

Catalan Art and Architecture

Antoni Gaudí as Creative Medievalist

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The attitude of Antoni Gaudí toward medieval architecture is not quite clear. A number of his buildings strongly resemble in form and picturesqueness the Gothic and Mudéjar, and Eugène Viollet-le-Duc was definitely one of his heroes.

However, Gaudí considered there to be structural inadequacies in the Gothic, saying:

«Gothic is an imperfect style, yet to be resolved; an industrial style, a mechanical system.»

His point is understandable in a comparison of Cologne Cathedral with the Sagrada Familia church. The former's vertical forces are contained within the building parts only by means of the action of various buttresses and props. What Gaudí was seeking in all his buildings, and here in the Sagrada Familia church in particular, was what is called «equilibrated» structure in which, by means of a variety of devices including parabolic arches, corbelling, thin-shell vaulting, and leaning piers, the masonry structures (and he always worked in brick or stone) are self-sufficient within themselves and are composed in units that are likewise self-sufficient.

Somewhat like the American Gothicist Ralph Adams Cram, Gaudí

felt that the Gothic had never really achieved fruition, in part because of having been cut off by subsequent styles as in New York's Cathedral of St. John the Divine, where futuristic forms were used by Cram (with Catalan vaulting, incidentally) as if he were building what a continuing Gothic would have developed. Gaudí remarked to Marius Ary Leblond in 1910:

«Gothic is sublime, but incomplete; merely a beginning stopped in full development by the deplorable Renaissance. Today one must not imitate or reproduce, but continue the Gothic, stripping it of everything flamboyant, for the Gothic employed much of its ingenuity in the design of essentially unnecessary elements [e. g. flying buttresses].»

On the other hand, and probably because of his enthusiastic Mediterraneanism, Gaudí actually called himself a «Greek»: an interviewer remarked, «But you do the Sagrada Familia church in Gothic...». «No, Señor», Gaudí replied, «the Sagrada Familia church is Greek!».

So, perhaps, it is not correct to try to reduce Gaudí to any particular style definition—even «medievalistic»—particularly because his buildings differ so much among themselves. To seek out, as I am doing here, Gaudí's positive responses to the medieval in those particular instances where we can detect it, or he tells us about it, is only to determine certain historically interesting circumstances within what is actually a multiplex manner and indefinable style of working.

When he practiced overt medievalism Gaudí seems to have tried to be true to the architectural tendencies of the region for which he was building; for instance, when he was preparing to design the Episcopal Palace in Astorga and a large apartment house on a main square in León, we are told that he did preparatory reading about the medieval in León and Castile in those volumes of *España, sus monumentos y artes, su naturaleza e historia* that had just up-dated the old *Recuerdos y Bellezas de España* series of the 1840s. That certain of his characteristic architectural forms were taken from the special qualities of Catalan Gothic he never said himself, but the Sert/Sweeney monograph has suggested it, and Thomas Beddall seems to have established it convincingly in research and photography that he conducted about ten years ago. For instance, the Catalan Gothic tended to distribute all the downward thrusts of loads within its church walls—albeit they were thick unlike Gaudí's—instead of employing flying buttresses. And in numerous Catalan Gothic arcades the arches almost meet the

ground and curve into it, as if they were leaning like Gaudí's piers. There are also decorative devices and ways of «turning the corner» of a tower in which Gaudí's forms and techniques are strikingly similar to Medieval Catalan ones.

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Like other Catalan architects, Gaudí occasionally became involved in the matter of uncovering, reconstructing, or finishing what remained of the glories of late medieval Barcelona, the days of Aragonese supremacy.

For instance, since the 1860s the banker Manuel Girona had been trying to get organized a campaign to finish the façade and cupola of the Cathedral of Barcelona whose construction had been interrupted in the early 15th Century. There had been several projects, mainly by the architect Oriol Mestres, and in 1882 the architect Joan Martorell i Montells submitted one which Gaudí copied. The project was rejected, in part because of its height and cost, leading to a considerable controversy. Fellow architects, Gaudí included, supported it vociferously, and both Eusebio Güell and the Cercle Artístic de Sant Lluc produced large broadside prints some years later as the dispute continued, in order to publicize Martorell's project, but the façade was finished differently by Oriol Mestres. Following the demise of Mestres, Augusto Font did the cupola on the narthex, finishing that in 1912. The dates of construction of Barcelona Cathedral are, then, 1298-1912.

Incidentally, the drawing is quite spirited and is gorgeous in detail. We do not know, actually, whether Gaudí and Lluís Domènec i Montaner (who lettered it) did it in 1882 when Gaudí was assisting Martorell (in part as a delineator) or later in the 1880s when the broadsides were prepared. In either case, we are told that Gaudí made this copy of Martorell's project after simply looking at it in the cloister of the Cathedral.

Not unrelated to the continuation of the Cathedral was the matter of the reform of the entire Barrio Gótico of Barcelona which, in 1908, was to be bisected by extension of the Via Layetana to the port side. Originally a Roman settlement destroyed in invasions, the old center of Barcelona was rebuilt and walled, in parts, from the 4th to the 13th centuries, with new fortifications erected from the 14th to the 17th. The walls were demolished in the 19th century, and considerable other demolition occurred within the area.

The architect Puig i Cadafalch, in charge of the Layetana extension, in 1907 consulted Gaudí about the Barrio, and Gaudí, taking a photograph in hand, drew on it as in saying:

«Are they not renewing the city now? It is, then, the moment to transform the Plaza del Rey into the character it had when the sovereign used to stroll through it. Demolish the houses that have backed up against the Church of Santa Agueda. Demolish also those which remain in the calle de la Tapinería, and build a great stairway that would connect the Plaza del Rey with the new avenue. In order that the historic plaza speak even more intensely to us of the grand monarch, joined to the door of the palace one could place a group representing Jaime I with his Court and men-at-arms.»

In his drawing Gaudí added an angel to the tower of the Royal Chapel at the left and two spires to the middle towers that had masts of sorts; he completed the Cathedral cupola then under construction; and he roofed the Cathedral, the Tinell Palace, and the Torre del Rey Martín in the right foreground. With white lines he indicated the clearing away of a lot of structures in the front, providing open spaces that now exist there (but not according to his plan). Some of the things that he suggested eventually happened. Others, like the roof and spires on the Cathedral, did not.

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To examine Gaudí's creative medievalism we should look at some building carried out in the neo-Mudéjar and neo-Gothic manners.

There are generally considered to be two major phases of Muslim architecture in the Peninsula: the «Caliphate» as exemplified by the Mosque at Cordoba and the «Nasrid» as seen in the Alhambra Palace. There was also a third, rather hybrid popular manner, now generally called «Mudéjar».

The Mudéjars were practicing Moslems under Christian domination in Spain, the term meaning essentially «domesticated» in Arabic. Depending on the particular circumstances, Mudéjars could retain own religion, culture, and professions or crafts; the last most concern us because the Mudéjars were apparently responsible for a number of peculiarly «Spanish» aspects of architecture in the Peninsula: certain wall-transparancies and types of natural internal illumination; three-

dimensional play of surfaces by means of laminated planes; emphasis on polychromy, especially by application of *azulejos* and *alicatado*; shallow patterning of geometries, calligraphy, arabesque, or brick texturing.

These stylisms arose in the Middle Ages and lasted through the Plateresque period into the 16th-century Renaissance. The Mudéjars worked in gangs (*alarifes*) of *albaniles*, were famous for their brick and terracotta effects which were assumed to be Moorish (Teruel, Calatayud, Sahagún), and also did agricultural labor. Meanwhile the Christians were supposed, hierarchically, to be warriors rather than laborers and to employ *stone* masonry when building.

The rather vernacular Mudéjar manner of building persisted even after 1609-14 when the Moors were expelled from the Peninsula, as we know from the scorn heaped upon it by the 18th-century Neo-Classicists in Spain. The term Mudéjar seems not to have been applied to building, however, until 1859 when José Amador de los Ríos so named it, *El Estilo Mudéjar en Arquitectura*, on the occasion of his acceptance speech into the Academia de San Fernando. It soon began to flourish in Spain in a rich eclecticism —commented on at the time, e. g., by the Marqués de Cubas— of cathedrals and castles in Gothic, museums and public buildings in Classic, educational institutions in Romanesque, and residences and places of entertainment in Mudéjar. The Mudéjar was particularly characteristic of Madrid and Barcelona in the late 19th century and Seville in the early 20th century; that in Barcelona was nicely chronicled by Santiago Alcolea Gi at the 23rd International Congress of Art History in Granada in 1973.

Mudéjar effects characterized the work of several Catalan architects of the *Renaixensa* movement. That there was a general romantic interest in the Muslim can be seen from an important article, «En busca de una arquitectura nacional», by the architect Lluís Domènech i Montaner in the periodical *Renaixensa* for 1878, wherein he considered the Muslim to be basically Spanish —not anti-Spanish as history of the Reconquest might suggest. Catalonia was actually much involved in Muslim North Africa from the campaign of General Prim (of Reus like Gaudí) painted by Mariano Fortuny (also of Reus). Catalans had also explored North Africa: both the famous Ali Bey and Kaid Ismail (i. e., Joaquín Gatell of Tarragona).

Western Catalonia (Lérida) had been occupied by the Moors until fairly late, and perhaps the Catalans were also identifying themselves patriotically with Aragon where the Mudéjar culture had flourished until late, even persisting after the expulsions of the early 17th century.

Gaudí was definitely an exponent of the Mudéjar, although he may not himself have called it that. Usually his works are not «neo», but he was involved with exposition pavilions which Spanish institutions frequently cast in a neo-Muslim style in those days, for instance the Arabic pavilion at the 1857 Agricultural Exposition in Madrid and a pavilion at the 1878 Universal Exposition in Paris by Agustín Ortiz de Villajos. Gaudí was previously thought to be designer of Compañía Trasatlántica Pavilion at the Naval Exposition in Cádiz in 1887 that was reconstructed for the great Barcelona 1888 Exposition. César Martinell has found evidence that the pavilion was originally designed by a local *maestro de obras* in Cádiz, although we do have documentation that Gaudí supervised its installation in Barcelona, where it was totally modified.

Earlier Gaudí had made considerable contribution to the emerging Mudéjar style in Barcelona, in particular by including more ceramic color than others and by intensifying the structural appearance of the Cordoba-like arcading and corbel tables. This is to be seen in two contemporary buildings of the early 1880s: the Casa Vicens in Barcelona and the villa El Capricho in Comillas, a Catalan enclave near Santander. The interior of the Casa Vicens actually draws heavily on Art and Crafts motifs, but is also Muslim—as was often the case—in the smoking room with its stalactite vaulting and wall surfaces filled with Pre-Raphaelite flower patterns.

In Barcelona the Palacio Güell (1886-89) and the gatehouse and stable of Güell's then-suburban *finca* of the late 1880s are also of a medieval mix that we may call Mudéjar. The Palacio Güell façade is part Venetian palace and part Cairo street. Internally it is based on Granadine hall effects with its central space going up through several stories, the upper corridors and bedrooms being isolated by Muslim jalousie shutters and rising to a star-pierced dome that resembles the ceilings of arab baths. The Finca Güell is ornamented on the outside by a variety of textural and coloristic devices that reflect the Muslim. Also, Gaudí has maintained the Spanish hierarchical distinction between high-class (i. e., Christian stone masonry for the main part of the Palacio Güell while building the attached servants' wing and chimneys in brick; similarly the «rural» Finca Güell buildings which were servant to the main Güell mansion (now Royal Palace of Pedralbes) were built in brick.

Gaudí's Mudéjarismo developed from the rather obvious that we have seen to unusual forms which it has been suggested might have been taken from Berber castles of the Atlas mountains: the Colegio

de las Teresas of 1888-90 and his project for Franciscan missions in Tangier of 1892-93. Whatever the ultimate source, Gaudí's architectural forms always became highly personal in a creative way, and «Mudéjarismo» was a compound style into which they could well fit.

Likewise his Gothicizing structures. Although the Astorga and León buildings where he was trying to be regional are quite clearly Gothic, the Sagrada Familia church is a considerable variation on that style. He also designed a Gothic chapel for a church in Alella, just north of Barcelona, that is highly original.

Another venture into the medieval was his building of castles in Spain. There had been some 10,000 castles built in the Península, of which 2000 survive, 500 being in fair shape. Bell Esguard, built on the site and beside the ruins of the castle of King Martín el Humano and overloo King and Port de Barcelona, is essentially in that tradition.

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Gaudí's other association with the Medieval was, as characteristic of his day, an effort to return church liturgy to Medieval form. What is particularly interesting, ritually, is the reformation that he carried out for Bishop Pedro Campins in the interior of the Cathedral of Palma de Mallorca from 1901-15. The original «Mediterranean» nature of such a Catalan Gothic church, with its heavy walls and vast «democratic» space rising up to the vaults, had become cluttered in Renaissance and Baroque times with a large choir in the nave and retablos that subdivided, like screens, the flow of nave space to the sanctuary. Gaudí and the bishop cleared all that out. They gave the congregation a full view as far as the ultimate apsidal Lady Chapel. And they hung a suspended baldacchino over the altar so that the priests could get the entire congregation into an empathetic, direct involvement in the liturgy such as was generally not to occur in Catholicism until after Pope John XXIII's Second Vatican Council in 1962 — sixty years later!

In the case of the Expiatory Church of the Sagrada Familia, he went even further and produced iconographic plans for various levels of the structure and a sculptural decoration that exceeded the complexities of even the idealized Medieval cathedrals postulated in France at that time by Emile Mâle.

The projects most important to Gaudí himself were his religious works, and in this way he was, indeed, a truly medieval builder.

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The Templo Expiatorio de la Sagrada Familia is one of a number of huge neo-medieval churches that were begun before or just after the turn of our century in Gothic style and remain today unfinished despite periodic and recent programs to complete them. The Cathedral of St. John the Divine in New York City (started 1892), largest Gothic church in the world, is an example, as are those of Santa María de la Almudena in Madrid (started 1881), the new cathedral in Vitoria in Spain (started 1906), and Liverpool's Cathedral of the Church of England (started 1904).

Just why this rash of large neo-medieval cathedral-type projects started at that time is not entirely clear. In general it was probably owing to the incredible urbanization and city population increase in the industrialized areas of the world during the nineteenth century and the consequent need for more bishop's dioceses within the Roman Catholic and Episcopalian churches. In Spain, however, the new projects were related to religious revival, reestablishment of churchly prerogatives, and re-entry of banished monastic orders following the restoration of the monarchy in 1875, and in the case of Barcelona's Church of the Holy Family, at least, it was an effort to collaborate with «progressive» contra —Marxism of the Vatican— especially under Pope Leo XIII (1878-1903).

In 1866 José María Bocabella y Verdager (1815-92), proprietor of a bookstore in Barcelona called Librería Herederos de la Viuda Pla, being exceedingly devout, started to publish a periodical entitled *El Propagador de la Devoción de San José* in order «to resist the danger suffered by public piety because of the revolutionary ideas of the day». The periodical was based on one of the same name that had been launched by a Marist Father, Joseph Huguet, in St. Foy, Dijon, in France.

The cult of St. Joseph, father of Christ, is somewhat modern. In the early church, Joseph had been largely a peripheral or apocryphal figure. He was named in the Gospels of Matthew and Luke, but figured mainly in questionable tracts such as the Egyptian History of Joseph the Carpenter. Usually he would take part in the Flight into Egypt and then disappear. In the later Middle Ages Bernard of Clairvaux (12th century) was concerned with him as a person, and Joseph became important to religious orders of a missionary cast because he was thought of as Joseph the Traveller. The Franciscans venerated him as part of their devotion to the Holy Family; the Feast of St. Joseph was established about 1400, and the Council of Trent (1545-63) calendared his day as the 19th of March. The Council of Trent considered that

as Father of Christ he was the third member of the earthly Trinity of Joseph, Mary, and Jesús that parallels the Heavenly Trinity of God, the Holy Spirit, and Christ, so dramatically painted by Murillo. But the growing enthusiasm for St. Joseph was probably owing in large part to Santa Teresa de Jesús (1515-82) whose convent in Avila was dedicated to Joseph; the Pope was even convinced to replace Santiago (St. James) with St. Joseph as the patron saint of Spain for two years, 1678-80. During the nineteenth century the cult of St. Joseph became a cornerstone of the religious concern for survival of the concept of the family, and he became patron—as he was a carpenter—of associations of workers formed up in opposition to the secular trade unions. In 1870 St. Joseph was made a Patron of the Universal Church by Pius IX (1846-78) and in 1889 figured in an encyclical letter of Pope Leo XIII.

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It was the hope of Bocabella and his Asociación Espiritual de Devoción de San José de España, and his architects as well, who were or became equally devout, that the great church would become a real bustle of worker activity, clustered around its base in lodges and craftwork in a romantic image of medieval life like the contemporary Bauhütten in Germany and Austria. Bocabella said in 1881, on purchasing the property: «On this site will rise the sumptuous expiatory church of the Holy Family, surrounded by gardens for the recreation and enjoyment of children, and accompanied by Catholic schools and workshops with the object of uplifting those gangs of street urchins who wander about lost, and so to facilitate their moral and physical development». And Gaudí in 1908 remarked to a Frenchman with whom he was conversing, that a colony of artisans would cluster about his church «from which will rise the noises of work, like the buzzing of bees, a mystical hive...».

There was formed in Catalonia, somewhat later, just such a religious association of artists and craftsmen, the Cercle Artístic de Sant Lluç (the Artistic Society of St. Luke, patron of the arts) based on a pious art-and-craft society of the same name that had been founded in Belgium in 1861. Gaudí and most of his associates became members of the Cercle in an almost political act, since it corresponded to a number of new religious orders throughout Europe that were attempting, among other things, to replace the Baroque and modern rituals of the Catholic Church with neo-medieval procedures and music. The Cercle still

flourishes in Barcelona and has recently been headed by the grandson of Gaudí's major patron, the Conde de Güell.

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It is difficult to know exactly what Gaudí intended with respect to the Templo because his atelier with virtually all his drawings in it was destroyed, but it may be that, preoccupied as he was with specific structural/formal problems, he never made detailed renderings of the whole, leaving that to his associates. For instance, Juan Rubió y Bellver made such a rendering in 1906. Oddly enough, for this Nativity side of the project, we have no drawings by Gaudí of the whole, but do have for those years (c. 1892-1900) an interesting drawing by him of the façade of the opposite Passion transept (on which no work was done until long after World War II) that develops the elements of the façade porch in terms of graphic-static stress lines. The only whole study that we know of by Gaudí—and it does seem that if he had done others they would have been published before being destroyed, as this one frequently was—is a side elevation of about 1900. Again, it is not of the flank on which he was then working, but includes the Passion transept. The most elaborate of all his studies was one done for that same transept façade in 1911 and then slightly changed and added to in 1917 as a result of the death of a renowned Catalan cleric, the Bishop Josep Torras i Bages, for whom Gaudí designed a monument drawn at the side of the façade, but actually to be erected in front of it. In any case, it is the Passion transept that has gone up in recent years, and the elements of Gaudí's drawing are now being carried out.

With his assistant José María Jujol, however, Gaudí did make plaster models of parts of the Sagrada Familia church for the exhibition of his works at the Société National de Beaux Arts in Paris in 1910. That of the façade of the Nativity transept (but not the whole flank of the church) was polychromed in symbolic colors representing, among other things, the transept's three portals of Faith, Hope, and Charity. A French critic, writing for *l'Architecture* of the exhibition, said of this model:

One wonders how an edifice such as this Church of the Sagrada Familia, whose enormous polychromed model presents the façade for us here, can be built in Barcelona. And yet, if one were to have doubts about the genuineness of such a monument, they would be dispelled by the photographs displayed of the

work under construction. Is this architecture of Dahomey? No indeed! More likely the architecture of a sherbert-maker. One can imagine this extraordinarily constructed piece appearing on a table of Gargantua. But I would scarcely want to taste it! These colors do not really attract me.

But most unique about the church is its proposed structural system and the manner in which Gaudí arrived at it. He experimented at length with methods of vault design during the first decade of our century when he was occupied with the Nativity façade, doing most of this experimentation in connection with the church for the workers' colony of the Güell family's textile factory in Santa Coloma de Cervelló, south of Barcelona. For this project he constructed a model of cords hanging from a set of irregularly shaped flat boards that represented the contour lines of the site. Sheets were hung on the outside of the cords to indicate the exterior surfaces of the building. As is well known, Gaudí would draw or paint on inverted photographs of this model to obtain his famous sketches of the Colonia Güell church, inside and out.

A particular design advantage of his use of this funicular model instead of elaborate sections and graphic static diagrams was that if Gaudí did not like the appearance of the final forms—either as they hung or as he sketched them on photographs of the model—he could merely change the weight or point of attachment of a bag of pellets, or could reposition a pier by reattaching a hanging cord to another screw-eye on the board; indeed, some photographs of the model do show vacant screw-eyes that would so result. The mechanism was, then, actually a tinkering machine on which the architect could play a sort of electronic music and in which structure was identical with architectural form and form with structure at all times, regardless of how he manipulated the parts (keys).

Part of the elegance of the forms in the existing crypt of the Güell colony church derives from the fact that the vault surfaces or webs are made of thin-shell laminated tile vaults called in Spanish *bóvedas tabicadas* (board vaults). These are so thin (a few inches), are composed of such hardfired tiles, and are stuck with such copious and tenacious mortar that their pieces adhere by *cohesion* rather than through the force of gravity upon them. Hence, their structural resistance derives from the shapes into which they are curved, usually being surfaces of double curvature which are rigid, albeit thin, and produce very little resultant side thrusts. It is as if the vault webbing were of bent plywood; they are form-resistant structures.

So we can see that in essence Gaudí preferred the following structural characteristic in his buildings, and not only in his churches:

1. Inclined piers. As he once said, «Have you ever observed that when one leans on a cane he inclines it? Thus my inclined columns are stone canes in which, as is obvious, the technique of following the lines and curves of forces is even more refined».

2. Parabolic arches, the parabola being, as he observed, an easy-to-calculate approximation to the catenary curve. He also noted that certain Sassanian and High Gothic pointed (i. e., broken) arches also approximate the catenary at their crests, but they do not, of course, at their bottoms because they meet the ground perpendicularly instead of at an angle. We have seen that certain Catalan Gothic buildings have arches that curve into the ground, and Gaudí must have been aware of this, as he did a youthful study of at least one of those structures.

3. Thin-shell surfaces (*bóvedas tabicadas*) of double curvature for vaulting —and actually for walls where practicable, to be used vertically (called *tabiques de panderete*).

4. All supporting forces centered within the cross-section of piers or columns, often aided by «mushroom» capitals that tend to funnel downward thrusts into the centroid of the pier.

That Gaudí's dominant aesthetic in the Sagrada Familia church is High Gothic, i. e., neo-medieval, but in this «equilibrated» manner, we know from the comparison of the support systems of the Sagrada Familia church and the Cathedral of Cologne, that we have seen was prepared by his shop. Gaudí once explained this to Bocabella's successor (and grandson), José María de Dalmases Bocabella, as follows:

Would you like to know what my model has been [pointing to a eucalyptus tree in front of his studio]? A straightstanding tree; it supports its branches, and these its twigs, and these its leaves. And everything grows harmoniously, grandly, since God Himself is the artist who rendered it. The tree does not need external support. Everything in it is balanced in itself. Everything is in equilibrium.

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Form, structure, geometry and Nature all here coincide, while the aspirations of the soaring medieval style have been retained and indeed enhanced. That is, the engineering-like congruency of all aspects of the

building has not reduced or impoverished its expression, but actually by its effect of growing like Nature has made it speak more clearly and popularly (like the St. Joseph cult!), while the theologian and philosopher are satisfied by this new infusion of the cosmic implications of quadric geometry —instead of the Platonic solids— into forms that appear to be material and structural. Gaudí believed that the hyperbolic paraboloid, a ruled surface produced by one set of non-intersecting straight lines (the Holy Spirit) passing over two other such sets (God the Father and Christ) was a symbol of fundamental divinity. Or as he several times commented:

«Originality is to return to the origin.»