

The Architecture of Antoni Gaudí

Fall Semester 2019 (Langley Hall, room A224)

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Lecture 5: Sagrada

Partis Pris:

Living Architecture: Materials more than tectonic and structural properties, a plasticity of form to breathe life into the stone, the building capturing the essence of all living things made by the creator, in their multitudes of variety and expressions.

“All cathedrals had taken three or four centuries to be finished, and that this would be no different, despite some people’s belief that there would be no religion three or four hundred years from now.”

Plasticity: Sculptural aspect of architectural form, intuitively developed in **three-dimensional model (plaster casting, 1892)** more easily than flat two-dimensional drawing. Gaudí’s plasticity search, hinted at with Güell’s dragon gate (1885), began with parabolic form (1885-**1904**) answering to gravitation, followed by anatomic form (1892-**1904**) found in natural flora and fauna, concluding in warped form (1900-1909) inverting the traditional Catalan bóvedas tabicadas (vault board).

Gesture: The essence of life, a unique movement characteristic of the individual, photographed to be transferred to stone.

“Beauty is life, and life is manifested in the human form through movement. In man it is the skeleton that moves – a set of levers activated by the muscles. The expression is provided by the skeleton, the rest is clothing. There are two methods of studying the skeleton: the direct study of the bones of which it is composed, and the study of man’s movements.”

Symbolism: The origins of the Catholic Church is in the catacombs, before the state recognized it as an official religion. Symbols were used to keep their faith secret, Christ symbolized as a fish, lamb or dove. The meaning behind a symbol must be told to the uninitiated. Those who understood the significance behind a symbol became one community, a church. Filling the Sagrada Familia full of symbolism, the stones become a communion, creating a bond between the people, as one body.

Sagrada Familia Nativity Façade (1891-1900)

Leitmotifs:

Inspired by Becerra’s figures (Astorga Cathedral, 1562), Gaudí begins **anatomic form studies** on Nativity Façade (**1892**-1898), exploring human skeleton, the source of body’s expression, gesture, and ideal structure, replicated most accurately by casting in plaster, to freeze a particular moment faithfully true to life. Anatomic lessons carried into Casa Calvet chair (1898-1900), Miralles Gate (1901-1902), Park Güell terrace bench (1903-1914), and **Casa Batlló chair (1904-1906) responding to weight.**

Series of hinged mirrors circling the human model, to see multiple sides of the figure simultaneously in a single photograph.

Visual distortions of the figure on the façade in perspective, were corrected to Gaudí’s eye by lengthening at the stone joints.

A church of the people, workers and parishioners modeling for the sculptural figures on the façade, immortalized in stone.

The façade filled with scenes from Christ’s life, the church becomes a poor man’s bible, each stone a verse.

Sagrada Familia Bell Towers (1899-1914)

Leitmotifs:

Transitions from square bases to circular spires in **1904**, based on the **parabolic form studies** of Palacio Güell (1885-1890), Tangiers Mission (**1892**-1893), and Park Güell viaduct porticos (1900-1903).

Double layer of twelve parabolic arches, tied together by sloped resonating slabs and spiraling staircase rising helically.

Each of the twelve bell towers dedicated to one of the twelve apostles, the Barnabas tower completed before Gaudí’s death.

Sagrada Familia Passion Façade (1911-1917)

Leitmotifs:

Sharp geometric simplicity, to be frightening, feel of desolation, suspension of life, to express the cruel pain of the sacrifice.

Inclined columns following diagonal loads, based on the **equilibrated structure studies** of Colonia Güell church (**1898**-1908), informed by an understanding of anatomic positioning, body posture and gesture, the **levers and props of skeletal bones.**

Sagrada Familia Windows (1918)

Leitmotifs:

Hyperboloid in section, faceted as if daylight had slowly bored through the thickness of the walls, a polyform erosion.

Interiors colorized by the stain glass, based on **color and light studies** of Mallorca Cathedral restoration (1902-**1904**).

Sagrada Familia Vaults and Columns (1921-1923)

Leitmotifs:

Weight of stone roof and vaults divided into pieces, each supported by an inclined branch, each converging to a trunk column, each complete parabolic section structurally independent of the others, all loads transferred internally keeping weight off walls, the mechanics and architecture in harmony as one, with the building becoming a living organism, a forest of trees.

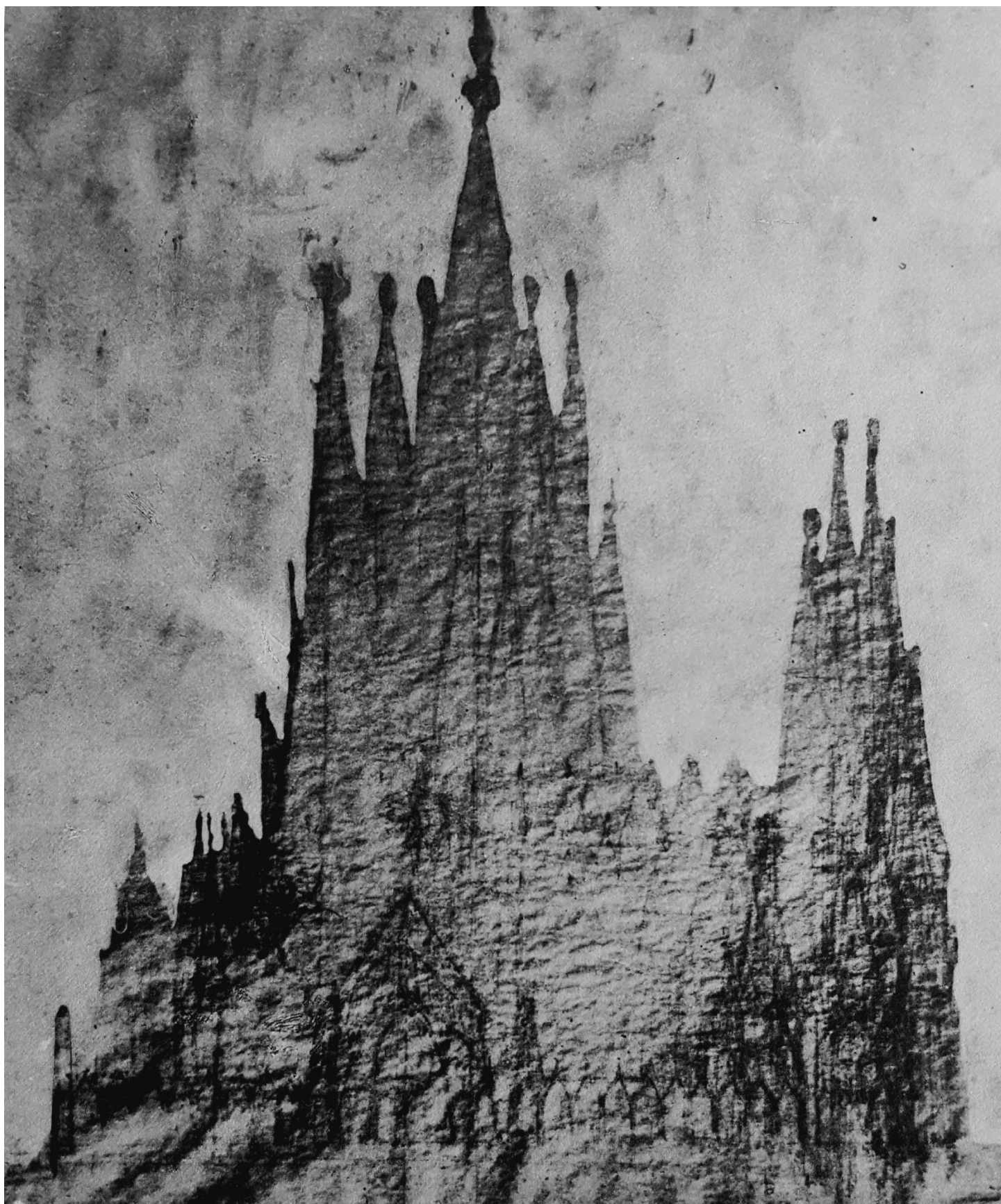
Undulating convex and concave vaults of the canopy diversifying light, air and sound, based on the **warped form studies** of Park Güell gatehouses (1900-1903), Casa Batlló (**1904**-1906), Casa Milá (1906-1910), Colonia Güell church (1908-1914), and Sagrada Familia Schools (1909).

Twelve-pointed star section of columns, rotating as it rises up the length, the twist of a tree trunk. A second inverted helix overlaid, modulates and transitions the fluting, exaggerating the vertical height and drawing the eye upward to the vaults.

Sagrada Familia Pinnacles (1923-1925)

Leitmotifs:

Resolution of the ornamental rooftop ventilation caps, combining the crosier, mitre and cross, decorated with Venetian glass, based on **trencadís (broken) mosaic** of Güell Estate gatehouse (1884-1887), Palacio Güell (1885-1890), Park Güell (1900-1914), Casa Batlló (**1904**-1906), Casa Milá (1906-1910), and Colonia Güell church (1908-1914).



Sagrada Família Passion Façade, charcoal drawing by Antoni Gaudí, 1900.
Note the lighting, to model the plasticity of form, bringing the church to life.