

# THE DISAPPEARANCE OF THE ORNAMENT

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# SUMMARY

During the late 19th and early 20th centuries, there was a significant decline in the use of ornamentation in architecture. Louis Sullivan and Adolf Loos were two architects who had contrasting views on the use of ornaments in the beginning of modern architecture. This research explores how Louis Sullivan's and Adolf Loos' views on ornamentation influenced modern architecture. The findings of this study can be used by architects to understand the trend of ornamentation in architecture and why it has largely disappeared to this day. The main research question is "How did Louis Sullivan's and Adolf Loos' views on ornaments in architecture influence modern architecture?". The study conducts qualitative literature research on the theoretical writings of Sullivan and Loos and analyses two modern architectural works that exemplify the influence of their ideas on ornamentation: the Guaranty Building (1896) by Louis Sullivan and the Looshaus (1911) by Adolf Loos. The results show that Sullivan used ornamentation to enhance the expression of the function and purpose of the building, while Loos saw ornamentation as a sign of degeneration in modern architecture and opted for simplicity. The emphasis on functionality by Sullivan and Loos inspired modernist architects to design radically functional buildings, which led to the disappearance of ornamentation in the early 20th century.

# INDEX

1. Introduction.....	3
1.1 Research question .....	3
1.1.1 Main question.....	3
1.1.2 Sub questions .....	3
1.2 Methodology .....	4
2. Louis Sullivan's views on the use of ornaments .....	5
3. Adolf Loos' views on the use of ornaments .....	11
4. Their impact.....	15
5. Conclusion .....	17
6. Discussion .....	18
7. Bibliography.....	19

# 1. INTRODUCTION

Ornamentation has been an integral part of architectural design throughout history. The use of decorative elements has served various purposes, from symbolizing cultural values to expressing individual creativity (Saxena, 2021). However, in the late 19th and early 20th centuries, there seems to be a strong decrease in the use of ornaments. Two architects, Louis Sullivan and Adolf Loos, were notable for their contrasting views on the use of ornamentation in the beginning of modern architecture.

Louis Sullivan (1856-1924) was an American architect who believed that ornamentation was a critical part of architecture. In his essay "Ornament in Architecture" (1892), Sullivan argued that ornamentation should be an integral part of the building's structural design, rather than being applied as an afterthought. He believed that ornamentation should serve a functional purpose and should not be used simply for decorative purposes. Sullivan famously coined the phrase "form follows function," which became a guiding principle for modern architecture.

Adolf Loos (1870-1933) was an Austrian architect who held a very different view on the use of ornamentation in modern architecture. In his essay "Ornament and Crime" (1908), Loos argued that ornamentation was a waste of resources and a sign of cultural decline. He believed that the use of decorative elements was a reflection of a society's immaturity and lack of sophistication. Loos famously stated, "The evolution of culture is synonymous with the removal of ornament from utilitarian objects." (Loos, 1908, p. 20)

Louis Sullivan's essay "Ornament in Architecture" and Adolf Loos' essay "Ornaments and Crime" are influential texts in the history of modern architecture. Both essays were written at the turn of the 20th century and challenged the traditional use of ornamentation in architecture. There are currently no comparing studies about Louis Sullivan's and Adolf Loos' view on ornamentation in architecture and their impact, were this study aims to fill that gap in literature. This insight can be used by architects to understand the trend on ornamentation in architecture and why it generally disappeared to this day.

## 1.1 Research question

### 1.1.1 Main question

How did Louis Sullivan's and Adolf Loos' view on ornaments in architecture influenced modern architecture?

### 1.1.2 Sub questions

1. What does Louis Sullivan say about the use of ornaments in architecture?
2. What does Adolf Loos say about the use of ornaments in architecture?
3. What are the similarities and differences between Louis Sullivan and Adolf Loos on ornaments in architecture?

## 1.2 Methodology

Within this research, mainly qualitative literature research is conducted. The first step of this research will be a comprehensive primary literature review of the theoretical writings of Louis Sullivan and Adolf Loos. These are mainly the essays “Ornament in Architecture” by Sullivan (1892) and “Ornament and Crime” by Loos (1908). This will provide a basis for understanding the key concepts and principles underlying their views on ornamentation. Secondary sources are used to validate the interpretations.

The research will then proceed to analyse two specific modern architectural works in a case study that exemplify the influence of Sullivan's and Loos' ideas on ornamentation. The buildings selected for analysis are the 'Guaranty Building' (1896) by Louis Sullivan and the 'Looshaus' (1911) by Adolf Loos. These buildings will be analysed through a combination of visual analysis and critical interpretation to determine how Sullivan's and Loos' ideas on ornamentation have been applied in these works.

Finally, the theories are compared with each other and similarities and differences are examined.

This research only focuses on ornamentation outside the building. Ornamentation inside the building is excluded from consideration.

## 2. LOUIS SULLIVAN'S VIEWS ON THE USE OF ORNAMENTS

Louis Henry Sullivan, an American architect who lived from 1856 to 1924, is renowned for being the pioneer of functionalism in architecture. One of his notable contributions was the introduction of the idea of "organic architecture", which emphasizes that a building's appearance and structure should be derived from its intended function (Kunstbus, 2021). In his essay for Lippincott's Magazine in 1896 titled "The Tall Office Building Artistically Considered", he likened this approach to nature, where form follows function:

*"All things in nature have a shape, that is to say, a form, an outward semblance, that tells us what they are, that distinguishes them from ourselves and from each other." (Sullivan, 1896).*

Louis Sullivan conveyed his conviction that all elements in nature, including constructions, possess a distinct structure that embodies their function and intention (Craven, 2019). He asserted that analogous to living organisms that have individual physical traits that facilitate their identification and comprehension of their place in the environment, edifices should also have a design that corresponds to their intended purpose and enables recognition of their function. This perspective gave birth to his renowned principle "form follows function" as a natural rule (Sullivan, 1896).

Sullivan applied his principle of "form follows function" to the use of ornamentation in architecture as well. In his essay "Ornament in Architecture," which was published in The Engineering Magazine in 1892, he expressed his views on the topic as follows:

*"It is the pervading law of all things organic and inorganic, of all things physical and metaphysical, of all things human and all things superhuman, of all true manifestations of the head, of the heart, of the soul, that the life is recognizable in its expression, that form ever follows function. This is the law." (Sullivan, 1892)*

Sullivan stressed that ornaments should not merely be decorative but should derive from the building's structure and purpose. He maintained that a building's form arises from its function, and consequently, its ornamentation should also serve a functional purpose. In his constructions, the objective of the ornaments was to reinforce and accentuate the building's function. Nonetheless, the query persists regarding the function the ornamentation performs in his buildings.

Louis Sullivan was primarily involved in designing skyscrapers in architecture. The 19th-century social conditions, including population and business growth in the cities, along with the escalating land value, necessitated the construction of tall buildings, such as offices (Dubois, 2021). With the advent of fast elevators and advancements in steel construction, Sullivan devised a new form of skyscrapers, earning him the recognition as the progenitor of contemporary skyscrapers. He meticulously integrated ornamentation onto the facades of these constructions. One such instance is the Guaranty Building (also referred to as the

Prudential Building) in Buffalo, New York, designed by Louis Sullivan and Dankmar Adler, and completed in 1896 (refer to Figure 1).

**Figure 1**

*Guaranty Building in Buffalo, New York by Louis Sullivan and Dankmar Adler*



Note. Retrieved from *Prudential Building* by en.wikiarquitectura.com, n.d. (<https://en.wikiarquitectura.com/building/prudential-building/>). Copyright 2017, De la Paz.

Louis Sullivan partitioned the Guaranty Building into three principal sections: the first and second floors, the office levels, and the attic (Dubois, 2021). He likened this to the three components of a classical column (refer to Figure 2). and drew inspiration from the idea of trinity in art, nature, and time to establish a functional concept of harmony. He believed that the lower floors of a building should be more open and welcoming because they are more easily accessible. To achieve this, he employed large window openings and embellished entrances on the façade (refer to Figure 3). The office levels were structured with a proportion of windows to piers based on the size of the office units. The office levels exhibit pronounced vertical lines accentuated by the more profusely ornamented piers (compared to the base), and each office level appears identical (refer to Figure 4). Lastly, the

attic, which mainly functioned as storage and did not necessarily necessitate windows, is distinguished by a broad, extended cornice with additional ornamentation, where the façade gradually transforms into the projecting roof, signifying the definitive conclusion of the series of office levels (refer to Figure 5).

**Figure 2**

*Guaranty Building compared to Greek column*



Note. Retrieved from *Exterior - Guaranty Building* by Buffalo Architecture and History, n.d. (<https://buffaloah.com/a/church/28/12east/12east.html>). Copyright 2016, Chuck LaChiusa.

**Figure 3**

*Guaranty Building ornamentation on plinth*





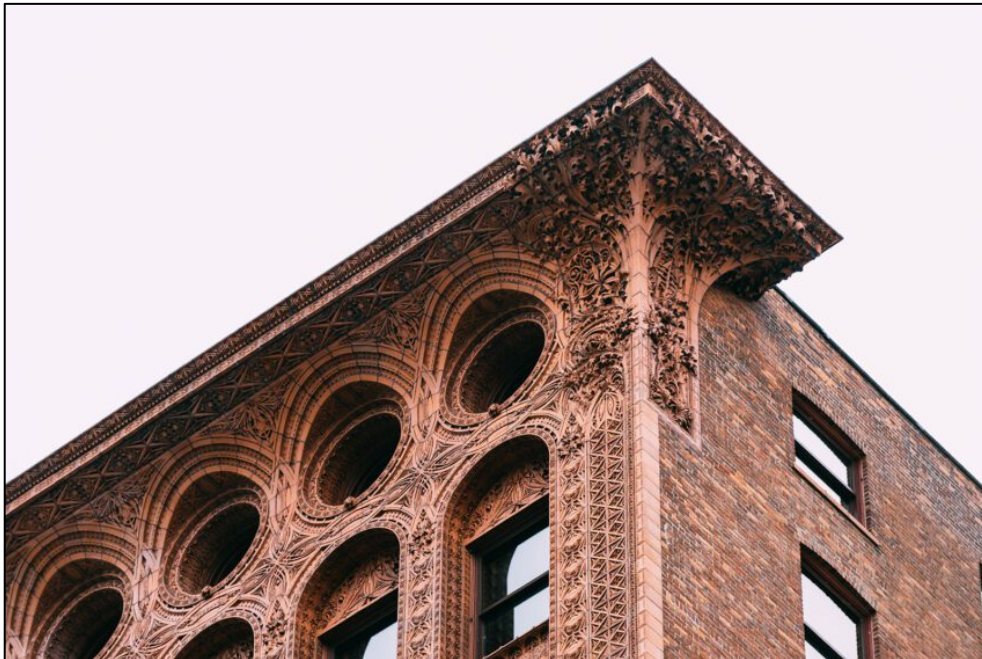
Note. Retrieved from *Louis Sullivan's Masterpiece: The Guaranty Building* by ArchEyes, 2023. (<https://archeyes.com/louis-sullivans-masterpiece-the-guaranty-building/?amp=1>). Copyright n.d., Nick Stanley.

**Figure 4**  
*Guaranty Building ornamentation on office floors*



Note. Retrieved from *Guaranty/Prudential Building* by M.A. Sullivan, 2009. (<https://homepages.bluffton.edu/~sullivanm/newyork/buffalo/sullivan/guaranty2.html>).

**Figure 5**  
*Guaranty Building ornamentation on cornice*

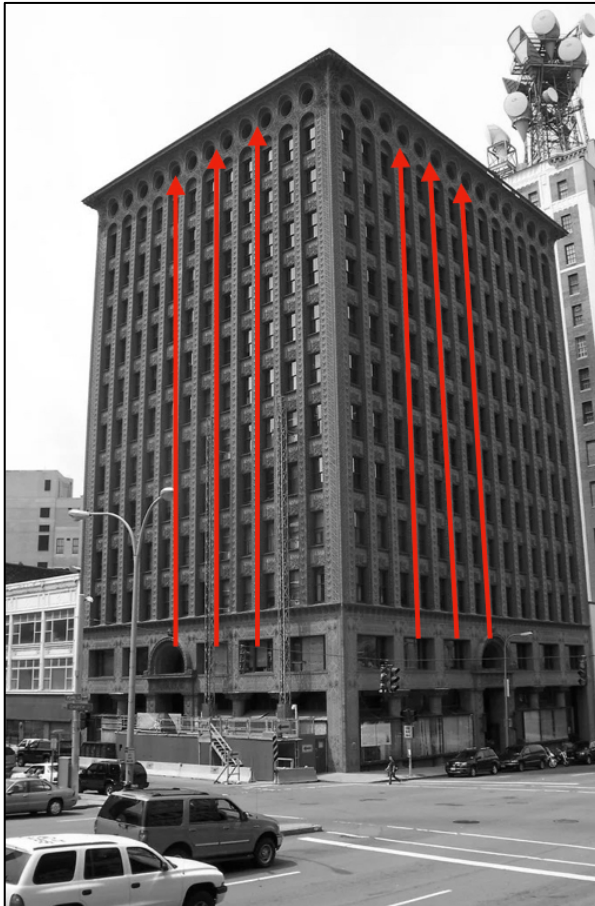


Note. Retrieved from *Louis Sullivan's Masterpiece: The Guaranty Building* by ArchEyes, 2023. (<https://archeyes.com/louis-sullivans-masterpiece-the-guaranty-building/?amp=1>). Copyright n.d., Nick Stanley.

The embellishment on the Guaranty Building intensifies from the bottom (the plinth) to the top (the cornice). The office levels' vertical lines attract attention to the imposing cornice, underscoring the building's conclusion (refer to Figure 6). By repudiating traditional designs and extolling the verticality of the skyscraper, Sullivan sought to express the United States' confidence and prosperity at the close of the 19th century, in contrast to earlier European skyscrapers with strong horizontal lines (Meyer & Haremza, n.d.). In his essay, "The Tall Office Building Artistically Considered," Sullivan discusses how an office building:

*"(...) must be tall, every inch of it tall. The force and power of altitude must be in it. It must be every inch a proud and soaring thing, rising in sheer exultation that from bottom to top it is a unit without a single dissenting line—that it is the new, the unexpected, the eloquent peroration of most bald, most sinister, most forbidding conditions" (Sullivan, 1896).*

**Figure 6**  
*Accentuation of verticality*



*Note.* Adapted from *Louis Sullivan's Masterpiece: The Guaranty Building* by ArchEyes, 2023. (<https://archeyes.com/louis-sullivans-masterpiece-the-guaranty-building/?amp=1>) Copyright n.d., Nick Stanley.

Sullivan frequently drew inspiration from nature for his ornamentation. At the Guaranty Building, he incorporated flowers, seed pods, and tree branches that spread across the cornice. Despite modern steel frame construction and electric elevators, Sullivan sought to

connect buildings with the natural world through ornamentation (Meyer & Haremza, n.d.). He believed that ornamentation should arise from the same emotional impulse as the building's structure and be integrated into it. In his essay, "Ornament in Architecture," he states:

*"That is to say, a building which is truly a work of art (and I consider none other) is in its nature, essence and physical being an emotional expression. This being so, and I feel deeply that it is so, it must have, almost literally, a life. It follows from this living principle that an ornamented structure should be characterized by this quality, namely, that the same emotional impulse shall flow throughout harmoniously into its varied forms of expression — of which, while the mass-composition is the more profound, the decorative ornamentation is the more intense." (Sullivan, 1892)*

Sullivan believed that the design of a building should be motivated by a deeper emotional impulse of the artist, which should then be expressed through ornamentation that is integrated into the structure of the building. This approach results in a harmonious and organic design. In the case of skyscrapers, the dominance of ornamentation in the vertical direction of the facade strengthens the building's expression. Sullivan's ornamental designs were integrated into the terracotta facade elements during production rather than being applied afterward. This was achieved by pouring liquid terracotta into molds with detailed patterns and shapes, which were then hardened. The lightweight ornamental facade elements were mass-produced for the repetitive office floors, and the use of terracotta also improved the fire resistance of the steel structure. Therefore, Sullivan's method of ornamentation is completely integrated from the function to the structure through various layers of a building and not an afterthought.

The sub-question 'What does Louis Sullivan say about the use of ornaments in architecture?' can be answered as follows: Louis Sullivan uses ornamentation in architecture to enhance the expression of the function and purpose of the building. Specifically, he used it to emphasize the height of his skyscrapers through the systematic use of ornaments that draw the eye upward towards the dominant cornice. This is in line with Sullivan's belief that "form follows function", where the design of a building should be based on its purpose. Sullivan's method of ornamentation involves integrating detailed ornamentation into the terracotta facade cladding for the steel structure of the building, rather than applying it afterwards. This creates a cohesive whole where the accentuation of height through different layers of a building is seamlessly integrated. The Guaranty Building serves as an example of this approach to ornamentation in architecture.

### 3. ADOLF LOOS' VIEWS ON THE USE OF ORNAMENTS

Adolf Loos (1870-1933) was an Austrian architect who became well-known for his uncompromising opposition to the use of ornamentation in architecture and design. His essay 'Ornament und Verbrechen', which was published in 1908, argued that ornamentation was a symbol of cultural and moral decline. Loos used the metaphor of a child who has reached the same level of development in modern times as adult society did tens of thousands of years ago to emphasize his point. In his essay, he stated:

*“The human embryo in the womb passes through all the evolutionary stages of the animal kingdom. When man is born, his sensory impressions are like those of a newborn puppy. His childhood takes him through all the metamorphoses of human history. At 2 he sees with the eyes of a Papuan, at 4 with those of an ancient Teuton, at 6 with those of Socrates, at 8 with those of Voltaire. When he is 8 he becomes aware of violet, the colour discovered by the eighteenth century, because before that the violet was blue and the purple-snail red. The physicist points today to colours in the solar spectrum which already have a name but the knowledge of which is reserved for the men of the future.” (Loos, 1908)*

The Papuans, who were an indigenous group in New Guinea and lived around 50,000 years ago (Lawes, 2023), engaged in cannibalism and considered it acceptable at the time, whereas it would be regarded as a crime in modern society. Adolf Loos drew a parallel between this and the use of ornamentation, noting that both involved the adornment of the body. He referred to contemporary criminals as degenerates who did not conform to the values and norms of modern times, and their tattoos served as evidence of their ornamentation. In his essay, he stated:

*“The evolution of culture is synonymous with the removal of ornament from utilitarian objects.”*

Loos saw ornamentation as a thing of the past that did not fit within modern architecture. He believed that applying decorations to buildings in the modern era was a sign of degeneracy and criminal behavior. Loos was a strong advocate for functionality and simplicity in modern architecture and design, and saw ornamentation as a useless addition that detracted from the true purpose of functional objects. Loos found joy in simplicity and function, rather than in decorations.

*“I don't accept the objection that ornament heightens a cultivated person's joy in life, don't accept the objection contained in the words: 'But if the ornament is beautiful!' Ornament does not heighten my joy in life or the joy in life of any cultivated person. If I want to eat a piece of gingerbread I choose one that is quite smooth and not a piece representing a heart or a baby or a rider, which is covered all over with ornaments.” (Loos, 1908)*

Loos also associated the use of ornamentation with social and economic inequality.

*“The relationship between the earnings of a woodcarver and a turner, the criminally low wages paid to the embroideress and the lacemaker are well known. The ornamentor has to work twenty hours to achieve the income earned by a modern worker in eight. Ornament generally increases the cost of an article; nevertheless it happens that an ornamented object whose raw material cost the same and which demonstrably took three times as long to make is offered at half the price of a smooth object. Omission of ornament results in a reduction in the manufacturing time and an increase in wages.”*

Loos argued that ornamentation was a manifestation of social and economic inequality, as it was often used to display wealth and status. He believed that this pursuit of ornamentation was a form of social injustice and a waste of resources. Additionally, he asserted that the production of these decorations exploited workers who were forced to spend more time, materials, and money on them, without improving the object's function or purpose. For Loos, simplicity and functionality were the true measures of good design.

Despite his aversion to ornaments, Loos incorporated high-quality materials like marble and wood that displayed natural patterns and textures in flat surfaces. The Looshaus in Vienna, Austria, also known as the Goldman & Salatsch building, is a prime example (Figure 7). Completed in 1911, it was designed by Loos as a men's clothing store for Goldman & Salatsch.

**Figure 7**

*Looshaus in Vienna, Austria by Adolf Loos*



Note. Retrieved from *Looshaus* by Wikipedia, 2022.

([https://nl.wikipedia.org/wiki/Looshaus#/media/Bestand:Looshaus\\_Michaelerplatz.JPG](https://nl.wikipedia.org/wiki/Looshaus#/media/Bestand:Looshaus_Michaelerplatz.JPG)). CC BY-SA 4.0.

The building features a functional and simplistic appearance without any ornaments. Notably, the bottom two retail floors have a striking marble finishing that contrasts with the regular white plaster finishing of the residential floors above (see Figure 8). It seems that Loos only applied the marble finishing to the retail floors to attract customers to the store, which serves a functional purpose.

**Figure 8**

*Looshaus symmetric marbling on plinth*



Note. Retrieved from *Wien - Kohlmarkt - View West on Looshaus / Goldman & Salatsch Building 1910-11 by Adolf Loos - Expensive Materials were used on this Flagship of Functionalism* by TxllxT TxllxT, 2018.

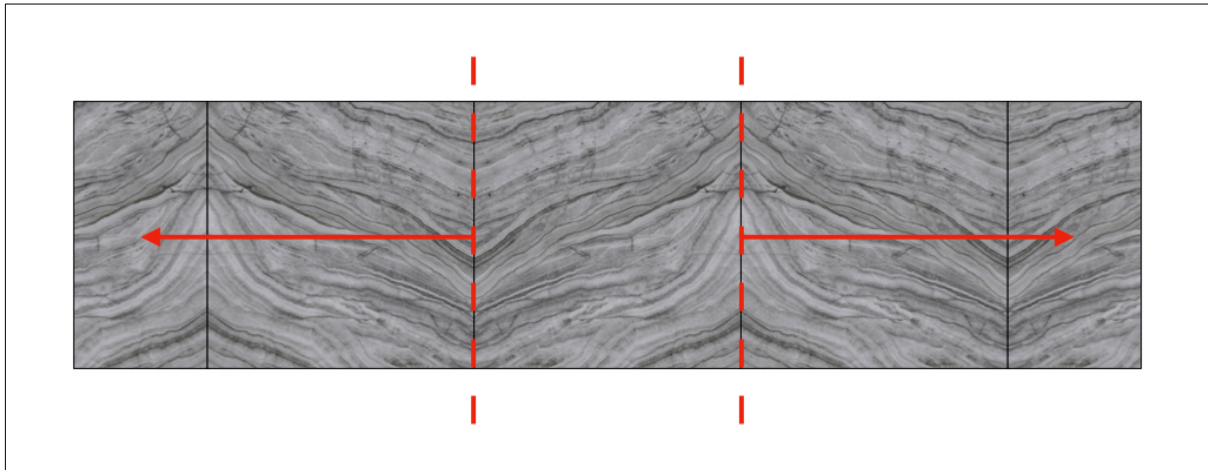
([https://upload.wikimedia.org/wikipedia/commons/7/74/Wien\\_-\\_Kohlmarkt\\_-\\_View\\_West\\_on\\_Looshaus\\_-\\_](https://upload.wikimedia.org/wikipedia/commons/7/74/Wien_-_Kohlmarkt_-_View_West_on_Looshaus_-_)

[Goldman %26 Salatsch Building 1910-11 by Adolf Loos - Expensive Materials were used on this Flagship of Functionalism.jpg](#).

Loos opted for a uniform finish on the entire facade of the building, achieved by using a single block of marble cut into thin tiles. To create a sense of coherence, he mirrored the left and right sides of the tiles, as shown in Figure 9 (Iconic Houses, 2023).

**Figure 9**

*Marble tile symmetry*



*Note.* Own work.

Loos effectively utilizes the inherent qualities of marble to maximize its potential, without resorting to ornamentation. By highlighting the natural patterns in the material and creating a two-dimensional decoration, he adds character to the building while rejecting the use of three-dimensional, degenerate ornamentation.

The sub-question ‘What does Adolf Loos say about the use of ornaments in architecture?’ can be answered as follows: Adolf Loos believed that the use of ornaments in modern architecture was a sign of cultural and moral degeneration. He thought that ornamentation was a style of the past and did not align with the emphasis on functionality in modern times. According to Loos, ornaments were a waste of resources, including materials, money, time, and human labor, and they detracted from the functionality of the building. He preferred simplicity and believed that objects should serve their true purpose without unnecessary embellishment.

In the Looshaus building, Loos used high-quality materials such as marble and wood, but he did not add any ornaments to the facade. Instead, he used the natural properties of the materials to create a two-dimensional decoration that accentuated the natural patterns and textures. For instance, he finished the retail floors of the building with mirrored marble tiles, creating continuity and emphasizing the material property of marble. Loos rejected three-dimensional ornamentation on the facade and instead created a new type of modern ornamentation that highlighted the natural properties of the materials used in a two-dimensional plane.

## 4. THEIR IMPACT

Sullivan and Loos both prioritize the functionality and purpose of the building in their designs, but they approach it in contrasting ways. Sullivan uses three-dimensional ornamentation to highlight the height of the skyscraper and to integrate the building's function into its design. On the other hand, Loos rejects three-dimensional ornamentation, viewing it as a form of architectural degeneration that detracts from the building's function and purpose, and a waste of material, money, time, and labor. He prefers simplicity and employs two-dimensional plane decoration that accentuates the natural material properties to give the building character.

Sullivan and Loos, while not completely functionalist, made significant contributions to the rise of functionalism in the early 20th century. Their shift towards emphasizing the function and purpose of buildings influenced many modern architects to prioritize functionality over ornamentation. Sullivan's "form follows function" principle laid the groundwork for functionalism, which was taken to the extreme by modernists like Le Corbusier and Mies van der Rohe, who emphasized simplicity and efficiency in their designs (Figure 10). They saw functionalism as a groundbreaking style that suited the industrialization and standardization of modern society, utilizing new building materials and technologies such as concrete, steel, and glass to simplify and industrialize building design (De Vree, n.d.).

**Figure 10**

*Villa Sonneveld in Rotterdam as a functionalistic example of modern architecture*



*Note.* Retrieved from *Huis Sonneveld* by Wikipedia, 2023.

([https://upload.wikimedia.org/wikipedia/commons/f/fe/Rotterdam\\_sonneveld.jpg](https://upload.wikimedia.org/wikipedia/commons/f/fe/Rotterdam_sonneveld.jpg)).

The emphasis on functionalism in architecture had wider political and social implications beyond aesthetics (University of Applied Sciences Rotterdam, 2021). It was a response to



the excesses of capitalism and growing social inequality, and aligned with the ideals of the socialist movement of the time, which sought to create a more egalitarian and fair society. The focus on functionality and efficiency in building design aimed to better serve the needs of society, rather than prioritize individual status or profitability. By prioritizing functionality, there was a push for greater social equality and justice in building design. This was reflected in the designs of homes and public buildings, where the focus was on creating affordable and accessible housing for all levels of society, as well as public spaces that were open and accessible to everyone. Expensive and non-functional ornamentation was no longer considered appropriate for the needs of society and therefore disappeared.

The sub-question 'What are the similarities and differences between Louis Sullivan and Adolf Loos on ornaments in architecture?' can be answered as follows: Both Sullivan and Loos prioritize the functionality and purpose of the building, but they differ in their approach to ornamentation. Sullivan uses three-dimensional ornamentation to accentuate the function of the building, while Loos prefers simple designs without three-dimensional ornamentation, which he sees as a form of degeneration that distracts from the function and purpose of the building. Loos accentuates the natural properties of the material in the two-dimensional plane. Sullivan's focus on functionality and his famous statement "form follows function" inspired modernist architects to design radically functional buildings in response to industrialization and social inequality. The emergence of functionalism in architecture reflected the ideals of the socialist movement of the time and aimed for greater social equality and justice by creating affordable and accessible housing for all levels of society, and public spaces that were accessible to everyone. Non-functional ornamentation was seen as unnecessary and unfitting for modern society and eventually disappeared.

## 5. CONCLUSION

This research aimed to answer the question: "How did Louis Sullivan's and Adolf Loos' views on ornaments in architecture influence modern architecture?". A qualitative study was undertaken to investigate their differing views on the use of ornaments.

Sullivan utilized ornamentation to reinforce the function and purpose of the building, particularly in the design of skyscrapers. The systematic application of ornaments drew attention upwards, which was appropriate for tall buildings. The detailed ornamentation was incorporated into the fireproof terracotta facade, creating a cohesive structure consistent with Sullivan's law of "form follows function."

In contrast to Sullivan, Loos rejected the use of ornaments in modern architecture, viewing it as a sign of degeneration. He believed that ornamentation wasted resources and time, and detracted from the functionality of the building. Instead, he favored a simpler approach and utilized the natural qualities of materials as two-dimensional decoration.

The focus on functionality by Sullivan and Loos served as a catalyst for modernist architects to design highly functional buildings, in response to industrialization and as a means of addressing capitalism and the increasing social inequality of the time. As a result, radical modernist architects considered non-functional ornaments in the early 20th century to be superfluous and unsuitable for the demands of modern society, resulting in their decline.

## 6. DISCUSSION

This study relies primarily on the essays of Louis Sullivan and Adolf Loos as primary sources, with various secondary sources used to validate the interpretation of their viewpoints. Only information that was consistently supported in the literature was included in the study, which enhances the validity of the results. As a result, it can be inferred that reproducing the study would yield similar outcomes, and thus, the study is deemed valid.

Louis Sullivan's statement and theory of "form follows function" are significant because they likely contributed to the eventual removal of ornaments in architecture, despite Sullivan himself using ornaments to emphasize the function of the building. However, architecture is an evolving field, and modern architects interpret and apply Sullivan's theories differently to meet the needs of contemporary society.

This study specifically examined the period in which ornamentation disappeared from architecture, driven by the needs and values of modern society. However, it did not explore whether ornamentation can still be relevant in contemporary architecture, especially in light of the growing emphasis on sustainability. Therefore, further research is recommended to investigate the potential role of ornamentation in contemporary architecture and how it can be reconciled with the principles of sustainability.

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