

Le Havre (France)

No 1181

1. BASIC DATA

<i>State Party:</i>	France
<i>Name of property:</i>	Le Havre, the city rebuilt by Auguste Perret
<i>Location:</i>	Haute-Normandie region; Seine-Martine department
<i>Date received:</i>	22 January 2004
<i>Category of property:</i>	

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention*, this is a sector of a town that is inhabited.

Brief description:

The city of Le Havre, on the English Channel, in Normandy, was severely bombed during the Second World War. The destroyed area was rebuilt according to the plan by a team headed by Auguste Perret, from 1945 to 1964. Amongst the many reconstructed cities, Le Havre is exceptional for its unity and integrity, integrating a reflection of the earlier pattern of the town and its extant historic structures with the new ideas of town planning and construction technology.

2. THE PROPERTY

Description

The city of Le Havre is located in Normandy, northern France, on the English Channel at the mouth of the Seine river. The city was devastated in the Battle of Normandy during the Second World War, and it was rebuilt in modernist style following the project by a team led by Auguste Perret from 1945 to 1964. The proposed core zone consists of 133ha urban area, and forms the administrative, commercial and cultural centre of Le Havre. It includes *Avenue Foch*, *Saint-Roch square*, *place de l'Hôtel de Ville*, and the quarters of *Perrey*, of *Porte Océane*, and those along the sea. The project corresponds to the architect's ideal to create a homogenous ensemble, where all the details are designed to the same pattern, thus creating a kind of *Gesamtkunstwerk* in the urban scale. Perret reserved some of the most important public buildings as his personal design projects. A few buildings that had not been destroyed in the bombardment were retained as part of the new town scheme. Even though also the quarter of Saint-François was destroyed, several historic buildings remained standing, and were protected in 1946. As a result, the plan of this area was mainly based on the old street pattern.

The urban plan of the new design is based on two axes: the principal public axis is formed by the broad *Avenue Foch*,

which runs in west-east direction through the northern part of the area, taking the alignment of the earlier *Boulevard de Strasbourg*. It starts from *Porte Océane* on the seaside, and touches on *Square Saint-Roch* and *Place de l'Hôtel de Ville*, giving the general direction for the basic grid of the scheme. At the *Porte Océane*, the avenue is crossed at the angle of 45° by *Boulevard François 1er*, which forms the second axis. On the seaside of the boulevard, there is the *Quartier du Perrey*. In the triangle that is formed by the two axes there are various commercial and other functions, such as *Place des Halles Centrales*, *Bassin du Commerce*, the old market, and the old *Cathedral Notre-Dame* (16th to 17th cent.). The *Quartier St-François* in the south-east corner of the rebuilt area has retained the pattern of streets, dating from the 16th century, and some historic buildings.

The design of the buildings and open spaces was based on the module of a square, 6.24m each side, to facilitate the production, but also to introduce “musical harmony” into the city. The average density was reduced from the pre-war 2000 to 800 inhabitants to a hectare. The spirit of the town was conceived as “neo-classical”, where the building blocks are closed and the streets remain streets. The essence of Perret's project is in structural design, which was based on an avant-garde use of reinforced concrete elements, a system called ‘*poteau dalle*’. The idea of the structure is to make it modular and completely transparent so that no structural elements remain hidden. This gives the dominating character and a certain uniformity to all architecture. However, the elements are used in skilful way so as to avoid boredom.

The *Porte Océane* is a monumental entrance to Avenue Foch and an entrance to the city from the sea, taking the idea of the ancient gate destroyed in the war. This building also became an experimental ‘laboratory’ for the development of the structural system and methods of construction for the project. The *square Saint-Roch* is located in the place of an earlier public park and cemetery, which has given some its orientations to the new design. The *Hôtel de Ville* (Town Hall) is the most monumental structure in the whole scheme; it has a length of 143m, and its central part is marked by a tower that has 18 stories is 70m high.

History

Being at the mouth of the river Seine, the site of Le Havre was always strategic for the access to the inland, to Rouen and Paris. Due to the estuary and the marshy lands, the decision to establish a seaport for Rouen was only taken in the early 16th century (1517). As a result of the discovery of America, the port gained in importance, and in 1541, King François I commissioned architect J. Bellarmato from Siena to plan an extension. This area was the quarter of Saint-François, and it was designed on the basis of a Renaissance grid-plan. In the 17th century, Le Havre (meaning ‘harbour’) continued developing its commercial links with America and Africa. Minister Colbert authorised the construction of an arsenal, transferring the naval docks to the area of Perrey. It was from here that Lafayette started his trip to go to fight America in 1779.

At the end of the 18th century, Le Havre was one of the four principal ports of France, and in 1786, a new plan was commissioned (engineer François-Laurent Lamandé),

though only completed in 1830 due to the Revolution. In 1847, a railway was built from Paris to Rouen and to Le Havre, further strengthening the role of the city. In 1852, the old fortifications were demolished and the city area was multiplied by nine. The population reached 60,000. Important companies for transatlantic traffic were established here, encouraging industrial development. At the beginning of the First World War, the population of the metropolitan area was 190,000.

At the start of the Second World War, the harbour of Le Havre was used by the British army for servicing its troops. The town was bombarded by the Germans in May 1940, and the British left it. After the peace treaty, it was occupied by the Germans, who were preparing an attack to Britain. Therefore, the harbour was bombed by the British and the shipyards were destroyed. In the following years until September 1944, the city was continuously under air attack by the Allied Forces, and finally the central area was entirely destroyed.

The idea to rebuild Le Havre was perceived during the war destruction. In summer 1944, with a group architect colleagues Auguste Perret (1874-1954), then 70 years old, took the lead in the project of reconstruction of the town. Perret had studied in the school of Beaux-Arts, though he never graduated as this would not have allowed him to act as a contractor entering his family enterprise. He was trained in the spirit of classicism and had the inheritance of the 19th-century technical developments. He obtained solid experience in the development of the techniques of reinforced concrete. Some of his early architectural designs, such as the flats in the Rue Franklin in Paris (1903) and the Notre-Dame of Le Raincy (1923) have been recognized as masterpieces of the early modernism.

Taking into account the soil conditions and high water table, it was proposed to construct the entire city on a reinforced concrete platform about 3.50m above the ground level. At the time, this was a revolutionary initiative, and would have facilitated the building of infrastructures. Due to the limits of cement and iron in the post-war period, it was not authorised however. The general master plan was however carried out. The project was based on the basic grid module of 6.24m square. The lots were planned in a 100m grid, though some of these were united to make larger lots. The construction lasted until 1964, when the church of Saint-Joseph was consecrated.

Management regime

Legal provision:

Most of the properties of the reconstructed area are either publicly owned or subject to 'co-ownership'. (This latter concept, revolutionary at the time, meant that an individual would own some thousandths of a particular structure.) There are few private properties, mainly in the margin of the area.

The first protection was mainly related to the law on historic monuments of 1913, which assigns of perimeter of 500m around each protected monument. The church of Saint-Joseph was the first modern building to be protected, in 1965.

The nominated zone coincides exactly with zone, established in 1995 for protection on the basis of the 1983 law of Z.P.P.A.U.P. (*Zone de protection du patrimoine architectural, urbain et paysager*). *La Loi Solidarité et Renouvellement Urbain* (SRU) of 2000 produced the *Règlement de Plan Local d'Urbanisme* (PLU) which covers the whole Commune of Le Havre. It regulates densities, land use, building types, etc. The designated *Architecte des Bâtiments de France* has to verify that the applications for building permits comply with the requirements of Z.P.P.A.U.P.. Furthermore, *La Loi Littoral* of 1986 regulates the preservation of the seafront, *La Loi Paysage* of 1993 is important for the promotion and protection of the urban landscape, and *La Loi sur l'Air* of 1996 will affect the quality of life.

Management structure:

The principal management responsibility of the nominated area is with the Municipality of Le Havre.

The town of Le Havre is divided administratively in two distinct areas: the harbour and the urban area. The management of these two areas are independent. The areas of the harbour that involved in urban activities are given in concession to the City.

Regarding the reconstructed area, the Municipality of Le Havre established two committees in 1994; these are formed of representatives of the respective authorities and institutions. One is the Technical Committee with 10 members, and the other the *Comité de Pilotage* (guiding committee) with 19 members, including also the representative of the French DoCoMoMo. In addition, there is a special committee, consisting of 17 members, which is responsible for the management and monitoring of the site.

The protection and conservation of the nominated area is regulated by the plan of Z.P.P.A.U.P.. In addition there exists a tourism development plan established in 1998.

Resources:

Finances are received on the basis of Z.P.P.A.U.P., but also from other government funds as well as from the Municipality of Le Havre.

Justification by the State Party (summary)

The property has been nominated on the basis of criteria i, ii and iv.

Criterion i: The work of Auguste Perret and his students in the reconstruction of Le Havre represents one of the most remarkable achievements in reinforced concrete architecture. Author of the building in rue Franklin (1903) in Paris, the church of Raincy (1923), Corot Hall (1929), Mobilier National (1936) and the Museum of Public Works (1939), Auguste Perret is considered by architectural historians as the heir of the rationalist tradition in France. ... He has invented a new classicist order ... [The project of Le Havre has brought together different influences from tradition and modernism.] The integration of these architectures that represent opposite poles of the international modernism offers a good idea of the semantic richness of the architecture of Le Havre.

Criterion ii: The particular type of urban fabric of Le Havre establishes a subtle balance between the claims of CIAM's modern urbanism and the traditional urban culture. Even though Le Havre has its own specific typology, the reconstruction represents the practical implementation of the theoretical knowledge in architecture and urban planning obtained in Europe between the two world wars. This operation materialises on an unforeseen level the ideals of modernity. ...

Criterion iv: Le Havre is a typical ensemble of the period following the Second World War. None of the histories dealing with the architecture and urban planning of the 20th century ignore this experience that chrysalises all the hopes in the post-war period. ... The conception of the buildings, their planning, the construction using new methods of prefabrication, as well as the complete mastering of the public spaces, are elements that have contributed to make Le Havre a real urban laboratory. ...

3. ICOMOS EVALUATION

Actions by ICOMOS

An ICOMOS expert mission visited Le Havre in August 2004.

ICOMOS has also consulted its International Scientific Committee on Historic Towns and Villages.

Conservation

Conservation history:

After the completion of the works in 1964, the reconstructed area was not readily accepted by the population. There was too much sufferance associated with it. It took until the mid 1980s, when a new approach started developing particularly with the younger generation who had not experienced the town before the war. At this time, there were also some of the first changes that appeared, for example by painting some of the bare concrete elevations. As a result, in 1986, the Municipality decided to establish simple guidelines for the management of the properties. With the declaration of the Z.P.P.A.U.P. zone, in 1995, there were more concrete initiatives and regulations including the instruction of the population about maintenance and repair. In 1986, the Municipality also commissioned a study on the state of conservation of the concrete structures, involving C.E.B.T.P. (*Centre Expérimental de recherche et d'études du Bâtiment et des Travaux Publics*). The result of the study was that the concrete was generally in good condition. There had been some problems related to rusting iron, but these were considered resulting from mistakes in the early phase of the construction. Later the execution was improved based on experience. Solutions to repair eventual technical problems are being elaborated as part of the strategies of Z.P.P.A.U.P.

State of conservation:

It is possible to concur with the nomination dossier's claim that the concrete of the reconstructed city is today in a good state of conservation, but that this must not be made an excuse for failing to take the necessary preventive measures against the degradations resulting from the

ageing of the material in the marine climate and as a result of the air pollution from Le Havre's major industrial area. A considerable number of apartment blocks have been satisfactorily re-dressed, painting the concrete on the façades is emphatically proscribed and the paint which was applied to some of the façades in the belief that it would improve the appearance, is being removed and the concrete underneath restored. The City has requested the Prefecture for authorisation to re-dress, beginning in 2006, a major axis like the rue de Paris. Under the regulations of the Z.P.P.A.U.P. it has become possible to prevent the replacement of window frames and balustrades, originally made of oak and steel respectively, made of inferior and inappropriate materials. It has also become possible to persuade shopkeepers to respect the horizontal and vertical structural subdivisions and to accept a discipline in the design, placing and lighting of signs.

Management:

The Z.P.P.A.U.P., like the Conservation Area in the United Kingdom, is an indispensable instrument in France for the management of the non-monumental heritage. The yearly reports, produced since 1999, on the works undertaken within the Z.P.P.A.U.P., have revealed the need for stricter monitoring and a more effective dialogue with business people and building contractors. The reports have also identified blocks at risk ("îlots à risques"), where the most rigorous application of the regulations under the Z.P.P.A.U.P. is required. A Committee of Management and Monitoring has been established with all the stakeholders, meeting every two months and working in collaboration with the relevant departments of the municipality. Within the Z.P.P.A.U.P. there are two zones with different degrees of control zone 1 containing architectural heritage characteristic of Perret's 'structural classicism' and the major spaces of the reconstruction; and zone 2 containing reconstruction not representative of 'structural classicism' and peripheral secondary spaces. Management is made easier by the fact that the reconstructed Le Havre is a city of apartment blocks with co-ownership, built by industrialised methods of prefabrication and standardisation, and run by syndics who are contracted to undertake the management of the finances and the organisation of maintenance and building works.

The municipality is developing tools which will make it possible to establish the state of conservation of the reconstructed city and to measure its evolution: an atlas of city blocks ("*atlas d'îlots*"), providing information on the history and actual state of conservation of each block, as well as the means of managing the demands for changes and the resulting building works. Grant aid for co-owners is wholly inadequate. The demand is great but at the moment the lack of availability of resources allow only relatively few restoration projects to benefit from such aid.

Risk analysis:

Environment: due to the maritime air, the building materials of the reconstructed area of Le Havre are subject to weathering and corrosion, and requiring maintenance and repair, and sometimes replacement.

Development: The risks to the area include the changes made by the population. For example, some shopkeepers, ignorant of the regulations and wanting to make their signs

more visible, have tried to enlarge them excessively, give them inappropriate supports and lighting, and allow them to trespass on the public domain.

Natural catastrophes: being partly built on ancient marshes, Le Havre is potentially subject to inundation. The area has cavities in the ground, resulting from ancient quarrying of white clay. These risks are however relatively low in the centre city area.

Authenticity and integrity

The Z.P.P.A.U.P.'s primary objective is the conservation of Perret's reconstructed city in its full authenticity, while at the same time recognising that it is a live city undergoing change and development. The authenticity of the setting remains unimpaired and the construction of some new commercial and housing ensembles and a new theatre are unlikely to have any detrimental effect. The authenticity of design, of space and form remains high. There have been relatively few changes and they are not considered to cause concern. The only exception is the new block of the *Polyclinique François 1er*, which is harmful and regretted. Also the authenticity of materials and workmanship remain high. The principal material, concrete, is generally in a good state of repair. There have been some unsympathetic repairs and changes of fittings, but it is believed that the policies developed under the regulations of Z.P.P.A.U.P. it should be possible to find solutions which respect the quality of the original architecture.

Comparative evaluation

The comparative analysis presented with the nomination compares the property with several reconstructed cities, including: Warsaw, Berlin, Dresden, Rotterdam, Coventry - only to dismiss each one as not relevant in reference to Le Havre. Le Havre can also be compared with other post-war reconstructions in Europe, including Kassel, Freudenstadt, or Kiel, but it stands out for its particular qualities. In Russia urban planning of that period (e.g. Stalingrad, Novgorod Velikiy, Minsk, or Kiev) was governed by "neo-classicism" typical of the Stalinist epoch, characterised by the principle of stylistic unity and architecture based on classical orders.

DoCoMoMo considers Le Havre the most important example of state intervention in the reconstruction of urban areas in France. At the same time, it is also fundamentally different for example from the plans that Le Corbusier prepared for Saint-Dié, another town completely destroyed by the war. Projects such as Brasilia (World Heritage List in 1987) and Chandigarh are new towns, and not post-war reconstructions.

Outstanding universal value

General statement:

The reconstructed city of Le Havre is distinguished in its combination of modernity with traditional concepts. It is modern because of its uncompromising and systematic use of raw concrete. The structural system is however classical in its conception. Perret called this "structural classicism",

and it consists essentially of a post and beam structure on a strict module which pervades the whole of the reconstructed city, buildings as well as spaces between buildings. It is modern due to its experimental nature and use of prefabrication and standardization. It is modern also because of its social experiment with co-ownership in apartment blocks, resulting in a communal sense of cultural identity. The traditional city block is re-interpreted by means of tower and slab apartment blocks combined to form inner courtyards, resulting in a much lower density of inhabitants per hectare than previously (800 instead of 2000).

The plan, on the other hand, takes over the historical patterns in the reconstruction of the streets and squares with buildings defining them. It preserves the historical axes of the destroyed city, the docks, and buildings that survived the bombardment, such as the 16th-century cathedral and 19th-century law courts. The reconstructed city, on account of its remarkable consistency and high quality of workmanship, achieves an outstanding degree of order and harmony from which the few unusual projects, like the Niemeyer structures and the Candilis housing, in no way detract.

The reconstruction of Le Havre is recognised by historians as an outstanding example of modern town planning in the post-war period, and at the same time one that synthesises lessons learnt from past traditions with modernity.

Evaluation of criteria:

Criterion i: The reconstructed city centre of Le Havre is characterised – more than by its aesthetics - by the large-scale use of innovative building techniques based on reinforced concrete and a systematic modular design. While recognising the importance of this, ICOMOS considers however that, in the case of Le Havre, these themes are more appropriately covered by the criterion ii and iv.

Criterion ii: The post-war reconstruction plan of Le Havre exhibits an important example of the integration of lessons in urban planning learnt from the 19th century and a pioneer implementation of developments in architecture, technology, and town-planning in the 20th century. Le Havre is an important landmark and a classic alternative to the open-plan concept adopted in most post-war reconstructions. It is distinguished as an example of modernist approach to city planning, based on the concept of a closed quarter, where it was possible to retain the historic structures and street patterns that survived from the war destruction.

Criterion iv: The post-war reconstruction of Le Havre is an outstanding example and a pioneer demonstration of urban planning and construction based on the unity of methodology and system of prefabrication. The overall character of the town results from the systematic use of a modular grid and the innovative exploitation of the potential of concrete. The master plan and the architecture of the town are an interpretation of the theory of architecture promoted by Perret, and where the project idea was brought into each detail.

4. ICOMOS RECOMMENDATIONS

Recommendation for the future

Taking note of the valuable experience in the construction using reinforced concrete and of the monitoring systems already adopted in Le Havre, ICOMOS recommends that these efforts be continued in a systematic manner within the programme of a specialised research centre for concrete.

Considering the need to maintain a high standard in the workmanship, repair and restoration of the structures of Le Havre, ICOMOS recommends that every effort be made to facilitate this process through effective sources of financial aid.

Recommendation with respect to inscription

ICOMOS recommends that the World Heritage Committee adopt the following draft decision:

The World Heritage Committee,

1. Having examined Document WHC-05/29.COM/8B,
2. Inscribes the property on the World Heritage List on the basis of ***criteria ii and iv***:

Criterion ii: The post-war reconstruction plan of Le Havre is an outstanding example and a landmark of the integration of urban planning traditions and a pioneer implementation of modern developments in architecture, technology, and town-planning.

Criterion iv: Le Havre is an outstanding post-war example of urban planning and architecture based on the unity of methodology and system of prefabrication, the systematic use of a modular grid and the innovative exploitation of the potential of concrete.

3. Recommends that, taking note of the valuable experience in the construction using reinforced concrete and of the monitoring systems already adopted in Le Havre, these efforts be continued in a systematic manner within the programme of a specialised research centre for concrete.

4. Further recommends that, considering the need to maintain a high standard in the workmanship, repair and restoration of the structures of Le Havre, every effort be made to facilitate this process through effective sources of financial aid.

ICOMOS, April 2005



Town Hall Square, rue de Paris, avenue Foch and Church of Saint-Joseph



Rue de Paris