



Welcome to The Architecture of Antoni Gaudí.

Housekeeping Items for New Students:

Questions > **Raise Hand & Chat questions to Erin (co-host).**
5 to 10 minute break & 10 to 15 minutes at end for **Q&A.**

Show of Hands: How many have visited Gaudí's work in person?

How many know that we have a Gaudí connection here in Pittsburgh?

"A building is a living thing, that is beating and breathing."

Gaudí speaking of Palau Güell, Gaudí's manifesto in today's lecture on the **parabola**. This building brought Gaudí recognition within the public eye for the first time in his career, his name published as the architect in the critical reviews.

It was his first major commission by Güell, who became **Gaudí's life-long patron**, **instrumental in every one of Gaudí's most significant works**. Each of these lectures will highlight and focus on one of his most celebrated creations, identifying the **leitmotif and parti pris that define the essence** of what made Gaudí the **grandfather of modern architecture**.

Over the coming weeks, in these six lectures, we will see **Gaudí's search for a Living Architecture**, his attempt to **make his buildings come alive, beating and breathing**, a **characteristic in the structure and materials he referred to as plasticity**. His attempt to **transform the traditional masonry construction weightless**; to render the **popular rigid geometries of the day soft, tensile, gestured**; to **return to nature**, following the example of the **origin of all life**.

The same search that **Wright** and **Corbusier** would pursue a generation later.

The **synthesis of all arts** (**Gesamtkunstwerk** ‘total artwork’) that Gaudí pioneered **blending the diversity of trades** (sculptors, blacksmiths, masons, ceramicists, plasterers, carpenters) we’ll see today in Palau Güell, is what the Bauhaus sought.

Today’s **parametric architecture**, by Gehry and Zaha, is rooted in Gaudí’s work.

So, **thank you for attending this class**, I am **excited to share this material** with you. **Please let me know of any way I can improve the class**, as this is **for your benefit**.



Gaudí was born the son of a coppersmith/boilermaker, in the countryside of **Riudoms, Tarragona, Spain**, in 1852. From a modest family, learned very quickly the lesson of **how to exploit minimum resources to maximum effect**.

“With the pots of flowers, surrounded by vineyards and olives groves, excited by the hubbub of the henhouse, the chirping of the birds and buzzing of the insects, and with the mountains of Prades in the background, I acquired the most pure and **pleasing images of Nature**, which is my constant mistress.” (Gaudí)

“One consequence of my weakness was that I was often unable to take part in the games my friends were playing, and this helped to develop my **sense of observation**. Thus, once when the teacher told us that birds had wings so that they could fly, I replied: ‘The chickens on our farm have very big wings and they can’t fly. They use them **to help them run faster**.’” (Gaudí)

Further, “**Beauty is the brightness of Truth**, as Art is Beauty, without Truth there can be no Art. In order to discover the Truth, the **beings of creation must be well understood**.” Therefore, true **Originality consists in returning to the Origin**. (oo)

At 3 or 4 years old, Gaudí **attended preschool (Francesc Berenguer) on a modest rooftop** (Carrer dels Monterols), a fond memory inspiring designs for decorated **rooftop terraces** in future designs.



In 1867, at age of 15, Gaudí along with two friends, developed plans to restore the site of a 12th century Roman ruins, the **Poblet Monastery**, (Roman center for Cistercian monasticism, contents looted by Spanish government in 1830s). They explored the ruins and a plan for a **self-sustained, artist community**, which they set out to create, an **idealized socialist community**. **Teamwork of sculptors, blacksmiths, masons, ceramicists, plasterers, carpenters**, that would become Gaudí's trademark of weaving **eclectic mix of materials into a unified composition**.

In 1868, Gaudí **moved to Barcelona**, to study at newly founded **Barcelona School of Architecture** (1868-78). Roomed with older brother, who was studying medicine. To fund their studies, Gaudí's father sold his business and the family house, relocated to Barcelona (mother died in 1877). Gaudí worked as an assistant of his teachers who had mixed opinions regarding him. [Professor **Juan Martorell** (1878-1906) employed Gaudí to design a bench and prayer stool for industrialist **Marqués de Comillas** (1887 Tangiers Mission), the brother-in-law of patron **Eusebi Güell** (1882-1914).]

Gaudí was **never a model student**, in fact he became an architect with the lowest possible score. Elies Rogent the head of the school, said when handing Gaudí's degree; "**We have given the title either to a fool or a genius, time will tell.**" (Domenech voting against his qualification).

Spend many hours in the photographic archive of the school library, which had an extensive **collection of exotic art and architecture**.

He always thought in opposition to book learning or academic teaching, that "one should at all times favor **direct experience, personal work** and fidelity to **one's own impulses above all the conventions** of the scholars".

Lessons taught by **repetition, he believed only encouraged mimicry rather than innovation**.

[Admired the **Church of Santa Maria del Mar**, built in 14th century using funds and skills of the local congregation, ideal public building/community partnership.]

Following the **restoration of the Spanish monarchy in 1875** (until 1923 dictator Primo de Rivera), there was a **period of political stability**, the bourgeoisie of **Barcelona enjoyed major growth** of business and a **great accumulation of wealth**. Barcelona was a modern, cosmopolitan city, its perimeter enlarging with a new **expansion, L'Eixample** 'The Enlargement', absorbing the industrial towns around it, becoming a vast center with a dense population.



After awarded the **title Architect** (March 1878), **wrote memorandum** to Barcelona municipal government on importance of **street lamps**, "being out and about, and enjoying the crisp, fresh air in what was soon to be the well-lit streets of **Barcelona**", awarded design and construction for the **Plaça Reial** (June 1878). Designed as inverted chandeliers, to be manufactured more cost effective than existing street lamps. Many designs for most beautiful possible forged streetlight within a budget for a small series of two different models (Mercury helmet). Rather than traditional fixed rate compensation, Gaudí **proposed construction of the street lamps for a discounted lump sum, in writing**, with possible surplus to City. The project left a bittersweet taste when he was left unpaid for most of his work.



Constructed in the carpentry (incl. Stone & metal) **workshop of Eudald Punti** (Carrer de la Cendra, no. 8, in the El Pedró district of Barcelona, next door to the sculptor Llorenç Matamala). Met and later employed **model maker/sculptor Llorenç Matamala** y Piñol (1883-1925) who made the street lamp prototype, dragon gate and palau gates; **marble worker Manuel Pons**; **tinsmith Luis Cerda**; **gilder Vilaplana y Serrado**; **glaziers Eudaldo & Ramon Amigo**; **painter Juan Parera**.



Also met **Raimundo Comella a local glove maker**, who commission a design for a **display cabinet** for the **Paris 1878 Universal Exhibition** (won silver medal). Designed in clay and plaster model, with Neogothic floral and foliage décor.



Eusebi Güell, richest Catalan industrialist (manufacturing textiles, Catalonia's principle product. Spain was agricultural. Made fortune in Cuba and Puerto Rico, trading with the Spanish slave colonies, until Spanish American War of 1898.), saw the display in Paris and became convinced of the young architect talent, impressed by its style, attention to detail, both beautiful and functional. Güell was convinced that everything Gaudí touched would turn to gold, and already knew Gaudí from the City Council lamppost, went to meet him at Puntí's workshop and hired him to design and handcraft furniture for his family chapel.

Introduced him to the ranks of Catalan high society. Both admired each other and lifelong friends. Gaudí was likely ignorant of origins of Güell's inherited a fortune, which he doubled from his father Joan, who made part of wealth as a slave trader. Gaudí considered Güell a true noble man of catholic faith who cared for his subordinates. Güell was a patron of the arts (seated at his desk in 1900, heading the committee of the Jocs Florals literary competition; founder of La Renaixença peridiodical).

He was thrifty to the extent he would cut off unused portion of writing paper (from father), but generous to a fault on works of art or beneficence (mother's support of art museums, music and theater). While the Modernista artist and intellectuals were urging the bourgeoisie a greater consumption of artworks, art as market commodity, Güell sought to re-establish the figure of patron, making the artist dependent both in their output and the subjects of their work.

Yet, Barcelona had become bourgeois in excess, not sufficiently aristocratic and lived in ignorance of Catalonia's glorious past. Were few palaces in the true sense, too many bourgeois villas. Güell was resolved to not be bourgeois, but a gentleman, one who still traveled in horse drawn carriages, in an industrial age with streetcars.

For 40 years, mutual admiration and friendship. But, as a patron, Güell played a part in all of Gaudí's seminal works (which this course covers).



Gaudí's first commissioned building from child friend, **Salvador Pagès Inglada** who was a **textile industrialist** that believed in the **ideals of Utopian Socialism**. He was manager of **one of the first cooperatives in Spain, Mataró Workers Cooperative (La Obrera Mataronense)**, modeled on the industrial colonies / mill towns, providing social facilities / housing with the aim to **emancipate the workers from submission to their employers** and to **provide them security and dignity**. [Gaudí was given the task to design the industrial complex, the workers housing and social amenities for the cooperative. Only three buildings were built, the manager and the clerk homes, and only the **cotton bleaching machinery shed: Nau Gaudí, 'Gaudí Ship' (1883)** remains.



Leitmotif: First use **parabolic arcs**, which allowed for **large open space (600 sq.meters) free from interior walls or columns**; much like a modern hangar. Integrated with the pre-existing structure, innovative for its time, demonstrating his technical inventiveness, 13 strong but **slender parabolic arches, formed by small lengths of wood bolted** (according to the methods of French Renaissance architect Philibert de l'Orme). Asymmetric placement, offsetting center peak.



Latrines (1883) first use of decorative ceramic tile. In particular, to **decorate the top of a triangular ventilator**. Also note, **parabolic domed shaped roof**.



Next year, in 1884, designed the **cooperative society's standard**, displayed at celebrations and in formal events, atop a **bronze bee**, as an **allegorical symbol of hard work, dedication, tenacity and frugal resourcefulness, creativity, and common purpose, with each individual working for the good of the society as a whole**.

Gaudí brother (died 1876) published an **article in 1870 titled Bees**, promoting the virtues of beekeeping, **medicinal beliefs of honey**, making **familiar with Bee Skep**.



Traditional **Rustic beehives of Catalan farming life** made of **bunches of reeds** woven together into a **rope layered in a spiraling circle** to form a **parabolic dome**, based on the **natural shape of honeycombs** built by bees **suspended from branches**.



The banner was **embroidered by a teacher in the cooperative**, who **played the piano**, **Josepa 'Pepeta'**, the eldest daughter of Moreu family, who owned a house that Gaudí would visit for Sunday brunch, taking a train from Barcelona with niece Roseta. Finely decorated; walls covered with murals and handcrafted furniture.

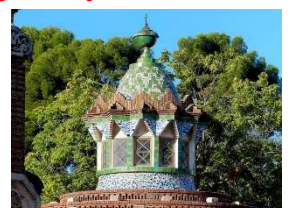
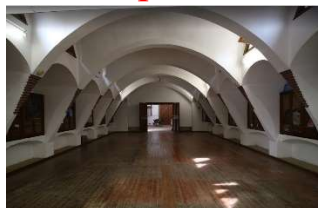
Fell secretly in love with Pepeta, was **too shy to confess feelings** or approach her. Her husband left her after she became pregnant, divorce paperwork took eight years, **Gaudí waited four years**, asked her to marry him through his friend Salvador. **Pepeta refused him**, she was already engaged to a wealthy businessman. Gaudí never set foot again in the Moreu's house.

Left the Cooperative (1884) after named Sagrada Familia architect (Nov. 1883).

Later the same year he became romantically involved with a French girl, that was already engaged and moved to America.

Subsequently fell in love with a devout woman, who became a nun, at which point **Gaudí became deeply religious and celibate the rest of his life**.

At the same time, was **given first major commission by Güell** (1884), possibly to lure such a talent away from the cooperative, that threatened the oligarchy of Barcelona's textile families.



Finca Güell 'Güell Ranch' Horse Stables (1884) parabolic structure.

Oriental style, **decorated lanterns** resembling minarets, **interior parabolic vault**.



Finca Güell Dragon Gate (1885) and gatehouse.

Dragon Ladon, guardian of the Garden of Hesperides in Greek mythology, conquered by Hercules, the founder of Barcelona in Catalan tradition.

Myth featured in epic poem L'Atlantida, by Catalan poet Jacint Verdaguer, a fellow member of Gaudí's Excursions club. The dragon gate symbolic, guarding the country gardens conquered by Güell, the industrialist reviving Catalonia.



In 1885, height of Gaudí's dandyism, living an aristocratic lifestyle, a backlash to the romantic rejections at the Cooperative, he was dining on fine food, smoking cigars in late-night cafes with poets and industrialists, after taking in the opera. He was the ideal architect to capture Catalonia's heritage and artistic traditions, so was named the Güell family architect (for the next 35 years).

In 1885, asked Gaudí to design a family/business home in the City, to position Güell's name as synonymous with modern Catalonia, "against routine and fashion", money no object, "Is that all Gaudí has spent?"

Gaudí would edit the building on site, tearing down walls and entire rooms, as if a full-scale plaster model or cardboard maquette. Typically Spanish artist of, 'seeing how it will turn out', beginning with only a vague notion of the product and absolute confidence in their own abilities and innate genius to create a masterpiece.

He was tasked with building a palace for nobility, not merely a bourgeois industrialist townhouse, to rival the luxuries of Palau Moja, the property of his brother-in-law, the Second Marquès de Comillas, Claudio López y Bru, just up the street west of the Ramblas.



Manifesto: Palau Güell (1885-88) located just off the Ramblas (City's most prestigious 18th century mansions), connected to his father's townhouse estate. A venue for social events (theater, poetry, concerts), received the Spanish King and Queen in 1888, presenting him with formal demands for Catalan autonomy.



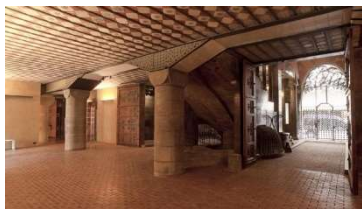
(Lady at Eden Concert, 1903)

Despite this part of town's rich history, at this time it was the part of town filled with vice, "the fowl slime of city sewers, those wasted by disease, degeneration, wanderers without family or homeland, vagrants, tramps and beggars, heads crawling with lice, dark spirits at the mercy of animal instincts, whores, cretins, madmen, thieves," a neighborhood under constant threat of TB, absinthe, syphilis and abject poverty. Across the street was the notorious **Eden Concert**, a variety theater of pantomime, slight of hand, and cinema. On the second floor was a brothel, run by Madame (Carlota) Valdivia, the subject of Picasso's blue period painting La Celestina (1904), painted in his studio next door, which he occupied just two decades later.



It is no surprise therefore, the front elevation of the Palau Güell would be austere, made of grey Garraf marble, a stern face confronting the cold streets. The decorative ironwork of the imposing paired gates earned their keep, protecting the treasures found inside.

Wrought-Iron in windows obscures view in, but permits someone close to see out.



First time in Barcelona, carriages could pull inside to the safety of the house before stepping off. The carriages and horse stables below (grove of 127 limestone 30in. dia. columns). Not to be fixed in Industrial age of new materials, but built of a timeless age of masonry and craftsmanship.



Paired parabolic entry arches terminating cleanly by the ground, as if the Venetian canal waters lapping in the lower level of a grand Palazzo (nod to Güell's wife's Italian ancestry).



Between the arches, wrought-iron phoenix taking flight atop the Catalan four bar flag (Senyera), symbolizing the **Renaixença** (Catalan renaissance). The bird stands atop a helmet crowning the flag, an allusion to Jaume I, the 13th century king whose conquest of Valencia and Mallorca marked the beginning of Catalan's Mediterranean expansion.



The **bat** (rat penat, often mistaken as a winged dragon), is found on the **crest of Jaume I and repeated at the highest point of the house**, atop the lantern on the roof. Here again, as in the gate of the Güell country estate, **layered metaphors of Hercules, Jaume I and the Renaixença**. The house in its solidity and mythology, seeks to be the foundation for the spirit of Catalonia, within the Güell palace.

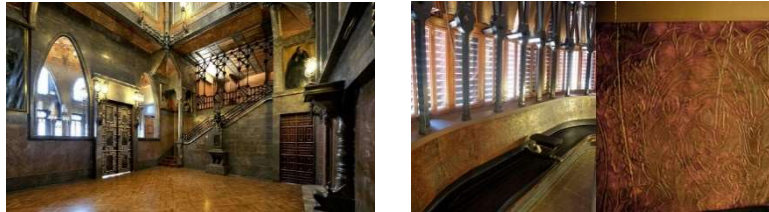
Yet, it is not Hercules or Jaume I that is represented figuratively, the defenders of the Golden Apples in the Garden of Hesperides, **rather it is the winged dragon, that threatens to steal all of the garden's treasures**. In 19th century Barcelona, that **dragon was Güell and the garden was the Spanish colonies** supplying tobacco, slaves, molasses and rum, along with the Catalan industries of mining, steel and textiles.

Architecture as propaganda: Fixing Güell at the center of Catalan mythology and the Renaixença.

The only building completed by Gaudí to his specifications and that has been essentially unchanged since.



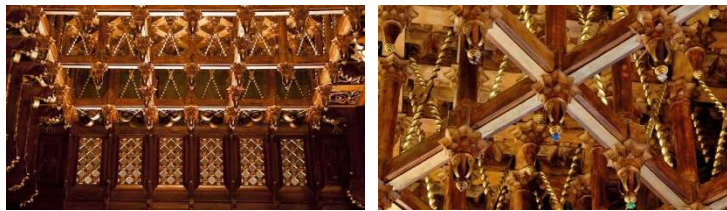
In the Güell palace, we find the **winged dragon throughout**, from the Catalan crest centered on the main entry to the top of the rooftop central spire. Oriental style fireplace.



Ascending up a grand staircase to the Mezzanine: administration office, sitting room, library. **Inside the dragon's lair**, is the **guarded garden of treasures**, sconces and **candelabras attached to marble walls** and **beaten copper sheets** (Gaudí's first trade).



Ebony, tortoiseshell and ivory fragments were inlaid meticulously into wood. One room **eucalyptus**, the next **beech, oak, walnut, ebony**, while Islamic-derived sequences of marquetry in **pearwood, palisander and padouk**.



Carved wood ceilings in the salons, with **applied silver and gold leaf** to the polychrome beams.

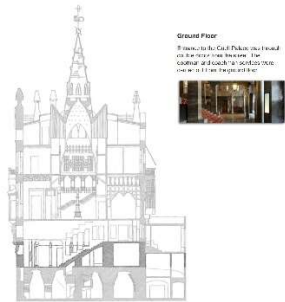


The **ironwork weaves its way throughout the house like ivy**, literally attaching itself to the walls and columns.

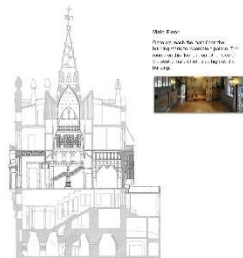
Synthesis of all arts (Gesamtkunstwerk 'total artwork', Wagner 1849 opera+drama, **Catalan Modernism** 1890 **architecture+furniture**): **blending** wrought-iron (not gold), stained glass, ceramic tiles (not stucco), carved wood, colored stone.



The **artwork** is not hung on the walls, but **becomes part of the walls**, becomes the house. Mosaics, stained glass, mural paintings by **Alex Clapés turn the corners**, **not temporarily centered on wall space**. A sense of **solidity is created**, temporality has been removed, the most inalienable of possessions, in a culture of consumption.



Situated on a confined lot (18m x 20m), adjoining his father's house (Joan Güell), **building developed vertically**, through 8 levels, into **Light/dark**, **vertical/horizontal**, **compressed/expanded**, **Earth/Heaven**. From the ground floor entrance hall, **central stair arrives on the mezzanine** with the office where Güell directed his businesses.



A side stair up to the main floor, **through a lobby**, **'room of forgotten steps'**, visitor room (parlor/drawing room and powder room), and dining room and sitting rooms laid out around a **domed central salon 20 meters high (9m x 9m)**, **pushing up through three floors**.



The heart of the house, **prayer chapel (closet)**, here concerts (a love of music from his mother's family, the Marques), parties and receptions were held, as well as religious ceremonies.



Parti: Floating **Cupula Parabolica**, at the heart of the house.

Parabolic **honeycomb** dome covered in stone slab **hexagons**, atop 4 parabolic arches supports narrowing down / cantilevering over voided interior corners, **floating celestial canopy**, spiritual curve rising like a flame through the house.

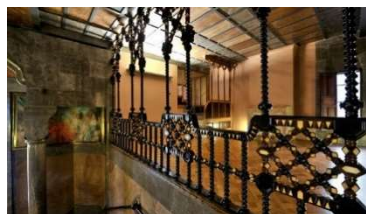
Integrating **structural, architectural, metaphorical elements into synthesis of the arts.**

Multifunctional ingenious use of central space: business, social, private needs.
naturally lit, soaring 55ft.



On one occasion, in 1893, premiered **Hymn of Apollo**, a composition discovered from 138 B.C. at Delphi. **Played in the central salon by a full orchestra and choir accompanied by the organ built into the house**, it was a metaphor for the eclectic style of extravagance, with **melodies moving in short intervals, disjointed rhythmic sequences, continuously returning to a keynote.**

Electric pipe organ (**precursor to electric tubular bells of Sagrada Familia**)



From the salon, a transverse open stair leads to a balcony to hold the musicians overlooking the hall behind wooden screens. An **Arab hammam**, where the **caliph could peer down unobserved on his harem** of heavenly delights.

In the corner a discrete door accesses a stair to the family bedrooms (daughter Isabella's vanity mirror table), bathrooms, study on the floor above.

Above in the attic, the servants' quarters on the top level, with kitchen and laundry.



On the roof, Gaudí's first decorated roofscape terrace, with a cluster of 18 decorated chimneys and ventilator shafts, each unique in material and shape, clad from the waste of the building site – shards of glass, marble, tile, the remains of a lime kiln. Combined at random in ingenious and fanciful forms, displaying artistry from rubble. The leftover remnants from the work are put to use, no waste, as in nature. Redeemed of its condition, cleansed of its sin, raised to highest point on the roof.



Completing the metaphoric cosmos, from the bowels underground in the stables, the main floor salon as earth, the star filled dome sky overhead, natural light filtering through the punched perforations, and the roof terrace as triumphant heaven with the central spire covered in Triassic limestone, an axis mundi, the founding order, place of sacred communication with God. All enshrined within a single structure, a spiraling processional vertically, from the earthly sins to the heavens above, Palau Güell offers redemption, resurrection for a worldly Prince.



The parabolic arc, adopted by Gaudí as a signature motif, becomes an elevated spiritual curve which tends to rise like a flame through the house. Confronting the public on the street in the paired front doors, then inside emerging from the columns, springing forth everywhere, to a grandiose crescendo in the cupola of the main salon, before fragmenting into the swift spirals of the rooftop chimneys – a total work of art, thematic and integrated. The variety in materials and design, every column, every chimney, every room, with a unique design, not just an exotic exuberance, but an expression of individuality, the riches of the king of industry holding court in his Catalan palace.