Edited by
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FENSE

a dictionary

architecture / politics
history / territory

Parenthèses

PARIS

PORTE MAILLOT
ARC DE TRIOMPHE
CONCORDE
LOUVRE

Location m

Location map

Aerial view of La Défense Seine Arche.
⊙ Drawing: Luc Guinguet, Graphic design: LM communiquer & associés, 2009.

Foreword

Signing with its vertical silhouette the western horizon of Paris, punctuating the city's historic axis, La Défense is an urban quarter at one and the same moment new and timeless. In terms of the long and measured history of cities, it has the air of being an almost instant uprising, a piece of development whose pace signals extraordinary ambition and very substantial human, material and institutional. resources, united, from September 1958, by the Public Agency for the Development of La Défense (Epad), the first of its kind in France.[1]

However, after more than a half century of existence, La Défense is fundamentally and permanently integrated into regional, European, and even world geography. Born of the Thirty Glorious Years, it can no longer be understood by the measure of a mythical developer from that era long gone. A place to work, but also to live, to consume or to visit as tourist, La Défense has become an urban reality in its own right, which cannot be reduced to the sum of its projects, however numerous, which it inspired and of which it has been formed as sedimentary layers of material. Beyond that, it appears as a place with a more complex history, of which this present volume is a contribution to our understanding of its range and compass.

La Défense has certainly been the subject of several historical treatments (articles, books, doctoral theses, research reports and documentaries etc.).[2] However, there is no single work which sketches an overall synthesis of its history, already lengthy. It is this editorial gap to which we are attempting to respond, by focusing on three viewpoints.

[1] Its current title is the Public Agency for the Development of La Défense-Seine Arche (Epadesa).
[2] The Works are referenced in the bibliography at the end of the volume.

▷ From Seine to Seine

First of all; we have considered La Défense in all its spatial and temporal dimensions. Remembering that the public development agency is the key player in this story, it is effectively the whole territory entrusted to it in 1958 which we have taken into account. This includes, of course, the business district, easily identified in its setting by its spiky skyline and, on plan, by its circular boulevard in the form of a pear. But the zone also includes a project which is located to the rear of the Grande Arche, extending right up to the Seine, covering much of the plain of Nanterre. Embracing a large share of past or current speculative developments, this zone, long called "Zone B" and today known under the title of "Seine Arche" can claim a full and genuine place as part of this history of La Défense. Besides, it seemed to us that this whole territory could only be understood by observing it across its whole cycle of transformation. For that reason, our study period begins with the first propositions for its development stemming from the interwar period and extends until the implementation of the "Renewal Plan" promoted by the State in 2006. It is therefore a question of understanding the singular rhythm of its history, its key moments, its break points, its periods of inactivity or of turbulence, of its slowing down or speeding up.

▷ Singing together

Having made that clear, if a little presumptuously, we have taken it as read that the whole work will be a collective one. Historians, architects, town planners, engineers, sociologists and economists, more than fourty authors were invited to contribute, bringing to the collective enterprise their own specialist angle of view and matters relevant to their own particular discipline. Three principal themes have been developed: architectural, political and cultural.
A real enough district, but also a place of myths, shaped by literary, painterly or cinematic presentations. In effect, La Défense ranks as common ground in the collective imagination. At the same time cause and effect of a certain urban culture, it demands being approached via social and cultural history.
Undeniably linked to the French brand of capitalism, totally dependent on the markets (economic, property and financial), criss-crossed by political moves in constant regroupings, La Défense is

also a playing field of power. It is therefore a question of unscrambling the logic of the players, the relationships between forces, the institutional fixes which, at every stage shaped the business of development.

Finally, whatever the scale under review, La Défense appears as an object planned to death by several generations of designers and builders. True laboratory of urban experiment, it represents an ideal vantage point from which to observe the evolution of architectural, town planning and landscape doctrines amongst the different professions who have exercised them and their operating conditions in France for half a century. These are the three storytelling threads which we gave ourselves to weave.

▷ Modernity, French style

We need to insist upon certain important points. First of all, La Défense, thought of as a radical and innovative urban form, remained a prototype. If, at the time when the 1963 plan was given the go-ahead, the deck as an urban form and the separation of circulation systems were concepts widely familiar to town planners and even formed part of the official recommendations in Great Britain made by the Buchanan Report.[3] They remained in most cases only a paper dream. However, one can see traces of them in the Part Dieu district of Lyon, in the New Towns of the Paris Region, or in London's Barbican district. In Zone A, the public realm on the deck — "the esplanade of La Défense" — remains to this day a very definite success, a stunning and singular place which enjoys popular support, notably on the occasion of great public events.

Nevertheless, we must insist on the weight of coincidence in the evolution of the project. For a considerable period (1950-2011) a number of projects, often studied in the minutest details, such as the Tour Lumière Cybernétique (Cybernetic Light Tower) by Nicolas Schöffer or the Tour Sans Fins (Tower Without Ends) by Jean Nouvel,

[3] Traffic in Towns, The Buchanan Report, Ministry of Transport, HMSO, 1964. The report was translated into French Under the title: Rapportdu groupe pilote et du groupe de travail créés par le Ministre des Transports de Grande-Bretagne, L'Automobile dans la ville. Etude des problèmes à long terme que pose la circulation dans les zones urbaines, Paris, Imprimerie nationale, 1965. The concept of the deck as a means of resolving the problem of trafic movement in urban centres was developed in similar fashion in: Percy Johnson-Marshall, Rebuilding Cities, Edinburgh, Edinburgh University Press, 1966, p. 54.

were abandoned for political or economic reasons, or in accordance with evolving tastes in town planning. If one takes an interest in the history of our society, these "theoretical" projects show that improvements in our standard of living take place just as much as the result of what might be called "paper architecture" as from actual built projects. The architecture of cities is written jerkily, between pragmatism and symbolism, realism and futurism — and even sometimes goes backwards.

Finally, La Défense illustrates another aspect of French culture, inscribed by Rem Koolhaas[4] who reckoned that no other European country had been so enamoured of modernity in the sixties as France. La Défense, the RER, the TGV[5] and Concorde[6] were the most advanced symbols enjoying international renown, a major assert for the Grand Paris region in the worldwide competition between cities.

▷ A method

Concerning the actual format of this work, with pretentions less exhaustive than at the outset; it was a question of launching history which remains for the most part to be written, opening up directions for research rather than solidify a fragment of data. Consequently, we have put aside the idea of writing a linear history, continuous and singleminded. The dictionary format seemed to us in fact more relevant and accessible. It allowed us to combine what could have been an infinite number of entries, viewpoints and explanations of the same subject. It also seemed likely to be the most useful for the future reader. With more than 60 illustrated entries, of variable lengths, arranged in alphabetical order, equipped with notes and cross-references, a general index and a thematic bibliography, this book represents a real working tool for all those interested in the history of contemporary town planning. To round off this tale-telling work, a specially commissioned graphic and cartographic project brings together the analytical data and represents it in the form of

[4] In an open session during the International Colloquium on Architecture held at the Pompidou Center on the 1st and 2nd of October 2009, he declared: "Modernity (in France) is seen as an exciting business and is very popular…"

[5] Entering into service in the eighties, the firts TGV was developed in the Workshops of Alsthom in 1971, based on studies carried out in the sixties.

[6] The latter is a British-French joint project, but the first test flight took place over Toulouse in 1969.

a timeline and a game of original cards, entomological and in sync. These displays retrace, in time and space, the rhythm of events, the genealogy of completed projects, the progressive removal of the old artifacts and the building of the singular landscape of La Défense Seine Arche in the Grand Paris region.

With these two perspectives, historic and cartographic, this work presents La Défense in all its complexity, a mixture of willfulness and slow sedimentation, of great architectural projects and of more commonplace events.

▷   Pierre CHABARD et Virginie PICON-LEFEBVRE

/ P. Chabard,

La Défense Seine Arche, aerial view.
Photographer: Alex MacLean, 2010.

The site of La Défense, side view from Boulogne-Billancourt.
Photographer: Alex MacLean, 2010.

ud (Emile)

Aillaud (Emile)

In 1971, Epad (Etablissement public d'aménagement de La Défense; Public Agency for the Development of La Défense), decided that a 15 hectare zone bordering a 24 hectare public park south of the B1 Zone in Nanterre would be allocated to public housing. Its implementation was entrusted to three public housing organisations — the OPHLM (Office Public d'Habitations à Loyer Modéré; Public Office of Low-Rent Housing) of Nanterre, the Paris Region, and the Hauts-de-Seine Department — while the Epad retained over infrastructure, the development of the external spaces and the landscaping. Emile Aillaud (1902-1988) was put in charge of the first project, which included an initial phase of construction of 1,452 flats. He imagined a set of 24 towers (in the event, 18 were completed) based on the idea of a vertical "forest," something he had not been able to implement for his earlier undertaking in Chanteloup-les-Vignes (La Noé Estate, 1966-1984). The towers of varying heights — the tallest one is 38 floors — were to have undulating facades covered with ceramic tiles.

The colouring of the facades was entrusted to Fabio Rieti, a visual artist who collaborated on all of Aillaud's projects. He worked out a sky design intended to alleviate any overbearing presence of the buildings, which were immediately nicknamed Tours Nuages (Cloud Towers). The tower windows were to disappear within the design thanks to the technique of sliding formwork, enabling the glass to be incorporated without revealing the wooden frames. The windows could therefore take on different shapes — circular, square with rounded angles, or leaf-like. By liberating himself from the conventional format of rectangular windows and designing facades using curves and counter-curves, Aillaud advanced a supple way of freeing mass housing from the monolithic and rectilinear shapes typical of housing estates. But it is at ground level, especially, that Aillaud sought to inject a "poetic way of living." He suggested having a three-level underground car park, nicknamed Le Serpent (The Snake) because it snaked around to adjust to the difference in levels, thus leaving room at ground level for a park filled with plants and hard landscape, where stone mounds of stones are arranged alongside clusters of trees, with sculptures dispersed throughout.
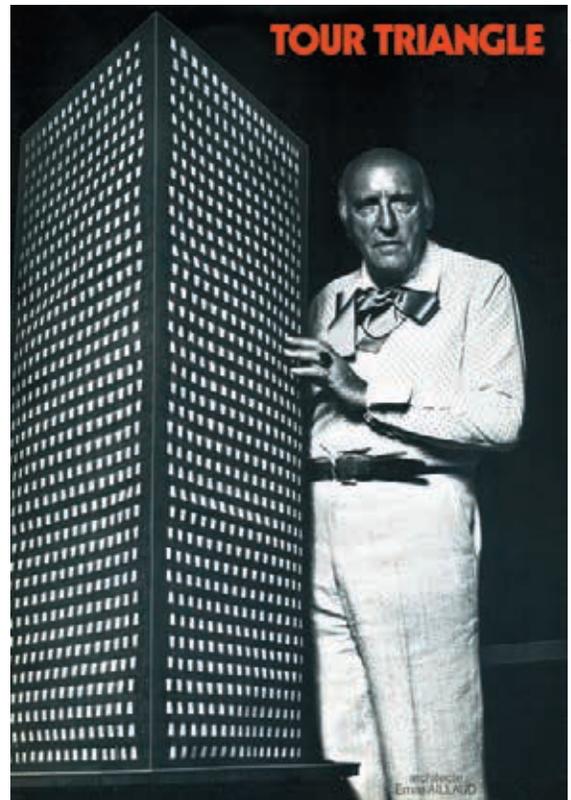
Emile Aillaud handling his Triangle Tower, which he proposed in support of his scheme for Tête Défense.
○ Brochure *La tour Triangle à La Défense, 40,000 m² of office space*, Sofracim, c 1972. Epad Archives.

▷ Immeubles miroirs (mirror buildings)

Jean Millier, director of the board of the Epad since 1969, was seduced by the idea of breaking away from the preoccupations that accompany mester planning to concentrate on the relationship between the buildings and what residents see at the ground level. He knew Aillaud back in 1963, during his project for La Grande Borne estate in Grigny, for which he had been one of the contracting parties alongside Paul Delouvrier, who was then Delegate General for the District of the Paris Region. In 1972, convinced that Aillaud would be able to revitalise the image of La Défense, he decided to put him in charge of a counter-project to the proposal of architects Ieoh Ming Pei and Araldo Cossutta for Tête Défense (Head of La Défense), who had imagined a set of twin towers — 195 metres high and 70 metres apart — linked to each other by a glass suspension bridge. Located
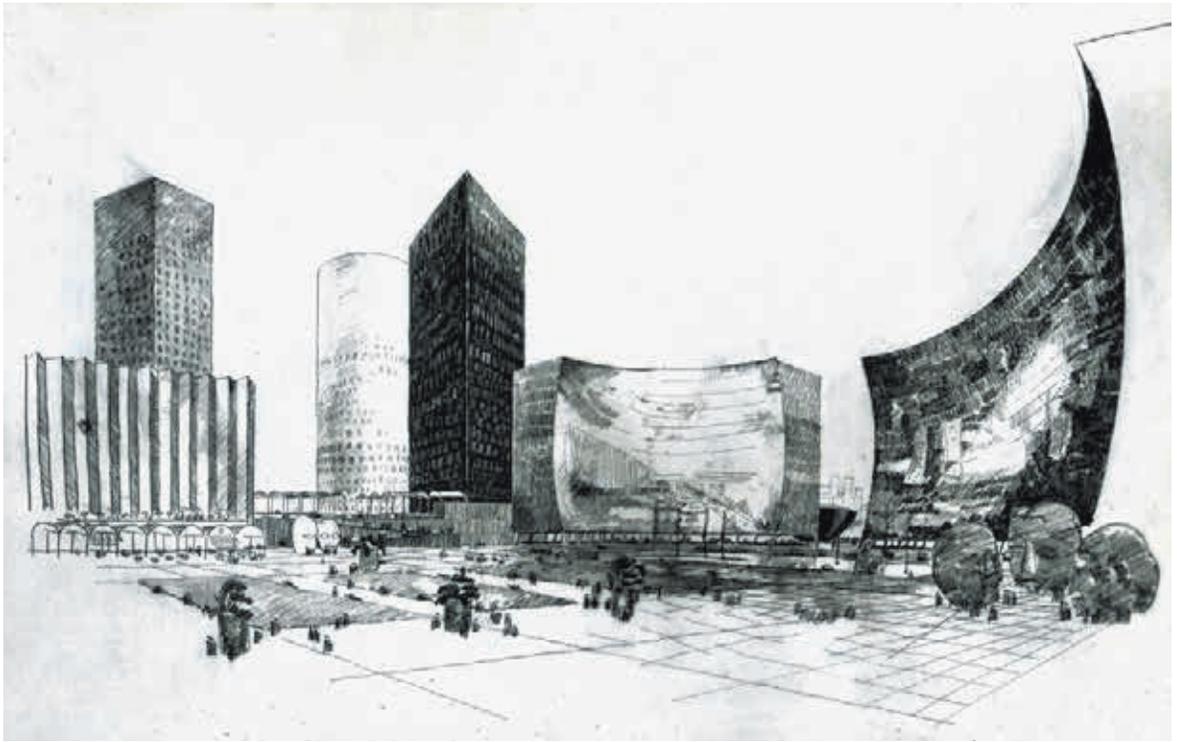
Sketch of the preliminary concept for Tête Défense as envisioned by Emile Aillaud: the two mirror buildings, 70 m high, are complemented by a cluster of three towers (one tower square in plan, one circular and one a triangle in plan); between the mirror buildings one can make out an upturned dome enclosing a conference facility, 1972.
○ Epad Archives.

across from the Cnit (Centre des nouvelles industries et technologies; Centre for New Industries and Technologies), they would have acted as a frame for the axis from the Louvre as well as being the highest point along the Voie Triomphale (Triumphal Way). Although it would have added to the majestic character of the axis, the conception did not find favour with Millier, whose desire was to "calm things down" by opting for a more modest and less demonstrative construction.

Aillaud's proposal for Tête Défense broke away from previous proposals by suggesting closing the Triumphal Axis with two 70 metre high curved buildings, which he called immeubles-miroirs (mirror buildings). One would have black facades and the other silver. The composition also included several ancillary constructions — three small office towers facing the Cnit, with square, triangular and circular floor plans respectively, as well as an inverted dome, inspired by the one by Niemeyer in Brasilia, which would house conference rooms and be located at the rear of the mirror buildings, just above the circular boulevard of La Défense. With this project, Aillaud

freed himself from all the issues linked to the question of the axis. Instead, he suggested a scenography where both buildings would function as surfaces alone, with no feigned depth. President Georges Pompidou immediately approved the project to close off the Triumphal Axis and, in this way, showed his determination to establish a new political direction in terms of architecture. However, even despite this, the controversy did not end. The Académie d'Architecture (Academy of Architecture), in particular, lamented the fact that the mirror buildings would be visible from the Place de la Concorde. Aillaud therefore accepted reducing their height to 50 metres.

▷ **Various "heads" for La Défense**

This modification was not enough, and the Epad chose to consult other architects. Thirteen were selected, among whom were Henry Bernard, Robert Camelot, Pei and Cossutta, Joseph Belmont, Jean de Mailly, Jacques Kalisz and Henri Ciriani, Henri Pottier, and Robert Auzelle. Their projects were drawn during the winter of 1972-1973 and submitted to Carp (Comité d'Aménagement de la Région Parisienne; Committee for the Development of the Paris Region). Aillaud followed his original line of thought. He used his design of the mirror buildings for which he set the height at 60 metres and replaced the dome by a sculpture of a giant head, La Tête (The Head), by François-Xavier Lalanne. This sculpture, which was to contain a 600-seat conference room, was presented as a thinking head, a "vision of the contemporary man for whom the techniques and the infinity of science can

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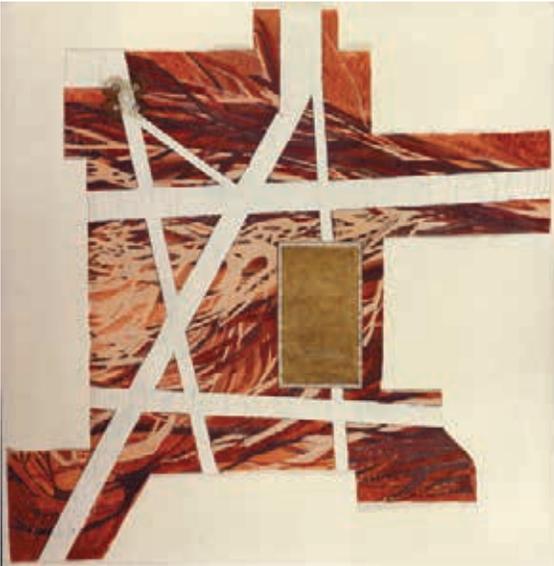
View of the La Défense Concourse, c 2010. Architect's base drawing: Emile Aillaud.
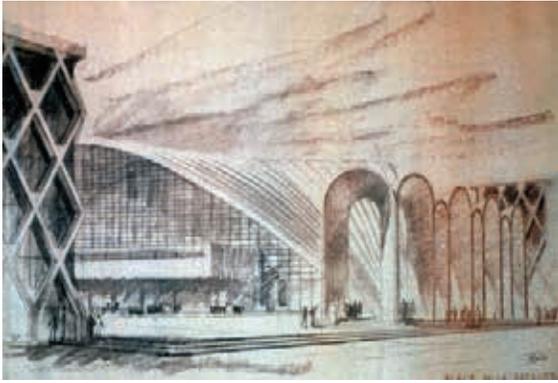   Epad Archives.

Proposal for the Concourse, c 1973. Architect: Emile Aillaud.
   Epad Archives.

reach a metaphysical dimension." On July 10, 1973, Olivier Guichard, Minister of Territorial Development, Public Works, Housing and Tourism, announced that Aillaud's was the winning project.

Aillaud thus resumed his work on Tête Défense. This time, he paid great attention to climate control issues for the glass buildings. Tests were conducted on scale models, in collaboration with the Institut d'optique théorique et appliquée (Institute of Theoretical and Applied Optics) and the CNRS (Centre National de la Recherche Scientifique; National Centre for Scientific Research), laboratory of Professor Trombe (inventor of the famous "Trombe wall") in order to evaluate the actual effects of heat on the facades. The walls, in the shape of tori or paraboloids of revolution, would be hit by rays of sunlight, causing a 4 metres deflection on the horizontal and vertical curves to the centre of the facades. Moreover, many studies were conducted on the pool located in front of the mirror buildings, which was supposed reduce the heat load on the buildings. Calculations made by the Institut d'optique identified the areas of the facades that were likely to become overheated, which prompted Aillaud to draw a large flower in front, whose petals were pools of ever-changing water. Aillaud's work demonstrated his determination to establishing a symbiosis between architecture, technology, and art. The resulting formal liberty had no longer so much to do with the structure of the buildings — like the shell of the Cnit a few years earlier — but to the energy performance of the buildings and the public realm.

Proposal by Emile Aillaud for the "La Défense Square", 1975.
Epad Archives.

Elected in 1974, President Valéry Giscard d'Estaing immediately proclaimed his attachment to national heritage, and asked Aillaud to resume his project after having once again reduced the height of the mirror buildings, this time to 35 metres. Aillaud decided to pursue the development of the square and gave free reign to his interest in history. As an answer to postmodernism and its concern to marry architectural creativity with references to the art of the past, he suggested setting up a "French-style" labyrinth beyond the pedestrian deck. The garden was to be enriched by seven marble arcades, which would create a symbolic separation between the public character of the square and the private world of the mirror buildings. In order to accentuate the "urban gate" effect, the Quatre Temps shopping centre was supposed to arrive at the level of the arcades, and its structure be echoed across from it by the Maison de La Défense (House of La Défense) hosting Epad's services.
At the centre of the square, along an experimental lawn, itself surrounded by columns — just like that of Hadrian's Villa — was intended to be a pared area designed by Elisabeth Smnavoska. This literal reference by Aillaud should not be interpreted here as his merely jumping on a bandwagon. In fact, it was an approach he had followed for some time. He had used the processes of collage, irony, and re-invention as early as 1953, for his Cité de l'Abreuvoir project in Bobigny, with its six towers of eleven stories — three in the shape of stars and three round ones — which he had visualised as being "poetic and humorous." These same processes would reach a new apex with Lalanne's sculpture-building, which Aillaud, in his third version of the project for Tête Défense, suggested placing at the heart of the square.
As we now know, this last project would never see the light of day. In 1983, Joseph Belmont was named at the head of Epad and decided to launch an international competition for Tête Défense, which was won by Otto von Spreckelsen. On its completion, Spreckelsen's project would permanently eradicate the memory of the successive formal arrangements that Aillaud had imagined for that same site. His barely-finished arcades were destroyed in 1988, during the construction of the Grande Arche, at Otto von Spreckelsen's request, in order to open up the perspective of the Arche. Apart from the design of the 200 metre north wall of the Quatre Temps shopping centre, and the completion of the Place de La Défense, as well as the fishnet facade of the shopping centre, which was supposed to prompt a similar treatment on the facing buildings in Courbevoie, but was never completed in that style, there is no visible trace of the ideas that occupied Aillaud's mind over a period of ten years. Yet these were widely published at the time and shown in 1979 at the Metropolitan Museum of New York during a presentation of the most notable architectural achievements of the period. The only contribution of Aillaud's left in La Défense are the Tours Nuages of the Cité Pablo Picasso, to which were added another 600 flats a few years later in the Fontenelles neighbourhood. Completed in 1978, the ensemble of these developments forms one of the major works of that period and is a testimonial to the desire to liberate residential architecture from the demanding conditions of the time.

▷   P. L.

See also:

➔ Architects │ Critical Reception │ Housing │ Landscape / Landscape Architects │ Quatre-Temps (Les) │ Social Housing (Grands ensembles) │ Zone B

Partially completed blind arcade, c 1981. Architect: Emile Aillaud.
Epad Archives.

Americanism

Often referred to as Manhattan-sur-Seine, the links between La Défense and America seem well-established. Yet, this is deceptive. Although clearly present, the influence of America is limited both in terms of its extent and its duration. When work first began on La Défense, the impact of Haussmann and Beaux Arts architecture on urban planning was in decline, but still very much in evidence. The project began as a classic architectural plan for a major avenue, the voie triomphale. However, by the time the architectural competition for the voie triomphale was launched in 1931, it was clear that certain proposals had been influenced by the skyscrapers then under construction in America. As the role of La Défense moved closer to that of business district with groups of office blocks, the public authorities and architects had no option but to look to see what was being done on the other side of the Atlantic. After all, America was the cultural reference in the post-war period, especially in the area of architecture.[1]

▷ **Journey to America**

One of the first expressions of American influence in La Défense was the involvement of three successive generations of French architects, all of whom who had studied or worked in the United States. The role played by the first of these architects, Jacques Gréber, dates back to before the establishment of Epad, the State-owned planning authority for the La Défense area. Following on from the construction of the Cnit building, Gréber designed the site's first office block for the

American company Esso, a subsidiary of the Standard Oil Co. group. A sculptor's son, Gréber did not take after his father professionally, although he did follow him to America after his graduation from the Paris School of Beaux-Arts (Ensba) in 1909. He spent the first part of his career there, designing many gardens for private individuals as well as working on much larger projects.[2] It therefore came as no surprise when Esso approached him and his brother Pierre to collaborate with their own New York-based architect, Lathrop Douglass, on the design and construction of France's most modern commercial building.[3]

A number of La Défense's subsequent generation of designers also travelled to America. First there was Robert Camelot, who won the Delano-Aldrich scholarship, in 1931, an award which gave Ensba students the opportunity to visit the United States. During his year there, Camelot travelled to Canada and, more importantly, taught for a semester at the School of Architecture of the Massachusetts Institute of Technology (MIT), where he stood in as a replacement for another Frenchman, Jacques Carlu. On his return to France, he attended Jacques Gréber's urban design lectures at Paris university's institute of urban planning, a choice almost certainly influenced by his trip to the States. He returned to the United States on two occasions, the first of which was in 1939, to construct the French pavilion for the New York World Expo, under the supervision of the man who would go on to become Epad's first director, André Prothin. He returned again in 1956, the year in which La Défense's first master plan was drawn up.[4] This third visit formed part of an invitation extended by French industrialists Aluminium français to the architectural society Cercle d'études architecturales. In 1951, two other key contributors to La Défense's first master plan, Jean de Mailly and Paul Herbé, embarked on a working trip with the aim of observing and reporting on American productivity methods. De Mailly, who would remain as consulting-architect with Epad for almost the same length of time as Camelot, was also on the 1956 trip, as was Pierre Dufau,[5] another architect who went on to construct a number of important buildings in La Défense.

This approach of looking to America was also taken by a third generation of French architects. Although focussed on the project management side within Epad, architect Claude-Hughes Boistière is perhaps one of the most important architects to have worked on the La Défense project. In 1946, he began his architecture

[1] See J.-L. Cohen and H. Damish (ed.), *Américanisme et Modernité, L'idéal américain dans l'architecture*, Paris, ehess-Flammarion, 1993.

[2] Jacques Gréber also designed Philadelphia's Benjamin Franklin Parkway and produced proposals for the development of Phildelphia city centre, published in 1917 and 1926 respectively. He also produced plans for the development of Ottawa, Canada and the surrounding region between 1937 and 1950. See: A. Lortie, *Jacques Gréber (1882-1962) et l'urbanisme, le temps et l'espace de la ville*, doctoral dissertation, Institut d'urbanisme de Paris, Paris XII University, 1997, mimeog., pp. 32-42.

[3] See P. Trébouet, "Un bâtiment type: le nouveau siège social de la SAF Esso Standard à Courbevoie (France)", *Acier-Stahl-Steel*, Vol.28, October 1963, pp. 437-445 and "Douglass, Lathrop" in *National Cyclopedia of American Biography*, New York, J. T. White, 1964, Vol.1, p. 84.

[4] *Techniques et Architecture*, May 1957, p. 18.

[5] See I. Gournay, "Retour d'Amérique (1918-1960), Les voyages de trois générations d'architectes français" in J.-L. Cohen and H. Damish (ed.), *op. cit.*, pp. 285-316.

The Esso Tower, built upon *terra firma*, c 1965. Architects: Jacques and Pierre Gréber, Lathrop Douglass, 1963.
○ Photographer: Jean Biaugeaud. Epad Archives.

studies at McGill University in Canada. This experience allowed him to create distance from France and explore a more modern approach. This approach would later prove very useful, in particular when it came to developing the architecture of La Défense's first skyscrapers.[6] Another architect to have spent time in America was Jean Dimitrijevic. Working mostly on the design side, Dimitrijevic designed what was then viewed as a classically American building, the Quatre-Temps shopping centre. After graduating from Ensba in 1957, he joined forces with his former boss Guy Lagneau and left for the United States two years later. He attended lectures at MIT's School of Architecture and City Planning while working in Ieoh Ming Pei's design firm. In 1967, he returned from France to teach at the University of Minnesota, and worked for another major contemporary American

architect, Ralph Rapson.[7] The experience he gathered during this period undoubtedly proved invaluable when it came to designing a building which was unheard of in France at the time but common across the Atlantic.

▷ **Jean Millier and the American model**

If an "American period" ever truly existed in La Défense's history, it occurred during Jean Millier's time as head of Epad. Soon after taking up his position in 1969, Millier set the tone by opting for a typically American plan for the development area surrounding the Cnit building. Breaking with tradition, he also decided to entrust the design of this section of La Défense to an American — the architect and urban planner Victor Gruen.[8] The site for the project, later renamed Tête Défense, was located in the western sector and earmarked for the construction of an *American-style* shopping mall. Millier was effectively pursuing the same strategy he had initiated while secretary general of the Institute for the development and urbanisation of the Ile-de-France region

[6] Interview with Claude-Hughes Boistière in J. Beauchard (ed.), *Historiographie de La Défense*, université Paris Val-de-Marne, 1994, pp. 22-23.
[7] See "Jean Dimitrijevic, architecte dplg, Etudes, formation, titres et fonctions", in J. Dimitrijevic, biography (Epad archives, Architects file).
[8] M. J. Hardwick, *Mall Maker, Victor Gruen, Architect of an American Dream*, Philadelphia, University of Pennsylvania Press, 2004; A. Wall, *Victor Gruen, From Urban Shop to New City*, Barcelona, Actar, 2005.
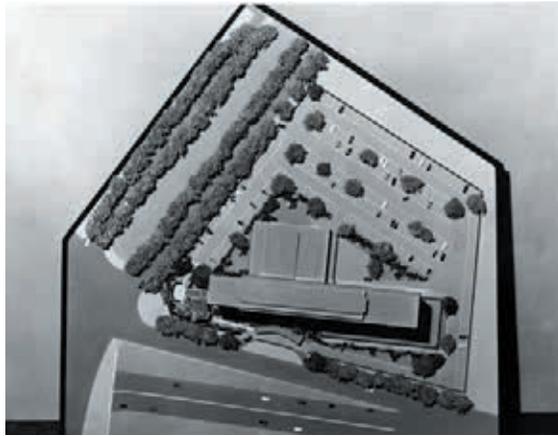
Model of the Esso Tower, 1958. Architectes: Jacques and Pierre Gréber, Lathrop Douglass, 1963.
○ Epad Archives.

Aerial view of the worksite of La Défense, with the Esso Tower in the centre, c 1967.
○ Epad Archives.

(iaurp) where he had already invited Gruen to work on a similar type of project.[9] However, up to this point, there had been limited interest in what was being done in urban planning in the United States. With La Défense, that all changed.

This shift coincided with Epad's decision to retain Sefri — a financial studies and property development company — to develop the high-rise office block to be built near the Cnit building. Headed up by Jean-Claude Aaron and his right-hand man, Jacques Tézé, a brother in law of Francis Bouygues,[10] Sefri was one of France's leading property developers. And not surprisingly, it also had links with the United States.

Aaron had begun his career building residential units for Nato officers. Tézé was also close to Edgar Tafel, a right-hand man of Frank Lloyd Wright. Aaron had also succeeded in securing financial backing from American investors for the Tour Montparnasse project, which Sefri itself would go on to develop. Disappointed with Gruen's work, Millier and Aaron began looking to appoint an American architect, one with an illustrious track record in high-rise office buildings.

This prompted yet another significant trip to America, this time to find a new architect and view a number of innovations in the commercial property sector. The delegation was made up of Millier, Boistière, Aaron and Tézé along with financier Jean-Pierre Lacoste.[11] The trip lasted more than two weeks and involved visiting seven of the largest architecture firms in the country. The bulk of this time was spent looking for the right architect for the high-rise tower project. In Atlanta, John Portman showed them the Peachtree Center, a group of office blocks he was constructing at the time.[12] However, New York was where they spent most of the trip. Bouygues introduced them

9 See C. Orillard, "Shopping malls *versus* agoras: la conception des équipements intégrés centraux des villes nouvelles face aux centres commerciaux", in A. Korganow (ed.), T. Meehan and C. Orillard, *L'Interaction ville-équipement en ville nouvelle, Réception et adaptation de la formule de l'équipement socio-culturel intégré*, Paris, Laboratoire ACS, 2005, pp. 84-98.
10 See D. Barjot, "Francis Bouygues, L'ascension d'un entrepreneur (1952-1989)", *Vingtième siècle, Revue d'histoire*, no 35, July-September 1992, p. 48.
11 Sefri, "Voyage aux Etats-Unis du 12 au 21 Décembre 1969, Compte-rendu de Mr. Tezé", January 2, 1969 (Epad archives).
12 See J. Portman and J. Barnett, *The Architect as Developer*, New York, McGraw-Hill, 1976.
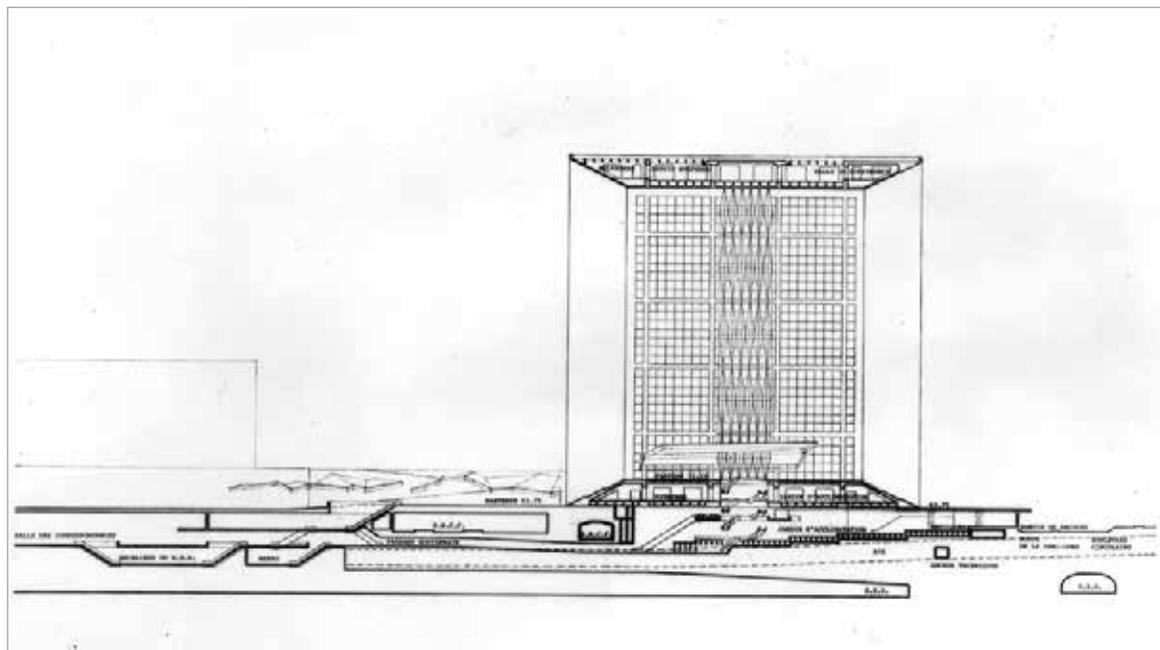
Cross section of the Grande Arche and the pedestrian deck, c 1985.
○ Epad Archives.

Placing of the facade and supports between the two pylons, June 1987.
○ Photographer: Claude Bricage.

project packages. As leader of the building and public works contractors, Bouygues ran three contracts covering the civil works and the facades. As leader of the worksite, Bouygues established a site office of 40 staff and employed 600 workers. The final dimensions of the Cube (117 m × 112 m × 111 m high) called for unusual techniques. The building rests on 12 huge foundation piles 30 metres high threaded between the infrastructure of the deck. Neoprene sheets are interposed between the "Cube" and its foundations to avoid transfer of vibrations from the trains running below. The worksite as a whole was enormous — and dangerous. Two workers were killed and more than a thousand worked there at any one time, many of them temporary hires. The La Défense worksite resembled instead one better suited to building a *bridge*, such as that just completed by Bouygues to link the Ile de Ré to the mainland, rather than a building. Constructing the facades, a crucial matter in Spreckelsen's view, did not pass without problems in terms of the choice of the marble which was to cover the canted surfaces, the base, the podium, the roof and part of the facades. François Deslaugiers was able to devise fixings to secure the different materials (marble, glass and aluminium) so as to achieve the perfect flatness intended to express the character of the "Cube". He also went on to design the panoramic lifts.

A further area of contention was the concept of the "cloud" at the heart of the Arch. Spreckelsen had drawn very sketchily at the time of the competition a sort of glass roof to recreate a human scale; This structure was to come to ground and cover the "foothill" buildings. At the time of his death no design solution had been approved. However, Spreckelsen had met the Irish engineer Peter Rice to consider a solution

The building site for the Grande Arche and the worksite for the foundations.
○ Epad Archives.
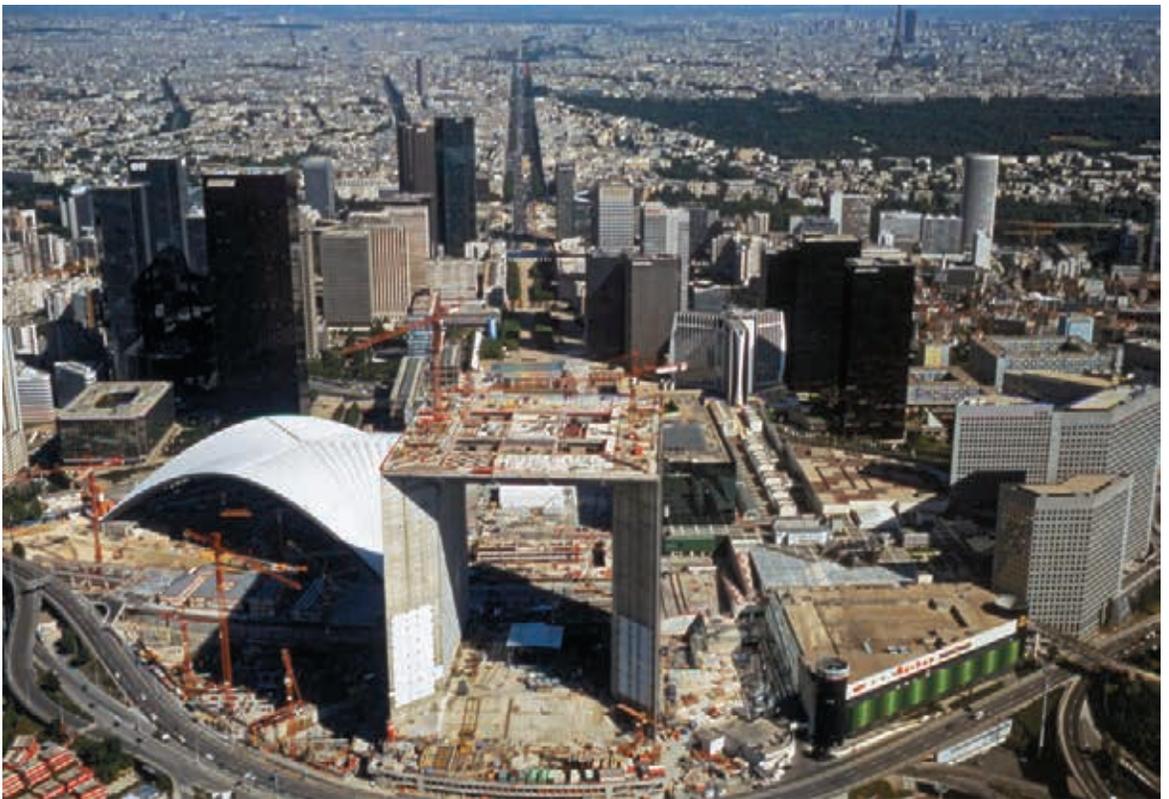
The Grande Arche under construction, 1985-1989, the building of the flanks and the placing of the roof .
Epad Archives.

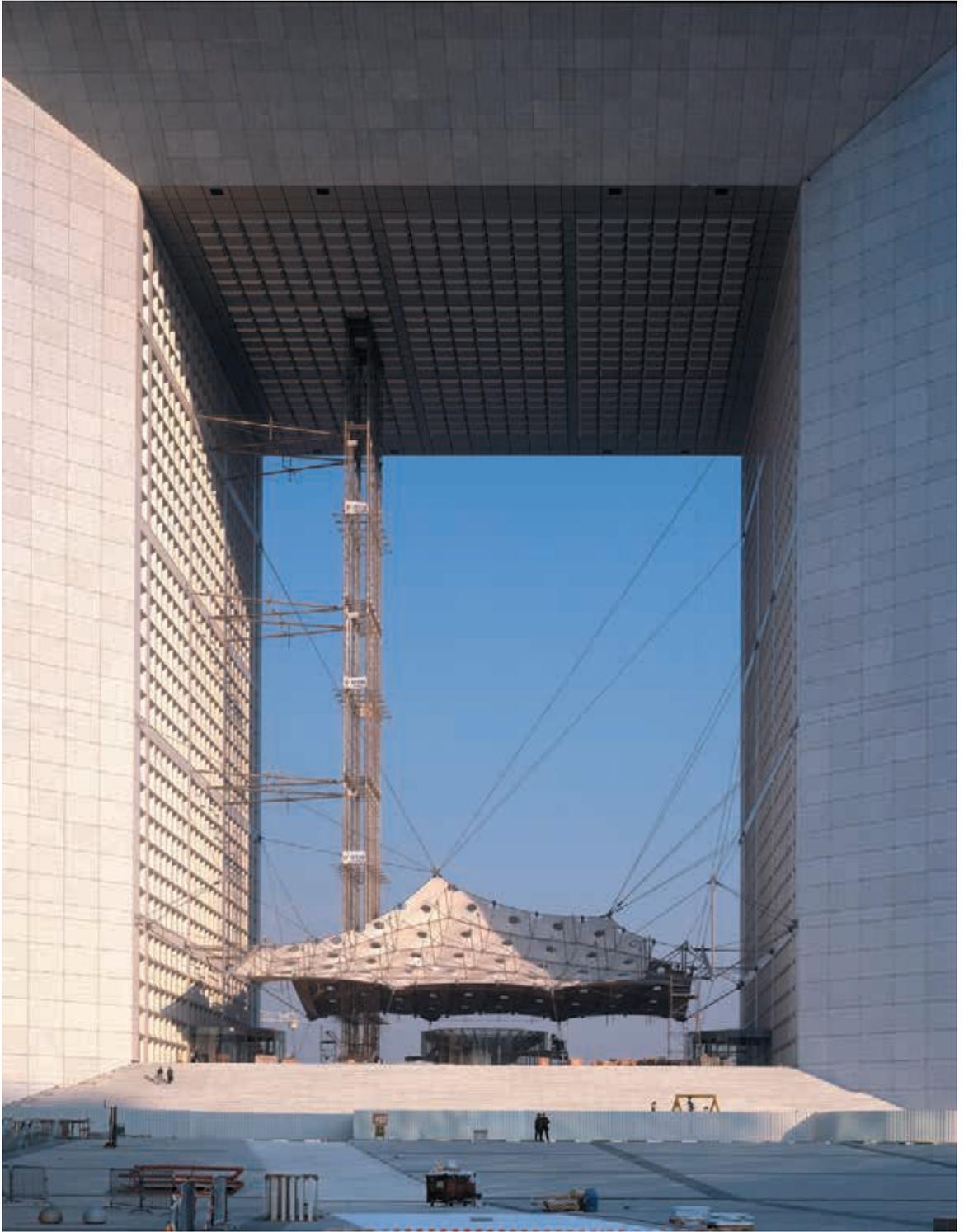The Grande Arche on completion, aerial view.
Photographer: Alex MacLean, 2010.

in canvas which was eventually approved by project management, who signed off this structure, punctured by openings through which one would appreciate the grand scale of the space within the Arch. The work was welcomed enthusiastically. The Danish architect had succeeded in giving form to his idea and in saving its essence in the political and financial battle, from which he did not himself emerge unscathed. The choice of the Arch as meeting place for the G7 in 1989 showed the extent of François Mitterrand's satisfaction, as the cameras of the world were turned upon it. After three years of development studies and four years on site, the Grande Arche has become a Parisian monument, a tourist destination. Its enigmatic facades opening out to Paris and to Nanterre, made it possible to imagine a new role for Zone B than that of back stage for the business quarter. Following Zone A, Zone B (now called Seine Arche) is going to focus the essence of deliberations and projects, a new chapter then opens for the development, that of the axial progression towards the west.

▷ V. P.-L.

See also:

➔ Architects │ Axis │ Buildings and Public Works Companies │ Concrete │ Critical Reception │ Film (La Défense in the) │ Koolhaas (Rem) │ Nouvel (Jean) │ Pellerin (Christian) │ Photography │ Public Development Agencies │ Toponyms │ Tourism

The Grande Arche: project completion, 1989.
Photographer: Stéphane Couturier.

/ P. Chabard, V. Picon-Lefebvre — La Défense, a dictionary architecture / politics, history / territory /

www.editionsparentheses.com
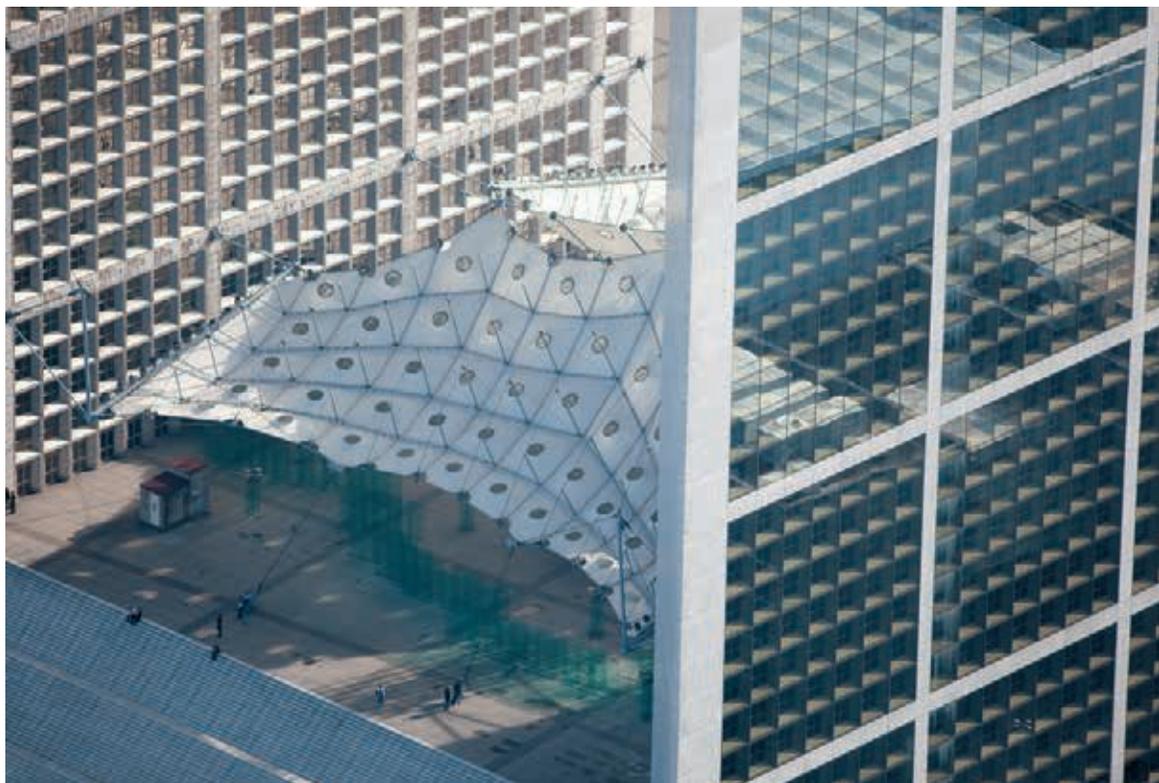
The tension structure over the forecourt of the Grande Arche.
Stuctural engineer: Peter Rice.
   ○ Photographer: Alex MacLean, 2010.

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La Seine between Neuilly and Zone A of La Défense.
Photographer: Alex MacLean, 2010.

Seine

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▷ Seine

Following the merging of La Défense and Seine Arche, the impact of the river, initially overlooked, came to play a significant and symbolic role in the development of this enormous industrial and residential sector. The area is known as "Les deux Seine", and this allusion to nature and the famous river softens somewhat its image as an ultramodern city quarter or an area dominated by property development. This tendency is widespread throughout Paris. Having fostered the establishment of *Lutetia*, the Roman city where Paris now stands, and the development of Paris itself, since the end of the 20th century the Seine has been a focus of attention for local officials and developers, as well as the population of the suburbs and extended region. Antoine Grumbach, one of the "Grand Paris" project architects, also saw the river valley as a major axis for the development of a route between Paris and Le Havre, which would run through Rouen and liberate the capital from its "dependency on the Rhine".

▷ From one Seine to the other

Since the seventies, planners in the Paris Region have been working on the "Seine Aval" and "Seine Amont" initiatives, with all Ile-de-France riverside *communes* seeking to weave a connection between the riverbank and the surrounding urban fabric. For better or for worse, even industrial installations, such as Odile Decq's "Port of Gennevilliers" project, are opening their riverbanks to meet new demands and new recreational trends.

In La Défense, the linear aspect of the *axe historique* is complemented by the more natural and creative structure stemming from the "extended reflection of the Seine on the Seine". The development of an "interstice on the Seine" that uses the meandering of the river to open up the two sides is a testament to the river's urban richness. This brings us to the idea of "folding geography" prevalent in Grumbach's aforementioned proposal: "The Seine valley's distinguishing feature is its meandering form, which produces a geographical folding highly conducive to development."[2]

The form of the *axe historique*, which rests on the principle of symmetry, is reinforced by the two aquatic "gateways"; at the eastern end of La Défense's central concourse, the Seine; to the west, past Seine Arche's seventeen terraces, the Seine once again.

However, the urban characteristics and landscape at these two facades are very different. On the Pont de Neuilly end, the banks are dictated by an automobile obsession dating back to the seventies, dominated by a motorway and its barrier of seven high-speed lanes, unyielding to pedestrians. The area remains largely the preserve of motorists, who, after all, are just as entitled to benefit from what the landscape has to offer. Pedestrians strolling along the concourse of La Défense have a bird's eye view of the Seine, in the long-standing tradition of Le Nôtre.[3]

At the Seine Arche end, the terraces lead to a vast area which enjoys a more fertile relationship with the river. Here, enormous zones of urban wasteland have been transformed into the extensive Parc du Chemin-de-l'Ile.[4] The towpaths which line either side of the river are usually open to pedestrians. Unlike the Paris section, choked by its surrounding road network, the Nanterre section is structured in a series of sequential strips, filled with obvious attractions: the above-mentioned park, the first left bank towpath, the first branch of the Seine, the Ile Fleurie (strictly preserved), the second branch of the Seine, the second right bank towpath, and on to the remaining agricultural land at the end.

"Les deux Seine" today represents a unique asset for La Défense, as much in terms of the legibility of the landscape as in terms of development and variety of functions. Alain Fleischer highlighted this in a *Le Moniteur* article, writing that "Paris's metropolitan area offers hundreds of kilometres of riverbank, of interfaces between natural and built environments [...]. This lengthy bank [...] could become a strip of land with great potential for development."[5]

▷ C. P.

See also:

→ Axis │ Grand Paris (La Défense in the) │ Landscape / Landscape Architects │ Paris Region (Development of the) │ Water

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[1] Agence Grumbach & Associés, "Seine Métropole, Paris, Rouen, Le Havre", *AMC*, special edition of Le Grand Pari(s), February 2009.
[2] *Ibid.*
[3] Described on the Ministry for culture website dedicated to Le Nôtre (www.lenotre.culture.gouv.fr).
[4] Covering an area of 14.5 ha across the Nanterre commune.
[5] A. Fleischer on Jean Nouvel's proposal, *AMC / Le Moniteur*, special edition of *Le Grand Pari(s), op. cit.*

Slums

Slums

Between 1953 and 1972, a large population lived in slums in several sectors of Nanterre. A substantial proportion of these slums were located in the part of Nanterre set aside in 1956 for the development of La Défense. Though less densely populated than the slums at Champigny-sur-Marne, the Nanterre slums were nevertheless the most extensive in the Ile-de-France.[1] The *bidonville* (or "slum"), a term initially coined to refer to the impoverished barracks of Casablanca, gradually became one of the three elements characterising urban morphology in North Africa, along with the *médina* and the *villeneuve*. In France, it was introduced during the fifties to refer to the instability of the unregulated environment, as well as the poverty and marginalisation of its inhabitants.[2] This new usage of the word *bidonville* thus transformed the general issue of public housing (as evident in the area surrounding Paris in the interwar period) into a specific issue relating to a particular population, i.e. the temporary dwellings inhabited by temporary immigrant workers, some of whom were Portuguese but the majority of whom were North African.

▷ The post-war boom years — built segregation

The well-known photographs of the rudimentary shelters sitting in the shadow of the Centre for New Industries and Technologies (Cnit building) perfectly illustrate the negative consequences of the growth and technological progress so characteristic of the post-war boom years; in this case, the segregation of FMA workers (French Muslims of Algerian origin). Though this group was considered more French than the average foreigner (they enjoyed complete freedom of movement and the right to vote up to 1962), they were still considered more foreign than the average European. The history of the Nanterre slums is therefore inextricably linked with the Algerian War and

[1] See J. Barou, "La mémoire des bidonvilles", in J.-Cl. Béhar, *La Défense: L'avant-garde en miroirs*, Paris, Autrement, 1992, pp. 45-64.
[2] R. Cattedra, "Bidonville", in C. Topalov (ed.), *L'aventure des mots de la ville*, Paris, Robert Laffont, 2010, pp. 125-129.
[3] A. Sayad, *Un Nanterre algérien, terre de bidonvilles*, Paris, Autrement, 1995, pp. 20-40.

Shantytown of Pâquerettes. In the background, the Canibouts estate under construction (1961).
Photographer: Jean Pottier.

with French immigration policy. Its collective memory is rife with confrontations between the Algerian national liberation front (FLN) and the Algerian national movement (MNA), and the bloody repression on 17th October 1961 of the protests against the curfew imposed on the Algerian population following a series of attacks.

The Nanterre slums were made up of several zones differing in size, situation and population make-up (single workers or families), scattered across ill-defined tracts of land and interstitial industrial sites. Three main zones can be identified, themselves broken into parts. Petit-Nanterre was an enclave in the north-east of the commune which would become, in the years following the war (1946-1954), a North African neighbourhood. Its overpopulated, essentially ghettoised, café-hotels extended out to the slum lord shelters lining the Rue des Tartarins. The men's slum was located on Rue Alfred-Dequéant, while the Rue des Pâquerettes housed the families who had emigrated in order to escape the Algerian War (1955-1961).[3] The *bidonville de la Folie*, the largest, was situated between the Rue de Colonne, Rue de la Garenne, Rue de Valenciennes, Rue des Bizis, Rue de Courbevoie and Rue des Fontenelles, on the land earmarked by the La Défense planning authority (Epad) for the development of the university, the prefecture, the

Shantytowns in Nanterre, 1958.
Photographer: Jean Pottier.

▷ Urban policy — Slums, temporary shelters and HLMs

park complex and other important infrastructural elements. Known for being under FLN control, it was a major police target. Finally, the third major slum area, closer to the Seine, was located between the Rue des Prés, Rue Gutenberg and Avenue Hoche.

Despite the insalubrious conditions (no heating or electricity, few water sources, frequent flooding and fires), a community life developed here, with its own cafés, grocery stores and a strong sense of solidarity. A serious property market also developed, from brick constructions (costing a year's salary for an average worker), right through to converted trailers. Yet a slum address was not considered a valid home address for official documents such as residence or work permits, or family record books, or for the use of public services, such as the postal system. The listing and systematic numbering of the dwellings carried out by "Brigade Z" police units (also known as the "*démolisseurs*" or "wreckers") as well as the census conducted by SAT (Services d'assistance technique) police units — both entities reporting to the special intelligence division created at prefecture level in 1959 — were completed for the sole purpose of monitoring these areas and preparing them for demolition.

The national slum redevelopment policy, entrusted to the local prefecture, was launched in Nanterre in 1959. This coincided with the *Plan de Constantine* in Algeria which had been devised by the French ostensibly for economic reasons, but had the equally important aim of weakening the influence of the FLN. The policy was initially concerned more with maintaining order than with rehousing. The task of "freeing the working population of Algerian origin from the squalor of the slums" was handed over to the foundation for social action for Algerian Muslim workers in metropolitan France, a body created in December 1958. The national society for the construction of housing for Algerian workers (Sonacotral), founded in 1956, was a tool used to great effect by the Ministry for the interior in their monitoring of the FMA population. At the time, there were two police forces in operation in Nanterre: the "brigade Z" and the "Nanterre *harkis*"; former Algerian soldiers loyal to the French, together forming the SAT.[4] Three types of (re)housing were proposed for the population of the slums: hostels; for single workers, temporary shelters; a provisional measure for families deemed "problematic" and subsidised housing projects (known in France as HLMs); a type of housing designed to promote social integration. A project coordinated by Robert Auzelle in 1949 on behalf of the Ministry for reconstruction and urban planning (MRU), which aimed to establish a method for investigating

[4] M. Hervo, *Chroniques du bidonville, Nanterre en guerre d'Algérie (1959-1962)*, Paris, Seuil, 2001.

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Shantytown at rue de la Garenne and the workside of the prefecture, July 1968.
○ Epad Archives.

defective housing, provided a report evaluating the social profile of families, and whether they required permanent rehousing or prior rehabilitation. The temporary shelters therefore, unlike the emergency shelters (established following an appeal by Abbé Pierre on behalf of the inadequately housed in 1954), were intended to be a socio-educational tool targeted towards those considered maladjusted or asocial.[5] Four of these temporary shelters were constructed in Nanterre between 1960 and 1963: Grands-Prés;101 units, 1960, Pâquerettes; 30 units, 1962, Doucet; 90 units, 1962 and Les Groues; 70 units, 1963. These prefabricated structures, either mobile or easily dismantled, would be followed by more permanent shelters, in the form of substandard HLMs. Although no explicit regulations existed to exclude foreigners from the HLMs[6], Algerian families were not prioritised until the mid-seventies. Up to that point, priority was actually given to French families from the middle classes, employed and qualified workers, particularly those displaced by the redevelopment of Zone A.

5 J. -P. Tricart, "Genèse d'un dispositif d'assistance: les cités de transit", *Revue française de sociologie*, XVIII, 1977, pp. 601-624.
6 For information on the legal status and identification of Algerians, see F. de Barros, "Des 'Français musulmans d'Algérie' aux 'immigrés', l'importation de classifications coloniales dans les politiques du logement en France (1950-1970)", *Actes de la recherche en sciences sociales*, no 159, September 2005, pp. 26-45.
7 A. Steiner, "Figures de l'immigré à Nanterre: d'un habitat stigmatisé à l'autre", in A. Gotman (ed.), *Villes et hospitalité: les municipalités et leurs "étrangers"*, Paris, Maison des sciences de l'homme, 2004, pp. 331-354.

The Canibouts pilot project (691 units, architect Marcel Roux) was constructed between 1963 and 1965 by Logirep, an affiliate of the Sonacotral housing group, in a section of the Pâquerettes slum in Petit-Nanterre outside Epad control. This project welcomed French nationals (many of whom were repatriates) and Algerians (single workers and families selected from the temporary shelters), offering the immigrants a habitable space which conformed to standards of modern living.

However, in an attempt to avoid "ghettoisation" and favour social mixing, the Algerian population was limited to 15% of residents, thereby prefiguring the later institutionalised notion of a "*seuil de tolérance*" or threshold. This expression entered into the legislation as part of the Loi Debré, which dealt with the abolition of slums, in 1964. The flawed nature of the Nanterre resorption policy, however, became patently obvious in the census carried out by the prefecture in 1966. The number of people living in the slums had almost tripled between 1959 and 1966 (from 3,000 residents to 8,400). This was the case everywhere except Petit-Nanterre, where the local authority had taken an active role in rehousing. At the end of the sixties, the Communist local authorities, of which Nanterre council was one, denounced the inequalities between communes and officially called for immigrant families to be dispersed equally across the entire department.[7]

▷ Symbolic rehabilitation

Influenced by the May 1968 movement, which actually started at Nanterre university, itself established in 1964 on the site of former slums, a group of intellectuals and activists contributed to a (re)assessment of the value of these stigmatised locations, their neglected residents and their ignored cultural heritage. Sociologists Monique Hervo and Marie-Ange Charras[8] carried out studies on the living environment in the *bidonville de la Folie*, recording numerous testimonies from its residents.[9] Breaking with the traditional perceptions of poverty, anthropologist Colette Pétonnet found, not a collection of atomised, rootless individuals, but a resistance to the established order through the preeminence of interpersonal relationships, solidarity and friendship. She redefined the slum as a tool for a "softer" form of cultural integration in the urban environment, describing the temporary shelters, on the other hand, as a segregated, isolated environment which marginalised poorer families.[10] As part of their final dissertation, Isabelle Herpin and Serge Santelli conducted a full census of the Rue de Prés slums, from the urban make-up as a whole to the internal structuring of the dwellings, which served as the basis for a rehousing project. They favoured a vernacular architecture which would reflect a specific way of living and incorporate cultural practices, criticising the way in which these had been eradicated by the temporary shelters which were founded on an administrative framework.

Within this climate of political action and activism came a watershed moment in the form of the Loi Vivien in 1970. The law dealt with the abolition of substandard housing and included the redevelopment of the slums. Up to this point, the focus had been on immigrant housing only. Prime Minister Jacques Chaban-Delmas embarked on a more global policy to combat inequality; one which better responded to the objectives of the "new society."

▷ From one stigmatised environment to another

Yet the slum redevelopment policy still marked a divide between French workers and immigrants, the latter being kept well away from the HLMs, considered at the time to be the ultimate in residential housing. And so periods of indignation and calls for the abolition of the slums alternated with longer periods in which there was no mention of them at all. The mixed history of the slum was due, above all else, to the ways in which its status evolved and how effectively it was appropriated. The slum was maintained so long as it housed a fixed and affordable labour force to work on the all-important worksites of Zone A. It was eradicated as soon as the land it sat on was required for the major developments of Zone B.

The temporary shelters, which continued to be used as the principal method of rehousing, aged badly and became unhealthy environments of exclusion. In 1983, the Gutenberg project, the last remaining temporary shelter consisting of substandard HLMs, was torn down. It had been officially opened in 1971 by Prime Minister Chaban-Delmas, accompanied by the State secretary for housing, Robert-André Vivien, and Nanterre's Communist mayor Raymond Barbet (1935-1973). Surrounded by smiling children, he described them as "children of happiness, where before they were children of extreme poverty." The discrimination which had kept Algerian immigrants away from the HLMs for so long was now the very reason they were being herded into the projects as soon as they became perceived as substandard. In this way, the temporary shelters and HLMs were the successors of the slums in the socio-political representations of the stigma associated with immigrant housing. While the redevelopment of the slums was achieved within a twenty year period, the desire to make the immigrant population less visible by dispersing them geographically and improving their living conditions through access to a modern environment, failed rather miserably.[11]

▷   M. K.

See also:

→ Governance │ Housing │ Photography │ Social Housing (Grands ensembles) │ Zone B

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[8] See M. Hervo, M. A. Charras, *Bidonvilles, l'enlisement*, Paris, Maspero, 1971.

[9] *Ibid.*; M. Hervo, *Chroniques du bidonville*, *op. cit*.

[10] C. Pétonnet, *Ces gens-là*, Paris, Maspero, 1968 and *On est tous dans le brouillard, ethnologie des banlieues*, Paris, Galilée, 1985.

[11] M. C. Blanc-Chaléard, *Des bidonvilles à la ville, migrants des trente glorieuses et résorptions en région parisienne*, thesis, University of Paris I, 2008, pp. 73-124, 276-298.

Social Housing (Grands ensembles)

The operational perimeter of the State-owned La Défense planning authority (Epad) included, from the beginning, a number of *grands ensembles* (or social housing projects), mainly in the Nanterre area. The term *grand ensemble* is, however, ambiguous and rather vague. It is usually associated with a block and tower form which breaks from traditional urban morphology. Used to describe group housing developments, usually involving an element of prefabrication, it is defined in terms of quantity by a threshold which has varied according to context from 500 units (minimum amount for a priority zone for urban development (Zup) as per decree of 31 December 1958) to 1,000 units. Although it does not always involve HLMs (subsidised housing blocks), the *grand ensemble* is often implicitly associated with State funding. In any case, it does not have a legal definition. First emerging in the French architectural lexicon in 1935,[1] it is now used to refer to the mass construction of housing in France's post-war boom years — from the Plan Courant in 1953 to the Guichard circular in 1973 — a period of strong economic growth, industrialisation of the building sector and state interventionism.[2]

In Epad's plans for La Défense, Zone B, which is mostly located in the Nanterre area, was always intended to house the urban functions that were necessary but difficult to incorporate into Zone A; most notably the rehousing of those displaced from the sector. In this area, the *grand ensemble* typified the social housing environment of the post-war period; both product and symbol of the welfare state and the Communism of the local authorities. The successive construction projects in Zone B, itself subdivided into three sectors (B1, B2 and B3), are a clear illustration of the history of *grands ensembles* in France.

1   M. Rotival, "Les grands ensembles", *L'Architecture d'au-jourd'hui*, no 6, June 1935, p. 57.
2   See F. Dufaux and A. Fourcaut (ed.), *Le Monde des grands ensembles*, Paris, Créaphis, 2004, pp. 45-46.

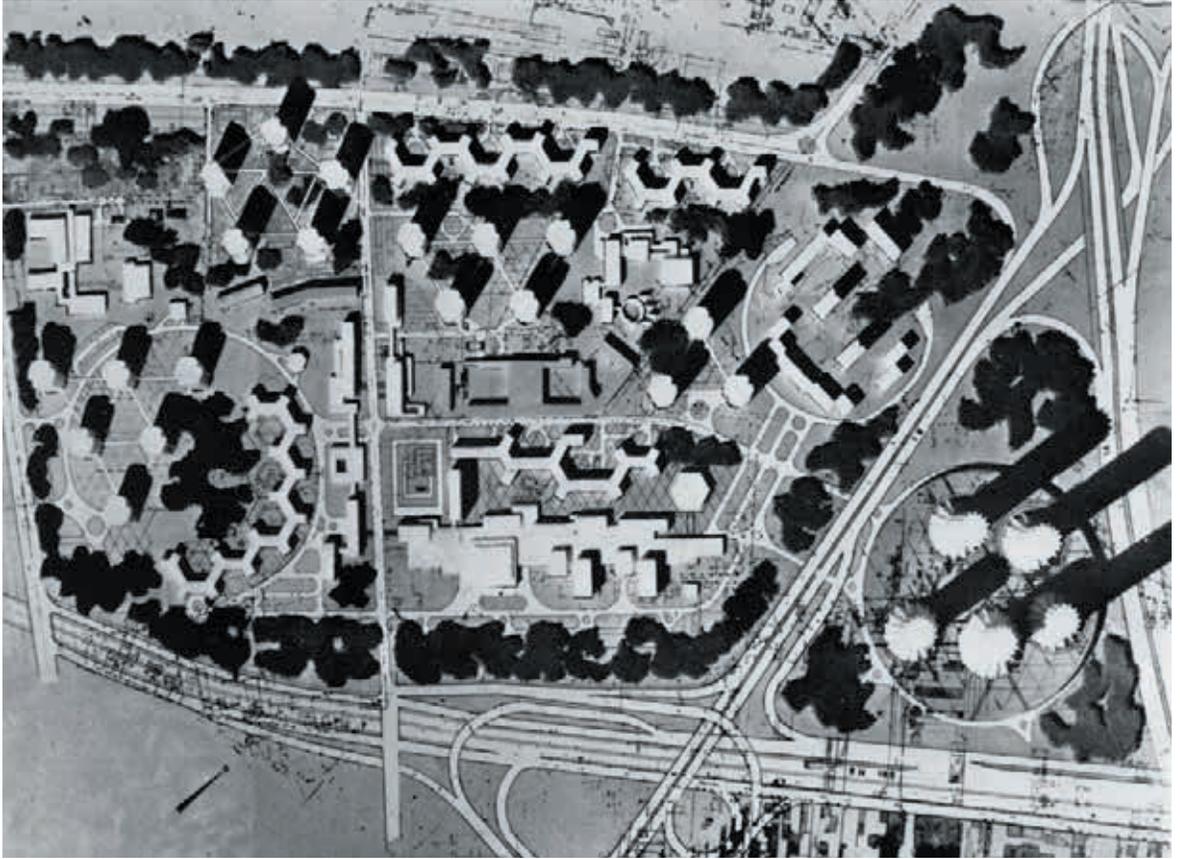▷ **From low-rise blocks to diversified structures**

As part of the experimental construction programme organised by the State in 1953 to rehouse those displaced by the war at a national level, 2,590 units were planned for Nanterre. The first *grands ensembles* were born within this emergency framework; the Marcelin-Berthelot and Provinces-Françaises projects (1,753 and 886 units respectively) under the direction of Bernard Zehrfuss, Robert Camelot and Jean de Mailly, 1956-1958, and the Anatole-France project (799 units) under Zehrfuss, 1955-1960. Previous to Epad's involvement, these were the first urban development projects of the future B2 sector which, at that time, consisted of no more than an indistinct terrain of quarries and abandoned land. They were designed by the architects selected in 1950 by Minister Eugène Claudius-Petit to draw up plans for the La Défense region — the same architects who were, at that time, also involved in the development of the Centre for New Industries and Technologies (Cnit building), unveiled in 1958. The Marcelin-Berthelot and Provinces-Françaises projects formed part of the plan for 4,000 housing units in the Paris Region and were constructed according to Camus' heavy prefabrication method. Consisting of housing blocks running from north to south and east to west, the three projects offered modern comforts such as running water, electricity, indoor toilets and bathrooms but were, from the start, poorly serviced and lacking in facilities. Following negotiations, local authorities succeeded in gaining back 1,316 housing units from the local subsidised housing office (OMHLM), as well as a re-evaluation of the compensation amounts owed to those displaced from their homes. The Caserne Rathelot block was erected on the same land a decade later, under the direction of Zehrfuss. With its four towers of fifteen storeys each, it was earmarked for the families of members of the Republican Guard (700 units, 1971).

These first three projects now consist in large part of social housing (85%). Provinces-Françaises houses the most disadvantaged population, while Anatole-France is home to a high turnover of La Défense's ministry employees.

The development of the Chemin-de-l'Ile, sector B3, located between the oil depots at the port and the A14 motorway, was part of the master plan drawn up for Epad in 1967 by André Remondet. The plan had involved a residential area (3,191 units) and

Massing plan for sector B3. Architect: André Remondet, 1967.
○ "Zone B.Sector III", *Techniques et Architecture*, Vol. 29, no 1, February 1968, p. 122.

attendant facilities (schools, sports facilities, health and retail facilities). It consisted of an open-plan design, with towers and low-rise buildings positioned in a triangular plan and ringed by circular roadways.[3] Though it was never fully realised, the plan, covering an area partially occupied by the slums of the Rue des Prés and the Avenue Hoche, included all the typical (re)housing elements; the André-Doucet temporary shelter (now the Komarov project) for the rehousing of "anti-social" families from the slums (276 units, architects Amédée, Jean Darras and Yves Redon, OMHLM, 1966-1967), two hostels from the national society for the construction of housing for Algerian workers (Sonacotral) for single immigrant workers (1,000 rooms, Edouard Menkès, 1969), the Exprodef 3 building (105 units for those relocated from La Défense, Remondet and André Malizard), the six towers of the Zilina project (676 units, OMHLM, 1970-1971) and the eight towers of the Acacias projects (1,105 units, Remondet, Dan Giuresco, Darras père et fils and Redon, Logirep, affiliate of Sonacotral, in various phases between 1971 and 1975).

Temporary access ramp to one of the buildings by Jacques Kalisz, 1982.
○ Epad Archives.

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[3] See "Zone B", *Techniques et Architecture*, no 1, February 1968, pp. 122-124.

Aillaud Towers from André-Malraux Park, site analysis document.
Epad for Tête Défense, November 1981.
○ Epad Archives.

The early seventies saw the start of the development of Zone B1, then dominated in large part by the *bidonville de la Folie*. In addition to the Hauts-de-Seine prefecture and important infrastructure, Epad also developed a residential quarter around the Parc André-Malraux. This development kept nothing of Remondet's original plan apart from the southern section including the Fontenelles and Champs-aux-Melles areas. The new master plan, designed by architect Claude Schmidlin under the direction of Jean Millier, consisted of two distinct clusters of housing around the park. On the north side, five of the seven pyramidal megastructures designed by Kalisz were built (MH1-MH7, 2,500 units, 1974-1977), all with direct access to the park. On the south-east side, Emile Aillaud's eighteen towers with their varied heights and Fabio Rieti's rippling coloured facades (1,607 units, 1974-1978, managed for the most part at department level) formed the Pablo-Picasso project, later joined by the Fontenelles quarter (754 units, 1977-1981) and the Champs-aux-Melles project (1,142 units, 1970-1972).

With his more artistic approach, Aillaud broke with the so-called *chemin de grue* construction method (rapid, homogeneous construction using concrete blocks and cranes on tracks), while Kalisz's Brutalist architecture replaced the monolithic blocks with

diversified, multi-faceted structures. Aillaud's "cloud" towers and Kalisz's "organic urban units" were evidence of an urban landscape and communal space searching for new ways to relate to the physical environment. They offered new, varied forms of housing as a form of liberation from the standardisation and homogeneity of the blocks and towers created by the previous generation. With the exception of Kalisz's three megastructures, Central Park, Vallona and Liberté, where there were also luxury units for rent or sale, highly subsidised social housing units were the norm in the other two projects (MH4 and MH7), as well as the entirety of the Pablo-Picasso project.

▷ Deterioration

The social composition of the *grands ensembles* can be related directly to the way in which the units were allocated.[4] Between the development projects for zones B2 and B3, the Canibouts pilot project was constructed in a section of the Pâquerettes slum in Petit-Nanterre — outside the scope of Epad. Constructed by Logirep, this *grand ensemble* (691 units with attendant facilities, Marcel Roux, 1963-1965) was the first attempt to rehouse the inhabitants of the slums outside of the usual measures put in place for their rehousing, such as hostels for single workers and temporary shelters for providing social and educational support to families (literacy and health). These sub-standard buildings had been created for immigrants, while the *grands ensembles* had been designed for solvent French families from the middle classes, qualified workers and employees, and those who had been moved out from Zones A and B. This partly explains the HLM project carried out by Logirep. The Canibouts project unveiled by Claudius-Petit housed French nationals, single immigrant workers and selected families from the temporary shelters. In an attempt to favour social integration and avoid ghettoisation, the Algerian population was limited to 15% of residents, foreshadowing the subsequently institutionalised notion of a "threshold." The general approach often consisted of housing at-risk families in communes which were politically opposed to the dominant politics prevalent at department and regional council level. This led to condemnation from Communist local authorities, Nanterre included, of the inequality between communes and a call for immigrant families to be dispersed equally across the entire department. As they saw it, the high concentration of immigrants in their communes was the result of collusion between the Government and the Right with the aim of destabilising the opposition.[5] The discrimination which had kept so many immigrants away from the *grands ensembles* for so long was now the very reason they were being herded into these projects as soon as they began to deteriorate.[6] In turn, the *grands ensembles* became disadvantaged areas,

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4   See M. Oberti, "L'analyse localisée de la ségrégation urbaine. Ville, quartiers et cités dans une commune de la banlieue parisienne", *Sociétés contemporaines*, no 22-23, 1995, pp. 127-143.

5   See A. Steiner, "Figures de l'immigré à Nanterre: d'un habitat stigmatisé à l'autre", in A. Gotman (ed.), *Villes et hospitalité: les Municipalités et leurs "étrangers"*, Paris, Maison des sciences de l'homme, 2004, pp. 331-354.

6   See O. Masclet, "Du 'bastion' au 'ghetto', le communisme municipal en butte à l'immigration", *Actes de la recherche en sciences sociales*, no 159, September 2005, pp. 10-25.

Pedestrian overbridge designed by Kisho Kurokawa and Peter Rice (1994), linking the Kupka Towers (architects: M. Andrault and P. Parat, 1992) to the Pacific Tower (architect: K. Kurokawa, 1992).
○ Epad Archives.

certifications are increasingly required by project managers and supported by Epadesa, dry construction minimizes the environmental impact of the worksite. For this reason, but also because of its reversible and recyclable nature, steel appears henceforth as a material supporting statutory compliance.

The fact that the largest general contractors in France had tended to specialize in reinforced concrete has always increased the complexity of constructing buildings with mixed structures, by multiplying the number of participants. The recent integration of departments specializing in metal structures within these contracting organisations is currently easing their implementation and, by the same token, the development of the material. In a national context which for so long did not favour the development of steel, North American expertise in metal construction and in ultra high-rise buildings has continued to offer valuable support, encouraged by the internationalism of the client bodies. The large North American architectural practices, often boasting in-house engineering resources, are becoming involved in a consulting capacity in cases where they are not sole or joint initiators of the project. The Esso-Standard building, designed in collaboration with the New York practice Lathrop Douglass, who acted as consultants, began

this tradition. French architectural practices such as Saubot-Jullien, now succeeded by SRA, with very high profiles at La Défense, are building a knowledge base in the field of high-rise buildings, as well as becoming the favoured go-betweens of the American practices.

▷   N. C.

See also:

→ Buildings and Public Works Companies │ Concrete │ Glass │ Nobel Tower │ Towers

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