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***LEARNING THE RULES OF THE GAME ABROAD:
THE CASE OF FRIEDRICHSTADTPASSAGEN 207***

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LEARNING THE RULES OF THE GAME ABROAD: THE CASE OF FRIEDRICHSTADTPASSAGEN 207

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SUMMARY

A la différence des autres projets, tous relatifs à des concessions d'infrastructures, l'étude de cas présentée ici concerne un projet de bâtiment réalisé à Berlin par des acteurs de différents pays. Le maître-d'ouvrage était une *joint venture* franco-allemande alors que la réalisation était à la charge d'une entreprise générale française - CBC. Celle ci, agissant comme *Generalübernehmer*, employait à ses côtés des entreprises de plusieurs pays européens. Toutefois, il n'y avait aucune participation d'entreprise du bâtiment allemande. Les entreprises les plus engagées dans le projet étaient d'origine française et autrichienne. Leur objectif était de pénétrer sur le marché du bâtiment allemand par le biais de ce projet. Elles n'y sont pas parvenues et ont subi, au contraire, d'énormes pertes. L'étude identifie les points critiques et souligne le caractère décisif que recouvrent, plus encore à l'étranger, la connaissance du système local et de ses règles .

INTRODUCTION

Whereas the other cases selected to study joint ventures in the construction industry in different countries in Europe were big infrastructure projects, the project examined in Berlin was the only building project in the sample. The main reason for the inclusion of a building project in the number of projects studied was very simple: a great infrastructure project executed by an international joint venture of construction firms like the other projects included (Channel Tunnel, Storebælt, Second Severn Crossing, the planned TAV in Italy) was not available in Germany at that time. So we had to choose another type of project, which is not strictly comparable with the other projects in the sample. But this point was compensated by the possibility to include some additional questions to study in more detail due to some differences, which discriminate the Berlin project from the other ones.

These differences followed from several facts. Firstly buildings to a certain extent differ in their nature from infrastructure works. Secondly the project coalition was not a joint venture but a coalition of different actors from different countries acting under a national regulatory framework that was more or less unknown to all of them. Thirdly the importance of the project for one of the main actors lay not only in this particular project, but in the project as a means to reach an overriding aim: to enter the German construction market. And fourthly labour market conditions in German construction at that time were different from those in the most other countries in Europe. So the main question to study in this project was not how firms cooperate inside an international joint venture, but how construction firms manage their cross-border activities and what, in particular, the internationalisation of labour markets in construction means.

For a building, as opposed to infrastructure works, the architectural design is more important and the number of functions, which are to be fulfilled is greater. The project, and therefore also the project coalition, are more complex. So it is not above all the *technological* competence of the structural contractor, which is crucial to the whole project (this normally can be expected from every large construction company), but a certain *organisational* power and experience. In the case studied here to win the contract required not a high performance to a given bill of quantities was required, but a threefold competence: the architectural one to present an extraordinary design for the building, the organisational one to ensure the management of the whole process, and last but not least the financial power of an investor, who was able to buy and to develop the site. Therefore a joint venture of developers was formed, which then gave the project to a *Generalübernehmer*, who was responsible for the execution of the whole project from the design phase to the handover of the building to the user.

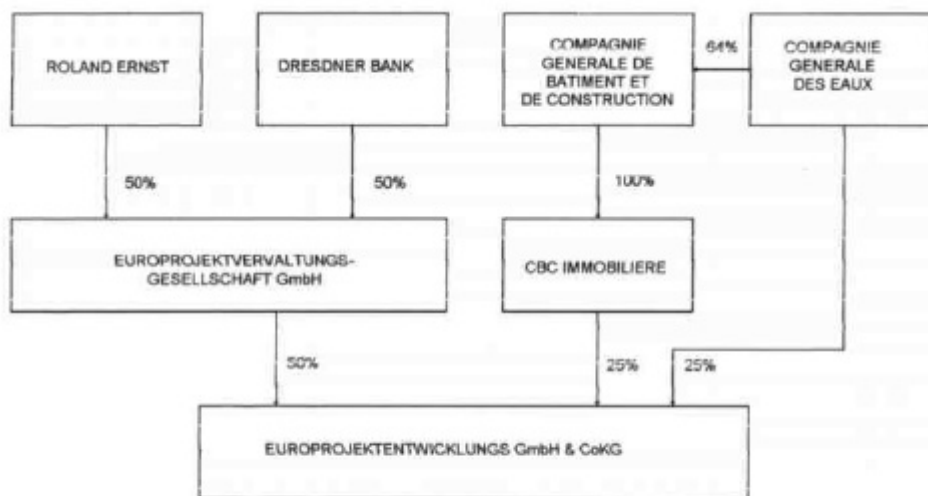
Unlike the client, the project coalition itself was not a joint venture². It was formed not along the border lines between full trades (e.g. like superstructure, steelworks), but had to organize the performance of a single trade (e.g. superstructure) as a cooperation between different actors (respectively responsible for structural engineering, site management, different parts of site works) - with the particular point here, that these different actors all came from different countries. Furthermore contractors and subcontractors from different countries worked together, so that cross-national cooperation was required. And last but not least they all worked under German regulations, which again made their activity some kind of a cross-border one.

Unlike the case of great infrastructure projects, the client in Berlin was totally private. So interested parties had to bid for not only the project, but for the land where the site was to be. This land in the centre of Berlin was of course extremely attractive, so the fight for getting the plot of land that the construction site was on represents a good part of the whole story. On the other hand once the site was sold to the developers, the state no more interfered as an actor into the project. It was involved neither as client nor in the construction process and came on stage only in its regulatory role safeguarding the observance of urban planning policies, building norms and health and safety matters on site. It was not a member of the project coalition.

For private developers an investment like this does not only have - like infra-structure projects do - the quality of a single investment, but also represents a market in the respective local area. So investors and firms involved in this case re-garded the project also as a key to a bigger and future market and tried to use it for market entry. In particular, this project was subject to the market entry strategy of the major French actor involved. But it did not, like firms normally do when they go abroad or when they take part in international joint ventures concerning infrastructural works ordered by the state or its agents, try to cooperate with local, (i.e. in this case German partners), but explicitly tried to avoid to do so.

Finally the project was affected by the special situation of the construction market in Germany and in particular in Berlin. After the end of the border to-wards the East, the unification of the country, and the re-establishing of Berlin as its capital, there is an enormous inflow of capital and a huge demand for construction work. And as a consequence of the big changes in Europe after 1989 there are particular conditions in the labour market in construction, which is under high pressure from migration by mobile workforces from regions which are peripheral to Western Europe's industrial centres. So not only do construction enterprises from abroad attempt to enter the Berlin market and the German market via the Berlin one, but also workers from many different countries come and are offered the opportunity to perform the works on site, but whose professional origin and qualification very often is completely unknown.

THE PROJECT STUDIED



THE INVESTORS' GROUP
Source: Interview 18/5/94

Figure 1

The project studied was *Friedrichstadtpassagen*, lot 207, in Berlin *Friedrich-straße*. It is one of the largest developments in Berlin, sharing the whole site (consisting of three lots) with two other, similar developments. The total investment sum is DM1.4bn. Lot 207 will provide 19.000 sqm of offices, 2.000 sqm of shops and 15 apartments, plus underground parking services, offering 300 places for a contract sum of around DM176m. The client in the end was a Franco-German joint venture of developers: Roland Ernst, Dresdner Bank, SGE Immobilière and CBC Immobilière who formed EP Europrojektentwicklungs GmbH. The main commercial user is the French department store group Galeries Lafayette. The structure of the investor's group is shown in figure 1.

The execution of the project was given to the French construction firm CBC (not identical with CBC Immobilière, although belonging to the corporate group), who won the tender. CBC acted as a *Generalübernehmer*. The *Generalübernehmer* in Germany is normally responsible for the whole project from the design to the handover of the building to the client³. But in this case the architectural design was the responsibility of Galeries Lafayette, and they chose the French architect Jean Nouvel, of Nouvel Cattani Associés. The structure of the project coalition is shown in Figure 2.

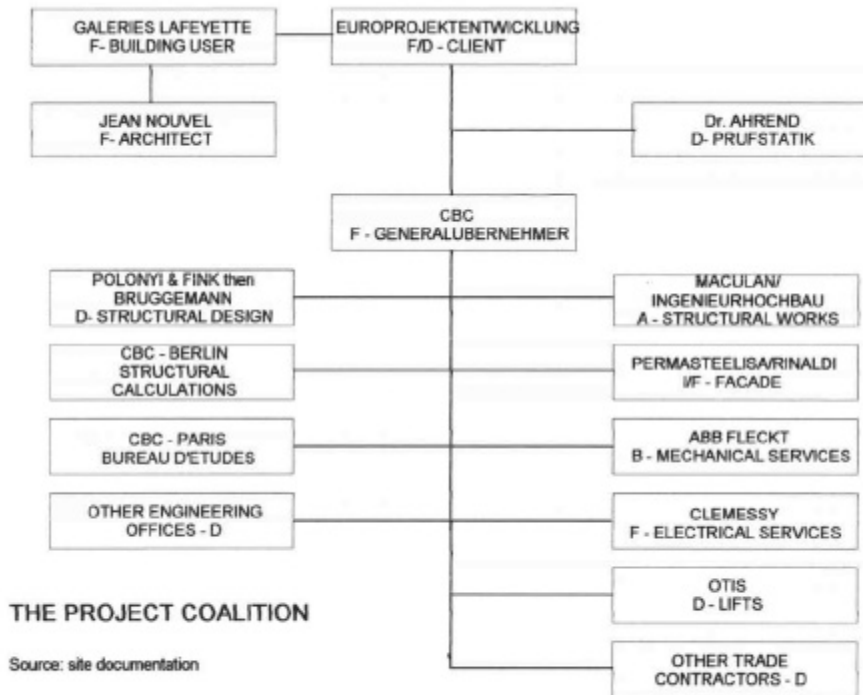


Figure 2

A *Generalübernehmer* has not to, but can, himself contract for the construction trades and so did CBC here. The structural works were undertaken by the Austrian firm Maculan, who acted in some respects as *Generalunternehmer*. A *Generalunternehmer* normally is responsible for the execution of the whole building. The main difference was that Maculan here was responsible only for the structural works. They themselves engaged for the different parts of the works different subcontractors - all non-German. Façades, services, and finishing works were contracted for directly by CBC themselves. Contractors and subcontractors for these trades were either foreign or small local firms. The engineering design services came from German engineering firms. Works on site started June 1993, and the building was opened on the 29th February 1996, one year later than planned.

THE HISTORY OF THE PROJECT

Friedrichstadtpassage is a site situated in the very middle of the City of Berlin and one of the most famous urban quarters downtown. It is part of the Friedrichstraße, which was first constructed in the beginning of the 18th century by King Friedrich II of Prussia. It is a road 3.3 kilometres in length originally dead-straight between two town gates right through the centre of Berlin. In the 19th century, it connected the quarters where the government buildings were with those of the shopping and business centres, the headquarters of the newspapers, the theatres, and last, but not least, the amusement area. So it was a magnet for all who possessed or sought money, as well as an arena of continuous construction and re-construction.

This part of the *Friedrichstraße* is geographically located right in the centre of Berlin (*Bezirk Mitte*). It is marked at the one side by the famous boulevard *Unter den Linden*, at the other side by the *Leipziger Straße*, which leads directly to the *Brandenburger Tor*, and at the third side by the *Gendarmenmarkt*, which - bordered by the buildings of the Academy of Sciences, the *Staatstheater*, and the *Französischer Dom* and the *Deutscher Dom* - is still reckoned to be one of the places with the most urban quality in Germany. Here can be found what literally is called "The Heart" of Berlin and first of the state of Prussia, later of the *Deutsches Reich*. And it is here where the site of *Friedrichstadtpassage* is situated.

On February 3rd 1945, the area around *Friedrichstadtpassage* was heavily damaged by air strikes. The frontier between the two parts of Berlin and later, more severely, the wall, turned that part of the *Friedrichstraße* into a border area, after the division of the city into West and East Berlin.

It was cut not only by checkpoints like the well-known Checkpoint Charlie (less than one kilometre from *Friedrichstadtpassage*), but cut off from rebuilding and further development on both sides of the frontier. In the Sixties, plans to rebuild this area according to the ideas of urban renewal of those days had arisen and been abandoned again - to the advantage of the quarter, because it was planned to widen the traditionally narrow *Friedrichstraße* into a boulevard of 60 meters. So it was not until the middle of the Seventies, when the government of the GDR had become self-conscious enough to include this area in their plans to build up the eastern part of Berlin as their capital, that redevelopment started. They launched "competitions of ideas" for architects to rebuild this area, and execution began some ten years later. In 1984 the GDR-government announced a big reconstruction and re-valuation of the quarter as a central shopping area, so that *Friedrichstraße* would become "the most attractive shopping area of our capital". The planning of 3000 dwellings, 45 shops, 22 restaurants, two schools, three *Kindergärten*, and a hotel as well as the reconstruction of the famous buildings of *Gendarmenmarkt* (*Neues Deutschland* 8/2/85), obviously was timed to be ready before important political events like the celebration of 40 years of GDR in 1989, and the X. Congress of the ruling communist party, the Sozialistische Einheitspartei Deutschlands (SED) in 1990. Works started in 1987 and construction workers from all over the GDR were concentrated in Berlin and in the *Friedrichstraße* to meet these goals (*Bauwelt* 1991 Heft 18/19 p 972-7; *Foyer* 1991 Dezember p18-20).

On the site of what is now 205, 206 and 207 *Friedrichstadtpassage*, a department store was planned, and the client was the central trade organisation of GDR (*Centrum Warenhausgesellschaft*). *Galeries Lafayette*, the French department store group, were involved at this stage as a potential user of the new building. Construction works started and were half ready, when, about three years later, after unification, this organisation was taken over by the *Treuhand*, a state agency founded in the last days of the GDR and later on taken over by the unified state to privatise former GDR state property ("Volkseigentum"). So the *Centrum Warenhausgesellschaft* from 1990 on was no longer an independent actor. Applicants to buy *Centrum Warenhausgesellschaft* could not be found. It went into liquidation the same year and the construction works could not be continued (Interview 12/12/1994; *Sturm auf die Stadtmitte Der Spiegel* 13/8/90).

Until unification, the site had been developed by the *Baudirektion* of the GDR. This had been an organisation of the GDR government, employing, among others, the best architects of the country, which had to undertake all important urban planning and representative buildings, especially in Berlin as their capital. It was among their responsibilities to develop sites and they continued to do so after the end of communist government between 19th March 1990 (first and only free elections in the GDR and formal end of communist participation in GDR government) and 2nd October 1990 (the evening before unification), still using the land which had been in their area of responsibility. The difference was, that in the meantime, employees of the *Baudirektion* - according to a resolution of the last SED-dominated government of the GDR before 19th March 1990 - had founded a private real estate company. This company now made a claim for sites totalling 200.000 sqm (including *Friedrichstadtpassage*) which had been *Volkseigentum* or (property of the state) all the time with an

estimated value of about 1bn DM. The new company claimed the right to sell these sites to its own profit to developers, who in that days came into East-Berlin in droves.

This action of former *Baudirektion* employees would not only have enabled a company, whose members were thought to be to a great extent former high-rank officials of the former ruling communist party, to become private owner of former state-owned land by a stroke of a pen. It would also have lead to a situation, where this company would have got the exclusive right on the most famous and precious sites in the centre of Berlin or at least would be able to earn a fortune by selling them. So the Senat of Berlin, after October 3rd 1990 responsible for the entire city, acted successfully against the new established *Baudirektion* company, and reserved to itself the exclusive right to sell the sites. Without these sites the *Baudirektion* company owned nothing anymore and went bankrupt. The land, like all former *Volkseigentum*, was taken into the responsibility of the *Treuhand*, who then would sell it to later investors (Dreister Griff in die Staftkasse *Die Tageszeitung* 11/9/1990) .

For the Senat of Berlin now the way was open to redefine and reorganise the development of *Friedrichstadtassage* according to the new needs of the new capital, which is expected to become very soon an *agglomeration* of some five million inhabitants. The existing half-completed building was demolished at the site prepared for tender to international developers at the expense of the *Treuhand*.

THE TENDER PROCESS

The tender for developing *Friedrichstadtassage* was a particular one. First of all it was not a tender for a defined building, but a tender to define one, which at the same time contributed to the development of the entire quarter of the city. More than that: tenders were to combine both architectural and financial proposals. State money would not be given to the projects. The whole site was divided in three lots (205, 206, 207), in order to preserve the traditional (i.e. 19th century) dimensions of the sites and the shape and running of the streets of this part of the city, which the earlier *Centrum Warenhausgesellschaft* project had not done. All applicants had to make three proposals one for each of the three lots, although it was decided from the very beginning, that each lot should be given to a different investor to avoid the "need" for buildings covering two sites (and the street between them) or for bridges bet-ween the single buildings. This procedure obviously favoured strongly financially powerful and professionally experienced real estate companies.

An exception of the requirement to present proposals for all three lots was made for only one competitor - Galeries Lafayette - due to their earlier involvement with the *Centrum Warenhausgesellschaft*. They could argue that they were in some way, if not former co-owners, partners of the former owner of the site which now forms lot 207, and that the disappearance of their partner could not lead to a disappearance of their business rights and interests. If this argument could have withstood a legal challenge or not is moot; fact is, that the Senat of Berlin was very interested in having a shopping area designed by a well-known and high quality international group, like Galeries Lafayette, on such a prestige site. So to them the exclusive right to tender only for one lot was given.

The tender for the three lots took place in two stages. Initially more than 100 investors had stated their interest. 22 of them were invited to make propo-sals for the pre-tender stage, twelve of them foreign. In this first phase of the tender, applicants had to lay down the general aspects of their plans such as the overall dimensions of the building and its proposed users (Interview 15/12/94).

An urban development scheme did not exist for the eastern part of Berlin, and the process of developing one with all its administrative and parliamentary stages would have taken years. So due to the political and economic inter-est of the Senat of Berlin to present to its citizens and to the entire world an immediate start of reconstruction of the city, a very sparse building regulation was put in force. To participants in the tender process of *Friedrichstadtassage* it was only prescribed,

that their buildings must obey the alignment of the site to keep the shape of the streets and must not be above the traditional (i.e. 19th century) height of buildings in that area of Berlin of 22 metres ("*Berliner Traufhöhe*" cf Hans Stimmann, *Berliner Abkommen Bauwelt* 1991 heft 39 pp 2092-3).

The Senat of Berlin for its part guaranteed to investors, that on these sites there were no rights of restitution of former land owners (i.e. owners before the expropriations after 1933 and 1949). This assurance was the consequence of a special condition of German unification. In the process of unification, the government first of the (western) Federal Republic, then of Germany, both formed by a conservative-liberal coalition, had intended not only to register, that the GDR has disappeared, but to declare as many as possible of the measures taken by the GDR as a state as not happened, in particular the ex-propriation of land owners. Only expropriations made between 1945 and 1949 under Russian administration, and not under the Nazi or GDR governments, were excluded and remained in force. The principle of "Restitution before Compensation" was made. It determined, that former owners under all circumstances got back their property, regardless what had been done to it in between and by whom. It was clear, that possible investors would be massively deterred if they could not be completely sure to whom the land they intended to buy really belonged.

For the three lots of *Friedrichstadtpassage*, five applicants came into the second tender stage. In this stage full architectural designs were required. Three applicants were the winners, all three entirely or mainly foreign investors: Tishman Speyer won lot 205 with a German architect, Prof. O.M. Ungers; the Fundus-Gruppe won lot 206 with the Americans Pei Cobb Freed and Partners as architects; and Galeries Lafayette, who presented an architectural design by Jean Nouvel - won lot 207 (Interview 15/12/94). We took this last as our case to study.

The predominance of foreign investors was not unforeseen. It may be argued, that the real estate business is more developed in countries like Great Britain, France or the USA than in Germany. Investors from these countries are more used to developments of greater financial dimensions, their power in a completely open and risky competition like it was the case here could be expected to be greater than those of most of their German competitors. But there were also explicit efforts by the Senat of Berlin to encourage foreign investors to take part in the reconstruction of the city. The aim may have been to present Berlin as an open, international city. About other reasons only assumptions can be made. The City of Berlin has always strived to be on the world's top level. One probably can safely presume that in this period only the most powerful investors, the most effective contractors, and the best architects of the world in the eyes of the Senat and the people of Berlin were adequate to take part in the reconstruction of their city. And surely it was also in the interest of the Senat to avoid giving projects worth billions of DM to the well-known network formed by the Berlin construction industry which extended to contractors, engineers, property developers, architects, and government officials, which had been protected from external competition because of more than 40 years of isolation.

In order to pursue these policies, the Senat from May 1990 on started to employ a special person to look after investors and this person, particularly for the most attractive sites in the most high profile locations in the city, looked for investors from abroad. He did not make a secret of his opinion that German, and in particular Berlin, investors generally were not able to meet the needs of the reconstruction of Berlin. This person was murdered in June 1991 when amongst the mail he opened one evening in his apartment was a letter-bomb (Warum starb Hanno Klein? *Die Tageszeitung* 19/9/91 and 9/10/91). Although many of the members of the Berlin network may have benefited from his death, the latest evidence points towards ex-members of the Staatssicherdienst (STASI), the former GDR secret police (Warum starb Hanno Klein? *Der Tagesspiegel* 16/4/96)

A loser in the tender process for *Friedrichstadtpassagen* had been a French-German joint venture named EP Europrojektentwicklungs GmbH, a joint venture by the German real estate company of Roland Ernst, Dresdner Bank, and two French construction Société Générale des Entreprises (SGE) and Compagnie Générale de Bâtiment et de Construction (CBC), who for this purpose had formed

CBC Immobilière as a real estate company. Roland Ernst, one of the most experienced and farsighted German real estate owners, knew better German reality than his foreign competitors and Berlin history than the Senat. Already before the tenders had been opened, he had found a former Berlin family now living in the USA, who were owners of a piece of land now forming a part of the site of lot 207. That gave him the possibility to buy 25 per cent of this lot and, after the tender was made, present himself to Galeries Lafayette as an owner, who could not be ignored in case of the execution of a construction project on land which was partly his property. To avoid a possible lawsuit lasting years, Galeries Lafayette agreed to withdraw from ownership of the land and retired to the role of final user of the building which was to be constructed. In return, Roland Ernst agreed to execute the architectural design of Jean Nouvel, originally made for Galeries Lafayette. So EP Europrojektentwicklungs GmbH (Europrojekt) became the developer of lot 207 (*Die Tageszeitung* 30/7/91; *Süddeutschezeitung* 24/10/91).

In a turnkey contract, the contractor is responsible for the whole project, including the design. Among the criteria, a contractor has to fulfill, therefore priority is given to the capacity and the reliability to perform a large and complex project. The assurance of this capability is given by references, especially performance on international projects, financial data on the company, and the impression, that the company's representatives made when they present their proposal. Of course, the price offered plays an important role too, including guarantees offered by banks, assuring the liquidity of the turnkey contractor, who has to finance the while the project is under way. So it is quite clear, that only big companies with a great amount of appropriate experience had a chance to win this contract.

The winner in the end was the French contractor CBC. That meant, even if CBC Immobilière as part of the client is not identical with the construction company CBC, that part of the client and the turnkey contractor were in the end part of the same company. So the question may be raised whether the tender process was competitive, or whether the order was simply handed out by the client to the contractor on a friendship basis. It was reported to us that there was a competitive tender and that CBC won it, because their offer was the best in terms of cost-benefit and reliability (Interview 18/5/95). But in this game the whole question of the nature of the tender process is misleading.

In the case of a private construction project, where client and contractor belong to the same enterprise, the question whether the *tender process* is more or less competitive, is of minor importance compared to the fact, that the *result* of the process brings a noticeable advantage for the whole company. If the project is low risk, then internalising the project can lead to greater profits. If the project is a risky one, then internalising the risks can lead to better management of the conflicts that may arise. In this case it is even better to rely on a well-known partner, who shares the same values and interests. Moreover, for CBC the project at *Friedrichstadt passage* was more than a simple construction project. It was planned as a first step to enter the German construction market.

STRATEGIES OF MARKET ENTRY

The entry into a foreign market in general can be tried by exporting commodities (goods or services), capital (share-holding, merging and acquisition) or production (building up own fabrication facilities). For construction firms, exporting their commodities is normally not possible. So exporting capital in order to form cooperative and financial links in one form or the other with local firms has many advantages, and is nowadays widely used in the European construction industry. It includes ownership, and allows influence on the business strategy of partner firms, reduces the risks which may follow from the lack of specific cultural knowledge and local experience, and it can form a part of a long-term business strategy instead of acting from project to project. Construction firms can go one step further. If they can get direct access to a land owner or to a developer, they can avoid the effort, the uncertainty, and the short-term orientation of the tendering process. Big construction companies moreover have the possibility to realise this step with their own means: they can buy,

participate in or even found real estate companies. And this way obviously was the strategy of CBC to enter the German market (Interview 4/5/94).

After 1989 CBC had made some experience in eastern European countries, but they regarded the German construction market, which by construction volume is the biggest in Europe, as important and promising. They planned that their turnover in Germany within five years would be as big as their turnover in construction in France (about 3 bn FF).

To meet that goal, they first bought a German engineering firm; another take-over was said to be under way. These type of firms in Germany normally have - despite their engineering capacity - in terms of capital, turnover, and employment the dimension more of a small than a medium enterprise. Their main advantage is the access to architects and clients, with whom they often have long-term stable business relations. So this takeover could open the access to construction orders. Owning an engineering firm located in a foreign country also ensures the ability to meet all the technical norms required in those markets. This point may be seen of special significance in the case of Germany, where the DIN (*Deutsche Industrie Norm*) is of particular importance for all permission and execution in construction.

What CBC did not do, was the other way, often used by construction companies going abroad - cooperation with a local German construction firm. In fact according to their own statements, they explicitly avoid doing so. They considered that these firms would be far more competitors than real partners. From their eastern European experience they were sure, that their own strength as a construction firm, in particular in managing sites, was sufficient to convince foreign clients: constructing buildings on a fixed price basis, offering short completion dates and keeping or even undercut them, and assuring a good quality of the building.

The means they thought was the most important and promising one was to participate in joint ventures for property development. This would help them to avoid tender processes, and to enter directly the construction phase, where they could show their ability and efficiency. This market entry strategy of CBC was, on the one hand, the crucial background to understanding why they formed part of the client joint venture. The new company of CBC Immobilière that they had founded, with a local headquarters in Berlin, would open the Berlin and then the whole German construction market to them. What they looked for was not performing projects to get access to clients, but access to the clients side to be enabled to perform projects. On the other hand, this explanation settled the question of the nature of the tender process of the lot 207 project. This process was obviously never thought to be a tender in the true sense of the word, but it was a component of an international business strategy, of which the aim was much more far-reaching than winning a single project. And that was why they formed the joint venture with German partners at the level of the real estate business, because that was their point of market entry and not the construction project itself.

Similarly for the facade contractor, the project offered a route for market entry. The Italian steelwork fabricator Permasteelisa was chosen by the *Generalübernehmer* for the curtain wall parts of the building after a competition to which a limited number of pre-selected companies were admitted. It is important to underline that the participation to the Berlin project had been considered by the company's executives as a crucial element in a strategy of world-wide communication and promotion. In fact, the constant variations which occurred to the detailed design during the execution of the works - imposed by Nouvel - led to a serious growth of costs so that from the strictly economic and financial point of view the interest of the project turned out to be very limited.

THE FORMATION OF THE PROJECT COALITION

The history of the project and the market entry strategy of one of the major actors also influenced the way the project coalition was formed. The architectural design of Jean Nouvel had been a very important element that helped Galeries Lafayette initially to win tender process for lot 207. And it was of such importance for their plans in Berlin, that they could agree to retire from being owner of

the site if only this design was kept. The *Generalübernehmer* (in this case CBC) is normally responsible for the design of the building too, had to accept the existing architectural plans of Jean Nouvel as a condition of undertaking on the project.

But CBC did not intend to execute the building work themselves. Reflections on the cost side very soon led to the conclusion, that all work on site must be subcontracted. It was decided to hire a general contractor responsible for the structure, who then had to do all subcontracting for the trades on site. During the tender process for the execution of the project there had been a competitor to CBC, who had tendered for the role of the *Generalübernehmer*. This was the Austrian firm of Hofman Maculan, the third largest construction group of Austria, and it was Maculan, to whom the structural works were offered by CBC, once the tender was decided in their favour. This may have been due to the personal relationship between one of CBC's high ranking officials, and the owner of Maculan, but it was not unreasonable at all to give the works to them. While tendering, they had dealt with the details of the project, so that they knew what the details of the project were; in any case, companies winning a tender often bring in their former competitors to take part in the work. Additionally Maculan had recently bought the East Berlin company of *Ingenieurhochbau* - formerly one of the biggest *Baukombinat* (state-owned construction trusts) in the GDR and Maculan had considerable experience of working in eastern Europe and in the former GDR, which at the time accounted for over half of their total turnover. It was the explicit strategy of CBC to join for their market entry in Germany with experienced partners, but not with German construction firms. So Maculan seemed to be a well selected partner for them, and they took the role as *Generalunternehmer*. In formal terms this was as an *Arbeitsgemeinschaft* (consortium) of Hofman Maculan and Ingenieurhochbau (Interview 5/7/94).

Taking the main works on site, all the other important trade contractors to whom contracts were given by CBC were also non-German. This was the case for the façade, given to the Italian firm of Permasteelisa, for the mechanical services (heating, air conditioning) given to the Belgian company ABB Fleckt, and even for the electrical work, given to Clemessy from Strasbourg. Only for certain equipment trades like fire-proofing or lifts were German firms were engaged.

COOPERATION INSIDE THE PROJECT COALITION

Due to their background in the French construction industry, CBC were used to being responsible for the structural integrity of the building. Typically, French contractors have their own *bureaux d'études* for structural design in house. In order to assure the quality of engineering design work undertaken by the contractor, the *bureau de contrôle* acts on behalf of the client, but as a member of the project coalition⁵. Thus the structural integrity of the building is both assured by the technical expertise of the engineers of the construction firm and of the *bureau de contrôle* and at lastly verified by the building itself. So assurance is given *by result*.

The German philosophy of assuring structural integrity is the opposite of this. Actors are obliged to follow certain prescribed steps of the process and fulfill given norms and rules - assurance is given *by procedure*. The difference between the French and the German systems is probably given expression best by the fact that in France any check of the structural calculation happens *inside* the process by a member of the project coalition and that the work on site normally is not interrupted by the examination procedure, whereas in Germany the construction firm is not involved in this part of a project. All documents (like structural calculations or drawings), have to be examined *outside* the process by an *independent* actor, who is not member of the project coalition. Building permission will not be given and the construction process cannot start as long as this check has not been completed.

This actor in Germany is called the *Prüfingenieur*. The function of the *Prüfingenieur* is executed by private engineering firms, to which a special licence is given by the public authority (normally the *Land*). Every client is obliged to engage a *Prüfingenieur* and to pay for his work. A *Prüfingenieur* in

person normally is a very well experienced structural engineer. His task is to check the structural design and drawings and he can demand changes in them before letting them pass and construction works can start. However the function of the *Prüfingenieur* is not seen as an overall censor or as a "hostile" agent of the client. On the contrary, structural engineers consider this function as helpful to them. If a building is simple, the work of the *Prüfingenieur* is fairly a routine one, if it is difficult, it provides for the structural engineer and the construction firm the benefit of what is called "The Principle of Four Eyes". Because errors or mistakes can occur to the best professional, everybody feels better, if somebody else is checking what at last is a difficult and responsible work and can have severe consequences.

Although it is not his business, quite often the *Prüfingenieur* informally gives a help to the structural engineer working out a structural design so that his re-marks can be considered from the very beginning - so that *in fact* often there is not a big difference from how a *bureau de contrôle* is working. Moreover engineering firms having a licence as *Prüfingenieur* normally also work as structural engineers, so that it is quite common, that in a building project one engineering firm is engaged as structural engineer and the other one as *Prüfingenieur*, and in the next project *vice versa*. So *Prüfingenieure*, although they act towards the single building project from outside, with respect to a local network of the construction industry are far from being outsiders.

Once the works on site have started, the work of the *Prüfingenieur* is done - unless the client demands changes of the design. In this case he comes back on the stage, but now with a enormous increase in importance. Under the German contracting system, the construction firm as structural contractor typically works with given *and checked* structural calculation and construction drawings from the structural engineer (although the reality on sites sometimes differs fairly from that principal). Changes of the design can be made easily - they happen under the responsibility and at the expense of the client. This is of course different, if the construction firm is the *Generalübernehmer*. Now the construction firm is responsible for the design. Under the French system that causes little worry. Changes are done and checked inside the process, building permission is not dependent upon approval of the documents and works on site can - normally - go on.

Under the German system the worry is only little more, if changes are minor and if the structural engineers, who worked them out, are given influence over the nature of the changes. Then the collaboration with the *Prüfingenieur* is easy. He gives his approval to the new structural calculation of the load (*Lastabtrag*) as soon as he has received it. If the structural drawings (*Konstruktionszeichnungen*) and the layout of formwork and reinforcement (*Schal- und Bewehrungspläne*) are executed after the approval of the structural calculation was given, the transfer of errors and mistakes from the structural calculation to the drawings can be avoided. When the latter are checked, the principles should be correct, and only minor corrections - if any - are demanded by the *Prüfingenieur*. Delays can be avoided and normally the work on site does not need to be interrupted, because every engineer involved - be they structural engineers or site managers - can take responsibility for the building works executed.

This procedure is different if changes of the design are fundamental or frequent; if they are the result not of technical reflections, but of architectural ideas or of new functional needs of the client; if structural engineers are not asked about how to translate changed ideas into structural changes, and if only little time is given to work out structural calculation and structural drawings. But exactly this was the case with the building which was performed for *Galeries Lafayette* in *Friedrichstadt* passage.

After CBC had given up the idea of executing the structural design themselves, they first engaged a Berlin engineering firm, who performed a complete structural calculation. Although all collaboration in particular on the engineering level in the project coalition was reported to have been professional, satisfying, and cooperative, this first work was not accepted by CBC. So they en-

gaged another engineering firm, situated in Düsseldorf, which performed a new structural calculation. This had of course to undergo the same check-procedure by the *Prüfingenieur* as the first one. Otherwise building permission could not have been obtained. The same happened, when the whole climate and air condition system was changed on request of CBC, who, while the construction process was running, had decided to buy a system other than the one they had ordered originally. And it happened again, when because of changes of the architectural design, perhaps due to new wishes of the client, walls had to be moved or broken through, and shafts had to be constructed where originally none were planned (Interview 15/3/96).

The overall procedure of the sequence of requirement, performing and checking of changes was always the same. But the consequences each time became more severe. To change the structural calculation, and the associated structural drawings and layouts for formwork and reinforcement took time, and so did the check-procedure of the *Prüfingenieur* - but time was the resource which was least available to the project. So the way to save time, which is usual under the French system and not infrequently used under the German one, was undertaken here too - to continue working on site even if plans and drawings are not completed. But whereas under the French system this is the accepted way, under the German one it requires at least two things: a building, which is technically manageable with normal resources of engineering expertise and time, and the cooperation of everybody involved in the process. But these things the project lacked at times.

The building itself was not just a building, but a means to meet the needs of a world famous architect and an international department store group. The design provided, for instance, almost no load bearing walls going from the basement to the top, and main pillars whose load bearing capacity was reduced because they were angled instead of vertical. Of course engineers and construction companies are able to erect such a building, as they have proved many times all over the world. But they are severely impeded, if there are continuous changes of requirements, no consultation before decision, and not enough time to prepare site works sufficiently. So when the *Generalunternehmer* once, to avoid another interruption of the work on site, decided to take the risk and to construct some element without complete and checked drawings, it had to demolish two pillars at his own expense, thereby and losing even more time than it intended to save (Interview 15/12/95).

But even that would not have happened, if cooperation between the project coalition and the *Prüfingenieur* had existed. A *Prüfingenieur*, even if he is not ready to give informal help to a project to reduce its time pressure, by his normal way of working is not a hindrance to the progress of the project. In the construction process for buildings, first a structural calculation of the load is made, then the structural drawings, and last the layout for formwork and reinforcement, and these three documents are logically completed as a sequence one after the other. So when the *Prüfingenieur* gets the first one, the structural calculation, he starts to check it. If he finds something, which requires a correction, then he informs the structural engineers. An error or mistake will then not be transferred to the other documents and time will be saved for the overall process. Experts say, that *Prüfingenieure* normally do so. But this was, what the *Prüfingenieur* engaged in the project on lot 207 apparently did not. He informed about the result of his check only when he had checked all three documents. If there was a need for correction, all three documents had to be renewed, and the works on site concerned by these documents had to stop as long as correct documents have been presented. So in fact works on site had to stop for several weeks and a fairly big sum of money was lost (Interview 5/7/94).

HUMAN RESOURCE MANAGEMENT

In international construction projects it seems to be usual that the staff for the management of the total project including the site management is posted by the companies who perform the project, whereas the labour force for the work on site - except some few specialists - is recruited locally⁶. This was also the case in *Friedrichstadtpassage*. CBC as *Generalübernehmer* and Maculan as *Generalunternehmer* had sent their own personnel to Berlin. Operatives for the site works were

almost entirely recruited locally - with the remarkable difference from the other cases in the sample of our study, that none of these workers was local. In fact they came from different countries all over Europe (Interviews 5/7/94 and 15/12/94).

CBC's representatives confirmed that for a firm engaged in a construction project abroad, it was normal to fill all key positions with their own employees. So they installed a fairly large office in Berlin consisting of all staff necessary for their project management. The same was the case with Maculan, who brought their site management from Austria. This consisted of the chief site manager and his assistant, and five site managers responsible for iron, concrete, programme, and (two of them) for the budget. A senior foreman and foremen for each trade also came from Maculan.

As far as CBC is concerned, they complained that it is more and more difficult to find people to go abroad to run construction projects. Differences were noticed between staff for performing infrastructure projects and those for building projects. Staff for infrastructure projects are used to follow projects, rather than companies, so that a sufficient mobility can be attained. For building projects, mobility is considered to be too low. On the other hand they have found some young engineers, even if not enough, who form some kind of a «European staff» - bi- or trilingual, mobile, and actively looking for the chance to go abroad. But although the big construction business is in Eastern Europe (including the former GDR), it is more difficult to find people ready to go to the east (including the former GDR again), because a stay in the eastern countries is remarkably less attractive than in a western one.

The posting of personnel below the level of foreman is rare. The main reason is the high cost. Workers in many countries receive special payments, if daily return home is not possible, which increases labour cost above the competitive level. On the other hand, workers usable for site work, are more or less everywhere available, particularly if work for reinforced concrete is required, where the level of skills required is much lower than for other construction works. A special condition for the recruitment of workers for construction sites in Germany was established after 1989, when the borders opened in Eastern Europe too. Pushed by the sharp deterioration of living conditions in their home countries and pulled by the huge demand for labour, in particular in construction, many of them went west. Additionally inside the EU Portugal became a big deliverer of labour towards German construction sites. Not all of the migrant workers were legally in Germany or had legal working contracts.

Also on the sites of *Friedrichstadtpassage* most of the workers were locally recruited, but few of them were German. They came from Middle and Eastern Europe or from the southern part of the EU. The exceptions were two gangs from the Austrian and East German subsidiaries of Maculan respectively. Each worker had a single contract with Maculan so that recruiting and dismissing are easy for the company. It was stated that because these sites were in an exposed place, and strictly regarded by the public no illegal work was used. But the newspapers reported control actions by German officials, who found numerous workers without the working permission required (*Die Tageszeitung* 24/11/93). The IG Bau-Steine-Erden (the German Construction Workers Trade Union) was said to look for their people and for the agreements of the others.

Gangs for the works subcontracted were formed homogeneously, so that each gang, including their foremen, was from a different country:

- formwork for the ceilings: Portuguese (70 workers)
- formwork, steel and concrete works for the walls by Italian and former Yugoslavian (together 70 workers) and by Austrian and (East) German (25 workers each) workers.
- transport on site and cleaning: Hungarian, Czech, and Yugoslavian (20 workers).

Maculan staff reported that none of the workers (except the Austrian) had been trained or experienced in site work on a project of this size and nature; even the East German workers lacked knowledge of this type of work organisation and the technology in use. The workers from Eastern and Southern Europe mainly came from rural areas, seeking work on site because they cannot earn

their living by agricultural work. So intensive training was required, which was performed on the job. But before a training process could begin, a sharp selection had to take place. To recruit about 70 workers, Maculan employed and inspected around 400. They were tested for a week on site, after which 330 were dismissed again. "Those, who stay, really work well", explained the chief site manager. The daily work then was again a continuous training on the job and was estimated to lead to an adequate level of skills for iron and concrete works on big projects. The workers were regarded as being well qualified after having worked on a site like this.

Work organisation is crucial under these conditions and the qualification and engagement demands on foreman are extremely high. While gangs have their internal structure which partly can be used for self regulation, meeting the programme schedules and controlling the quality of the work is the responsibility of the foremen alone. Quality can only be as good as the foreman. The foremen themselves act under the control of the responsible site managers.

This type of work leads to divergent forms of working time. Regular working time on site was reported with about 250 (paid) hours per month; about 80 hours more than regular working time under German construction collectively bargained regulation. Daily working time was from 7.00 a.m. to 8.00 p.m., and if necessary from 6.00 a.m. to 10.00 p.m.; German labour law forbids work of more than ten hours a day. Shift work was avoided, because this was estimated to be too expensive. The Austrian workers were reported to have a rhythm of three weeks of work and one week of holiday. Regulation for the workers from the other countries are not reported, but an interruption of paid work by holiday was hardly in their interest.

Payment was strictly on performance by square metre or tonne. Workers were reported to reach about 10.000 DM per month before taxes; though it is unclear to whom taxes should have been paid. This may not be less than a German worker would have earned under similar conditions (working time, payment by performance). However in the German's case, not only taxes, but also social insurance fees are obligatory and paid by deduction and direct payment to the respective social institutions. And as the sum of 10.000 DM for about 250 hours represents a hourly rate of about 40 DM, it is less than two thirds of the total labour cost payable by a construction company under German legal and collectively bargained conditions, which include payment for the legal social security system and fees for the sector's education and training system and for the construction workers' holiday and pension funds.

To obey health and safety matters is - in the words of the chief site manager - for a site like this "essential". Nevertheless he added that to fulfill all the regulations required is too expensive. A person responsible for health and safety (*Sicherheitsbeauftragter*) as prescribed by German law was named, but this was not organised as a full-time job. All newcomers were trained in safety regulations followed by freshening up knowledge and consciousness through a short briefing (of three to four hours) one day per month. Additionally, foremen were responsible for health and safety, and were fined in the case of accidents. Since the work on site started, "six or seven" accidents were reported, which is claimed to be below the stochastic level. The main problems regarding safety were language and mentality, because even foreign foremen only know a few fragments of "site-language".

FINAL REMARKS

The new store opened by Galeries Lafayette on the 29th February 1996 in the old centre of Berlin could not have been better placed - "A piece of Paris coming to Berlin", the newspapers announced (e.g. *Frankfurter Rundschau* 29/2/96) - in the middle of the quarter, where the Huguenots settled in the 18th century, close to *Französischer Dom* (French Cathedral) and *Französische Straße* (French street). But how long will it take, until Berlin comes to this new symbol of Paris? It might be a fairly long time. Galeries Lafayette and the *Friedrichstadt passage* are situated in that part of Berlin, which is still much more "east" than "centre". The entire *Friedrichstraße* is still a construction site, the opening of Galeries Lafayette was postponed twice in order to enjoy a more suitable environment.

By February 1996, only about 10% of the three blocks of the *Friedrichstadt passage* was let to users. In addition to a number of other developments around the three lots at *Friedrichstadt passage*, a major development is presently under way just down the *Friedrichstraße* at Checkpoint Charlie - the American Business Centre. Further away on the *Potsdamerplatz* a massive development of office, retail and leisure facilities is now gathering momentum (Info Box 1996). In addition, there are countless refurbishment and infill speculative developments all around the city. A surplus of about 600.000 sqm of retail trade space is predicted for Berlin until the year 2000. Berlin's retail trade is not growing; in 1995 it lost 7% of its total turnover. The US department store group Maceys has cancelled their planned investment in Berlin.

Moreover the futuristic design of Jean Nouvel and the luxury standard of Galeries Lafayette recently seem - not to use the word "sharp contrast" - a bit strange inside an environment, which is still characterized by forty years of state supported dullness and by six years of new poverty. The big housing area of *Leipziger Straße* for example, close to *Friedrichstadt passage*, consisting of huge prefabricated blocks, looks like a monument to GDR housing policy. Well-off people mind those areas. People, who would be able and ready to buy caviar and *le dernier cri* do not live here. So Galeries Lafayette, before opening, silently changed their market offer and orientated more towards what people of the surrounding area might be able to afford, and they recruited all their salespersons deliberately from the eastern part of Berlin. For the moment they have said that they do not want to become the old-new shopping centre of Berlin, but to be attractive "for people, who live and work here, our original customers". There is no doubt that the shopping centre of Berlin remains where it could develop and establish during the 40 years of the division of the city - around the *Kurfürstendamm* several kilometres west of *Mitte*. A trend of customers towards the old centre is not expected before the year 2000.

For some other participants of the project in *Friedrichstadt passage* the future begun much earlier. The same day when Galeries Lafayette opened, Maculan announced, that they will demand proceedings of enforcement (similar to a bankruptcy) for most of their East German companies (*Handelsblatt* 1/3/96 and subsequently). The group had quickly and strongly grown through their East German engagement after 1989, including the acquisition of eight firms for about 160 million DM. It was estimated to have undertaken too much in East Germany, where in 1995 about half of their total turnover of 2,2 bn DM was made. The same year losses were estimated at 300 million DM, and debts at 1,5 bn DM, so neither its Austrian nor its German banks were ready to support them any longer. 5000 of Maculan's total of 8000 employees work in East Germany. About 4200 of them are affected by the bankruptcy, as well as about 5000 working for their suppliers. The Austrian part of the company does not seem to be affected, but nevertheless it was the second biggest insolvency in Austria's post-war history. One of the orders of which the future now is unsure, is a section of the *Tiergarten-Tunnel*. This project belongs to the plans for the movement of the Federal government to Berlin, because it forms a part of the tunnel system, which should keep the new government quarter free of any through traffic.

A particular link between losses in 1995 and the *Friedrichstadt passage* project was not reported for Maculan, but it was for CBC (*Les Echos* 29/2/96). They announced for that year a total loss of 500 million francs. 430 million francs of that was reportedly caused by the project in *Friedrichstadt passage* 207. By this loss, the capital of the company was reduced to 60 million francs. As a result of this, Compagnie Générale des Eaux (CGE), as mother company of CBC with little less than two third of the shares, offered to the other share-holders of CBC to buy their shares at a rate of 105 francs, whereas the real value, according to a financial consultants expertise, was about 88 francs. The total cost of this operation to recapitalise CBC and give the company a new power to act, was about 1,3 million francs. The Berlin loss was said to have different reasons. In general there is a crisis in the real estate and construction business, a reduction of profitability, and no possibility of future growth on the German market. But the particular reason was seen in "the severe deterioration of the conditions of completion and taking over of that building in Berlin

Friedrichstadtpassage". There was, what CBC described as "a disagreement with the client", which since November 1995 did not pay any longer because the execution of the works did not fit with the building contract. In other words, the building erected was not the one the client had ordered. One can hardly presume, that there has been a real difference between the architectural or functional value of the building and the needs of the client. But what possibly did exist, may be a difference between design and structural drawings at the one hand and the building really performed at the other. "The Germans need for everything a drawing", the chief site manager of Maculan said during an interview, pointing out, that this behaviour was viewed as involved, ponderous, and backwards. This may be not wrong, and this is obviously silently accepted by German construction actors too by the fact, that on German sites many things happen *before* the respective drawing is ready. But it belongs to the rules of the game in Germany, that the drawings have a certain status inside the total procedure from the tender to the final handover of the building. This does not mean that the drawing is a superdetermining issue, to which everyone and everything has to follow slavishly. But it is a means to work with, and it requires a particular handling. This handling is not opaque, but can be learned. Like Mr Mark Palmer, a for-mer US ambassador in Hungary, now property developer, and since 1990 engaged in Berlin, said: "There's one thing we learned about the business here. You cannot go in blind. You must prepare to deal with [he then named out of his particular experience "property rights", but this is surely true for all other issues too - GS]. It takes time. But it can be done" (*Financial Times* 23/4/96).

CBC announced together with the goal of their recapitalisation, a change in the business strategy of the company. They said that they intended to evaluate all their activities and to prefer a *renewal of their traditional competencies* (my emphasis - GS). This could be read as the announcement of a reformulation of their goal to enter the German construction market and a retirement from their activities in the German real estate market - hopefully it is not. For the internationalisation of Europe's construction that would be an unfortunate result of learning.