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Frank Lloyd Wright and Viollet-le-Duc

DONALD HOFFMANN

WHEN, in his youth, Frank Lloyd Wright came upon the writings of Viollet-le-Duc the encounter was evidently more than casual. Viollet-le-Duc's words became a cardinal influence in the formation of Wright's architectural philosophy. Even in his ninetieth year, Wright spoke of their impact.¹

That the words of Viollet-le-Duc should have commanded the attention of Wright—even before he reached the milieu of the Chicago School, where functional and organic tenets were widely discussed—is in no way curious. Upon the death of Viollet-le-Duc in 1879, the “extraordinary popularity in this country of some of the works” was already noted, and his *Entretiens sur l'architecture* was cited as “a very important work, of which one-half has been translated into English by Mr. Van Brunt . . .”² Nearly twenty years later it was remarked that “thanks to Mr. Van Brunt's excellent translation of [Viollet-le-Duc's] ‘Architectural Discourses,’ he can hardly be ignored by American architects.”³

Nor was Wright by any means the only architect in the Middle West aware of Viollet-le-Duc. In a bizarre claim to having been the inventor of skeletal skyscraper construction, L. S. Buffington referred to a passage in the *Discourses* as the source of his “inspiration.”⁴ John Wellborn Root

mentioned Viollet-le-Duc in his own essays, and clearly his thinking was indebted to Viollet-le-Duc's.⁵ Louis H. Sullivan, Wright's mentor, can be presumed to have been familiar with some of Viollet-le-Duc's words.⁶ “I'm sure my father had many a discussion with Sullivan over Viollet-le-Duc and his concepts,” Lloyd Wright declared recently.⁷ Even the source of Charles B. Atwood's design for the railroad terminal at the World's Columbian Exposition of 1893—a design which became the prototype of the “Roman baths” terminals across the nation⁸—may well have been Viollet-le-Duc's vivid perspective section drawing reconstructing the Baths of Caracalla.⁹

practical architect might not unnaturally conceive the idea of erecting a vast edifice whose frame should be entirely of iron . . .” See D. Tselos, “The Enigma of Buffington's Skyscraper,” *Art Bulletin*, xxvi (March 1944), 3–12.

5. See my collection of his essays, *The Meanings of Architecture: Buildings and Writings by John Wellborn Root* (New York, 1967).

6. William Gray Purcell, in “Le Duc,” *Northwest Architect*, xvi (May–June 1952), 13, wrote that Sullivan “could not have failed to read this man . . .” Whether Sullivan learned a great deal from Viollet-le-Duc has, however, been questioned. “Sullivan seems to have derived little inspiration from Viollet-le-Duc's theories . . .” writes Peter Collins in *Changing Ideals in Modern Architecture* (Montreal, 1967), p. 155.

7. Letter to the author, 18 July 1967.

8. Carroll L. V. Meeks, *The Railroad Station: An Architectural History* (New Haven and London, 1956), pp. 128–129. There is no mystery concerning who designed the terminal, as Meeks indicated. Atwood was definitely credited with the building in “A White City Architect Passed Away” (editorial), *The Chicago Tribune*, lrv, No. 355 (21 Dec. 1895), 12; in the obituary in *The American Architect and Building News*, l, No. 1044 (28 Dec. 1895), 143; and by Arthur Woltersdorf, “A Portrait Gallery of Chicago Architects, III, Charles B. Atwood,” *The Western Architect*, xxxiii, No. 8 (Aug. 1924), 89–94. Atwood joined the staff of the fair's chief of construction on 21 April 1891; see D. H. Burnham et al., “Final Official Report of the Director of Works of the World's Columbian Exposition” (June 1894), 1, 15 (MSS in the Burnham Library of the Art Institute of Chicago).

9. Van Brunt trans., pl. vii, opp. p. 144; Bucknall trans., 1, pl. vii, opp. p. 127. Both were published in Boston, where Atwood began his career.

1. When traveling through Paris in 1957, Wright “recalled the effect of Viollet-le-Duc in his (Mr. Wright's) early years,” and reiterated that the only writers on architecture whom he had respected in his youth were Ruskin and Viollet-le-Duc—letter from William Wesley Peters to the author, 11 April 1967. The impact of Ruskin on Wright will not be treated here.

2. Russell Sturgis, “Viollet-le-Duc,” *The Nation*, xxix, No. 744 (2 Oct. 1879), 219–220. The *Entretiens* was first published in Paris in 1863 (vol. i) and 1872 (vol. ii). The book cited by Sturgis is Eugene Emmanuel Viollet-le-Duc, *Discourses on Architecture*, trans. by Henry Van Brunt (Boston, 1875).

3. W. Henry Winslow, “Viollet-le-Duc,” *The New England Magazine*, xv, No. 5 (Jan. 1897), 515.

4. The passage, as rendered in the Benjamin Bucknall trans. of vol. ii (London, 1881; Boston, 1881 and 1889), p. 128, reads: “A

Which of the many books of Viollet-le-Duc essentially influenced Wright's thought? With his own accounts Wright somewhat obscured the issue. For instance, he wrote that in his wide extracurricular reading while a special student at the University of Wisconsin (in 1886),¹⁰ he read Viollet-le-Duc's *Dictionnaire Raisoné de L'architecture Française*.¹¹ He also wrote that, after arriving in Chicago, he found in the library of All Souls Church not only Owen Jones' *Grammar of Ornament*, but Viollet-le-Duc's *The Habitations of Man in All Ages*, adding: "I had read his 'Dictionnaire,' the 'Raisoné,' at home, got from the Madison city library. I believed the 'Raisoné' was the only really sensible book on architecture in the world. I got copies of it for my sons, later. That book was enough to keep, in spite of architects, one's faith alive in architecture."¹²

The story was slightly varied in the third of Wright's Princeton lectures. He spoke of the effects of reading Victor Hugo's *Notre Dame* and seeing the collapse of the new wing of the Wisconsin Capitol. He continued: "Soon after this, Viollet-le-Duc's *Dictionnaire Raisoné de L'architecture Française* fell into my hands by way of a beloved schoolteacher aunt of mine and the work was finished, ready for the master to whom I came some four years later, Louis H. Sullivan . . ."¹³

But the *Dictionnaire Raisoné* has never been published in English translation, excepting the lengthy chapter on construction, which appeared in 1895,¹⁴ and Wright neither read nor spoke French.¹⁵ He could have only fumbled through the ten volumes, studying primarily the illustrations.¹⁶ (In his sixties, his memory may have been confused by the publication, from 1927 to 1930, of a magazine series of digests from the Nathan Ricker manuscript translation of the *Dictionnaire Raisoné*.)¹⁷

10. Records of the registrar of the University of Wisconsin (Madison) show that Wright's brief attendance extended only from January to March 1886 and from September to December 1886. Letter from the registrar's office to Mrs. Kenneth Baxter (a daughter of Wright), 11 May 1966.

11. Frank Lloyd Wright, *An Autobiography* (New York, 1943), p. 53.

12. Wright, *An Autobiography*, p. 75.

13. Frank Lloyd Wright, "The Passing of the Cornice," as republished in *The Future of Architecture* (New York, 1953), p. 114.

14. *Rational Building*, being a translation of the article "Construction" in the *Dictionnaire Raisoné de L'architecture Française* of M. Eugène-Emmanuel Viollet-le-Duc, by George Martin Huss (New York, 1895).

15. William Wesley Peters, letter to the author, 11 April 1967.

16. In 1887, while Wright was in the office of Joseph Lyman Silsbee, he made 100 tracings from Owen Jones and from the *Dictionnaire Raisoné*. See Grant Carpenter Manson, *Frank Lloyd Wright to 1910* (New York, 1958), p. 21.

17. Thomas E. O'Donnell, "The Ricker Manuscript Translations of Viollet-le-Duc's *Rational Dictionary of French Architecture—from the Eleventh to the Sixteenth Century*," *Pencil Points*, VIII, 609–611, 630;

The problem, in any case, can be resolved from two directions. What the Madison Free Library possessed, as early as 1877, was the Van Brunt translation of the first volume of the *Discourses*.¹⁸ And John Lloyd Wright has written that the "copies" of Viollet-le-Duc that his father gave him were the *Discourses*: "'Here they are, John.' He handed the books to me. 'In these volumes you will find all the architectural schooling you will ever need. What you cannot learn from them, you can learn from me' . . ."¹⁹

In examining the parallels between Wright's philosophy of architecture and Viollet-le-Duc's, then, references will be made principally to the Van Brunt translation of the first ten of the *Discourses*, and secondarily to *The Habitations of Man in All Ages*, a book of lesser significance. For systematic comparison and continuity, the parallels will be drawn with two of Wright's earlier, most trenchant, essays: the first "In the Cause of Architecture" paper (1908) and the introduction to the large Wasmuth portfolio of renderings (1910).²⁰

I. NINETEENTH-CENTURY DISORDER

Whatever personal motivations lay behind Viollet-le-Duc's propensity for marked independence of thought,²¹ the radical basis of his theory within the text of the *Discourses* arose from what he saw as a gross disparity between certain admirable aspects of architecture in the past and the low state of architecture in the present.

The malady, he thought, had first appeared in the sixteenth century ". . . when architects, instead of making form the frank expression of the requirements they were called on to satisfy, and of the means of construction at their disposal, began to preoccupy themselves with the idea of adopting certain styles . . . borrowed directly or indirectly from ancient Rome" (*Dis.*, x, p. 474).

IX, 79–83, 110, 578–582, 719–724; X, 234–238; XI, 31–35, 875–878 (Oct. 1927–Nov. 1930). The eleven MSS volumes are in the University of Illinois Library. The Princeton lectures were given in 1930. In 1927 Wright was urged to begin his autobiography, and he was still at work on it in 1930—see Olgivanna Wright, *Frank Lloyd Wright* (New York, 1966), p. 213.

18. Anon., *Catalogue of the Madison Free Library* (Madison, Wis., 1877).

19. John Lloyd Wright, *My Father Who Is On Earth* (New York, 1946), p. 69. William H. Jordy and Ralph Coe, in their introduction to Montgomery Schuyler, *American Architecture and Other Writings*, 2 vols. (Cambridge, Mass., 1961), I, 12n, drew attention to this significant passage.

20. "In the Cause of Architecture" first appeared in *The Architectural Record*, XXIII (March 1908), 155–221. For convenience, citations from it and from the Wasmuth introduction of 1910 will be taken from *Frank Lloyd Wright On Architecture*, ed. Frederick Gutheim (New York, 1941). Citations from *The Habitations* will be from the Benjamin Bucknall trans. (Boston, 1876).

21. See John Summerson, "Viollet-le-Duc and the Rational Point of View," *Heavenly Mansions* (New York, 1963), p. 142.

Viollet-le-Duc's point of view lay firmly within the tradition of nineteenth-century evolutionary theory. Through the character of Epergos, who provided the progressive line in the dialogue of *The Habitations of Man in All Ages*, Viollet-le-Duc declared: "The Renaissance movement . . . turned this part of the globe for a time out of its normal path of progress" (p. 392).

The consequence was that, for two or three centuries, ". . . we have been inundated with neo-Greek and neo-Roman—such indeed as would make Greeks and Romans laugh—without the slightest regard for origins, natural aptitudes, climate, materials, or the novel conditions of social life" (p. 393).

Viollet-le-Duc could only lament what he saw about him: "Our monuments seem to be bodies without souls, the fragments of some departed civilization, a language incomprehensible even to those who employ it" (*Dis.*, x, p. 472).

During the years when Wright was apprenticed to Louis H. Sullivan, from 1887 to 1893, he too found a disheartening architectural landscape. Most architects, Wright recalled, were prostituting the machine "in reproducing with murderous ubiquity forms born of other times and other conditions . . ." (1908, p. 42).

Centuries of false education had resulted in an accumulation of architectural rubbish, Wright wrote, adding: "Any attempt to use forms borrowed from other times and conditions must end as the Renaissance ends, with total loss of inherent relation to the soul life of the people" (1910, p. 63).

Viollet-le-Duc pleaded: "Must this nineteenth century, then, come to a close without ever possessing an architecture of its own? Is this epoch, so fertile in discoveries, so abounding in vital force, to transmit to posterity nothing better in art than imitations, hybrid works without character and impossible to class?" (*Dis.*, x, p. 473).

Wright pleaded: "In this polyglot tangle of borrowed forms, is there a great spirit that will bring order out of chaos? vitality, unity, and greatness out of emptiness and discord?" (1910, p. 64).

II. EXCESSIVE ORNAMENTATION

To Viollet-le-Duc, one manifestation of current architectural decay was excessive, or inappropriate, ornamentation:

Clothe a deformed man as you will, you can never give him a noble bearing. It is the same in architecture. When, by means of carving and gilding, you endeavor to distract attention from a troublesome assemblage of lines, a disagreeable proportion, a vulgar form, you effect no higher object than the momentary amusement of the multitude. Such decoration leaves upon the mind but a confused impression, and often causes such a thorough dislike for splendor so ill used, that a simple square chamber with smooth whitewashed walls would be a grateful relief. (*Dis.*, x, p. 513)

Wright echoed that sentiment: "Our aesthetics are dyspeptic from incontinent indulgence in 'Frenchite' pastry. We crave ornament for the sake of ornament; cover up our faults of design with ornamental sensualities . . ." (1908, p. 42). He wrote that the severity of his own early residences caused them to be called "dress reform" houses.

III. TRUTH IN ENGINEERING

Viollet-le-Duc did find truthful expression in structures such as the great railway works of engineering (*Dis.*, III, p. 83), or the central markets of Paris (*Dis.*, VIII, p. 334n).

He also praised machines: "We, who, in the fabrication of our machinery, give to every part the strength and the form which it requires, with nothing superfluous, nothing which does not indicate a necessary function, in our architecture foolishly accumulate forms and features taken from all sides, the results of contradictory principles, and call this art" (*Dis.*, VI, p. 186).

In perhaps the most striking passage in the *Discourses*, Viollet-le-Duc defended a paradigm of functional expression:

A locomotive, for instance, has its peculiar physiognomy, not the result of caprice, but of necessity. It expresses controlled power; its movements are gentle or terrible, it advances with awful impetuosity or, when at rest, seems to tremble with impatience . . . It is almost a living being, and its exterior form is but the expression of its power. A locomotive, then, has style. Some say it is but an ugly machine. And why ugly? Does it not have the true expression of brutal energy? Is it not a complete organized mass, possessing a particular character, like a piece of artillery or a rifle? A thing has style when it has the expression appropriate to its uses. (VI, p. 182)

In a similar vein, Wright declared: "The relation of the architect to the economic and industrial movement of his time, in any fine art sense, is still an affair so sadly out of joint that no one may easily reconcile it" (1908, p. 37).

The machine should be accepted as a fact of modern life, he thought; it should be properly utilized by the architect in creating the new architecture. "His machine, the tool in which his opportunity lies, can only murder the traditional forms of other peoples and earlier times. He must find new forms, new industrial ideals, or stultify both opportunity and forms" (1910, p. 66).

IV. TRUTH IN ARCHITECTURE

The moral tone in Viollet-le-Duc's theory was evident. He wrote, for instance: "The modern architecture, which is called classic, is a lie . . ." (*Dis.*, x, p. 510). Even good taste in art "consists in knowing how most gracefully to confess the truth" (*Dis.*, VII, p. 290).

"It cannot be too often repeated," he wrote, "that that art only is true and good which is in harmony with the

manners, institutions, and genius of the nation wherein it exists . . ." (*Dis.*, III, p. 90). He concluded:

There are two ways of expressing truth in architecture: it must be true according to the programme of requirements, and true according to the methods and means of construction. To be true according to the programme, is to fulfil with scrupulous exactness all the conditions imposed by necessity; to be true according to the methods and means of construction, is to employ materials with a due regard for their qualities and capacities. (*Dis.*, x, pp. 474-475)

The moral strain in Wright was also evident. Thus, ". . . the forms must be born out of our changed conditions, they must be *true* forms, otherwise the best that tradition has to offer is only an inglorious masquerade, devoid of vital significance or true spiritual value" (1908, p. 36).

Works of architecture had a definite moral character: "Buildings like people must first be sincere, must be true and then withal as gracious and lovable as may be" (1908, p. 34).

True style could grow from a frank acceptance of the conditions of an architectural problem: "This quality of style is a subtle thing, and should remain so. Style is not to be defined in itself so much as to be regarded as a natural result of *artistic integrity*. Style, then, if the conditions are consistently and artistically cared for little by little will care for itself" (1910, p. 69).

V. REASON

When the character Epergos viewed a Pre-Columbian palace in Mexico he exclaimed, "What shocks me in everything is the absence of reasoning . . ." (*Hab.*, p. 308).

Most often remembered as a rationalist, Viollet-le-Duc indeed had almost unlimited faith in the powers of reason to reform architecture: "I am convinced that we can bring the taste of our generation to perfection by making it reason. Observe that, in many cases, reason accounts for the judgment which taste has pronounced. Very often (perhaps always) the sentiment of taste is but an involuntary and inappreciable act of reason" (*Dis.*, I, p. 22).

Viollet-le-Duc gave little ground in the face of opposition from his contemporaries: "I do not pretend that architecture is simply an art of reasoning, a pure science, in a word; but, as it is in peril, we must hasten to the point where there is the greatest danger" (*Dis.*, VI, p. 140), or, again: "I am sometimes accused of attributing too much to reason and too little to sentiment in architecture; the positions I have assumed would therefore seem to require from me a further explanation on these points. What, then, is sentiment as regards art? Is it not an involuntary action of reason applied by education to instinct?" (*Dis.*, III, p. 74).

Finally, after seemingly making a fatal admission, he once more rebounded:

The arts may remain obscure and repulsive, even when under the strict control of reason and logic; they may absolutely be reasoned into ugliness. But if this is sometimes the case, it is no less true that real beauty can only be obtained when developed in accordance with laws based upon reason. Every absolutely beautiful work must be the development of a rigorously logical principle. (*Dis.*, x, p. 487)

Just as Viollet-le-Duc praised architectural forms so direct and frank "that the common-sense of the people can sit in judgment upon them and recognize what is good and what is bad" (*Dis.*, VIII, p. 341), Wright expressed gratitude for his clients among American businessmen:

Taking common sense into the holy realm of art is a shocking thing and most unpopular in academic circles . . . I believe that every matter of artistic import which concerns a building may be put to the common sense of a businessman on the right side every time, and thus given a chance at it, he rarely gives a wrong decision . . . In an organic scheme there are excellent reasons why the thing is as it is, what it is there for, and where it is going. (1910, pp. 67-68)

True simplicity meant "an entity with a graceful beauty in its integrity from which all discord, and all that is meaningless, has been eliminated" (1908, p. 33). Wright's titanic imagination was no more reductive than it was deductive; and he confessed that his architecture in the beginning arose from an intuitive process. Still, he added: ". . . but, after all, architecture is a scientific art, and the thinking basis will ever be for the architect his surety, the final court in which his imagination sifts his feelings" (1908, p. 43).

VI. STAGES OF DESIGN

The design procedure advised by Viollet-le-Duc was fully implied in his rationalism, in his commitment to truthful expression. A program presented a problem to be solved: the art of architecture was inseparably related to the finesse of the solution.

"Thus, the invention of the architect must be chastened on the one hand by the absolute requirements of his problem, including fixed conditions of expense and site, and, on the other, by the nature of his materials and the manner of using them" (*Dis.*, VIII, p. 332).

Design should proceed in a logical manner. The program given the architect "is apt to be confused and contradictory," but by careful analysis it can be reduced to its elements, and its "intricate and complicated conditions thus become simplified . . ." (*Dis.*, VI, p. 188). Gradually, the plan coalesces. Architectural effects from the past should not be allowed to seduce the designer:

No, the true architect does not allow his mind to be preoccupied

by these monuments of the past. His plan settled upon, his elevations are a part and an expression of them; he sees how he should construct them, and the dominating idea of the plan becomes the principal feature of the façades. Considerations of stability and of the most economical methods of construction suggest to him the character of his exteriors. (*Dis.*, VI, p. 189)

Architecture to Wright was "an organic expression of the nature of a problem" (1910, p. 70). The program required simplification: "A building should contain as few rooms as will meet the conditions which give it rise and under which we live, and which the architect should strive continually to simplify . . ." (1908, p. 33).

In presenting his early work, Wright wrote: ". . . I have endeavored in this work to establish a harmonious relationship between ground plan and elevation of these buildings, considering the one as a solution and the other an expression of the conditions of a problem of which the whole is a project" (1908, p. 35).

VII. AXIAL SYMMETRY UNNECESSARY

As a corollary, Viollet-le-Duc declared that symmetry was often uncalled for; a statement of the requirements, "if interpreted strictly with regard to convenience, usually results in an irregular plan," and "balance is not symmetry, as it admits of variety" (*Dis.*, X, p. 504).

The architects of the day were designing from the outside in, throwing up a Renaissance façade before contemplating the practical requirements that should have been the leading motives of the composition: "Thus, palace, public office, barrack, ball-room, stable, or museum are indiscriminately forced behind the same architectural screen" (*Dis.*, VIII, pp. 348-349).

The monuments of antiquity were being falsely interpreted:

Is it not indeed a dangerous error to attribute to ancient art such ridiculous and absolute laws as those of symmetry and of the indiscriminate application of fixed academical orders, the shelter and protection of modern ignorance and mediocrity, whereas, in the works of antiquity, there is one dominating principle, the frank and honest acknowledgment of practical requirements in each case, varied in the expression by the wise liberty of common-sense and good taste, or, in short, the habit of reasoning applied to the sentiment of art? (*Dis.*, V, p. 158)

Wright wrote that his plans were established by a simple axial law and order, but admitted that the balance was occult: ". . . although the symmetry may not be obvious always the balance is usually maintained," continuing:

. . . I have great faith that if the thing is rightly put together in true organic sense with proportions actually right the picturesque will take care of itself. No man ever built a building worthy the name of architecture who fashioned it in perspective sketch to his taste

and then fudged the plan to suit. Such methods produce mere scene painting. A perspective may be proof but it is no nurture. (1908, p. 39)

VIII. PRINCIPLES, NOT FORMS

The radical and rationalist bases of Viollet-le-Duc's theory meant that the history of architecture could be profitably studied only in a special way. The architect should not adopt forms from the past; he should study them to discover their generative principles.

Typically, in citing the perfection of ancient Greek architecture, Viollet-le-Duc declared: "Art does not consist in this or that form, but in a principle, a logical method," adding, ". . . we should reason like them, but should not endeavor to speak the same language" (*Dis.*, II, pp. 48, 55).

Wright could recommend study of the great architecture of the world "solely in regard to the spirit that found expression in the forms . . ." (1910, p. 70).

"All the great styles, approached from within, are spiritual treasure houses to architects. Transplanted as forms, they are tombs of a life that has been lived" (1910, p. 66).

IX. PRIMITIVE SOURCES

Viollet-le-Duc's most often remembered words appeared in his argument that the great revival of architecture signalled by the sudden appearance of Byzantine art did not result from study of the corrupt types of later Roman architecture, but rather from an indigenous art in Syria during the Phoenician-Judaic epoch: ". . . only primitive sources can furnish the energy for a long career" (*Dis.*, VI, p. 227).

Viollet-le-Duc identified what he considered the essential constructive principles differentiating Greek, Roman, and Gothic architecture, and he concluded: "Simple principles are alone productive; and it is worthy of remark that the more simple they are, the more beautiful and varied are their ultimate results" (*Dis.*, X, p. 482).

Wright's journey to Europe in 1909 had given him the opportunity to study anonymous and unpretentious buildings, as well as the Renaissance monuments he so deprecated; and from Florence he wrote that "the true basis for any serious study of the art of architecture is in those indigenous structures, the more humble buildings everywhere, which are to architecture what folklore is to literature or folk songs are to music, and with which architects were seldom concerned" (1910, p. 59).

His interest in primitive sources was broad, paralleling the range of Viollet-le-Duc's dialogue in *The Habitations*. "The appreciation of beauty on the part of primitive peoples," Wright wrote, "Mongolian, Indian, Arab, Egyptian, Greek, and Goth, was unerring" (1910, p. 62).

X. THE GOTHIC EXAMPLE

Viollet-le-Duc was not only a mediaevalist, as he is commonly remembered today. In the *Discourses* alone he discussed Egyptian, Greek, Roman, Romanesque, Gothic, and early Renaissance architecture, discovering what he regarded as the principles at work during each epoch. And yet he believed that the Gothic example held forth the greatest promise for his own day.

For architecture to advance, the experience of the past must be known: "Now, of this experience, that included in the twelfth and thirteenth centuries is the most instructive in the history of art, because it was a part and an expression of a prodigious intellectual movement towards modern ideas . . ." (*Dis.*, VII, p. 326).

Gothic structure most clearly anticipated the possibilities of iron structure. Gothic architecture, thought Viollet-le-Duc, was the perfect example of structural rationalism—he arrived at the exaggerated conclusion that "every member was the result of a constructional necessity . . ." (*Dis.*, VII, p. 291).

Moreover, Gothic art "was essentially democratic, it was everywhere and in everything; and the villager had as much right to be proud of his little church, or the country gentleman of his manor-house, as the citizen of his cathedral or the nobleman of his palace" (*Dis.*, VII, p. 314).

To Wright it was clear that "our ideal is democracy" (1908, p. 36). He, too, found in Gothic architecture the best lesson:

I have called this feeling for the organic character of form and treatment the Gothic spirit, for it was more completely realized in the forms of that architecture, perhaps, than any other. At least the infinitely varied forms of that architecture are more obviously and literally organic than any other, and the spirit in which they were conceived and wrought was one of absolute integrity of means to ends. In this spirit America will find the forms best suited to her opportunities, her aims and her life. (1910, p. 66)

XI. NATIONALISM

Although Viollet-le-Duc cautioned that an appreciation of French Gothic architecture was not merely an instance of national vanity, he declared it to be a supreme expression of the French national genius.

The lesson he drew was that "public and private buildings should, in plan and construction, be made to conform to our usages, to our climate, to our national spirit, and to the progress which has been made in science and practical knowledge" (*Dis.*, VII, p. 289).

Wright wrote of his hope that "some day America may live her own life in her own buildings in her own way . . ." (1908, p. 35).

"An American," he wrote, "is in duty bound to establish traditions in harmony with his ideals, his still unspoiled sites, his industrial opportunities . . ." (1910, p. 65).

XII. THE ORGANIC ANALOGY

Finally, the theory of Viollet-le-Duc fell squarely into the long and complex history of the organic analogy. He—as had a diverse array of thinkers before him—viewed natural organisms as paradigms of functional and structural expression, and thus of true style. In his most compressed statement of the organic analogy, he reasoned so:

Nature, in all her works, has style, because, however varied her productions may be, they are always submitted to laws and invariable principles. The lilies of the field, the leaves of the trees, the insects, have style, because they grow, develop, and exist according to essentially logical laws. We can spare nothing from a flower, because, in its organization, every part has its function and is formed to carry out that function in the most beautiful manner. Style resides in the true and well-understood expression of a principle, and not in an immutable form; therefore, as nothing exists in nature without a principle, everything in nature must have style . . . it should be explained to you why the cat and the tiger, the flower and the insect, have style, and you should be instructed to proceed like Nature in her productions, and thus you would be enabled to give style to all the conceptions of your brain. (*Dis.*, VI, p. 179)

His organic thinking also embraced the idea of accommodating a building harmoniously to its specific site; he gave as examples the Erechtheum and the rambling, informal disposition of the Laurentine villa of Pliny the consul. Again, he emphasized a respect for the nature of materials, a notion that logically derived from his insistence on truth:

By using such forms as shall most naturally and inartificially express the qualities and capacities of the materials we employ, by using cast-iron forms for cast-iron and wrought-iron forms for wrought-iron, by having appropriate distinctions of treatment for a form of granite, of sandstone, of marble, of brick, and of wood, we shall not only open a vast and inexhaustible field for variety and novelty of design, but must at last succeed in attracting the sympathy and appreciation of the public for an art which, by its false and arbitrary standards of criticism, has so long been alienated from them. (*Dis.*, X, p. 509)

Nature was, of course, Wright's deity; and early in his career he wrote that "given inherent vision there is no source so fertile, so suggestive, so helpful aesthetically for the architect as a comprehension of natural law," and that nature's "wealth of suggestion is inexhaustible; her riches greater than any man's desire" (1908, p. 31).

Of his own work, he asserted: "In a fine art sense these designs have grown as natural plants grow" (1908, p. 40). And of plants:

... we discover a strange sympathy between the form of the flower and the system upon which the leaves are arranged about the stalk. From this we are led to observe a characteristic habit of growth, and resultant nature of structure . . . This structure proceeds from the general to the particular in a most inevitable way, arriving at the blossom to proclaim in its lines and form the nature of the structure that bore it . . . Law and order are the basis of its finished grace and beauty; its beauty is the expression of fundamental conditions in line, form and color, true to them, and existing to fulfil them according to design. (1910, pp. 60–61)

As to site, Wright wrote: “A building should appear to grow easily from its site and be shaped to harmonize with its surroundings . . .” (1908, p. 34). As to the nature of materials, Wright’s thinking was parallel to Viollet-le-Duc’s but on a deeper, more instinctive plane:

Bring out the nature of the materials, let the nature intimately into your scheme. Strip the wood of varnish and let it alone; stain it. Develop the natural texture of the plastering and stain it. Reveal the nature of the wood, plaster, brick or stone in your designs; they are all by nature friendly and beautiful. (1908, p. 34)

*

Nearly every historian has taken note of the chasm between Viollet-le-Duc’s forceful theory and his lacklustre—not to say awkward—designing. It was asserted in America as early as 1879 that he showed “scarcely any evidence of power of artistic design.”²² Indeed, his career might well serve in support of the dictum that “theory alone rarely creates an architecture.”²³

And yet Viollet-le-Duc’s theory alone, his rigorous logic, had been enough to impress the young Wright. For to Wright the true architect was he who could grow through the process of “the self-sacrifice of interior discipline.”²⁴ Wright’s interior discipline was crucial to his art; his almost obsessive concern to make sure that even the smallest detail was “right” and was a manifestation of the whole closely paralleled what, in reference to French Gothic architecture, has been described as the kind of “systematic articulation . . . unknown until the advent of Scholasticism . . .”²⁵

Wright’s alliance with the Gothic spirit was lifelong. His mother, even before his birth, “took ten full-page wood-engravings of the old English Cathedrals . . . and hung them upon the walls of the room that was to be her son’s”;²⁶ and near the end of his life Wright still believed that “Gothic architecture approached the organic in character.”²⁷

22. Sturgis, “Viollet-le-Duc,” p. 220.

23. Henry-Russell Hitchcock, “Architecture,” in *Art Nouveau* (New York, 1959), p. 125.

24. Frank Lloyd Wright, *Genius and the Mobocracy* (New York, 1949), p. 6.

25. Erwin Panofsky, *Gothic Architecture and Scholasticism* (Cleveland and New York, 1957), p. 32.

26. Wright, *An Autobiography*, p. 11.

27. Wright, *Genius and the Mobocracy*, xi.

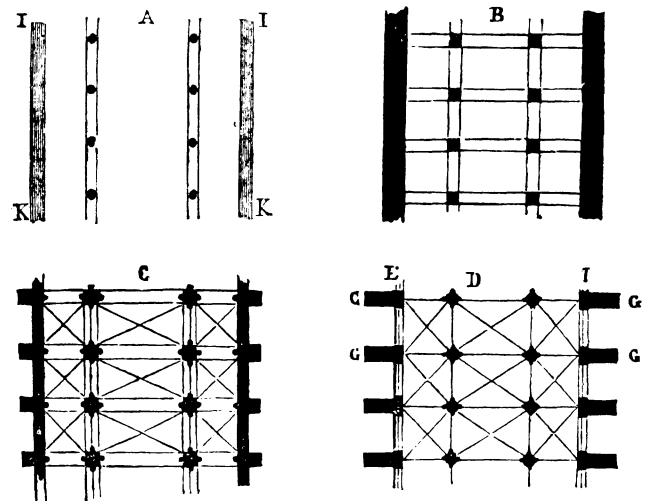


Fig. 1. From basilica to cathedral (from Viollet-le-Duc, *Discourses*).

Between those outer limits of his life, he had studied Viollet-le-Duc. At the heart of Viollet-le-Duc’s theory lay his exposition of Gothic architecture. The influence of Viollet-le-Duc on the visual qualities of Wright’s architecture need not be predicated on the tenuous basis of chance similarities between the drawings of the former and the buildings of the latter; rather, it related to the Gothic example.

By 1910 many of the essential aspects of Wright’s architecture—articulation, cruciform plans, nave-like spaces, ornament derived from conventionalization of indigenous flora, and clerestory lights—were analogous to aspects of the Gothic.

The principle of articulation, surely one of the most fertile in the art of architecture, can be understood to encompass the manifestation of functional spaces, the symbolic visual expression of structural forces and points of support, and the drive toward an over-all ordering of discrete parts to the whole and whole to the parts.

Viollet-le-Duc illustrated the transitional steps from the ancient basilica plan to the mediaeval cathedral plan (Fig. 1). He contrasted the inert masonry construction of ancient Roman buildings to the articulated, dynamic equilibrium of the Gothic cathedral: “The stability of every point of support was regulated by the kind and amount of work it had to perform. Every thrust of an arch found another thrust to cancel it. Walls disappeared, and became only screens, not supports. The whole system became a frame . . .” (*Dis.*, vii, pp. 276–277).

However often Wright wrote of his quest for continuity and plasticity in the building fabric, his work by 1910 was characterized by extreme articulation—as he well knew.

Of his studio in Oak Park, Illinois (Fig. 2), he noted: “An early study in articulation—the various functions featured,

individualized and grouped,"²⁸ and of his work in general, as presented in the large Wasmuth portfolio, he wrote: "Many of the structures carry this principle of articulation of various building parts to the point where each has its

28. Frank Lloyd Wright, *Buildings, Plans, and Designs* (New York, 1963), note to pl. 9.

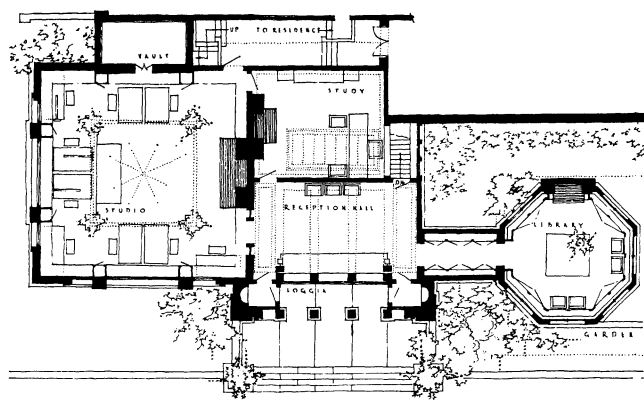


Fig. 2. Oak Park, Ill., Frank Lloyd Wright studio, plan (from Manson, *Frank Lloyd Wright to 1910*).

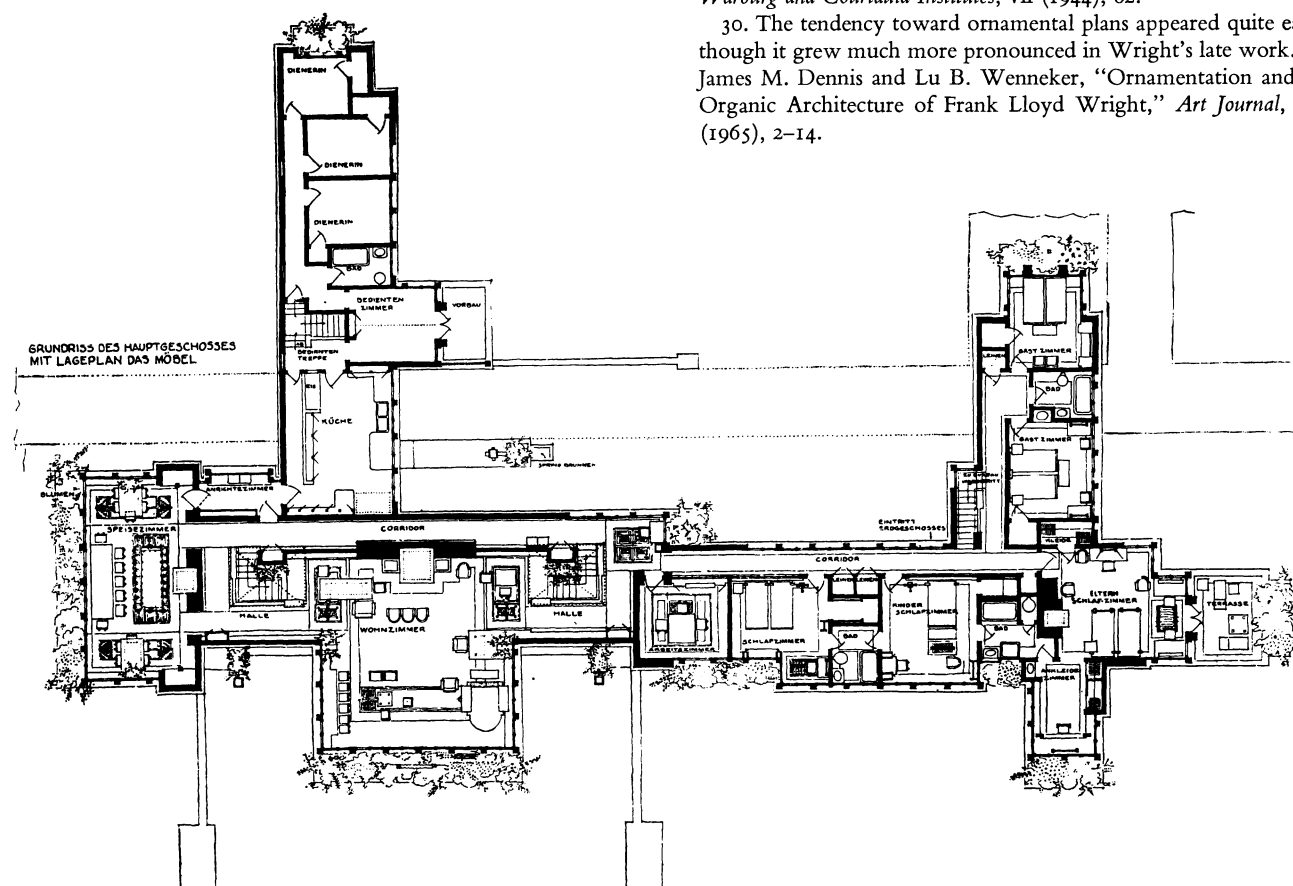


Fig. 3. Riverside, Ill., Avery Coonley house, plan (from *Frank Lloyd Wright Ausgeführte Bauten*).

own individuality completely recognized in the plan" (1910, p. 74).

A good example was one of his own favorites, the magnificent Avery Coonley house in Riverside, Illinois (Fig. 3). Since plan and elevations, ideally, worked together, one finds in Wright's early work such distinctively articulated elevations as those of the Ward Willits house in Highland Park, Illinois (Fig. 4). Whatever such elevations owed to Japanese or to American "Stick Style" influences,²⁹ basically they were essays combining an articulation of post-and-beam structure with a complete exterior expression of the various interior spaces.

Because Wright was attempting total integration of plan, section, elevation, ornamental pattern, and fixture design, his plans became in a sense latently ornamental.³⁰

A plan such as that for the enlarged River Forest Golf Club (Fig. 5) might easily provide the profile of a light fixture—and in one of Wright's most disciplined efforts,

29. Aspects of Wright's early work have been related to "the clear articulation of American stud-structure," and traced to his early "admiration for frank trabeated expression in the classical tradition." See Henry-Russell Hitchcock, "Frank Lloyd Wright and the 'Academic Tradition' of the Early Eighteen-Nineties," *Journal of the Warburg and Courtauld Institutes*, vii (1944), 62.

30. The tendency toward ornamental plans appeared quite early, though it grew much more pronounced in Wright's late work. See James M. Dennis and Lu B. Wenneker, "Ornamentation and the Organic Architecture of Frank Lloyd Wright," *Art Journal*, xxv (1965), 2-14.



Fig. 4. Highland Park, Ill., Ward Willits house (from *Frank Lloyd Wright Ausgeführte Bauten*).

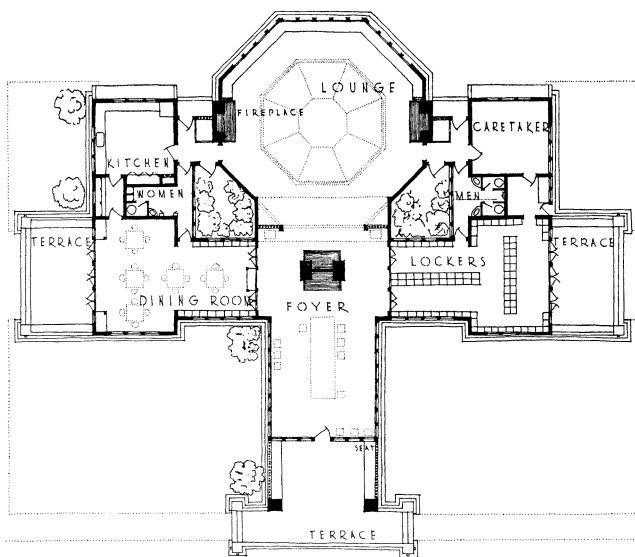


Fig. 5. River Forest, Ill., Golf Club, plan (from Manson, *Frank Lloyd Wright to 1910*).

the Unity Temple in Oak Park, Illinois, the plan (Fig. 6) indeed was reflected in the fixtures (Fig. 7). Here, again, was evidence of Wright's bent toward articulation.

Cruciform plans were not uncommon in his early work. They appeared with the Willits, Charles Ross, Darwin D. Martin, A. W. Gridley, Isabel Roberts, and George Barton houses. The last serves as a clear example (Fig. 8). Occasionally, a plan or detail became eminently cathedral-like in character, as in the conservatory of the Martin house (Fig. 9).

When the program or budget was favorable, Wright delighted in the inherent majesty of two-story spaces, such as appeared in the Susan Lawrence Dana, Thomas P. Hardy, and Frank J. Baker houses, and even in the small Isabel Roberts house. In the Larkin Building in Buffalo, New York, he created a full nave-like space.³¹

31. The Larkin has been described as "an industrial cathedral that should have delighted Viollet-le-Duc," by Vincent Scully, Jr., "Frank Lloyd Wright and Twentieth-Century Style," in *Problems of the 19th and 20th Centuries, Studies in Western Art*, 4 vols. (Princeton, N.J., 1963), IV, 11.

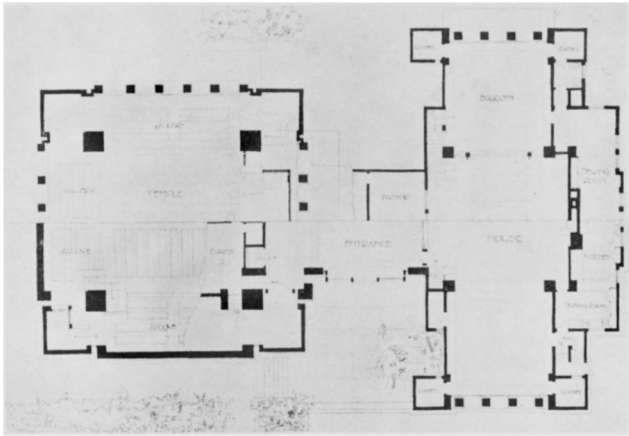


Fig. 6. Oak Park, Ill., Unity Temple, plan (from Manson, *Frank Lloyd Wright to 1910*).

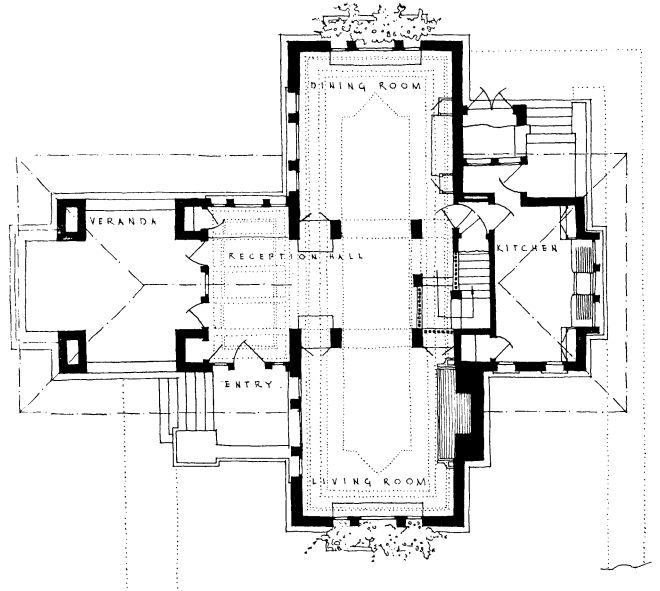


Fig. 8. Buffalo, N.Y., George Barton house, plan (from Manson, *Frank Lloyd Wright to 1910*).

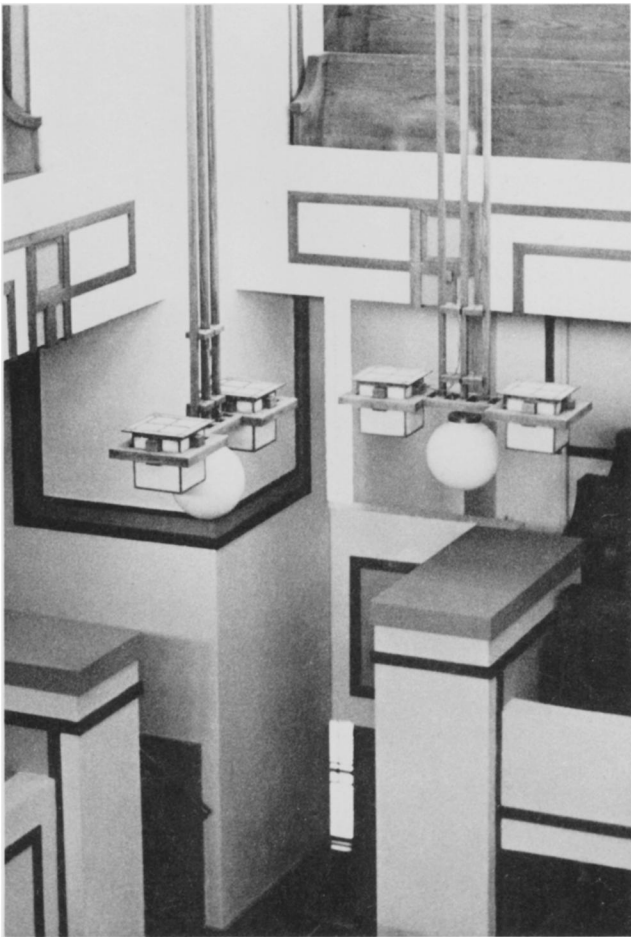


Fig. 7. Oak Park, Ill., Unity Temple, interior detail (photo: author).

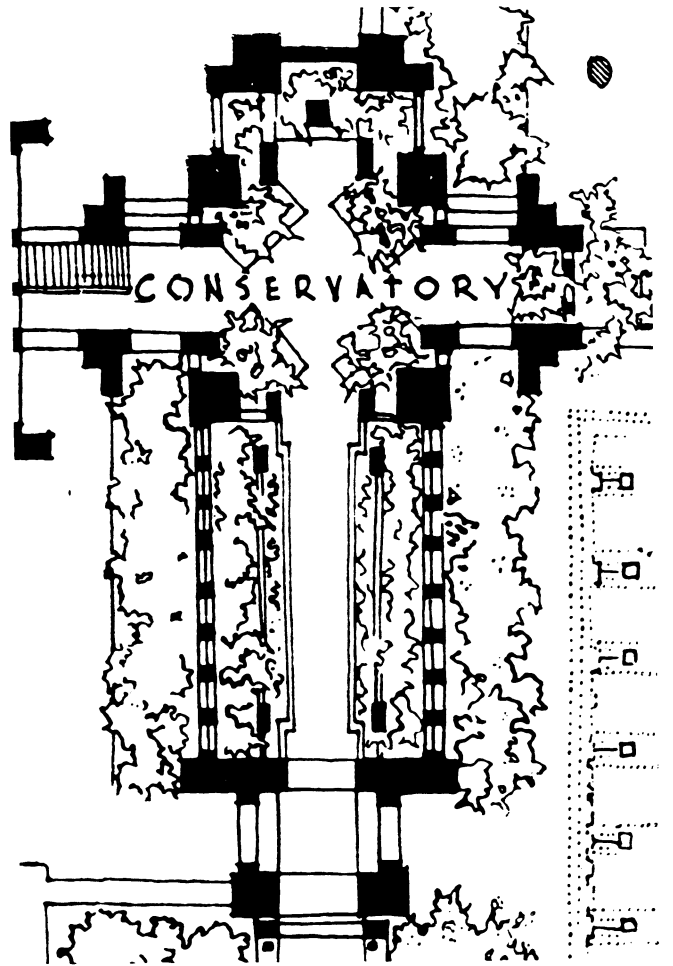


Fig. 9. Buffalo, N.Y., Darwin Martin house, conservatory plan (from Hitchcock, *In the Nature of Materials*).



Fig. 10. Springfield, Ill., Susan Lawrence Dana house, window detail (photo: author).

Viollet-le-Duc had frequently noted that Gothic ornament was derived from native flora; Wright acknowledged that he turned to the same sources, in particular for the Dana house in Springfield, Illinois (Fig. 10), where patterns were based on the formal properties of sumac.³²

Oblique or clerestory lights were an ever-present element in Wright's architecture, and undeniably one of the principal sources of its enchantment. Wright's subtle use of light has been compared with ancient Roman building-types,³³ but the precedents were more diverse. The clerestory lights of the Gothic cathedral cannot be overlooked, and Viollet-le-Duc had also referred to the "subdued and tinted light" that streamed through awnings above an Egyptian palace,

32. Frank Lloyd Wright, ed. Gutheim, p. 40.

33. Vincent Scully, Jr., *Frank Lloyd Wright* (New York, 1960), p. 20. Perhaps a closer connection between Wright's early work and ancient Roman architecture lies in the free planning of Wright's larger houses as compared with the larger Roman villas.



Fig. 11. Buffalo, N.Y., Larkin Building, exterior perspective (from *Frank Lloyd Wright Ausgeführte Bauten*).

the softened light from the demi-cupolas of an Assyrian palace, and the admirable distribution of a half-light from points high in the hall of a "Hindoo" palace.³⁴

One last note. Viollet-le-Duc never proved himself capable of creating an architecture on the order of the Larkin Building (Fig. 11); yet who besides Viollet-le-Duc could have described the Larkin Building so:

The smoke, noise and dirt incident to the locality made it imperative that all exterior surfaces be self-cleaning, and the interior be created independently of this environment. The building is a simple working out of certain utilitarian conditions, its exterior a simple cliff of brick whose only 'ornamental' feature is the exterior expression of the central aisle . . . the work may have the same claim to consideration as a 'work of art' as an ocean liner, a locomotive or a battleship.³⁵

Frank Lloyd Wright, for one.

34. Viollet-le-Duc, *The Habitations*, pp. 106, 147, 279.

35. Wright, "In the Cause of Architecture," pp. 166-167.