

EXEMPLIFICATION AS EXPLANATION: THE NEGATIVE RECEPTION OF MODERN ARCHITECTURE REVISITED

A B S T R A C T

What are the reasons for the negative reception of modern architecture in the 1960s and 1970s? If we consult the critics themselves, the counter-reaction is a result of the overflow of new semantic insights from disciplines such as psychology and sociology in architecture. But if we turn to philosophy of architecture, Nelson Goodman's notion of exemplification might provide some answers; not only to the critiques of modern architecture but also to the epistemic turn affecting architecture. This article argues that it was the extensive use of a formalist aesthetics of exemplification which led to condemnation of the International Style, Brutalism and Structuralism for producing monotonous, self-referential and meaningless works of architecture. By examining the historical critiques of modern architecture under the lens of Goodman's notion of exemplification, a picture emerges where it is the hegemony of one symbol system, exemplification, that may well be the culprit for the negative response to modernism.

KEY WORDS

MODERN ARCHITECTURE
INTERNATIONAL STYLE
BRUTALISM
EXEMPLIFICATION
NELSON GOODMAN

INTRODUCTION

More than anything, ‘meaning’ became the epithet for a wide range of critiques in which modernist buildings and urban planning practices were chastised and condemned for generating monotonous, sterile, unimaginative environments with adverse impact on people’s well-being. In the 1960s and 1970s a vast critical literature emerged wherein modern architecture was put on trial from semiotic, psychological, phenomenological, hermeneutical and sociological viewpoints that were all instrumental in highlighting the cognitive function of architecture.

This paper will attempt to answer the following question: Is it possible that the negative response to modern architecture of its most formalist kind (International Style; Brutalism; Structuralism; High-Tech) can be explained by the oversaturation of these buildings with formalist, reductionist and exemplification strategies? This would imply that exemplification plays a leading role in the failings of these formalist design strategies to gain acceptance and recognition with the general public, and it would help to explain, at least tentatively, why International Style architecture and CIAM urbanism suffered a devastating backlash after 1945.

GOODMAN’S CATEGORIES

Architecture occupies a minor role in Goodman’s *Languages of Art* (1968/1976), where he approaches cultural phenomena as “symbol systems”, but takes centre stage in his article “How Buildings Mean”, published in 1985. Here, Goodman presents us with a thorough explanation of how architecture works through “‘denotation’, ‘exemplification’, ‘expression’, and ‘mediated reference’.”¹ Being mainly non-representational, architecture never had to suffer the shock of abstraction as the pictorial arts did, Goodman claims; thus regarding modern architecture not as an anomaly but as an equally rich generator of aesthetic experience as any other period in the history of architecture.

Denotation, Goodman explains, is central to pictorial representation but is seldom relevant in the context of architecture. Though parts of buildings often denote by way of ornament and symbolism, at least when speaking of traditional, pre-modern buildings, and though “shops that represent a peanut or an ice-cream cone or a hot dog” denote everyday objects to the fullest, it is a rare sight to encounter a building which entirely denotes something else.²

EXEMPLIFICATION AND ITS USE IN FORMALIST ARCHITECTURE

In contrast to the scarcity of denotation in works of architecture, “exemplification is one of the major ways that architectural works mean”, Goodman argues.³ Exemplification occurs when a work of art, or a work of architecture, both displays and refers to some of its own properties.⁴

Goodman remarks that “in formalist architecture” exemplification “may take precedence over all other ways” of meaning. He mentions Gerrit Rietveld’s use of lines and planes in the Schröder House (1924) in Utrecht, where certain aspects of construction are highlighted at the expense of others.⁵ Additionally, colour is also exemplified in the Schröder House (just as in the work of the *De Stijl* group at large).

It is worth noting that Goodman chooses a modernist structure as his example of exemplification in architecture. Catherine Z. Elgin, a follower of Goodman’s, does the same when she mentions that

“I. M. Pei’s addition to the Louvre is a case in point. Because it is both a pyramid and presents itself as such, it exemplifies its shape. Any symbol that at once instantiates and refers to a feature exemplifies that feature.”⁶

She also emphasizes that “exemplification, moreover, is selective. A symbol denotes everything it applies to, but exemplifies only some of the features it has”.⁷ This selective operation, I think, is crucial when identifying exemplification in a work of architecture. In all cases of exemplification, some properties take centre stage while others recede into the background, or are not noticed at all.⁸

Moreover, exemplification can also function metaphorically, what is more commonly called expression.⁹

Exemplification in the literal sense seems highly relevant to understanding modern architecture, which is already indicated by Goodman’s choice of examples. Oftentimes, in formalist modernist buildings, features such as colour, materiality, planarity, modularity, transparency or orientation in space become exemplified to a degree where no other aesthetic formula is allowed to compete with the principle of exemplification. This also explains why, very early on, formal aesthetic experiences of singular aspects of this new architecture, such as transparency, became an object of study in its own right.¹⁰

The usefulness of exemplification for explaining certain types of modernist buildings has already been seized upon by Maurice Lagueux, who locates several relevant cases of exemplification in high-tech architecture, such as the

Centre Georges Pompidou (1971–77) by Renzo Piano and Richard Rogers and the PA Technology Center (1982–85) in Highstown, New Jersey by Rogers alone. In both cases, tectonic systems have been put on display in an almost curatorial way.¹¹

An exceptionally resolute case of the use of exemplification is the enduring design strategy of Richard Meier, whose architectural code does not only entail tectonic and technological exemplification but also the universal application of the white colour as the architect’s trademark.

While Lagueux also draws attention to exemplification of tectonic structure at work in much older architectural pieces, such as Gothic cathedrals exemplifying verticality, it would seem that the presence of exemplification is much more dominant when experiencing twentieth century architecture. Lagueux might admit to such a conclusion since he devotes significant analytical fervour to the architecture of Ludwig Mies van der Rohe, whose oeuvre seems to go typologically either in the extreme horizontal or in the extreme vertical direction. Mies’s way of treating façades becomes a case in point since many of his buildings showcase otherwise tectonic elements as *both* functional elements *and* ornaments, which we witness when looking at the I-beams on the façade of the 860–880 Lake Shore Drive Apartments (1949–51) in Chicago, for instance. Even obliqueness, Lagueux adds, can be exemplified, as is the case of Piet Blom’s Cube Dwellings (1982–84) in Rotterdam.¹²

THE ROLE OF EXEMPLIFICATION IN THE NEGATIVE RECEPTION OF MODERN ARCHITECTURE

Was it the extensive use of a formalist aesthetics of exemplification that led to the condemnation of the International Style, Brutalism and Structuralism for spawning monotonous, self-contained, meaningless and alienating works of architecture? I will attempt to answer this question tentatively.

Let me repeat Goodman’s remark that “in formalist architecture” exemplification “may take precedence over all other ways” of meaning. In other words, the totality of the exemplifying aesthetic manoeuvre may overshadow, or even shut down, other channels of meaning in the experience of a building. As Lagueux’s range of examples demonstrates, exemplification is certainly not alien to pre-modern architecture, yet in the previous architectural cultures and stylistic periods the external appearance of buildings was rarely governed by one mode of reference only. Periods such as Mannerism may indeed witness a novel way of incorporating raw geological references into façades such as extensive

rustication exemplifying stoniness, but those strategies almost always only dominate select zones of the façade, leaving room for denotation through artful ornament to take place in other localities. Likewise, Remei Capdevila-Werning draws attention to the fact that, in many pre-modern works of architecture such as Gothic and Baroque churches, the exemplification of structure, form and geometry requires a second look to ascertain since exemplification is coexistent with, or even subordinated to, other modes of reference at work.¹³ This would indicate once more that a reduction in the range of referential modes available occurs in many modernist buildings, which can explain why Dalibor Vesely registers a profound loss of richness of communication in the resulting works of the 1920s avant-garde movements:

“In all these studies and investigations, the recurring issues are the ontological nature of the conditions and possibilities of formalization, the nature of formal systems, and continuity of meaning in mathematical operations.”¹⁴

What is lost here, according to Vesely, is the possibility of cultivating complex sequences of communicative spaces where one art form partakes discreetly in the other’s domain in order to support an overarching architectural continuum, such as in the Würzburg Residence (1720–78), and while formidable modernist counterparts to such a Baroque/Rococo *Gesamtkunstwerk* orchestration of space certainly exist, the advent of abstraction substantially altered this continuum of mixed media and over-arching semantic programme.¹⁵ It thus seems reasonable to assume that the dominance of exemplification in both formalist architecture and formalist art leads to greater aesthetic alignment across mediatic platforms.

Mies’s oeuvre serves as a good focal point here, as even phenomenological critics of modernism have applauded this architect’s sensitivity to richness of materiality and his care for craftsmanship.¹⁶ Mies is a pivotal figure in Vesely’s critical account of an emerging gap “between the traditional symbolic and the new instrumental representation”,¹⁷ and already in his ground-breaking critique, *The Language of Post-Modern Architecture* (1977), Charles Jencks lamented that, in Mies’s Illinois Institute of Technology (IIT) campus (1939-58), a breakdown of architectural communication was evident since the chapel and the boiler house had changed places in the apparent hierarchy and codification of building types. Incidentally, Rob Krier arrived at a similar conclusion about modernist churches in general.¹⁸ All the campus buildings had been subjected to the tyranny of the same modularity and the same materiality, and it would seem that it is exactly the universal use of exemplification (in conjunction with functional differentiation) in the campus buildings that triggered Jencks’s experience of alienation and loss of meaning.¹⁹

Jencks was demanding instead “a multivalent architecture” that should be both “emotive *and* cognitive.”²⁰ Much has been said of the “silence” of the Miesian aesthetic, and if we for a moment accept this characteristic as implying a lack of semantic differentiation, we might add that there is less tactile appeal in the glass façades to make up for the alleged loss of semantic richness.²¹ And while the Louvre Pyramid benefits contextually from having as its backdrop a historic royal and imperial residence, in all its rich architectural splendour from various centuries, no such heritage environment comes to the semantic rescue of the Chicago campus.

However, Goodman himself is much less judgmental about this relatively new type of architecture. He writes that:

“In painting, where representation was customary, the absence of representation sometimes left a sense of deprivation and gave rise to both acrid accusations and defiant defences of meaninglessness.”²²

Yet he does not extend this meaninglessness to architecture. Instead he states that “where representation is not expected, we readily focus upon other kinds of reference.”²³ This is where I would argue that this is not necessarily the case, since pre-modern works were characterised by a layering of referential modes, and that exemplification may lead, not to a semantic emptying of the architectural experience, but to the hegemony of one mode of reference at the expense of others.

Modern-day use of exemplification is embedded in an industrial culture of mass production and modularisation; something that indirectly became the target for some of the critics of modernism. In *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form* (1972/1977), Venturi, Scott Brown and Izenour commented, while paraphrasing Alan Colquhoun, that the infatuation with the industrial vernacular in the early stages of modernism could not be justified by functionalism alone:

“Early Modern architects appropriated an existing and conventional industrial vocabulary without much adaptation. Le Corbusier loved grain elevators and steam ships; the Bauhaus looked like a factory; Mies refined the details of American steel factories for concrete buildings.”²⁴

And, referring to Mies, Le Corbusier and Gropius, the authors claim that:

“Their factorylike buildings were more than ‘influenced’ by the industrial vernacular structures of the then recent past ... Their buildings were explicitly adapted from these sources, and largely for their symbolic content, because industrial structures *represented*, for European architects, the brave new world of science and technology.”²⁵

What they describe is the workings of mediated reference – a complex chain of cultural symbolism, and their analysis could easily be extended to include Richard Meier and the high-tech followers as well. But what happens when one gets habitually accustomed to this brave new world? Then it ceases to hold sway over the imagination, and only the strategy of exemplification remains active. We must assume this to have been the case at the time of Mies’s efforts on the IIT campus. “The architecture of Mies van der Rohe and his followers is the most univalent formal system we have”, Jencks asserts, stating that “it overwhelms all other concerns”.²⁶ While the IIT buildings certainly display different *kinds* of exemplification simultaneously at work – horizontality, transparency, tectonic structure, blackness, brickwork²⁷ – it is the absence of other active modes of reference, such as denotation or allusion, that causes Jencks’s disappointment.²⁸

While International Style architecture was Jenck’s preferred whipping boy, Brutalism occupied an identical role for the Venturis and Izenour. To them, the sculptural buildings by Paul Rudolph and the likes of him, were nothing more than manifestations of private, subjective, whimsical expressionism without any share in common cultural experience. To take part in this shared culture, they claimed, one had to follow the denotative path and not stray off to more connotative provinces that belonged to the domain of connoisseurs.²⁹ The remedy for this modernist malady was to inscribe the buildings with closed reference in the vein of the nineteenth century symbol systems, they argued.

Jencks thought otherwise. He praised Le Corbusier’s sculpted concrete chapel in Ronchamp (1953–55), the origin of Brutalism, for its ability to provoke an unending string of metaphors. This also happened to be the nature of Le Corbusier’s actual design process, where impressions of a crab shield, a boat, a ski slope, a sluice, and an aircraft wing were synthesized into a design proposal. Dell Upton concludes that:

“The concrete images were thoroughly transformed, even dissolved, in the course of the design process as they were subjected to the distinctly unsymbolic operations necessary to create usable, buildable structures.”³⁰

Upton’s assertion would indicate that the merit of the Ronchamp chapel is its enigma of representation. “Le Corbusier has so overcoded his building with metaphor”, Jencks instead claims, calling it a “Rosetta stone” waiting to be decoded.³¹ I would turn this claim on its head, instead arguing that it is not encoding, but the overall Sphinx-like character that imbues the chapel with both power of form and openness to interpretation.

EXEMPLIFICATION VERSUS PROPORTION

Alongside the evolution of the Modern Movement in architecture, certain art history critics and theorists such as Sigfried Giedion and Colin Rowe aimed to historicise and normalise the architectural idiom of this movement, thus diminishing the radicality of its ideas.³² The historical continuity of the use of harmonious rules of proportion occupies a key role in Rowe's account of modern architecture, and architect Arne Jacobsen concurred:³³

“The fundamental factor is proportion. Proportion is precisely what makes the old Greek temples beautiful. ... And when we look at some of the most admired buildings of the Renaissance or the Baroque, we notice that they are all well-proportioned: that is the essential thing.”³⁴

As Capdevila-Werning mentions, “Palladio's Villa Rotonda exemplifies proportion”, and proportion has the potential of being a major objection to the idea presented here – that the obsessive use of exemplification in Modern Movement buildings was instrumental in the negative reception of this current. However, widespread incorporation of harmonious proportions did not immunise modern architecture against fierce criticism, nor was it sufficient to recreate a sense of continuity between modernism and past styles of architecture.³⁵

This would suggest that, although being an instrument of exemplification, proportion alone cannot shed light on the alienating effects of modernism unless other exemplification strategies in a work of architecture are taken into consideration.

CONCLUSION

“A building exemplifies when it functions like a sample”, Capdevila-Werning explains.³⁶ As I hope to have made plausible, such semantic concentration and such reduction of means of expression in a work of architecture can lead to a sense of the loss of meaning in the beholder, if not adequately supplemented or challenged by other coactive ways of referencing. At the same time, it is important to take into account that “exemplification provides a privileged epistemic access to certain properties that would otherwise remain obscure”.³⁷ This would place the phenomenon of exemplification within the domain of appearing, thus making it an integral part of architectural experience and appreciation.³⁸

My aim here has been to search for an aesthetic–epistemic break caused by the reorientation toward formalist exemplification by the modernist avant-gardes. In subsequent critiques of modernism, where this tipping of scales from one

system of representation to another was acknowledged just to be bemoaned, disciplines such as psychology and sociology were called upon to make the case for a rejection of modernist typology altogether. “The functionalists made no mention of the psychological and social aspects of the design of buildings or public spaces”, Jan Gehl remarked in his influential corrective to the urban design principles of the CIAM.³⁹

The predominance of exemplification as a symbol system might also help to explain why strictly linguistic, semiotic, rationalist and universalising critiques of modernism were less successful in telling modernism and its predecessors apart than more psychologising, hermeneutic and socially-oriented alternatives:

“All we need to understand [in] architecture can be seen in architecture itself, but to understand it there must be some prior process of learning. The criterion of understanding is what we say, how we speak of architecture and how we act on it, but the architectural meaning itself is not translatable into words.”⁴⁰

The majority of the influential critiques of modern architecture were never merely aesthetic but also cognitive in nature. That is why, as I have argued here, several modernist buildings may well have been aesthetically successful, even in terms of creating a dialogue with compositional rules of the past, but have been considered lacking in semantic and psychological respects at the same time. The hegemony of exemplification, the monopoly of reference and the fixity of meaning, I would conclude, can partially explain the negative reception of mainstream modern architecture in the 1960s and 1970s. This may be implied already in Goodman’s own emphasis that a formal abstract work “is not an inert unmeaning object.”⁴¹ Ultimately, that leaves us with the question of whether there can be *too much* meaning in a work of architecture.

NOTES

- 1 Nelson Goodman, "How Buildings Mean", *Critical Inquiry* 11, no. 4 (June 1985): 642-653 at 644.
- 2 Ibid., 644.
- 3 Ibid., 645.
- 4 Goodman often explains exemplification with an example from the textile business: "A commonplace case is a swatch of yellow plaid woolen serving as a sample. The swatch refers not to anything it pictures or describes or otherwise denotes but to its properties of being yellow, plaid, and woolen, or to the words 'yellow', 'plaid', and 'woolen' that denote it. But it does not so exemplify all its properties nor all labels applying to it—not, for instance, its size or shape. The lady who ordered dress material 'exactly like the sample' did not want it in two-inch-square pieces with zigzag edges." Goodman, "How Buildings Mean", 645.
- 5 "In other buildings made of columns, beams, frames, and walls, the structure is not thus exemplified at all, serving only practical and perhaps also other symbolic functions." Ibid., 646.
- 6 Catherine Z. Elgin, "Relocating Aesthetics: Goodman's Epistemic Turn", *Revue internationale de Philosophie* 147 (1993): 171-186 at 172.
- 7 Ibid., 173 (original emphasis). "Exemplification is selective." Remei Capdevila-Werning, *Goodman for Architects* (London and New York: Routledge, 2014), 46.
- 8 Goodman states that "just which among its properties a thing exemplifies can often be hard to tell" (Goodman, *Languages of Art*, 66.), but even Goodman's notion of the reference component of exemplification remains vague, and other scholars have therefore successfully sought to clarify our understanding of the mode of exemplification. See: Inga Vermeulen, Georg Brun and Christoph Baumberger, "Five Ways of (not) Defining Exemplification". In *From Logic to Art: Themes from Nelson Goodman*, ed. Gerhard Ernst, Jakob Steinbrenner and Oliver R. Scholz (Frankfurt am Main and Lancaster: Ontos-Verlag, 2009), 219-250.
- 9 "Reference by a building to properties possessed either literally or metaphorically is exemplification, but exemplification of metaphorically possessed properties is what we more commonly call 'expression'," Goodman asserts. In that way, a building can metaphorically showcase properties borrowed from the living world – emotions, for instance – that is has no way of actually enacting. Lastly, Goodman mentions "mediated reference", which includes more complex chains of associations where indirect reference is at work. Goodman, "How Buildings Mean", 647.
- 10 Colin Rowe and Robert Slutzky, "Transparency: Literal and Phenomenal", *Perspecta* 8 (1963): 45-54. Hans Ibelings would later claim that "the immediate sensation of space, form and light, of transparency and weightlessness is more important in this modern architecture than the communication of any messages." In this regard, he clearly belongs to a culture of aestheticism far removed from Goodman's cognitivist stance. Hans Ibelings, *Supermodernism: Architecture in the Age of Globalization* (Rotterdam: NAI, 2002), 43.
- 11 Maurice Lagueux, "Nelson Goodman and Architecture", *Assemblage* 35 (April 1998): 18-35 at 28.
- 12 Ibid., 28-29.
- 13 "Exemplification of form, structure, and any other property does not need to be conspicuous, but can also be subtle and not immediately obvious." Capdevila-Werning, *Goodman for Architects*, 49.
- 14 Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, MA & London: The MIT Press, 2004), 23.
- 15 Ibid., 86-89.
- 16 "In Mies van der Rohe's architecture a frontal perspectival perception predominates, but his unique sense of order, structure, weight, detail and craft decisively enriches the visual paradigm." Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (London: Wiley, 2005), 29.
- 17 Vesely, *Architecture in the Age of Divided Representation*, 17.

- 18 “The underground church at Lourdes, or the one by Nervi beside Saint Peter’s, can at best be called well-
structures garages. These buildings have nothing to do with churches. Many modern churches can be
mistaken for being industrial halls”. Rob Krier, “Elements of Architecture”, *Architectural Design Profile*
49, *Architectural Design* 9/10 (1983), 15.
- 19 Charles Jencks, *The Language of Post-Modern Architecture* (London: Academy Editions / New York: Rizzoli, 1977), 16-17.
- 20 K. Michael Hays (Ed.), *Architecture Theory since 1968* (Cambridge, MA and London: The MIT Press, 1998), 306 (original emphasis).
- 21 Other scholars have interpreted this aesthetic (of the Seagram Building) as pure dematerialisation, see:
Reinhold Martin, “Atrocities. Or, Curtain Wall as Mass Medium”, *Perspecta* 32 (2001): 66-75.
- 22 Goodman, “How Buildings Mean”, 644-645.
- 23 *Ibid.*, 645.
- 24 Robert Venturi, Denise Scott Brown and Steven Izenour, *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form* (Cambridge, MA: The MIT Press, 1977), 3.
- 25 *Ibid.*, 135 (original emphasis).
- 26 Jencks, *The Language of Post-Modern Architecture*, 15.
- 27 A Gothic cathedral can, in one and the same interior space, possess both horizontality and heaviness, but
without both properties necessarily being exemplified. Again, modernist architects seem to make use
of exemplification to a much higher degree, and with less ambiguity as to what is being exemplified.
Lagueux, “Nelson Goodman and Architecture”, 33.
- 28 Regarding various kinds of ‘quotation’ in architecture, Remei Capdevila-Werning proposes “that Good-
man’s conception of *allusion* as an indirect and complex mode of reference may serve to explain them
all.” Remei Capdevila-Werning, “Can Buildings Quote?”, *The Journal of Aesthetics and Art Criticism*,
69 (2011): 115-124 at 122.
- 29 Venturi, Scott Brown and Izenour, *Learning from Las Vegas*, 92-93; 101-102 and 118.
- 30 Dell Upton, “Signs Taken for Wonders”. In *Relearning from Las Vegas*, ed. Aron Vinegar and Michael J.
Golec (Minneapolis: University of Minnesota Press, 2009), 147-162 at 153.
- 31 Jencks, *The Language of Post-Modern Architecture*, 47.
- 32 Panayotis Tournikiotis, *The Historiography of Modern Architecture*, trans. Cox and Solman (Cambridge,
MA and London: The MIT Press, 1999).
- 33 Colin Rowe, “The Mathematics of the Ideal Villa” [1947]. In *The Mathematics of the Ideal Villa and
Other Essays* (Cambridge, MA and London: The MIT Press, 1976), 1-27.
- 34 From an interview with Jacobsen in the Danish newspaper *Politiken* in 1971. Félix Solaguren-Beascoa
de Corral, *Arne Jacobsen*, trans. Graham Thomson (Barcelona: Gustavo Gili, 1997), 22.
- 35 Capdevila-Werning, *Goodman for Architects*, 47.
- 36 *Ibid.*, 47.
- 37 *Ibid.*, 46.
- 38 See for instance: Michael Asgaard Andersen and Henrik Oxvig (Eds), *Paradoxes of Appearing: Essays
on Art, Architecture and Philosophy* (Baden: Lars Müller Publishers, 2009).
- 39 Jan Gehl, *Life Between Buildings: Using Public Space*, trans. Jo Koch (Copenhagen: The Danish Archi-
tectural Press, 2001), 47.
- 40 Jānis Taurens, “‘Meaning’ and ‘Context’ in the Language of Architecture”. In *KOHT ja PAIK / PLACE
and LOCATION: Studies in Environmental Aesthetics and Semiotics VI*, ed. Eva Nāripea, Virve Sarapik
and Jaak Tomberg (Tallinn: The Research Group of Cultural and Literary Theory, Estonian Literary
Museum, Institute of Art History, Estonian Academy of Arts, Estonian Semiotics Association, 2008),
71-82 at 80.
- 41 Goodman, “How Buildings Mean”, 648.

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