

T1640

NC 0020973 2



National College of Art and Design

Faculty of Design

Department of Industrial Design

Les Grands Projets:

**Town Planning Policy in Paris during the
Presidency of François Mitterrand.**

by

Sinead Harte

Submitted to the Faculty of History of Art and Design and
Complementary Studies in Candidacy for the
Degree of Bachelor of Design,

1996

Acknowledgements

In preparing, reseraching and compiling this thesis I would like to
thank the following for their guidance and help:

Dr. Paul Caffrey.

Mr. Joe Mc. Donnell.

Staff at Arch Info., Clonskeagh.

Gemma Bradley, Assistant Librarian.

Maartje Boer.

Table of Contents

Acknowledgements.

Introduction. 3

Chapter 1. The Political and Social Influences. 7

Chapter 2. *Les Grands Projets.* 15

Chapter 3. Competition for *La Défense.* 30

Chapter 4. The Design of the Arch. 37

Conclusion. 47

Bibliography. 49

List of Illustrations.

- Figure 1. *La Grande Arche de La Défense.*
- Figure 2. *Le Centre de Georges Pompidou.*
- Figure 3. *La Géode at La Musée des Sciences et de L'industrie.*
- Figure 4. The east - west axis.
- Figure 5. *Le Grand Louvre.*
- Figure 6. Detail of the pyramid.
- Figure 7. *L'Institut du Monde Arabe.*
- Figure 8. *Moucharabiyah.*
- Figure 9. *La Cité de la Musique.*
- Figure 10. *La Cité de La Musique.*
- Figure 11. *L'Opéra de la Bastille.*
- Figure 12. *Nouveau Ministère des Finances.*
- Figure 13. *La Bibliothèque Nationale de France.*
- Figure 14. Headquarters of American company Bull.
- Figure 15. Shopping Centre and arch.
- Figure 16. View of *La Grande Arche* from the axial promenade.
- Figure 17. Original sketch for *La Grande Arche de La Défense.*
- Figure 18. Detail of tensioned structure of *les nuages*.
- Figure 19. Detail of canopy.
- Figure 20. View showing Les colines and *La Grand Arche*.
- Figure 21. View of arch with canopy.

Introduction.

Les Grands Projets are a typical example of the French attitude towards architecture and design ie: the more impressive looking the better. One of the best examples of this attitude from the *projets* is *La Grande Arche de La Défense*.

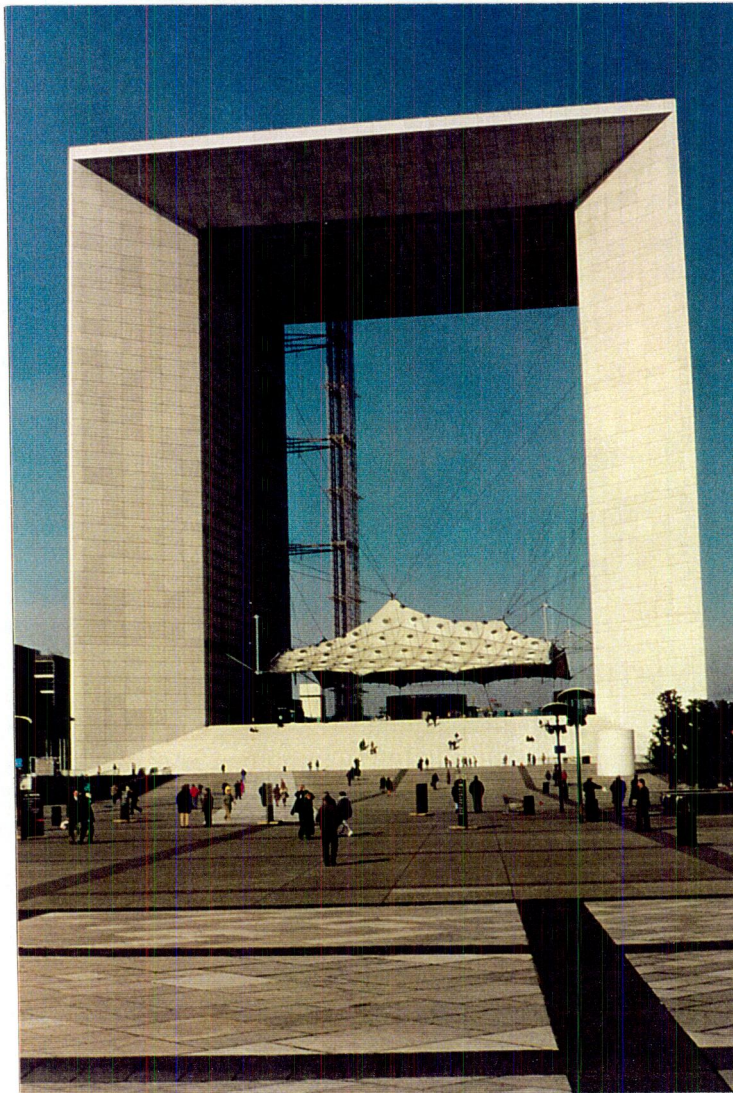
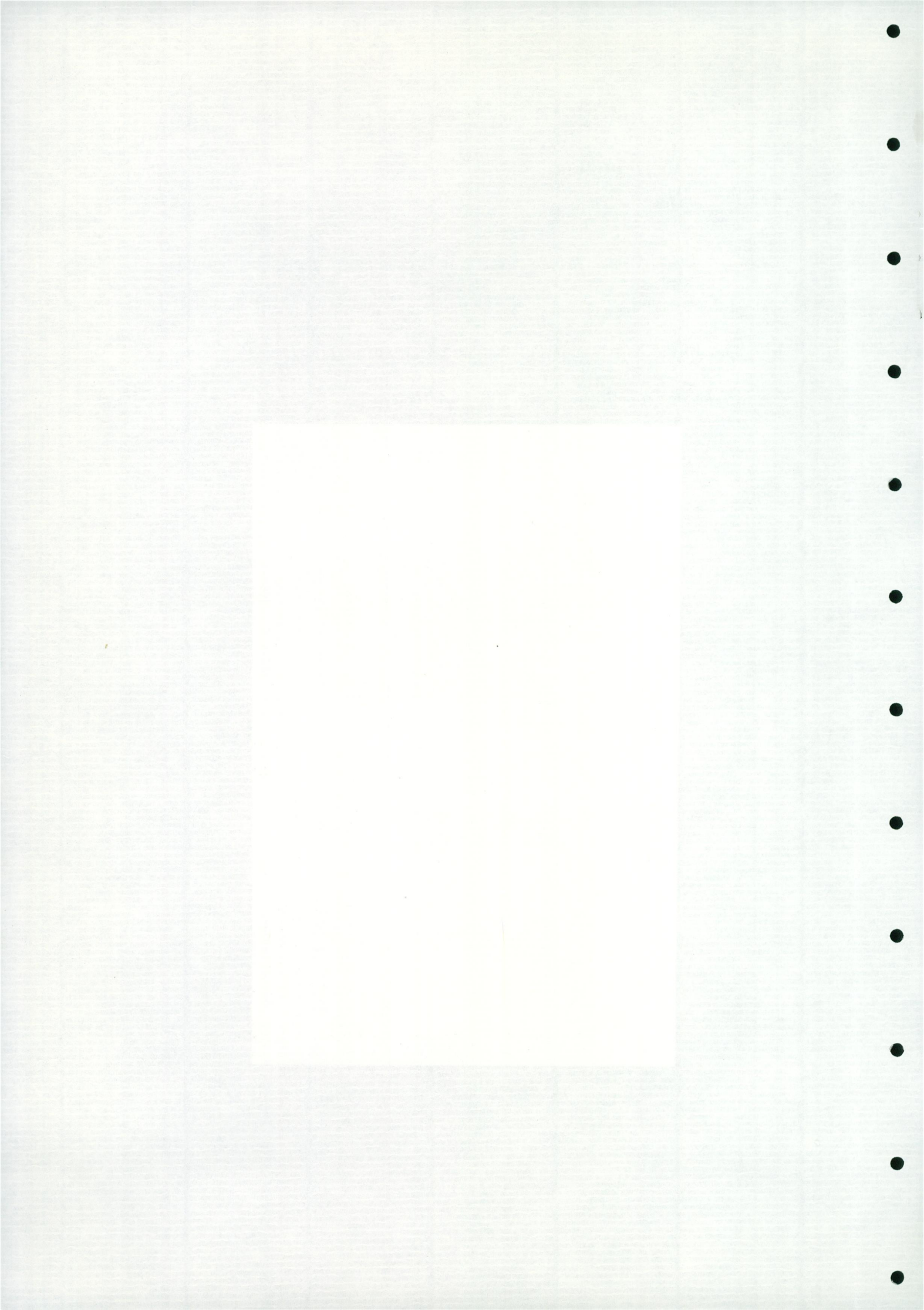


Fig. 1. *La Grande Arche de La Défense*.



In France for the last twenty years or so there has been a concerted effort to try and highlight the importance of design and architecture so as to form a coherent national identity. This has mainly been achieved through the state patronage of various designers like Philippe Starck, who was responsible for the design of Mitterrand's presidential apartments and also through the patronage of the various architects who were involved in *Les Grands Projets*.

It is for this reason that state patronage is so important as this automatically means that these buildings are given an important status. If Francois Mitterrand had not been involved in these "grandiose architectural and technological creations" (Aldersey-Williams, 1992, p.71) they would probably never have been built. These modern buildings are positioned alongside older historic buildings so as to make them more visual and also to give them a certain legitimacy.

This thesis will examine the effect which Francois Mitterrand's *Grands Projets* have on the streets of Paris today and in the future taking *La Grande Arche de La Défense* as a case-study.

The first chapter will look into the political and social influences which are behind the architecture of Paris. These include the importance of historical Paris and the effect which the placing of these Grands Projets has had and will continue to have on the historical value of these areas. The infamous French pride and stubbornness will also be discussed in relation to their attitude towards the buildings. For this chapter the most relevant source of information was Norma Evenson's book Paris: a

Century of Change which dealt mainly with the subject of the changes in architecture and town planning from the time of Haussmann to the present. However this book only goes as far as 1979 and so is really only useful for background information. This thesis picks up from the point where this book left off and continues up to the present.

The second chapter will concentrate on *Les Grands Projets* and each of these buildings will be briefly discussed in turn. The arrondissement *La Défense* shall also be discussed under the following headings, contemporary *La Défense*, *La Défense* as an edge city and also the importance of this area for the economy in Paris. The information for this chapter was taken mainly from various different architectural and design journals. Most of the articles were quite short and very broad with no specific information in them. These articles tended to concentrate on only one or two of the Projets at a time and so it is necessary to read a lot of articles to get the information. This thesis brings together all of the information from these various articles so as to form a more coherent account.

Chapter three will examine the reasons why Francois Mitterand opted to use a design competition to pick the building. It will also discuss how the competition winner was picked and why this particular building was chosen. This chapter will look at the meaning behind the arch as well as the significance of the International Carrefour de Communications. There were two main sources for this chapter, assorted journals and the book Paris 1979 - 1989. Again these articles were quite broad and so this

thesis presents a unified version of these events.

In chapter four the design of the arch itself will be analyzed. The use of the shape of the arch and the canopy will be analyzed in relation to the original concept of the architect. A critique of the building both inside and out will be given, with particular reference to its suitability for human usage. The problems with the arch both design and policy wise will also be discussed with reference to governmental interference and technical problems. This chapter is based mainly on my own observations on the building design after two field trips to Paris were conducted and so does not contain many references to either books or journals.

Chapter 1. Political and Social Influences.

It could be said that Paris was the first city in the truly modern sense of the word. This can be attributed to Kings like Napoleon III and Louis XIV as well as Presidents like Francois Mitterand and Valéry Giscard d'Estaing. Paris is the city it is today, due in part to the ambition of these leaders. Napoleon III in particular was responsible for the basis of the infrastructure in Paris today, along with the engineer Baron Haussmann. "Paris lives on Haussmann's work" (Evenson, 1979, p.24) was Le Corbusier's attitude to this great town planner.

One of the most important elements of Haussmann's system was the creation of a major north-south, east-west crossing in the centre of the city. This was called the *grande croisée*. There was no room for sentimentality, history, or tradition in his plans and as a result of this, many older and more historic areas of Paris were either razed to the ground or demolished. Haussmann was not only involved in the restructuring of the streets, but also in the "look" of the city as one. Haussmann advocated unity and order and in order to do this it entailed him becoming the architect of the buildings as well as planning the streets.

Before the First World War, France had one of the biggest colonies in the world and this resulted in them being one of the greatest powers as America and Russia had yet to become as powerful as they are today. All of the power was centred in Europe, and France along with Great Britain

was very important. However, after World War 2 this all changed as France was now the poor country which had to rely on the aid of bigger and more powerful countries like America, and even England.

As a result of this there has been a general effort in the last twenty years in France to restore some of it's standing on the world stages of both politics and the economy. The search for a national identity is part of this, so that France will remain unique, a major player on the world stage, yet still retaining it's own distinct culture and traditions. It is important for the French that they retain their culture even if it means that they lose out on certain areas of power.

"To do unto the city - and to undo what others have planned - is an accepted prerogative of high office in France" (Mangon, 1989, p.69). The above quote is very relevant to the architectural policies of the presidents of France. This may be due to the fact that the presidents role in France is mainly a ceremonial one and this is probably why the people elected to this office spend so much time and energy on architectural policies. The reason being that buildings will remain standing long after their term in office ends. It offers in essence a chance for immortality. The French presidents in particular are known for their attempts to impose some form of architectural vision on the streets of the capital, ie: Georges Pompidou with *Le Centre de Georges Pompidou* and Valery Giscard d'Estaing, who was responsible for projects like, *La Musée des Sciences et de l'Industrie* at La Villette as well as the *Musée d'Orsay*, although these two were eventually brought to their fulfilment

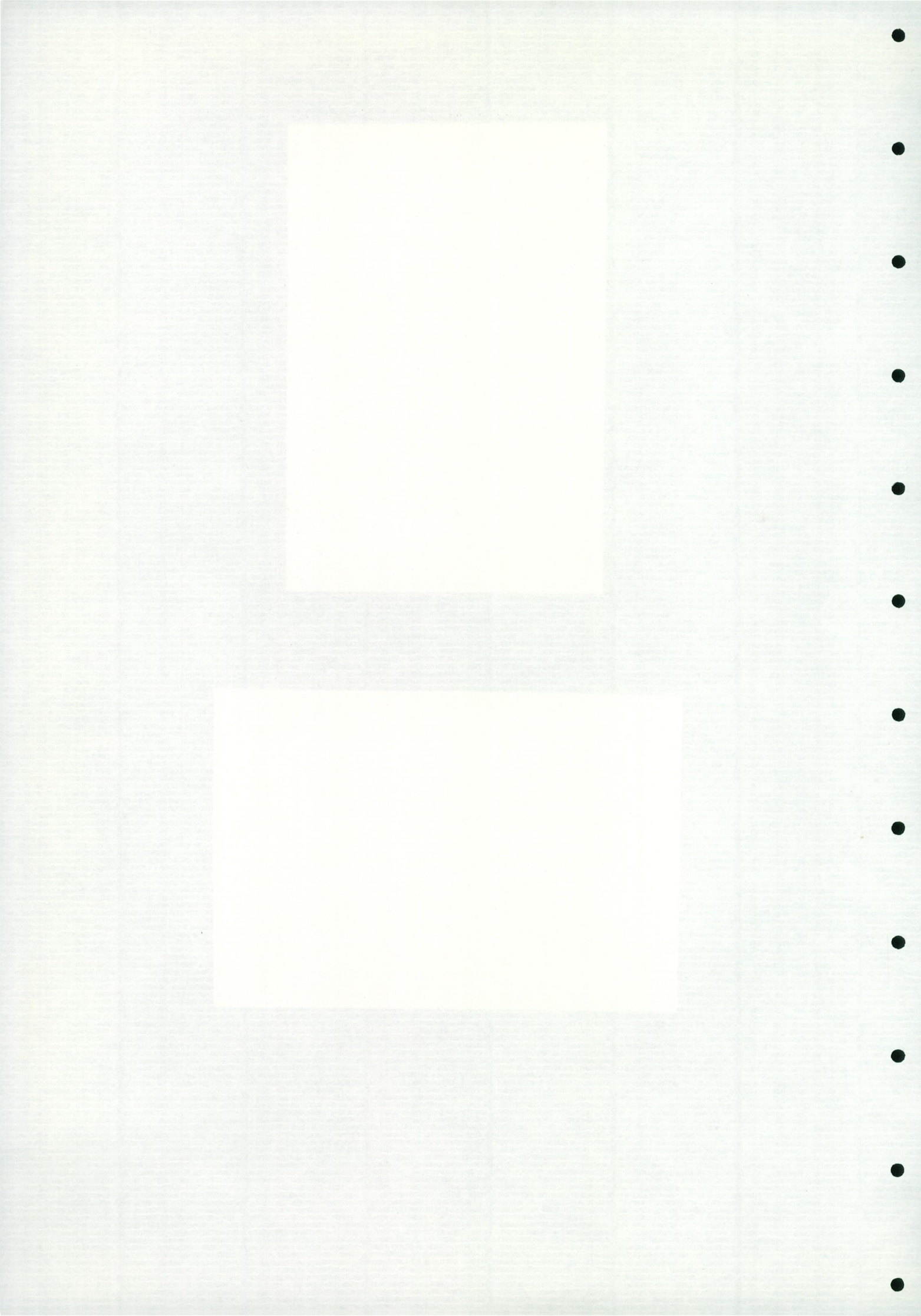
by Mitterand. Mitterand's plans for the streets of Paris were probably the most ambitious and wide ranging plans for Paris this century. The French people have always been obsessed with their country being one of the most important and powerful countries in the world.



Fig. 2. *Le Centre de Georges Pompidou.*



Fig. 2. *La Géode at La Musée des Sciences et de
L'industrie.*



This is especially true of Francois Mitterand, who wanted Paris to be the ideal city of the future; a city where modernity and history amalgamate perfectly into the one harmonious unit.

During his first term in office, (1981-1988) he had to work with a socialist government and since Francois Mitterand was also a socialist, this meant that all of the design projects could commence immediately. However, halfway during his first term of office, and for all his second term, (1988-1995) he had to work with Jacques Chirac, a conservative politician, and as a result, funding for many of his projects was greatly reduced. In the case of *La Grande Arche*, this resulted in the cancellation of the *International Carrefour de Communication* and eventually led to the resignation of Johann Otto Von Spreckelsen.

"This [cuts in spending] is quite normal as these major projects are the result of a collective effort which surpasses political differences" (Dauge, 1989, p.12). This was said by the then President of the Interministerial Co-ordinating Commission for the Major Architectural and Urban Planning Projects Yves Dauge.

At the time of this statement, Yves Dauge, was a minister in the government of Jacques Chirac and was in office when the changes to *Tête Défense* were being made. These changes resulted in many problems for the building, the main one being Von Spreckelsen's resignation. Yves Dauge's comment when taken in the light of what happened at *La Grande Arche* was either a very naive statement or a cover up. The fact that while the socialists were in power the buildings were given the go ahead

as was originally planned seems to have been ignored by the conservative government. If anything their actions were merely petty political manoeuvrings on behalf of unscrupulous government officials who wished to make fools of the previous socialist government by causing problems. It is a great pity that the French parliamentary parties cannot truly work together to bring about proper and lasting social and economic change.

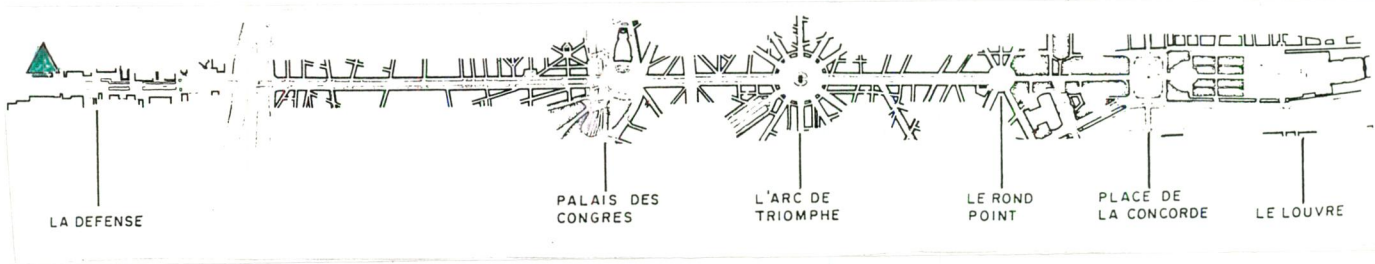


Fig. 4. The east - west axis.

The historical city centre of Paris is "hinged" on the East-West axis. This axis begins at the *Louvre's Cour Carré* and continues along through the *Jardin des Tuileries*, up the *Champs Elysées* and then straight up to *La Défense*. Traditionally the *Champs Elysées arrondissement* (sector) is probably the most important one in Paris, in both an economic and historical sense. This is due to the concentration of government and historic buildings. These can be seen all along this boulevard. These include the two *Arcs de Triomphe*, *La Place de la Concorde*, and the *Louvre*. Most of the streets off this great boulevard are exclusive ones, in particular those off the *Champs Elysées* section of the *Boulevard*.

It is perhaps for this reason that the East-West axis needed a monumental piece of architecture at its most western end. *La Grande*

Arche can be seen (except in very bad weather) from beneath the *Arc de Triomphe*, however, it is only on exceptionally clear days that the other buildings in *La Défense* can be seen and so the historic area of Paris is untainted by the "curse" of the modern building. *La Grande Arche* is quite appropriately situated in relation to the other monuments on the axis. The Arch is at an angle of six degrees off the avenue leading up to it. This was done mainly to avoid the road and the R.E.R. (underground rail system) line, both of which run beneath the buildings foundations. This six degree skew off the axis also coincides with the *Cour Carré* in the *Louvre* which is also offline with the axis to a degree of six. The Arch also has another similarity with the *Cour Carré*, as the floor area of the *Cour Carré* is the same as that of the Arch. The Arch because of its skew is also in line with the Tour Eiffel. The Arch's relationship to the *Arc de Triomphe* is that the *Arc de Triomphe* can fit into the centre of *La Grande Arche de La Défense*.

It is interesting to note that at the most eastern end of this very historic axis is *Le Grand Louvre* by I.M. Pei and at the most western end, *La Grande Arche* by Von Spreckelsen. It is fitting that these two buildings are at either end of this long straight boulevard due to their geometric and modern forms, it is interesting to note that at either end of Paris' most historic axis are two modern buildings.

The French are known as a conservative race and in Paris more so than in any other European capital the importance of the "old" has perhaps led to a city in which modern buildings are few and far between. This

attitude has often been criticised by people who would like France to be a modern country as well as an important economic power. The reason why modern buildings bring these attributes to a country is because these buildings tend to form the workplace of these companies. Therefore if there are objections to these buildings it is likely that important companies will be obliged to set up elsewhere. This criticism was most notably voiced in 1972 by the then president of France, Georges Pompidou, who said in an interview in *Le Monde* that "The French prejudice and particularly that of Parisians, against height is, to my eyes, completely retrograde"(Evenson, 1979, p.190).

However, thanks to presidents like Francois Mitterand, the future of European architecture has become an important issue in France. The most important success which Mitterand's *Grand Projets* have accomplished is to highlight the best, in contemporary European and international architecture. This has been done by using these competitions to place these modern buildings in historically important areas of Paris and not hidden away from sight so that these buildings will be a visual testament to the future ie; *The Grand Louvre* which has been placed in the *Cour Napoléon* in the *Louvre* and *L'Opéra de la Bastille* which is sited at the exact location of *La Bastille*. They were not relegated to be used simply as office space but to be centres of culture and learning. The placing of *La Grande Arche* in *La Défense* changes the commercial image of this area considerably giving *La Défense* a "proper" image.

Chapter 2. *Les Grands Projets.*

When François Mitterrand was first elected president of France in 1981, he immediately set about organizing his policies concerning issues such as design and architecture. Probably the greatest and most visual of his successes have to be his *Grands Projets*. These buildings were all planned for the Bicentenary of the storming of the Bastille which was due to be celebrated in May of 1989.

These buildings are as follows: *La Grande Arche de La Défense*, *Le Grand Louvre*, *L'Institut du Monde Arabe*, *La Cité de La Musique*, *L'Opéra de La Bastille* and *La Ministère des Finances*.

In all of the above buildings, with the exception of *Le Grand Louvre*, the design for the building was settled by means of an International Design Competition. In each case, a jury of renowned architects picked the two first prize, and two second prize winners. The drawings for these were then presented to François Mitterrand who picked the building which was to be built. Mitterrand was not told which of the buildings were the first prize winners. In the cases of nearly all of the competitions there was quite a lot of controversy concerning the proposed buildings. One reason for this ^{were} the designs and another was the fact that in all but two of the projects the competitions were won by non French Nationals.

In the case of *Le Grand Louvre*, Mitterrand himself, personally chose the Chinese architect I.M. Pei to come up with the design.

Mitterrand had seen some of Pei's other buildings in the United States and as a result he felt that I.M. Pei was the right person to bring Paris into the twenty-first century. It reflects well on the diplomacy of Francois Mitterrand that he managed to ensure the finishing of these buildings despite the public outcry and the election of Jacques Chirac into government, and then later as mayor of the city, which resulted in the process being hampered considerably.

Another *Grand Projet* was arranged after Mitterrand was re-elected in 1988, this was called *Le Bibliothèque Nationale*. The winner of this competition was the 36 year old French architect Perrault. Interestingly enough in this project there were no objections raised by the mayor of Paris, Jacques Chirac.

The following is a brief description of each of *Les Grands Projets* in turn.

Le Grand Louvre

Architect: Ieoh Ming Pei and Partners, New York

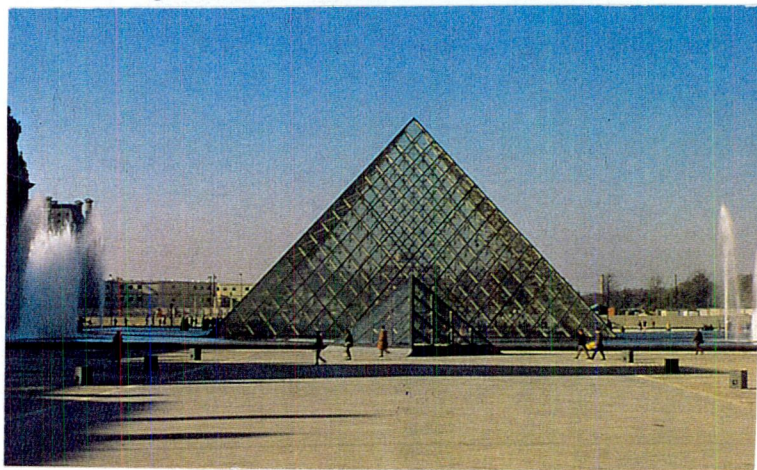


Fig. 5. *Le Grand Louvre*.

Le Grand Louvre consists of a 60ft. high glass pyramid situated in the *Cour Napoléon* of the *Louvre*. This addition to the *Louvre* provides a large and spacious underground reception area, a bookshop, as well as a highly successful shopping mall for the *Louvre* which includes shops like Virgin and several clothes shops.

At first, this pyramid was hotly contested by the public at large, but Mitterand held his ground and has now been proved right by the success of the pyramid. This pyramid shows how well modern architecture can fit in with the more traditional kinds and is probably the best example of Mitterand's wish to place new architecture along with old. The new interior area was badly needed for the *Louvre* and this has served it's purpose in bringing the *Louvre* museum into the twenty first century.

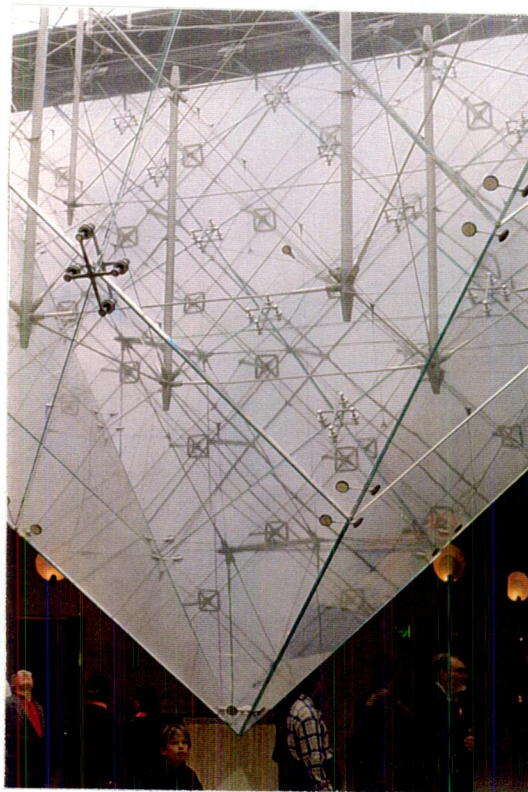


Fig. 6. Detail of the base of the pyramid.

L'Institut du Monde Arabe

Architect: Jean Nouvel, Pierre Soria, Gilbert Lezèves and Architecture Studio.



Fig. 7. *L'Institut du Monde Arabe*.

This building was built so as to create more links and understanding between the Western and Arab worlds. This building is particularly suited to Paris as France has a large Arabic population as a result of its African colonies. This building includes facilities such as concert and lecture halls as well as a museum and library. This building depicts the interweaving of several influences, the traditional and the modern, the Arab and the Western cultures and also the inwardly turned characteristic of Arab World Architecture contrasting with the openness of Arab culture towards other cultures.

One of the most remarkable features of this building are the windows, which are historic Arabic geometrical symbols called "*moucharabiyah*". These open and close much like the aperture of a

camera, depending on the brightness of the light outside as well as with every changing hour.

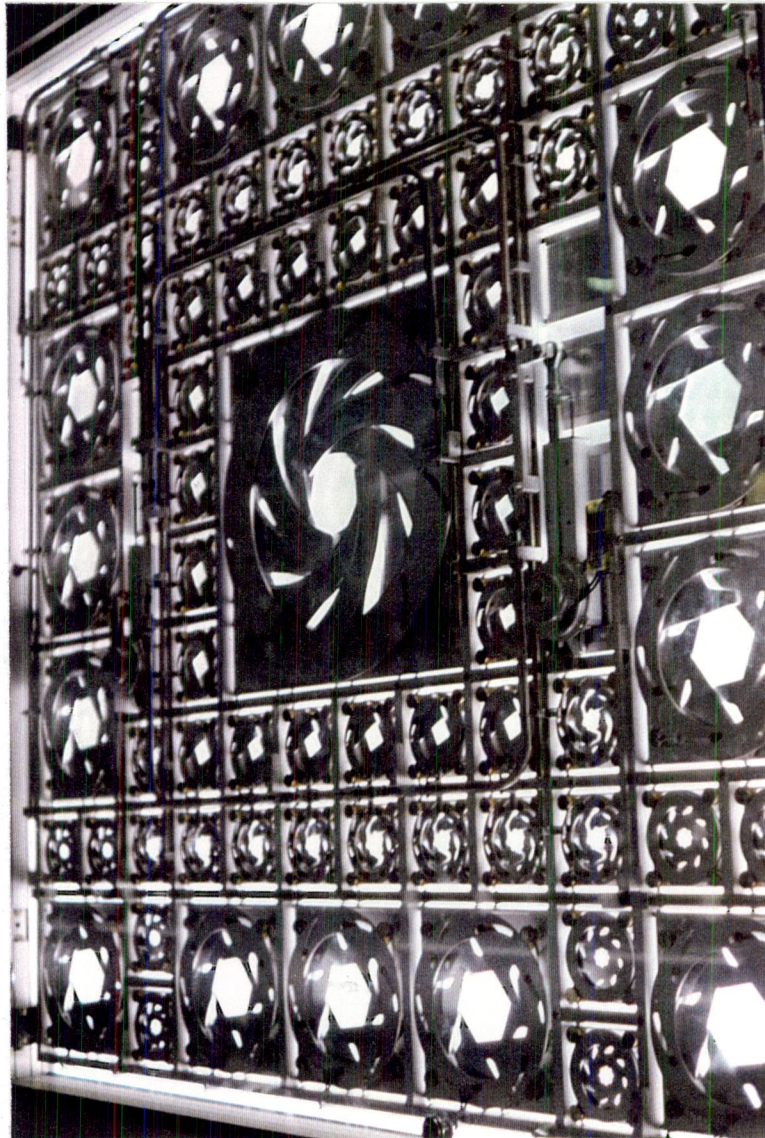


Fig. 8. *Moucharabiyah.*

La Cité de la Musique at La Villette

Architect: Christian de Portzamparc.

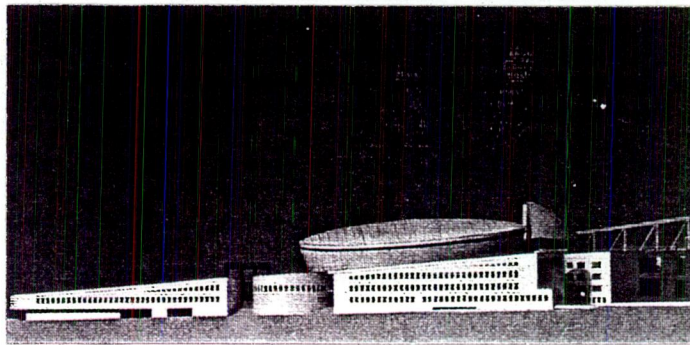
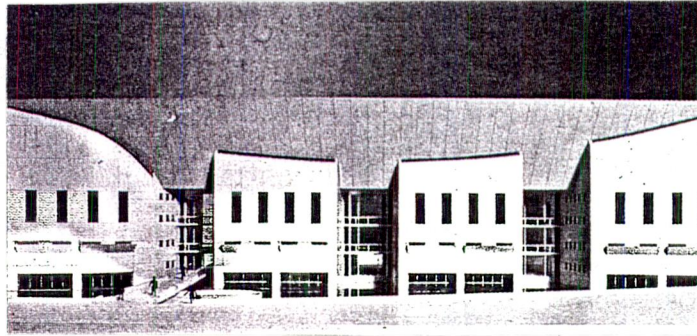


Fig. 9 + 10. *La Cité de La Musique.*

La Cité consists of a complex which will house; music classrooms, performance halls, student accommodation as well as a museum for musical instruments. The site is split into two parts, with the conservatory to the West and the museum, concert halls and guest performers quarters to the east. *La Cité* is situated beside the Lion fountain at the main entrance of the park de *La Villette*.

L'Opéra de La Bastille

Architect: Carlos Ott with NORR, Toronto.

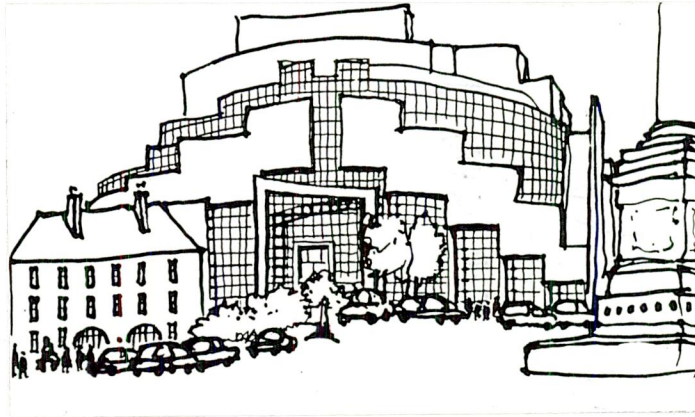


Fig. 11. *L'Opéra de La Bastille*.

This opera house is situated at the exact location of the now demolished prison *La Bastille*. It was designed to accommodate large crowds of people, as well as allow modern performances to take place. The traditional Opera House designed by Charles Garnier was too small and unsuitable.

However it has now been realised that there are many different problems associated with the new building. Due to faulty construction and the use of cheap materials this opera house is quite literally falling apart. One can see quite clearly while walking past, the green netting which has been put in place to collect the falling masonry.

Nouveau Ministère des Finances, Bercy.

Architects: Paul Chemetov and Barja Huidobro, AUA, Paris, and Arreteche and Karasinski, Paris.

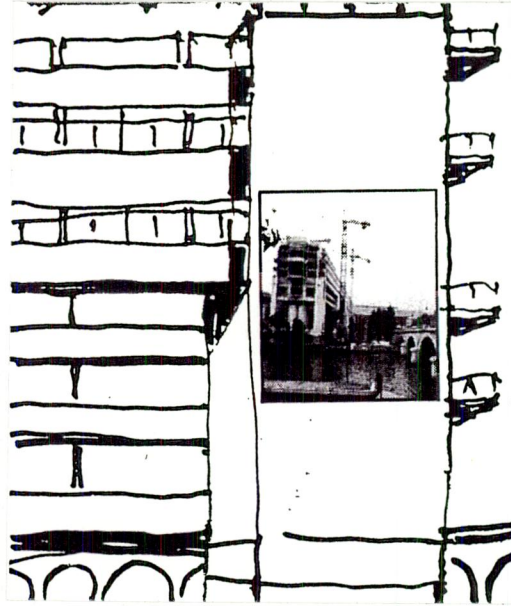


Fig. 11. *Nouveau Ministère des Finances, Bercy.*

When *Le Grand Louvre* was proposed it meant that the Ministry of Finance had to be moved out to a new location. The building is very large as it covers an area of nearly 250,000 square metres. This building is quite interesting as it actually projects itself into the river Seine and as a result becomes a part of the nature of the city. It also includes a helicopter pad on the roof (Moffet, 1989, p.25).

Le Bibliothèque Nationale de France

Architect: Domonique Perrault



Fig. 12. *Le Bibliothèque Nationale de France.*

This was the last of Mitterrand's *Grand Projets* and it was initiated in 1988 when he was re-elected president of France. The building consists of four towers positioned around a large square garden. The large garden houses 250 trees which will face the library reading rooms which when finished will give them a bright airy feeling.

This building will be 13 stories high off the ground but will also have eight stories of storage underground. At first this building was 15 stories high but 2 were taken off because it was considered too high for Paris (Architecture Today, no.58, p.29).

La Défense today consists of a 1,700 acre site on the outskirts of Paris. This area is considered to be one of the most important sites of modern architecture in France, both in an economic and historical context. *La Défense* lies 2 miles west of the *Arc de Triomphe* at the most western end of the historic East-West axis. Yet this part of Paris is still metropolitan and not yet suburban. This is perhaps due to its economic importance.

La Défense was named after an heroic, but futile stand was made against the Prussians in the Franco - Prussian War (many people died there trying to protect the city against a vastly superior Prussian army). For many years *La Défense* was occupied by a round about, which had been subject to a previous design competition in 1931 to improve the road.

However,

It was de Gaulle who decided - partly in response to the persistent post-war demands for more office space in Paris and partly to preserve the city's characteristic density and medium-rise building height - to create La Defense (Moffet, 1989, p.24).

In 1958 an organisation (*Établissement Public pour l'Aménagement de La Défense*) was set up by the government to design and build what was known then as "the most ambitious and exciting urban renewal scheme in the world" (Evenson, 1979, p.191). In 1960, as a result of this, a master plan was proposed which included a mix of high-rise offices and other buildings arranged around a large axial promenade which was to be aligned on the *Champs Elysées*.

From this time onwards, because of this, most of the modern high rise buildings which the Parisians did not approve of were relegated out to *La Défense*, and it was this fact which meant that an historically important building had to be erected in order to justify *La Défense*'s existence in the centre of Paris (Davey, 1989, p.54).

However it was not until 1981, when Mitterand decided to sponsor the competition for ideas as to how this "modern mess" could be cleaned up that the go-ahead was given for a building which would be directly aligned on the East-West axis.

A design competition was organized, so as to solve the problem posed by the non-existence of a monument at the most western end of the axis and also to solve the "unfinished" look of *La Défense*. Before then, many different ideas had been put forward, these included designs for buildings by I.M. Pei and Émile Aillaud. I.M. Pei's idea consisted of "a pair of symmetric towers joined by a parabolic volume which liberated the historic axis" (Lion, 1989, p.18). Émile Aillaud's design on the other hand closed off the axis. However, the French people felt that a fitting monument had to be erected in order to justify its position on this famous axis (Weston, 1989, p.46).

The Arch has really changed the image of *La Défense*, making it an acceptable area for tourists to visit. *La Défense* is mentioned in most guide and travel books as a glimpse of what twenty-first century towns and cities will look like, and not as the modern high rise ghetto it is sometimes perceived to be. On clear days the Arch can be seen from the

Arc de Triomphe and one can be certain that curiosities will have been aroused by the look of its pristine white walls and understated arch. This Arch is a fitting end to one of the most famous axes in the world. An axis which has retained its importance for over two hundred years and which, due to the efforts of Francois Mitterand and other presidents like him, will continue to be important well into the next century.

Contemporary *La Défense*, can be called an "Edge City" as defined by the American journalist Joel Garreau. He defines an "Edge City" as: an employment core that has at least 24,000 jobs, at least five million square feet of lettable office space and has office and retail developments which have been designed and built in the last twenty years. At present there are over forty office towers in the *La Défense arrondissement*.

These edge cities which were first seen in the 1970's is more typical of American rather than European cities. The reason that these "edge cities" were developed is because in most large cities the employees live out in the suburbs and so have to commute into work everyday. This practice became more and more expensive, so developers moved out to the suburbs in order to accommodate their employees. There were some advantages for the companies also, as the land out in the suburbs would also have been cheaper and easier to develop. These "cities" cater primarily for commercial office buildings that are the workplace of the hi-tech information age. This is why the International Centre of Communications was so suited to this area (Garreau, 1995, p.3).

La Défense is extremely important for the economy of Paris, as it is the headquarters for many different companies. *La Défense* boasts the headquarters of 14 of France's top 20 companies. This area is very well served by the various different methods of transport and so as a result can be very easily reached from all parts of Paris, France and indeed the world. The reason for this is because of the metro station, the R.E.R. station, a motorway and also its close positioning relative to the *Boulevard Périphérique* (a motorway which surrounds Paris). Although the city centre of Paris is still economically important, most of the buildings related to business are not in close proximity to each other, which is the case with *La Défense*. The skyscrapers not only house French companies like *Crédit Lyonnais* and *Le Banque Nationale de Paris*, but also international companies like Fiat. In the cases of some of these companies their *La Défense* offices are their French headquarters like the American company Bull.

Fig. 14. Headquarters
of American
company Bull.



La Défense also consists of apartments and several hotels like Holiday Inn. The huge exhibition hall C.N.I.T. holds many different shops like F.N.A.C. a music store and *Galeries Lafayette* a department store, as well as restaurants and several bars. *La Défense* also contains a two storey shopping centre with everything from groceries to jewellery on sale inside it.

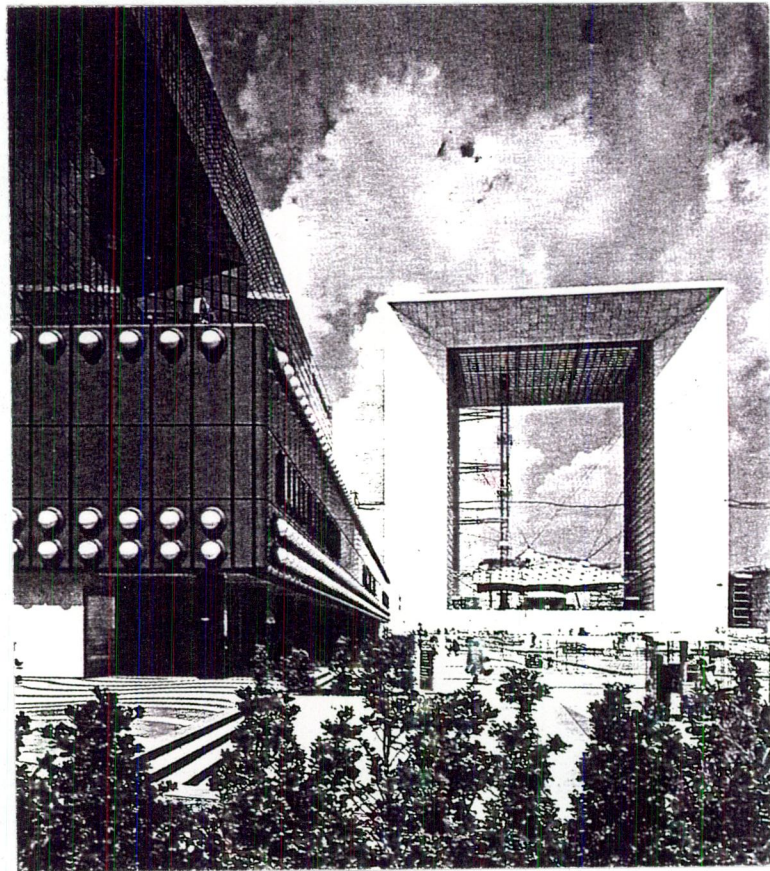


Fig. 15. Shopping centre and arch.

These examples show *La Défense* to be a thriving community and not just an amalgamation of several different high-rise buildings. The shopping centre is as busy as any which could be found in the centre of Paris.

In *La Défense* the image of what the modernist world was meant to look like can be seen through the wide pedestrian areas and promenades which give so much space to the people who use this area every day. All of the traffic is underground which diminishes both the air and sound pollutants common to most cities and towns. In a way it is the ideal city in other words consideration is given to both the commercial and human users.

As mentioned earlier in chapter one the town planning system in Paris today is the same system which was planned and built by Baron Haussmann in 1878. As part of this plan, Paris was given a look, ie: all of the houses were designed so as to look part of the same group. This is perhaps why there is such an apprehension on the part of the Parisians when it comes to constructing modern buildings right in the centre. The Parisians have become too used to their city and how it looks as a whole. They are too used to looking at rows of practically identical buildings and perhaps are afraid that the unity of the city as a whole will be destroyed. This was why built up areas like *La Défense* were created.

Chapter 3. *Competition for La Défense.*

In March of 1982 the President of France, Francois Mitterand, announced details of what was to be an international design and architectural competition. The building to be designed was to house the proposed *International Carrefour de Communications*.(I.C.C)

The I.C.C. was, according to President Mitterand, a complex that "confirms the country's commitment to communication science and it's desire to master all related social, cultural and industrial aspects"(Loriers, 1983, p.32). This complex was to be an "open-ended program that includes research, media and telecommunications"(Loriers, 1983, p.32), which according to Mitterand would confirm France's commitment to communication science and it's desire to master all related social, cultural, and industrial aspects. The I.C.C. was to be used by people of all nationalities, not just by the French. This communication science was to help create better links between the different countries and their cultures and also to bring understanding and tolerance to all nations. The Internet, is an example of a global tele-communications system in operation today.

The I.C.C. was organised so that the information gained could be used in the *Universal Exposition* of 1989. This exposition was planned for the celebration of the bicentennial of the storming of the Bastille and was subsequently cancelled due to economic reasons. The *International Carrefour de Communications* was also cancelled, due to the same reason when Jacques Chirac's conservative party was elected into power (Loriers,

1983, p.32).

The site chosen for the building was at the most western end of Paris's historic East-West axis. This section of Paris is known as *La Défense*. The competition achieved huge international interest and as a result 424 designs were submitted for the competition. A one hundred and thirty member jury which included influential architects like Richard Rogers and Richard Meier, selected sixteen projects from the four hundred and twenty four. There were many different criteria which had to be considered by the jury in order to pick the winning design. The historic positioning of the building had to be considered as well as the wish to make *La Tête Défense* a modernist monument.

The final design was chosen by Mitterand himself, who chose it from a selection of four different ideas (the four were made up of the two first and two second prize winners). The building which Mitterand chose was designed by the, then virtually unknown Danish architect, Johann Otto Von Spreckelsen. Of all of the competitions which decided *Les Grands Projets*, the result of this one was probably the most successful. The reason for this success was because it received almost unanimous support from the French people. In most of the other competitions there had been quite a bit of controversy surrounding the chosen designs. His design consisted of a one hundred and ten metre squared "open" cube which was clad in white carrara marble. To either side of the building Von Spreckelsen envisaged smaller administration buildings which he called *Les collines* (hills). The structure in the centre, *Les Nuages*

(clouds) was designed to add a human scale to the building and also to highlight the pure and simple lines of the arch (Anon, 1984, p.68).

The arch was picked because it was considered to be a modernist monument and a testament to the good that modern and progressive architecture is. The design is not part of the modernist tradition like most of the other buildings which surround it in La Defense but yet it still fits in with them.



Fig. 16. *La Grande Arche de La Defense.*

The arch is modern, new, fresh and inspiring and is a living tribute to

the deceased architect, it will be forever remembered as Von Spreckelsen's greatest work. It is a testament to the skills of the modern architect and engineer as its very structure and shape is impressive.

It is interesting to note that after all of Spreckelsen's ideas concerning his axis, that when he resigned in 1986 he felt that it was simply a "monument without soul" (Anonymous, 1995, p.265). This statement shows a complete disillusionment with his work and ideas and it is a pity that he felt this way about the design in the end. Perhaps he was fed up with all of the red-tape involved or just felt that enough was enough. Maybe the reason for his problems were caused by the cancellation of the I.C.C. which in effect meant that his original thoughts and ideas were simply excess baggage as far as the government were concerned.

The disregard for his wishes reflects badly on the French conservatives especially since just one year later he died and this is sure to have been accelerated by the problems incurred involving his building. This building is the only well known piece of architecture designed by Von Spreckelsen and perhaps in a way this was a chance for him to be remembered.

The sheer size and volume of this building lends to its monumentality and perhaps it should be said that a building not meeting these requirements should not have been placed on the East West axis in the first place. The simplicity and purity of this building give it an importance all of its own. It looks like an important building, one which

is of high visual interest. The arch basks in it's own glory and stands out without question from all the other nameless buildings in this area.

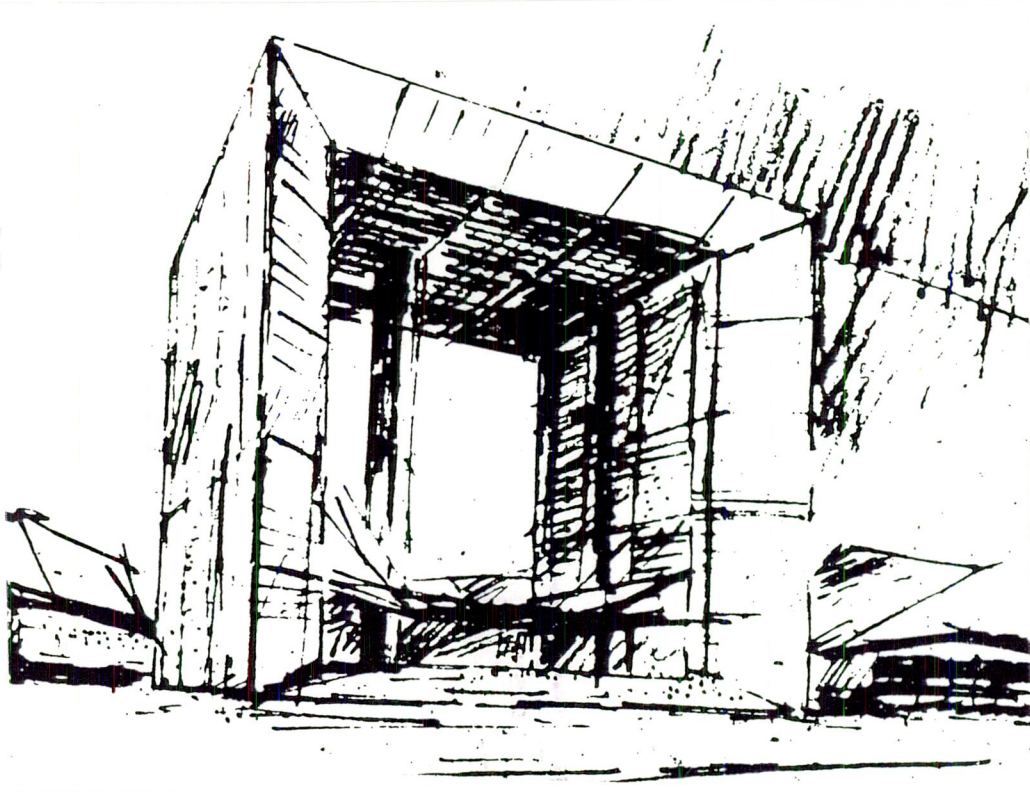
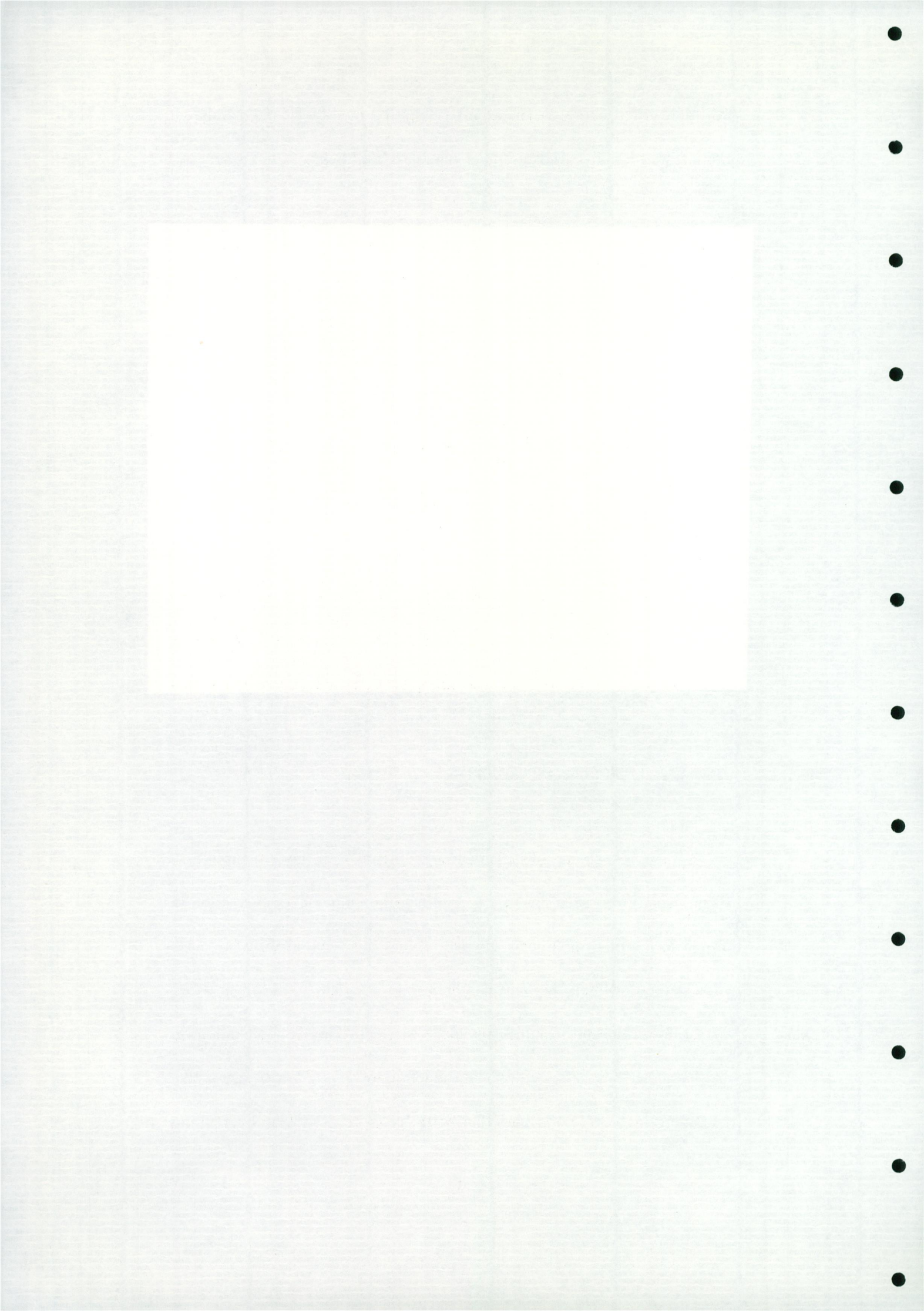


Fig. 17. Original sketch for *La Grande Arche de La Défense*.

Blandness is one of the greatest problems with modern buildings. It can sometimes seem as if no original thoughts have ever filtered through to the other architects minds and it is this feeling of nothingness in La Defense, which the arch has helped to alleviate. No longer is *La Défense* a boring and insignificant place to visit. This is another reason why Parisians have resisted the introduction of "downtown" areas like Manhattan in New York into their city as there is a fear of nothing



standing out and of their precious city being boring. There is an inherent irony in this statement considering the blandness of the city as a whole after Haussmann had his way with the plans. The city consists of sector after sector of nameless boulevards and streets which disappear into each other after the one visit.

"An open cube
A window to the world
As a temporary Grand Finale to the avenue
With a view into the future.
It is a modern "Arc de Triomphe,"
Celebrating the triumph of mankind,
It is a symbol of hope for the future
That all people can meet freely"
(Otto Von Spreckelsen, 1983, p.12).

These were the exact words which J.O. Von Spreckelsen used to express his idea behind the Arch's design. His idea behind the arch was as follows, he felt that the arch was an open window to the world which looked out onto the future. He thought of his design as being a modern "*Arc de Triomphe*" which celebrated the successes and achievements of mankind. The Arch being a meeting place for different races and cultures was also very important particularly in view of the fact that the initial use of the building was for the *International Carrefour of Communications*. Von Spreckelsen named his arch "The Triumphal Arch of Man".

Triumphal Arches are very suited to France as they have been built ever since Roman times to commemorate various victories. These Arches include *Porte St. Denis* and of course more famously the *Arc de Triomphe* which was built for Napoleon Bonaparte. The *Arc de Triomphe* is the

same width as the interior cube of *La Grand Arche* (Broadbent, 1992, p.68). J.O. Von Spreckelsen's design has often been the subject of both symbolic and philosophical debates. The relative simplicity of the design is found to symbolise much more when looked at in this light.

The reasons why Mitterand chose Otto Von Spreckelsen's idea was because of its inherent simplicity and purity of form. When the cube was designed its particular shape was not picked purely because of the way it looked, but also because of the aesthetics which were involved behind using a pure geometric form like a cube. Due to the historic placement of the Arch on the most western end of the *Champs-Élysées* axis. Otto Von Spreckelsen called his building a "window on the world" and this was to show the influence it was supposed to have on a worldwide basis. The roof of the arch was to hold the *International Carrefour de Communications* and it was for this use which Von Spreckelsen intended his design to be used for.

Otto Von Spreckelsen's arch was like a window looking out to the future. Positioned as it is on the end of an important axis it must fulfil both a cultural and monumental purpose as most of the other main buildings on this axis do. Positioned as it is on the most western end of Paris it is in a perfect position for showing how the French are concerned with looking out to the future.

Chapter 4. The Design of the Arch.

The winner of the Design competition was the Danish architect Johann Otto Von Spreckelsen. In his home country of Denmark he was known only as the architect of several churches. Johann Otto Von Spreckelsen was born in Copenhagen in 1929, and when his design was picked he was working as a professor of architecture at the Royal Academy of Art in Copenhagen. Otto Von Spreckelsen was very much involved in the preliminary stages of the construction of the arch, but in 1986 he tendered his resignation after disagreements arose concerning the building and he returned to Copenhagen where he died just a year later after a prolonged illness (Davey, 1989, p.45).

Otto Von Spreckelsen's design, known as *La Grande Arche de La Défense* is a cube 105 metres on each side. The central open space ("window") is the same width as the *Arc de Triomphe*. The arch weighs over 300,000 tonnes and the construction is organised around a megastructure composed of vertical walls with 21 meter bays, thirty five stories tall, joined at the roof and the ground by the three storey tall members. This structure is expressed on the facade by the marble bands every seven stories and every seven horizontal bays. The end-walls and other surfaces are sloped to soften the light. The facades are composed of aluminium frames covered with large glass panels to form a perfectly smooth exterior surface. The facade was intended to look like the surface of a microchip (Weston, 1989, p.47).

In Otto Von Spreckelsen's plans in the middle of the arch there

are structures made of panes of glass which were called *Les Nuages* (clouds). The primary aesthetic function of the clouds was to provide a "living contrast to the clean geometry of the cube" (Suner, 1989, p.196). However after building had started on the arch the engineers began to realise that *Les Nuages* were not a feasible design because of the wind pressures and the cost. As a result of this the Irish engineer Peter Rice was called in to assist with their redesign.

Peter Rice was a very well known engineer in the architectural world. In 1992 he was awarded the R.I.B.A. gold medal for architecture. In his architecture he endeavoured "to create an architecture that speaks both of craft and of the human mind at work" (Gruber, 1992, p.84). Peter Rice had also been involved in a number of high profile building projects including the Sydney Opera House and Lloyds of London. He worked as part of the Danish engineering company Ove Arup. Peter Rice was also responsible for the canopy in La Parc de La Villette, which is also in Paris (Gruber, 1992, p.84-87).

Even though the canopy was Peter Rice's design, both Paul Andreu and Von Spreckelsen were involved in the initial stages of its conception (Suner, 1989, p.196-197).

In Von Spreckelsen's original design the "*nuages*" were in fact sheets of thick sliding glass whose function was to form a "favourable local climate which allows outside activities most of the year" (Suner, 1989, p.196). These glass "*nuages*" were also intended to diminish the noise caused by traffic. In Von Spreckelsen's own words the *nuages* were

to be "sheltered spaces covered with planes of glass like moving clouds, that seem to float gently over the people and their activity (Suner, 1989, p.196). However it was found as the work began on constructing the "nuages" that it would be extremely difficult to achieve on " both practical and cost grounds" (Weston, 1989, p.43). Another reason for abandoning these plans was their questionable safety as it would in fact create it's own climate which would make the glass sheets very dangerous in most adverse weather conditions.

Les Nuages changed from the glass panels to a canvas membrane structure, essentially a canopy which was "canvas over a metallic mesh broken up into cells of smaller dimensions" (Suner, 1989, p.196).

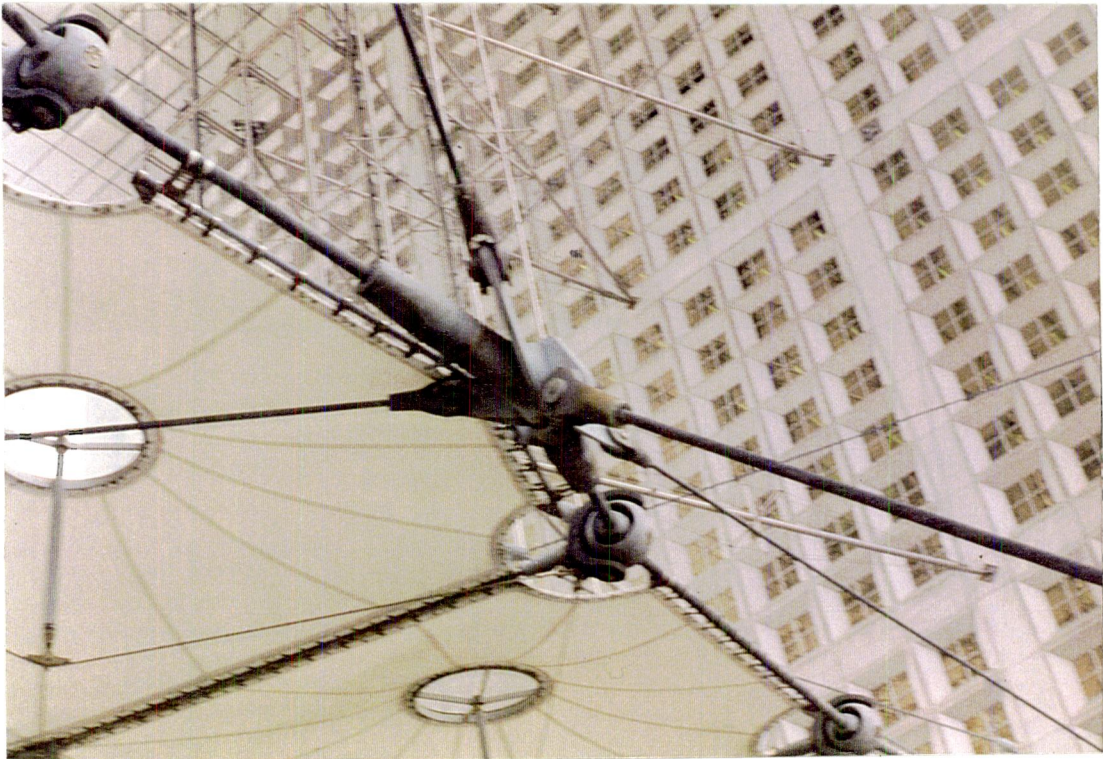


Fig. 18. Detail of the tensioned structure of *les nuages*.

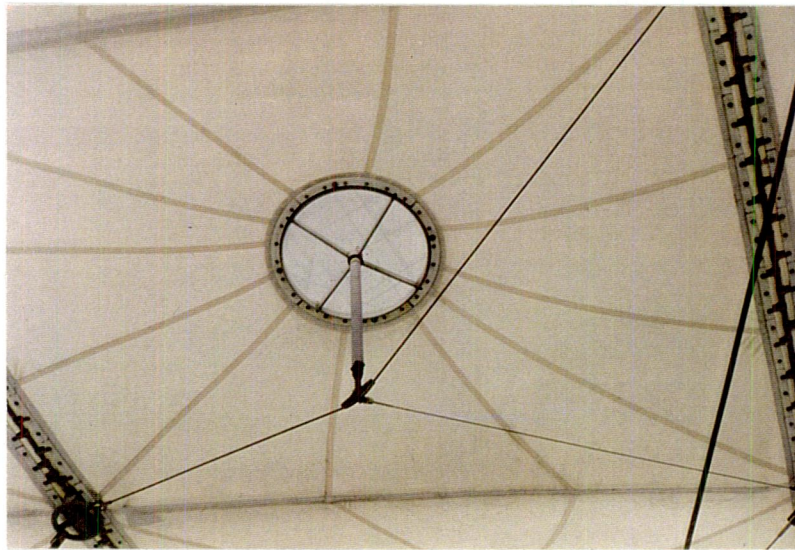


Fig. 19 Detail of canopy.

The canopy designed by Peter Rice, ranges in height from 9 metres to 25 metres above the plateau, and the *nuages* cover an area of 2000 metres squared. The purpose of the canopy was to provide shelter, a wind break and it was also to introduce human scale into the huge building. However even with the canopy in place it can be quite dangerous to walk down the steps on a windy day there have been several cases where people have been blown down the steps. Although Von Spreckelsen was involved with the initial design of the canopy he had retired and died before it was eventually finalised.

Paul Andreu, a French architect, was born in 1938 and is best known for his work on the *Roissy Charles de Gaulle* airport in the North of Paris. Paul Andreu who had already been acting as assistant architect on the building to Otto Von Spreckelsen, took over the task as head architect after Spreckelsen's resignation in 1986, and was responsible for

the finishing of the project.

As part of his design Von Spreckelsen also designed "*Les Colines*". These were smaller buildings to each side, their visual function was to allow the Arch to fit in better with it's surroundings. When Von Spreckelsen designed them they were to hold the Ministry of Public works. However, in April 1986, this was scrapped and so "*Les Colines*" had to be redesigned so that they could be used as office space.

Another solution by French architect Jean-Pierre Buffi was found after a limited design competition was held. These consisted of four thin seven storey blocks which were set to either side of the Arch. These were clad in dark granite and glass to contrast with the arch.



Fig. 20. View showing *Les Colines* and the arch.

These *colines* may be joined at a later date by huge tower. This round tower was designed by Jean-Marc Ibos and Jean Nouvel. It will be 40 metres in diameter and 400 metres in height and if this building goes ahead will become the highest building in Europe. This tower can be particularly related to the Arch as Von Spreckelsen felt that his arch would be perfectly complimented by a tower, rather like a square mosque with a free standing minaret (Davey, 1989, p.51).

As probably happens in most major building projects there were quite a few problems incurred. However not all of these problems were construction related, many were related to governmental policy. The Arch was designed to fulfil the supposed use for the building as the *International Carrefour de Communication*, ie: all of the symbolism behind the shape and the "open window on the world". However when Jacques Chirac's conservative government were elected, spending cuts were initiated which resulted in the abandoning of the I.C.C. This move was greatly disputed by Otto Von Spreckelsen but to no avail. This was only one of the many problems which plagued the building, in another a Danish engineer, Erik Reitzel, spoke out against the way that the piles were driven as his specifications had been completely ignored. Also the French architect, Jean-Marie Chevalier, tried to implement a 10% cost cutting exercise. However, even with President Mitterand personally stepping in on Von Spreckelsen's behalf, nothing was changed and so as a result Von Spreckelsen resigned from his post and returned to Copenhagen.

The origins behind the design of La Grande Arche are quite difficult to ascertain. The building design cannot be placed under any specific or defined architectural theories. The Arch displays elements of both postmodern and modern architecture. The modernity of the Arch is expressed through its clean simple lines and strong geometric shape, that of a hollow cube and its postmodern-ness is expressed through the free forms of the canopy. One of the requirements of the original design brief was that the building had to achieve a monumental stature and "bearing". The sheer size of the Arch serves to heighten its feelings of monumentality and importance. This shape is not one in which there is any pretence at human sympathies, it glorifies its aloofness from the everyday concerns of man.

In this way the shape is very much at home in the commercial district of La Defense where success can be measured in height and size. The Arch may not be the tallest of the buildings in La Defense, (the Groupe des Assurances Nationales at 42 stories is the highest) but it is certainly the one which is the most imposing. The Arch is due to be joined by a 400 metre minaret which will once again raise its image. The Arch is also quite aloof from the other buildings in La Defense, it has a special look and atmosphere to it, which tends to overshadow the other buildings somewhat. This is not simply a building, rather it is in Spreckelsen's own words a "window on the world" (Otto Von Spreckelsen, 1983, p.12). The building looks as if it rightly deserves to be built on the East West axis.

The shape of the building draws the spectators eye towards the Arch and away from the other high rise buildings and this is not really surprising as it can be plainly seen from almost every section of La Defense. Mitterand's wish that La Defense be completely finished has certainly been achieved with the Design of the arch.

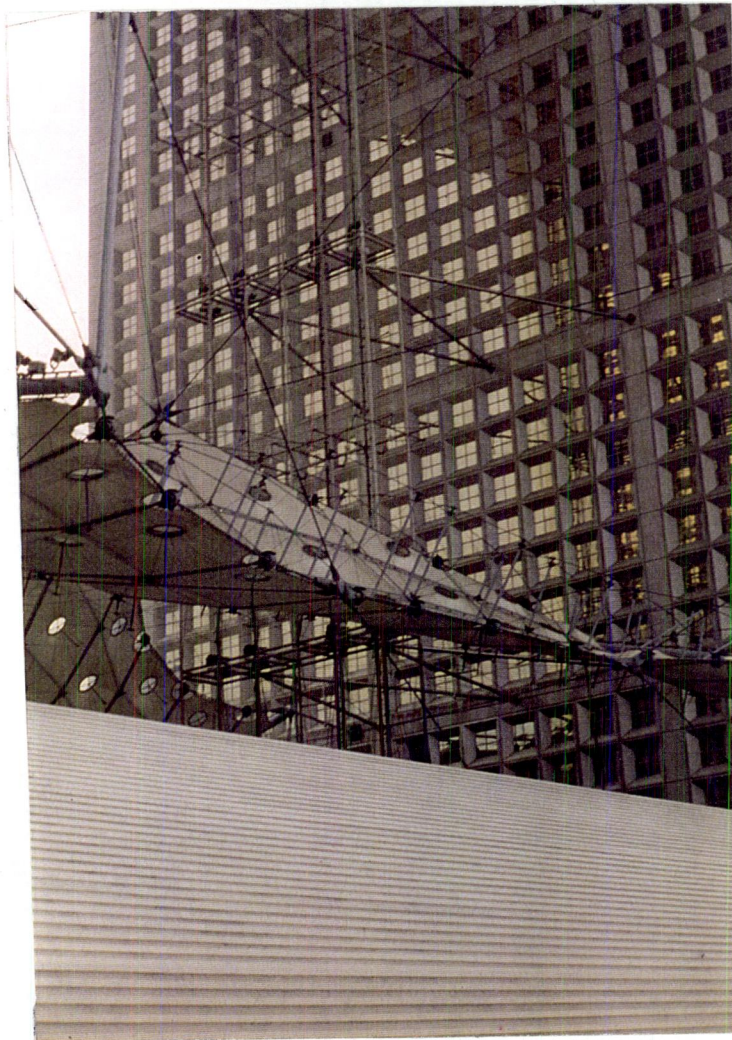


Fig. 20. View of Arch with canopy.

It is the canopy, the elevator shafts and the human sized windows which give the Arch it's human dimension. The cube on it's own is very harsh and geometric leaving very little there for humans to relate to. This

humanity is very important in the finished design as the Arch is supposed to be a place where people of different nationalities can meet to talk and exchange ideas on culture. This is also very important considering Spreckelsen's lofty title for his building as "The Triumphal Arch of Man".

The interior of the Arch has obviously been forgotten in this building, obviously Von Spreckelsen was really only concerned with the outside look and feel of the building. The two side members of the Arch contain a very straight-forward approach to interior design. It is a great pity that not more time and effort was given to the interior, as what happens in most modern buildings happens here ie; the interiors are dark, gloomy and oppressive and surprisingly, considering the size of the building the offices and lecture halls are quite small. It is obvious from the state of the interior that they ran out of money before this could be properly finished. Even the furniture inside is old and in bad condition. This is a great pity as it is sure to take away from the exterior of the building for anyone who has to use it every day.

The building was originally intended to house the *International Carrefour de Communications* but this was cancelled by Jacques Chirac due to lack of funds and now it holds the *Conseil d'Europe*. This centre is in the basement of the building, which is very dark and dismal.

It is unfortunate also that not more of the building is open to the public. The only way to ascend to the roof of the building is by escalator and this involves paying a sum of five pounds. The roof at present is only good for the magnificent view of Paris which can be gained, a restaurant

which is planned has not yet been finished. There will also be a garden on the roof which has yet to be built.

Conclusion.

Now that Francois Mitterand has died it is interesting to think about how this will affect the standing and importance of *Les Grands Projets* in terms of the new European Architecture. Perhaps now it will bring these buildings into a new and maybe more accepted stage of their "lives". His death gives these buildings a new maturity and worth as they are now testaments to a visionary leader of France, who was dedicated not only to an economically superior country but also to the arts and culture. He was also the one president who had the courage to fulfil his ideas concerning architecture even though they may have been unpopular and controversial decisions at the time. This determination on his part obviously struck a chord with the French people as they re-elected him for a second term of office, which meant that he was the longest serving president in French history.

In a way these projects are known as Mitterand's work rather than that of the various architects involved, as it was Mitterand who ensured that they were brought into the public's mind and this is what will be remembered. Mitterand's death has posthumously meant that once again media attention will be focused on his policies and buildings. Praising his diplomacy and courage in the face of adversaries and hassle. These buildings will be forever known as the products of Mitterand's vision and ideals.

It is highly unlikely that there will be another such important

programme of urban renewal on the streets of Paris before the start of the new century and so as a result of this he will become known as one of the most influential presidents of France. His work will ensure that Paris is ready for the twentieth century.

BIBLIOGRAPHY

ALDERSEY-WILLIAMS, Hugh, World Design, New York, Rizzoli International Publications, 1992.

ANONYMOUS, "International Center of Communication at La Defense", Architectural Record, v.172, no.3, 1984 March, p.68 - 69.

ANONYMOUS, "Canopy, *Parc de la Villette*", Progressive Architecture, v.70, no.12, 1989 November, p.135.

ANONYMOUS, "Architect quits in Paris fiasco", Building Design, no.812, 1986 November 14, p.1.

Anonymous, "The *Grande Arche, La Défense*, [Paris], 1989", Architecture and Urbanism, no.9 Extra Edition, 1990.

ARDAGH, John, The New French Revolution
A Social and Economic Survey of France 1945-1967 Secker and Warburg, London, 1968.

BOUTIN, Natalie, Let's Go, The Budget Guide to France, 1995, including Corsica and Monaco, Mac Millan, Massachusetts, 1995.

BROADBENT, Gloria, Camino de, "Johann Otto Von Spreckelsen: *La Grande Arche, La Défense*", Architectural Design, 1992, v.62, n.1-2, January - February, p.66-71.

COHEN, Jean-Louis, ELEB, Monique, MARTINELLI, Antonio, The Twentieth Century Architecture and Urbanism, Paris.

DAUGE, Yves, Paris 1979 - 1989, London, Rizzoli Intl. Publication Inc., 1989.

DAVEY, Peter, "*La Défense*", Architectural Review, v.186, no.1110, 1989 August, p.44 - 53.

DORMER, Peter, Design since 1945, London, Thames and Hudson, 1993.

DUTTMANN, Martina, SCHMUCK, Friedrich, UHL, Johannes
Translated from German by GABRIEL, John, William
Color in Townscape for Architects, Designers and Contractors for City-dwellers and other Observant People.
San Francisco, W.H. Freeman and Co., 1981.

DETHIER, Jean, GUIHEUX Alain, (sous la direction de)
La Ville, Art et Architecture en Europe 1870-1993
Editions du Centre Pompidou, Paris, 1994.

EVENSON, Norma, Paris: A Century of Change, 1878 - 1978
Newhaven and London, Yale University Press, 1979.

FISHER, Thomas, "Projects: Flights of fantasy", Progressive Architecture,
v.73, no.3, 1992 March, p.105 - 107.

GARREAU, Joel, "Main Street moves out to Edge City", The Irish Times,
Supplement, 1995 August 2, p.3.

GRUBER, David, "In memoriam: Peter Rice 1935 - 1992 [obituary]",
Progressive Architecture, v.73, no.13, 1992 December, p. 84 - 87.

LION, Robert, Paris 1979 - 1989, London, Rizzoli Intl. Publication Inc.,
1989.

LORIER, Marie Christine, "Building a new Paris: *La Défense*",
Progressive Architecture, 1983 September, v.64, p.32.

MANGON, David, "*La Grande Arche de la Défense*", Architecture
d'Aujourd'hui, no.252, 1987 September, p.66-79.

MC.DONALD, Frank, "The Legacy of Francois Mitterand", The Irish
Times, Supplement, 1996 January 18.

MOFFET, Noel, "Paris Quartet: reports from Paris on the progress of
President Mitterand's *Grand Projets*", Building Design, no.907, 1989
October 21, p.24 - 25.

READ, James, "Monument to Mitterand: the *Bibliothèque Nationale*",
Architecture Today, no.58, 1995 May, p.28-36.

SPRECKELSEN, Johann Otto Von, Paris 1979 - 1989, London, Rizzoli
Intl. Publication Inc., 1989.

SUNER, Bruno, "*La Grande Arche de la Défense*", Architecture
d'Aujourd'hui, no.265, 1989 October, p. 196 - 197.

SUTCLIFFE, Anthony, The Autumn of Central Paris, The Defeat of
Town Planning 1850 - 1970, DYOS, H.J., (general editor) Studies of
Urban History 1, London, Edward Arnold, 1970.

TAYLOR, Mark C., Disfiguring Art, Architecture, Religion, The
University of Chicago Press, London, 1992.

VONIER, Thomas, "Monumental Modernism", Progressive Architecture,
v.68, no.7, 1987 July, p.98 - 99.

WESTON, Richard, " Window on the world [*Grande Arche at Tete
Défense*], Architects' Journal, v.190, no.2, 1989 July 12, p.42 - 49.

WEISS, Glenn, "Disappointment at *La Défense* [Paris]", Progressive
Architecture, v.70, no.2, 1989 February, p.24.

