

Transforming the Palau Nacional: Gae Aulenti's Evolving Approach to Architectural Adaptive Reuse

Criticism, Context, and Design Compromise

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Abstract

The Palau Nacional in Montjuïc revitalized the debate over the adaptive reuse of historic buildings in Spain in the 1980s. In 1980, its state of deterioration divided public opinion: on the one hand, those who recognized its urban value, as a scenic conclusion to the Avenida Maria Cristina, on the other, the detractors, who criticized its architectural-aesthetic qualities. In preparation for the 1992 Olympics, the Barcelona City Council commissioned Gae Aulenti to transform it into the headquarters of the Catalonia's national art museum. The project, developed between 1986 and 2004, reveals an evolution in her design approach. Initially characterized by a postmodern and monumental language with "architecture within architecture", as in the *Musée d'Orsay* intervention, the first project was criticized for being too ornamental and detached from its pre-existence. An example of this is the idea, later abandoned, to introduce a water basin in the Oval Room. Later modifications of the project marked a design change toward a more integrated approach: Aulenti renounced the scenographic rhetoric in favor of human-scale installations, which valorized the pre-existing. This new, more balanced vision would continue to characterize her future projects. This case shows how a process of adaptive reuse can be a laboratory for critical reflection, where the dialogue between past and present evolves through design compromises.

Keywords: Gae Aulenti, Architecture within Architecture, Museu Nacional d'Art de Catalunya (MNAC)

Introduction

The *Palau Nacional* of Montjuïc, which is now the home of the *Museo Nacional de Arte de Cataluña*, revitalized the debate over the adaptive reuse of historic buildings in Spain in the 1980s. Built for the 1929 International Exhibition by architects Cendoya, Catá and Domènech, the building represents an eclectic Neo-Baroque *pastiche*, symbolizing Primo de Rivera's regime. In 1980, its state of deterioration divided public opinion: on the one hand, those who recognized its urban value, as a scenic conclusion to the Cristina's Avenue, on the other, the detractors, who criticized its architectural-aesthetic qualities.

In 1984, Lluís Domènech i Girbau, as director of the Museums Plan for the City of Barcelona, sent a letter to Gae Aulenti, inviting her to take charge of the renovation for the National Palace and the museum located inside it. Gae Aulenti was chosen because of the international fame she had gained thanks to her ongoing project for the *Musée d'Orsay* in

Paris. Domènech, together with the other members of the city council, had been travelling to Paris for some time to follow the progress of the works.¹

To understand the project of the *Museu d'Art de Catalunya*, it is important to consider the previous French renovations of the *Centre Pompidou* and the *Musée d'Orsay*. In these, Aulenti stands out for the postmodern characteristics that link her work to the museological projects typical of the 1980s, characterized by the revival of the traditional 19th-century system of rooms in a row, and an architectural composition based on the use of different volumes through a more eclectic and narrative language.

At the *Centre Pompidou*, Aulenti was responsible for the restyling of the fourth floor dedicated to modern art. The museum's director Dominique Bozo, in his statements, defined the museological theories of the 1960s as outdated, with their large and flexible spaces, because of the conception of an "architecture without walls".² For this reason, Aulenti revived the classical museum scheme, with a series of rooms organized in a row, creating galleries intended for small sized artworks. In the case of the interior design of the old *Orsay* Station, the classic organization of a museum helped Aulenti to solve the problem of the station's large central axis dedicated to sculptures. Aulenti created a subdivision of the space into virtual rooms through the introduction of Buxy stone walls as a background for the large artistic artefacts and with rhythmic changes in level represented by different steps. She also introduced two towers at the ends of the gallery to provide access to the upper floors. In this way, the architect introduced architectural typologies typical of the urban reality into the internal spaces of the museum, such as walls, towers and volumes that delimit the different areas of the exhibition space. These are autonomous forms and structures, "architecture within architecture," evoking a kind of fragmented urban landscape. This formalism not only gives the installation a distinctive character, but also contributes to create a narrative sequence, grouping the works together and structuring the museum itineraries.

The use of autonomous architectural elements within pre-existing buildings, while adding dynamism and expressive density to the museum space, also introduces a strong element of conflict with the original architecture; an aspect that cannot be underestimated. These solutions were at the center of the harshest criticism aimed at Gae Aulenti, both in the *Musée d'Orsay* project and in her preliminary design for the National Museum of Catalan Art.

The Project

The ideas from Paris were carried over into the Barcelona project, which continued for 18 years, until 2004, because of constant changes and financial problems. After her first site visit in 1984, Aulenti began her early design process for the museum between July 1986 and early 1987 and presented the first project in May 1987 at the *Palau de la Virreina*. In this preliminary project, Aulenti's museological program was still divided into three characteristic itineraries: the traditional chronological one, with a sequence of exhibition rooms; the typological one, which was concentrated in the Great Oval Hall and extrapolated exemplary architectural objects from different historical periods; and the symbolic itinerary, which was concentrated under the towers of the old building.

Architectural solutions similar to those adopted in the previous *d'Orsay* project were particularly evident in the Oval Room. Here, Aulenti had planned to include stylized and simplified reconstructions of the several churches, such as the Santa Maria de Taüll church,

two volumes dedicated to the Sixena's paintings, connected between them by a walkway. An architectural fragment for an altarpiece and other Gothic and Baroque structures such as the volumes dedicated to Carracci, Vigatà and Viladomat. There was also a café, whose structure was not very different from the current one. It was a glass-enclosed space, which, with its stepped shape, created a formal continuity with the upper steps of the Oval Room, as well as representing the profile of a pyramid, a typical shape in Gae Aulenti's architectural vocabulary. Above these volumes, on the first floor, another parallelepiped was designed to house the "Sala Sert", which was connected to the spaces dedicated to modern art on the first floor via terraces.

As in the *Musée d'Orsay*, Aulenti reintroduced the concept of an "architecture within architecture". With the new architectural volumes, Aulenti eliminated the perception of the large dimensions of the Oval Room and the emptiness that defined it. In this way, the large pre-existing building was reduced to a monumental backdrop within which the contemporary intervention was inserted. For the Great Oval Hall, Aulenti had also planned to flood it with a mirror of water covering an area of 5,000 square meters with a depth of 40 cm. Most likely, she wanted to recreate a strategy often used in her theatrical scenographies, where the use of mirrors reflected part of the set design, creating interesting visual effects. In this way, the various architectural volumes would have emerged as islands connected by passerelles. Additional drawings show the reconstruction of the stairs that lead to the first floor, between the Great Oval Hall and the vestibule. This is a solution similar to the one that was executed in 1990, with a transparent V-shaped roof that helps to bring more zenithal light into the vestibule, on the ground floor, and even into the area before the large dome on the first floor. Even the architectural solutions for the first floor, for those spaces that would later be dedicated to modern art, did not differ significantly from the final solutions that were built. In this area, the pre-existing architecture is almost completely hidden by the new structures of the museum project. However, in certain points of the different wings, it is still possible to admire the original elements, such as the columns, the domes' vaults and the bases of the towers, allowing visitors to appreciate their original decorations. The rest of the rooms were covered with false walls and double-pitched ceilings to reflect indirect light towards the artworks on display and, at the same time, to cover up the various electrical and air conditioning systems.

Analyzing the ground floor plan dated October 1987, it is already possible to see various modifications and understand how Aulenti tried to reinterpret the rigid pre-existing layout, defined by the symmetrical arrangement of the pavilions around the central hall, where the Romanesque and Gothic art collections are located. At the entrance, there is the intention to open two courtyards on both sides of the vestibule to bring more zenithal light in this part of the Palace.

In this initial project, the room dedicated to the Romanesque art was located in the right wing of the building. In drawings of 1987, the apses of the Romanesque churches of the Pyrenees were arranged in a scattered spatial organization. The apses, together with partial reconstructions of the naves as if they were ruins, contributed to creating a labyrinthine environment. In the large room to the left of the vestibule, the exhibition was designed to be dedicated to the Gothic art. Here the space was organized by a classic sequence of squared rooms arranged diagonally, adopting a solution similar to that of Hans Hollein's design for the Municipal Museum of Mönchengladbach (1972–1982). This strategy allowed

Aulenti to break with the rigid symmetry of the structural grid of columns in the existing building. As in the current project, the first floor was designed to house the modern art collection, although it had a totally different layout in this first phase. Starting from the staircase area connecting it to the lower lobby, visitors could access the upper balconies of the large Oval Room or start the museological itinerary. The space under the dome, located in the middle of the two symmetrical wings of the building, was completely occupied in this first project by the *Biblioteca dels museus d'Art* de Barcelona. Indeed, the library was presented as a single cylindrical block. The library was connected by bridges to the lateral reading rooms, arranged symmetrically to the dome. The rest of the museum path had to be completed by going through an entire cycle from the left wing to the right wing.

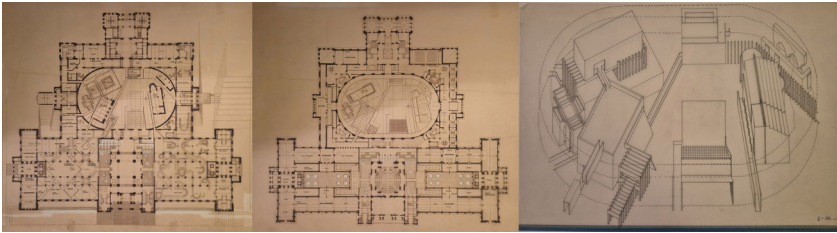


Fig. 1. On the left, the ground floor and first floor of the preliminary design from 1987. On the right, the volumes of the oval hall (Gae Aulenti Archive, Milan)

In 1988, the project encountered a series of obstacles that caused delays in its development and management, which influenced the municipal government's decision to complete only some parts in 1992, coinciding with the Olympic Games. Among these obstacles, the controversy surrounding Aulenti's preliminary design proposal stands out, especially regarding the formal and aesthetic aspects of her architectural intervention. Another major problem was the Barcelona City Council's inability to cover the costs of remodeling the museum, as well as all the other projects planned for the renovation of the city for the Olympic Games. On 31 December of 1988, the project was submitted to the City Council, so municipal technicians could review it.³

After this initial analysis, in the first two months of 1989, a series of modifications were arranged between the City Council and Gae Aulenti, mainly concerning the Great Oval Hall with its various architectural volumes and the water pool. The presence of the artificial lake was criticized by conservators and restorers for the damage it would have caused to the artworks on display due to humidity. For this reason, the 1989 drawings were changed in response to the criticism received.⁴ Gae Aulenti was forced to modify the design of the Oval Hall. The architectural fragments that had characterized this space until then disappeared completely, as did the mirror of water. The new perspective view showed small volumes located on the north-east side of the hall, next to the entrance from the vestibule, which do not interfere with the empty space of the great hall. Only the glass structure of the cafeteria remains similar to the first project. At the eastern end of the great hall, and on the opposite side to the enormous organ, Aulenti introduces a semi-circle, which creates a formal continuity with the upper grades.

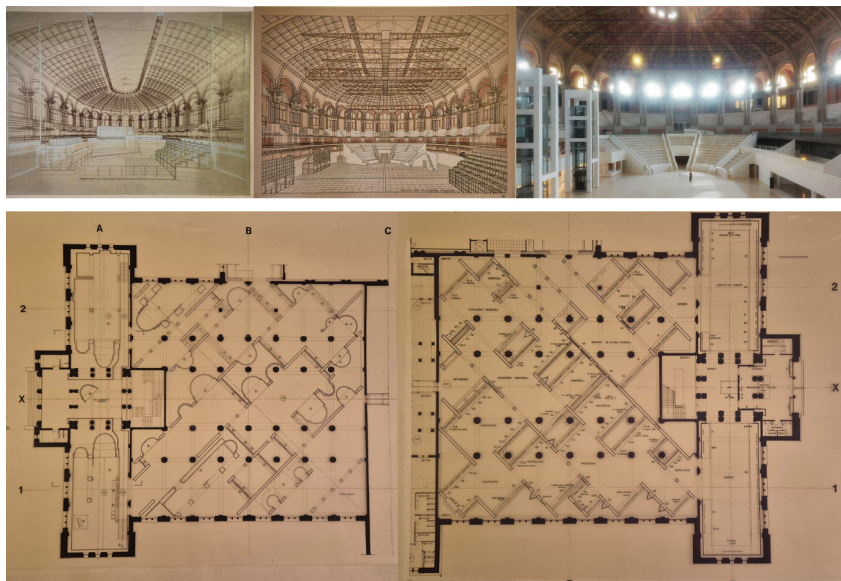


Fig. 2-3. On the top left, a perspective view of the oval hall in the 1987 design. In the centre, the view after the 1989 modifications. Photo of the oval hall as it is today. Below, the Romanesque and Gothic halls after the modifications (Gae Aulenti Archive, Milan)

In 1990, some intellectuals opposed the approval of the project despite the changes made by Aulenti.⁵ The accusations were similar to those that had fuelled the debate in the case of the intervention in the old Orsay station. In the French case, Aulenti was criticized for introducing an excessively monumental and theatrical architecture that clashed with the structure designed by Victor Laloux. In the Barcelona case, during the public presentation of the first proposal in 1987, criticism was directed at the different volumes and architectural elements proposed for the Oval Room, which chaotically saturated the space and nullified the emptiness that constitutes the very essence and symbolic power of that room. The overall composition of the project, perceived as disordered and excessive, was also questioned.

In 1992, criticism resumed regarding the intention to place a giant modern artwork in the great oval hall that would symbolically end the various stages of Catalan art. This was “El Calzetin” made by Antoni Tàpies. An enormous 18-metre sculpture representing a broken sock, which symbolizes the humble everyday life. That same year, on the occasion of the Olympic Games, the first phase for opening to the public took place. The spaces inaugurated were the vestibule, the Great Oval Hall and the underground areas dedicated to temporary exhibitions. The plans from those years show some changes that had already been made to the Gothic and Romanesque halls, with a division into rooms arranged diagonally. This proposal was changed by the museum’s second director, Xavier Barral, who replaced Joan Sureda i Pons. In fact, for the inauguration of the Romanesque Hall in 1995, Aulenti

presented an even simpler layout with the apses placed orthogonally. This allows visitors to walk behind the apses and admire the wooden structure that has supported the decorations taken from churches in the Pyrenees since the 1920s. The apses were often set in white frames that imitated parts of old churches, such as roof edges. The white structures that imitate ancient churches also help to cover up the complex system of installations and air recirculation, keeping the temperature and humidity within set parameters. On the left side of the Romanesque Hall, descending one level via ramps, the two churches of Sant Climent de Taüll and Santa Maria de Taüll were reconstructed, again in a simplified manner to indicate the correct position of the various paintings taken from the apses and side naves.



Fig. 4. On the left, the final plan of the Romanesque Hall (Gae Aulenti Archive, Milan). On the right, photos of the Romanesque Hall taken by the author

Barrall was later replaced by Eduard Carbonell, who followed Aulenti in the design of the museum until 2004. Carbonell was responsible for the changes to the museological design for the Gothic Hall, which was inaugurated in a later intermediate stage in 1997. Here too, the diagonal layout was replaced by a classic one with a succession of rooms and corridors. Due to the abundance of small artistic artefacts, Carbonell opted for fully illuminated rooms without any use of penumbra, unlike in the Romanesque Hall. The lighting design, as in many of Aulenti's other projects, was carried out by Piero Castiglioni, using a V-shaped false ceiling that radiates indirect light from spotlights throughout the room, while an additional row of central lights projects direct light only onto major objects.

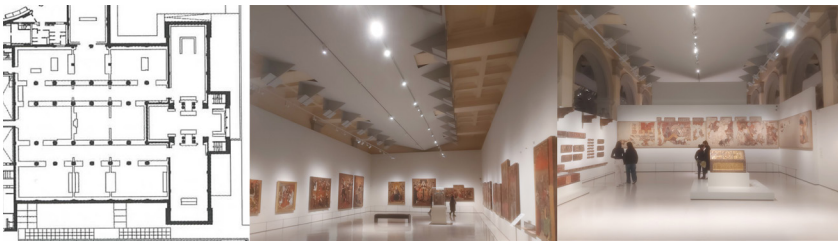


Fig. 5. On the left, the final plan of the Gothic Hall (Gae Aulenti Archive, Milan). On the right, photos of the Gothic Hall taken by the author

The works continued in the following years until completion in 2004. The library, which until the end was planned under the large dome, was built inside the old tea room with views towards the gardens of *Palacete Albéniz*. The important numismatic collection was placed under the steps of the oval hall, which were resolved with a glass structure. The

modern art collection was finally placed on the first floor, with a system of walls and false ceilings similar to those presented in the first sketches of 1987. Additional courtyards with terraces were opened on the sides of the central dome to allow more natural light into the rooms of the first floor. The new additions, in order to be distinguished from the existing structure, are generally in white, as in the Great Oval Hall, which now features a semi-amphitheatre at one end and two white towers for the elevators, with the typical square module of many Aulenti's works. The café itself still has a glass structure, although it is preceded by a white false wall that surrounds the entire perimeter of the hall on the ground floor. Entering towards the administrative area from the Oval Room there is the Sert Room, with its plafones designed by Josep M. Sert for the ballroom in the Sir Philip Sassoon's mansion. This is a private and exclusive space for the museum's benefactors.

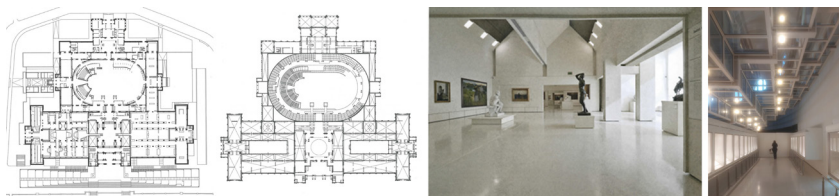


Fig. 6. On the left, the final designs for the ground floor and first floor. (Gae Aulenti Archive, Milan) At the Centre, photo of the modern art area (Agosti, Giovanni. *La Gae*. Milan, Electa, 2025, p. 714). On the right, the numismatic room, photo by the author

Conclusions

The many changes to the museum project showed how, over 18 years, Aulenti had to leave behind theatrical effects in favor of smaller-scale installations that respected the existing building. The idea of “architecture within architecture” and the insertion of new volumes into large spaces may also have come from her theater work, such as the *Laboratorio di Prato* in 1979 and Aristophanes’ opera “*Utopia*”, where sets and architectural shapes were placed inside old structures. To this we can add her installations at the MoMA in New York for the exposition *The New Domestic Landscape* (1972) and the travelling exhibition *Olivetti Concept and Forms*, where the exhibition spaces were placed inside large geometric shapes, arranged to create flexible exhibition routes that were able to adapt themselves to different buildings and pavilions in cities around the world. After the experiences of the *Musée d'Orsay* and the Barcelona Museum, she used large volumes again in the competition for the National Gallery of Victoria in Melbourne in 1995, adding new geometric shapes to the 1960s building. The same happened in 1997, when the great hall of the *Palazzo della Ragione* in Milan was planned to be turned into the new Chamber of Commerce, where the spaces (conference room, offices, secretarial office, etc.) were organized inside geometric shapes. Features that marked Aulenti's work in reusing old buildings included adding glass openings to bring in zenithal light, often made possible with shadow gaps and V-shaped roofs, typical elements of her architectural vocabulary. This could be seen in the Asian Art Museum of San Francisco, another eclectic building, a 1917 Beaux-Arts library, and in the old Hospital of *Santa Maria della Misericordia* in Rimini. Much less invasive were museum projects in older historic buildings that already had a classical sequence of rooms, such as Palazzo Grassi in

Venice and the stables of the *Quirinale*. Here, as in the MNAC in Barcelona, the separation between the new intervention and the pre-existing architecture was made clear with white plasterboard false walls, which hid the installations and usually are characterized by capitals with chamfered corners.⁶

Notes

- 1 The letter was found in the Aulenti's Archive. The cultural exchanges between Aulenti and Domènech, as well as with other Catalan intellectuals, are some of the subjects of study in the research project *RETRANSLATES: Reflections, from Europe, on architecture in Spain: urban projects, public facilities, design and interventions in heritage (1976–2006)*.
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5. Mora, Rosa. "Un grupo de expertos censura el proyecto museológico del Museu d'Art de Catalunya". *El País*, 25, Barcelona 17-I-1990.
6. For further information on other projects by Gae Aulenti, see the books dedicated to the architect: Agosti, Giovanni. *La Gae*. Milan, Electa, 2025. Then, the book: Petranzan, Margherita. *Gae Aulenti*. Milan, Rizzoli, 2002. And at the end: *Gae Aulenti*. Milan, Electa, 1979.