

ENGLISH

# INFORMATION BOOKLETS

# 9

## Interior of the Basilica

*On the exterior of the Basilica, Gaudí's mark is clear. However it is inside the Temple where the power and draw of his architecture are most manifest, inviting visitors on a contemplative journey.*



The acronym JMJ (Jesus, Mary and Joseph), one of the ways Gaudí referred to the Holy Family.

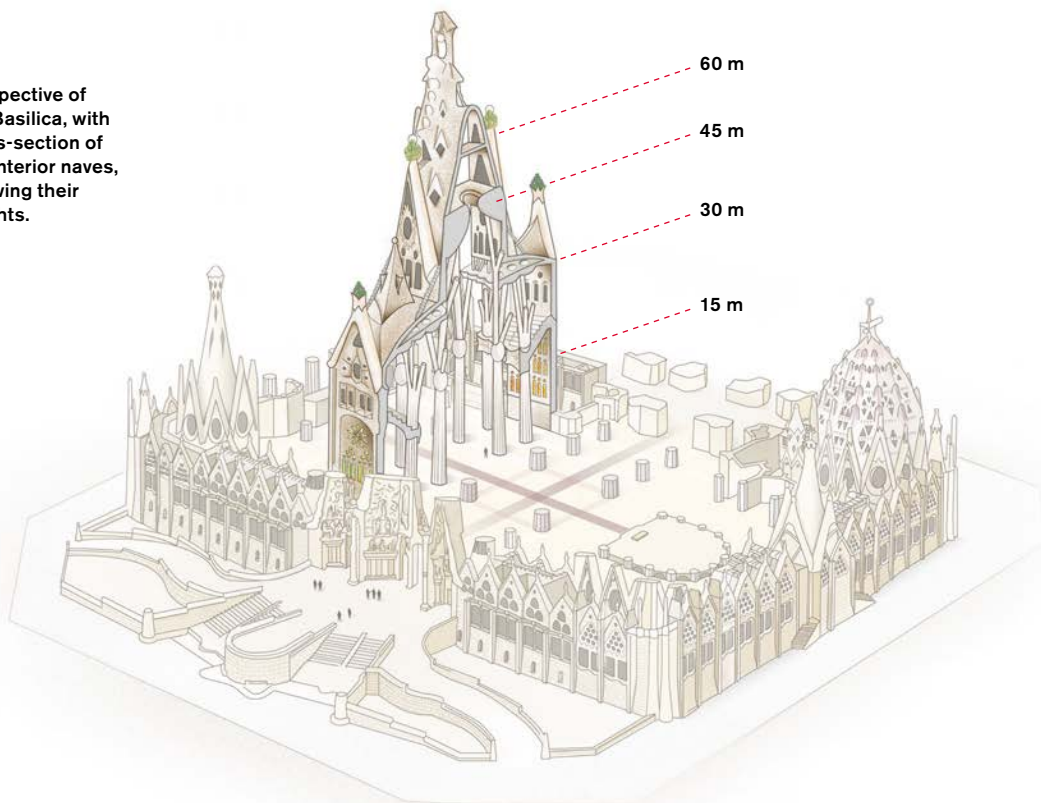
# The interior, in figures

**The vaults get taller as you move from the entrances on the Nativity, Passion and Glory façades towards the apse, and are all multiples of 7.5 metres.**

The inside of the Sagrada Família has a Latin-cross floor plan with the apse at the top (see booklet 2). The main nave has one central nave and two side naves on either side, and the transept has one central nave and one side nave on either side. The point where the main nave and the transept intersect is the crossing. The vaults get taller as you move from the entrances on the Nativity, Passion and Glory façades towards the apse, and all of their dimensions are multiples of 7.5 metres: the choir on the side naves is 15 metres high; the side naves, 30 metres; the central naves, 45 metres; the crossing, 60 metres; and the apse,

75 metres. Likewise, the horizontal dimensions are also multiples of 7.5 metres: 30 metres for the side naves; 15 metres, the central nave; 45 metres, the length of the transepts and crossing; and 90 metres, the total inside length. The width of the main nave, the size of the columns (thinner than in Gothic cathedrals) and the growing heights of the vaults make it possible to see the whole interior from nearly anywhere in the naves.

**Perspective of the Basilica, with cross-section of the interior naves, showing their heights.**



# The apse

The apse is the most important part of a church, because it is where the altar is located. At the Sagrada Família, this will connect symbolically to the tower of Jesus, rising up just above the apse vault.

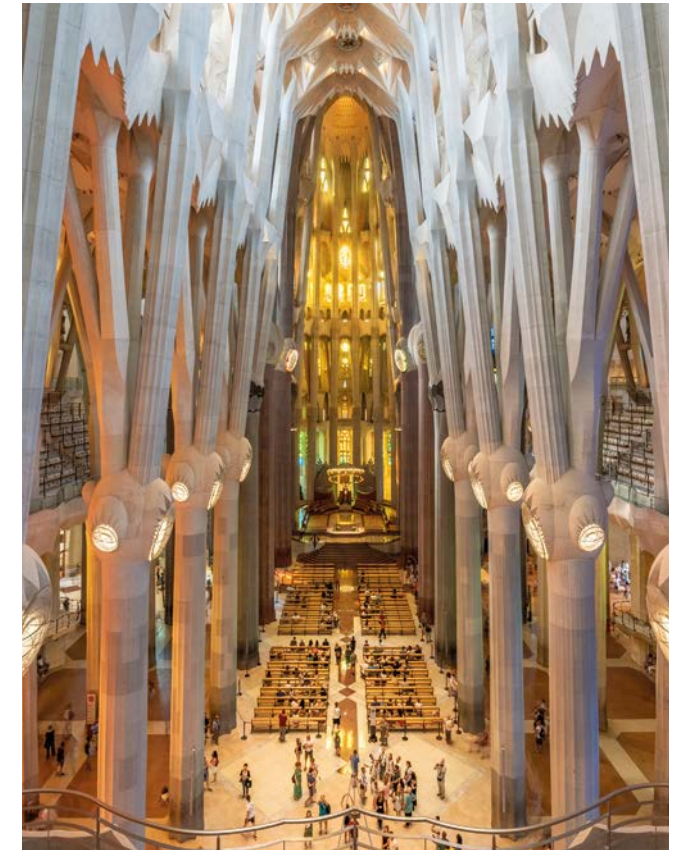
It occupies the head of the Temple and is one of the few places where we still find some neo-Gothic remains (the apse floor plan, façade and chapels). It is located just above the crypt and shares the same semicircular floor plan. It has three parts: the presbytery, the ambulatory that surrounds it and the seven apse chapels, with a large circular staircase on either side leading to the crypt and the central towers, which are currently being built.

## The presbytery

The presbytery is a platform delineated by twelve columns and raised 2 metres above the Basilica floor. This is where the main altar is located (made from a huge block of porphyry 2.72 metres long and weighing 7,500 kg), along with the Bishop's throne, ambo, seating for 140 con-celebrants and the organ (built in the Blancafort workshop in Collbató). A Christ sculpted in terracotta by Francesc Fajula hangs over the altar, inspired by the smaller Christ that Carles Mani created to Gaudí's specifications for the prayer chapel at Casa Batlló. Fajula's Christ hangs from a heptagonal baldachin that is five metres in diameter and has the same lines as the one Gaudí designed for the Cathedral of Mallorca and drew in a longitudinal cross section of the Temple.

**The apse seen from the choirs on the Glory façade.**

**Frontal view of the altar, notable for its austerity.**



From the **baldachin**, in allusion to the elements of communion, hang glass grapes, grape leaves and vine shoots and stems in copper. On top, there are ears of wheat in white wood and keys. The seven sides of the dais are covered in parchment and inscribed with the names of the seven gifts of the Holy Spirit: wisdom, understanding, counsel, fortitude, knowledge, piety and fear of the Lord and the words of the hymn "Gloria in excelsis Deo". On each side of the baldachin hang seven lamps, plus one in the centre, for the fifty lamps on the baldachin of the Roman Archbasilica of Saint John Lateran, the oldest seat of popes and mother of all Catholic churches. They are also a symbol of Pentecost, the descent of the Holy Spirit upon the apostles and the beginning of the Church. On the large vault of the apse, there is a mosaic in gold Venetian glass, evoking **God the Creator**: it is a triangle representing the Trinity (the Father, the Son and the Holy Spirit) that intersects with a circle, alluding to the cosmos.



Close-up of the baldachin (top) and evocation of God the Creator, on the apse vault (bottom).



**The apse chapels**

Of all the apse chapels, the Chapel of the Sacrament, in the centre with the tabernacle by goldsmith Joaquim Capdevila, is the quietest and most suitable for reflection. The stained-glass windows in the chapels, by Joan Vila-Grau, follow a tonal gradation that aims to create a setting for introspection. The oculi on the upper part of the apse chapels have references to the symbols of the antiphons of the last week of Advent, known as the O Antiphons:

- O *Sapientia*: wisdom.
- O *Adonai*: Hebrew invocation of God.
- O *Radix Jesse*: root of Jesse.
- O *Clavis David*: key as a sign of power.
- O *Oriens*: sun as a symbol of justice.
- O *Rex Gentium*: cornerstone.
- O *Emmanuel Rex*: king and legislator.

**Gaudí's new architecture**

Apart from the chapels, the other elements in the apse, meaning the columns, vaults and upper windows, are in the style of the new architecture Gaudí designed in his model for the main nave. Done according to this new method are the children's choir, with a semicircular floor plan located 15 metres above the chapels and the apse ambulatory; and the three levels of semicircular vaults, that of the ambulatory at 30 metres, that of the triforium at 45 metres and the one

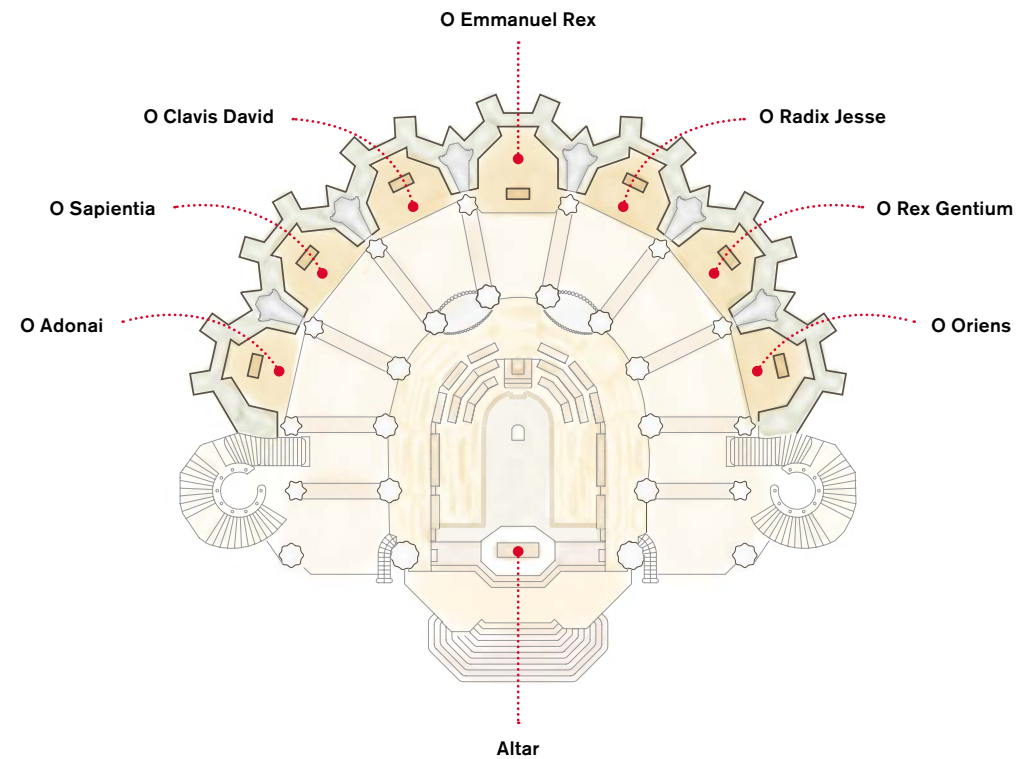
at the foot of the great central skylight in the apse at 60 metres, which as we've explained represents God the Creator with a golden triangle.

**The Holy Family inside the Basilica**

The representation of the Holy Family inside the Basilica consists of Jesus, the crucified Christ, which hangs over the altar; the Virgin Mary, on the platform above the central door on the Passion façade; and Joseph, on the platform above the door on the Nativity façade. The sculptures of Mary and Joseph are the work of Ramon Cuello. Plus, on the floor at the very centre of the crossing, there is a ceramic composition with the acronym **JMJ** (Jesus, Mary and Joseph), just like the one Gaudí put on the roof of the tower next to his study.



The JMJ acronym on the crossing.

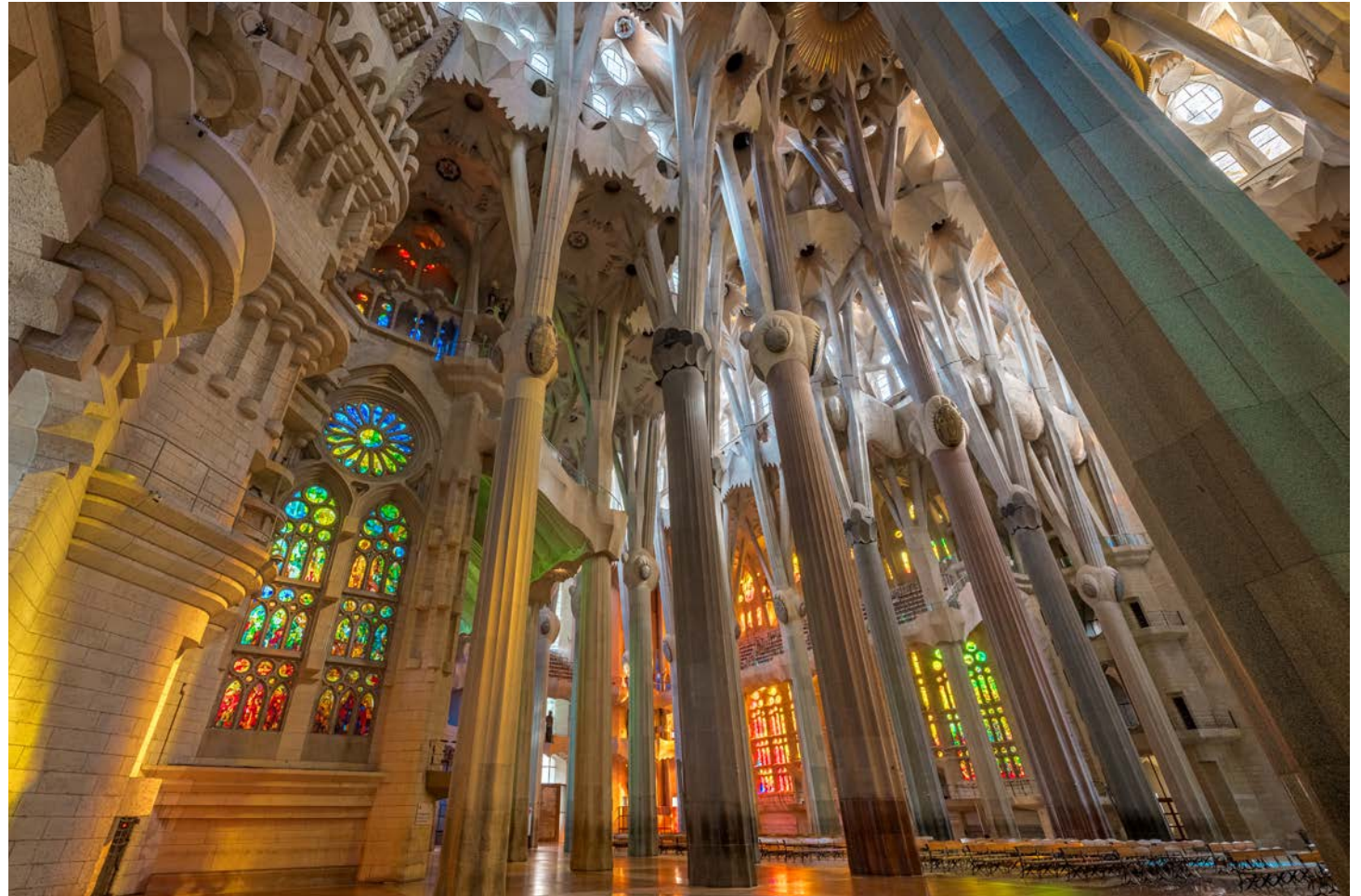


# The naves

Despite having the traditional structure of five naves (one in the centre and two on either side), the inside of the Basilica is unique because of its columns, vaults and roofs, designed by Gaudí.

Beyond the layout of the Temple and apse, there are few references to the classical structure of religious architecture. For the naves of the Sagrada Família, Gaudí chose to use never-before-seen roofs, vaults and columns. These came from his structural research and applications of ruled geometry, which allowed him to do away with the buttresses and flying buttresses of Gothic architecture, which he found excessive and not very attractive. So, he came up with the idea for tree-like columns (structural trees), based on a series of columns (nearly all inclined) that branch out at different heights to hold up the vaults, windows and roofs of

the main nave and the six central towers over the crossing and the apse. The weight of these elements is supported by the branches of the columns, and transferred directly to the foundations. To free up weight from the ceilings and light the space, Gaudí designed skylights between the columns based on the hyperboloid, bringing light from above into the Temple (289 in total). All of this allowed him to make lighter, more elegant vaults and design walls freed of the function of transferring loads, so they could have many more windows. These solutions represent a true break with the formulas of Gothic architecture.

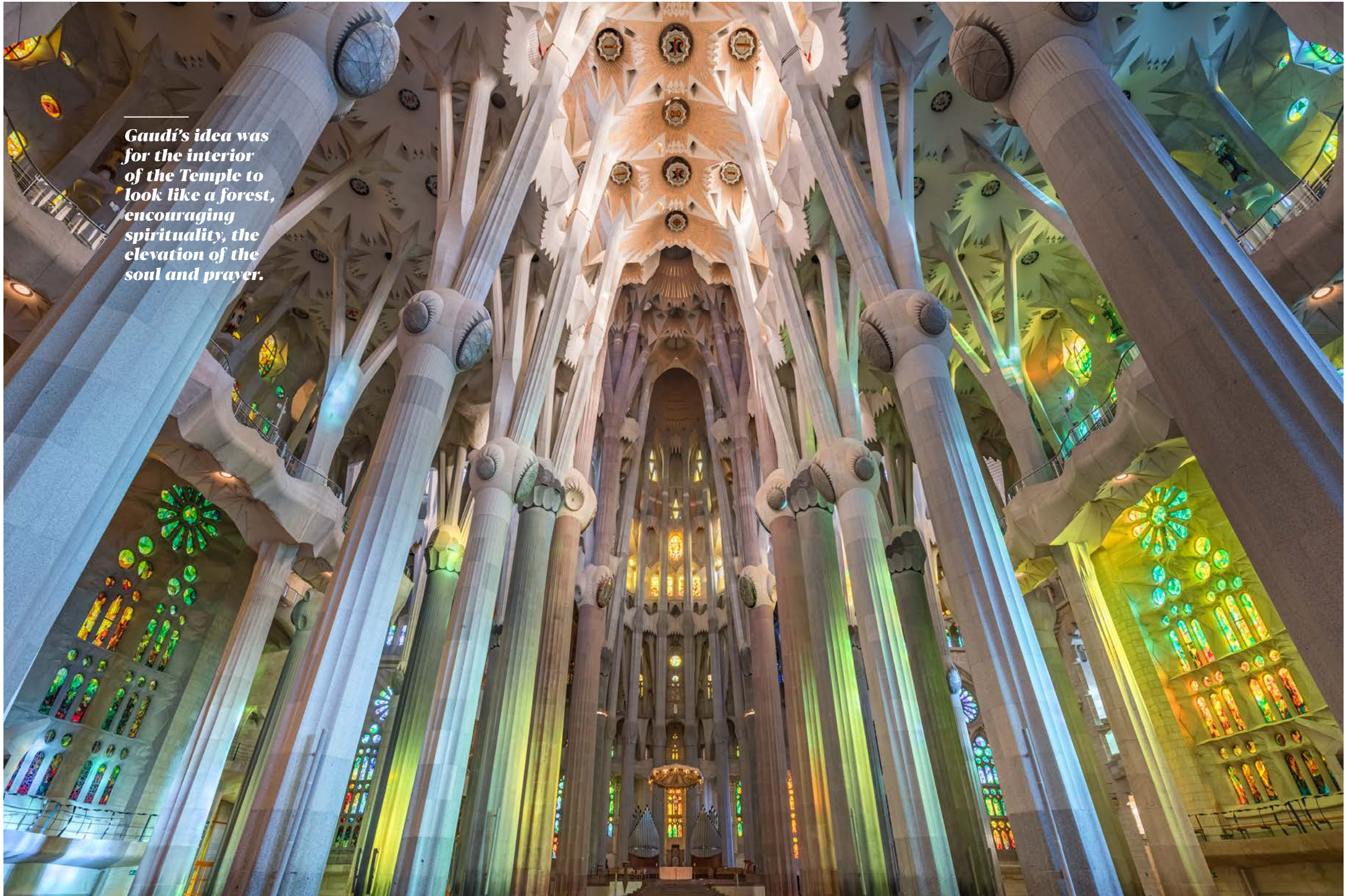


From the knot, the columns branch out at different levels to support the Temple vaults (top).

Perspective of the Temple's five naves (left).

***Gaudí's structural research and application of ruled geometry allowed him to move beyond the formulas of Gothic architecture.***

*Gaudí's idea was for the interior of the Temple to look like a forest, encouraging spirituality, the elevation of the soul and prayer.*



**View of the inside of the nave, showing the forest of columns.**

# The columns

Previously, we had the Doric, Ionic and Corinthian orders, but since Gaudí we have to think of a new order, which this architect called the double twist column.

The tree-like columns reflect both a rigorous structural proposal and Gaudí's idea that the interior of the Temple should be like a forest, encouraging spirituality, elevation of the soul and prayer, and suitable for holding communion. He created them based on what is known as the double twist column, with a polygon or star base that twists to the right and the left as it moves upwards, to become a circle. This makes it more stable and gives it a more stylised, harmonious appearance overall. The column is the intersection of two helicoidal twists. From the capital, which has the shape of a knot in a tree, the columns branch out and, in some cases several times, and sink into the vaults, creating the appearance of a forest. The columns and their branches tie into the continuity of lines and surfaces, as in nature.

## The symbolism of the columns

As per Gaudí's project, the lower parts of the columns inside the Temple are made of a variety of materials: the columns on the side naves, of sandstone from Montjuïc; those on the central nave, of granite; those on the perimeter of the crossing, of basalt; and the four in the centre, of red porphyry. This decision was not random. Gaudí chose the stone for each location depending on its strength, although with this resource he also brought a variety of colours and textures to the inside of the Temple.

Gaudí, however, not only established the shape and behaviour of the columns, but also their symbolism. In a space where everything has both function and meaning, he also thought of what each column should represent. So, the columns on the crossing represent the Evangelists and the apostles (with the churches they founded, the apostolic churches); those on the transept, the Catalan dioceses; the first ones in the main nave, the other main dioceses in the former Kingdom of Aragon-Catalonia; the others in the central nave, the Spanish archdioceses; those on the side naves, the European dioceses on one side and American, African and Asian dioceses, on the other. The shields of some of these dioceses will be on the lights in the knots of the columns (right now, only the archdiocese of Barcelona and Tarragona and the diocese of Girona and Lleida have been put in place), and each of the four columns on the crossing has the symbol associated with one of the Evangelists (tetramorph), by Domènec Fita.

***The columns and their branches tie into the continuity of lines and surfaces, as in nature.***



**Columns in different materials intermingle at the Sagrada Família, and help give the inside colour.**

# The vaults

By using ruled geometry, Gaudí was able to conceive of vaults that have also been key in making the interior of the Basilica so bright.

The Temple naves are covered with hyperbolic vaults (intersecting hyperboloids): the ones on the side naves are exposed white concrete and the ones on the central nave, the crossing and the apse are done with flat brickwork, known as Catalan vaults. In this case, the tiles on the vault follow the generatrices of the hyperboloid, and triangular sections of green and gold Venetian glass *trencadis* mosaic fill the space in between, representing the leaves of a palm tree. The side naves were completed in 1996 and are 30 metres tall. The central nave was enclosed in 2000, standing 45 metres tall. The maximum height of the interior (75 metres) is determined by the large hyperboloid that covers the apse, completed in 2010, where, as we have mentioned, there is an element that is highly visible as soon as you walk into the Temple through the main door: the mosaic of gold Venetian glass representing the Holy Trinity (the Father, the Son and the Holy Spirit). The vaults on the crossing, 60 metres tall, are concentric, radiating out from the central hyperboloid, with golden rays, where a sculpture representing New Jerusalem will hang.



**Model of the nave vaults by Gaudí.**



The skylights in the vaults contain metal elements to scatter the light (lamps), and hyperboloids, which spread the brightness towards the tile or concrete surfaces of the vaults.

**The bright hyperboloid vault on the apse.**

# The choirs

**The choirs surround the Basilica so that the singers' voices can fill the inside of the Temple.**

Firmly believing in the importance of song in religious ceremonies, Gaudí reflected a lot on where to put the choirs so that their singing could fill the Temple. Then he decided to have the choirs surround the space. So, he put them at a height of 15 to 20 metres so the hyperbolic vaults on the ceiling would act as abat-sons, and designed circular staircases to reach these spaces. In a horseshoe shape along the façades of the side naves and the Glory façade, he put the choirs for adult singers. In the apse, he created a complementary choir space set aside for children. The railings on the choirs feature the Gregorian sheet music of the hymns sung throughout the year, one on each section of the choir. Above the choirs, and between the columns supporting the vaults on



the side with the windows, there are sculptural elements representing monstrances, each one different and in different tones. They were designed by Gaudí and made in glazed terracotta by artist Jordi Aguadé and ceramicist Antoni Cumella.

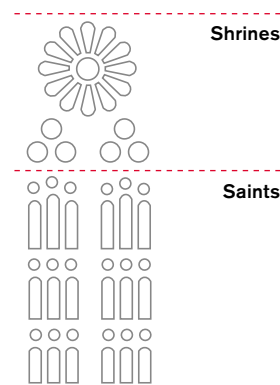


**On top, a close-up of the railings on the choirs, in the form of Gregorian sheet music, and, on the left, the choirs, with singers.**

# The windows and stained glass

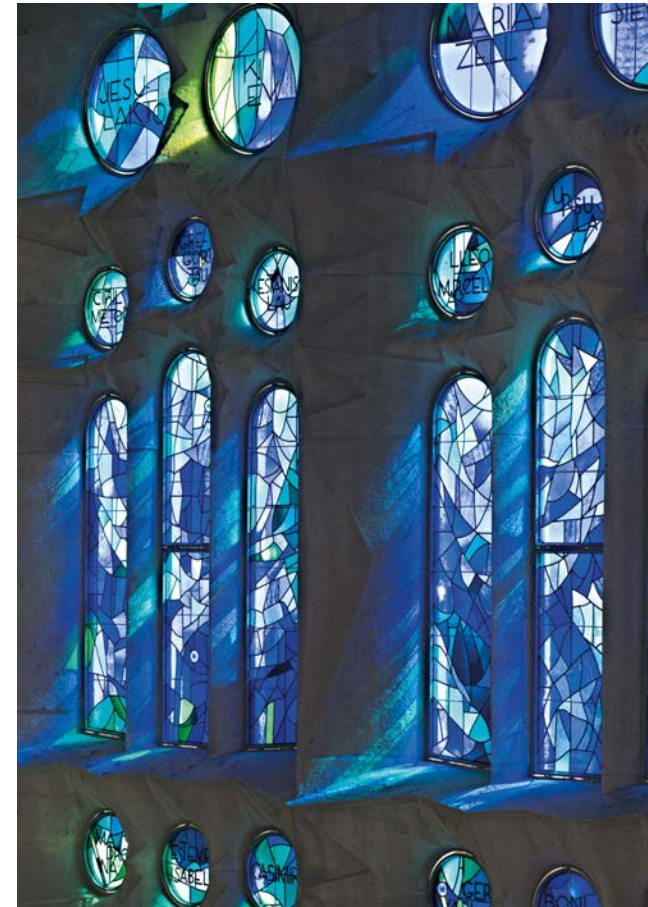
The architectural solutions that Gaudí applied at the Sagrada Família allowed him to free up the walls from their loads, making it possible to put in many openings that let light into the Temple.

Outside, the façades on the side naves, which rise up behind the cloister façades, stand out for their large number of windows, which let loads of sunlight into the Basilica. And thanks to the branching structure inside the Temple, the façades don't have to support the load of the Temple roofs. The windows at the Basilica feature stained-glass windows that Joan Vila-Grau has been making since 1999, under the framework of a programme carried out according to Gaudí's guidelines. All the stained-glass windows in the apse have been installed: the ones on the Passion transept, dedicated to water, the resurrection and light; and the ones on the Nativity façade, dedicated to poverty, the Nativity and life. The stained-glass windows have also been installed in the naves: the lower ones dedicated to the saints and shrines (the latter in the rose windows) of Catalonia and Spain, and the upper ones, allusions to Jesus' parables. Gaudí wanted the light inside the Temple to be harmonious, to highlight the artistry of the nave and, above all, to inspire introspection and spiritual contemplation. So, he said the stained-glass windows on the side naves should be darkest at the bottom and more transparent as they moved up, with transparent glass in the windows at the very top of the central nave, instructions that Vila-Grau followed by using different textures of glass. It must be noted that the stained-glass windows on the Nativity façade have bluer tones, corresponding to the morning light, while on the opposite side, facing the west, they are more orangey, like the evening light.



Windows on the side naves on the Passion façade.

On the right, windows in the side naves on the Nativity façade.



**The windows on the Nativity façade have bluer tones, corresponding to the morning light, while on the opposite side, facing the west, they are more orangey, like the evening light.**

## Glossary

**Aguadé i Clos, Jordi (Barcelona, 1925)** Artist specialising in ceramics, a technique he learned alongside Llorens i Artigas.

**Ambo** Lectern from which the Gospel is read.

**Ambulatory** Walkway that in some churches circles behind the presbytery. It was introduced in the Romanesque period to connect the main apse chapels and allow processions of pilgrims to pass through.

**Baldachin** Dais held up by columns, hanging from the ceiling or attached to a wall, which covers the altar, an image or some other religious object.

**Capdevila i Gaya, Joaquim (Barcelona, 1944)** From a noteworthy clan of Catalan goldsmiths, recognised for his secular and religious works.

**Cathedra or bishop's throne** Seat reserved for the bishop or main officiant in the presbytery.

**Choir** Platform for the choir singers in churches.

**Cuello i Riera, Ramon (Barcelona, 1939)** Sculptor who trained at the Escola Massana and Escola de Llotja, he specialises in large-format pieces for public spaces.



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**Cumella i Vendrell, Antoni (Granollers, 1951)**

Ceramicist who trained in the workshop of his father, Antoni Cumella. He has worked in both artistic and industrial ceramics, and has specialised in projects associated with architecture.

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**Double twist column**

Column with a polygon or star base that twists to the right and the left as it moves upwards, becoming a circle. This makes it more stable and gives it a more stylised, harmonious appearance overall.

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**Fajula i Pellicer, Francesc (Sant Joan de les Abadesses, 1945)**

Architect, sculptor and PhD in Fine Arts and expert in heritage sites. He has worked with the Sagrada Família on several sculpted images.

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**Fita i Molat, Domènec**

**(Girona, 1927)** Artist who trained at the fine arts schools in Olot and Barcelona, who defends the integration of art forms, which has led him to experiment with sculpture, drawing, painting and ceramics. He has also taught art.

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**Gifts of the Holy Spirit**

Divine gifts that allow humankind to complete and perfect the virtues of the Holy Spirit in order to reach salvation. There are seven, grouped into those that direct intellect (wisdom, understanding, knowledge and counsel) and those that direct the will (fortitude, piety and the fear of the Lord).

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**Hyperboloid** Surface created by rotating a hyperbola around a central axis and in a circle.

It is made up of inclined lines that twist in both directions around this axis and tangents of a circle or an ellipse. With these straight lines, Gaudí creates star-shaped hyperboloids, which in the vaults act as skylights and on the façades, windows.

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**Hyperboloid vault** Curved architectural structure made up of intersecting hyperboloids.

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**Lamp** In a Basilica, lamps are the metal elements that hang from the centre of skylights to scatter the light over the surface of the vault.

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**Mani i Roig, Carles (Tarragona, 1866-Barcelona, 1911)**

Expressionist sculptor. He studied in Madrid, Barcelona and Paris. Finally, around 1906, he settled in Barcelona, where he began collaborating with Gaudí on various works.

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**Monstrance** Gold vessels to display the Blessed Sacrament for public worship. Gaudí designed sculptural elements representing monstrances to go in between the columns in front of the windows on the side naves at the Sagrada Família.

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**Presbytery** Part of a church, located at the back of the central nave, that houses the main altar. It is often raised above the rest of the church and reserved for clerics.

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**Tabernacle** Ark where consecrated Hosts are stored in a church.

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**Tetramorph** Representation of the symbols of all four Evangelists in one image.

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**Transept** Transversal nave of a church that forms a cross with the main nave.

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**Triforium** Elevated walkway surrounding the apse in churches.

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**Vault** Curved architectural structure that creates a roof and is made up of elements that hold each other up.

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**Vila-Grau, Joan (Barcelona, 1932)**

Fine artist. In 1955, he left architecture school to devote himself professionally to painting, ceramics and stained-glass. Interested in the renewal of religious art, he has specialised in the historical study of stained-glass windows and in creating contemporary windows. He has been working on the stained-glass windows for the Sagrada Família since 1999.

- 1 Meaning of the Sagrada Família
- 2 Brief history of Temple construction
- 3 Gaudí and his followers. The workshop
- 4 Architecture of the Sagrada Família
- 5 Crypt, apse façade and Chapel of the Assumption
- 6 Nativity façade, cloister and portal of the Rosary
- 7 Passion façade, cloister and sacristy
- 8 Glory façade, Baptistery and Chapel of Penitence and the Sacrament
- 9 Interior of the Basilica
- 10 Bell towers, lanterns and sacristies

