron Haussmann. But Mitterrand's renewal also promoted, as a cultural intervention, the (preferably socialist) intelligentsia of French and foreign architects. Around the 'bicentenaire' (200th anniversary) of the 1789 French Revolution in 1989 many of the grand projets were completed. The grandest project, Très Grande Bibliothèque TGB (Dominique Perrault 1988-96) was announced by Mitterrand on the 14th of July 1988 and is today named Bibliothèque Mitterrand after him.

Meanwhile at Jussieu, the success of the IMA building alongside with the élan of Paris's transformation with the grand projets, enforced the ambition of a long overdue renovation of the campus, the unfinished leftover of the late 1960s transformations. Several proposals to complete Jussieu were designed (two of them by Jean Nouvel) but no decisions made (Campus Jussieu 2003 p.56-57, p.60-61, Hottin 2007 p.21, Scarif 1992). Around 1991 the realisation of a 50,000 m<sup>2</sup> reserve was finally formalised in a program which resulted in a project brief for a library with sports facilities and a conference centre in the development of the master-plan "Univeristé 2000" (Scarif 1992, Javoy in Campus... 1993).

Besides this program, the actual high architectural ambition at Jussieu must be seen in this context of the grands projets. Its key client was minister Jack Lang (\*1939, in office 1988-93), who saw his chance to build a monument to his own double legislature, when he became jointly minister of culture and education in 1992. It should have been a monument the size and ambition of André Malraux's 1962 Jussieu plan - he himself was also minister of culture and education simultaneously (usually two portfolios in France).

In the publication of the 1992 competition results, Lang put an excerpt of meeting minutes regarding Albert's contact from 25.4.1963 with Andre Malraux (Campus uni. ... 1993 p. 11). Lang clearly expressed how his plan for Jussieu was meant to complete the unachieved Malraux project for the Paris Universities.

In that ambition Lang asked the client's project manager Patrice Mottini to hire philosopher Jean Attali (\*1950) for the programming and jury (Interview with Jean Attali in OMA 2011 p. 522) bringing the technical competition program onto an higher level of discussion about the malfunctioning public space, university education & research and the future of libraries in the IT-revolution (Attali OMA AMO 2011 p. 522). The new project at Jussieu should transform the segregated Paris universities to become a strong public and democratic institution again. It was a symbol for a long overdue institutional reform after repressive post-1968 measures.

A 100-page programming document was issued in September (Scarif 1992) with two pages alone full of jurors' and advisory experts' names. Out of 100 applicants ten were shortlisted. Five international teams - Herzog de Meuron, Coop Himmelb(l)au, Toyo Ito, Cruz & Ortiz and OMA - and five French teams - Jean Nouvel, Architecture Studio, Pierre Du Besset & Dominique Lyon, Laurent Beaudin and Jacques Hondelatte - all handed in their projects on November 10 1992 (OMAR 2004 #2958, OMA-AMO 2011 p.524).

When invited OMA had already been involved in several competitions of the Grand Projects in Paris like TGB (1989) and Parc de la Villette (1982). They had also just finished Villa Dall'Ava in Saint-Cloud near Paris (1991) and held an exhibition in Paris at the Institut Français d'Architecture IFA (Goulet 1990). Still they were a relatively unknown and exotic team compared to some of the acclaimed French competitors. The proposition that OMA came up with was unique in the competition field.

## 4.3 Impression from the Field-Trip and Design

---

Even though OMA won the competition (ex aequo, see ch. 4.4) the project was never built. My field-trip to Jussieu libraries is an imaginary visit. OMA previously neither designed nor built anything comparable to Jussieu in size.

Despite the absence of a building I chose a 'walk through' perspective of a visitor. I 'pro-constructed' the building's appearance (based on available records and newly retrieved sources; see Bibliography).

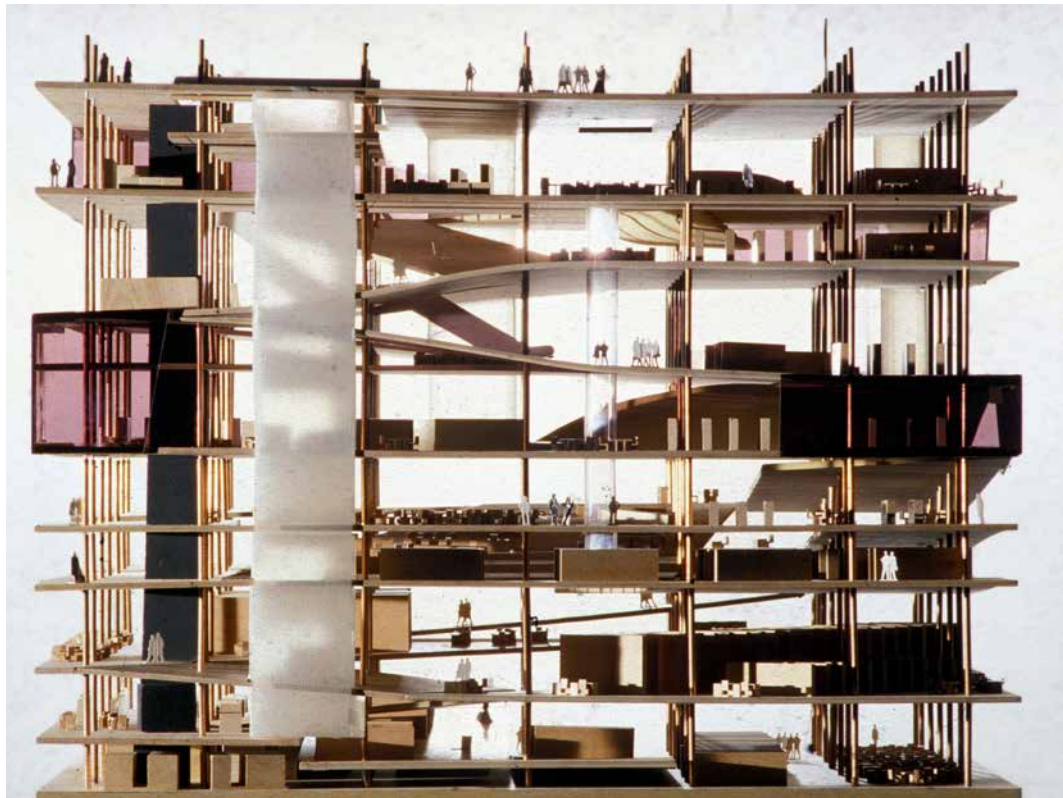


FIG. 4.3.1 Jussieu Libraries. Model Photograph (Jussieu 1993)

OMA's proposal for Jussieu is approachable in a crossing of two platforms connecting access at different levels in four directions. One platform is a park that leads from the Boulevard St.Germain across the Square in front of IMA across Rue Cuvier to the Jardin des Plantes. The other platform leads from the Seine Riverfront (Quai St. Bernard) through the adjacent 1950s University building to the elevated Parvis of Jussieu containing a conference centre for both disconnected parts of the University.

The cube of the library is strategically positioned on the crossing of these two trajectories and thus incorporates the movements across the whole 350 x 450 meter large urban block into a new centre. Similar to OMA's Kunsthal in Rotterdam (1989-92) the building is at once a bi-directional gate, a new axial orientation point and a containment of space.

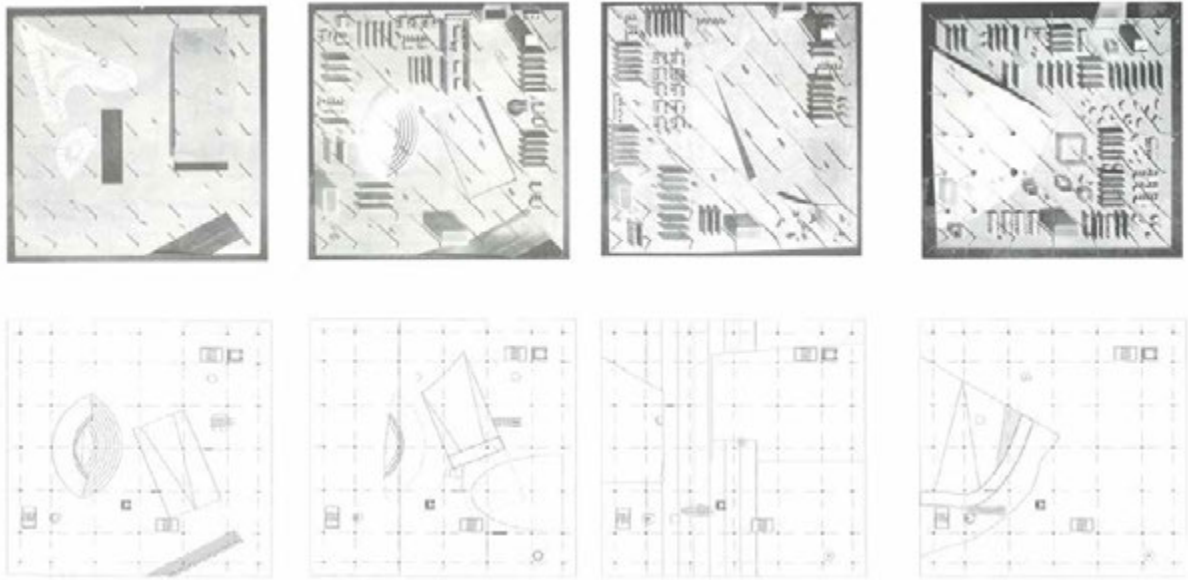


FIG. 4.3.2 Literature library Jussieu: Above ground levels, starting at top level +4. Model view and plan drawing of project status 1993. (OMAR)

Access is provided on two levels by partially external and partially internal ramps or undulation gradings, but essentially the building has no “datum level”. The dominant level of the parvis is though its elevation from the streets an absurd “ground level” completely detached from the actual street levels around the site. The condition generated is similar to what Koolhaas would later describe in *Junkspace*:

“The ground is no more. There are too many needs to be realised on only one plane. The idea of a datum level, the absolute of the horizontal, has been abandoned” (Koolhaas 2000).

This level adjacent to the parvis was called *niveau Jussieu* in the competition project and from there the building develops upward counting levels +1, +2, +3, +4. The lower ground level connecting to the opposite side was called *niveau St Bernard* and further levels -1, -2 develop downward. As I will show when (virtually) walking through the building, these levels are merely indicating the height of cutting planes or horizontal sections through a huge variety of stepped levels on a continuous space of sloping planes.

Already Between *niveau Jussieu* and *niveau Bernard* access from the exterior is provided at various levels. Christophe Cornubert (1993) explains this spatial composition as a response to the parvis :

“These new territories - vertical intensified passages are urbanised: the specific elements of the libraries are planted like individual constructions in a city. ... a continuous passage transgresses the whole structure like loops of an interior boulevard.” (Campus uni... 1993 p.126)<sup>102</sup>

From the entry square of the IMA is the only grand view from the urban space. An adventurous topography of the ‘sports park’ enhances the 200m distance. It contains a running-track that twice crosses under the long bar that blocks off the Seine and passes through tunnels. University sports

<sup>102</sup> “Ces nouveaux territoires de passage vertical intensifiée - sont alors urbanisés: les éléments spécifiques des bibliothèques sont implantés comme des constructions individuelles dans une ville. ... un itinéraire continu traverse la totalité de la structure comme les boucles d’un boulevard intérieur” (Campus uni ... 1993 p.126, transl. by the author)



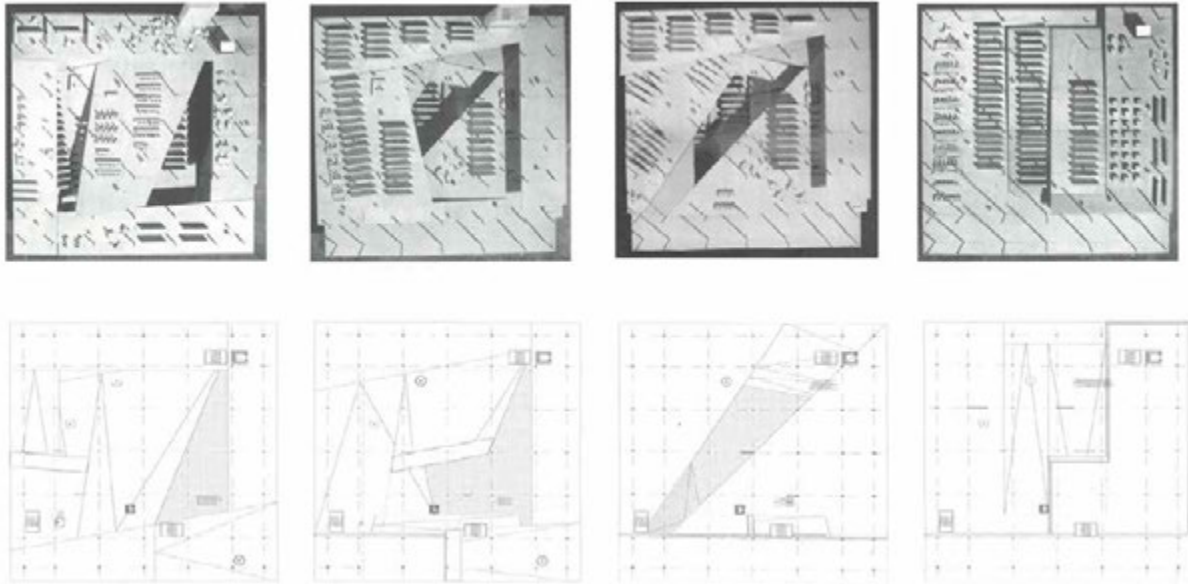


FIG. 4.3.3 Entry levels Parvis Jussieu and Quai St. Bernard. Science library below ground levels, ending at bottom level -2 (OMAR)

facilities are implemented in boxes and plateaus at different heights, with an outdoor swimming-pool on top of a half underground sports-hall. The sports park establishes the continuity from Haussmann's Paris at Boulevard St.Germain to the Jardin des Plantes - the oldest public garden of Paris and predecessor of urban parks. The new continuous landscape, including a 'landscaped' library, links the university with its own public garden to the Jardin des Plantes. The strategic placing of the sports-park gives sports an important role, as it was well received by the university (Javoy in Jussieu Campus ... 1993 p. 63). This large landscape plan of the outdoor areas was part of OMA's proposal but is little developed after the competition, when an executive decision by minister Jack Lang awarded this area of the design second place winner Jean Nouvel. (Architecture d'aujourd'hui, 1993 Apr., n.286, p.24-25<sup>103</sup>, Interview A.1.1.1)

Orthogonal to this strip the design proposes another one with a functional connection: OMA develops the congress centre with the missing large auditoria in the form of a bent and folded strip between the various access levels. The two strips cross at the cube. Access is provided from the three sides of the cubic volume to the inside on several levels. The interconnectivity of levels into the volume changes the site condition completely. It solves the problematic disconnection of the grille Albert from the ground of the parvis and the street level. The outdoor design of the project was never published after the competition (except for Campus uni... 1993 p.130) but I demonstrate here how it is crucial to understand how Jussieu uses landscape design strategies in (correcting past) architecture.

The footprint of the square block of the building is approximately the size of the square where the two orthogonal strips meet. But then the building is set back into the 'grille Albert'. With a setback of almost half its depth behind the facade line from the main viewing axis the library displays its functional attachment to the main campus and the parvis. The main attraction of the Jussieu libraries is the inner development of these continuous bands in a series of planes that are sheared, cut and bent in various forms to build one continuous floor with routes leading on a 1.5km continuous path or folded plane.

<sup>103</sup> "deux, lauréats ... l'autre pour son parti d'aménagement, et c'était Jean Nouvel." (Architecture d'aujourd'hui, 1993 Apr., n.286, p.24-25)



FIG. 4.3.4 Jussieu Libraries. Pro-constructed view from sports garden and IMA (rendering author and WAX, see chapter 4.6)



FIG. 4.3.5 Jussieu Library Lettres Auditorium with View on Nôtre-Dame de Paris (rendering author and WAX)

The building is actually a 1.5 km long Boulevard. (Imagined) visitors are strolling through a city of books made of shelves that are arranged like an urban plan. Inside the square crossing of the two outdoor strips, student and visitors facilities develop in two directions: upward into the library of letters (humanities), and downward into the library of (natural) sciences. Both are one continuous promenade with several loops and shortcuts across a variety of topographical deformations. Access ramps and platforms are an interwoven layer in the midst of the promenade that continues from archives deep down in the subterranean labyrinths to a viewing platform far above on the rooftops. (Fig: Sketch Rem Koolhaas 1992 Source OMA AMO 2011 p.296 OMAR).

Unusually high ceilings bring light into the core of a series of large voids that form deep ravines. Some precipices are four-stories deep, like in alpine landscape conditions. As one walks (or would walk) through the building the organisation and detailing change. Zones, like different urban quarters, include vivid squares and acute corners, as when walking in a landscape, a visitor's orientation needs to rely on landmarks and the light. In the lower floors orientation is provided by the always visible terraced gardens (the roof of the conference centre) diving down into the basement. With spiralling and zig-zagging paths along ravines exploring the library of (natural) sciences becomes an expedition into a cave deep down in the earth.

While moving downward uncovers a secret world, moving upward into the (humanities) library reveals a reconnection with the rich cultural context of Paris. The connections to the urban tissue become increasingly present with the composed views, and offer new perspectives on the city. Through the levels, the directions of spatial orientation continuously change. Shortcuts are provided with escalators, and a series of elevators provide vertical access from several entry areas.

The building has seemingly no facade, as the slabs run through to the outside of the skin. A great variety of glass is combined in many sizes like a mosaic. It is as if the building is immersed in both the city and the campus, not only through views but also through mirrors. The greatest feature of the building would have been the views onto Paris. A new kind of highly reflective dark glass at some spaces strategically mirrors the space, even reflecting views from the opposite side. At night one could have walked on an upper floor and had the impression of flying over the night sky of Paris towards Nôtre-Dame or several other (illuminated) landmarks. The continuing path through the building is a montage of urban sensations and impressions connecting the inner urbanity of a boulevard with a colonised landscape with the outer reality of Paris - intermingling inner and outer space. The outside is used as a spatial structure for the inside, while the inside grows more and more complex. The densifying montage technique merges reality and fiction, the architectural and imaginary landscape of literary Paris. The design merges inspiration and performance. A virtuous 'play' of the city in a building becomes a story in itself; revealing how Baudelaire - the writer flaneur - inspired Koolhaas the storytelling architect (i.e. In OMA 1995 p. 1323)



FIG. 4.3.6 Jussieu Library Sciences with view on site for terraced garden court (author and WAX)



FIG. 4.3.7 Jussieu Libraries with Views on Paris from roof of 7-9 Quai Saint-Bernard (author and WAX)

Exemplary of this spatial strategy are the upstairs amphitheatre or the great viewing platform on top (both ch. 4.5.2). Through the whole building there are always surprising moments, new spaces, unexpected perspectives and a great variety of spatial situations. Together with the constant movement of people and the sheer amount of information accessible it would create a vivid and contrasting atmosphere, where, through landscape, urbanity invades the building.

It is the kind of urban life that may have been imagined by Albert but never could be realised on this campus. Koolhaas had great respect for the work of Albert and may have felt encouraged to enhance the project's misled architectural intentions. Koolhaas writes about OMA's project in relation to the campus "While the project (of the 2 libraries) represents the insertion of a new core, it should also resuscitate the significance of Albert's original project" (1995 p. 1307).

In an interview Koolhaas leaves no doubt to the political implications he sees in his building, that he also nicknamed a 'social magic carpet' (Balmond quoting Koolhaas in OMA AMO 2011 p. 518). At that stage he also said "I would prefer to do nothing else than build the Jussieu Libraries" (Koolhaas in Kuhnert e.a. 1994 p.16)<sup>104</sup> The great expectations and excitement that Koolhaas and other OMA architects had from this building and the incredible energy that came out of this discovery still is visible in old documents and even recent statements. It is now up to us to imagine how this building would have worked, how this vegetation would have changed - programed by the usage of the building changing throughout 25 years.

This evocation of a walk though helps establish an idea of the sensation this building would have created. For sure the account of how it would have been built would be an interesting story to tell here - instead the next section is a less heroic one in the history of architecture.

<sup>104</sup> "Het liefst zou ik niets anders doen dan de bibliotheken van Jussieu bouwen" (Koolhaas in Kuhnert e.a. 1994 p.16. transl. by the author)



## 4.4 Not Building the Two Libraries

---

When OMA won the Jussieu competition in 1992, problems with the realisation started soon after the first verdict of the jury. The following should explain why the two new libraries at Jussieu were not built.

Shortly after OMA was announced a winner, the competition result was a split first place finish. The surrounding area was to be designed by Jean Nouvel, who had also been (one of) the architect(s) of the IMA and the Jussieu building was reduced to a container. Patrice Mottini, former advisor on Jussieu to the minister of culture and education Jack Lang recalls how the minister intervened in the decision of the Jury. Lang reportedly did not permit a one-voice majority to attribute the first prize to OMA, against Jean Nouvel, a well connected intellectual figure and most celebrated architect in Paris (Mottini in OMA AMO 2011 p.530).

In the context of the thesis and analysis it will be important to hold onto the initial and conceptually more intense connection between the continuous surface of the building and the different levels of the urban surface, when OMA was able to “work with the environment” (Interview with Cornubert, Annex A1.1.1.).

The French periodical *Architecture d'aujourd'hui* (n.286 p24-25) is quite frank about what most probably happened: “On friday December 11 (1992), a communiqué of agency France-Pressé announces the victory of Rem Koolhaas. Next Monday, in a press conference, Jack Lang announced that there were from now on two winners, one for the actual architectural object itself, that was Koolhaas, and another for its surroundings, that was Nouvel.”... “after Nouvel could during a whole week end try this and that.” The French *Architecture d'aujourd'hui* (No. 286 p.24-25) insinuates that Nouvel attempted to influence the minister<sup>105</sup>.

Soon after the competition the political situation in France changed dramatically in spring 1993. Jack Lang and François Mitterrand's Socialist Party had already suffered a landslide loss in the Regional and Cantonal elections in March 1992. Consequently on March 21 and 28 1993 their socialist government lost the majority in the national assembly elections. When President Mitterrand saw his “presidential majority” reduced, Jack Lang, the key client of the Jussieu project, left office by the end of March 1993 - and with him ‘his’ grand projet disappeared.

In this climate the development phase of the project up to spring 1993 progressed very slowly. In February 1993 it was put on a list of “uncertain” projects in an internal memo (OMAR unnumbered). There remained many practical concerns collected from library and university bodies that were taken into account in the revisions of the project. A meeting was arranged where sloping surfaces (found at the time only in OMA's own Kunsthal in Rotterdam) were tested for book storage and transportation (Fig. AMO 2011 p.366, 367).

---

<sup>105</sup> French minister of Culture Jack Lang was a successful client of Jean Nouvel on the same site. He i.e. visited the construction site of the Institut du Monde Arabe in Paris on 12 November 1985, as reported by the press (gettyimages.com :Nouvel + Jack Lang, last accessed March 2018)



FIG. 4.4.1 Book robot testing at Kunsthal (AMO 2011 p.366)



FIG. 4.4.2 Jussieu Campus asbestos removal (Reuters 2011)

The last major revisions wrapped up in a project design dated March 30 1993 that was probably presented on April 1 and 2 in Paris (OMAR 2949), in the week after the fatal elections. After this, despite many efforts by the architects and remaining client representatives, the project does not move forward. Meeting minutes from Paris in April and May 1993 show how the climate on the client side is extremely hostile to their project (OMAR). Finally, putting financial arguments in false context (Mottini AMO 2011 p. 532), the conservative led ministry of finance decides in a meeting (May 15 1993, OMAR) to close the project account while also putting forward that no actual assignment had ever been given to the architect.

The protagonists of the project were still so excited about this design they assumed or hoped it would be realised (Mottini in 2011 p. 533). In 1994 OMA prepared a larger exhibition at MoMA and decided not to show Jussieu as a single project but rather an overview (including the Jussieu model however). In our Interview Cornubert draws sketches of sloping planes inside the New York gallery (A1.1.1.). But after it “became clear that Jussieu was ... not going to move forward” (Cornubert A1.1.1.) that exhibition concept was abandoned.

The two libraries of Jussieu will never be built. Instead other changes take place at the Jussieu University complex. In 1996 a large operation was begun to remove asbestos from the campus (désamiantage). A mix and match of pavilions and numerous temporary buildings spread on the site. The renovations take more than 15 years to be realised (3 times the construction time) and its initial budget of 183 million EUR is expected to be multiplied by ten by 2015 to 1'850 million EUR (La Cour des Comptes 2011 p.81).

The central tower completed in 1970 and meanwhile called Tour Zamansky was renovated with a lightning project designed by architect Thierry Van de Wyngaert in 2004 and built in 2009. (see Lamarre 2009).

In 2006, the eastern corner of the grille of Albert that was left open with the OMA design is closed off with the Atrium Jussieu, a building by Peripheriques Architectes (documented in Tallon 2006). Peripheriques' infill in that corner solves the paradox of the Jussieu campus with a solution that looks incomplete. The new 16,700 m<sup>2</sup> wing of closes off the grille of Albert for good. For this building, Peripheriques was awarded with a Mention spéciale at the Équerre d'argent, The same prize which Jean Nouvel and Architecture Studio AS had received in 1987 for the IMA and that Rem Koolhaas received in 1998 for OMA's villa in Floriac near Bordeaux.

As of today it is sure that OMA's 1992 Jussieu project will not be built. Still the building design remains a particular moment in architectural history. The meaning of the project as architecture if analysed with landscape methods will be explained in the following chapter.

## 4.5 The 4 Layers of the Landscape Architectural Composition

---

Repeatedly and with great emphasis Koolhaas, Cornubert and other designers at OMA explained this unique building as a landscape. In the midst of one of the large metropolises of Europe, the ancient program of a university library leaves no doubt that this is an urban building task. The large-scale, built artificial landscape is “vegetated” or “urbanised” with program. The project emphasises and “montages” landscapes in design in regard to the versatility and complexity of the landscape elements to be applied.

While still in a concept phase - the use of four layers of the landscape architectural composition in this case incorporates a wide range of strategies at each layer. Ground Form here not only reacts to an urban context, bringing in park elements, urbanised and tamed landscape, but also starts from a context dominated by large planning operations like that of Baron Haussmann and the architect Albert. The study of all the (many) formal manipulations of the ground plane and horizontal slabs in the framework of ground form into one continuous multi-storey floor will reveal the main invention of this project. The spatial form of Jussieu deals with the route across this continuous floor and an evenly collaged and diverse series of visual relations including reflections and manipulated or montaged inside-out relationships. The metaphorical form deals not only with landscape entering the building, mainly as topography, but also with very abstracted allusions to nature. Besides, a landscape narrative of another dominant metaphor is that of an inner urbanisation: Incorporated by the Parisian flaneur exploring this city of books as a literary urban landscape. Programmatic freedom is a main goal of the design: It does not derive order from the architecture but facilitates the changing needs of librarians and users. Program is also explicitly understood as political, especially from many explanations of Rem Koolhaas himself. Jussieu is also a proposal to completely change the way public space is provided inside a building and how the occupation of public space might even transform a society.

### 4.5.1 Ground Form

---

Even if the original landscape or topography of Paris is largely overruled by urbanisation in this central area of the city, some elements of the outer landscape are still very present. Particularly in the competition design, the Jussieu project makes strong connections to these urban and landscape elements. In a 1:10'000 overlay of topography and built structures (Fig. 4.5.1.1) one can still read the hilly site of the former Faubourg St. Victoir and hills of the Quartier Latin with the Sorbonne west of Jussieu. On the east the (partially artificial) hill of the Jardin des Plantes with its romantic zoo design is a landscape that became an enclave in the city. North of the site the are the two Islands - the oldest part of Paris - with the river Seine - a landscape element with strong presence. On the West we have the Hausmannian axial web of Boulevards, nearby Boulevard St. Germain and in a view from upper levels the Place de la Bastille with its eight crossing streets and boulevards. Further visual connections across the city web and its monuments will play a important role in the design.

However, the most dominant surrounding, the incomplete Jussieu university campus (1962-1973), negates any topographical connection of architecture. The elevated structure of the grille Albert on pilotis strongly separates topographical ground and architectural form.





FIG. 4.5.1.1 Jussieu site relief 1:10'000 (Drawing: author)

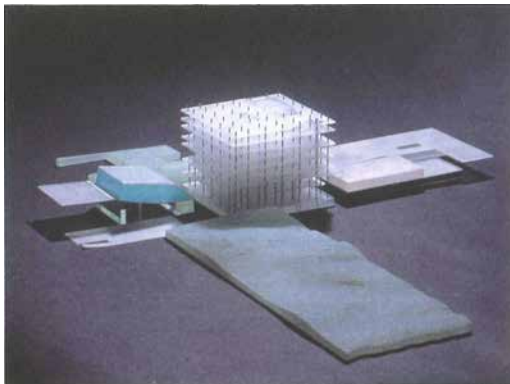


FIG. 4.5.1.2 Site model insert competition (Centre Pompidou)



FIG. 4.5.1.3 Original design sketch (OMAR 2883)

The separation is reinforced by the underlying ground floor on a pedestal that is even fenced (altered from Albert's plan as in 4.2.). The campus as a whole, in particular the grille Albert, represents a typical modernist attitude opposing architecture against landscape (3.1.8.) in its canonical manifestations of the 1960s and 1970s.

In opposition to that negation of topography, the design of the two Libraries activates and transforms topographical situations. At 1:10'000 scale it is visible how the 1992 design for the two libraries at Jussieu transforms the ground by inserting two linking undulating platforms (Fig. 4.5.1.1). The platforms provide a "cross-link" through an "urban-landscape" (Fig. 4.5.1.4). The importance of this link to the site is also visible in the initial competition model (Fig. 4.5.1.3 now at centre Pompidou collection) and two documents from the design. A collage of plans of the existing ground levels makes it clear that this connection should be a landscape with the 1950s university buildings on double rows or pilotis.



FIG. 4.5.1.4 Jussieu ground floor plan collage with Swiss topographical map (OMAR 2914)

This collage of plan and map photocopies on tracing paper (Fig. 4.5.1.2 OMAR) also shows the Grille Albert on its massive staircase tubes and slender columns and the IMA square. In between all these, the architects collaged a copy of a topographical map of the High Alps (Sheet 1327 'Evolène', 1:25'000 topographical map of Switzerland). Landscape in this montage is introduced into the core of the abstract modernist campus to reconnect it to its surrounding and ancient urban topography. My analytical drawings (Fig. 4.5.1.5, ... .7) show how this cross-link works, and even connects to former interventions. The design was based on a crosslink from the river Seine to the 'parvis' and from Bd. St. Germain and IMA to Jardin des Plantes. This connection already includes different datum levels and thus would require ramps or slopes that are exaggerated.

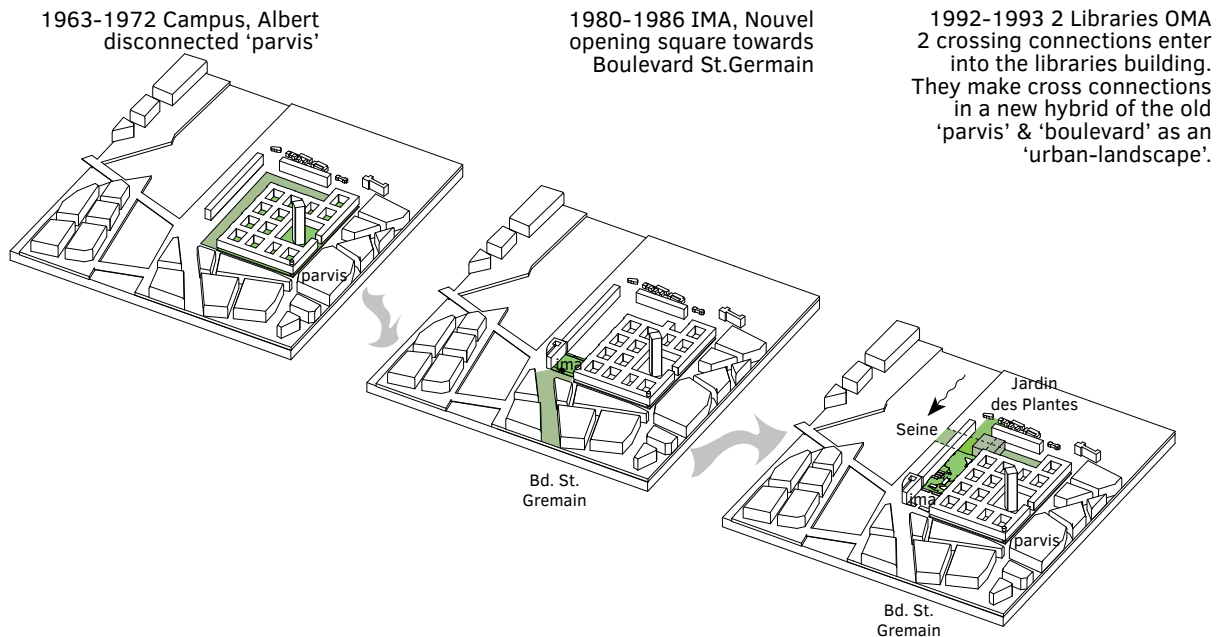


FIG. 4.5.1.5. Jussieu historical stages of development of the ground form with the OMA project on the right (Drawing: author)



FIG. 4.5.1.6 Jussieu ground floor plan collage with Swiss topographical map (OMAR 2914)

This crossing strips connect the site with different programs. Sports and conference connect to the whole campus (see also section 4.3.). The crossing of these two directions and different levels interweaves a central spiral-shaped space inside the crossing volume. Both crossing strips manipulate the ground plane with platforms articulated in artificial topographic cuts and tilted planes. Inside the square area of their crossing where the volume lies, these articulations start to get more agitated, turning into a spiral and other continuous forms. The outer interweaving 'infects' the inner volume. All the stacked planes get deformed, folded and manipulated with cuts, bends and a series of other transformations. The generating idea in the composition of the Two Libraries building is a result of this crossing: The ground form of the site is activated and turned into the ground form of an inner volume.

The two crossing positive forms were meant to generate a non-space or non-form in the way that two negations make a positive or  $-1 \times -1 = +1$ . This formula is a typical design approach of OMA that Koolhaas himself calls "paranoid critical method" (Koolhaas 1978). It is a subtle expression of the negation of context in later essays like "Bigness, ..." (Koolhaas in S,M,L,XL 1995 p.494). At Jussieu the main problem of the context is attacked, reversed and taken hostage by the architect to turn it into a value.

The central idea of 'double negation' of the neutral and inactive parvis- seems to connect several other concepts. In a sketch the development is named 'volume', 'field', 'lava' and 'extended field' (Fig. 4.5.1.6). The term 'extended field' here alludes to the occurrence of Non-Object Sculpture later named Land-Art coined by Rosalind Krauss in 'Sculpture in the Expanded Field' (Krauss 1979). In a similar way to Non-Object-Sculpture OMA overcomes object-centred thinking. They propose 'Jussieu' as a way to overcome an object-centric architecture they call 'Dolphins' to describe a building of 'large masses' ... 'in the periphery' ... 'which house the secret processes' of the 'registration-storage-distribution cycle' (Rem Koolhaas in a Fax 'To: Winy' (Maas) dated '03/05/93' OMAR OMA/AMO 2011 p.293).



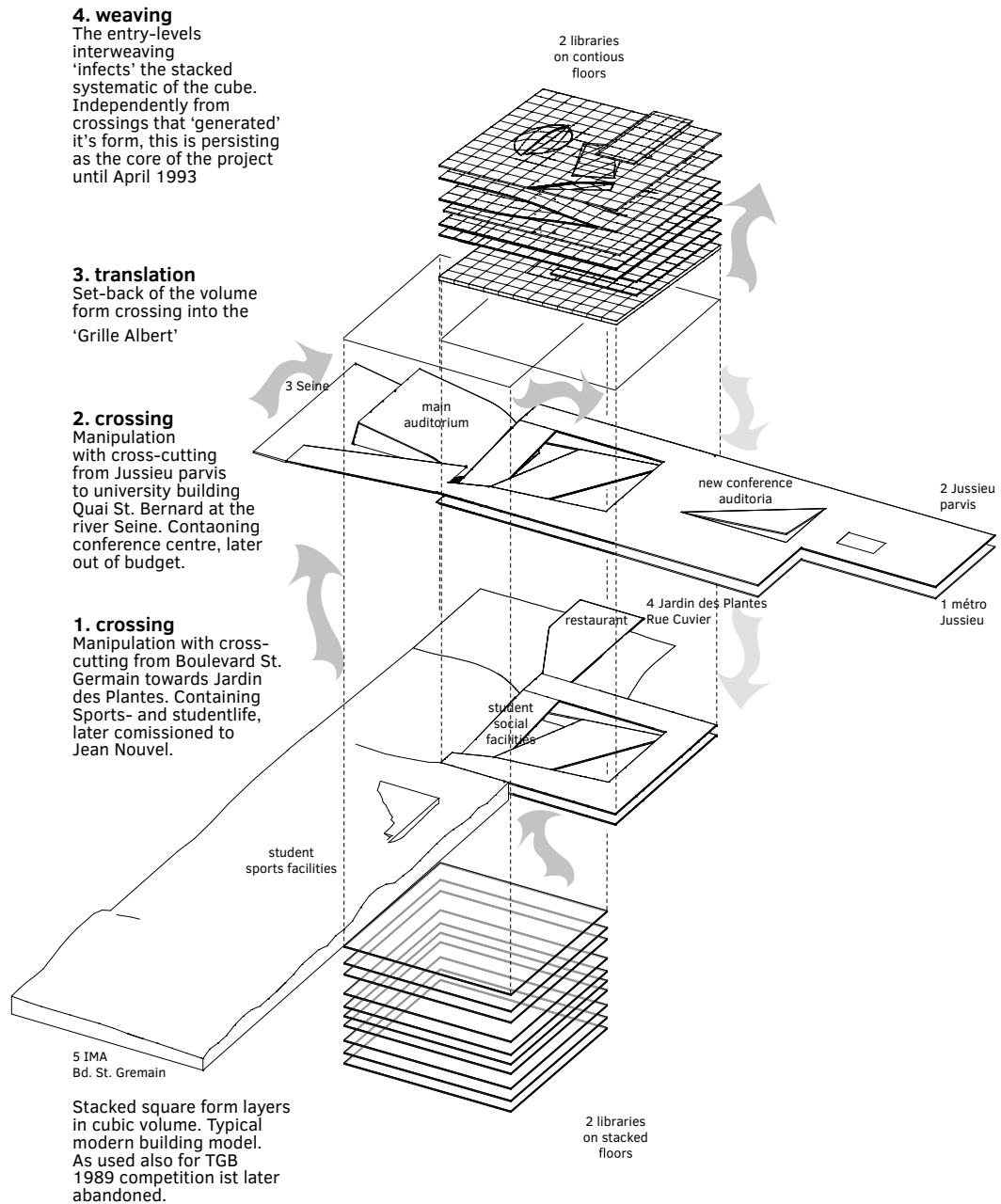


FIG. 4.5.1.7. Jussieu development of the Ground Form form bottom to top: stacked floors, crossing planes of sports park and conference centre. resulting in intertwining floors (Drawing: author)

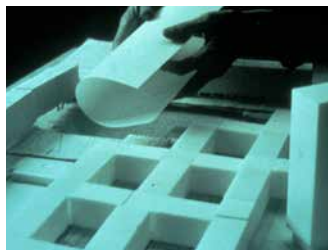
Some earlier sketches and study models organise the library program of Jussieu as a series of stacked floors in a cube-like form. At Très Grande Bibliothèque TGB competition (1989) OMA's concept for Paris proposed a 'solid block of information ... (where)...the major public spaces are defined as absences of building, voids carved out of the information solid' (OMA 1995 p. 636). The Jussieu design departs from a similar concept of stacked floors (shown from bottom to top Fig. 4.5.1.7.). The almost-cubic volume is inserted in the incomplete eastern corner of the grille Albert, the Jussieu library competition site. OMA chooses a somewhat simplified visual explanation for this method to manipulate and activate the ground-form. A series of photographs show hands manipulating a sheet of paper (the ground form, or plane of the parvis) and transforming it into a cubic volume with two folds (Fig. 4.5.1.9-11 in our analysis Fig. 4.5.1.8. bottom). This way of folding suggest an activation of the underused parvis, as the central and most important idea of this ground-form landscape method.

It leaves out how nuanced and versatile the strategy actually is in relation to a series of other site problems and connections - namely to Seine-side buildings, IMA square, Jardin des Plantes park, restaurant, auditoria, metro and the surrounding quays, boulevards and streets.

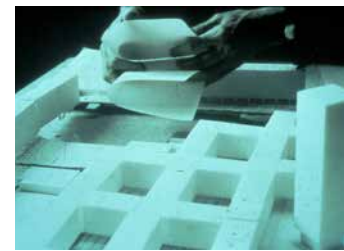
Another design principle is illustrated with a similar series of photographs (Fig. 4.5.1.12–14) that is also a manipulation of the ground plane, as used inside the building. The planes inside the building are cut at strategic places to be bent up or down and interconnect with other planes. My analysis (Fig. 4.5.1.8. top) identifies eight such cuts in the last design on various levels. Four of these cuts are straight cuts, two are L-shaped with one bend in plan and another two U-shaped, double bent in plan. In the typical collage manner of OMA this folding and cutting is combined with another strategy of the void (from the TGB design): Volumetric insertions that cut out in a boolean operation. The most important are three triangular voids in the central floors, a U or horseshoe shaped one on the upper floors and an eye shaped void on the top floor.



FIG. 4.5.1.8-10 Folded parvis ...



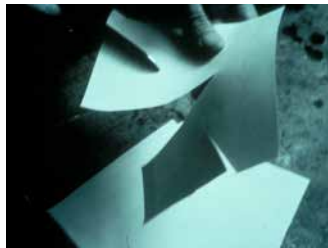
... paper folding by OMA to ...



... illustrate concept.



FIG. 4.5.1.11-13 Cut planes ...



... paper cutting by OMA ...



...configured. (Photos Hans Werlemann)

The manipulations of the ground form with folding, cuts, and voids interact in a complex way. A summary sketch on one A4 page shows the main characteristic topographical transformations as applied in the last design (Fig. 4.5.1.16). The last analytical drawing of the ground form (Fig. 4.5.1.15 left) shows the interaction of various manipulations in eight topographical transformations of the ground plane slabs, each of them different and used either once or a few times. Next to these I identified fourteen cuts or 'voids' that are boolean volumetric subtractions (Fig. 4.5.1.15 right) of the TGB strategy (Fig. 4.5.1.17). Some of them are repeated often, others are specifically designed for typical situations. They each provide a specific space, for example a ramp rising from a counter-slope, or a tunnel in a falling horizon. The most complex interaction is the space called 'eye'. In the ground form this eye-shaped void is inserted into the otherwise horizontal top floor plane. That plane is cut thorough in the centre of the invisible void (a surrealist metaphor to be discussed in 4.5.3.). At the inward side of the cut the plane is pushed down to cover the eye like a lower eyelid, and on the outward side it is lifted up. Here a little auditorium profits from a vaulted ceiling that reflects the sound of a speaker and uses the grade downward like an amphitheatre. The outer side of the shell is imagined as a viewing hill with a series of panoramic views (noted with an arrow 'to Paris' in sketch Fig. 4.5.1.16). The 'eye' ground form intervention has strong spatial consequences, a metaphorical dimension and even a programatically provocative space. It is a good example of how in a single landscape element can form a connection though the different layers.

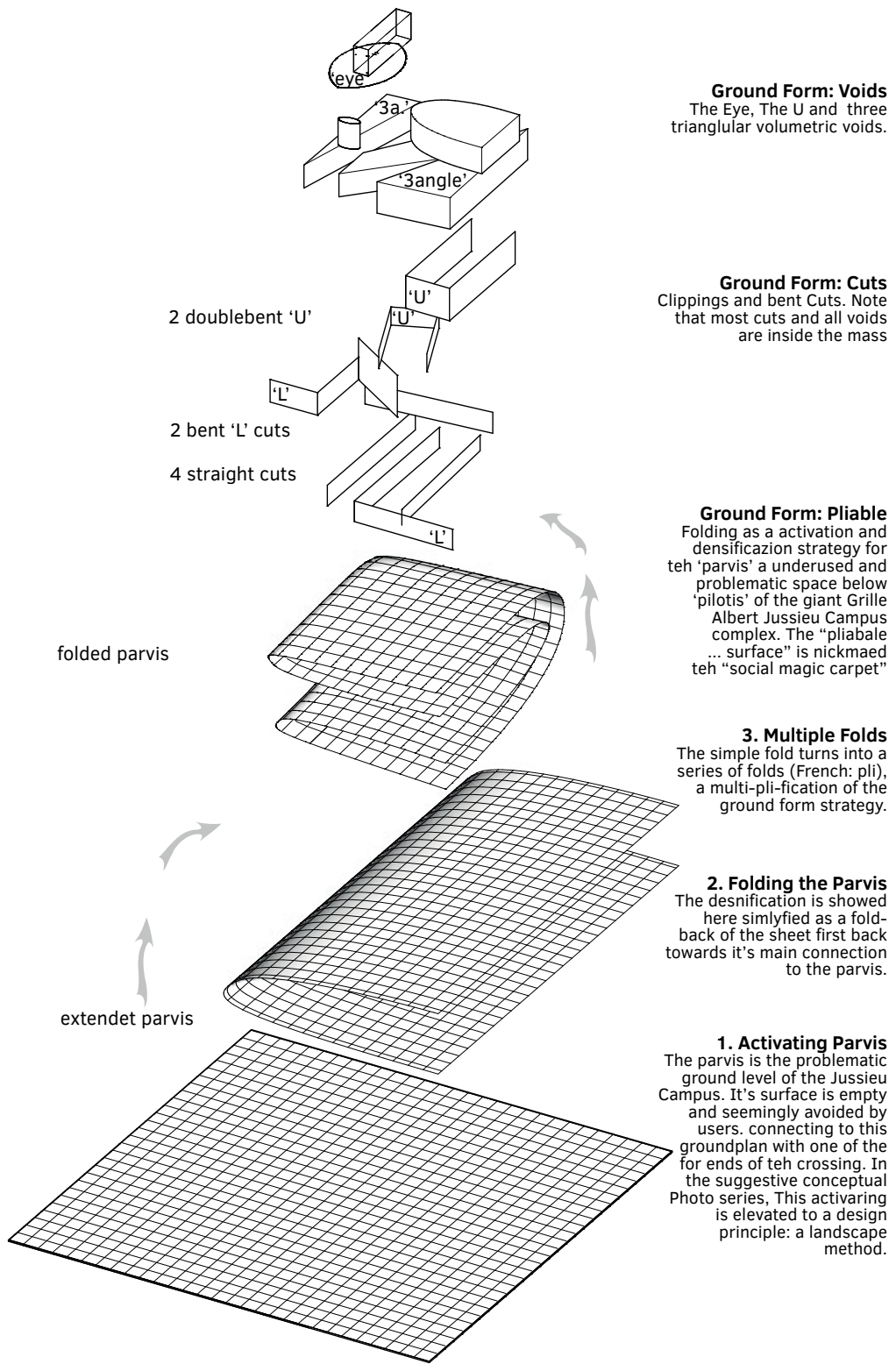


FIG. 4.5.1.14 Bent planes and cuts (Drawing: author)

8 Topographical transformations of slabs 14 cuts and 'voids'

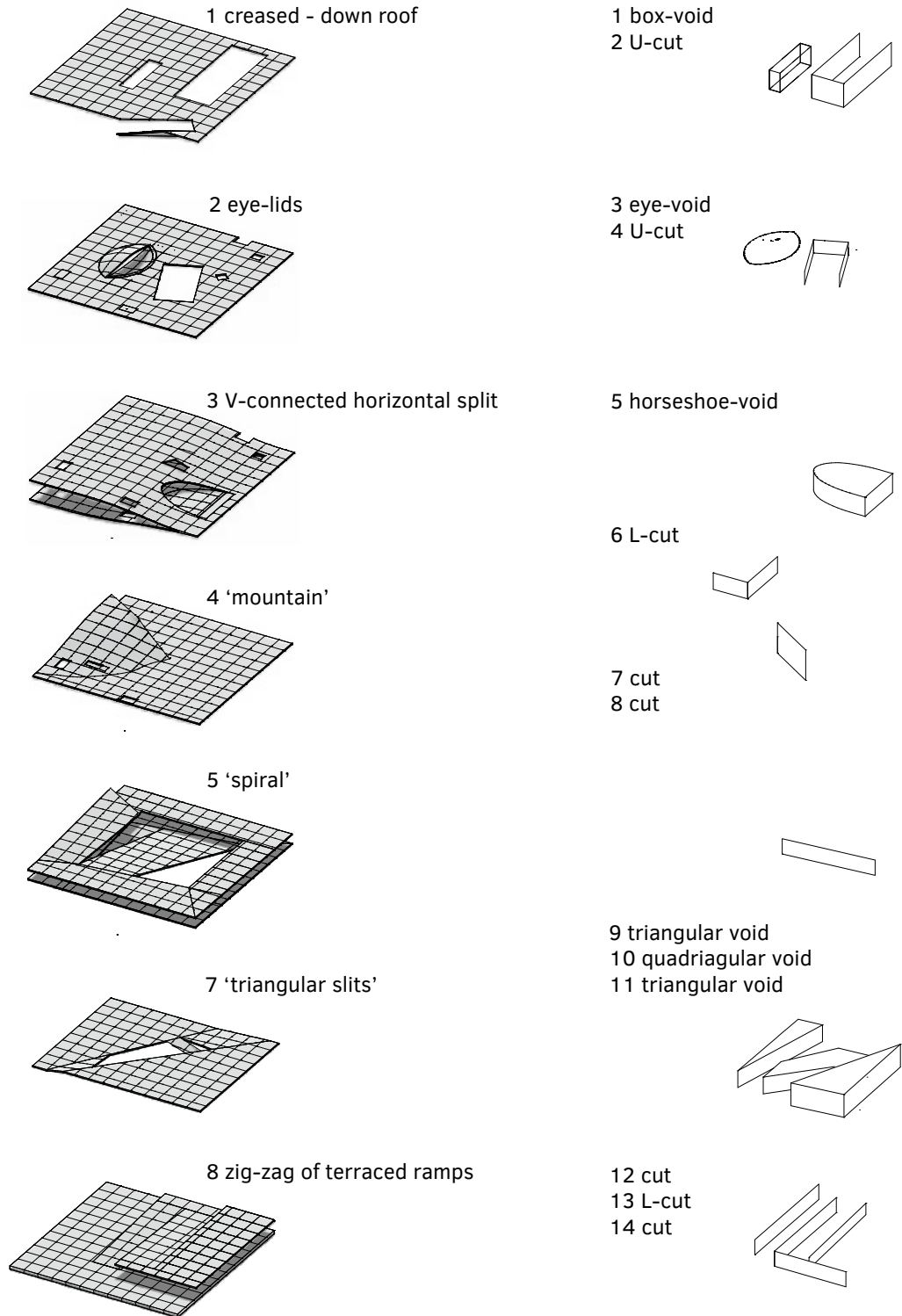


FIG. 4.5.1.15 Levels with respective cuts and voids (Drawing: author)





FIG. 4.5.1.16 Sktech of ground form elements (OMAR 2914)



FIG. 4.5.1.17 Volume and void models of Très Grande Bibliotheque. Another competition design by OMA from 1989 (OMA 1995 p 660)

In summary, the ground form of the two libraries at Jussieu project is a collage series of techniques and manipulations of the ground plane. Quite typical for an OMA project of this period, the design applies many different tactics to create a large variety of situations. This intended density at Jussieu also reacts to the monotonous situation found at the campus. These manipulations of the ground-form create a large density of spatial events within a relatively small space. The richness of urban life in Paris enters in between the basement and roof of a single building volume.

## 4.5.2 Spatial Form

The main landscape principle applied to the spatial organisation of the two libraries is a continuous route, that leads up and down for each department with several loops and short cuts. The connection with a route is essential to the development of the architectural space. It translates the spatial reading of a city by a wanderer into a landscape experience: Like the literary walks in poetry of the flâneur Baudelaire, evoked by Koolhaas in his presentation (i.e. OMA 1995 p. 1323) or like the derive of a situationiste (i.e. Koolhaas 1993 in Arch+ 117 p. 22). The analytical reading of a space designed for such a poetic or situationist experience is particularly complex when interpreting an unbuilt building.

The ground-form and spatial form cannot be separated into two discrete entities. Rather they constantly inform each other through the development of the design. The routes form the building and the building forms the routes. The form is a dialogue between ground and space. Two ground form principles have great influence on the spatial form of Jussieu: The collage of sloping planes and the insertion of varied cuts and 'voids'. Like a wanderer planning his route through a landscape on a topographical map, the architects sketched routes on the plans, connecting inner programs, the facilities in the vicinity and outer urban elements around the city of Paris. One of these previously unpublished sketches (Fig. 4.5.2.2 OMAR) served as a basis for my analytical representation of the path (Fig. 4.5.2.3).

At the place of the crossing area in the ground form paths from several entry levels form a complex knot, leading into paths to both upper and lower areas of the building. The formative design phase in the spring 1993 shows four routes (A,B,C,D) that are named 'circulation extérieure' in a sketch (Fig. 4.5.2.1).

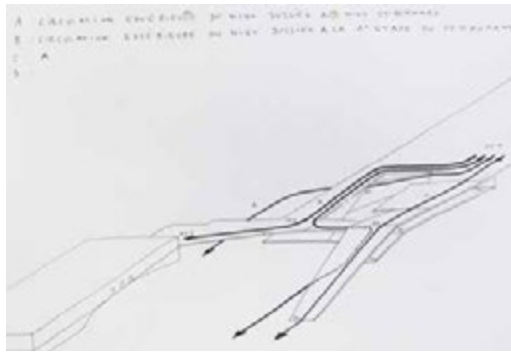


FIG. 4.5.2.1 Design sketch routing entry levels (OMAR 2915)

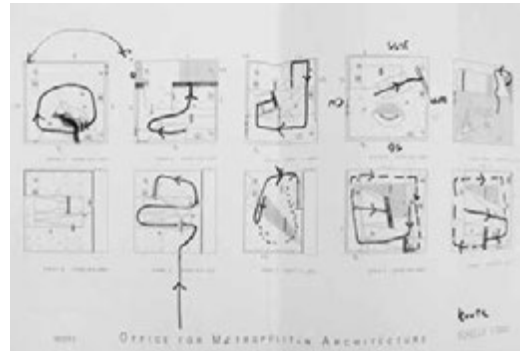


FIG. 4.5.2.2 Design sketch routing upper levels (OMAR 2887)

They are not exterior but are actually routes that lead through the interior libraries building and connect exterior program. In this core spatial and ground-form are one, the ground forms a 'spiral' (Pos. 5 in Fig. 4.5.1.15) and the inner route here forms a 'spiral', (Fig. 4.5.2.3) too. Routes spiral up and down in the core of the building, while four other passages are cut through it.

It was an important part of the project to generate this movement inside a building, to put the library as a central public space into the campus rather than as a discrete closed object. At Centre Pompidou by Richard Rogers and Renzo Piano (1972-1976) the public movement is exposed with the iconic exterior escalators in the main facade (referred to by Koolhaas 1993 in Arch+ 117 p. 25). At Jussieu movement through a continuous landscape becomes the generating force of the whole building design. It radiates from the core of the entry crossing into remote areas of the 1,5 km of continuous folded route.

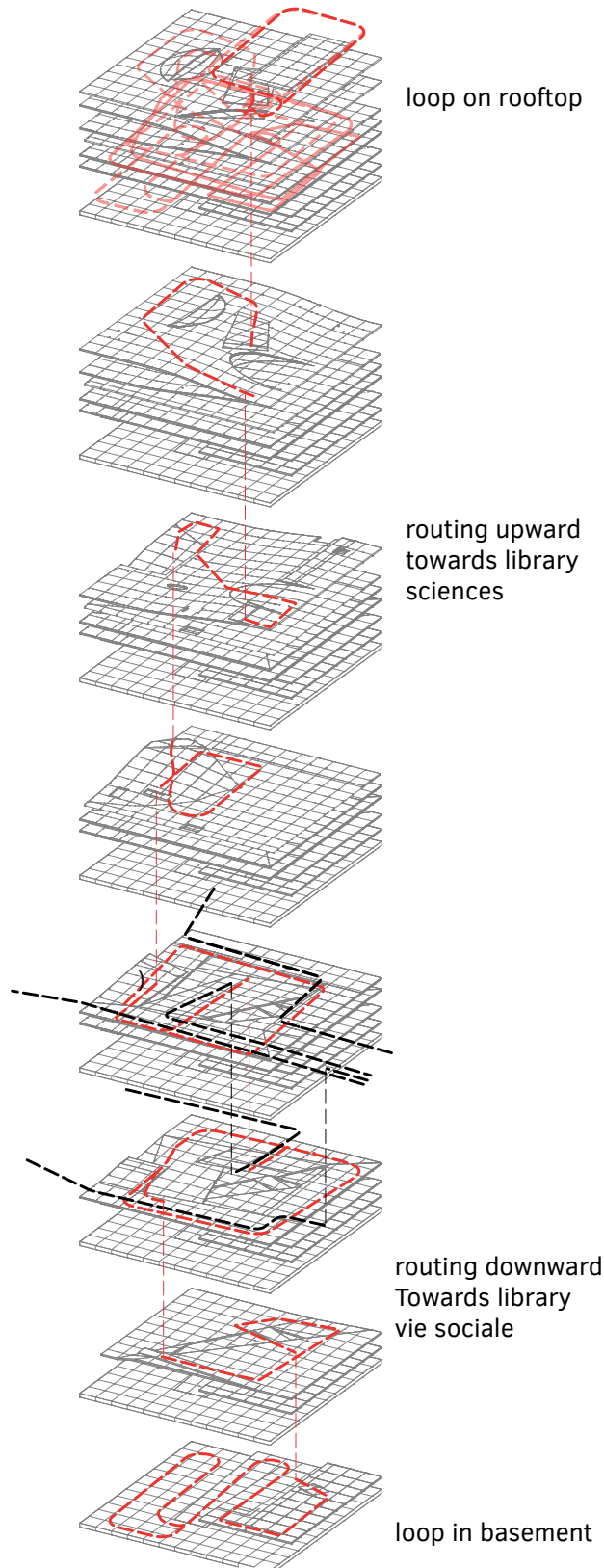
The other spatial strategy is the strategic placement of the cuts and 'voids' (see ground form fig. 4.5.1.15). In the core of the entry levels we find no less than three 30-40 meter deep voids, completely inside the building. They cut through one or two levels that form 15 to 20 meter high spaces and would provide very long views. The many views into the different areas of the library would tease passengers to dive into remote worlds between the covers of thousands of books.

OMA's home city Rotterdam has two book-related buildings with a similar space, most probably known by the architects of Jussieu: The Donner bookstore at the Lijnbaan (formerly furniture shop 'De Klerk', Architects Van den Broek en Bakema 1949-1956) and the public library on Blaak (Architects Van den Broek en Bakema 1978-1983). At Jussieu besides the opening fireworks of spatial effects on the entry levels, two ramps and additional elevators and staircases lead up and down into the Libraries, providing alternative access options from three sides of the building.

The downward route starts counter-clockwise (contrary to i.e. the Guggenheim Museum in New York 1943-1959, Frank Lloyd Wright).<sup>106</sup> The route goes down almost two full rounds along the outer facade then takes two narrow turns and dives on a steeper ramp into a ravine-like space provided by a narrow central void (Fig. 4.5.2.3. Bottom left). Walking against the back wall the route then takes two right turns, opening on a sequence of three sloping terraces (Pos. 1 in fig. 4.5.1.15)

<sup>106</sup> In landscape architecture it is often prescribed which direction is to be taken on a route through a garden or park. An example of clockwise is the riding route through the Bosco at La Cetinale closed to Siena (Steenbergen and Reh 2003). An example to counter clockwise is the promenade through Stourhead, closed to Stonehenge (Nijhuis 2015). Although do not know about the intentions of each designer of these gardens, nor about those of Frank Lloyd Wright or OMA to chose a direction for their routes. However is relevant to discuss routings in Landscape context. They could be related to the direction of sunlight turning (in the northern hemisphere) clockwise around buildings, which already is a large scale connection than any object centred architect may make, if not alluding to landscapes.

### Circulation Paths



### Connections through 'voids'

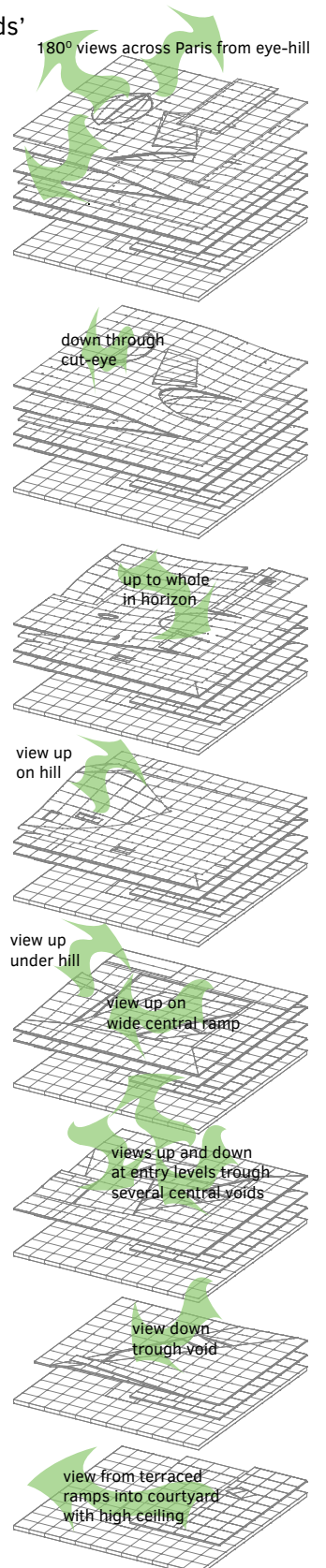
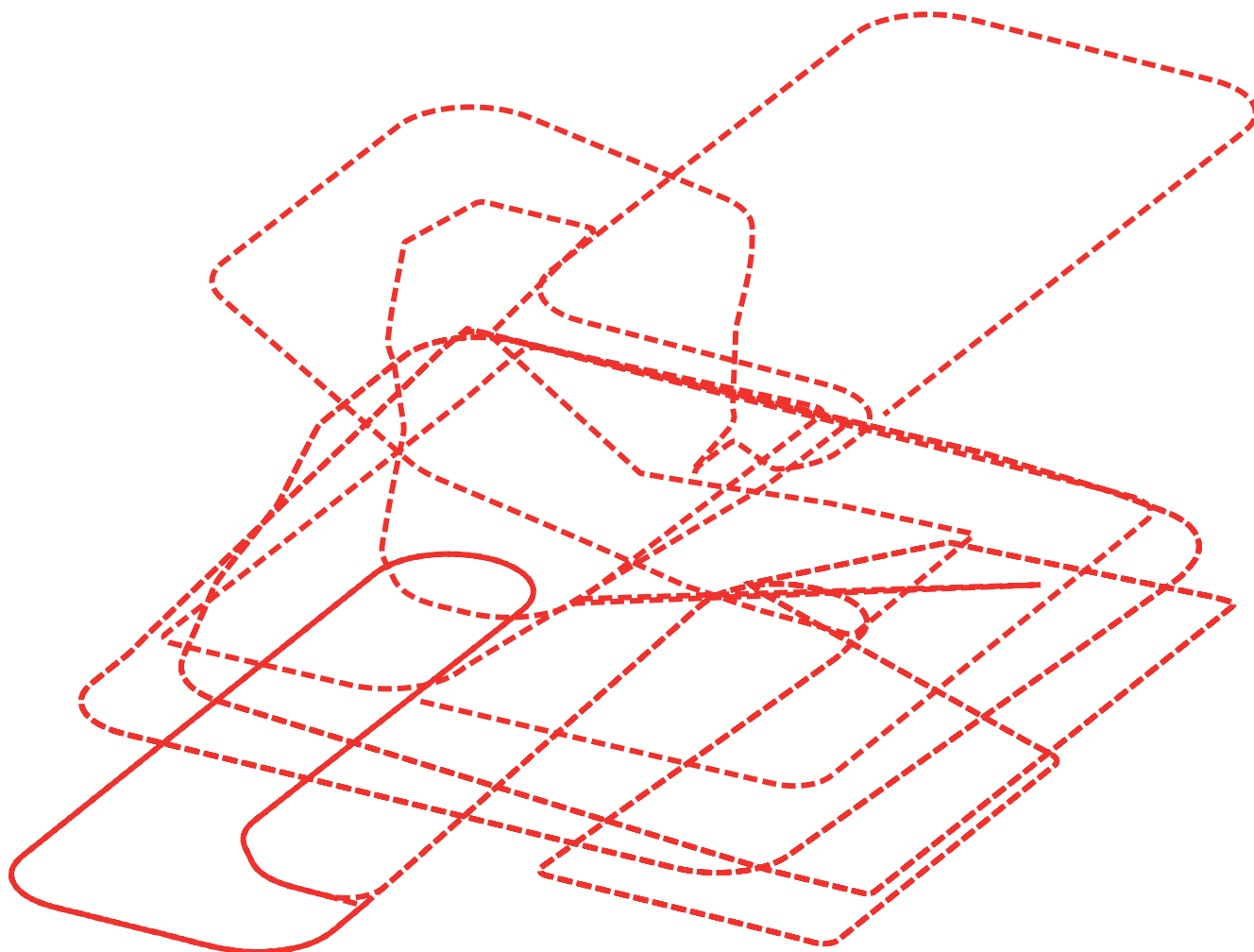


FIG. 4.5.2.3. Analysis of the Spatial Form (Drawing: author)

Route





that zig-zag down into an overly high hall on the lowest level. That hall opens with a two-storey high giant window onto an exterior courtyard that was imagined (but never designed) as a giardino secreto or hidden garden. The layout of the furnishings in this area would suggest that the route ends in a loop here. The space under the ramps is filled with book depots.

The upward route starts clockwise, and leads after one loop that can be taken narrow or wide onto a free formed slab nicknamed 'the mountain' (Pos. 5 in fig. 4.5.1.15 left). On top of the mountain, where the floor is lifted upward, the ceiling is pulled downward (Pos. 6 in fig. 4.5.1.15 left) and generates a tromp l'oeil effect of depth. A similar spatial effect was used for the foyer of the Nederlands Dans Theater in The Hague, one of the first public-buildings realised by OMA 1983-1987, demolished 2016 (OMA 1995 p. 322-323). In Paris the seemingly endless horizon has an opening formed by the 'horseshoe' shaped void (Pos. 5 in fig. 4.5.1.15 right). This passage though a space that is a hole in the sky and tunnel at once must be exited left or right on top. Continuing right, after another clockwise circle, the visitor reaches a ramp about half way on the upper sloping slab or 'on-top of the sky'. Still moving clockwise around the 'eye'-void, the inner route ends on top with a wide converging stair that leads to the roof. Until 'on-top of the sky' the visual connections more or less follow the route (fig. 4.5.2.3 left). The 'eye'-void actually provides a more surprising view though the cut and a panoramic gaze on the city-landmarks of Paris. One view goes across the beginning of boulevard St. Germain and the Seine to Notre Dame de Paris on Île St. Denis. Another view goes across the tip of Jardin des Plantes and the Seine towards the Bastille. Up here the route is anchored in the surrounding city.

In the initial design this route would reach its summit with the panoramic roof terrace, that would have provided views up to all important landmarks of Paris. The effect is similar to the top floors of Centre Pompidou when diving out of the roofs of the dense Marais and Beaubourg districts. The Jussieu libraries should have stuck out of the campus. However, according to Christophe Cornubert (Interview Annex A.1.1.2), the competition design was too high for the building regulations and had to be lowered. Later, two smaller hills appeared on the roof to provide for panoramic views. The roof was proposed as a garden, although no specific design proposal was worked out and only some sketches remain.

In terms of routing, the roof space is again a short loop. One can walk through the libraries in an endless loop of 1.5 km in total up and down. There would have been three alternative loops across main floors of both libraries to get around the building, just as in a city there are different routes and shortcuts. Koolhaas himself compared the design to a film-script but pointed out that it is not following a linear story line. Rather it is more layered and available for many different interpretations<sup>107</sup>.

Similarly I could not identify a strict logic to the axial views inside or outside the building but rather see them as a sequence of surprising cuts or twists in a storyline. Two spaces ('eye' and roof) are designed for panoramic views sketched by the designers (Fig. 4.5.2.6.) naming 'Sorbonne', the 'Tour' (today called Zamynski), the 'TGB' (Très Grande Bibliothèque today B. Mitterand), 'N. (Dame) de Paris' and 'Bastille'. This sketch shows the site of the competition empty, which suggests that this (undated) sketch is part of the early site analysis design phase: That views onto Paris have been important throughout the whole design is even more peculiar for a building in an inner courtyard formed by modern buildings that completely negated the old city.

---

<sup>107</sup> "Bij de Bibliotheeken ben Jussieu tracht ik daarna de linëaire structuur van een verhaal te ontkenen, het ontwerp is niet zo linëair, het is gelaagder en voor velerlei interpretatie vatbaar." (Koolhaas 1993 in interview with Kuhnert, Oswalt, Zaera-Polo e.a. In de Architect 1994-1 p. 18 german in ARCH+ 117 Juni 1993 p.24 re-transl. by the author).

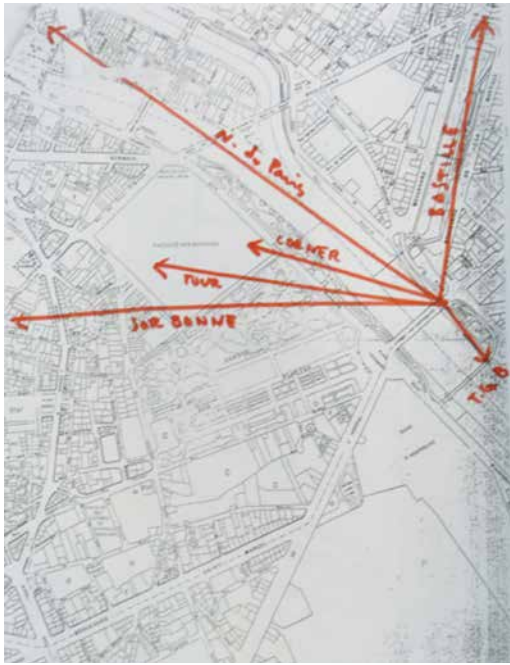


FIG. 4.5.2.4 Design sketch of views (OMAR 2914)



FIG. 4.5.2.5 Route from a CAD model (OMA 1995 p.1344)

Hausmannian boulevards are a composition of directed views and long axes (I.e. Louvre and Champs Elysées, Boulevard de l' Opera or nearby the Place de la Bastille). But the inner landscape space of Jussieu is not composed in axial relations. Still the typology of the Paris boulevard as an urban space is a major source of inspiration for a building that was imagined like a long varied boulevard to stroll along. The Boulevard St. Germain for example, that starts just outside, gently bends through the Quartier Latin like a third arm of the river Seine. It is the central public street-space of the Rive Gauche, and was literally the main conflict area in the '68 student revolt. At Jussieu the inner boulevard is surprising urban space, that allows shortcuts and distractions and that connects to all sorts of aspects of life and science in the many books. The many relations to outer views lead to a transparency to outside except for some interior mirrored glass (4.3.). OMA tried to 'render' animated sequences of the inner space (Fig. 4.5.2.8). But in the early 1990s computing of CGI in movie quality was financially unavailable for architects. Even if not made visible as architects would nowadays, I believe the inner Boulevard is the core spatial concept. Wandering through such a large surface public building is a landscape experience in architecture. This spatial concept is not rigid but versatile. The open spatial system opposes the enclosed 'Grille Albert'. It does not impose a hierarchy of views. Although routes are supported by slopes, cuts and 'voids' this boulevard-building would be experienced in different individual ways. As one Paris boulevard triggers a number of stories in poems, novels and movie scripts. Jussieu space is about openness and not enclosure - essentially this is the landscape effect or 'expanded field' reached with this design. The design of the two Libraries at Jussieu solves the paradox that space is cut off from the urban landscapes with it's spatial form; it captures on an extremely limited site its widest possible openness to urban space. Such an urban public space has seldom been realised inside a building.

### 4.5.3 Image or Metaphorical Form

---

The use of metaphors or image allusion is very different in each of the three cases' specific approach. This also counts for landscape metaphors in architecture. To describe the form of the Jussieu libraries, OMA used the word 'landscape' (OMA 1995 p. 1316) as the overall metaphor for the whole design. However, that landscape is not designed for the pleasure of strolling though it - it is to be 'urbanised' (OMA idem.) with the program of the library, the 'City of Books'.

We divide the landscape metaphors in the Jussieu project into two groups: the first related natural landscape elements that are translated into an architectonic expression of the building; and the second group, the several forms of urbanisation of that landscape. In an interview while working on Jussieu, Rem Koolhaas said he had a "very cannibalistic attitude towards metaphors," (Arch+ 117 June 1993 p.23)<sup>108</sup> alluding to the fact that the natural sciences have become hard to understand for anyone. This helps understand the haphazard use of landscape metaphors at Jussieu. They do not seem cherished as individual story elements but are devoured quickly to fulfil the general plot. The support and development of the fascinating argument for a novel type of building leaves no time to develop the individual aesthetic experience of a particular novel form.

Design metaphors are here also in an embryonic development phase. Concepts of how to materialise each aspect of the landscape were not all fully developed when the project halted. Other metaphors had to be abandoned in the process, like the sports park; or were heavily questioned, like the sloping storage floors for books. This is an important aspect of designing landscapes: To develop a design further while key ideas are sacrificed to the general cause. Metaphors are not left dead but absorbed in the whole. This is what could be interpreted as design cannibalism. Its combination with the previously described collage technique leads to a thrilling speed of ideas in one design in only few months.

Some metaphors have been named by the designers in texts or archived sketches, those we put in between 'quotes' as opposed to the metaphors I gave names myself from the formal analysis. In the analysis of the ground form - integrating also the larger site design - I showed how the two crossing strips of a sports-park and a conference centre turned into the continuous folded landscape. The continuous 'fold' is a real discovery - ironically OMA proposed a fictive patent (Number 8,728,220) together with the 'interior boulevard' as 'inside-out city' (Fig. 4.5.3.2) (OMA 2004). This folding up of the ground plane is a much copied principle in a number of projects by other architects. With the cutting off in a cube the landscape becomes visible outside as a layering of geological sections, varying in height and in material. Everything was undertaken to expose the slabs in favour of a covering skin. The metaphor is expressed with a folded sheet of paper (Fig. 4.5.1.9-14) from the 'parvis' ground plane (as discussed in ground form 4.5.1).

The continuous fold takes a series of different formations that are landscape forms. As all of them are listed already (Ground Form fig. 4.5.15) we concentrate here on the most metaphorical ones relating (first) to natural landscapes and later to urban ones.

---

<sup>108</sup> «Ich selber habe eine sehr kannibalistische Einstellung gegenüber Metaphern» (Koolhaas in Arch+ 117 June 1993 p.23, transl. by the author)

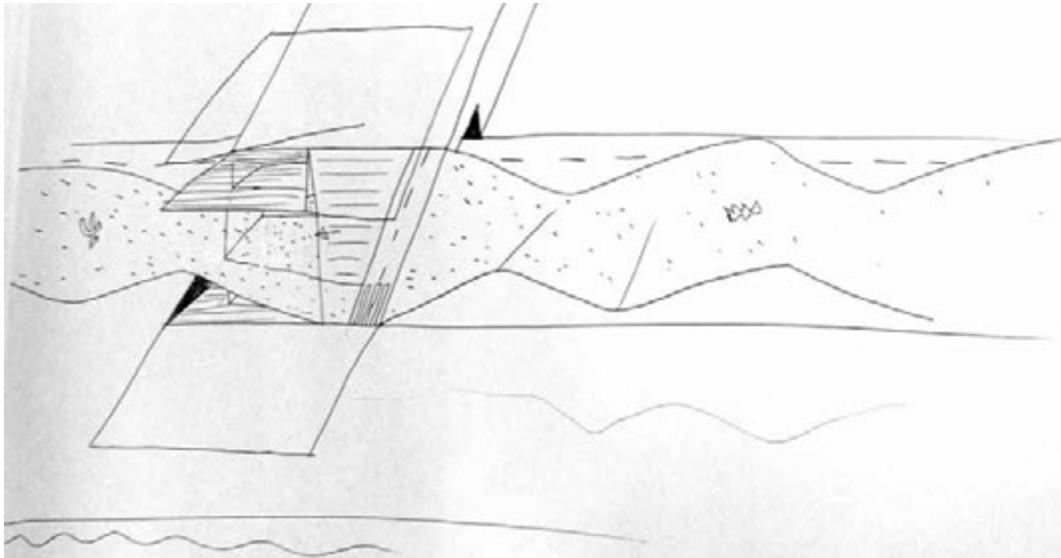


FIG. 4.5.3.1 Landscape Sketch (OMAR)



FIG. 4.5.3.2 Patent for "Inside-out City" for Jussieu



FIG. 4.5.3.3 Conical Intersect Paris Gordon Mata Clark 1975

(OMA 2004 p.79 and Collection Centre Pompidou AM 1991-48)

Surprisingly for a landscape, there are relatively few elevations in the folded plane that appear like natural hills. One is represented by the free-formed elevation that is part of the spatial continuum of the connecting route upward to the science library (Pos. 4 in fig. 4.5.1.15). Two other hills are loosely introduced on the roof (probably in order to compensate for missing height of the viewpoint). The upper 'eye'-lid could also be considered a hill looking into Paris.

Besides the slopes, the spatial impression of landscapes is also triggered by the cuts and 'voids', especially in the entry area the connection to the lower floors is kept wide open into the deepest floor of the lower level humanities library. Three 'voids' and several cuts form a series of breaks that tear into a complex ravine landscape. The main purpose of these openings is to bring light into the library floors that have only one facade lit. With my pro-construction - replacing retrospect of reconstruction by prognosis. (section 4.6.) I show that these cuts with sloping planes form a complex interplay in all direction across five floors. It would be a spectacular space that would make some visitors shudder as if in a sublime landscape.



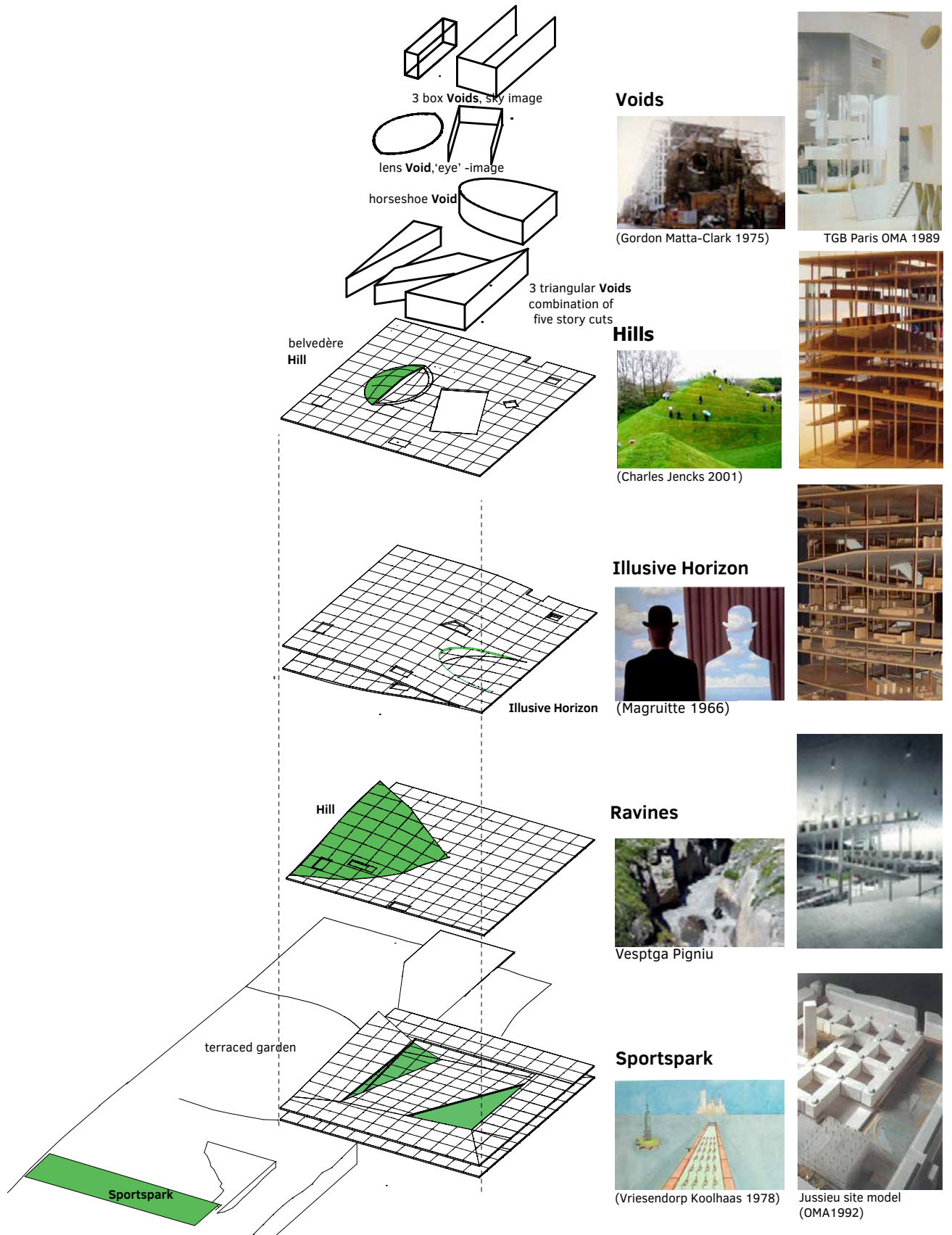
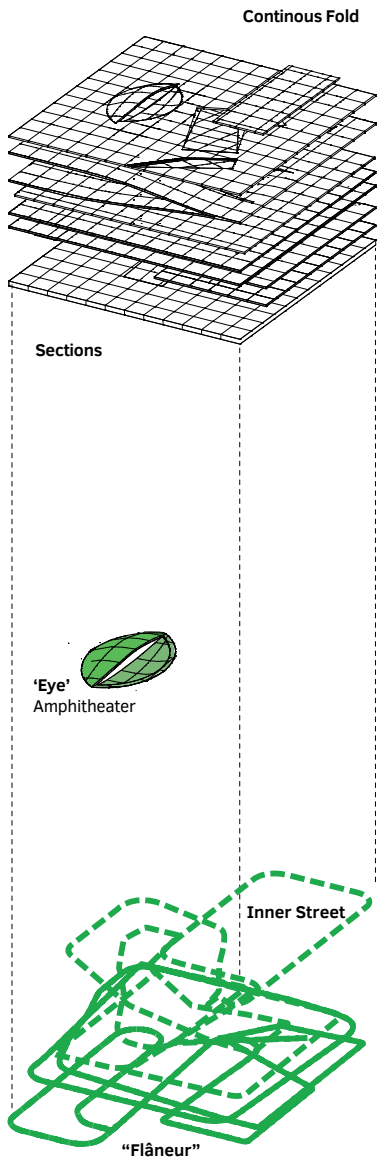


FIG. 4.5.3.4 Jussieu Libraries in Paris Image or Metaphorical Form (Drawing: author)



**Continuous Fold**



erally sketch for Jussieu (UMAR unnumbered)

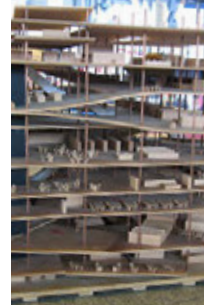


Diagram (OMA 1993)

**Sections**



geological section



Model OMA at Moma 1994

**'Eye' Amphitheater**



chien andalou (Buñuel 1929)



(AMO 2011)

**Inner Street**



(OMA 1995 p.1306)



**"Flâneur"**



(Burckhardt in Weisshaar 2013 p.95)



The extremes evoked in the OMA collage of landscape scenes is reminiscent of the taste for surrealism very present ever since Rem Koolhaas's first projects in the 1970s - the paintings of Zoe Zenghelis and Madelon Vriesendorp in the book *Delirious New York* are evidence of this (Koolhaas 1978). It comes as no surprise that the metaphors used are also applied in a surrealist technique: OMA is shifting motives out of context like dream sequences with open or disguised associations to remnants and suppressed ideas in the unconscious. The allusions to political motives are strategically camouflaged but well placed in the context of French intellectual politics, alluding subliminally to May '68. These metaphors have an explosive potential but are discussed as bricolage. A second reading leaves no doubt that this is a 'left-wing' design important in the political climate of French architecture. This also explains why Jussieu would be abandoned quickly after the political left lost power.

The whole 'strategy of the void' (OMA 1995 p. 603) was transferred from the lost competition project for TGB in 1989. There already were comparisons made to the Centre Pompidou in Paris. The strategy of cutting holes into a building was actually developed as an art installation by Gordon Matta-Clark (1943-1978) during construction of that same Centre Pompidou. The artist cut and chiselled holes into a building that was designated to be demolished. Matta-Clark's voids were seen by some critics as a critique of the destructive operation of erasing whole neighbourhoods of low income homes with large projects (in this case of the conservative politician Georges Pompidou (1911-1974)). OMA uses this idea and cuts and casts models like the positive and negative of sculptures (see ground form fig.4.5.1.17) several of these voids have a connotation that openly alludes to landscape.

One of the voids in horse shoe shape (catalog room at TGB, OMA 1995 p. 647) is cutting into the spatial formation of two converging planes that would form an illusive horizon and thus appear infinitely long - another landscape architectural design strategy derived actually from the scenographic painting tradition. The combination of the horse shoe void and the artificial horizon becomes a surreal perforated horizon.

Another void with complex surreal connotations is the 'eye' - also used at TGB, but there in the same horseshoe shape that appears like an eye on the facade. This eye is also a cut - a cut eye like in the famous scene of Buñuel and Dalí's surrealist scandal film "un chien andalou" (1929). The eye in the city moves inside the building - as if to underline that the landscaped building is also a city turned inside out. The installation of an amphitheatre alludes to the half dome and theatre at the nearby Beaux-Arts amphitheatre by architect Félix Duban (1798-1870), where OMA exhibited the Jussieu project in 2011. This reference to an academic core space, with the metaphor of the eye looking at the city outward and inward is a key metaphor to understand the project: The 'eye' concentrates the allusions to urbanity, the density of ideas, people, and books in the architectural landscape.

Today, to design an urban landscape is commonplace. The expression of 'landscape urbanism' is used in an inflationary manner, as previously discussed (1.4.2.). But in 1992 none of this existed. Urban landscape is a metaphor as if invented by this project (Cornubert A1.1.1). The motor for this invention was the idea of an inner street or boulevard across the building. The idea to turn the street into a battlefield and a landscape derives from the May '68 revolt. The Jussieu design was "a fertile May '68 programming" according to Koolhaas (1993 Arch+ 117 p.22). Famous graffiti of that time (on another faculty building) reminds of this surreal idea that the revolt could transform the paved streets into a beach, as students were throwing paving stones onto police in street-fights and only sand was left, before the government ordered to glue in all the pavers under asphalt, and Paris Boulevards changed surface.

So not only the flaneur would occupy the inner boulevard and peacefully browse through books. Koolhaas developed the democratisation and opening of the University as a political program metaphorically translated as a landscape into architecture. The practical program of the city of books with its inner boulevard was installing books on floors and making them accessible to the public and faculty members. But that metaphor was merely a vehicle for a social and political program, as I will explain in the next section.

#### 4.5.4 Form of the Program

The term 'program' is used most ambiguously in the Jussieu design, compared to the other case studies analysed. For architects, program means the use of a building or garden. For our purposes, 'program' is translated similar to Paul Frankl's 1914 use of the rare and beautiful German word 'Zweckgesinnung'. 'Gesinnung' involves moral values or political convictions of a person and goes far beyond the merely technical definition of a functioning program used by modernist architects. Koolhaas said during the project that it was a

"terrible 'May-68-programming', to do ... (Jussieu), In this sense it is a very political project. Also because the existing Campus was an important centre of the Paris May. The project is in a certain sense a dialogue with the thinking of that era" (Koolhaas in Arch+ 117 June 1993 p.22)<sup>109</sup>

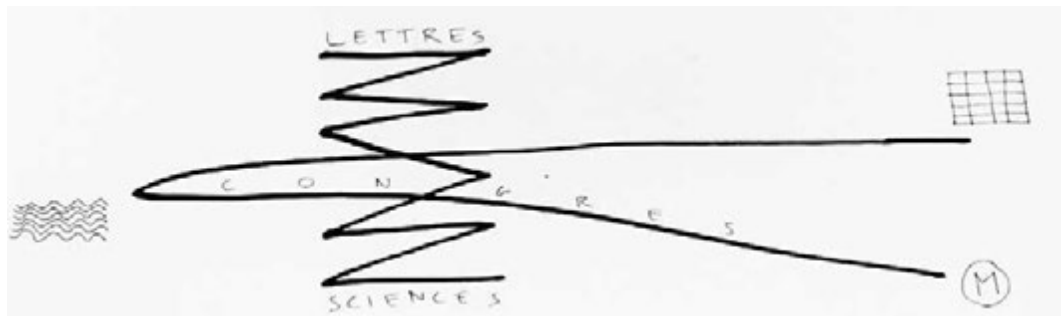


FIG. 4.5.4.1 Programming and connections to Seine (left) and Jussieu Metro station and existing Campus (right) (OMAR 2862)

The basic idea of programming Jussieu is to occupy the folded boulevard or continuous landscape inside the building with a program that would be distributed with great flexibility across the whole surface of the libraries. Some central services are placed in the two entry floors and the two libraries develop from there along the continuous path - Sciences downward and Humanities upward. Those areas which require the least light (the archives) are in the lowest part and those which require the most silence (individual workspaces) in the top part.

<sup>109</sup> «... ich glaube, es ist einfach eine furchtbare «Mai-68-Programmierung», so etwas zu tun. In diesem Sinne ist es ein sehr politisches Projekt. Nicht zuletzt auch deswegen, weil der bestehende Campus eines der wichtigsten Zentren des Pariser Mai gewesen ist. Das Projekt ist in gewisser Weise ein Dialog mit dem damaligen Denken» (Koolhaas in Arch+ 117 June 1993 p.22, transl. by the author)



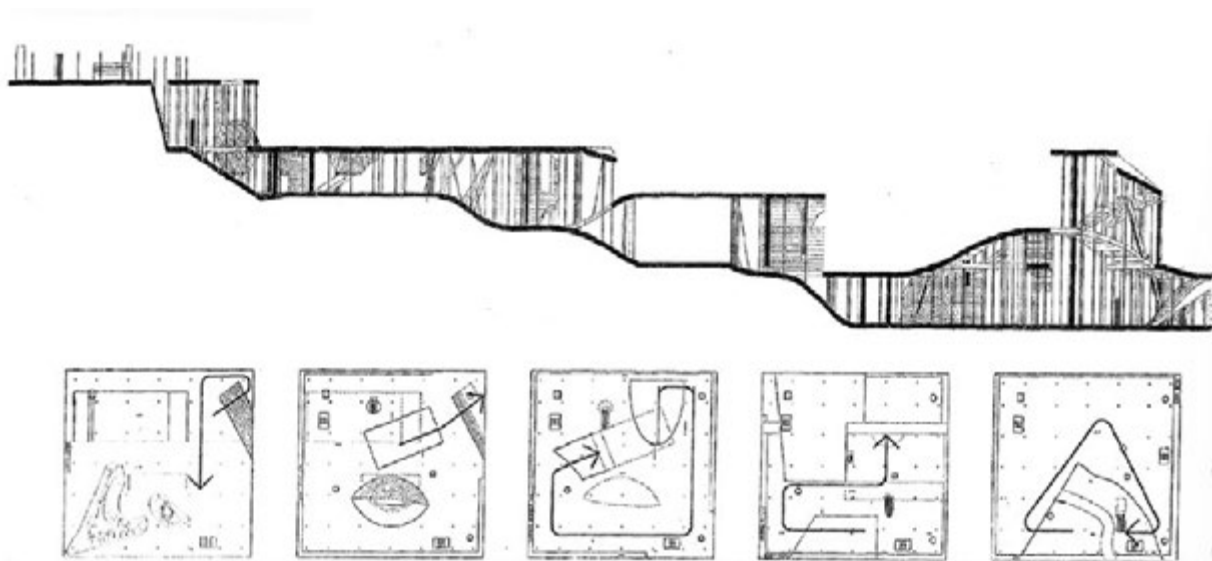


FIG. 4.5.4.2 Jussieu Libraries Development of the Section upper levels heights exaggerated (Drawing OMA 1992-93, AMO OMA 2011 p.286)

Again the design strategy chosen in the competition project to distribute the program across the surface is a collage technique: working tables and bookshelves are photocopied on 'sticky foil' and then glued onto the plans. Other photocopied patterns are also introduced for certain programs and then stuck onto the plans. A playful set of endless variation and rearrangements could be found in the Archives. Including photographs of mass protest, texts on Situationism, aerial photographs of a city, microscopic cell images and fragments of Giambattista Piranesi's (1720-78) Map of Rome (that would also play a role in the design of Peter Eisenman, ch. 6 and Interview A1.3.1.). Not only do the plans change throughout the process, but also the system is used to demonstrate flexibility of the idea of 'programming the surface'. It is almost impossible to display all the possibilities that were imagined by the architects for programming and reprogramming of the surfaces.

The University gaining the street is also a symbolic gesture and a programmatic political claim. In 1968 Rem Koolhaas was a reporter during the May student revolt in Paris for the 'Haagse Post' and in his own retrospect had "an ambivalent, at times critical position" towards the events (Koolhaas in Kuhnert e.a. 1994 p.16)<sup>110</sup>. 1968 was also about claiming the streets of Paris for revolution, that would spread with surprising activism from the university as an avant-garde throughout the society and the city, claiming urbanity for the public. Both aspects of surprise and urbanity have been incorporated in the situationist movement, to which Koolhaas was acquainted through his contacts in the Dutch Fluxus art movement (Kuhnert e.a. 1994 p.16). A typical Paris 1968 slogan embraces the whole amplitude of that important shift in the notion of public space. The transformation of streets into landscapes is the programmatic side of the slogan "sous les pavées la plage"<sup>111</sup>.

<sup>110</sup> "van '68 had ik een ambivalente, soms kritische houding" (Koolhaas in Kuhnert e.a. 1994 p.16, transl. by the author)

<sup>111</sup> translates "Underneath the street is the beach." by project architect Christophe Cornubert (Interview A.1.1.) or more literally "under the streetstones lies the beach" by author

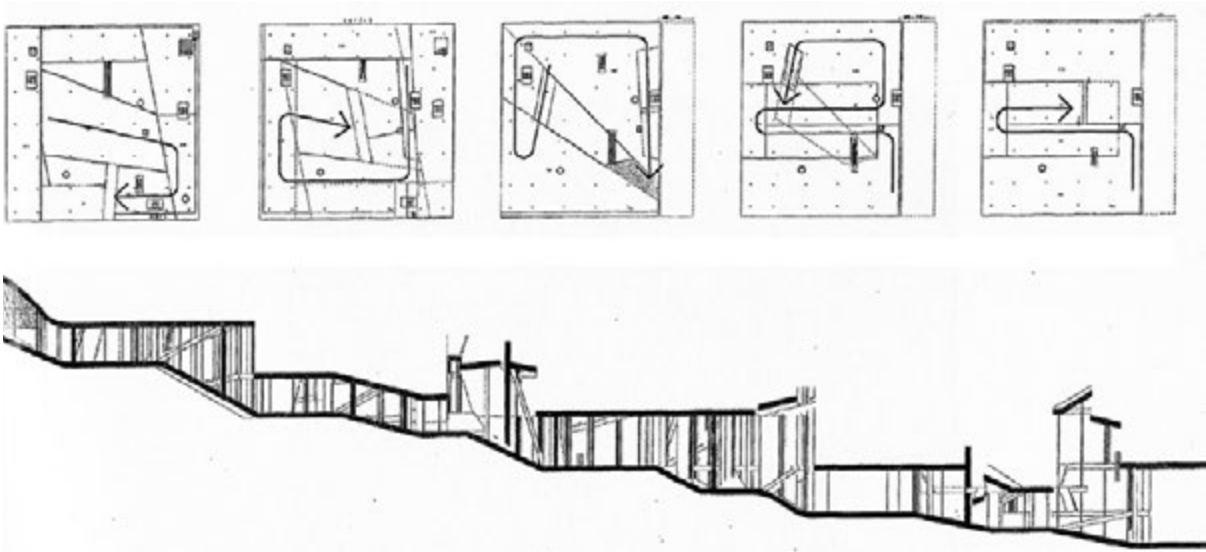


FIG. 4.5.4.3 Jussieu Libraries Development of the Section lower levels heights exaggerated (Drawing OMA 1992-93, AMO OMA 2011 p.287)

While this may seem a harmless slogan in retrospect it is much more charged if we relate it to the discussion of Le Corbusier's Plan Voisin for Paris (ch. 3.1.9.). With the Jussieu libraries, Koolhaas takes a very different position towards creating public space. Koolhaas said on his radically opposite proposal that OMA sees their "buildings as public buildings against the general trend of disappearance of public space" (in Kuhnert e.a. 1994 p.18)<sup>112</sup>. The reclaiming of the landscape that underlies the city planning is just a dramatisation of the same act of public movement. The Jussieu project opens a variety of uses without imposing a right way through its architecture. He compares usage of this architecture to the vegetation of a landscape.

"At the Jussieu library the most important thing was the differentiation between architecture and usage. We differentiate the space with the most simple means - with cutting and folding of ground floor levels while guaranteeing with a undefined floor plan and more than seven meter high spaces a completely free usage. The usage is like a second layer, that never dominates the spatial working, but it is rather comparable with the vegetation of a landscape. ..." (in Kuhnert e.a. 1994 p. 21)<sup>113</sup>

The actual form of the program of Jussieu almost disappears in these endless variations. This seems to me intended by the almost anarchistic freedom of usage provided in this design.

<sup>112</sup> «Wij vatten onze projected op als openbare gebouwen, tegen de algemene tendens van de verdwijnende openbare ruimte.» (Koolhaas in Kuhnert e.a. 1994 p.18, , transl. by the author)

<sup>113</sup> «Bij de bibliotheken van Jussieu was het belangrijkste idee de scheiding tussen architectuur en gebruik. We differentiëren de ruimte met de meest simpele middelen -door het doorsnijden en dubbelklappen van de begane grond verdiepingen- waarbij de onbepaaldheid van de plattegrond en de meer dan zeven meter hoge ruimtes een volkomen vrij gebruik garanderen. Het gebruik is als een tweede laag, die de ruimtelijke werking nooit domineert, maar te vergelijken is met de vegetatie in een landschap. ...» (Koolhaas in Kuhnert e.a. 1994 p. 21, transl. by the author)



FIG. 4.5.4.4 "Under the pavement, the beach" anonymous slogan, Paris 1968



FIG. 4.5.4.5 Paris 1968 (OMA 1995 p.1306)

A major issue and discussion around this flexible programming is the practical usability of slopes. For book transportation, hand carts, electrically powered carts, and cable car systems were discussed. A photograph (Fig. 4.5.4.1) shows a demonstration of each option by Rem Koolhaas himself to librarians in the (also sloping) Rotterdam Kunsthal. Several options were discussed for reading areas and bookshelf deployment on the slopes as well. Additionally, the amount of sloping areas was reduced as the design developed in order to address some of these concerns.

The question of programming the oblique surfaces may have been the most difficult field of discussion between the librarians and architects - in the end it remained unsolved. The rather vague accusations are a symptom of a missing political will to install this library with such a revolutionary approach to programming. The inventive way of programming the building that was once the strongest point of this project (to win a socialist governed university) had turned into weakest (to lose a conservative governed bureaucracy). The project was too symbolic to survive the massive savings in education after the downturn of Mitterrand ended Jack Lang's tenure. In that sense programming politically was the highest risk taken by the design - at once the highest gain and loss.

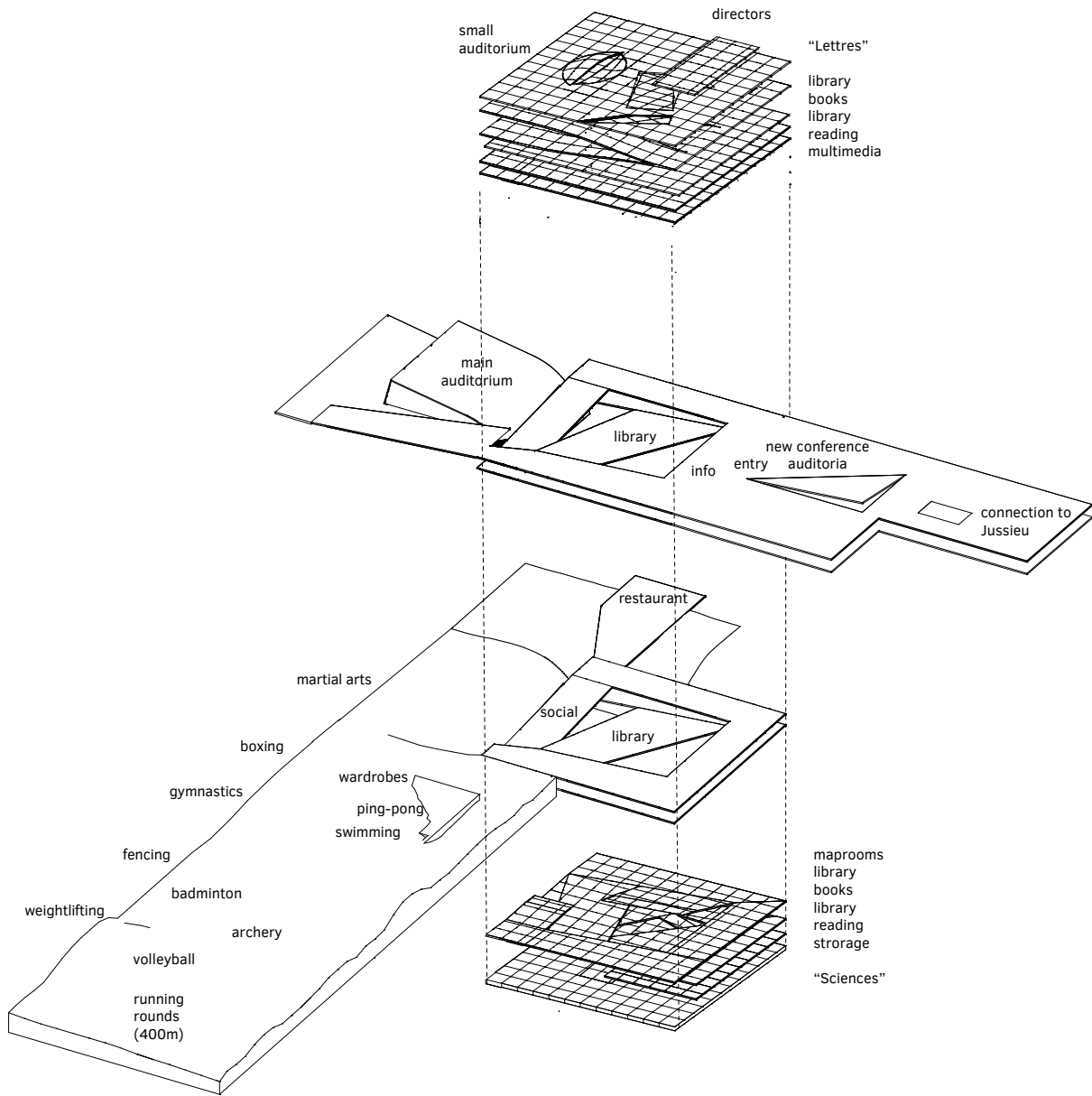


FIG. 4.5.4.6 Jussieu Programmatic Form (Drawing: author)



#### 4.5.5 The Composition

---

In a synoptic overview of the composition (Fig.4.5.5.) I can show how the integration of the various layers leads to an interplay of ground, space, metaphor and program. There is no preconceived order between these layers; their interaction is a guiding force.

The routing is dominant, such that movement up and down informs the landscape transformation of the stacked planes. As movement dominates in routing, everything is subordinate to the constant flow. Organisation of user circulation across the campus and through the libraries as well as the 'hard' program of the libraries itself is kept in a state of flux.

This flow is enhanced by the versatility of the chosen systems. Surfaces and furnishings, but also facades and glazings are used as adaptive strategies - changed towards any situation in many different permutations of few basic principles. The returning composition principle of the Jussieu libraries is that of the collage - the sticking together of seemingly different things to make a whole out of discrete elements. The collage principle goes across all layers - a collage of ground forms, of spatial relations, of metaphors and of programs - each overlay the others and generate a density of elements and compositions.

The density is what creates an idea of urbanisation of the landscape - the counter proposal to the empty parvis is the overly loaded and concentrated continuous floor of the two libraries.

After having studied this composition in numerous drawings and other documents from the designers, and a series of my own hand, and after visiting other OMA buildings that were built before or after Jussieu, I have come to the conclusion that this project is a unique one - would it have been built it might have many imitators. But its composition is not easy to understand from outside - and can still not be explored from inside.

The VPRO building in Hilversum (MVRDV 1993-1997) might be one of its closest imitations, but it has so many differences and shortcomings, and such a different context that it is incomparable as a composition.

The difference that the project for Jussieu made to architecture as a discipline integrating landscape had to remain a virtual one. I hope that this study will contribute to building up the composition of Jussieu in the minds of researchers, critics, and students of architecture and landscape architecture - to make this virtual difference influence the reality of our living environment.

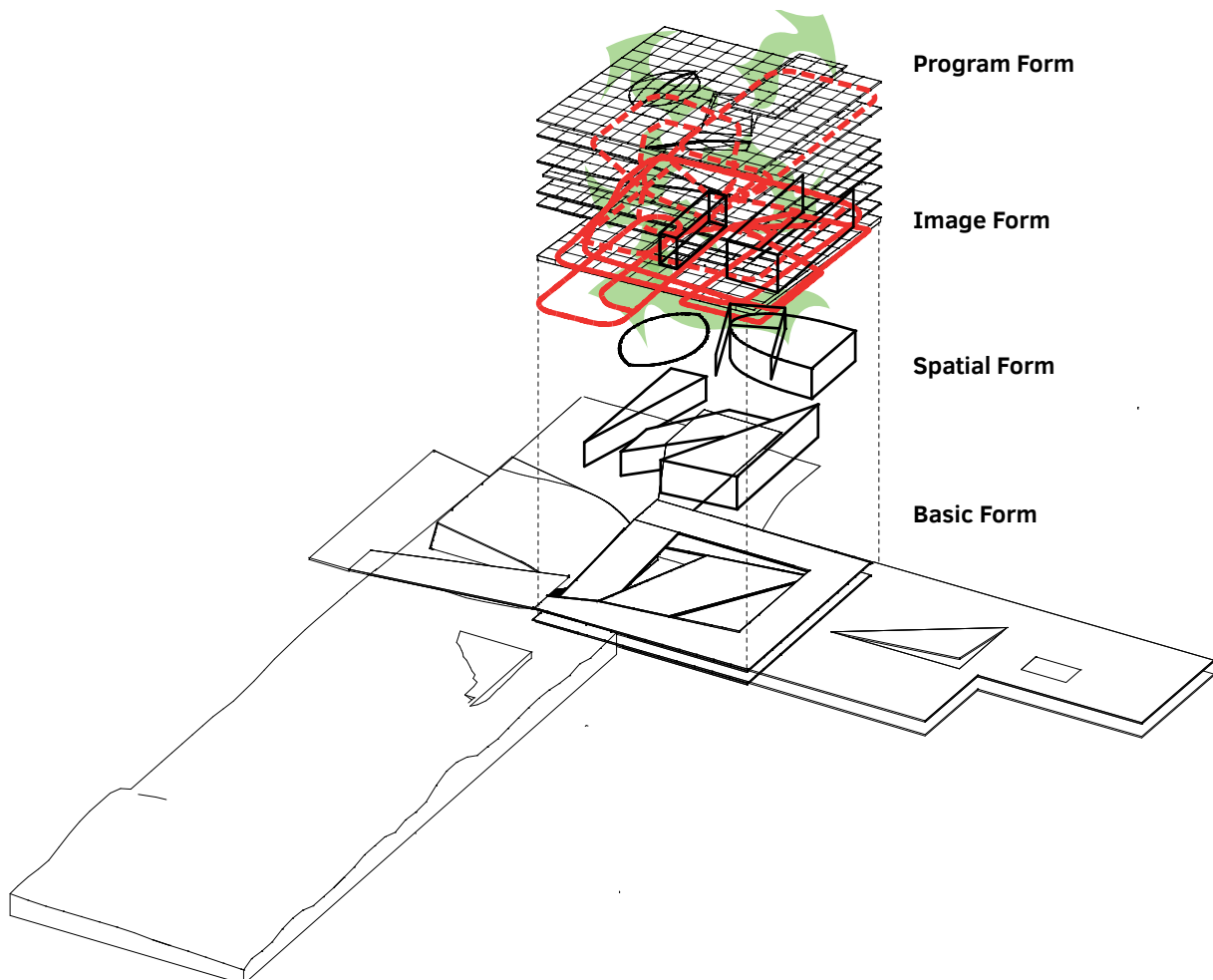


FIG. 4.5.5. Jussieu Composition of 4 Layers (Drawing: author)

## 4.6 Specific Methods of Design Analysis for Jussieu

---

The specific methods for my analysis of the Jussieu project anticipates its possible appearance as a building. The two libraries at Jussieu were never built. I used contemporary computer imaging media, which are today much more common than in 1992, in order to demonstrate how a design might look as a building.

To simulate visual experience, I relied on computer generated imagery CGI. This process of GCI is best described as pro-construction<sup>114</sup>. Retrospective reconstruction can be used in reconstruction of past states of transforming landscape designs (i.e. Stourhead in Nijhuis 2011) or in simulation of archaeological findings without excavation (i.e. Virtual Archaeology at Stonehenge 2011).

CGI's photorealism introduces a novelty in regard to the Jussieu project for this thesis, as before the critical reception of the Jussieu project has been based mostly on the materials published between 1993 and 1995.

For the design of Jussieu, CGI was used at OMA for design and control of the form but not yet so widespread and available for representation or simulation of photography as we know it today. Around 1992 architects were only slowly discovering the tools of digital representation. Also in the interview, Christophe Cornubert recalls the excitement and disappointments about these first experiments. Probably the first use of CGI at OMA occurred in the competition phase on Jussieu around 1992. Drawings of the competition are based on orthogonal projections and perspectives of a computer model in so called wire frame (all lines remain visible as if the masses were transparent) or hidden line (the lines of foreground masses hide background lines). Wireframe superimposed floor plans were even simulated by hand (Interview Cornubert A1.1.1). A series of nine renderings that are in OMA Archives at NAI where never published (OMAR 2930) and if ever used worked over to invisibility in black and white collages (OMA 1992 panel 6).

The process of architectural design of the Jussieu project was abruptly stopped in a phase of preliminary design (section 4.4.). Some essential parts of the design process like materialisation of the surfaces, facade detailing, and structural detailing had to be inferred from references to loose sketches or propositions with fragmentary sources. Most of these indications are found in undated boxes at NAI (OMAR). As a result, it is not easy to place them in context or verify a single direction .

The pro-construction process is the outcome of a fully documented experiment with one crucial peer. During the two-step process of pro-construction I had two interviews to check the preliminary and final results with the former OMA project leader Christophe Cornubert (A1.1.1. and A.1.1.2) for Jussieu Paris. In the first discussion of the pro-construction with Cornubert in 2012 (A1.1.1.) he used the expression of 'dressing somebody else's children'. Later he also compared the Jussieu project to the Knossos reconstruction in concrete on Crete (1905-1930) by self-taught British archaeologist Sir Arthur John Evans (1851–1941). This is a controversial case (see Gere 2009) but certainly helped popularise Minoan culture. My pro-construction attempt might be polarising like Evans' reconstruction.

---

<sup>114</sup> pro-construction is a specific method developed here. the prefix "pro" stands for replacing retrospect of re-construction by prognosis. (as explained in section 4.5.3.)

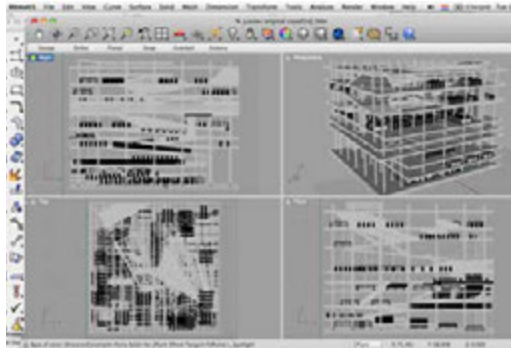


FIG. 4.6.1 Jussieu Rhino CAD Model (Screenshot: author)



FIG. 4.6.2 Jussieu Model 2012 (Photo: Paul Cournet AMO)

Another source for my pro-construction was the buildings that have been realised in the period just before or just after the Jussieu project by OMA. Visual references for our pro-construction come from Kunsthall Rotterdam 1988, Villa Dall'Ava near Paris 1991, Congrexpo Lille 1994, Educatorium Utrecht 1997, Dutch Embassy Berlin 1999 and Casa da Musica Porto 2005 and Seattle Central Library 2004. For several of the finishings and furniture choices of Seattle served as a reference, especially the furniture of Belgian designer Maarten van Severen (1956–2005) who worked closely with OMA on several other French projects.

The central part of this hypothetical look of the building was my reconstruction the facade that Jussieu would have. I pro-constructed the facade from the few available documents, but only a few indications are available. In S.M.L.XL. a double page photograph of a (formerly unknown) model shows a piece of facade (OMA 1995 p.1330 and Cornubert 1994 p.153) built by Christophe Cornubert (A1.1.2). This curtain and glass shingle motive does reappear in a sole sketch by Rem Koolhaas for schematic design in early 1993. Both that photograph and a sketch by Koolhaas show three layers in the facade. In the last of eight “steps” a three layered permeable facade is sketched of “non-reflective shingles (A). Against the sun: Chain-link mechanical curtains (B). Against glare: curtains of gauze/silk inside (C)” (Fig. 4.6.1.: Sketch Rem Koolhaas probably 1993, source: OMA AMO 2011 p.333). The sketch indicates that these elements would be assembled in a kind of ad hoc collage (where needed) and that the slabs remain dominant, as they were larger than the inner facade volume. The silk curtain is known from Villa Dall'Ava (OMA 1995 p.158) The chain link was used at Groningen Video Bus Stop (OMA 1995 p.196) but might have to be executed much stronger (at that time chain link conveyor belts where for example used at the TGB in Paris by architect Dominique Perrault – maybe not to OMA’s knowledge). A similar facade was later developed by Cornubert for OMA’s Educatorium Utrecht.

OMA’s approach to detailing also includes incompleteness and a programmatic openness. Consequently the facade should look like an open window (Cornubert 1994). The architects proposed to use new low reflective and highly transparent shingle glass with less than 8% refraction. The result should not be a “ruinous glass-box or ... antiseptic ... French ... high tech facade” but have the “aura of the old-fashioned” (transl. from Cornubert 1994). This led to a kind of ad-hoc construction of sticking together shingles of glass. In the article and other descriptions OMA refers to “irregularly broken glass ... overlapping each other ... like in some sculptures of the artist Mario Merz” (Koolhaas in de Architect 1994–1 p.30). (Fig. 4.6.2. Mario Merz triple igloo, 1984 Musée d’Art Contemporain Montréal).

From the Interview I conclude that depending on each orientation and position a certain variation of glass would be used, each of which was carefully selected based on refraction, transparency and colour or in many cases a colourless appearance. Many new products were researched and probably the choice a combination of glass and its application would have been unique and not





FIG. 4.6.3 View A Jussieu Libraries. Pro-constructed view from sports garden and IMA (rendering author and WAX)

like anything seen before. In particular OMA intended to work with selectively reflective glass, depending on each view relation inward or outward, on the adjacent buildings and on the light situation. It is difficult to make a prognosis for each of the 'many-fold' decisions made with OMA's design approach that reacts differently to each situation. Certainly the Jussieu glass shell would have been unique.

In the competition design the Jussieu and IMA side facades would be in a special shingle type of construction while the facades towards the long bars on the Seine and Cuvier side would be a system of structural glazing - where bearing parts are also executed in glass in a frameless construction.

Another detail that would have been unique were the dark parts of the glass facade, represented as black surfaces on the isometric drawings. Cornubert (1994) describes them as "black coloured glass" that looks like "built-in shadows" from the outside and like mirrors that extend the space outward from the inside and would confront the visitor with his own double flying above the skyline of Paris. That particular dark glass would have the effect of removing boundaries and blurring the difference of outside and inside like in a dream. The black glass should express how the "confirmation and denial of materiality" is a "conscious contradiction" (Cornubert 1994).

My CGI-simulation of materials can not replace the long and certainly intense work that still would have been necessary to realise Jussieu technically. OMA projects of this phase were usually accompanied by a large investigation into available materials that oftentimes were very original and new in use for buildings. That design strategy of assemblage is very visible in projects like the Kunsthal or Educatorium. To my knowledge in 1997 material research at OMA was organised almost like an independent advisory department, then led by Gary Bates, who worked at OMA 1990 to 1998. But the Jussieu team had probably not reached that stage of materialisation in research. It is more probable (and implicit in my interview) that for Jussieu material research was done in the few months of design in Paris 1993, where Christophe Cornubert ended up as sole employee of OMA before he returned towards other challenges in the Rotterdam headquarters.



FIG. 4.6.4 View C Jussieu Library Lettres Auditorium with View on Notre-Dame de Paris (rendering author and WAX)

The images shown in these pages are based on computer models reconstructed by OMA, by myself, Frank Schadewijk and Joost van Rosenberg in the 3d-CAD software packages Rhino, FormZ and Sketch-up. The CGI material and light simulations were rendered in Maya with V-Ray and enhanced with my own environment photographs collected on site in July 2012. Four Viewpoints have been chosen as they best illustrate the nature of the project and best accompany the descriptive walk though in the previous sections.

In 2014 I had a second interview was led with Christophe Cornubert with the raw renderings at hand via video conference (A.1.1.2.). In the second interview more details of the unfinished design could be revealed, but also it became clear that not all can be anticipated in the design.

In the following I will comment on the final versions of each rendering and a smaller preview of a preliminary version.

In View A (Fig. 4.6.3.) I simulate the urban setting and surrounding of the Jussieu building. An adaption of the façade colour of the dark glass was made in terms of reflection and tone. The whole of the exterior was rendered less glossy, 'silver' and 'high-tech' (Cornubert A.1.1.2) and we simulated 'roughness' (Cornubert A.1.1.2) especially in the finish of the concrete surfaces.

In View B (Fig. 4.6.5., next page) I show some of the relation to the outside especially with the view on the iconic cathedral Notre-Dame de Paris and other aspects of the inside-out relation. The part in the foreground where the ground plane dives down into the lower floors of the building was not rendered as Cornubert had imagined it. In the Interview he came up with a previously unpublished idea to make a stepped garden that would provide a view form the inside- to the outside-landscape. Cornubert mentioned that OMA had looked into the Winter Palace of Sanssouci in Potsdam as a green house or artificial landscape.

As suggested by Cornubert we used picture mapping technique (like in the mappings of View A) to reconstruct a garden like structure in this area, that would also become visible in View D.



FIG. 4.6.5 View B Jussieu Libraries with Views on Paris from roof of 7-9 Quai Saint-Bernard (rendering author and WAX)

In View C (Fig. 4.6.4., previous page) I had chosen a strange kind of ‘mirror finish’ (Cornubert) for the columns that did not appeal to the designer, and we needed to check on the scale of the model (or more probably the figures we placed next to it). The building’s floor heights were unusually high, which might even trick a viewer when looking into the CAD models. Cornubert asked me to make it look ‘almost as a ruin, something between a parking garage and a ruin’ (Cornubert A.1.1.2) which might explain why the final renderings are less flattering than the preliminary ones.

Also it became clear that lighting and other detailing was not meant to be homogeneous, but rather was supposed to change throughout the building - leading us to propose more differences in the detailing of our interior views. We generally added less detail in the renderings, leaving more to the imagination of the viewer. Some details that were used in both interior views (C and D) seemed more plausible as a pro-construction in one than the other.

In View D (Fig. 4.6.6., next page) again this variation of surfaces by level was requested by the project architect to get a “stronger sense of layering” (Cornubert A.1.1.2) and even radically different lighting per floor. Also the interiors in terms of usage were imagined much more “urban” as a kind of public space, filled with crowds of students that would move in between lectures or even just protest in Paris “May ‘68” (Cornubert A.1.1.2) fashion.



FIG. 4.6.6 View D Jussieu Library Sciences with view on site for terraced garden court (rendering author and WAX)

After this 2nd interview we revised our first 4 renderings to those that are placed in this chapter. As a conclusion to our experiment I can state that the pro-construction triggered an insightful discussion about the building and revealed some very specific thoughts and imaginations about its appearance that were not legible from the project materials nor imaginable from other projects of OMA. The particular Jussieu project can therefore rightfully claim to be for the first time presented in its most complete state since it was imagined and presented for a competition more than 25 years ago. The visual appearance could now lead me to more clearly understand how the building would have been understood as a landscape, had it been built - and thus how it might have changed the course of architectural history.





FIG. 4.6.7 View B Jussieu Libraries with Views on Paris from roof of 7-9 Quai Saint-Bernard (rendering author and WAX)



## 4.7 Landscape Architectural Attitudes at Jussieu

---

How do the analytical methods' revelations of landscape design strategies in the two libraries at Jussieu relate to the attitudes in landscape architectural design as I developed them from Sebastien Marot's definitions in chapter 2.3?

Anamnesis influences the design almost in the medical sense of the word. This stems from a reaction, in relation to the Jussieu site, to the uprising and dismantling of the Paris universities in May 1968 and its long aftermath.

The Jussieu project by OMA is a spatial 'cure' to the spatial 'diseases' of the misled Albert project. The diagnosis of the diseases addresses different realities: a physical reality of a complex that is very hard to use; a political reality of a loss of the university as an urban public space; and a strategic reality of the loss of street space from anarchic students by the state order.

The anamnesis of landscape simulates a cure to the diagnosed disease. In this sense, OMA's 'paranoid critical method' (Koolhaas 1978) addresses these overlaid problems that are identified within the complexity of the Jussieu site with an intervention and collage (or rather de-collage): From anamnesis follows the dismantling of existing and adding of new layers of form to create a space of radical intervention into the context.

Process here is also spatially related to the plan of Albert. The separation of a huge, monumental public space from both the Paris streets and the university's own buildings establishes a spatial doctrine of three discrete layers: Paris (a dangerous and chaotic city), the parvis (a clean and empty public space), and the grille Albert (a dysfunctional teaching machine). The idea of a landscape arises as a strategy when the process of intermingling, interconnection and the densification of these discrete layers generates a complex landscape that re-unites all three: A continuous public space occupied by university programs introduces a missing Paris boulevard into the heart of the formerly separated campus.

The connection to history is a first step into a process of transformation that synthesises the past (that has become almost impossible to use) into a possible future. In architectural form these processes of transformation are simulated in the ground form of the building as in the insertion of voids. The landscape process is divided into a geological formation of the landscape (by the OMA project) and a urbanisation of that landscape (initially an OMA plan but meant as a flexible usage of the library as a city of books). At the time of the Jussieu project's conception as a new type of library, it was apparent that the digital revolution would fundamentally alter the way we deal with books. The French took a lead in digital online communication with "Minitel" (available throughout France in 1982) that was a predecessor of the WWW (the first Web browser was released outside CERN in 1991). Both would step by step change the availability of text in the most radical transformation since the invention of movable type book printing by Johannes Gutenberg (1400–68) (Vulgata Bible of 1455). Taking into account the enormous speed of development in computer technologies, the designers left open the possibilities for future processes to take place. In France 1989 the use of Minitel, at the time the most popular digital information system via phone lines, was widespread. In the same year 1989 in Geneva, Tim Berners-Lee, (\*1955) proposed the World Wide Web and designed its first software at CERN (Berners-Lee 1999) which is today indispensable and has crucially changed all aspects of our life.

TABLE 4.7 Resume Two Libraries at Jussieu Paris

Landscape Design Strategies in Jussieu Libraries Paris			
4-layer design analysis (Steenbergen & Reh 2003)			
Ground form	Spatial form	Image form	Program form
Connect artificial topography to parvis. Continuous plan folded and stacked. Additionally: Ravine inside, Terrace to lower floors	Routing spiraling up and down in montage. Incidental but conscious view relations to urban context. City as backdrop. At design stage still in development. Spatial system of cuts in spiraling space	Main landscape image of multiple folded slab, complex geological section. Landscape Imagery Elements: Amphitheater/Grotto, hill(s), slopes in various forms. Roofgarden and terrace cascade (not worked out), sports-park (removed form project). Key metaphor of an urban landscape collage	Programming like urbanising a landscape flexibly. Urban as the building as city, the inner street folded is connecting square and landscape in a interior dense city.
Landscape attitudes (Marot 1999)			
Anamnesis	Process	Sequencing	Context
Relation to exiting Jussieu Campus. A 'cure' to it's spatial 'diseases'.	Simulated geological formation of a landscape and it's urbanisation. Design process as transformation of the site. Libraries are not an object of design but a field of strategic action.	Routing is guide to form-finding instead of just consequence of design. Spatial sequence informs the building. Complex montage with cinema-like density.	Concentration of contextual interventions in one space. Connecting the campus back to the city via a building that is hidden in that campus: an 'urban landscape' projected into the building.

The Jussieu project proves exemplary in the way a design process of a building relates to the potential transformation process to its environment, even with its complex context and program. Like a landscape architect, the architects find themselves acting in the midst of the changing environment they helped create. In such a way the two libraries are no longer just an object of design but a field of strategic action.

The spatial sequencing obviously was used for the routing across and through the building and for arranging spatial features (views, voids, shifts of direction) and programs. The dominance of the routing gives it the role of a guide to the building design (a way towards the form) instead of just being the consequence of the design (a way through the form). In the way the spatial sequence informs the building it strongly implements a landscape design strategy. This development of a space out of the routing is similar to OMA's Kunsthal design, but more exhaustively used here. Both designs are a complex manipulative montage with cinema-like density.

How OMA deals with context is different from that of a mere reaction. The densification of spaces inside the Jussieu libraries, the compacting and overlaying of different structures turns the campus into a new structure, concentrating contextual interventions on one new place: the spot of the Jussieu Libraries. Especially in its initial design, the force of Jussieu would have been how this building, while actually hidden inside the vast campus, would have connected the whole site back to the city. The design plays with the whole of Paris as a context in a mostly hidden spot inside a (still today) fenced-off public building. This overruling of the separation from context comes from a strong dialectical opposition. The unique creative solution to this dilemma is a unique invention: an 'urban landscape' in a building. This dealing with context is the core achievement of the Jussieu design. It was an invention particular to this spot in the world - but also a crucial invention in architectural history.



## 4.8 Landscape Design Strategies at Jussieu

---

As an intermediate conclusion, I recapitulate our main research question in a general critique of this first case.

**In what way do landscape design strategies (as they would have been applied in Jussieu) change how we understand and create architecture? (Q 1.1.1.)**

Over the course of this section, I will go through four subsidiary questions.

**How did the architects of Jussieu apply landscape strategies in architecture? What were their motives to do so and what do they accomplish? (Q 1.1.3.)**

The Jussieu project engages in dissolving constraints of architecture through landscape concepts with a goal to create a novel spatial concept. This freedom of spatial use, a variety of playful adjustments to the library program, is related to what Mark Wigley calls 'extreme hospitality' (Wigley in Stamps e.a. 2016 p. 38) in regard to the architecture Constant Nieuwenhuys proposed in New Babylon.

The potential of the Jussieu project for a fundamentally novel approach to architecture simultaneously shows its limitations, not so much in its practical application, but in opening up architectural methodology to the freedom of spatial use through landscape.

In the face of global ambitions of the '68 movement, the political undertones of the Jussieu exercise are modest in comparison. Jussieu makes a pointed statement about a moment, but does not propose a real revolution. That said, its Utopian stance aligns well with a leftist perspective. Its abolishment as soon as the socialist government lost power on the cultural and educational fronts comes as little surprise.

Despite the unmistakably progressive character of the Jussieu design, I believe OMA did not merely envision to change architecture fundamentally. Rather, they tried it practically and within the provided project limits. Jussieu is more Utopian, more radical than many other OMA projects designed before it or built after it. Recently, Koolhaas acknowledged that since the 1960s "Utopia and architecture have totally grown apart" (Koolhaas in Stamps e.a. 2016 p. 64)<sup>115</sup>. Exploring in Jussieu the extreme of continuous space modulated as a landscape remains an exercise simply within a building.

Jussieu is a Utopian operation limited, and even hindered, by a real program and budget for an existing institution. Koolhaas always considered himself an architect and consequently OMA's work is not fundamentally anti-architecture. Koolhaas' 'paranoid critical method' mentality, self critical or not, is essential to OMA's designs - even when challenging building practice and conventional use of materials, the solutions are meant to be practical. Jussieu was intended to be built from the delivered designs and further developed with this goal.

---

<sup>115</sup> translated from Dutch original quote by the author





FIG. 4.8.1 Constant Nieuwenhuis, Betty van Garrel and Rem Koolhaas 1966.



FIG. 4.8.2 Ludique trap Constant 1969. (Gemeentemuseum Den Haag 2016 Photo: author)



FIG. 4.8.3 Ode à l'odéon Constant 1969 (Gemeentemuseum Den Haag Photo: author)

**Which landscape elements are applied to architecture, which concepts of landscape are applied in architecture, and how is their formal composition developed? (Q. 1.1.4.)**

To understand Jussieu as a landscape I have separated its constituent formal layers and explained their composition as well as the landscape attitudes. However, like any landscape, the experience of the built project would be the ultimate way to understand it as such. Each representation risks falsifying the original message.

The composition consists of collage technique and interweaving of all four layers: spatialisation of the ground; the metaphor influencing space; the program fundamentally reinterpreted through ground; and space and image tricks. The separation into four layers of this amalgam of landscape sometimes seems limited in its scope compared to the complexity of composing Jussieu fully of cross-references among the four.

**How did the architects of Jussieu understand the idea of landscape and its design strategies for application in architecture? (Q 1.1.5.)**

The previous section about the landscape attitudes summarised the understanding and application of landscape in architecture. Mainly the new attitudes toward the anamnesis, process, and spatial sequencing culminate in a manipulation and activation of the context: the immediate one of the Jussieu campus, the larger one of Paris and the macroscopic cultural context of unresolved tension between the French state and its university.

For architecture in general, this crucial work of OMA indeed takes two steps at once. At first, the designers introduce a landscape ground form, space, and metaphors as an architectural project for a formerly pure architectural type, the library. In the second step they urbanise this landscape, and read the ground form as a boulevard; occupy it as an urban public space; introduce visual relations to the city and urban metaphors; and program it in an urban plan of zoning programs filled with repetitive structures. Landscape methods here are used as a doorway into the traditionally closed institution of a University Library into an open public space. This becomes particularly visible in the analysis of the form of expression of the program layer as well as with the expressed intentions of the designers' idea of a social magic carpet or a building "against the general trend of disappearance of public space" (Koolhaas in Kuhnert e.a. 1994 p.18)<sup>116</sup>. I would see this way of

<sup>116</sup> «Wij vatten onze projected op als openbare gebouwen, tegen de algemene tendens van de verdwijnende openbare ruimte.» (Koolhaas in Kuhnert e.a. 1994 p.18, , transl. by the author)

treating program as a landscape as the formal architectural expression of the political and social implications of landscape architectural design. Contrary to colleagues who sometimes miss that social dimension in the analytical toolbox of Steenbergen & Reh (i.e. van der Velde 2018) I would locate it at Jussieu in the composition of program-form, and its integration into ground-form, spatial-form and metaphorical form. In other words, the political and social implications are not peripheral to the project or my analysis of it. The essence of the Jussieu design with landscape strategies is to impose a new public openness into the desolate and overly controlled Jussieu campus: a spatial condenser breaks open visible and invisible boundaries, and in turn transforms the cut-off campus into a landscape again.

Cornubert states that this design was 'landscape urbanism', *avant la lettre* (interview A1.1.): an early amalgam of a novel approach to the built environment across the divide of landscape and urban space, and across the disciplinary divide of architecture and landscape architecture. Since Jussieu remains a concept, this idealised retrospective however misses a certain reality check, therefore my last subsidiary question:

**What kind of landscape design strategies are successfully applied to the design of the Jussieu case of architecture? (Q. 1.1.6.)**

Two particularities did not allow this design to pan out like it should have as a built project. On the one hand, it is an unfinished design where ideas are not materialised and thus an architectural concept rather than an architectural design. Completion of the design would have involved thousands of decisions up to a finished building and would have ideally served as a filter and concentration of ideas into the essential message. On the other, the landscape inside the two Libraries was never made publicly accessible. Like any landscape, only the experience of it produces the actual appreciation, and in my view, this building would have commanded a sensational appreciation.

The final assessment of what kind of landscape design strategies would have been successfully applied remains limited to the critique of the unfinished plan, including the evocation of it with a simulation in my pro-construction.

However fragmentary it may be as an unbuilt design, I think the message is clear: At the Jussieu libraries, landscape design strategies enrich architecture to reach a new level of urbanity in a public building. A set of proprietary formal tools invented for the project changed the means of architectural space. This change occurs within a dense urban context, which before seemed reserved for anything but landscape. The change is still hidden partially in drawings and models, and the memories of designers and the traces of their thinking. Given the nature of such records, only other designers may have understood what the potential of this project was. In my further studies I could observe particles of 'Jussieu ideas' floating around in nearly every project on my long list of almost 100 projects, including the next two cases studied (ch. 5 and 6). Built or unbuilt, the two Libraries at Jussieu are unmistakably a crucial work of architecture.

**In what way would landscape design strategies (as they would have been applied in Jussieu) change how we understand and create Architecture? (Q 1.1.1.)**

To the main question above, I have a threefold answer derived from Jussieu.

The first relates to the human experiential environment - our living space. Jussieu projected a liberated public space inside a building as an explorable landscape of a giant continuous five hectares of floor space. Leaving many parts undefinable in its use, the programming strategy went beyond the conventions of its time and program.

Second, Jussieu takes a novel approach to freedom of space, leaving as much undefined as possible, which was unconventional within the architectural field at this time. As an artificial landscape it is relatively limited, roughly the size of a small park, by several landscape means exploring the technically and architecturally most realisable level of latitude.

Third, in exploring such latitude, and as a proposal to integrate a landscape into architecture, the Jussieu project went as far into landscape as an architect could go then. Conversely, OMA may have gone too far beyond the limits set at that time for the possible workings of a building, contributing to its unrealised status.

The actual landscape experience evoked by the architectural design was never provided by the building Jussieu. Although I provided imagery and simulated parts of a design development that never happened, the limitations of this case are immanent in the fact it does not exist and live as a real building. It is more like a living ghost or theoretical ancestor of the few key cases studied here, which limits both enthusiasm and critique to a concept.