The Necessary Ornament. About *Decor et Ornamentum* in Architecture

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Introduction

Which form for which function is a question at the center of architectural theory since the treatises exist. Ever since the Vitruvian triad of *firmitas*, *utilitas*, and *venustas*, architecture has longed for a balance between structure, use, and beauty, even if it was interpreted in different ways to define good architecture. Distinguishing between "good" and "bad" also meant pointing out a moral issue regarding the aesthetics of architecture; and from Gothic Revival to modern architecture, it meant to define decoration as both something needed and despicable.

The myth of Middle Ages arose as the age of true principles, in contrast to the Renaissance. However, the idea of a necessary ornament was already present in the theories of a great Renaissance master, that is Leon Battista Alberti.

For the first time in Alberti's writings,[1] along with the correspondence between *utilitas* and *venustas*, there is the reference to the rhetorical *decorum*, which was applied to the discourse by Cicero, with the meaning of convenience. In rhetorical speech, *decorum* has a crucial importance. It is one of the four *virtutes elocutionis* (*latinitas*, *perspicuitas*, *ornatus*, *decorum*), i.e., the four virtues of the speech, and its aim is to make speech harmonious and appropriate to the place, the listeners and the topic.[2] Applied to architecture, this concept determines a hierarchy of beauty, so that ornament can be conveniently chosen and applied to the kind of building, according to the social importance of the inhabitants, or according to its function.[3]

The coincidence between *utilitas* and *venustas*, thus between the scope of the building and its appearance, points out the convenience of the form to the use of the building. In addition, the sentence that Alberti uses to express this convenience is worth mentioning: he compares the balance of the perfect forms of a horse to that of an architecture, where the forms must be in harmony with the practice required by the use.[4]

The *perfectus artifex*, the perfect architect, is able to discern and use the convenient – or decent – forms according to scope and use. Decoration, therefore, is not only useful, but it is required.

This paper strives to outline the concept of necessary ornament, mapping out the changes from the "revolution" of the 20th century and up to the contemporary architecture, when the ornamental treating of the surface appears to be the only proper way to characterize the building.

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1 See Elisabetta Di Stefano, *L'altro sapere. Bello, Arte, Immagine in Leon Battista Alberti* [*The Other knowledge. Beauty, Art and Image in Leon Battista Alberti*] (Palermo: Centro Internazionale Studi di Estetica, 2000). Leon Battista Alberti, *I dieci libri de l'architettura* [*The Ten Books of Architecture*] (Firenze: Vincenzo Vaugris, 1546), 138.

2 Marco Tullio Cicerone, "Orator," in *Opere retoriche* [*Rhetoric Works*], ed. Giuseppe Norcio. Torino: Utet, 1970, 835.

3 Di Stefano, *L'altro sapere*, 25. Alberti, *I dieci libri de l'architettura*, 120.

4 Ibid.

The first part describes the rise of the convenience of decoration from Gothic Revival as a moral condition, so that decent and moral architecture must not be deceitful (Pugin), but it is in balance between structure and aesthetics (Ruskin); then, the good architect is the one who can find a balance between form and structure (Viollet-le-Duc, Perret). The second part draws out how the concept of ornament becomes the very center of the good or bad architecture, from the Loosian parallels with tribal tattoos, to the need of going to the essential requirements ("less is more") with apparently no space for ornament. I will briefly dwell on the 20th century Italian architecture, by using an example by Pier Luigi Nervi. In the third and final part, I will focus on contemporary considerations which grew after postmodernism and high-tech, exploring the issue of ornament as the very form of architecture, apparently in contrast to the Modern Movement. Through the lens of the concept of *decor*, this paper is an invitation to reflect on contemporary architecture, as well as the architecture to come: in other terms, is ornament just an unnecessary make-up or is it the needed item of clothing to dress up a naked body?

Decoration and Truth from the Gothic Revival to Auguste Perret

The concept of structural sincerity, thought as the honest application of constructive principles, is an emerging theme in 19th century, following the English Gothic Revival. The assumption that architecture should be true according to moral principles finds a clear origin in Augustus Welby Northmore Pugin, one of the main supporters of Gothic architecture in England. According to him, the Gothic architecture indicated a supreme ideal of aesthetic truth and constructive sincerity. Pugin's approach paves the way to the belief that architecture is an expression of the social, moral, and philosophical conditions of a certain age and that the application of fake materials and techniques is immoral. As it is clear from the etymological root of the word "morale" (from Latin *mos-moris*, custom, habit),[5] it refers to what is good and fair, honest, correct, relating to the good and evil categories, of a certain period and society. It is evident, thus, that the interpretation of what is good or moral is far from being univocally determined.

In 1836, in England, with the publication of *Contrasts: or a Parallel between the noble edifices of the fourteenth and fifteenth centuries and similar buildings of the present day. Shewing the present decay of taste*, Auguste Pugin moves against neoclassical architecture, predominant at the time, advocating the Gothic supremacy as a manifestation of the divine truth. His theory is that a Gothic church cannot be other but itself, because its shapes are infused by God's will. From this premise, in *Contrasts*, Pugin states that Gothic architecture is to be preferred to the classical one, because Christianity is propeller for the former, while the classical canon is the symbol of the pagan religion. From the very beginning, it is clearly expressed that "the two main rules for design are the following: first, that there should be no features about a building which are not necessary for convenience, construction or propriety; second, that all ornament should consist of enrichment of the essential construction of the building."[6]

The distinction between simple ornament and the ornament related to structure and architectural convenience is one of the points on which Pugin insists when explaining the primate of Christian Gothic architecture: convenience indeed consists of the inner and outer appearance of a building suited to the aim it has been intended for. Pugin's remarks against the picturesque deceits connect the supposed decay of the society to the adoption of a "fake" architecture. Using artificial means to improve the appearance of a building constructed in the name of God is a device of deceit, incompatible with the practice of a good (and moral) architecture. In his writings, Pugin anticipates John Ruskin's aesthetic theories in *Seven Lamps of Architecture*, a volume which places the relationship between structure and decoration at the center of the argument. The balance

5 https://www.online-latin-dictionary.com/latin-english-dictionary.php?parola=mos.

6 Augustus Welby Northmore Pugin, *Contrasts: or a Parallel between the noble edifices of the fourteenth and fifteenth centuries and similar buildings of the present day. Shewing the present decay of taste* (St Marie's Grange: 1836), 13.

between the two is due to a necessary authenticity of them both. This means that the structure has to assume the real function of support, the materials are not masked or counterfeited, and decoration expresses an ideal of beauty coinciding with honesty.

Ruskin's study on medieval architecture, not coming from moral and religious interests, has as a central core the relationship between decorated surfaces and production methods. He condemns the industrial production as deceitful and dishonest, an imitation of an ancient handmade work that, instead of making a unique object, allows for the creation of thousands of identical objects, producing false decorations to be indistinguishably applied to every building. The structural falsification is similarly deplorable when structural elements are hidden and mystified. The architect's ability lies in making the essential supports of the building beautiful, which can now express the ideal of both beauty and constructive sincerity. Ornament is allowed only if it is the unique artisan's expression and must be condemned if it is mass-produced.[7]

This duality beauty-constructive sincerity is clearly shown by Eugène-Emmanuel Viollet-le-Duc, when claiming the link between aesthetics and the principle of structural truth embodied by Gothic architecture.[8] According to Viollet-le-Duc's writings, the attachment to the program and to the constructive processes lies in complying with the conditions imposed by what each case requires and in using different materials according to their own properties and qualities. Instead of classical symmetry and proportions, he employs the sole principle of truth, opposed to an arbitrary aesthetic criterion. Viollet-le-Duc confirms the predominance of reason, linking form to structure.[9] Only reasoning can distinguish Gothic builders, whose modern inquiring spirit is maybe their most admired quality, from the builders of the previous ages, who were subdued by an authoritarian power or subjected to tradition.[10] The Middle Age, on the other hand, is also the mean to widen the perspective on Greek and Roman classical architecture, to be investigated in his contemporary debate. For the medieval builders, the Roman lesson, based on the construction of stone walls structures and the wise use of the vault, is a starting point to re-invent architecture, emphasizing the structural element characterized by decorative motifs. In turn, Greek architecture is based on the principle of the point of vertical support and thus starts from the soil to dispose the points of support in a symmetrical way. Greek architecture and Gothic architecture are linked by common aims and ideals, because they rely on the freedom of a rational research towards an idea of uncanny and beauty.[11] Decoration can be seen as the only convenient way to confer nobleness to matter, and it also expressed as the moral necessity of the builder to try to give materials a form convenient to their nature and to their static exigencies.

This convenience to the nature of materials is to be remembered in relation to Auguste Perret's architecture. In the first decades of the 20th century, Perret gathers Ruskin's theory concerning the honest application of the materials and Viollet-le-Duc's lesson, looking to Greek architecture as a model for the correspondence between structure and appearance of the buildings. The first applications of concrete, a material as new as steel some decades earlier, are for Perret incentives for taking advantage of its qualities and thus stating the link between form and means of constructions. Perret finds in Gothic architecture the interrelation between structure and form he was looking for in the new architecture. Relying on Viollet-le-Duc's heritage and convinced that every element of Gothic architecture has a functional or technological origin and reason, Perret affirms that architecture has to sincerely express the spirit of the time; it can use new forms only if they result from the unhidden application of a new structural system.

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7 John Ruskin, *The Seven Lamps of Architecture* (London: Smith, Elder & Co, 1855), 32, 49.

8 Eugène-Emmanuel Viollet-le-Duc, *Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle*. [*A Reasoned Dictionary of French Architecture from 9th to 16th Century*] (Paris: Bonaventure et Ducessois, 1854), 61-62, 149.

9 Eugène-Emmanuel Viollet-le-Duc, *L'architettura ragionata. Estratti dal Dizionario* [*The Reasoned Architecture. Abstracts from the Dictionary*], ed. Maria Antonietta Crippa (Milano: Jaca Book, 1988), 108.

10 Ibid.

11 Ibid.



Fig. 1: The decorated concrete of the building in Rue de Franklin, Paris, by Auguste Perret, 1903, compared to the ornamental motifs of the building next to it

The use of concrete allows Auguste Perret to test the plasticity of the new material and the post and lintel system following the idea of constructive sincerity. In his architecture, one can find the application of Ruskin's belief that the ability of the architect lies in making beautiful the necessity of structure. The real problem of concrete is to be related to that of construction in general, because its shape is exactly the one it receives from the formworks.[12] The recall to carpentry in the treatment of ceramic details characterizing the cladding of the building in Rue Franklin (1903-1904) is a representative clue of the relationship between structural frame and cladding, interpretation of the decoration of the concrete structure (Fig. 1).

Again, the issue of ornament conceived as something convenient emerges as the relationship between structure and exterior look and will be more and more compelling in the following decades.

12 Peter Collins, *La visione di una nuova architettura* [*Concrete. The vision of a new Architecture*] (Milano: Il Saggiatore, 1965).

The Essential Decoration in Modernism

Six centuries ago, Leon Battista Alberti underlined that the architectural form should depend on human needs. As pointed out by Elisabetta Di Stefano, the pair beauty-ornament was at the center of the aesthetic theories of the Italian master of Renaissance.[13] Alberti explains that although ornament is almost absent in the primitive construction because its aim was the immediate need for shelter, the more the art of building evolves, the more architecture needs it. Ornament is needed because it fulfills the aesthetic pleasure; so, it is not superfluous but necessary for bestowing the beauty of the building.[14] Decoration is crucial especially for public and sacred buildings. Nevertheless, Alberti is aware that decoration is something added on, so he asks himself to which point it is licit to use it. The solution lies in the concept of *decor*, explained by the metaphor of beauty. Like in the Greek ideal, the perfect beauty is the naked body, but the ornament, as a dress, is needed in the convenient way according to the use and the social importance of the building.

Nudity, as a value of perfect beauty, is at the center of the 20th century revolution of Modern Movement.

Using Loos's words, "poverty is not a disgrace. Not everyone can be born into a feudal manor house. But to pretend such a thing to one's fellow men is ridiculous, immoral."[15] The immorality of ornament emerges again, almost a century after Pugin's writings. It is resumed in connection with the convenience of cladding. Loos sees it as a natural value when it is not disguised in something else but is reproachable otherwise:

> "stucco can be given any ornament but one – bare brickwork. We might imagine that there is no need to utter something so obvious, but it is only recently that my attention has been drawn to a building whose plastered wall was painted red and given white joints. That very popular kitchen decoration that imitates stone blocks falls under the same heading. And so, all materials that serve to disguise walls – wallpaper, tarpaulin, fabrics and tapestries, tiles and stone blocks – should not be used for representation."[16]

As Viollet-le-Duc wrote earlier, the ornament used to disguise is immoral and indecent. Moreover, Loos was certainly aware of the anthropological studies of the period, especially Ernst Grosse's.[17] He summarized their findings in a very harsh way (certainly condemnable from our contemporary perspective), explaining that the most important development of the century was the abandonment of ornament: "As culture advances, it excludes object after object from being decorated with ornaments."[18]

The time came for the ornament to be seen as a crime. Loos's story of The Master Saddler[19] explains very well the concept of something beautiful for its shape is governed by its use.

A similar idea is expressed by Le Corbusier too, in *Towards a New Architecture*:

> "Decoration is of a sensorial and elementary order, as is colour, and is suited to simple races, peasants and savages. Harmony and proportion incite the intellectual faculties and arrest the man of culture. The peasant loves ornament and decorates his walls. The civilized man wears a well-cut suit and is the owner of easel pictures and books. Decoration is the essential overplus, the quantum of the peasant; and proportion is the essential overplus, the quantum

13 Di Stefano, *L'altro sapere,* 28.

14 Alberti, *I dieci libri*, 3, 123, 210.

15 Adolf Loos, "The Potemkin City," in *Ornament and Crime*, 30.

16 Adolf Loos, "The Principle of Cladding," in *Ornament and Crime*, 47.

17 Ernst Grosse was the author of the anthropological work *Die Anfänge der Kunst*, 1894, about the artistic expressions of the primitive populations.

18 Adolf Loos, "Ladies' Fashion," in *Ornament and Crime,* 36.

19 Here I refer to the Italian translation, "Il mastro sellaio," in Adolf Loos, *Parole nel vuoto* [*Spoken into the Void*] (Milano: Adelphi 2006), 97-98.

> of the cultivated man. […] And beauty? This is an imponderable which cannot function except in the actual presence of its primordial bases: the reasonable satisfaction of the mind (utility, economy)."[20]

Thus, if the ornament is despicable because it belongs to the uncivilized man, proportion and harmony (those of the perfect form of Alberti's horse, for instance) are the only decoration needed. Of course, even if the words are harsh, the projects conceived by these two masters leave room to further reflection. Indeed, the decoration acquires a hybrid nature resulting from the needs of the modern man, whose life is rooted in scientific development and mathematical reasoning, so that the free man lives in hygienic, clean houses, as Le Corbusier would say, almost ten years later:

> "I believe that we are entering on a period infinitely more serious, when we shall no longer have the right to stick on something, but when the pure, regenerating spirit of modern times will be expressed by organisms with a mathematical interior. […] Architecture provides shelters. These shelters supply human need, from the dwelling to the building erected for civic, intellectual or mystic purposes, etc."[21]

And a few lines later:

> "[in the past] There was no decoration in the houses; people lived with a robust simplicity-proof of their moral wholesomeness."[22]

However, when he stresses on the need for a pure architecture, he speaks about the importance of a sort of alliance between architects and painters and how architecture would have been enriched by "an appropriate color."[23] Indeed, the attention given to the colors or to the particular sculpture-like form of the walls in Le Corbusier's work is well-known. It is not a total lack of ornament, but on the contrary the presence of a necessary decoration, an appropriate one. If one recalls, for instance, the great attention to the use of marble revetment in Loos' interiors, this concept of proper decoration becomes more intelligible.

The debate within the Modern Movement concerning what is decent finds an interesting explanation: since ornament for its own sake is "a crime," the appropriate decoration, if required, is not something to be added on. The accepted decoration is something one achieves when anything more cannot be removed. Alina Payne explains in this way the suspicion towards ornament: "Once designated as a sculptural 'add-on,' ornament signaled wastefulness and anachronism and was profoundly suspect in an industrial economy."[24]

Useless, anachronistic, and fake: Nikolaus Pevsner well described this idea of superfluous ornament as reported by David Watkin in his work. Pevsner's words are remarkably similar to Pugin's argument against fake materials and technique.[25] It is that "lie or trick" for which Perret criticized his contemporaries and against which he theorized.[26]

The role of decoration in the modern language is clearly shown by Pevsner in his most renowned work *Pioneers of Modern Movement.* Here, he traces back how decoration, perceived as something applied but necessary, was present in the works of those "masters of the masters," such as Sullivan, emphasizing the fundamental difference between his ornament, that cannot

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20 Le Corbusier, *Towards a New Architecture* (New York: Dover Publications, 1986 [first edition 1923]), 143.

21 Le Corbusier, "The Quarrel with Realism. The Destiny of Painting," in *Circle. International Survey of Constructive Art*, ed. J. L. Martin, Ben Nicholson, N. Gabo (New York-Washington: Praeger Publishers, 1971), 71.

22 Ibid.

23 Ibid., 73.

24 Alina Payne, *From Ornament to Object. Genealogies of Architectural Modernism* (New Haven: Yale University Press, 2012), 15.

25 David Watkin, *Architettura e Moralità. Dal Gothic revival al movimento moderno* [*Morality and Architecture. From Gothic Revival to the Modern Movement*] (Milano: Jaca Book, 1982), 107.

26 Kenneth Frampton and John Cava, *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture* (Cambridge: MIT Press, 2001) 154.

be understood "without a vivid memory of the austerity of the main lines and blocks of his buildings" and Victor Horta, who remains "a decorator."[27] About Perret's Rue Franklin building, he states that

> "though the infilling panels are of ceramic ware with foliage decoration in relief, the eye is not detained by them, but follows the vertical and horizontal girders and beams all along the front. A nakedness appears that seemed shameless at the time when the house was built."[28]

This time, the ornament is tolerable and decent because it is something that does not trouble the eye, so the apparent bareness of the volumes is preserved.

From this perspective, Mies van de Rohe "less is more" means that simplicity is convenient. Thus, in Karsten Harries words, one should ask "must not Mies' symbolic exposure of the steel frame be considered decoration? And is not the same true of Rudolph's use of concrete?"[29]

In Italy, where the classical heritage was always present, the dialectics between superfluous ornament and appropriate decoration matched with the critical thought on the relationship between structure and cladding, especially in the 1950s and 1960s. In this regard, Pier Luigi Nervi's contribution (among others) was particularly important. Nervi studied the relationship between construction and architectural aesthetics in the famous *Aesthetics and Technology in Building*, where he points out the need of good technology for a good architecture. Aesthetics cannot depend on the abstract research of beauty, but it must be the product of the technological development. According to Nervi, beauty in architecture starts with the primary truth of the structure: an architecture made of solids and voids has no meaning without a truthful structure. He also makes frequent references to the Gothic ideal, highlighting the beauty of wide windows and what he defines as the constructive miracle of a Gothic cathedral.

> "For several years I have tried to examine works of architecture of the past and of the present from the point of view both of the builder able to understand, evaluate, and appreciate the problems of the various methods of construction […]. This dual investigation has brought me to the conclusion that a technically perfect work can be aesthetically inexpressive but there does not exist, either in the past or in the present, a work of architecture which is accepted and recognized as excellent from the aesthetic point of view which is not also excellent from a technical point of view. Good technology seems to be a necessary though not sufficient condition for good architecture."[30]

Obviously, far from the will for a Neo-Gothic style, throughout the Gothic example Nervi underlines the key to what he believes is good architecture, that is: the showing of the structure and the technological sincerity comes from the coherence among form, structure and construction. Nervi's structural rationalism has strongly influenced Italian architectural culture, enthusiastically welcoming his works since Berta Stadium (1932) and finding in his columns on *Casabella*, "Critica delle Strutture", an intense yet short acknowledgment.[31]

If we look at the work of Giuseppe Samonà or the BBPR office (among the others), the structural issue, since the birth of the rationalist movement to the post-war period, crosses the diverse spirits of the Italian architecture. The use of the sincerely shown concrete finds in Perret the progenitor of a generation of architects that believed the primacy of the structure as a practice of the composition. The reference to Perret can be seen in quite different directions and personalities, from Ernesto Nathan Rogers, to Vittorio Gregotti, to Giuseppe Samonà.

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27 Nikolaus Pevsner, *Pioneers of Modern Design. From William Morris to Walter Gropius* (Middlesex: Penguin Books, 1975), 98.

28 Ibid., 180.

29 Karsten Harries, *The Ethical Function of Architecture* (Cambridge: The MIT Press, 2000), 76.

30 Pier Luigi Nervi, *Aesthetics and Technology in Building. The Charles Eliot Norton Lectures, 1961-1962* (Cambridge: Harvard University Press, 1965), 2.

31 In 1956 Nervi enters the scientific committee of the journal *Casabella,* at that time under the guide of Ernesto Nathan Rogers, and with the n° 223, in January 1959, he starts a column named *Critica delle strutture*, but he will stop the collaboration with the n° 227.

Even if shown in different and various backgrounds or individual poetics, the common memory of the Perretian school – as origin of and central to the Modern Movement aesthetics – consists especially of the expressive use of concrete as both structure and decoration.

Surface Architecture

In this section I would like to shed light on the contemporary role of the ornament in architecture, emphasizing the independence of the architectural surface from the structure and its autonomy in expressing the aesthetic values of the building.

On the one hand, as product of our *société du spectacle*, architecture places great importance on its outer appearance. On the other hand, the relationship between structure and cladding, thanks to the advancement of technological means, loses its meaning. It is the cladding itself, the surface, the place where the architectural expression condenses.

Since its origins, the language of architecture borrowed from other arts, especially textile art, to customize the primordial element of the cladding, the fence, the separation between an inside and an outside. Gottfried Semper described the functions of the *fence* in the chapter *Drittes Hauptstück. Textile Kunst*[32] of his majestic work *Der Stil*, and in *Die vier Elemente der Baukunst*,[33] where he observed that the most ancient way to adorn the fence was by weaving, evolving considerably later in brick walls. Nevertheless, from wicker weaving to the brick wall, the meaning, the very essence of the wall – *das eigentliche Wesen der Wand*[34] – stays intact. The carpet *is* the wall: if the wall in its function stays hidden, the carpet – *der Teppich* – is the true representative for the wall.[35] The role of the carpet has been replaced by stucco, plaster, painting, or other materials like marble or wood over time. Also quoting Adolf Loos, "cladding is older than construction."[36] But what happens if cladding becomes a mask to other materials? Loos proposed a law against this eventuality:

> "So this law is as follows: the possibility of confusing the cladded material and the cladding shall be ruled out in every case. Applied to individual cases, this clause would read: wood may be painted with every color, except one – wood color."[37]

The possibilities introduced by the new technologies and means of production changed the very way of conceiving the surface of a building.

Frank Lloyd Wright pointed out:

> "Each material demanded different handling and had possibilities of use peculiar to its own nature. Appropriate designs for one material would not be appropriate at all for another material."[38]

And then, fifty pages later:

> "The 'shell' as human habitation. Why not? Another phase of architecture organic. The straight line, the flat plane, now textured. The sense of interior space coming through, the openings all woven together as integral features of the shell. The rich encrustation of the shells should be visible as mass, the true mass of the architecture. Here ornament would become a legitimate feature of construction. Decoration asserts the whole to be greater than

32 Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten, oder praktische Aesthetik* [*The Style in the Technique and Tectonic Arts, or Practical Aesthetics*] (Frankfurt: 1860), 54.

33 Gottfried Semper, *Die vier Elemente der Baukunst: ein Beitrag zur vergleichenden Baukunde* [*The Four Elements of Architecture*] (Braunschweig: 1951), 57.

34 Ibid.

35 Ibid., 58.

36 Loos, "The principle of cladding," in *Ornament and Crime*, 47.

37 Ibid.

38 Frank Lloyd Wright, *An autobiography* (New York: Barnes & Noble, 1998), 154.

> any part and succeeds to the degree that it helps make this good. Genuine mass in this sense will always be modern."[39]

Two concepts can be underlined: the first one, that is the shell, and the second one, that is ornament as legitimate feature of construction.

The metaphor of the shell as something empty, surrounding a void, can be compared to what Farshid Moussavi calls today "blank" buildings,[40] since she states that the role of the architect is more and more dedicated to the design of the "shell" than to the inner space, so that the exterior expression is independent to the interior, left to other designers. She then writes about the "direct sensations" that the architect wants to transmit through the skin.[41] Serving no more as a balance between structure and cladding, the ornament takes a meaning of its own. This is a kind of rhetorical use of ornament, like Robert Venturi stated for the Modern trend:

> "much of the use of the ornament is rhetorical – like the use of Baroque pilasters for rhythm, and Vanbrugh's disengaged pilasters at the entrance to the kitchen court at Blenheim which are an architectural fanfare. The rhetorical element which is also structural is rare in Modern architecture, although Mies has used the rhetorical I-beam with an assurance that would make Bernini envious."[42]

Then, in the chapter centered on the "decorated shed" in *Learning from Las Vegas*, he explains how the Modernist denying of decoration made the architecture itself "decoration." However, this is also a warning: it is licit to decorate architecture, but it is a crime to deliberately construct decoration. That being said, the aesthetic component applied to add a symbolic function is seen as "necessary decoration."

Since the masters of the Modern Movement were aware of the gained independence of the skin from the structure, thus finding no need in decorating it by borrowing from other arts – no floral motifs, no stucco or superfluous additions – the precise choice of painting the concrete surfaces white was a "necessary" decorative choice.

On the contrary, the high-tech architecture made the threshold between structure and cladding collapse: it is the structure, the conquest of the technological progress, the true essence and expression of architecture.

Contemporary architecture has overcome the traditional contraposition between structure and cladding.

Antoine Picon points out:

> "To this day, architecture has remained distinct from engineering and more generally from construction, like an irreducible supplement. What if the best way to think about this uncanny situation were to imagine it as a form of ornament?"[43]

As something based on the building itself, cladding is inseparable from the materials it is made of. Cladding does not borrow from other arts anymore, it is not a mask and it has no hidden meaning, but it is a sign producing effects and resonances, and this is its best quality.

However, this concept in the use of the material is not new. If we compare two very distant architects like Carlo Scarpa and Rem Koolhaas in their projects in Venice, we will find interesting intersections in the use of materials as necessary ornaments.

Kenneth Frampton said that:

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39 Ibid.

40 Farshid Moussavi and Michael Kubo, *The Function of Ornament* (New York: Actar, 2006), 5.

41 Ibid., 8.

42 Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art, 1966), 40.

43 Antoine Picon, *Ornament. The Politics of Architecture and Subjectivity* (Chichester: Wiley, 2013), 55.



Fig. 2: Detail of the brass balustrade in the restoration project of the Fondaco dei Tedeschi, Venice, by OMA, 2016. The juxtaposition of metals, stones and revetments, like the use of *terrazzo* of different colors and size is the main feature of the project

> "Scarpa's characteristic use of revetment makes itself evident here [Querini Stampalia Foundation] in the travertine lining to the walls of the great hall, where, apart from the traditional use of stone cladding, there is the suggestion of a metonymic exchange between wood and masonry; between wood as it is employed in the deck and handrail of the bridge and travertine as it is laid up against the walls of the exhibition space. Stone thus appears in two aspects; in the first simply as cladding and in the second as a kind of 'wood,' where it is incised, inlaid, and hinged as though it were petrified cabinetwork."[44]

In Rem Koolhaas' restoration of the Fondaco dei Tedeschi (2016) in Venice, the use of the materials recalls Scarpa's influence and the Venetian heritage of mosaics and richness. The restoration intervention clears the former post-office and turns it into a Venetian mall, like a small *Galeries La Fayette*, with rich boutiques, great care in matching colors, materials, and application of new masses, such as escalators and even air conditioning pipes. There is an expressive idea at play of using materials as appropriate not to their intrinsic matter but to the sensation they are meant to express. In Scarpa's oeuvre, decoration came from the incision of the matter, in Koolhaas' work, from the application of the matter (Fig. 2).

Moussavi describes the new function of ornament in contemporary examples as a matter of consistency,[45] an *in-built* sense of order, something directly coming from the embedded forces of the material through the process of construction.

While certainly influenced by new techniques and systems of production, ornament is necessary since it produces emotional resonance and effects, it also extolled itself as a status symbol – of a city or municipality, and of an entrepreneur as well – as it somehow has always happened for churches, *palazzi*, *villas* or tombs. To some, that rise of a star system for Architecture[46] risked producing, as a luxurious mass product, fashion architecture.

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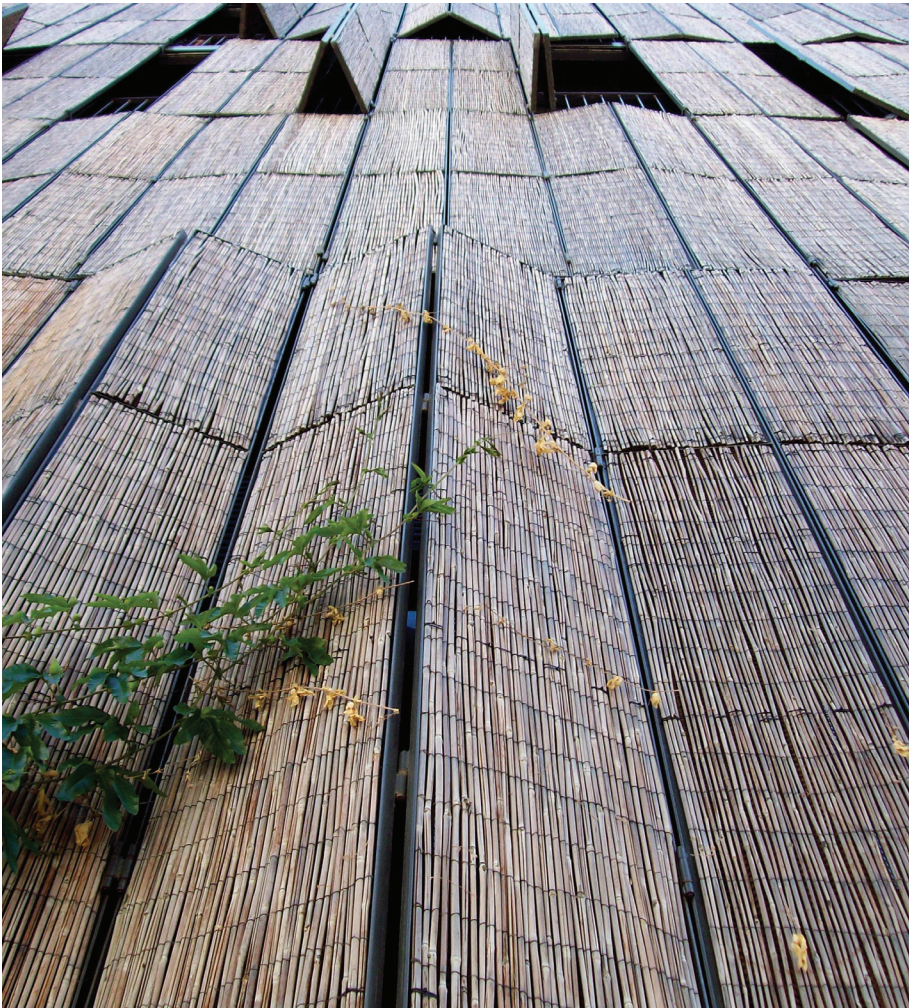
44 Frampton and Cava, *Studies in Tectonic Culture*, 301.

45 Moussavi and Kubo, *The Function of Ornament*, 9.

46 Look at Luigi Prestinenza Puglisi, *La storia dell'architettura. 1905-2018* [*The History of Architecture. 1905-2018*] (Milano: Feltrinelli, 2019).



Fig. 3: Department D2, by Atelier Hitoshi, WU Campus, Vienna
Fig. 4: Detail of the façade of the Bamboo Building, Madrid, by FOA



Nevertheless, beyond that risk, I would like to point out what Ben Pell calls "the resolution of the split between technique and content," which turns the surface into a new dualistic entity,[47] namely a decorated interface where architectural production and cultural expression converge. Regarding this concept and the role of ornament in accentuating structural form, Greg Lynn wrote:

> "In the Deleuzian sense of 'two-fold deterritorialization' each previously distinct category, in this case 'ornament' and 'structure', would have to open themselves up with some lack or deficiency to then allow the other term to reorganize it internally. So it is not just the expansion of structure into the field of ornament, or of ornament becoming structural, but rather a dependency on collaboration that transforms each category in some unforeseen and unprecedented way."[48]

For instance, in the new WU Campus in Vienna, completed in 2013, the buildings being part of the Departments of Economy of the University lead the visitor along the pathways, in a sort of continuous line even though all the buildings are very different from one another. Looking at the waving surface of Department D2, by Atelier Hitoshi (Fig. 3), or at the sinuous panels of the more famous building of the central library by Zaha Hadid, or again the dramatic COR-TEN steel of the department designed by BUSarchitektur ZT, to name just three among the others, the surface entirely shapes the form and vibration of the buildings.

Similarly, FOA's work engages the role of the communicative envelope, whose layers, materials and forms convey an idea of volumes in movement (Fig. 4). Again, the ornamental treatment of the skin is the necessary feature of the architectural object.

It is possible that the architectural ornament is turning into a new unforeseen category, neither functional nor superfluous, but, on the contrary, an "essential excess"[49] in order to have access to a broader cultural audience than in the past. The relationship between the volume and the decorated cladding i.e., the surface of contemporary buildings, could be the new and future field of debate for the architectural discipline.

Conclusions

In the previous sections, I tried to outline how the Latin concept of *decorum* could be retraced in the issue of the necessary ornament in vastly different theories, from the Gothic Revival to the Modern Movement. Decoration is an ornament perceived as something added, but still essential to distinguish architecture from mere construction.

In the story of architecture, it is possible to trace back a relationship between aesthetic taste, moral qualities, and proper ornament. This synthesis can be seen as a balance, alternatively leaning towards the classical order and what it is considered as its opposite, generally the Gothic principles and their alleged connection to the Greek ideals. The temporality of taste justifies the one or the other tendency, with a precise ideal of truth embodied by the one or the other system, and therefore the proper ornament thought as something inseparable from architecture and necessary for its expression if in accord with the truthful architecture. Otherwise, ornament becomes immoral.

From the Vitruvian triad, passing through Alberti, jumping to the Gothic Revival, the issue of the morality of decoration has become a constant theme until the 20th century. Decoration as proper and therefore necessary ornament persists even through the Modern Movement,

47 Ben Pell, *The Articulate Surface. Ornament and Technology in Contemporary Architecture* (Basel: Birkhäuser, 2010), 9.

48 Greg Lynn, "The Structure of Ornament," in *Digital Tectonics*, edited by Neil Leach, David Turnbull, Chris Williams (Hoboken: Wiley, 2004), 65.

49 Pell, *The Articulate Surface*, 16.

when Adolf Loos, Le Corbusier, and Mies Van de Rohe looked at ornament as a crime and promoted simplicity as a moral quality of architecture. Decoration is a hybrid concept inherent to architecture itself, to the relationship between structure and cladding, to the choice of the materials, and to colors and light as revealing the plastic shape of architecture.

Against the dictates of Modern Movement, Venturi described the decorated shed as a rhetorical use of ornament: with its symbolic meaning, decoration makes an essential element of architecture, a necessary ornament.

The quarrel between what was necessary and what superfluous can be found again in the dialectic between structural functionality and revetment. High-tech Architecture produced a formal imbalance by transferring all the expressive values on the exposure of the technological solution. Nowadays, like a recoil effect, the stress on the astonishing technological solution, along with the progressive emptying of the container, whose function loses specificity, guides the conception of buildings whose surface as aesthetic appearance gains all the expressivity of the architectural object. In contemporary architecture, Antoine Picon's words, "décor is always the result of a compromise between not enough and too much,"[50] apply to the surface: since architecture is freed from structure, meaning that it does not depend on the forms of structure (opposing to Pier Luigi Nervi), but allows the surface to be whatever it wants, there is no space for the dialectic between structure and cladding, and the ornamental treating of the skin appears to be the only proper way to characterize the building.

Decoration, once derived by the appropriate relationship between structure and cladding, leaning towards the one or the other over time, changed into a new category which the surface of the architectural building seems to be turned in. The metaphor of the "shell" overcomes the traditional idea of cladding: its decoration through ornament is essential because it is intrinsic in the way of conceiving its form and it is needed, because it fulfills the aesthetic pleasure.

If it is true that today "judgment is passed quickly on the outer appearance, nine tenths of which represent his clothing apparel"[51] – which also applies to architecture – as Rudowsky argued in the 1940s, it is also true that surface architecture frees the ornament from being subject to what is strictly necessary and what is not. Almost coinciding with its clothing, architecture could achieve a sincere and therefore moral expression through the employment of the true qualities of materials, and ornament is required as long as it is necessary for bestowing the beauty of the building, quite like Leon Battista Alberti stated 600 years ago.

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50 Picon, *Ornament*, 123.

51 Bernard Rudowsky, *Are Clothes Modern? An Essay on Contemporary Apparel* (Chicago: Paul Theobold, 1947), 233.

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