Louis Sullivan's *Horror Vacui* and the Ethics of Ornament: Between the Empty Surface and Misappropriated Classicism

Buildings are inhabited by people whose lives hold value far beyond any measure of material cost yet contemporary architecture often fails to express this human vitality. Instead, facades become mute surfaces. For Louis Sullivan, the modern wall was a delicate membrane between the city outside and the human vitality within. Ornament erupted through this membrane in bursts of what he called "efflorescence," "that which is within, deposited on the surface."[1] Ornamental efflorescence was Sullivan's way to celebrate the vitality of the people within the building. The architectural conventions of Sullivan's time, prescribed symmetry, axial order, proportional discipline, and the use of historical ornamental motifs. Sullivan, however, saw this as a sickness[2]. His antidote to the horror vacui was to let surfaces become expressions of the building's inner life.

Keywords: *Louis Sullivan; horror vacui; architectural ornament; arabesque; infinite rapport; intertwining ornament; singular arabesque; George Elmslie; Parker Berry; Kristian Schneider; terra cotta; vitality in architecture*

Section 1: Moses Woolson, Asa Grey, and Grandfather's Farm: Beginnings—Nature, Thought, and the Spark of Form

Louis Sullivan's architectural journey began not with buildings, but with ideas shaped by mentors, landscapes, and a restless search for meaning[3]. In his autobiographical reflections, Sullivan recalls the profound influence of Moses Woolson, his high school teacher, whose teachings laid what Sullivan called a "deep and sound foundation for the masterful free spirit."[4] Woolson instilled in him the value of directness, simplicity, and singleness of purpose, encouraging Sullivan to pursue "self-discipline of self-power" and to "explore, examine, and cross-examine" in order "to interpret".

This intellectual rigor was matched by a poetic sensibility. Sullivan's early years on his grandparents' farm awakened what he described as a "constant and intense love of the open." Nature was not merely scenery—it was a living system, a source of form and vitality. Sullivan believed that "childhood remains sequestered within us unchanged," and that the child's instinctive connection to nature was the wellspring of creative insight.

[1]Louis H. Sullivan, "The Tall Office Building Artistically Considered," *Lippincott's Magazine* 57 (March 1896): 403–409.

[2]Sullivan, Louis H, Autobiography of an Idea, Dover Publications, 1924, pp.325. "The damage wrought by the World's Fair will last for half a century from its date, if not longer. It has penetrated deep into the constitution of the American mind, effecting there lesions significant of dementia"

[3]Sullivan's search is chronicled in his writings spanning for 1901 "Kindergarten Chats" through his 1924 "Autobiography of an Idea" and conclude in his 1924 "A System of Architecture Ornament According with a Philosophy of Man's Powers."

[4]Sullivan, Louis H, Autobiography of an Idea, Dover Publications, 1924, pp.47

Equally formative was Sullivan's encounter with Asa Gray, the eminent botanist whose lectures for Moses Woolson's class on plant morphology introduced Sullivan to the organic logic of nature. Gray emphasized that "the living part of the plant… manifested the life and did the work in vegetable as well as in animal organisms," and that "all life is interrelated". These ideas resonated deeply with Sullivan, who would later transpose this botanical ideal into architectural ornament, seeking in the curves of terra cotta the same generative force he saw in leaves and stems.

Asa Gray's teachings also "planted the seeds" for several of Sullivan's most important ornamental ideas. Gray's descriptions of plant morphology—especially his diagrams of the rhythmic unfolding of leaves—offered a scientific model for the generative spirals that would later animate Sullivan's arabesque ornamental forms. Likewise, the botanical principle that all plant parts are transformations of a single underlying plan resonated with Sullivan's evolving archetypal plant (Urpflanze) concept. This is visible in his "seed medallion" form of ornament and the bursting, embryonic shapes that appear throughout his late ornament. Even Sullivan's lifelong effort to address the horror vacui can be traced in part to Asa Gray. For Sullivan, the problem was never merely compositional. It was biological. Sullivan believed that just as every cell in a living organism participates in its vitality and every inch of an architectural surface should express the same organic life-force. In this way, Gray became the essential bridge between Sullivan's instinctive early love of nature and the fully developed theory of organic ornament that would define his mature work.

The "Horror Vacui"… the fear of the empty space

The concept of Horror vacui-the fear of empty space-can be traced to Aristotle's proposition in 350 BCE that space cannot be empty since "Nature abhors a vacuum,"[5] a maxim later popularized in the 16th century as a philosophical truth stated by Francois Rabelais[6]. Alois Riegl formalized the term 'horror vacui' in his 1893 work "Stilfragen: Grundlegungen zu einer Geschichte der Ornamentik" (Problems of Style: Foundations for a History of Ornament), applying it to the tendency in certain artistic traditions to fill every available surface with ornament.[7]

While Riegl applied the principle of horror vacui to the ornamental space-filling impulse, he also traced the arabesque—a form type rooted in the vine scroll—back to Greco-Roman acanthus motifs.[8] This historical lineage underscores the organic origins of ornament, a theme that would resonate deeply

[5]Aristotle. *Physics*. Book IV, chapters 6–9. The concept summarized as "nature abhors a vacuum" is attributed to Aristotle's arguments in *Physics* IV, where he denies the possibility of a void and maintains that nature permits no empty space.

[6] Rabelais, F. (1994). *Gargantua and Pantagruel* (M. A. Screech, Trans.). Penguin Books. (Original work published 1534–1552)

[7] Riegl, Alois. *Problems of Style: Foundations for a History of Ornament*. Translated by Evelyn Kain, with an introduction by David Castriota. Princeton, NJ: Princeton University Press, 1992. P.32

[8] Ibid, p.229.

with Louis Sullivan. For Sullivan, the arabesque was not merely a decorative flourish but a vehicle for expressing vitality just as the medallion for ornament expressed immanence. The vitality of nature is a principal Sullivan absorbed early in Boston's English High School under Moses Woolson and Asa Gray, where nature was presented as dynamic and generative. This intellectual foundation shaped Sullivan's lifelong pursuit of an ornament that externalized the life within architecture.

While Riegl identified horror vacui as a stylistic impulse, Sullivan saw in it a deeper metaphysical challenge: how to express the life force of nature without succumbing to ornamental excess. The ability of the arabesque to twine, overlap, and fill irregular spaces made it an important addition to the more static and geometrically constrained medallion and the more horticulturally constrained "Urpflanze" ornamental types.

As an ornamental form type, Riegl traced back the Arabesque in material culture history to the Greco-Roman era as Acanthus scrolls (Fig. 1). The natural origins of the vine scroll, or arabesque, had a powerful appeal for architect Louis Sullivan as he sought expression of the vitality of nature learned as a child in the classroom of Boston's English High School, led by Moses Woolson and Asa Grey.

Figure 1. *Ara Pacis Eastfront ornament reproduction 1938, ©2011 by Charles Rhyne*

Section 2: Education in architecture and the seeds of rebellion

Louis Sullivan's early immersion in nature—on his grandfather's farms—instilled in him a visceral sense of organic form and growth. But it was in the realm of ideas that this instinct found intellectual scaffolding. At MIT, Sullivan

encountered the architectural theories circulating in Boston's Ruskinian climate, where The Seven Lamps of Architecture and The Stones of Venice were widely read, even if not formally taught. Through the literary influence of Moses Woolson and the moral tone of the curriculum, Sullivan absorbed Ruskin's belief that ornament was not mere embellishment, but a moral act—an expression of truth, nature, and the dignity of labor.

Where Ruskin grounded ornament—and the motivation for ornament—in a moral context, the expressive quality of Furness's ornament illustrated its potential for an emotional grounding. The tension between these two approaches, ethics and vitalism, defined Sullivan's direction for years to come.

Louis Sullivan departed MIT in 1873 at age seventeen and traveled to Philadelphia, a city then alive with architectural experimentation. In the atelier of Frank Furness, he found a mentor whose work rejected academic restraint and embraced a vitalistic exuberance. Under Furness, Sullivan glimpsed an architecture unafraid of force, asymmetry, and expressive invention—an architecture liberated from the conventions he would soon confront at the École des Beaux-Arts.

The Pennsylvania Academy of the Fine Arts (PAFA), begun in 1872 and completed by Furness in 1876, stood as the most vivid embodiment of this revelation. (Figure 2) Its façade—a deliberate riot of polychromy, pointed arches, muscular structural expression, and densely packed surface enrichment—presented a philosophy of architecture fundamentally at odds with the academic classicism that awaited him in Paris. In PAFA, Sullivan encountered a building in which ornament was inseparable from structure, carried by it and intensifying it, rather than applied to it.

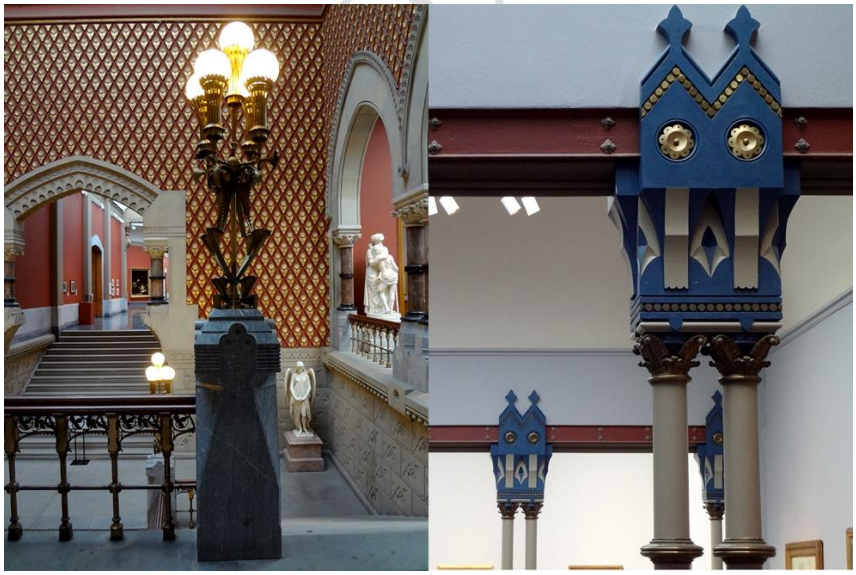

Figure 2. *Pennsylvania Academy of Fine Arts (PAFA)*
Photo by Author

PAFA's ornament sharpened the impact. Every surface seemed activated, every void filled, every boundary pressed into motion. It was not decoration in

any conventional sense; it was a saturating visual energy, a refusal to let silence stand where vitality could speak.

Sullivan's employment by Furness is the encounter that inspired him throughout his career, as he sought to confront and transform the horror vacui[9]. Unlike the Islamic arabesque ornamental patterns, which embraced infinite rapport through rhythm and geometry[10], the ornamental scheme of PAFA was more chaotic, more visceral. It lacked the underlying order Sullivan would later admire in Moorish ornament. Yet it also revealed something essential: that ornament could be expressive, even overwhelming, and that architecture could speak in tongues other than Greek or Roman classical revivals. This brief with Furness was formative not only for its stylistic provocations but also for its philosophical implications. Furness's work suggested that architecture could be emotional, even theatrical. It could reject symmetry, embrace asymmetry, and revel in contradiction. These ideas would later resurface in Sullivan's own buildings, especially in his medallions and arabesque ornaments, where Sullivan clearly expressed ornament as a coherent expression of life force.

In this sense, Philadelphia was not a detour but a crucible. It was here that Sullivan first saw ornament as a problem to be solved, not merely a style to be adopted. The saturation of PAFA, and the theatricality of Furness, converged to give a push Sullivan who was still chaffing at "the confinement, routine, and orthodoxy" of MIT. These Philadelphia experiences would eventually reconcile exuberance with order, chaos with growth, and horror vacui with organic form. As Sullivan later recalled, Furness was "an artist who made buildings out of his head," a revelation that freed Sullivan from the tyranny of pattern books and academic precedent. In Furness's studio, Sullivan glimpsed the possibility of an architecture born not of imitation, but of imagination.

Having first experienced a visceral architectural response to the horror vacui in the atelier of Frank Furness, Sullivan traveled through a brief stop in Chicago to Paris already bearing the imprint of Furness's imaginative freedom.

Section 3: Sullivan in Paris

Louis Sullivan's brief (1874-1875) tenure at the École des Beaux-Arts in Paris is often cast in the shadow of disappointment. His letters and later recollections describe a young architect disillusioned by the rigid formalism and rote classicism that dominated the curriculum. The Beaux-Arts system—with its emphasis on symmetry, hierarchy, and historical precedent—seemed to Sullivan a betrayal of the organic vitality he sought in architecture. Yet to reduce his Paris experience to simple rejection would be to overlook the subtle, enduring influences that quietly shaped his later work.

Among the most intriguing of these influences occurred in meeting his tutor, Monsieur Clopet, whose saying—"rules that admit of no exception"—left a

[9] Sullivan, L. H. (1924). *The autobiography of an idea*. American Institute of Architects. P.193

[10] Riegl, A. (1992). *Problems of style: Foundations for a history of ornament* (E. Kain, Trans.; D. Castriota, Annot. & Intro.; H. Zerner, Pref.). Princeton University Press. (Original work published 1893) P. 267.

lasting impression. One could imagine the convergences between Asa Grey's botanical science and the truths of mathematics Clopet was proposing.

Equally formative was Sullivan's exposure to Moorish and Islamic architecture—first in Furness and Hewitt's Philadelphia office, later the art galleries of Paris, and finally in his travels to Rome. His first exposure came in Philadelphia while tracing Moorish motifs for George Hewitt's design for a Masonic Temple. A deepener realization followed in his travel from Paris to Rome. While Islamic and Moorish decorative arts were already publicly visible perhaps unavoidable in 1874 Paris the Islamic arabesque—with its infinite geometries, vegetal motifs, and tendencies toward elimination of the horror vacui—must have resonated deeply with Sullivan's emerging sensibility. These traditions did not fear ornament; they embraced it as a spiritual and mathematical expression of the cosmos. In the arabesque, Sullivan glimpsed a model for his own future explorations—one that fused nature, mathematics, abstraction, and expressive form.

In his travels to Italy, Sullivan's exposure to the works of Michelangelo in Florence and Rome later helped reinforce his conviction that inanimate materials possessed an inner life—one waiting to be brought forth by an artist. Sullivan would hold on to this belief, seeking the life of each commission, whether of stone, iron, wood, or clay. He first encountered this possibility in the ornamental designs of Frank Furness and George Hewitt, and the journey through the École, and subsequently Italy, began to confirm and complicate this conviction. His later writing in "The Tall Office Building…" clarified the stakes of this belief: "Unceasingly the essence of things is taking shape in the matter of things, and this unspeakable process we call birth and growth." [11]

The Philadelphia and Paris exposures to new decorative traditions introduced Sullivan to ornamental systems built around the logic of infinite rapport—the sense that ornament could extend endlessly, without a focal center or terminal boundary. Such rapport later appeared in his own work, especially in the 1890 tomb for Eliza Getty in Chicago (Fig. 3), the great arabesque panels of Carson Pirie Scott, the live membrane-like surface that was the exterior wall of the Guaranty building. These were not mere decorative flourishes; they embodied Sullivan's conviction that architecture was alive, growing, and unbound by classical restraint.

[11] Louis H. Sullivan, "The Tall Office Building Artistically Considered," *Lippincott's Magazine* 57 (March 1896): 403-404.

Figure 3. *The Getty Tomb, 1890, Sullivan's early implementation of the "infinite rapport."*
Authors photographs

The dialectic—between Furness's imaginative freedom and the École's formal rigor—would haunt Sullivan's early career and ultimately shape his lifelong pursuit of an ornament capable of resolving architectural emptiness without collapsing into mere decoration. Horror vacui, for Sullivan, was never simply stylistic; it was philosophical. It demanded a response that was neither arbitrary nor academic, but vital—an ornament capable of externalizing the life within.

In this crucible of competing influences, Sullivan began to formulate his own path. He would not reject the École's teachings outright, nor would he fully embrace Furness's eccentricity. Instead, he synthesized them, forging an ornament that was organic, generative, and expressive of inner necessity.

Section 4: The return to Chicago and the development of ornamental form

When Louis Sullivan returned to Chicago in 1875, he reentered a city in flux—one still rebuilding after the Great Fire of 1871, and rapidly transforming into a center of industrial and architectural innovation. The lessons of the École des Beaux-Arts were fresh in his mind: symmetry, precedent, and the disciplined application of ornament. Yet the Chicago he returned to offered little patience for academic formalism. Instead, it demanded invention, adaptability, and a new architectural language suited to the American condition.

Sullivan found himself at a crossroads. The formulaic styles he had studied in Paris—Renaissance, Baroque, and Classical—were being applied wholesale to commercial buildings, often stripped of their original meaning. But in the wake of Emersonian self-reliance and the expressive freedom he had glimpsed in Furness's work, Sullivan began to reject this approach. He sensed that architecture in America must do more than borrow—it must speak and speak from within.

The tension between inherited academic form and emergent vision became the crucible in which Sullivan's philosophy began to take shape. He was no longer content to apply ornament as a decorative skin. Instead, he sought a system of expression rooted in nature, in structure, and in the inner vitality of the

building itself. This was not merely a stylistic shift—it was a moral and metaphysical one. Sullivan's architecture would strive to resolve the horror vacui not through academic completeness, but through organic fullness—a fullness that emerged from the building's own logic and life.

In the years that followed, Sullivan began to codify this vision, first in partnership with Dankmar Adler, and later through his own writings and designs. But the seeds were planted here, in the tension between Paris and Chicago, between formula and freedom, between the void and the ornament that could fill it with meaning.

His early work in Chicago, including brief stints with William Le Baron Jenney and others, showed traces of classical restraint. Sullivan was still working within the architectural vocabulary he had absorbed in Paris—symmetry, proportion, and applied ornament. But it was not until the formation of Adler & Sullivan in 1879 that his ornament began to evolve in earnest. The partnership gave Sullivan the confidence and freedom to explore ornament not as surface decoration, but as a language of growth.

Static Ornament and Early Signs of Life

In Sullivan's early years (1879-1884) under Dankmar Adler, his ornament remained largely static—symmetrical, framed, and subordinated to structure. These designs bore the imprint of Beaux-Arts training, where ornament was applied rather than grown. The ornamental themes were primarily based on the lotus, and often projected out from the ornamental plane, but they lacked the vitality of an inner nature. Following Adler's promotion of Sullivan to partner in 1883, Sullivan began the task of moving beyond this static phase.

Buildings such as the Rubel House (1884), Lindauer House (1885), Stern House (1885), Holzheimer House (1886), the Ryerson Tomb (1887), and the Auditorium Building interior (1889) exemplify this transitional period, where ornament primarily reinforced architectural hierarchy rather than challenged it.

The first of these works, the Reuben Rubel House (1884), is an eclectic composition blending vernacular Victorian forms with Sullivan's emerging ornamental vocabulary and is a transitional work in Sullivan's thinking about ornament. Its steep roof recalls mansard proportions and is punctuated by dual gabled dormers. A half-hexagonal bay window balances a shallow projection, while a central stair leads to paired wood doors carved with organic ornament—spirals, deeply veined lily leaves, and tapering forms converging on a large central bud.

The door panels (Fig. 4) exhibit asymmetrical compositions around a central axis. Directional movement animates the door panel: to the left, a single spiral and left-leaning leaves; to the right, a tapering leaf structure that draws the eye outward, underlain by spirals hosting calyx-like forms and buds. Despite this asymmetry, the design maintains a strong sense of center, enlivened by lateral motifs that suggest organic growth.

Figure 4. *Rueben Rubel House Door Panel (photo by author)*

The foundation is dressed stone, while the upper two floors are enclosed in brick masonry. To the left of the entry doors, a large arched window spans the façade, divided into three glazed panes—two narrow panes at the edges and one larger in the center—separated by turned columns in the Victorian tradition. The springline of the arch is marked by a terra cotta stringcourse ornamented with stylized lotus palmettes linked by directional leaf forms, repeating horizontally across the façade. Adjacent to this arch is the entry.

The wall above the entrance is distinguished with a unique twin arch element which, though unique among Sullivan's previous and subsequent works is less important than the ornamental corners from which the arch's trim originates. The molding of the arch extrados is brought to life by Sullivan by transforming the molding into a spiral that seemingly gives birth to a lobed spiral surround and a spiked-leaf motif. (Fig. 5) This is the first incidence of Sullivan suggesting that the building matter itself has life. A powerful principle that would re-emerge as Sullivan's principle of "efflorescence" and would continue to his final publication "A System of Architectural Ornament."

Figure 5. *Ruben Rubel House Entry arch extrados efflorescence*
By permission of John Vinci

The Rubel House stood on an alley corner lot on Ashland Avenue. On the alley side, Sullivan experimented boldly with the chimney ornament, creating a "sunburst" (Fig. 6) panel anchored by a large central lobed spiral from which four secondary corner spirals radiate. Seemingly unsatisfied with the relative stillness of this initial composition, he overlaid it with a network of flat serpentine bands that extend outward from the central "sun." These, in turn, are partially obscured by a final layer: a windswept field of aquatic leaves that seems to sweep across the panel's surface. This use of directional, wind-blown foliage marks the beginning of Sullivan's departure from the static, axial lotus motif and signals his first steps toward the dynamic, vectorized ornament that would characterize his mature work.

Figure 6. *Ruben Rubel House Entry Chimney Panel*
Photo by Author

The Lindauer House (1885) follows the vitalizing trend of the Rubel House, albeit more modestly. Its massing and articulation include a prominent corner tower rising above a heavily rusticated stone façade, with limited brick masonry at the side chimneys, pressed-metal rondels, and a terra cotta stringcourse at the chimney. In this stringcourse, Sullivan advanced the idea of ornament as motion—windswept, directional, animated (Fig. 7). No longer confined to symmetry or static decoration, the ornament was given energy, as if stirred by natural forces. This evolution marked a philosophical deepening: ornament became responsive, a living surface resisting emptiness through dynamic vitality. The static ornament of the earlier era, one marked by the lotus and rondel motifs was joined by these wind-swept energized leaf forms.

Figure 7. *Lindauer House Stringcourse*
Photo by Author

The Samuel Stern House (1885), The Stern house is primarily an amalgamation of H.H. Richardson's heavy rusticated masonry with Romanesque arches and an incised ornamental lintel from Sullivan's exposure to Frank

Furness. Sullivan's own voice it seems, is represented in the pressed metal pediment. This pediment is a riot of spirals balanced to the left and right while reinforcing the central axis of the pediment until the terminal spiral breaks the symmetry and favors the right side of the pediment (Fig. 8). Regardless of this right-favoring spiral the important issue is the dominant use of the spiral as an energizing motif on the façade of an otherwise staid composition. The spiral makes a more restrained appearance in the carved door panels where the four clusters of three leaves overlay each other in a way that suggests a clockwise rotation.

Figure 8. *Samuel Stern Pediment (left) and Door Panel (right)*
Photos by author

The Ryerson Tomb (1887–1889) presents itself as a nearly unornamented monolith—an austere mass of black granite shaped by Sullivan's selective reading of Egyptian precedent. Its single true embellishment is the bronze gate, whose design echoes the tomb's restraint through a disciplined grid of vertical and horizontal bars. Only two deviations interrupt this rigor: a lone diagonal bar and the subtly animated hasp and lockset. The lockplate offers an unexpected moment of vitality. Its ornament is organized around a left spinning spiral leaf form, yet this larger curve is intricately overlaid with a constellation of smaller spirals that anchor the leaf's origin in the lower left of the plate. In this miniature field of motion—scaled down to the size of the visitor's hand—Sullivan inserts a quiet counterpoint to the tomb's otherwise solemn, immovable composition (Fig. 9).

Figure 9. *Ryerson Tomb and Lockplate*
Author Photo

The Auditorium Building (1886-1889)

As Adler's new partner, Sullivan began probing a deeper idea: ornament as an efflorescence of inner vitality. The Rubel House's chimney panel (1884), door carvings, and faux-bay bracket ornament anticipated this concept. The chimney panel, with its shallow dome bursting forth in spirals and serpentine emanations, suggests life pressing outward from the building's core. Similarly, the Holzheimer (1886) ceiling escutcheon radiates overlapping spirals from the puncture of the light fixture, dramatizing Sullivan's later claim that ornament is "that which is within, deposited on the surface." These experiments signal a new strategy regarding horror vacui: not only animating the surface but revealing the latent energy of the structure itself.

In these works, faint signals of Sullivan's future philosophy appear—gestures of his search for vitality amid rigid symmetry. This tension reflects the underlying problem of horror vacui: the concern over architectural emptiness. Static ornament filled space, but it did not animate it. Sullivan's exhortation to Wright—"Bring it alive, man! Let it live!"—captures the urgency of this emerging conviction: ornament must embody life, not merely decorate form.

The early experiments with ornament (Rubel, Holzheimer, etc.) laid the groundwork for what was to become Sullivans greatest demonstration of the role of his architectural ornament and the "enlivened" surfaces and fixtures in his "middle period" (1885-1895).[12]Thus the Auditorium building is the physical remains of an ornamental timeline showcasing a record of Sullivan's growth and maturation of ornamental form and the beginnings of the ornamental expression of the "live" building fabric.

The Auditorium is also a record of Sullivan's ability to communicate his ornamental principles to the many subcontracted designers and fabricators responsible for production of metal, stone, plaster, fabric, and wood architectural ornament. Chief among these were the firms of Healy and Millet (art glass), Carsly and East (ornamental woodwork), Winslow Brothers (cast iron) and James Legge (cast plaster). He did this both individually and through a small-

[12] early period 1879-1884, middle period 1885-1895, late period 1895-1919

trusted group of designers in his office including Frank Lloyd Wright and George Elmslie.

If we consider long-lead items, stone or metal, stone is eliminated from examination as there is effectively none on the interior. Interior non-structural metalworks, grilles, stair components may have been the earliest to have been designed and installed. The metal newell post in the Michgan Avenue Lobby stands out as the most visible metal ornament. As do the light fixures in the dining room. The stair rail grillwork is of the same timeframe for installation but is a secondary element in the design of the Michigan Avenue Lobby stair.

The lobby stair, specifically the newell post (Fig 10), is a cast metal fabrication which would have been one of the earliest groups of ornamented objects installed in the construction. The newell is primarily brought to life through the large spiraling form spinning off smaller spiral tendrils and the overlay of the central bloom by the spiral and all is bracketed by the romain-like leaves holding the corners of the panel together. This newell ornament has been ascribed to Frank Lloyd Wright when he was in the employ of Adler and Sullivan[13].

The central motif is a spiraling figure overlain with a central foliate figure with sharp pointed leaves or petals. But overall, this motif, with all its implied energy is held flat to its surface with little projection from the background surface.

Figure 10. *Auditorium Building Michigan Avenue Lobby Newell post*
Photo by Author

[13] Sprague, P. E. (1968). *The architectural ornament of Louis Sullivan and his chief draftsmen* (Unpublished doctoral dissertation). Princeton University. P.92.

The plaster intrados of the arches leading to the left and right out of the lobby would be the next longest lead times. It is likely these were produced by master plasterer James Legge.

Beginning at the outermost trim of the arch and proceeding inward, the arch is articulated by a sequence of molded bands: an initial register of beads (astragals), a frieze panel with an intertwining, bulb like motif, a secondary line of smaller beads, a course of dentils, a third sequence of larger beads, and, finally, a deeper set of classical dentils (Fig 11). This graduated stacking of profiles prepares the eye for the principal vegetal display: a series of "Y"-shaped leaves whose blooms traverse the archivolt and, at points, overlap its moldings. These "Y" leaves serve as points of origin for the sharper, "spiky"- leafed foliate units that have been associated—following Sprague's attribution—with Wright's hand (Fig. 12). The alternating advance of the "Y" elements and their spiky satellites produces a measured animation across the archivolt, establishing a complex, repetitive rhythm from spring line to spring line.

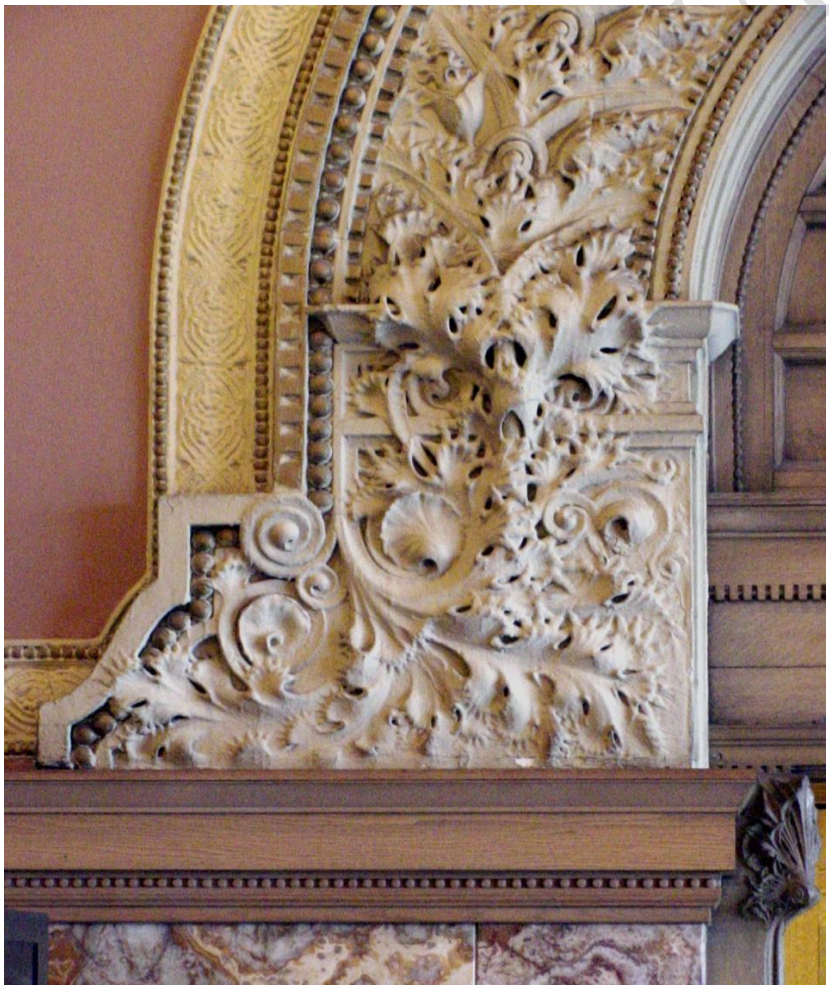

Figure 11. *Michigan Avenue Lobby North Arch detail*
Photo by Author

Figure 12. *Michigan Avenue Lobby North Arch Impost detail*
Photo by Author

Figure 13. *Michigan Avenue Lobby South Arch*
Photo by Author

While the cast-metal stair and Newell dominate the central axis of the lobby, the crossing axis generates a large arched opening on both the north and south lobby walls framed by plaster arched openings (Figs. 13, 14). The ornamented Newell is a longer-lead item for production than the wood, thus explaining its relatively static expression, the plaster the plaster voussoirs, and accompanying wood trim take less time to produce and thus could reflect more recent ideas. Seeing these earlier ideas of ornament near the later ornament (plaster and wood) one space allows us to make the following observations.

1. First, the Newell ornament shows overlapping motifs but is contained between the leaf-type corner motifs. There is no breaking this border by the main motif of the Newell itself.
2. Second, the plaster ornament of the arch voussoirs is a repeated leaf/bud motif that could be seen as wings.
3. Third, and the turning point in Sullivan's ornamental expression, while the progression of the leaf/bud motif is static within the voussoir it erupts from a stalk-like element at the arch spring line. This stalk is overlaid and wrapped by spiked leaves growing out of the border trim adjacent to the dentil border. This is the significant moment when ornament does not simply exist in a static element placed upon a surface. This is the moment when the framing trim of the ornament comes to life and grows atop the cymatium trim. The border comes alive with a downward movement at the spring line and spreads back upwards over the repeated leaf/bud motif of the voussoirs, integrating spring line efflorescence with the structured repetition of the leaf/bud voussoirs.

Figure 14. *Spring line efflorescence North wall Michigan Ave. Lobby*
Photo by author

On the same north wall of the Michigan Avenue Lobby there is an innocuous bit of oak trim at an inside corner. The trim breaks into "bloom" at the top of the trim, where it meets the crown molding and the stock beaded trim (Fig 15). This bloom presages Sullivan's written exploration of how lines become bursts of the plant's life essence, or "efflorescence" as Sullivan names it. It is the explosion of the building's inner life energy at a intersection where the trim meets its boundary.

Figure 15. *Oak Trim Bloom North wall Michigan Ave. Lobby*
Photo by Author

The efflorescence at the arch spring line—the point of origin for the foliate arches in the Michigan Avenue lobby—is the most important ornament in the space, for it embodies Sullivan's belief in the *life of the building fabric*.

When the ornamental border at the spring line becomes generative rather than merely containing, Sullivan reveals the principle that will later govern his small-town banks: that life in architecture does not reside in applied form, but in the consistent operation of a single growth law across every scale of the building.

For every exciting discovery such as the ornaments role in communicating the living force of the building fabric itself, there is a counterpoint. The great plaster arch on the south wall (Fig. 14) is an example of this counterpoint. On this arch face, the motifs appear comfortable with their role being constrained and contained between the dentils at the arch extrados and intrados. Why?

Like the "fabric alive" expression seen at the spring line of the Ruben Ruebel House, the arch of the north lobby wall exhibits ornament that is emergent—an experiment of sorts—while the south wall arch and the lobby beam brackets are more restrained, seemingly comfortable being held between dentil frames. The difference between the north and south wall arches may reflect Sullivan's experiment between an emerging voice, tentatively allowing ornament to behave as living fabric on the north wall, and a more settled ornamental condition on the south wall and brackets, where motifs remain content within their frames (Fig.16).

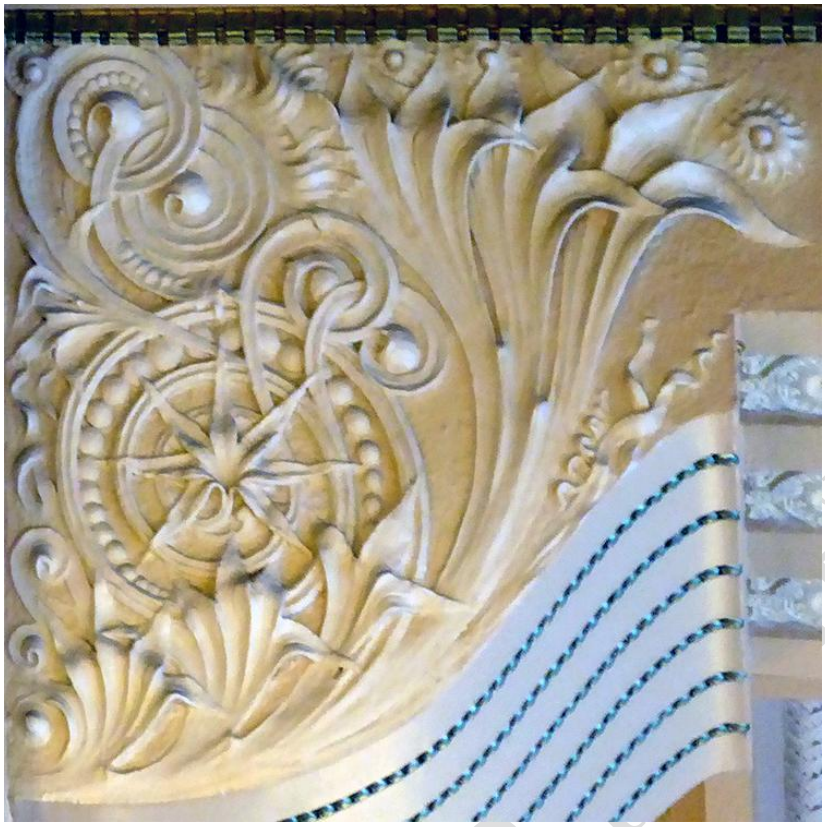

Figure 16. *Beam Bracket Michigan Avenue Lobby*
Photo by Author

The Auditorium represents Sullivan's first broad implementation of this principle, in which the fabric of the building itself is understood as alive, following its initial appearance at the entry arch spring line of the Reuben Rubel House. In the commissions that followed, Sullivan increasingly sought what he described as a "law of no exception" in architecture—an ordering principle akin to the mathematical laws emphasized by his Paris tutor, Monsieur Clopet—through which organic efflorescence and architectural structure would be bound into a single, coherent system.

Horror Vacui, Vitalism and the Wainwright and Guaranty buildings: Towards Architecture as Organism

It was in the early stages of the Auditorium Building design that Louis Sullivan realized the necessity of natural motifs as a defense against historicist ornament. He articulated this in a poetic presentation of an essay titled simply "Inspiration" to the Western Association of Architects in 1886 saying "Whence the dominant, all-pervading thought that a spontaneous and vital art must come fresh from nature and can only thus come'. [14] This seems a clear statement

[14] Sullivan, L. H. (1886, December). Essay on inspiration. *The Inland Architect and Builder*, *8*(8), 64.

advocating for the role of nature in the conception of ornament, yet the absence of vitalistic ornament on the South wall of the Michigan Avenue lobby seems to hint at a doubt about the application of vitalistic natural themes across the whole of the Auditorium.

The years following the completion of the Auditorium saw Sullivan experiment with developing his idea of a "vital art" through modest and highly localized expositions of ornament. Such instances can be seen in the lockplate at the Ryerson Tomb, the impost ornament at the Walker Warehouse, and the medallion ornament of the Meyer Warehouse, where vitality appears as an isolated ornamental gesture rather than a force shaping the building as a whole. During this same period, however, Sullivan's commitment to the "building that is comely in the nude," as articulated in *The Tall Office Building Artistically Considered*, remained ideologically and formally dominant. This approach governed his major commissions between 1888 and 1892, including the Dooley Block, the Wainwright Building, and the Charnley House, revealing a deliberate separation between ornamental experimentation and architectural mass.

The Dooley Block, completed in 1890, shows Sullivan exploring an architectural expression in which the inorganic and rational aspects of the dialectic assume visual and formal dominance. The building radically reduces the use of exterior ornament to simple reliefs confined to the cornice fascia, while deferring in several stylistic ways to Romanesque precedent. Contemporary renderings depict half-round arched windows and vertical pilasters articulated by pronounced horizontal coursing—suggestive of rustication, though not fully developed as quoins. In contrast, Richard Nickel's pre-demolition photographs reveal the completed building as a monolithic field of red stone and arches, largely stripped of surface articulation.

At the level of architectural organization, the Dooley Block establishes a strategy that would become significant for Sullivan's subsequent work. The ground and second floors employ a punched approach to window openings, while from the third through sixth floors Sullivan recessed the spandrels between floors, allowing the piers to read as vertically continuous elements. This treatment emphasizes the wall surface itself rather than individual openings, producing a clear vertical reading that anticipates later refinement. Sullivan's use of punched openings at the base and recessed spandrels with emphasized piers extending toward the attic and cornice would be developed more fully in the Wainwright Building later that same year.

In the 1890 Wainwright Building, Sullivan intensifies this vertical effect by recessing spandrel panels deeply between floors and setting windows well behind the face of the wall pilasters, exaggerating the building's height and reinforcing its "tallness." The result suggests that, at this moment, Sullivan was positioning the organic or emotional dimension of architecture as subordinate to the inorganic and rational—an architecture governed primarily by mass, repetition, and structural logic.

Where the Dooley Block has little to no exterior ornament—perhaps in part due to budgetary constraints—the Wainwright Building incorporates a rich ornamental vocabulary across its façades. Like the Dooley Block, the

Wainwright uses punched openings at the first and second floors, visually unifying the piers into a cohesive and materially weighty base. Above, the piers continue to establish the dominant surface plane while the spandrels retreat behind them, reinforcing vertical continuity. It is as if the organic life of the building is restrained in the steel cage of the buildings structure. This emphasis is further heightened by shadow reveals and the curved brick treatment at the corners, making the seven-story piers appear even taller. Rather than terminating in half-round Romanesque arches, as in the Dooley Block, the Wainwright's piers rise from an ornamental panel at the base uninterrupted to the attic, where each supports an ornamented capital-like element beneath an intensely spiraling ornamental band. Here, ornament does not compete with structural expression but crowns it, maintaining the primacy of architectural mass while allowing vitality to emerge selectively as spandrel panels between the piers.

There are not many examples of Sullivan prioritizing the inorganic/rational over the organic/emotional aspects. The fact that only a few years later he reverses course and gives the organic full voice over the rational is perhaps related to his time in the rose garden at his home in Ocean Springs where the rational trellis, established in 1890 is finally overgrown by roses in 1895 (Fig. 17).

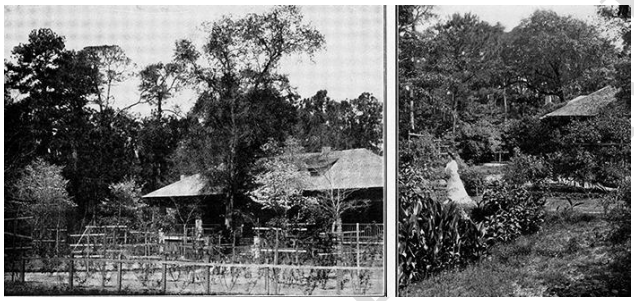

Figure 17. *Louis Sullivan home and garden Ocean Springs, Ms. 1890*[15]
Photographs by Lyndon Smith

[15] Smith, L. P. (1905, June). The home of artist-architect. Louis H. Sullivan's place at Ocean Springs, Mississippi - Illustrated. *Architectural Record*, *17*(6), 467-485.

Figure 18. *Wainwright Building (1892)*
Photo By Author

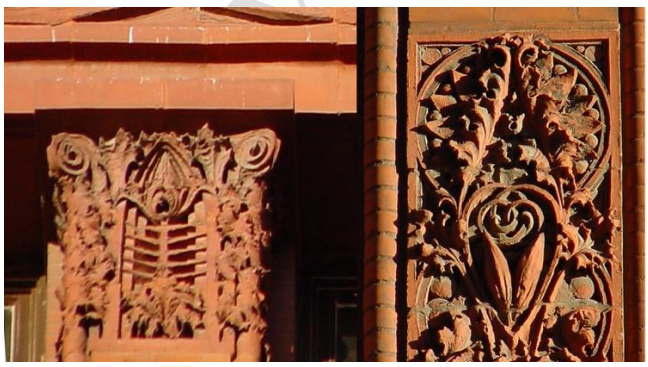

Figure 19. *Wainwright Building Pier capital (left) and base (right)*
Photo by Author

The imbalance of the inorganic/rational dominating the organic/emotional aspects in Sullivan's architecture shifted sometime between the 1890 Wainright building and the 1895 Guaranty building. While each epitomizes the "tallness" Sullivan writes about in "*The Tall Office Building Artistically Considered"* each design expresses the organic/inorganic dialectic of ornament differently.

The Wainwright and Guaranty Building both share an overall massing where the ground and second floor are articulated as a mass with deeply punched window openings with 7 floors of offices at the Wainwright and 10 at the Guaranty "piled tier upon tier"[16] topped by the attic, a space "purely physiological in nature". Here at the Wainwright Building (Fig. 18) the brick column/pier/structure establishes the mostly inorganic character (Fig. 19) while the ornamented spandrel panels and the attic itself are the organic motifs. The spandrel panels are recessed between the column/pier/structures tipping the visual balance to pier as primary element and spandrel as secondary element. The Guaranty Building in Buffalo, N.Y. follows the same overall massing formulation, but Sullivan achieves a distinctively different character by weighting the expression of the organic aspect greater than the inorganic (Figs. 20, 21). He achieves this primarily by completely cladding the main facades in terra cotta ornament developed with geometric motifs. Each geometric has a minor efflorescent burst of the organic hinting at the dominance of the organic over the geometric. He drives this point home at the corner pier development.

The corner pier, like the entire façade, is fully articulated with terra cotta ornament, and the corner stem and foliage overlay the geometric motifs of the pier and attic reaching to and claiming the cornice. In contrast to the Wainright, the inorganic/rational motif seems to be reinforced by the geometric ornament, not simply the piers themselves. The crescendo occurs at the corner pier where the organic is capturing the cornice at the whole building scale. The approach to the façade being largely comprised of geometric motifs with the organic blossoming through the geometric field subordinating it was first seen at the Getty Tomb (1890) (Fig. 20).

Figure 20. *Getty Tomb, Chicago 1890. Organic blossoming through a geometric field Overall South Elevation (left) Entry Gates on East Elevation (Right)*
Author Photos

[16] Louis H. Sullivan, "The Tall Office Building Artistically Considered," *Lippincott's Magazine* 57 (March 1896): 403–409.

Figure 20. *Guaranty Building Cornice*
Terri Boake with permission

Figure 21. *Cornice and Column Capital*
With Permission © 2016 Chuck LaChiusa
https://buffaloah.com/a/church/28/12east/12east.html

Section V: "People, replacing machines as the power behind buildings."

Business Decline and the intensification of an Idea

The completion of the Guaranty Building coincided with a period of decisive change in Louis Sullivan's career. His partnership with Dankmar Adler had dissolved, Frank Lloyd Wright departed the firm early in the Guaranty's design phase (1893), and the Midwestern economy was under severe strain following the Panic of 1893. Large commissions were increasingly scarce. Against this unsettled backdrop, two projects—the Schlesinger-Mayer Department Store and the Gage Building—proved instrumental in advancing Sullivan's organic/inorganic dialectic. In these works (temporarily setting aside the Bayard Building in New York), there is a clear intensification of the organic motif.

The Schlesinger-Mayer Department Store (1895) represents Sullivan's first significant commission executed without Adler and the first in which George Elmslie's ornamental hand emerges with unmistakable authority. Here, the domination of the inorganic framework by organic expression appears to reach a moment of full confidence and saturation.

Like the Guaranty Building, the Schlesinger-Mayer Store (Fig. 22) is clad in terra cotta for ten of its twelve stories. Unlike the Guaranty, the Wainwright, or the Bayard, however, its architectural expression is not predominantly *tall* but emphatically *long*. Continuous horizontal spandrels overlay the structural frame, visually suppressing the vertical piers and making the tectonic logic of the building secondary to the ornamental surface.

This horizontality is reinforced by a pronounced differentiation between the lower two floors and the upper stories. Where the upper floors are clad in white glazed terra cotta panels with relatively restrained ornament, the lowest two levels are heavily articulated in cast iron, richly ornamented with column covers and spandrel panels. The cumulative effect is one of compressed organic energy—an architectural base that reads like a root-bound plant pressing outward, ready to burst onto the city street.

Figure 22. *1895 Schlesinger Mayer Store: Sullivan's only horizontal emphasis?* Author Photo

Figure 23. *Two shallow motifs street level, State St column cover (left) Madison St entry panel (right)*
Author Photo

The columns, so strongly emphasized in the Wainwright and Guaranty Buildings, are here deliberately de-emphasized at street level. Their presence is visually overwhelmed by shallow-relief inorganic ornamental motifs that suppress vertical clarity rather than reinforcing it (Fig 23). These motifs vary by location and include, at the Madison Street entry, rotated squares overlaid with onion-like forms—closely related to Sullivan's interior fret-sawn ornament—as well as a series of nested geometric figures (circle and octagon) surmounted by shield-like forms, from which narrow leaves emerge and dissolve into spirals.

This Madison Street ornamental strategy is notable for its apparent subversion of the seed-germ motif. Rather than allowing the seed to remain the generative center, it is overlaid, masked, or displaced by leaf forms—an unusual move given the central role Sullivan assigns to the seed-germ in *A System of Architectural Ornament*. Here, organic growth is no longer legible as a singular origin but instead becomes layered, accretive, and partially obscured. The effect suggests not the revelation of organic genesis, but its containment a condition that anticipates Sullivan's later efforts to resolve architectural density without surrendering to horror vacui.

The "star" of the Schlesinger-Mayer building is clearly the corner entry**.** Its rounded footprint includes six segmented columns extending from the street to the underside of the overhanging cornice, where they culminate in a circular bloom of floral and bud-type ornament. The effect is that the columns appear to have "grown" directly out of the cast-iron streetfront.

The dark color of the first two floors' cast iron gives way to white terra cotta from the third through tenth floors. Perhaps this represents Sullivan's further development of the "plant" conceived in elevation: an architectural *Urpflanze*—Goethe's archetypal plant—explored intermittently from 1883 and here tested again in this 1895 configuration. In the Schlesinger-Mayer store, the building

grows quite literally from a "planter" of sorts: a soil-colored, root-bound storefront from which it rises and blooms toward the sky.

When we consider the Gage group (1898) in the context of Sullivan's "Life Force[17]" proposition, from "The Tall Building Artistically Considered" both the Schlesinger Mayer and the Gage building share the root-bound expression on the cast-iron street level ornamental panels. The primary difference is the origin of the stem reaching for the sky. At Schlesinger-Mayer, the cast iron columns starting at the sidewalk seem to be originating below the ground where what he termed "raw power" resided writing "*Wanted—first, a story below ground, containing boilers, engines of various sorts, etc.; in short, the plant for power, heating, lighting, etc*."[18] So the columns are emerging from the below-grade level where "Raw Power" Resides. His formulation changes somewhat at the Gage building where the cast iron as root-bound planting pot spans across the entire façade. Glass barely conceals the reality of columns beneath the mighty terra-cotta stems that rise to the cornice. The columns, barely visible in original photographs are clearly white, not cast iron. The vision I have formed in my mine (perhaps erroneously) is that the columns that dominate the facades full height terminating in a great floral efflorescent bloom originates at the *top* of the cast iron façade and *not* in the basement. Sullivan seems to be stepping away from the "plant for raw power" and seeing the street as a source of the building's energy. He is perhaps acknowledging the human power of the users as the real power behind commercial success.

People, replacing machines as the power behind buildings.

Sullivan's architecture becomes explicitly democratic only after 1900, but its democratic impulses—hostility to hierarchy, allegiance to life, and faith in collective human energy—are already latent in his earlier treatment of function, power, and growth.

If the Gage building is an early translation for the buildings energy to reside in people not machines, the Van Allen Store in Clinton Iowa 1913 (Fig. 24) sees to clearly propose the "roots" of the power for this store resides at the spandrel between the street level and first floor above grade.

[17] Louis H. Sullivan, "The Tall Office Building Artistically Considered," *Lippincott's Magazine* 57 (March 1896): 403–409.
[18] Ibid

Figure 24. *The street level as a buildings power source, seed germ at first floor: Van Allen Store, Clinton Ia.*
Photo by Author

By 1905 Sullivan's tall building commissions have waned, his total workload is diminished to the point where his trusted associate George Elmslie is seeing the writing on the wall, that Sullivan's firm will winnow down smaller and smaller. But the last group of Sullivan's commissions seems focused more on community than on the power implicit in "tallness."

In the 1906 essay *Democracy: A Man-Search*, Sullivan defines democracy not as a political arrangement but as a living condition—a collective life force arising from individual growth aligned with the whole. Opposed to hierarchy, feudal authority, and dead form, democracy appears as an ongoing struggle to give life adequate expression in culture, institutions, and ultimately architecture. Written at a moment of personal and professional isolation, the essay marks Sullivan's turn away from institutional power toward intimate, centered, and humane forms of gathering—a shift that would soon find architectural resolution in the bank lobby conceived as the town's living room, and later in the stabilizing logic of "a system" and the hearth-like stovebacks.

The Rooms for Community Sullivan's Jewel Boxes: Closing out the developmental arc

Between 1905 and 1922, as opportunities for tall commercial commissions vanished, Sullivan increasingly turned to the small-town bank as a final testing ground for his architectural ideas. In these buildings, the problem of ornament underwent a decisive shift in scale. No longer confined to the animation of

surfaces or interiors, ornament was asked to operate procedurally at the level of the building itself. In *"A System,"* Sullivan outlines the transformation of a simple square into a balanced expression of organic and inorganic motifs conceived as ornament. The bank is thus generated not through massing alone, but through an ornamental logic that organizes the whole.

As I have argued in *Architecture as Ornament: Louis Sullivan's Late Work*, many of these final works are conceived precisely in accordance with this logic. In the small-town banks, Sullivan treats the building itself as an ornamental composition, composed as *A System of Architectural Ornament According to a Man's Powers* proposes. Exterior ornament functions as the visible sign of "life," while interior ornament and space articulate that vitality as lived experience—a spatial ethic rather than a representational message.

With this shift emerged a new form of anxiety. If earlier works betray a fear of empty architectural surface—*horror vacui*—the so-called jewel-box banks expose a more subtle concern: the possibility of an empty civic presence. Sullivan recognized that a building could be complete, well-proportioned, even richly decorated, and still fail to register meaningfully within the life of a town.

The late banks can therefore be understood as an effort to ensure that ornament, conceived at the scale of the building itself rather than as an applied artifact, could secure architectural presence without being monumental. In this sense, the bank like the Bank at Owatonna MN, is not a civic monument but a civic ornament—a "gem" embedded within daily commercial life, intent not on declaring meaning but on sustaining a condition of vitality through form.

Farmers and Merchants National Bank Owatonna, Minnesota 1907: Elmslie's last contribution

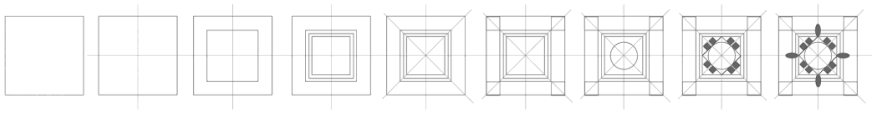

Figure 25. *Illustration of Steps 1 through 11, Plate 1 of "A System"*
Source: Author

The Farmers and Merchants National Bank at Owatonna (1907) marks the clearest realization of Sullivan's late ornamental logic and is likely the final major building to which George Elmslie contributed directly. More than any other of the small-town banks, Owatonna functions as a demonstrative case of the procedures outlined in *A System of Architectural Ornament According to a Man's Powers*, allowing ornament to be read not as applied decoration but as a generative method operating at the scale of the building itself (Fig. 25).

The primary banking mass is organized around a sixty-eight-foot square footprint, a dimension notably smaller than the available site frontage along Broadway. This reduction may be understood as an intentional act, establishing a controlled geometric "blank block" from which the architectural composition proceeds (Figure 14). Variations in wall thickness—between street-facing exterior walls and adjacent party walls—introduce an initial disruption in the apparent regularity of the square, signaling that the plan is not merely diagrammatic but energetically charged.

Within this primary square container, two additional rectilinear containers are nested concentrically. The secondary container defines the main banking room, bounded by the farmers' exchange, women's banking area, savings department teller enclosure, and officers' desks. A tertiary container is formed by the art-glass skylight, centered within the main banking room. This element marks the point at which the vertical axis intersects the building envelope and may be read as the principal efflorescent burst within the plan.

The orthogonal axes of the square intersect each of these containers, locating major architectural elements at their points of rupture. At the perimeter wall, these intersections produce four monumental arches, which Sullivan described in *A System* as eruptions from a "container of energy." In Owatonna, the arches at the party walls house murals, while those at the street elevations contain art-glass windows. The wall plane is slightly recessed within a continuous edge frame, and the arches are further articulated with stepped chamfers, intensifying their architectural presence without disengaging them from the plane of the wall.

Where the primary axis ruptures the secondary enclosure of the main banking room, similar efflorescent moments appear in the heavily ornamented teller wickets, vault enclosure, and principal entrance portal. While diagonal axes play a secondary role—organizing subsidiary spaces and service functions—they assume unusual significance at the point where a diagonal intersects the skylight. Here, four cast-iron electroliers descend through the ceiling plane, each penetration marked by a wisp of plaster ornament. These moments suggest a building fabric conceived as charged with latent organic energy, capable of eruption when intersected by geometric order.

If the sixty-eight-foot square plan serves as the container of energy described in Plate 1 of *A System*, and if the seed-germ is planted at its center in

plan, the question arises: where is the seed-germ located in section? The building rises approximately forty-nine feet in height. When a square is inscribed in elevation and aligned with the cornice, its horizontal centerline coincides precisely with the top of the green terra-cotta band marking the cornice of the president's office. This level establishes a horizon separating the pragmatic banking functions below from the idealized ornamental volume above (Fig. 26). It is at this horizon (Fig.27)—rather than at the literal site of transaction—that the seed-germ is planted, preserving formal coherence while acknowledging the practical realities of banking activity.

Seen in this way, Owatonna represents a new proposition in Sullivan's life's work. Rather than ornamenting function, the building itself becomes a form of functional ornament. The jewel box banks do not merely extend the struggle against *horror vacui*; they relocate it. What had once been addressed through the articulation of surface is here taken up at the scale of the building as a whole. Civic emptiness is countered not through saturation, but through concentration: the life force long expressed through ornament is organized into architectural efflorescence that rises from, and culminates, the building's functional life. In this way, Sullivan banishes empty civic presence by designing a building whose vitality is generated through use and translated into form.

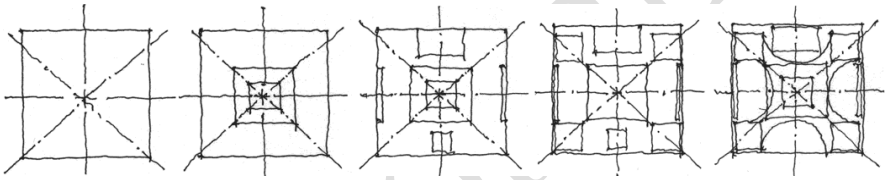

Figure 26. *Development of Farmers and Merchants Bank Floorplan according to Axis/Container Method used by Sullivan in "A System"*
Source: Author.

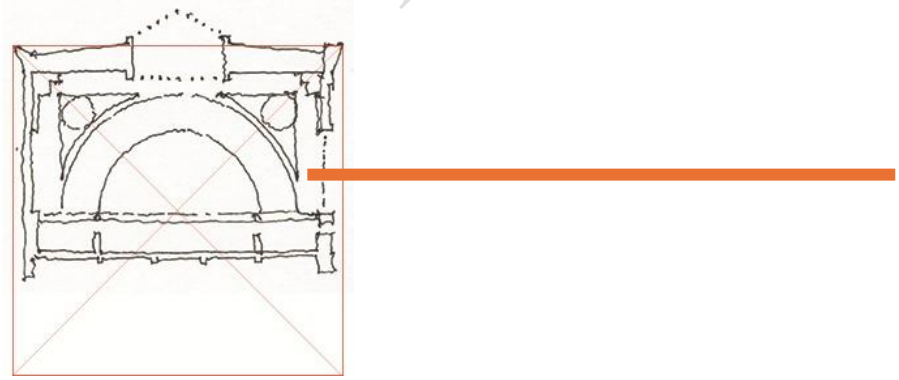

Figure 27. *Farmers and Merchants Bank Section Showing the Center (Seed Germ) Located at the Horizon between the Pragmatic (Lower) Banking Functions and the Ideal (Upper) Ornamented Volume*
Source: Author.

After Owatonna: the typology of the jewel box:

The National Farmers' Bank at Owatonna establishes the organizational rules of the jewel box bank later developed at Sidney, Ohio, and Grinnell, Iowa. In these buildings, circulation, vault placement, and overhead light are aligned to reinforce a centralized moment of architectural efflorescence.

Subsequent commissions—most notably Newark, Ohio, and the banks at Columbus, Wisconsin, and Manistique, Michigan—adapt this typology to different sites and constraints. In these later examples, the aisle in front of the teller line is converted into the primary lobby space, and the vault is displaced from the entry axis. The omission of the overhead skylight, present at Owatonna, Sidney, and Grinnell, further deemphasizes the central "seed germ" condition, softening the ornamental culmination that had previously organized the building as a whole.

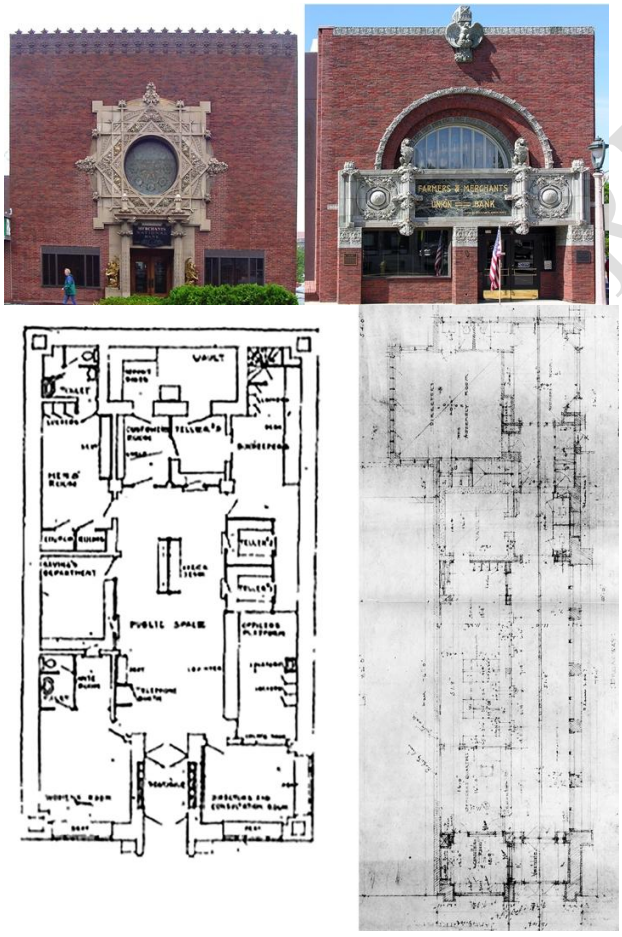

Figure 28. *Merchants Bank, Grinnell IA, 1913 (Left) Farmers and Merchants Bank, Columbus, WI, 1919 (Right)*
Photos by Author

These two small-town banks (Fig. 28), separated by roughly six years, demonstrate that even as Sullivan practices independently of Elmslie, he remains

exceptionally adept at reading opportunity. Grinnell and Columbus represent not refinement within a single type, but two fundamentally different approaches to banking architecture.

Grinnell extends the Owatonna model: a compressed point of entry opening into an expansive banking room, spatially aligned with the teller line and vault. The drama of compression and release remains central, and the banking hall functions as a civic interior—a great room that situates trust, visibility, and transaction within a shared volume.

Columbus takes a different direction. The narrow corner site does not permit the lateral width required for the Grinnell/Owatonna organization, and Sullivan does not force the type to fit. Instead, he steps away from it entirely. At first glance, this can appear as a retreat—an abandonment of the "building as ornament" idea. But when the plan is read carefully, the logic is not subtractive but translational. Columbus replaces the central room with an aisle-like banking space: a linear sequence of contained volumes rather than a unified hall.

This aisle-type planform does not negate Sullivan's ornamental thinking; it relocates it. Where Grinnell and Owatonna relate clearly to the "Development of the Square" diagram in *A System of Architectural Ornament*, Columbus operates through serial compression rather than centered expansion. Ornament no longer reinforces a room—it organizes movement.

Opening in June 1914, Wright's Midway Gardens articulated ornament as spatial organization rather than surface articulation. This is not a departure Sullivan would have needed to resist, but one he could plausibly have recognized as a parallel resolution. By this point, Sullivan's late banks were already moving toward a compressed, non-iconographic architecture in which meaning was concentrated rather than displayed.

The aisle-type plan may even suggest Sullivan's recognition—direct or indirect—of how Wright had begun to connect ornamental thinking to planform itself. At Midway Gardens, Wright and Alfonso Iannelli present a geometricized male figure composed as a stacked body of cubes, standing alongside a larger cubic mass (Fig 29). Read structurally rather than symbolically, the figure operates as an anchor of compressed order. In Columbus, the directors' room—a dominant, cubic volume—functions similarly, stabilizing a sequence of pilastered windows and spatial segments that read as a progression of cubes along the entry path.

This is not a claim of influence so much as correspondence: two architects, once closely aligned, arriving at related solutions through different means. In Columbus, Sullivan does not lose ornament; he **internalizes it**, allowing spatial composition itself to carry the ornamental burden.

Figure 29. *plan of the Columbus WI. Bank with spaces defined as squares highlighted*

In his final essay accompanying *A System of Architectural Ornament*, Louis Sullivan continued to insist that "the building's identity resided in the ornament." By the time of its publication, however, Sullivan's career—and his life—were ending as architectural theory moved steadily away from ornament toward the full embrace of the unornamented surface.

This shift did not come about because Sullivan had failed to explore the potential of unadorned form. Works such as the Ryerson Tomb, the Wainwright Building, the Dooley Block, and the Charnley House stand as complete and convincing explorations of what he termed the "comely nude." Ornament was never a necessity for Sullivan; it was a chosen vehicle through which architectural life could be made visible.

His final commission—the design of lithographically printed stovebacks for the American Stoveboard Company of Chicago—offers a final, telling condensation of that lifelong pursuit. In these designs, organic motifs are dramatically stylized, pressed beyond the serpentine and spiral forms of his earlier work toward a more rational, geometric order. Reduced to pattern and repetition, freed from the demands of structure, these stovebacks suggest a last fusion and quiet resolution of Sullivan's ornamental language (Fig. 30).

Here, at the moment when architectural culture turned away from ornament altogether, Sullivan did not abandon it. Instead, he carried it to its limit—refined, abstracted, and complete.

Sullivan's closure of the *Horror Vacui*

From the beginning of his career, Sullivan understood architecture as a struggle against lifelessness. Ornament was not embellishment but a strategy for making buildings appear vitally inhabited—to guard against the horror of emptiness devoid of meaning. Over time, that struggle moved from filling surfaces, to animating them, to concentrating life into ever more restrained form.

By the end of his life, Sullivan had effectively solved the problem he set himself. In his late banks and final ornamental works, fullness no longer required abundance, nor life force its overt display. Ornament was distilled, abstracted, and finally rendered self-sufficient.

That Sullivan's project ended just as architectural culture turned away from ornament altogether does not mark a failure of his ideas, but a divergence of concerns. Modern architecture abandoned the problem of horror vacui by redefining emptiness as virtue. Sullivan, by contrast, resolved it. His work stands as the completion of a question architecture no longer chose to ask.

Figure 30. *The Stoveback: Louis Sullivan's last commission*[19]
With permission of Eric Nordstrom Urban Remains, Chicago

[19] Urban Remains. (n.d.). *Fantastically detailed original c. 1920's Louis H. Sullivan designed American residential lithographed steel stoveboard* [Photograph]. https://urbanremainschicago.com/products/fantastically-detailed-original-c-1920-s-louis-h-sullivan-designed-american-residential-lithographed-steel-stoveboard-or-platform-with-a-richly-organic-design