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THE CHRONICLE OF LA DÉFENSE

With 4 figures

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Zusammenfassung: Die Chronik von La Défense

Während der letzten dreißig Jahre hat der expandierende Geschäftsbezirk La Défense nicht nur die Skyline von Paris verändert, sondern auch die räumliche Verteilung und die Struktur der Erwerbstätigkeit.

Die Entwicklung von La Défense trotzte der ökonomischen Krise der siebziger Jahre ebenso wie zahlreichen Wellen der Kritik und hat somit einen wichtigen Beitrag zur Neuorientierung der Struktur täglicher Aktionsräume in der Ile de France geleistet und gleichzeitig das Ansehen von Paris als „moderner Weltstadt“ und geeigneten Standort multinationaler Unternehmen gesteigert. Großzügige Wohn- und Freizeiteinrichtungen ergänzen diesen neuen Geschäftsbezirk, in dem der Standort von Tête Défense durch von SPRECKESENS massiven *Arc de Triomphe de l'Humanité* eingenommen wird.

Der Erfolg von La Défense im Nordwesten von Paris hat jedoch vorhandene räumliche Ungleichgewichte in der französischen Kapitale weiter verstärkt. Große Anstrengungen werden gegenwärtig darauf gerichtet, neue Beschäftigungsmöglichkeiten im Osten von Paris zu schaffen, insbesondere in der neuen Stadt Marne la Vallée, wo das „Euro-Disneyland“ errichtet werden soll.

Planning, Prestige and Grands Projets in Paris

The current sectoral shift from the manufacture of goods to the provision of services is having a profound impact on the mosaic of employment opportunities in the urbanised regions of Western Europe (DANIELS 1985). Deindustrialisation and the disturbing collapse of manufacturing work stand in contrast with the uneven but nonetheless impressive expansion of job prospects in the highly diverse service sector (MARTIN and ROWTHORN 1986). In common with the experience of many other West European cities the urban fabric of Greater Paris displays the powerful imprint of these divergent trends, as redundant factory premises contrast with new custom-built office blocks and together serve to accentuate spatial variations in urban morphology and econo-

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mic activity in the French capital (BENTHAM and MOSELEY 1980; BOYER, DENEUX and MERLIN 1986). For more than two decades these and other changes have been accommodated in a wide-ranging regional master plan (*Délégation Générale au District de la Région de Paris* 1965). However, Paris has not just been planned in recent years but has also been embellished by a galaxy of prestigious urban developments that are unrivalled elsewhere in Western Europe and proclaim the message that Paris is a *grand* city, not simply a great one (CHASLIN 1985).

The Parisian master plan of 1965 blended the lofty ambitions of Gaullism with the heady spirit of the 1960s to devise a spatial frame for installing new towns, suburban service centres, motorways and mass-transit systems. With the passage of time much of its fundamental logic was overtaken by events, as population growth slowed down, economic crisis

hit home and matters of social welfare and ecology received an airing (MOSELEY 1980; FLOCKTON 1982). A revised *Schéma* was presented eleven years later and still remains in force (*Préfecture de la Région Parisienne* 1976). Other *grands projets* are direct manifestations of presidential power and their material expression ensures that leading political personalities leave their mark in urban history. For example, the Centre National d'Art Moderne is popularly called the 'Pompidou Centre' in honour of its eminent patron; the Orsay and Villette museums were favoured by GISCARD D'ESTAING; and FRANÇOIS MITERRAND has promoted a host of cultural projects, most notably the Bastille opera house (WOOLF 1987). The present article aims to trace the controversial evolution of the vast new commercial district of La Défense, which is the earliest and arguably the most significant of these prestigious developments, and whose crowning

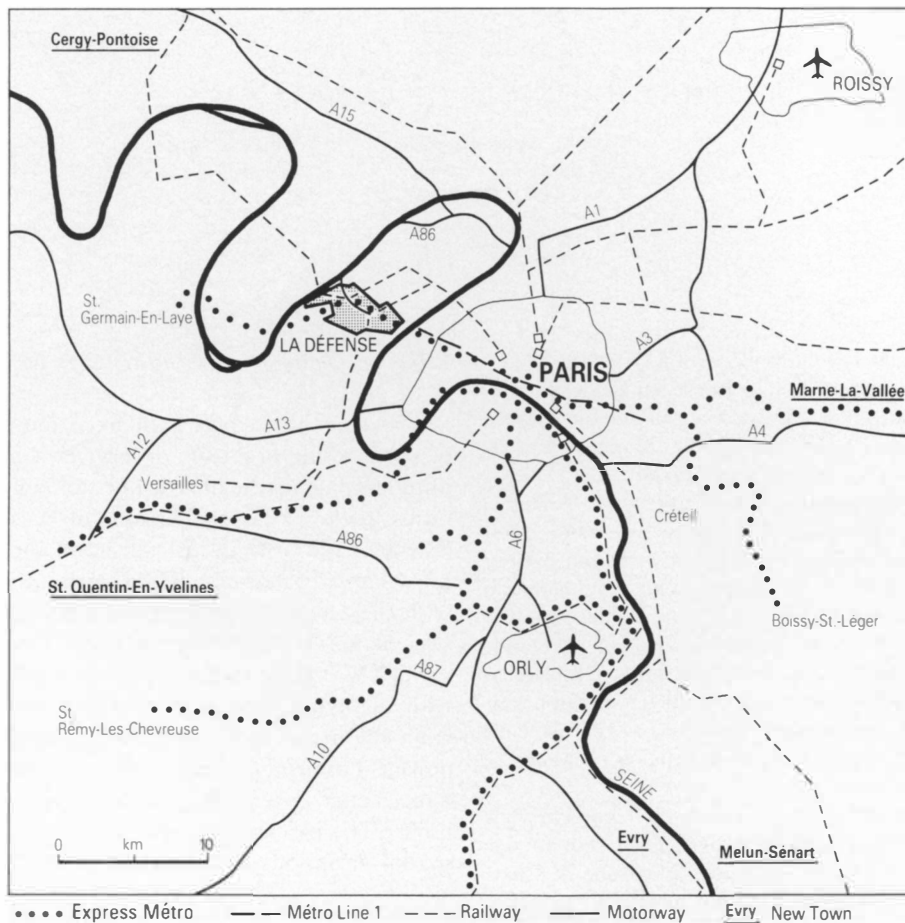


Fig. 1: Greater Paris showing the location of La Défense
Groß-Paris mit La Défense

feature was decided by the President in 1983 (Figure 1).

The words 'La Défense' evoke strikingly different images among Parisians. Some recall the statue of that name sculpted by LOUIS-ERNEST BARRIAS and unveiled in 1883 at the top of Chantecoq hill 9 km. north-west of Notre-Dame; but everyone will visualise the forest of glass and concrete towers that has given the city not only a new business district but also a new and startling western silhouette. What seemed like science fiction a quarter of a century ago has gradually become reality and is rapidly approaching completion (BASTIÉ 1964, 1984). Both images exhibit urban and – more emphatically – national pride. The statue commemorates the heroic (but unsuccessful) last stand by the city's defenders against invasion during the Franco-Prussian war of 1870. The office blocks proclaim Paris to be a 'world city' with appropriate facilities for multinational corporations to serve not just France but the whole of Western Europe (BATEMAN 1985). Not surprisingly, the business district of La Défense also provokes sharply contrasting reactions. For some the high-rise blocks clad with sparkling glass and burnished marble embrace the best of modern architecture and symbolise the 'new' France (ARDAGH 1982). For others these same buildings are no less than offensive intrusions that disfigure the most beautiful vista in Paris and simply reinforce the 'Americanisation' of Europe (BEAUJEU-GARNIER 1977). Between those extremes comes a grudging acceptance that the promotion of La Défense enabled skyscraper blocks to be banned in the historic centre of the city.

The Origins of La Défense

The site of La Défense is charged with meaning since it is bisected by the historic royal highway from the Louvre palace to the hunting grounds around the *château* of Saint-Germain, an alignment which acquired all the qualities of a *voie triomphale* over the centuries (PILLIET 1961). Thus, in 1667 LE NÔTRE extended the Tuileries gardens and in 1724 the Duc d'ANTIN, superintendant of royal gardens, set out the Champs-Élysées on the eastern slope of Chaillot hill (LE ROY LADURIE 1981). Thirty years later ANGE GABRIEL fashioned the Place Louis XV (Place de la Concorde) and in the early 1770s MARIGNY extended the great axis beyond the site of the Étoile to reach a new bridge across the Seine at Neuilly. The status of the *voie triomphale* was enhanced further when NAPOLEON ordered the building of the small Carrousel arch

(1806–1808) and the great Arc de Triomphe (1806–1837) and the installation of the Obelisk in the Place de la Concorde.

One great vista extended from the Louvre to the Arc de Triomphe on the flattened summit of Chaillot; the second ran from that point along the Avenue de la Grande Armée, across the Seine to the summit of Chantecoq hill 22 m. above the river. The tree-lined boulevards in the western part of the Ville de Paris structured the creation of affluent residential districts whose locational advantages were enhanced by the presence of the Bois de Boulogne and were reinforced when the first *métro* line was opened in 1900, linking the Pont de Neuilly to the city centre. Conditions were strikingly different beyond the city limits where the *communes* of Courbevoie, Puteaux and Nanterre to the west of the Seine accommodated a far more ordinary brand of suburbia, comprising small detached houses, tenements, factories, warehouses, cemeteries and railway yards. However, the westward march of fashionable development was firmly in progress and in 1912 it was proposed to extend the triumphal way beyond the Avenue de la Grande Armée (BASTIÉ 1964). The outbreak of war brought such ideas to a temporary halt.

They reappeared in 1929 when the developer LÉON ROSENTHAL launched an architectural competition to reorganise the Porte Maillot, a busy intersection where the Avenue de la Grande Armée became the Avenue de Neuilly (EVENSON 1979). Two years later the City of Paris sponsored a competition for ideas to redevelop the axis all the way from the Étoile to the rond-point de la Défense. The winner, an architect named BIGOT, proposed transforming the Porte Maillot and the Pont de Neuilly and suggested that a giant personification of Victory in the form of a winged female figure, be sited at the heart of the rond-point de la Défense, whose 234 m. diameter was not far short of that of the Place de l'Étoile (256 m). The jury noted approvingly that BIGOT did not propose arches or obelisks which had been popular in the nineteenth century but "wished to create, against the sky of greater Paris, a new silhouette marking a stage in the extension of the capital and characterising our epoch, as the Arc de Triomphe is the indelible mark of the past century" (*Ville de Paris et Département de la Seine* 1931 p. 16). Once again economic depression, war and occupation overtook these grand designs and by 1945 the slopes of Chantecoq hill were little changed, being covered with undistinguished suburbia and crowned with BARRIAS' statue.

Despite being 9 km. from Notre-Dame and lying beyond the *métro* terminus, La Défense had good rail

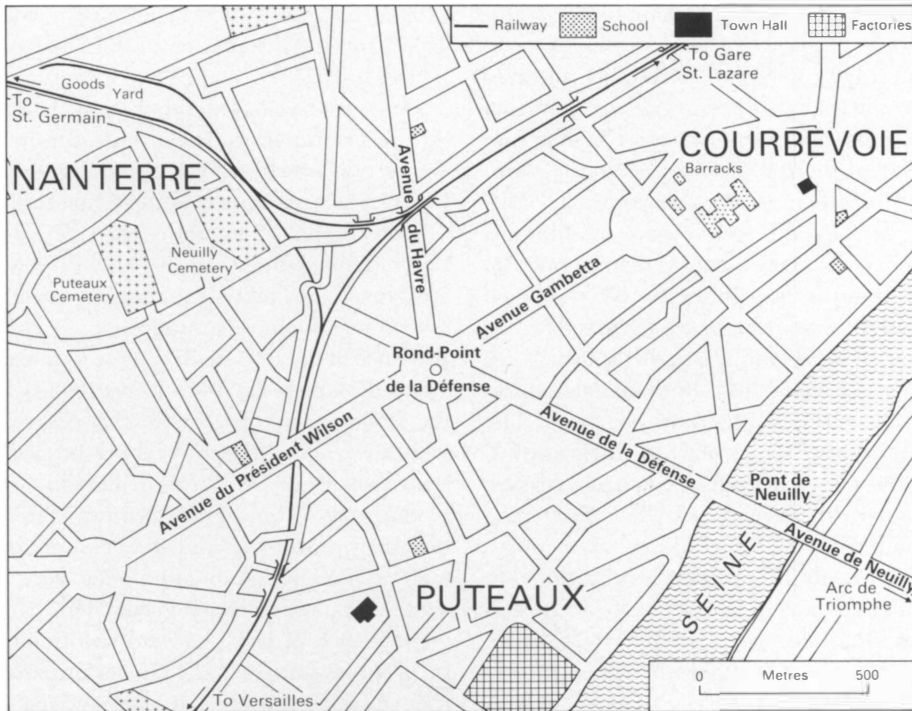


Fig. 2: The Site of La Défense in 1950
La Défense 1950

and road links to central Paris (Figure 2). Indeed the avenue running between the rond-point and the Pont de Neuilly was one of the busiest thoroughfares in France. The site had undeniable potential and was favoured by **ANDRÉ MALRAUX** and **LE CORBUSIER** for the construction of a twentieth-century museum. **WOGENSKY** conceived a design with this in mind but in fact the *Préfecture de la Seine* in inner Paris was to be the only direct result of this architectural experiment. The *Conseil Général* of *Seine département* perceived the future of La Défense quite differently. It was well aware of the difficulties that would be encountered in attempting to redevelop parts of the historic city centre to provide additional office accommodation and instead proposed that a completely new business district be built at La Défense, for which a plan was duly prepared by **CHARLES NICOD**. In 1954 the *Direction de l'Aménagement du Territoire* designated La Défense as a priority site, which might accommodate ministries and supranational organisations, such as **UNESCO** or **NATO**.

Using proposals dating from 1951 a private scheme was launched in 1955 by industrial firms to build the *Centre National des Industries et Techniques* for accommodating exhibitions that were too large for the Grand Palais in central Paris. The result was a vast, vaulted

hall of 90,000 m² that was opened by **DE GAULLE** in 1958. It was heralded as an impressive feat of engineering but neither the business community or the general public showed any immediate interest in the area (**AUZELLE** and **MAGNAN** 1984). However, a great number of visitors did come to the CNIT for the Floralties show of 1959 and the pavements along the avenue from the Pont de Neuilly were jammed with parked cars. Perceptions of this seemingly 'remote' suburban location were beginning to change. Indeed, a group of developers had already proposed constructing office blocks along both sides of the Avenue. The three local municipalities of Courbevoie, Puteaux and Nanterre had other preoccupations, including an urgent need to build social housing since the plain of Nanterre had spawned the second largest shanty town around Paris.

Developing the Site

In order to respond to these pressures, to avoid financial speculation and piecemeal development, and to maximise the opportunities afforded by this site along the great axis, the government set up the *Établissement Public pour l'Aménagement de la Région de la*

Défense (EPAD) in 1958 (Anon. 1965). It was given an operational existence of thirty years and was charged with drawing up a master plan for the siting of offices, apartments and a range of facilities on a total of 760 ha. site (comprising 160 ha. in Zone A – the so-called business district – and 600 ha. in Zone B). It was also empowered to expropriate land and install the necessary infrastructure and utilities (roads, parking spaces, and gas, electricity and water supplies). Sale of construction permits to developers provides the major source of finance for the EPAD and this is supplemented by grants from the State, the Paris transport authority and other agencies to fund specific facilities such as schools and *métro* stations. Running capital is managed by loans from the *Caisse des Dépôts et Consignations*. The development process required the demolition of no fewer than 9,200 dwellings, including the Nanterre shanty town which had housed about 1,000 families and 4,000 single people. Providing alternative housing in the locality became a vital task for the EPAD which also had to allocate new industrial premises for the 480 firms that it displaced.

In 1960 the *Plan d'Aménagement et d'Organisation Générale de la Région Parisienne* stressed that La Défense was not to be simply a business district but rather a multi-functional development comprising shops, housing, schools and recreational and administrative facilities as well as offices. Various scenarios were examined and the initial master plan was devised in 1962 to produce 860,000 m² of office space, some 6,000 dwellings and a wide range of support facilities. This received approval from the Ministry of Construction in December 1964.

The first and truly far-sighted principle involved a complete separation of pedestrians from vehicle traffic in Zone A by means of a vast deck – to cover roads, railway lines, bus terminals and other facilities – which would descend gradually to the Pont de Neuilly. Local road traffic would be directed along a circular boulevard around La Défense and through traffic would pass in tunnels beneath the business district (Figure 3).

The second principle embraced a gradation of building heights, reflecting the fact that La Défense was to be more than an ultra-modern CBD. Office

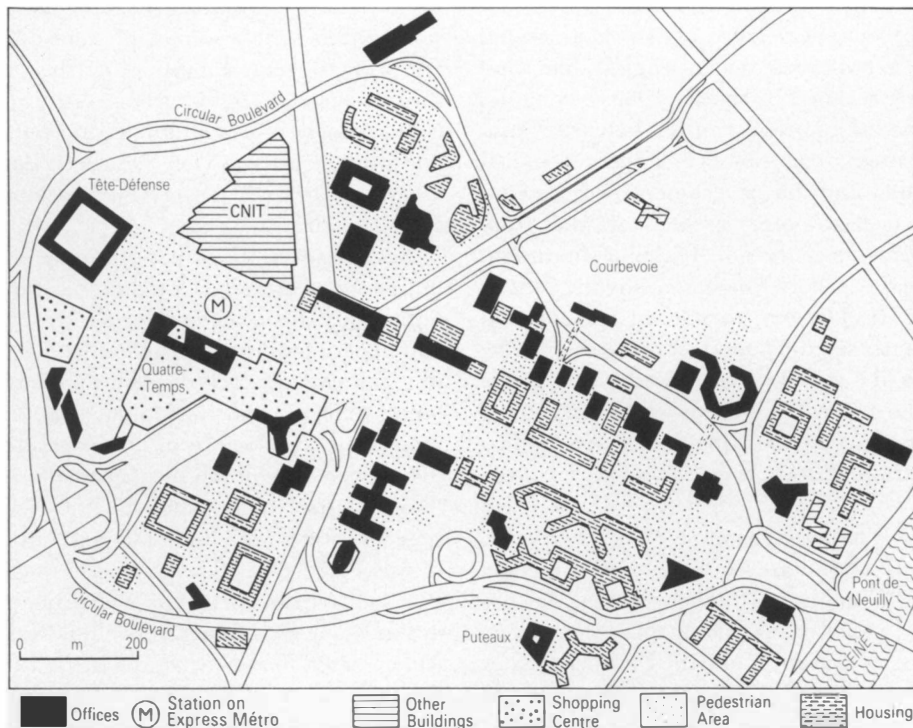


Fig. 3: La Défense: Zone A, the commercial district

Source: documents from the EPAD

La Défense: Zone A (Geschäftsbezirk)

buildings were to form the highest layer of construction; apartment buildings would have less than 8 storeys and would be arranged around courtyards to provide a favourable residential environment; and service and amenity buildings would be low-rise.

The third principle was that about 30 office blocks were to be constructed to a standard format (100 m. high and 25 storeys of 42 × 24 m.) to give 25–28,000 m² of working floorspace apiece. The master plan also included the possibility of a 200 m. supertower being constructed facing the CNIT to serve as a kind of architectural symbol for the whole of La Défense. In the years ahead this was to prove to be an enormously controversial issue.

Three Generations of Office Construction

The Esso building was opened in 1963 and heralded the first generation of office blocks built to an essentially common prescription. Office staff whose jobs had been relocated from central Paris generally liked their new workplaces but it soon became clear that the repetition of a single architectural stereotype produced visual monotony. Even more serious was the fact that the first generation of towers failed to satisfy commercial demand. Too great a share of each building had to be devoted to core facilities and the floorspace in individual towers was less than what large firms were seeking. By the late 1960s companies appeared to be losing interest in La Défense. Commercial investment was notably slower than had been anticipated and the government became convinced of the need to obtain greater revenues from future developments on the site. This objective might be met by building taller or by increasing the density of occupation. In addition, the 'suburban' location of La Défense needed to be made more accessible by a rapid transit link to the centre of Paris. In order to achieve this the government accorded priority to the construction of the east/west line of the express *métro* system, the *Réseau Express Régional* (RER) (RONCA-YOLO 1981).

In 1968 the *Union des Assurances de Paris* proposed to rehouse various operations scattered around the city in a double-sized building (70,000 m²) at La Défense with a ground plan shaped like a three-point star. Permission was duly granted and the EPAD set about preparing a more liberal master plan for the whole site. In order to make La Défense viable total office floorspace was to be increased to 1,550,000 m² by raising the maximum height for blocks to 45 storeys (180 m.). Apartment blocks were also permitted to

exceed the earlier 8-storey maximum. The implications of this new policy became clear in 1972 when the first second-generation building (the 170 m. tower for the *Groupe des Assurances Nationales*) fundamentally altered the skyline of western Paris. Opposition to what was perceived as 'Americanisation' was loud and long with many Parisians regretting that La Défense seemed destined to become another Manhattan. For a while at least, some powerful voices spoke in support of tall towers, with PAUL DELOUVRIER (former supreme *préfet* for the Paris Region) and President GEORGES POMPIDOU arguing in their favour (EVENSON 1979). Yet another controversy raged in the summer of 1972 following proposals to complete the western end of the business district, which had become known as Tête Défense. The intricacies of this issue will be explored later.

The second generation of office construction was unquestionably the age of the giants, with truly massive towers being erected (Anon. 1970). These were almost small towns in their own right, with the *Groupe des Assurances Nationales* building providing 70,500 m² of office space and accommodating a workforce of 5,000, and the black *Fiat* building offering 102,500 m² for 4,500 staff. The towers were awesome monuments to the modern construction industry as well as to multi-national finance but they soon proved to be problematic. They were high consumers of energy with regard to air conditioning (the windows could not be opened), lighting (especially in work space near the core of the building) and operation of lifts and other services. They had been designed in the age of cheap oil but were opened after the energy crisis had struck.

Not only were they inappropriate technologically but they were disliked by many staff who complained of more frequent headaches and eyestrain than they had experienced in their old offices. Even more depressing was the lack of cafés and corner shops for lunch time use, an inadequate amount of parking space, and an absence of public transport between the eastern edge of the site (buses and urban *métro* at the Pont de Neuilly) and facilities on the western edge (BURTENSCHAW, BATEMAN and ASHWORTH 1981). It was there that the station for the express *métro* (RER) had been opened in 1969 providing a fast link to the Étoile (5 minutes). The line was extended to Auber in 1970 and eastwards to Chatelet (a further 5 minutes) and Nation in 1977. Indeed, in several respects the RER was the salvation of La Défense, transforming an unfashionable suburb into an easily reached business district. Nonetheless most workers in the emerging 'tertiary city' at La Défense had a

tidy walk from their train or bus in order to reach their office and for many of them this meant skirting around building sites for year after year. Even crossing the great pedestrian precinct could be far from pleasant since it was frequently windswept or lashed by rain. Working and living at La Défense could be a depressing experience during the protracted construction phase.

During 1973 President POMPIDOU's advisors displayed strong opposition to the proliferation of tower blocks and at the time of GISCARD D'ESTAING's coming to office in 1974 a set of ecological arguments started to be advanced to bolster this point of view. The demand for additional office space in Paris plummeted in the crisis years of the mid-1970s but, of course, the second generation of towers was already under construction. During 1972 a record 325,000 m² of office space had been marketed at La Défense but by the end of 1975 275,000 m² remained unoccupied on the site out of a total of 1,000,000 m² of

empty office space throughout Paris. The future of La Défense and the financial viability of the EPAD seemed far from secure. Some of its staff were released and special loans had to be arranged to rescue the organisation. However, the market for offices began to recover in 1978 and by the following year the problem phase seemed to be over.

A third wave of building began in 1980, involving slimmer energy-saving blocks with offices which had access to daylight and were equipped with windows that could be opened for ventilation. A good example is the low, long Elysées-La Défense building (39,400 m²) which was opened in 1983. Enhanced by two interior gardens, it provides a working environment for 1,350 employees. On average 130,000 m² were being completed at La Défense each year during the first half of the 1980s. This accounted for a quarter of all new office space being created in the Ile de France region (Anon. 1985). By the end of 1987 just over 40 office blocks had been constructed in the business

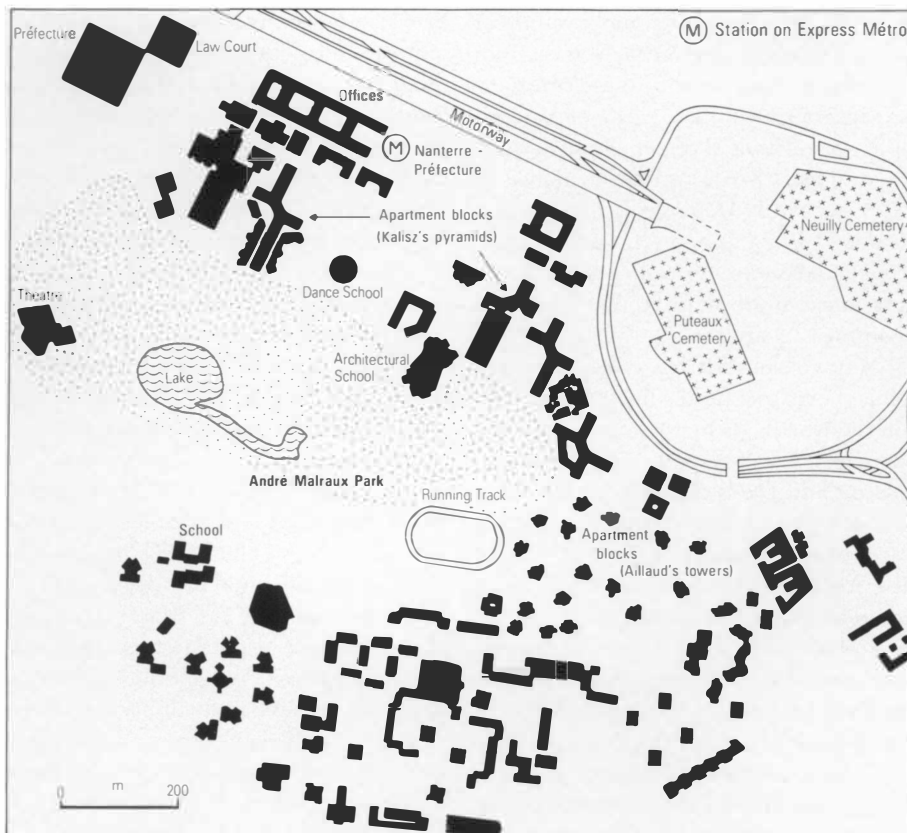


Fig. 4: La Défense: Zone B, the *Quartier du Parc*

Source: documents from the EPAD

La Défense: Zone B, das *Quartier du Parc*

district. Despite appearances, the density of development is comparable with that in parts of inner Paris built by HAUSSMANN one hundred years earlier. The explanation for this is the large extent devoted to the pedestrian precinct, gardens and other forms of open space.

The business district (Zone A) at La Défense employs a total of 65,000 staff in its office blocks which accommodate over 300 French and foreign firms. A further 2,000 employees work in the *Quatre Temps* shopping and leisure centre sited at the hinge point between the commercial district and the more residential *Quartier du Parc* in Zone B further to the west. *Quatre Temps* was scheduled to start trading in 1979 but one major store withdrew from the complex and opening was delayed until 1981 (BURTENSCHAW, BATEMAN and ASHWORTH 1981). It is currently the largest shopping centre in France, comprising 105,000 m² of retail and storage space and a further 75,000 m² for technical facilities. As well as 180 individual shops and boutiques, 10 cinemas and a range of cafés and restaurants, it houses a Samaritaine department store (22,000 m²) and an Auchan supermarket (20,000 m²). Shopping and strolling at lunchtime or after work have been transformed from a nightmare into a pleasure. Indeed, these commercial facilities are appropriate for a catchment of about 1 million people and attract shoppers from a wide stretch of western Paris, giving ample evidence of the strategic success of La Défense as a suburban restructuring node. In fact, Zone A is much more than an office city and shopping centre since 8,000 new apartments house more than 20,000 people in this so-called commercial area.

The central feature of this district is the pedestrian precinct, which is the largest (and some might argue the windiest) in the world. Its first component is the vast and exposed *parvis* between the RER station, the CNIT building and *Quatre Temps*; the second is the esplanade which extends for 1.5 km. descending gradually toward the Seine; and then there are lateral walkways giving access to individual buildings. Trees have been planted along the esplanade, gardens have been laid out, and numerous sculptures and other works of art have been commissioned by the EPAD. These have been installed at appropriate points throughout the pedestrian area. In addition, the EPAD has encouraged the promoters and occupants of office blocks to patronise artists and sculptors to further enhance the environment. On the grand scale, JOAN MIRÓ's fantastic coloured figures confront each other on the *parvis*, not far from ALEXANDER CALDER's great red metallic arch; while in a

more discreet fashion, HENRI DE MILLER's 'Sleep-walker' tip-toes on a bronze globe and LOUIS DERBRÉ's counterbalanced human forms evoke 'La Terre' (Anon. 1986 a). BARRAIS' sculpture, long relegated to a hidden corner on the vast building site, has been reinstated in glory close to the site of the original *rond-point*. By contrast with conditions in the problematic and brutal 1970s, the environment of La Défense is being successfully greened and humanised.

The Other La Défense

Contrary to popular perception, La Défense is very much more than Zone A. To the west of the controversial site of Tête Défense extends a further 600 ha. (Zone B) in the *commune* of Nanterre, which had contained thinly-spread interwar suburbia, worked-out quarries, derelict factories, warehouses and flourishing shantytowns during the 1950s. Plans to rehabilitate this sector involved construction of a *Préfecture* and high-order facilities to serve the suburban *département* of Hauts-de-Seine (established in 1964), a new university campus which acquired temporary notoriety in 1968, and a wide range of commercial, communal and educational facilities, as well as a large amount of predominantly social housing totalling some 6,000 dwellings. Within Zone B the activities of the EPAD have been focused on the *Quartier du Parc* which is separated from Zone A by highways, cemeteries and railway land (Figure 4).

The Parc André Malraux is a completely new creation that is roughly equal in size to the Luxembourg Gardens or the park of the Buttes-Chaumont. Covering 25 ha. it is the largest park to be laid out in Paris over the past hundred years. Landscape architect SGARD designed its linear lake and undulating surface which has been fashioned from sub-soil excavated from Chantecoq hill to accommodate the RER, highways and other facilities beneath the great deck of Zone A. The EPAD met more than half of the cost of establishing the park, with the remainder being provided by the Ministry of Cultural Affairs, the *département* of the Hauts-de-Seine and the Ile de France region. Tree species have been selected for their robustness and ability to tolerate an urban climate. Some 4,000 trees and 50,000 shrubs have been planted in the park, with rarer species placed in a botanic garden. Wooded patches alternate with open stretches and footpaths offer a range of routes suitable for local residents, lunch-time strollers from nearby offices, joggers (who favour the 4 km. long 'green path') and other users.

To maximise the amount of space that could be devoted to parkland, new housing developments needed to be high-rise and the score or so of 50 m. or 100 m. towers that make up the *Quartier du Parc* form some of the most distinctive apartment buildings in the whole of Paris. EMILE AILLAUD's tall towers resemble plant stems in cross section and are decorated with clouds; they stand in sharp contrast with the polychromatic pyramids designed by KALISZ. Together they accommodate 4,200 households in subsidised homes, which seem to be acceptable to their residents. Certainly a visit to the pyramids and the towers does not reveal people in active revolt against their housing conditions (CORNU 1982). The new neighbourhood also has an international hostel for young people but it is by no means entirely residential, being the location of a major architecture school, the *Théâtre des Amandiers* (with 1,000 seats), a centre for young musicians, and the Paris Opéra's ballet school. Finally, over 160,000 m² of offices have been built adjacent to the Nanterre-Préfecture RER station. La Défense has become a place where many people live and many people work; but they are rarely the same people, as the crowds disgorging in morning rush hours from buses, trains and the RER show all too clearly.

The Controversy of Tête Défense

Numerous components of La Défense were installed over the past quarter century but the westernmost section of the commercial district, occupying the perspective from the Étoile, remained undeveloped until recently. Should the vista be closed at Tête Défense or should some architectural form be created to lead the eye beyond? The question was certainly not new, with BIGOR's proposal for this controversial site originating in 1931. The latest round of debate began in 1970 when a developer commissioned IEOH MING PEI, the New York architect, to design a majestic structure that would soar perhaps 70 or 80 storeys high. In fact, thirteen years were to elapse before the final decision was taken on how this prestigious site should be used. The delay was partly due to changing political personalities but was more particularly related to the profound difficulty of choosing an appropriately symbolic and monumental Tête Défense.

PEI designed a megastructure that would stand more than 200 m. high in the form of a kind of giant 'V' and would be the tallest structure in Europe. An alternative was prepared by ÉMILE AILLAUD, who proposed two concave buildings – one silvered and

the other black – that would face Paris and act as enormous parabolic mirrors reflecting back on the city. Such a scheme would, of course, close the perspective from the Étoile. The architect BADANI left the employ of EPAD in protest at this suggestion and powerful public hostility to the idea was expressed during the summer of 1972. President POMPIDOU was consulted in September and declared that while he found AILLAUD's project to be very fine he must express some reservations. His personal preference for Tête Défense would be for either a tall sculpture or a massive jet of water. Such a feature would be visible from the Carrousel through the Arc de Triomphe but would leave a large opening to the sky (CHASLIN 1985). Designs by other architects were scrutinised and in July 1973 Planning Minister OLIVIER GUICHARD pronounced in favour of AILLAUD's 'mirrors'. He also suggested that structures implanted at Tête Défense should not be solely for commercial use but might also house a range of State organisations. But as the economic crisis of the 1970s deepened and wide areas of office space at La Défense remained unoccupied so the whole issue seemed irrelevant. In addition, the EPAD seemed to be heading for financial ruin.

In October 1978 the topic surfaced again when an interministerial committee, chaired by Prime Minister RAYMOND BARRE, decided that the Ministry of the Environment should be located at Tête Défense. Further top-level consultations occurred in the summer of 1979 and ten architects were asked to submit designs for a monumental structure that would, however, be totally invisible between the Carrousel and the Étoile in order to preserve the prestigious perspective of the Champs Élysées. To comply with this prescription would involve limiting the height of construction to a mere 35 m. AILLAUD modified his proposals for mirror buildings once again but none of the projects seemed appropriate. A further call for ideas was launched in 1980, with AILLAUD drawing up yet another version and JEAN WILLEVAL submitting a design which was greeted with considerable interest, not least from President GISCARD D'ESTAING. But two major questions remained. Could a 35 m. high structure be truly imposing, especially when adjacent to towering office blocks that soared to 170 m? And should Tête Défense not house a major monument of national, if not international, significance? Presidential elections were looming, which GISCARD was to lose. The implications of that event were fundamental for the development of Tête Défense.

On 17 September 1981 the recently-elected Socialist administration stated that earlier projects were

unacceptable and President MITTERRAND announced new ideas on cultural policy in his first press conference on 24 September. These included expanding and renovating the Louvre, promoting the museums of La Villette and Orsay, relocating the Ministry of Finance, and building a megastructure at Tête Défense which would house an international *Maison de la Communication*. The latter scheme offered the prospect of attracting a range of cultural activities to the business district and would manifest the international role of La Défense, Paris and indeed France. In the same month the Minister of Town Planning announced a new competition for the site and mentioned other activities which might possibly be located at Tête Défense (for example, a new headquarters for UNESCO, a new opera house and the Ministry of Town Planning, Housing and Environment). By early January 1982 it became clear that the new opera house was to be sited elsewhere in Paris and the new chairman of the EPAD (architect JOSEPH BELMONT) sought designs for a major monumental structure that would be appropriate to commemorate the bicentennial of the Revolution in 1989.

An international competition was launched which 296 competitors had entered by 4 October 1982 but unfortunately very few designs were forthcoming from the United States or Japan. The closing date was postponed, more submissions were requested, and a grand total of 897 architects eventually entered the competition. Some 424 designs materialised and during the fourth week of April 1983 an international jury of architects met at the EPAD headquarters high in the Fiat tower. On 25 May they announced that the *Arc de Triomphe de l'Humanité* was the winning entry (Anon. 1984). This was a vast 'open cube' designed by OTTO VON SPRECKEISEN, a little-known 54-year old professor of architecture from Denmark. The design not only symbolised a window to the world but also offered a view into the future (Anon. 1983). It was pleasing to the President who met the elusive VON SPRECKEISEN on 1 June. The great 'open cube' would be constructed a fraction ($6^{\circ}30'$) out of true alignment with the triumphal axis in order to avoid existing tunnels and underground facilities. It would be faced with white marble and would comprise two massive 37-storey vertical buildings ($105^5 \times 105 \times 18.7$ m.), linked by two horizontal structures with three storeys apiece. It would, of course, dwarf the neighbouring *Quatre-Temps* and CNIT buildings (Anon. 1986b).

In January 1984 the Paris Airports Authority was charged with implementing the major construction work. But although the broad design had been ap-

proved, the details of the 'cube', its environs and possible occupants proved highly contentious. Building permission was granted by the Hauts-de-Seine authorities at the end of 1984 and on 9 July 1985 President MITTERRAND inaugurated work on the site. Completion of the whole structure is planned for early 1989. Offices in the southern 'wall' will be occupied by the Ministry of Town Planning, Housing and Environment which should start moving into its new premises during 1988. Parts of the northern building, the 'roof' and the 'floor' will not in fact house the *Maison de la Communication* since the government abandoned the idea during 1986. Instead, this prestigious space will accommodate a range of commercial enterprises. The open cube of Tête Défense – and its immediate surroundings (which have been entrusted to architect JEAN-PIERRE BUFFI) – will remain controversial to the last!

The Implications of La Défense for the Structure of Paris

At the start of 1988 La Défense is entering its completion phase. More housing is being built south of the Parc André Malraux and a wider range of offices, shops and community facilities is being installed near the RER station of Nanterre-Préfecture to the north. The greening of Zone A continues apace and a 150-room 4-star hotel has been opened in the Michelet neighbourhood. Work continues on the Descartes Tower into which IBM-France will move in the spring of 1988. In the shadow of the ever-growing frame of Tête Défense, the CNIT building is being remodelled to accommodate a range of functions, including a congress centre with several halls to seat a total of 3,000 participants, a trade centre, exhibition areas, a sports club and a high-quality hotel with 300 bedrooms. Already many tourists place the gleaming towers and the esplanade of La Défense on their list of places to visit in Paris.

In architectural and aesthetic terms La Défense will always be a controversial addition to the grandeur of the capital of France. From an economic point of view its facilities have attracted and successfully anchored major French firms and multi-national corporations thereby reinforcing the status of Paris as a 'world city' (BASTIÉ 1984). Yet it is possible to argue that at the regional scale La Défense has been almost too successful. The RER is desperately crowded at peak times and additional means of public transport are needed urgently. After years of debate the decision has been taken to ease the situation by extending the urban *métro* across the Seine at

the Pont de Neuilly and continuing it beneath the esplanade of La Défense to serve an intermediate station before reaching an interchange with the RER (*Préfecture de la Région d'Ile de France* 1984). In addition, the costly and technically complex option of doubling the east/west RER tunnel through the centre of Paris has been discussed.

The creation of so much prestigious office space and service-sector employment at La Défense contrasts harshly with the loss of manufacturing jobs in the eastern suburbs and has served to accentuate long-established socio-economic disparities within greater Paris which the master plan of 1965 had sought to reduce (GUGLIELMO 1981). Planning procedures and spatially differentiated taxation measures operated for over two decades in order to steer new office development to the suburbs and periphery of Paris (for example to the five new towns) and to the eastern side of the city rather than on the west. However, La Défense was given favourable fiscal treatment, with levies payable on office construction in Zone A being pitched at a lower level than in surrounding western districts. This reflected the early conception of the scheme and its receipt of government backing before the master plan announced the principle of attempting to achieve spatial balance; the allocation in 1965 of a vital regional role as a suburban restructuring node; and, more especially, the promotion of La Défense as an office district of international importance that would enhance the status of Paris and be truly in the interest of the whole nation.

In fact the implementation of planning procedures and fiscal measures to regulate office development in the Paris region has been relaxed during the last few years and in this more liberal environment the office market of other western suburbs, whose image has been enhanced by the success of La Défense, has experienced pronounced growth (TUPPEN and BATEMAN 1987). Increased activity is reported in localities such as Issy-les-Moulineaux, Suresnes and Rueil-Malmaison and this market-led pressure in the west is likely to continue to develop in the immediate future as La Défense approaches completion. The authorities of the Ville de Paris (covering the inner city) have responded to this trend with profound disquiet and mayor JACQUES CHIRAC has led a vigorous campaign for promoting office development in inner eastern Paris to provide urgently needed employment and to enhance local tax revenues. In addition, emphasis has been placed more emphatically on attempting to boost development in outer parts of eastern Paris, notably in the new town of

Marne la Vallée. Thus the Cité Descartes has been established as a high technology science park within the new town and is capitalising on newly decentralised facilities for research and higher education in electronics, data processing, urban planning and transport engineering. Even more significant was the agreement signed in March 1987 for Euro-Disneyland to be installed on 1,785 ha. at a site on the eastern side of Marne la Vallée which will be served by an extension to the *métro* as well as by a new road system. The theme park is due to be opened in 1992 and – if promoters' estimates prove correct – could generate 20,000 jobs and attract 10 million visitors annually by the mid-1990s, with roughly half originating from beyond France. A later phase of development will involve the construction of hotels, shops and offices on land surrounding the theme park. A great deal of faith is being placed on Euro-Disneyland as a futuristic expression of one of the ways in which the service sector may evolve and as the essential stimulus for creating an eastern counterpoise to La Défense.

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WIRTSCHAFTSGEOGRAPHISCHE PROBLEME DER INDUSTRIEANSIEDLUNG IN DEN NEUEN ENTLASTUNGSSTÄDTEN DER ÄGYPTISCHEN METROPOLE

Mit 7 Abbildungen und 4 Tabellen

GÜNTER MEYER

Summary: Economic-geographical problems of industrial expansion in the new satellite cities of the Egyptian metropolis

Three new satellite cities are at present under construction in desert areas near Cairo. In each of these "New Towns", which are designed for 500 000 inhabitants, up to 80 000 jobs in industry are to be created before the year 2000. Altogether 229 manufacturing enterprises with a labour force of more than 17 000 people had started production by the end of 1986. A survey of these firms revealed the predominance of capital-intensive enterprises most of which produce consumer goods for the domestic market and depend largely on imported inputs. The

entrepreneurs' main reasons for choosing the satellite cities as the location for their new factories were the good infrastructure, the low price of land, tax reductions, and other incentives offered by the government.

Before setting up their factory in the new cities one out of three entrepreneurs had already owned a factory in Cairo. Other important groups of entrepreneurs are traders, former labour emigrants, native engineers and foreign companies. The impact of "Islamic" investment groups is rising dramatically. So far, the overwhelming majority of the labour force has to be transported every day from the centre of Cairo and from neighbouring localities in the Nile Delta to the new factories and back. In general, the latest