One hundred and fifty years after his birth and 76 after his death, the architect Antoni Gaudí has finally transcended the local and national sphere to become one of the identifying signs of the city of Barcelona, and a phenomenon of universal importance. However, this has not always been the case. In the past Gaudí and his work have been met with wide-scale incomprehension and even outright hostility. It is only with the passing of time that his work has become better recognised, due to its spectacular nature in form, and hence been analysed in depth. The result of this is that his position is now secured and his contribution to the art of the 20th century is at last understood as being fundamental.

There is something intrinsically bipartite about Gaudí: he is an artisan and an artist; he is a magician and a technician; he is a Modernista and an expressionist; he is archaic and modern; he is sacred and secular; he is a man of the 19th century and a man of the 20th. All of these seemingly oxymoronic descriptions are, in my view, those that generate a dialectical energy, the result of which is the forthrightness in the forms and concepts of this unusual genius, who has had dozens of books written about him, but who has hidden facets that are yet to be discovered.

Not long ago, the eminent architect, art historian and academic, Fernando Chueca Goitia, accurately described the place that Gaudí occupies in art and architecture. Chueca referred to Gaudí as the “the greatest Spanish artist between Goya and Picasso […] about whom it is not easy to talk, as he was a very complex man and due to the circumstances surrounding his life”. He concluded that Gaudí is “both of and beyond architecture”, a statement that places Gaudí in his rightful position in the context of the history of modern art and which underlines Gaudí’s typical manner of doing things, a man who overstepped the traditional boundaries of architecture and designed with consideration to constructional processes and the habitability of the spaces, blending architecture with art and following an intuition that sprang from the fount of tradition but which led towards innovation. It was in all likelihood due to this that Elies Rogent, the principal at the School of Architecture in Barcelona, remarked to his colleagues when Gaudí graduated in 1878 that he did not know whether he had given a degree to “a madman or a genius”, in his perception that there was something extraordinary about the newly-qualified architect, then aged 26.

It is clear that Gaudí’s early architecture was significantly imbued with the neo-Mudéjar style and Orientalism, and that it even included Neoclassical touches and later came to incorporate neo-Medieval elements. Even so, Gaudí stood out from his contemporaries because even when he was employing a familiar idiom, he devised solutions of his own and formulated original repertoires. Though it is common to
place Gaudí amongst the great Modernistas –Catalan and European– of his times, there are also those who, due to the forthrightness of his forms, consider him to be closer to Expressionism. Chueca, however, goes further and defines him as the “sole architect of Spanish expressionism and one of the greatest in Europe”.

We cannot deny that Gaudí was immersed in the context of the Modernistas and that many of the formal elements of this movement also appear in his work, especially undulating and curvilinear forms, but it is not true to say that Gaudi was intrinsically an Art Nouveau architect in the mould of Hector Guimard, for example. Perhaps the most appropriate approach to take in order to situate Gaudí would be to follow the advice of Cèsar Martinell, Gaudi’s disciple and collaborator, and talk of Gaudinism as a style in its own right or as a singular 'ism', because he surpasses the definition and content of Modernisme. At the turn of the 19th century, Modernisme signified the change or transition from academic to a more modern architecture, though both were different to Gaudí’s concept of the architectural. In his work, he took the architectural styles of the past as his starting point and evolved from there, taking into account firstly the concept and then the constructional techniques and results of the experimentation he conducted throughout his life, because his ultimate true goal was to arrive at a “total work of art”, a work in which there was no distinction between the smallest ornamental detail and the most complex structural solution.

Gaudí was interested in the past but always looked ahead towards the future, towards everything that he intuited would renew art and architecture. As a result, it is not surprising that Gaudí turned the most advanced style of his era, the Gothic, into the seed for research that would enable him to arrive at the definition of his own structural system, with equilibrated arches and without buttresses, a system that made it possible for him to build works as complex as the church at Colònia Güell and the Church of the Sagrada Familia.

Oriol Bohigas believes that Gaudí’s most important aspect is precisely his “total rupture with the styles of the past and the creation of a new plastic language”, which is revealed in the works of his mature period, including Palau Güell, Casa Batlló, Casa Milà, also known as La Pedrera, Park Güell, the small building of the Temporary Schools at Sagrada Família and the church at Colònía Güell, and the Church of the Sagrada Família.

These buildings are unquestionably individual, free, creative and experimental architecture, the result of a way of working that no longer bears any relation to post-Romanticism but is instead filled with the spirit of the Modern Movement. At this point, we should remember that Gaudí lived in an era of sweeping changes in science and technology that also affected him and his work. Nevertheless, Gaudí’s analytical and pragmatic sense must be attributed to two factors, as he himself acknowledged in declarations he made. The first of these influences was nature,
which was closely linked to the landscape of his childhood in the region around Tarragona; and the second his artisanal background, as his father and both his grandfathers were boilermakers who used anvils to hammer and shape sheets of copper. From nature, Gaudí learnt that there are no straight lines in the organic world, that natural forms have no solution for continuity but an internal geometry. Artisanal labour, which gave him a taste for working with his hands, taught him the discipline of skilled crafts, the basic techniques of construction and above all the ability to translate a flat plane into three-dimensional space. “I have this ability to see space because I am the son, grandson and great-grandson of boilermakers [...], in other words, people of space and the situation”. His understanding of how to see space, of how to master its physical and sensorial aspects, meant that Gaudí did not restrict himself to forms but also worked the spaces that were to contain these forms. Gaudí moved to Barcelona to study architecture at an opportune moment. Firstly, the Provincial School of Architecture had just opened in Catalonia’s capital city. No longer incorporated as part of the Academy of the Fine Arts, which meant that its students and graduates enjoyed a superior status to the earlier master builders, the school had a spirit of renewal and paid special attention to the technical training of its architectural students. Secondly, the city was at one of its periodic peaks of splendour, due to the tremendous economic growth instigated by a bourgeoisie that was the equal of any other in Europe. The Eixample district of the city, then recently designed by Ildefons Cerdà, spread the city eastwards and in the direction of the mountains, resulting in a construction boom in which *Modernisme* was the referent and the work of Gaudí its culmination. The Güells, Vicenses, Calvets, Batllós, Milàs and others were great families who were moved by a desire to own a residence that would distinguish them from the rest and, attracted by the singularity of Gaudí’s designs, entrusted him with the construction of their homes.

As we can see, then, the setting was propitious for Gaudí. Even the jobs he did as a draughtsman in a number of renowned architects’ offices worked in his favour, as not only did they help him financially, but they also enabled him to establish and maintain a close relationship with ceramics workshops, forges and foundries, and with glassmakers, carpenters, plasterers and so forth. The first commissions he received in Barcelona were related to these crafts and their practitioners: the design of lampposts for Plaça Reial, which still stand in the square today; display cases for the Guanteria Comella glove shop; and a number of reliquaries and decorative objects. These were in the main pieces that harked back to the past, pieces charged with medieval, naturalistic or religious symbology, but with a special emphasis on their functional and constructional aspects, matters in which Gaudí was an expert.

This capacity, which I would go so far as to describe as innate, for everything related to the arts and crafts was complemented by rigorous studies at the School of
Architecture, where Gaudí learned differential and integral calculus, descriptive geometry, which proved essential in the later development of his ruled surfaces, and rational mechanics, etc. In addition, even though he was not officially registered as a student, he attended the classes in aesthetics taught by Manuel Milà i Fontanals and the philosophy classes taught by Francesc X. Llorens i Barba, the professor of metaphysics whose aim was to arrive at a synthesis of empiricism and rationalism, following the ‘common sense’ school and Kantian thinking. In short, Gaudí pursued an amalgam of disciplines which reveal that even in his youth he was quite clear in his own mind that art and technology went hand in hand with thinking, and that by basing himself on sensible intuition, reflection and empirical models, he would be able to approach the profession of an architect in a different way.

If it is true that art and technology are inseparable in his work, why is it that his popularity is so closely associated with the outer skin of his buildings? Gaudí’s architecture is evidently extremely artistic from the plastic as well as the morphological point of view. The art historian Alexandre Cirici asserted that Gaudí was an abstract painter though he remained unaware of it: “he died perhaps without ever realising the extraordinary fact that his creativity anticipated the non-figurative plastic arts”. The watercolours of Wassily Kandinsky, considered the father of abstraction, are later than Gaudí’s works, as are the sculptures of Pablo Gargallo and Juli González, antecedents for which are unquestionably visible in Gaudí’s wrought-iron pieces, in particular the railings of Casa Milà, which Eduardo Cirlot declared to be forms “anticipating modern plastic art”. Gaudí used collage, assemblage, trençadís (mosaic made up of fragments of ceramic or other material), dynamic forms, undulating surfaces, and fields of colour avant la lettre, before all these techniques were used by artists of the avant-garde movements. There are even some art historians who associate Gaudí with Surrealism, Cubism, Expressionism or certain other artistic movements. It is, however, well known that his world was very remote from that of the Avant-garde, and that the sole point of similarity between Gaudí the architect and these artists is their determination to explore new modes of expression and to find new plastic solutions for their creative interests. Even so, we should avoid making the mistake of seeing Gaudí as a plastic artist, as his particular sense of beauty was always linked to functionality, practicality and cost.

In Gaudí’s view, the external appearance of things “must be nothing more than the reflection of the utilitarian, mechanical and constructional requirements”. For this reason, he studied geometry, the world of structures and construction methods in depth. Initially, he focussed on traditional materials and techniques such as brick and the ‘Catalan vault’, a world familiar to him that the Valencian Guastavino exported to the USA. In 1883, when he built the parabolic arches of wood in the Cooperativa La Obrera Mataronense workers co-operative, and in particular from the time of the
experiments he conducted in order to build the church at Colònia Güell, Gaudí decided to move on from traditional construction types and instead to create new forms and to expand the repertoire of construction solutions.

Gaudí’s capacity for innovation was such that he surprised even his own collaborators, such as when he used pillars instead of walls, inclined columns, catenary models, equilibrated arches, intersecting vaults, etc., solutions that he justified by saying, “my structural and aesthetic ideas are indisputably logical”. It was because of this that he made the form match the structure, eliminating any kind of buttress or supporting walls, and basing himself fundamentally on connected ruled surfaces.

Other not-to-be-passed-over remarks that Gaudí made include: “I am a geometrician, that is to say, I synthesise”; “I calculate everything”; “in the execution of surfaces, geometry does not complicate but simplifies the construction”; and “for an architectural work to be beautiful, all its elements must be appropriate in situation, dimension, form and colour”. If we analyse any of his chimneys, small edifices or detached buildings, we will discover that the powerful and expressionist morphology that characterises them masks a logic, a calculation, a sense of measure that fuses art and technology.

This side of Gaudí, which is more demonstrative of a man of science than of an artist, is revealed to us in his workshop or studio on the site of the Sagrada Família, a temporary construction formed of warped surfaces that has changed over the course of the years. It was here, during the last 14 years of his life, that Gaudí conducted the most fascinating studies of his career. Thanks to the journal Gaseta de les Arts, an extensive photographic reportage has survived, showing us the interior and exterior of this workshop and helping us to understand the way Gaudí worked, which we would otherwise only know of from the notes left by his disciples and collaborators.

Drawing boards, plans, three-dimensional geometrical models, maquettes of buildings, photographs, Venetian mosaics, ornamental details, moulds and counter-moulds of figures intended for the Nativity Façade of the Church of the Sagrada Família were all piled up in the tiny space of his workshop, demonstrating that nothing was improvised, that everything was studied and experimented with beforehand, to the extent that, as some who knew him recorded, the building that housed this laboratory had movable ceilings and windows to control the light entering in depending on the position of the sun or on the type of photograph he wanted to take. Gaudí would even, if the operational needs of the moment demanded it, have new windows cut into the walls or the ceilings raised.

This is perhaps the facet of Gaudí that is least known, yet it is probably the one that most reveals the substratum of his rich morphology and is unquestionably the secret of his work, which was the result not of some arbitrary aesthetic impulse, but of a
profound analysis of forms that brings the functional requirements into harmony with the aesthetic options.

It is this that we have been hoping to demonstrate through the various activities (exhibitions, congresses, routes, publications, university courses, workshops, etc.) that we have been holding over the course of 2002 and which provide an opportunity for a new encounter with Gaudí, so that the tremendous legend surrounding him will give way to a reflective and contemporary reading of his entire body of work.