

THE LINGUISTIC ANALOGY



The Language of Post-Modern Architecture

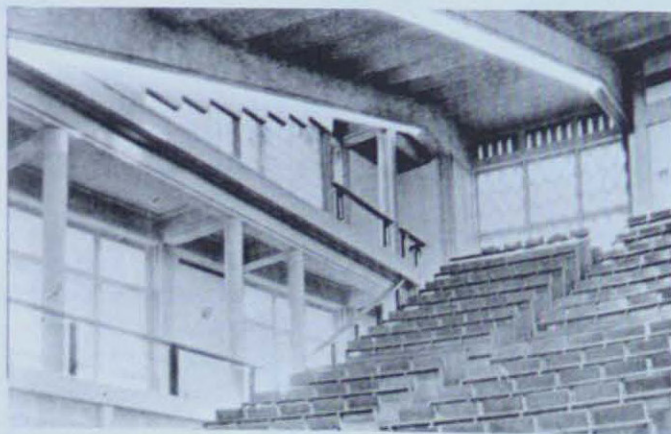
One of the keynote speeches at the ACSA (Association of Collegiate Schools of Architecture) Annual Meeting, Santa Fa, 1979. In the *Published Proceedings*, John Meunier, editor.

The current, and certainly the most widely popularized analogy between architecture and language nowadays is that whereby architecture is interpreted in accordance with the theory of literary criticism called "structural linguistics." For this reason, I begin with an illustration from Charles Jencks' *The Language of Post-Modern Architecture*. In the text which accompanies this picture, he writes—

When pre-cast concrete grills were first used on buildings in the late 1950's, they were seen as "cheesegraters," "beehives" or "chain-link fences." Ten years later, when they became the norm in a certain building type, they were seen in functional terms: i.e. "this looks like a parking garage."

The caption to his illustration says:

While the "cheesegrater" is now no longer perceived as a metaphor, the precast grill is on rare occasions still used for offices. Whether it signifies garage or office depends on the frequency of usage within a society.¹

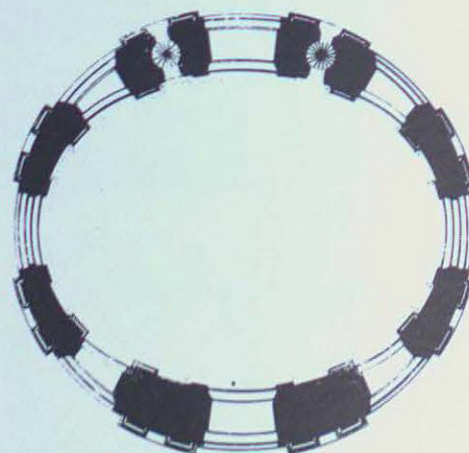


D. Honegger: University at Fribourg—Auditorium

It is not my present purpose to argue, in the context of this lecture, the accuracy or otherwise of this general philosophical approach, which in France is called "structuralism." But it seems to me essential to begin any discussion on "the linguistic analogy in the history of architecture" by distinguishing between the basic theoretical concepts used today and those initiated two centuries ago.

In the 1750's, the idea emerged that all buildings can, if well designed, express their purpose. The idea was not that this purpose needed to be explained verbally. It was, on the contrary, that a building's function was "announced" by the manner in which it was designed. Similarly, architectural criticism was concerned primarily with assessing the way each architect had translated the requirements of his client into a building, and overcome the constraints imposed by topographical and financial limitations. The final result was judged by reference to the standards of classical composition, the only standards then recognized as valid.

In the 1750's architectural criticism, (which concerned the translation of needs into visual shapes) differed from lit-



Mariette, Architecture Française

Le Vau: "Plan de l'Eglise du Collège des Quatres Nations"

erary criticism, which was then primarily concerned with translating one language into another (such as Latin into the vernacular). Today, literary criticism is still a form of translation; but instead of translating from one language to another, the critic simply translates from one type of English into another type of English, or from one type of French into another type of French. The linguistic analogy used by architectural theorists two centuries ago was part of a process of logical thought. Its purpose was essentially heuristic. It was concerned, like all philosophical analogies since the time of Plato, with inductive speculation which might hopefully lead to the discovery of new useful hypotheses. Though it began in the mid-eighteenth century, its heyday was in the the 1850's when the Battle of the Styles was bringing Revivalism into disrepute, and when no viable new systems of architectural construction—such as steel and reinforced-concrete frames—had as yet been economically developed within the building industry. From the late-nineteenth century onward, the biological and mechanical analogies became more popular; but since they were also used heuristically, it mattered little which analogy was argued providing it produced new and valid ways of building.

This is a detail of the main auditorium of the University of Fribourg, in Switzerland, designed in the late 1930's. Since it was always intended to be a university, it was also intended to look like one. But nothing could have been further from the architect's thoughts than that it should be seen in terms of a "figure of speech." And I suggest that what was true in the 1930's was also true in the 1750's when Jacques-François Blondel was writing his four great folio volumes of architectural criticism entitled *Architecture Française*. There is not a single metaphor or simile in the entire work; and he rarely found it necessary to describe one building by reference to another.

Consider, for example, his criticism of Le Vau's Collège des quatre Nations.² The problem was unique in that the site was not only irregular, but faced the south facade of the royal palace of the Louvre. The problem was therefore not simply one of relating form to function, but of relating it to the most dominant civic monument in Paris—a monument which, in fact, was then in the course of completion by the same architect.

Its chapel is unusual in that although the dome is oval internally, it is circular externally. The architectural problems of reconciling these two shapes are obvious, and close analysis of the program indicates why the problem arose.³ But whereas Anthony Blunt had nothing more to say about the entire building than that "the domed church flanked with wings curving forward combines motives from Pietro da Cortona and Borromini,"⁴ Blondel discussed its shape, details, proportions and general visual effects without reference to

any other building whatsoever, but solely on the basis of general principles, or with reference to the character which such architectural compositions should "announce."⁵

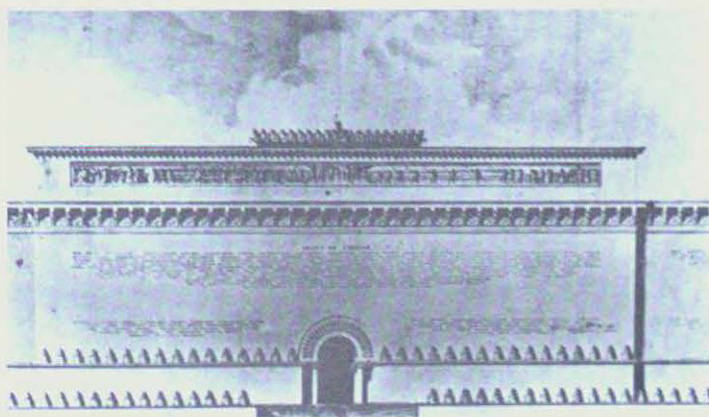
It will be obvious that this word "announce" already implied a linguistic analogy. The idea is of course as old as Vitruvius, and derives from Greek sources which Vitruvius himself consulted. But it may well be that J. F. Blondel was the first theorist to go on to assert that good architecture is analogous to poetry. In his lecture-courses given during the following two decades, he specifically claimed that the appropriate expression of function constituted the "poetry of architecture."⁶ He himself naturally illustrated this concept by referring to buildings by other architects; but it will be permissible for us to consider his theory by reference to a building which he himself designed. This is the *corps-de-garde*, or garrison headquarters at the focal point of the main plaza in Metz. Blondel was responsible for the whole of this urban renewal project, which included a new city hall on the south side and incorporated the medieval cathedral on the north. He was obviously attempting to give this building a military character, yet without detracting from the civic and ecclesiastical environment of which it formed a part. No "classical orders," as we would understand the term nowadays, were explicitly used. Instead, reliance was placed on the emphatic rustication of the basement storey, and the austere proportions of the fenestration. The only reference to the function of the building which did not derive from its proportion and profiling was the sculptural decoration of the pediment, which specifically proclaimed its military character by means of the unequivocal iconographic symbolism familiar to everyone in that age.

In an era which could not conceive of architecture other than as a continuation of the artistic legacy of Greece or Rome, it was inevitable that Blondel should have considered "poetry" and "style" to be virtually synonymous. For him, style in architecture was like style in eloquence. "In architecture, as in literature," he wrote, "a simple style is preferable to an inflated style."⁷ This doctrine was a commonplace in the literary theory of the age. But the next generation of architects—men like Etienne-Louis Boullée—were to show a marked predilection for "the inflated style" in terms of scale, even though they ostensibly, and indeed ostentatiously, opted for extreme simplicity in terms of shape.

Boullée's theories have been so well publicized in recent years that there is no need to quote any of his numerous references to "the poetry of architecture" found in his manuscript treatise.⁸ But the "poetry" to which he alluded was not so much an analogy with language as with easel-painting. It was the ancient doctrine summarized by the latin maxim: *ut pictura poesis*. He sought an architecture which would have the



Garrison Headquarters—Elevation



Boullée, Assemblée Nationale—Elevation



Auguste Perret: *Nôtre Dame, Le Raincy*—detail

qualities he admired, and envied, in the works of such painters as Hubert Robert.

His ideals had thus little in common with those of Blondel. For whereas Blondel considered that the poetry of architecture derived from each building's individual expression of function, Boullée, being obsessed with the metaphysical virtues of Plato's five basic geometrical solids, gave primacy to form; and there is something almost pathetic in his search for appropriate titles to attach to each of his huge hollow pyramids and unconstructable spheres. His most famous design is his "cenotaph to Newton," whose body then lay (as it still does) in Westminster Abbey, but was presumably to be transported to France, solely to give meaning to his graphic abstractions.

Even his designs for more practical public buildings, such as the parliament for the new French revolutionary regime, designed in 1792, show little imaginative grasp of either the real or expressive function of such buildings. The plan of his parliament building is just a symmetrical assemblage of rectangles around a circle: and one only has to compare it with Barry's Palace of Westminster, designed forty years later, to appreciate Boullée's poverty of invention. The immense blank facades—of a type which Blondel considered appropriate only for prisons—could only be made to express legislative function by anticipating Venturi's Lesson of Las Vegas. It was in fact designed as a vast bill-board, with the complete text of the Declaration of the Rights of Man incised on its surface like the inscription on a Brobdingnagian tombstone. Far from being analogous to language, the facade literally *was* language, and nothing more than language. It was the neutral support for a written message which Boullée would have inscribed in neon lighting had he known how.

In more recent years, the same dilemma was dealt with in an identical manner by Warren Perry when he designed the Berkeley Law School. The text on the facade consists of two eloquent passages from the writings of Chief Justice Benjamin Cardozo; extracts from a lecture which he delivered at Yale in 1921. The lettering is as elegantly arranged, and as typographically impeccable, as the prose it transcribes. But it can only be read by persons standing close. When seen from a distance it is sufficiently illegible to be classifiable as abstract ornament, and no doubt this is the effect which the architect (who was then Dean of Architecture at Berkeley) intended.

After Boullée's death, the third heuristic phase in the development of the linguistic analogy was inaugurated by J. N. L. Durand, whose use of it was influenced by the fact that he had to teach the rudiments of architecture to students of engineering. Durand's method was diametrically opposed to that of Boullée, even though superficially the resulting com-

positional designs of his students had much in common. For whereas Boullée was concerned only with the total effect, Durand was primarily concerned with the assembly of component parts. To quote his own definition: "The component elements of architecture (that is to say columns, beams, walls, windows, and so on) are to architecture what words are to discourse, and what notes are to music."⁹ His fondness for the word "architectonic" suggests that he may owe a debt to Emmanuel Kant, who gave the penultimate chapter of his *Critique of Pure Reason* the title: "The Architectonics of Pure Reason."

Forty years later the whole attitude towards the linguistic analogy had changed. The professional architectural theorists of the classical era were rapidly being swamped by romantic enthusiastic amateurs who, though frequently possessing immense intellectual ability, had little practical experience of building, but simply enjoyed talking about it. Ruskin's influence was the most insidious. Being deeply sensitive to the poetic qualities of all visual phenomena, he perceived no basic difference between nature and architecture. In so far as he found similar beauty in both, it was the transient everchanging beauty of irregular and erratic shapes which most powerfully excited his oratorical gifts.

His description of the Rhine Falls at Schaffhausen—that diminutive Swiss equivalent of Niagara Falls—is full of allusions to vaults, arches and domes; and to precious marbles with melodious names, such as chrysophrase.¹⁰ Moreover, there are enough metaphors and similes in this text to satisfy even the most garrulous professors of English literature and literary criticism. But Ruskin's literary techniques for describing natural phenomena carried over into his architectural criticisms, whereby St. Mark's Venice is described less as a building assembled by the hands of men, than as a marvelous manifestation of the work of God.¹¹

In fairness to Ruskin, it should be emphasized that this famous description, comprising a single sentence of over four hundred words, contains far fewer metaphors and similes than might be expected. Moreover, there is very little ambiguity in any of them. Perhaps the magic of his architectural prose resides precisely in the accuracy of his terminology: in his meticulous choice of descriptive words which are totally convincing because they are never whimsical or far-fetched.

But whatever the merits of Ruskin's imagery, the fact remains that for him, the eloquence of a facade derived solely from its sculptural details and mosaics. James Fergusson argued in his book *The Principles of Beauty in Art* (which was published in the same year as the *Seven Lamps of Architecture*) that eloquence, poetry and drama were the highest forms of art, and that the only aspect of architecture which could similarly be classified as "phonetic" (to use his own terminology) was ornamentation.¹² But it was precisely this which, for Ruskin, distinguished architecture from ordinary building. The facade of St. Mark's is indubitably a masterpiece. But what makes it absolutely unique is that no two pairs of capitals are alike. It had been assembled gradually, over a period of five hundred years, out of miscellaneous fragments looted from the ruins of Byzantium.

The colonnade of the tempietto at San Pietro in Montorio was also made of looted fragments: in this instance, recycled corinthian shafts, recuperated from antique ruins, were cut down to the proportions appropriate for a Doric entablature. But for Ruskin, such buildings possessed no poetic eloquence whatsoever; and he consistently ridiculed what he called their "mechanical repetition."¹³ Comparing the effect

of a romantic and byzantine work with designs such as these, the former were, he wrote, "like that of poetry well read and deeply felt to that of the same verses jangled by rote. There are many to whom the difference is imperceptible," he said, "but to those who love poetry it is everything—they had rather not hear it at all than hear it ill read."¹⁴ For Ruskin, as for Jacques-François Blondel, architecture was not analogous to a text which needed to be read: it actually talked: but whereas Blondel's architecture spoke in accordance with the classical rules of syntax and decorum, Ruskin considered that the principal defect of the Renaissance theorists was that "They discovered suddenly that the world, for ten centuries, had been living in an ungrammatical manner, and they made it forthwith the end of human existence to be grammatical."¹⁵

Ruskin's early hostility to traditional architectural rules and to constructional standardization demonstrates most clearly his incomprehension of how buildings are actually designed and how they achieve their stability. Whether his prejudices were justified by aesthetic, sociological or religious rationalizations, picturesque variety was for him the spice of life. Eccentric arcades such as those adorning San Michele at Lucca, were for him the quintessence of architectural poetry; and his concept of "The Lamp of Sacrifice" was not a call for restraint but for profusion. Anticipating current theories of Structural Linguistics, he demonstrated that linear ornament can, by careful verbal dissection of its symbolism, be seen as ornament "in depth"; as an *écriture* capable of rendering the riches of its poetic vitality to anyone with sufficient patience and education to examine each component fragment, and uncover the subconscious motives which activated the sculptor's chisel. For Ruskin, the standardized polychrome columns in the gardens at Versailles, and the sculptural panels which adorn its remarkable three dimensional arches, were unworthy of serious attention. "Mechanical" and "Pagan," they were for him what, in Structuralist terms, would be called "*écriture degré zéro*."¹⁶

Nevertheless, whether we like it or not, today's architecture, like that of the Renaissance, is an architecture of standardization. But whereas, in the seventeenth and eighteenth centuries, the distinction between temporary structures and permanent structures was clearly understood, today this distinction has become so blurred as to be virtually nonexistent. Paint and plywood architecture are no longer images of future buildings, but the buildings themselves. When photographed in full colour, they need only be published to become historical monuments.

There is nothing new in lathe and plaster facades, such as that erected for the ceremonial inauguration of Soufflot's church of Ste. Geneviève in Paris. But these are regarded by us as architecture because they were ultimately replaced by a permanent structure of solid stone, and only the inscription on the frieze had in fact changed.

The lesson of the Paris Panthéon, unlike the lesson of Las Vegas, is that real architecture persists, however frequently we change the writing on the wall.

It seems to me therefore that the linguistic analogy can only become effective again for architects by reaffirming its heuristic potentiality, and treating its affinity with literature with great circumspection. The French system of *explications de texte* was originally intended to teach people how to write more clearly and effectively. The current emphasis seems to be concerned mainly with teaching them how to read. The contribution of Structural Linguistics to a general theory of spontaneous generation may well be enormous. But architec-

tural design is not concerned with transforming things into words or old words into new words; it is concerned with transforming words into things: with transforming the total program into graphic images which eventually become the working drawings of an executed building. This transformation must always derive essentially from some theory of architecture. I believe whole-heartedly that there is such a thing as a theory of architecture, and also that the history and criticism of architecture are closely related. But the three are nevertheless separate disciplines.

In conclusion, I should like to comment on a curious oversight in Charles Jencks' analysis of pre-cast concrete grills. What seems most strange to me is not that he disregards their true origin in Perret's church at Le Raincy, designed in 1922: it is that he seems to have been unaware that these elements were "analogies" in the current "structural linguistic" sense—that is to say, in the sense defined by the progenitor of all modern structural linguistic research: Ferdinand de Saussure.

De Saussure devotes two chapters to "analogies" in his *Cours de Linguistique Générale*; and in these chapters, he places particular emphasis on the creative and generative role which analogies have played in the history of language. The general theme of these chapters is that many new words and grammatical forms were often created or generated analogically in imitation of other word-forms, rather than in accordance with internally logical linguistic rules.

But it was precisely by this process of analogy that Auguste Perret's pre-cast concrete elements evolved in the 1920's. In his search for an appropriate fenestration system for his new church at Le Raincy, he eventually decided to constitute a screen of pre-cast components and to design each element by analogy with the pierced marble panels used by the ancient Romans within the apertures of thermae halls. Indeed, he took specific care to denote these novel elements by the latin name of their prototypes: *claustra*, since (unlike Le Corbusier and Gropius) he experienced no shame in acknowledging his debt to the dead forms of the past.

This kind of analogy is probably inevitable when new structural or functional systems are being initially developed, and need architectural expression. But no analogies or metaphors, however scintillating in their wit, will stimulate the evolution of a genuine contemporary architecture if they derive only superficially, and without genuine cause, from theories of literary criticism.

As Fowler points out in his classic reference book on *Modern English Usage*, there is a clear and well-defined distinction between analogies used as a logical resource—that is to say heuristically—and analogies used as an influence on word-creation. It is possible that both types of analogy need to be studied, but architectural theory will never benefit from the current tendency to confuse the two.

NOTES:

1. C. Jencks: *Language of Post-Modern Architecture*, p. 40.
2. J. F. Blondel: *Architecture Française*, Bk. iii, pp. 4-6.
3. Ibid, p. 6, & *Cours d'Architecture*, Vol. 4, p. lxxviii, etc.
4. A. Blunt: *Art and Architecture in France*, p. 230.
5. J. F. Blondel: *Cours d'Architecture*, Vol. 2, pp. 229 ff.
6. Ibid, Vol. 4, p. lv.
7. Ibid, Vol. 4, p. lvi.
8. E. L. Boullée: Manuscript, p. 70 (H. Rosenau transcript p. 26).
9. J. N. L. Durand: *Précis de Cours*, (1813 ed.), pp. 29-30.
10. J. Ruskin: *Modern Painters* (1851 ed.), p. 344.
11. J. Ruskin: *Stones of Venice* (1880 ed.), Vol. ii, pp. 67-68.
12. Op. cit. (1849 ed.), p. 121.
13. J. Ruskin: *Seven Lamps of Architecture*, ch. 5 passim.
14. Ibid, ch. 5, para. XXI.
15. J. Ruskin: *Stones of Venice* (1880 ed.), Vol. iii, p. 55.
16. R. Barthes: *Le degré zéro de l'écriture* (1953).