

ON HISTORY

PARADIGMATICS

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...the revolution that has taken place in the intervening years in the relation of the history of architecture to the practice of architecture. The two have separated; they are different employments—two games now, not one.

SIR JOHN SUMMERSON

(speech given at the presentation of the Royal Gold Medal, 1967)

The differentiation of the species "architectural historian" from the species "architect" undoubtedly reflects a vital development in our present concept of architecture's relationship to its own history. But this development does not explain why architectural historians have tended more and more to become fused with the genus "art historian"; a fusion so intense that the American Society of Architectural Historians, with a membership of 3,500, is virtually obliged to hold its annual meeting in conjunction with the College Art Association of America. The fusion seems to have little to do with the nature of architecture, and seems due more to philosophical developments in nineteenth-century Germany and to artificial pressures exerted by, or congenial to, academic administrations. That the two disciplines can derive mutual benefits from a close awareness of their related activities is incontestable; indeed, the concept of the "unity of the arts of drawing" is of such venerable antiquity as to constitute, in some measure, a historical justification in itself. But for those architects and architectural historians who are concerned with discovering what, if any, is the practical value of architectural history, and with the means of conveying such significance as it may have with unequivocal clarity, there are dangers in this fusion which are greater than the dangers which arose from the fusion of architecture and archaeology

Firstly, there is the danger of arbitrarily imposing a universal and interchangeable system of classification. The idea of an interchangeable terminology has, of course, been for over a century the harmless affectation of a small coterie of critics of painting and music, whereby, for example, paint-

ings are commended for their "tone," and music is praised for its "colour." But whereas such transpositions were originally innocuous literary contrivances, the ideal of a universal taxonomy has now become so solemnly orthodox and rigid that most of the standard textbooks on the history of music used in American universities divide the subject into "medieval," "renaissance," "baroque," "rococo," "classical," "romantic," "post-romantic" and "twentieth century," as if these classifications were demonstrably fundamental to all forms of artistic expression. Indeed, Joseph Machlin's The Enjoyment of Music even includes numerous illustrations of painting, sculpture and architecture, in a transparent endeavour to convince juvenile musicologists that this universal classification requires no philosophical proof. In the history of music, this classification was introduced by Curt Sachs, who studied the history of art in Berlin before switching to the history of music. But the system fits so neatly into the concept of the "unity of the arts" that other musicological classifications (such as the theory that the history of music has only three main divisions: "candlelight," "gaslight" and "electric"-a theory which has obvious important architectural implications) are seldom even considered.

The second danger exemplified by this universal arthistorical taxonomy is the confusion between morphological and chronological classifications. In the musicological sequence just quoted, "post-romantic" is obviously a chronological classification, though "romantic" would seem to be morphological; and the ambiguity of mixing terms indicative of formal characteristics with terms indicative of specific eras would seem to me far more harmful than is usually supposed (if one may judge from the architectural histories published in recent years). Many architectural historians actively support this confusion, and would presumably argue that formal characteristics are inseparable from the motives which produced them, and hence inseparable from the era in which they were produced. This point of view is well expressed by Kerry Downes in his rejection of Mannerism as a classification for the work of Hawksmoor. "It is tempting," he writes on page 47 of his monograph, "to stretch an overworked stylistic term and call Hawksmoor a Mannerist, although none of the classic explanations of sixteenth-century Mannerism would account for Mannerist Style in the England of Queen Anne. It certainly cannot be explained by reference to social history, for the 1640's and 1680's had passed without it." Yet the claim that Hawksmoor was Baroque must surely be open to similar objections if we accept Joseph Machlin's explanation of its causes—the establishment of the "absolute state," Cartesian rationalism, bourgeois ambition and the intensification of piety (a summary which corresponds fairly closely with that given by Henry Millon in Baroque and Rococo Architecture). Hence we are left in the uncertainty as to whether the term "Baroque" signifies the possession, in common, of a number of morphological characteristics, or whether it is simply a synonym for "1600 to 1750."

Moreover (and here we come to the third danger confronting architectural history) there are many scholars who, whilst accepting these main art-historical categories, introduce sub-categories which are in fact the very negation of that basic classification. Confronted with the difficulty of transmuting such an individualist architect as Hawksmoor into a general category they would not hesitate to dub his work "neo-Mannerist" or even "Hawksmoresque." Indeed, it can be argued that the promiscuous proliferation of subcategories by such suffixes as "-esque," "-oid" and "-istic," or of such prefixes as "neo-," "proto-" and "crypto-," constitutes the hidden complex mechanism by which the procrustean bed of stylistic unification is made to work.

This mechanism would not be such a danger if architectural historians cold agree on a standard terminology. But there is not even any consistency among the leading authorities as to what precise distinction is implied by "Early Gothic," "High Gothic" and "Late Gothic," so there must be even less unanimity as to the meanings to be attached to mongrel expressions like "Late Baroque Classicism" or "Classicist Rococo." For some authors, terminological variations are frankly a device for providing literary piquancy, as in such adjectives as "Byzantinizing," "Byzantinoid" and "Byzantinesque": three terms which are all to be found in the same authoritative book. Nevertheless, the fact that the author of this book remarks that a certain building "is not easily pigeon-holed stylistically" suggests that stylistic pigeon-holing is a taxonomical ambition which still survives with unabated force in the most orthodox Rickmanesquoid

Defenders of multiplicity in stylistic classification argue that, whatever its disadvantages may be, these do not outweigh its usefulness; and they claim that, provided an author defines his terms, no confusion need be feared. Thus the standard textbook on Early American Architecture begins by stating: Quite arbitrarily, we shall in this book use the term "Colonial" to apply to those styles that flourished in the eastern colonies in the seventeenth century, and the word "Georgian" for the style that flourished in the eighteenth century in

the English colonies of the Atlantic seaboard. The fact that the eastern provinces remained colonies of England until the Revolution may make such a distinction seem slightly illogical-as indeed it is from the standpoint of political history. The three reasons given are: (a) that this terminology is more forceful than a division into "Early Colonial" and "Late Colonial"; (b) that it avoids the use of confusing subcategories such as "Late Early Colonial"; and (c) that the term "Georgian," as a synonym for "1700 to 1780," is now customary usage in the United States. Yet, whatever the validity of these motives, it is evident that a student initially indoctrinated into this terminology will be completely confused when he is later told, by other historians, of the importance of the Queen Anne Revival in nineteenth-century America—especially now that a later textbook on American architecture identifies "American Queen Anne" with the period 1725 to 1750.

Finally, the greatest danger of all is that of giving undue emphasis to the identification of prototypes-a danger increased by the popularization of the erudite synonym: "paradigm." Few students of nineteenth-century architecture are now so ignorant that they cannot define a "Ledolcian Paradigm" or explain immediately why "Soufflot's Panthéon provides no such simple paradigm as Stuart's temple." The importance, for architects interested in the history of ideas, of understanding the influence of Durand's didactic technique, and knowing why the Munich Glyptothek might aptly be described as "generically Durandesque" is, I think, uncontestable. But in so far as Summerson is justified in describing both architecture and architectural history as "games," it is because the latter has become a game of "hunt the precedent," whereas the former has become a game of "hunt the unprecedented." I would claim that this antithesis is not just a play on words, but is the fundamental reason for the separation to which Summerson refers; a separation that is largely the fault of retarded developments in architectural historiography. The persistent emphasis on paradigms is obscuring what was original in buildings of earlier ages, and why earlier architects considered that their work was original; for it cannot be overemphasized that the inner compulsion towards originality has always been the mainspring of every great creative impulse in architecture, and future architects must surely be more intrigued by the manner in which buildings of the past were considered original by those who designed them, than by any real or conjectural prototypes. The criteria of originality have changed from epoch to epoch, and it is these changes which have most significance in the history of architectural ideas. If architects today occasionally display an extravagant concern with novelty for its own sake, it may well be because architectural historians are still unemancipated from a methodology devised when the principles of Revivalism constituted the basic architectural philosophy of the age.



HISTORICISM

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The historians of modern architecture, by the very nature of their subject, cannot resist the temptation to be up to date. Henry-Russell Hitchcock finishes his Architecture Nineteenth and Twentieth Centuries (1958) with buildings constructed in 1956: Jürgen Joedicke's History of Modern Architecture (1959) includes photographs of models, such as that of Utzon's Sidney Opera House, yet to be built. The result is that architects are incessantly being reminded that everything they create forms a link in the chain of architectural development, and that their own work must therefore have some classifiable elements of novelty if the theory of evolution is to have any validity in the domain of art. The art historians, to use Gerhard Kallmann's phrase, are breathing down the architects' necks.

Hitchcock faces this problem squarely in the last chapter of his distinguished book. "The very extent in time of what should be considered 'the present' is a subjective matter." he writes. "I have known American architectural students whose present was so limited that they had never heard of Perret! To anyone under thirty the effective present will hardly extend backward more than five or ten years." Yet even ten years is a precious insulation against Historicism, and one which is essential if architecture is to develop in an uninhibited way. It represents the distinction between the history and theory of architecture. Recent developments in architectural historiography seemed at one time to be encouraging the assertion of this distinction by showing a greater objectivity as compared with the histories of a century ago. Indeed, so objective have architectural historians now become, that they rarely permit themselves any qualitative assessment at all beyond "crisp" or "jolly." Yet there are greater dangers than partiality in historical writing, for partiality can at least be perceived and refuted, whereas up-to-dateness exerts a subconscious influence which only advertising agents can claim to assess. History undoubtedly ends with the present, but historical studies must end sometime before then if we are to avoid confusing history with prophecy. One only has to look at the buildings admired twenty years ago to see how hazardous it is to anticipate the historical values which should

be set on what we are now building ourselves.

It is not, I suspect, sufficiently realized that the distinctive character of modern architecture, or in other words the essential difference between architectural ideas before 1750 and architectural ideas since 1750, derives almost entirely from a new kind of awareness of history. It would be quite wrong to assume that the study of history is a natural, inherent, inevitable kind of human activity, or that it has been regarded in all ages as a distinctive form of thought. The Greeks were not interested in history because it is concerned with what is transient and changing, with facts in a space-time location, whereas the scholars of Antiquity were more concerned with what was permanent and immutable, such as is expressed by mathematics. The Roman historians such as Livy did begin their histories at a more remote period of the past than the Greeks (whose histories were little more than contemporary chronicles) but their aim in doing this was to show the Eternal City as having existed ready-made from all time, so that they could hold up the mythical morality of its first citizens as an example to their contemporaries. Mediaeval scholars had no more critical awareness of history than the scholars who preceded them, since they merely substituted the authority of theology for that of mathematics, and thought it incumbent on them to interpret the past entirely in terms of the Divine Plan.

With the advent of the Renaissance, historical thought followed Greek and Roman traditions, although it was soon to be modified by the influence of Descartes, whose scientific method was applied to historical research. It was in this age that manuscripts were first accurately dated and scientifically evaluated, and that non-literary documents, such as inscriptions and coins, were first used to check the narratives of early writers, thus leading the way to the archaeological researches of the modern age. But it is a curious fact that although the study of ancient buildings and ancient manuscripts had formed an inevitable counterpart to the revival of Antiquity, history itself had little influence on seventeenth and early eighteenth century thought, because people then, like those of Antiquity, were more interested in the present than in the past. History was rarely taught in schools before about 1760, when it was introduced into the Dissenting Academies by such teachers as Joseph Priestley. Chairs of modern history had been founded at Oxford and Cambridge in 1724, but no lectures were delivered at Cambridge until 1773, whilst at Oxford the chair was usually occupied by such people as Thomas Gray, the poet. No chair of history was established at the Collège de France until 1769.

The first modern history ever to be written, according to Eduard Fueter, was Voltaire's Siècle de Louis XIV, published in 1751. The first history of architecture was that included as the first section of J. F. Blondel's Architecture Françoise of 1752. Others had written biographies of architects, and numerous travellers had published descriptions of ancient buildings, but apart from Fischer von Erlach's highly fanciful collection of engravings entitled Historical Architecture, there was no other book which assembled in chronological sequence a description of buildings from the time of the Egyptians, nor were there any lecture courses on the subject before Blondel opened his school of architecture in the rue de la Harpe.

Blondel had contributed all the articles on architecture in the Encyclopédie, so that it is not unnatural that he should have undertaken a task so much in harmony with the theme of that work. But being, like the other Encyclopédistes, a rationalist, he did not think of the past as a collection of disparate styles, but as a progressive series of improvements, interspersed by occasional retrogressions, which had culminated in the architecture of his own day. Graeco-Romano-Renaissance architecture was for him simply "Architecture" ("It was in the reign of Francis I," he wrote, "that architecture began to regain favour in France"), and since architecture thus meant for him the forms invented by the Greeks, improved by the Romans, perfected by the French, and used more or less correctly by every architect in Europe and America, he was incapable of seeing any Roman or Renaissance modifications as either current or obsolete, but only as either good or bad. He was in fact not a historian at all but a theorist (which was all he ever claimed to be), and since there could be no theoretical value for him in studying primitive or non-classical architecture, he confined himself to recounting the literary descriptions of ancient buildings extracted from the most celebrated authors of the past.

It was not until about 1820 that any general illustrated histories of architecture, such as we know them today, were published, and these were made possible only by the large number of monographs on Greek, Gothic and Oriental architecture published during the previous seventy years. Most of these general histories have the distinctive characteristics of Voltaire's historical works; they are critical, scientific, evolutionary, concerned with all eras and countries, and designed primarily to trace the origins and progress of varying manners or styles. Also, like Voltaire's histories, they aim at radical reform, and display, for all their occupation with the past, a dissatisfaction with the present and a great concern for the future. It is in these historical surveys, published between 1820 and 1850, that the demand for a New Architecture first appears.

One of the earliest expressions of this demand occurs in James Elmes's Lectures on Architecture, comprising the History of Art from the Earliest Times to the Present Day, first published in 1821. Elmes was a successful practising architect, but though he sided with what he calls "the Greek faction," this did not blind him completely to the dangers and frustrations which the co-existence of stylistic factions entailed. "An indiscriminate patronage of ancient or foreign art is not the encouragement now required by the British School," he proclaimed; "had the Greeks fostered alone Egyptian art, they would certainly never have become the inventors of their own pure style. The Romans, on the contrary, by their exclusive pa-

tronage of Greek architects, are known only as degenerators, instead of inventors or restorers."

Another architectural historian to profess dissatisfaction with current architecture was Thomas Hope, whose Historical Essay on Architecture was published in 1835. Being an amateur, he was under no obligation to demonstrate the practicability of his speculations, and was therefore free to propose reforms without restraint. "No one," he wrote, "seems yet to have conceived the smallest wish or idea of making the new discoveries, the new conquests, of natural productions unknown to former ages, the models of new imitations more beautiful and varied, and thus of composing an architecture which, born in our country, grown on our soil, and in harmony with our climate, institutions, and habits, at once elegant, appropriate and original, should truly deserve the appellation of 'our own'."

The culmination of the first great age of architectural historiography was James Fergusson's Illustrated Hand-Book of Architecture, first published unsuccessfully in 1849, revised and re-issued in its complete form in 1855, and eventually enlarged and extended in 1865 to form his famous History of Architecture in all Countries from the Earliest Times to the Present Day. Fergusson's main purpose in publishing his Handbook was to effect a return to "the true principles which might guide us in designing or criticising architectural objects" by means of the study of all buildings constructed before 1500. He had no doubt that a New Style could be created, because, as he explained in his introduction, no nation in any age or in any part of the globe had failed to invent for itself a true and appropriate style of architecture whenever it chose to set about it in the right way. "What that process is," he announced, "may perhaps be best explained by an example, and as one of a building character, though totally distinct, let us take ship-building," which he did. He confessed that no architect had shown any ability to put the philosophy he recommended into effect, but found satisfaction in contemplating the Crystal Palace which was, he claimed, "at least one great building carried out wholly in the principles of Gothic or any true style of art."2

In the past century, the reforms which Fergusson demanded and predicted have come into effect, but Historicism, the curse of the nineteenth century, has not for that reason been exorcised, mainly because architectural historians are deliberately or unconsciously keeping it in being. Sigfried Giedion goes so far as to assert that historical selfconsciousness is a good thing, and that the trouble with the nineteenth century was that "it lost all sense of playing a part in history," people then being either indifferent to the period in which they lived or hating it. It is undoubtedly true that nineteenth century architectural historians did not think many buildings of their own century worth recording, but then, neither does Giedion. Auguste Choisy, in his History of Architecture published in 1898, only mentions two buildings constructed in France since 1780 (namely the Halle au Blé and Labrouste's Bibliothèque Nationale), but then Giedion himself does not mention many more. It is all very well to lament the fact that nineteenth-century documents concerning urban development or new mechanical inventions were not scrupulously preserved for historical inspection, but this would seem to me a very healthy defect; for as Parkinson's Law seems to indicate, as soon as organizations start deliberately filing their records with a view to future historical research, there is every probability that their organization has ceased to be of any historical importance whatsoever. If the architectural innovators of the nineteenth century omitted to preserve their records, it was perhaps because they strove to emulate a tradition for which there were virtually no contemporary documents left.

The term "contemporary history" was invented by Giedion, and its meaning explained by him in the opening pages of Space, Time and Architecture. It does not mean, as it would for a political historian, the history of his own times, but a selection of those structural and spatial developments of the past few centuries which seem to him relevant to the creative needs of the present age. But this is precisely what the late nineteenth-century architects understood by "theory." If we compare Space, Time and Architecture with Julien Guadet's Elements and Theory of Architecture, published in 1894, we find that the former treats the development of forms in much the same way as the latter. When Guadet discusses the spatial and structural possibilities of masonry stairways, he does so by exemplifying all the various masonry stairways constructed since the Middle Ages, just as Giedion explains the steel frame aesthetic by tracing its development from the cast-iron factories of Boulton and Watt.

There are of course major differences between the philosophies inspiring these two books. One is that whereas Guadet, lecturing so soon after Viollet-le-Duc's disastrous course on aesthetics at the Ecole des Beaux-Arts, considered it wise to be ostentatiously impartial in his selection of historical examples, Giedion's analysis is frankly tendentious, even within the limits of the Modern Movement itself. Neither Mies van der Rohe nor Alvar Aalto were included in the first edition of Space, Time and Architecture, which was essentially a justification of the doctrines of CIAM, of which he was secretary. But there is a more important difference than this. Whereas Giedion very rightly keeps revising his book to bring it continually up to date, Guadet, from the first, rigorously excluded all mention of the works of living architects because he thought it indecorous for a professor to comment on his colleagues' work. "Amongst the works of your masters," he announced in his inaugural address,"there are some which, luckily for our epoch, will not only be classics in the future, but are so today. But you will appreciate that I cannot instruct, indeed must not instruct, by taking examples from among the works of living architects, because no professor wants to risk being accused of flattery." As a result, the Elements and Theory of Architecture went through five editions in ten years with the text unchanged.

We thus find the paradoxical situation that whereas the twentieth century tries to give its histories of architecture the up-to-dateness of theory, the nineteenth century tried to give its theory of architecture the objectivity of history. Both attitudes are wrong, but they represent little more than a demarcation dispute, and it is to be hoped that theorists and historians will soon be able to settle the matter by direct negotiation, without subjecting contemporary architecture to the inconvenience and disruption of a crippling aesthetic strike. We cannot escape our awareness of history; of what Le Corbusier calls "L'homme dans le temps et dans le lieu" but we can mitigate its more harmful effects on architectural creativity by maintaining a clear distinction between the history and theory of art. It is becoming less and less easy to do this because Historicism, after having imposed itself on biology a century ago by means of the theory of evolution, has now begun to control our basic thought-processes as a result of the importance now attached to psycho-analysis. Psychologists and sociologists have discouraged the nineteenthcentury emphasis on abstract moral judgements of goodness and badness, right and wrong, in favour of the accumulation of case-histories of those who appear to express their emotions in an unusual way, and so architectural historians may well feel that they, too, are able to provide a substitute for traditional principles, and the value-judgements these require, by simply analysing, classifying, and tracing the origins of the newest architectural forms backward into the past. Architects have certainly many advantages in knowing the precedents for any forms they use, but none in seeing the forms themselves prematurely pigeon-holed; indeed, nothing but frustration can result from labelling nascent developments with catchwords, and categorizing their first expressions as paradigms, before the creators themselves are clearly aware of what they are aiming at, and before it is certain that the forms produced are of any historical worth.

NOTES:

1. The article on "History" had been contributed by Voltaire.

2. In view of the publication in the AR for April 1960 (pp. 280-282) of a detailed description of Marshall's Flax-Mill in Leeds, it may be remarked that Fergusson considered that this revolutionary industrial structure (less the facade) would have been more suitable for the British Museum than the building constructed by Smirke (see J. Fergusson: Observations on the British Museum, &c. (1849), pp.39-48).



THE EIGHTEENTH CENTURY ORIGINS

OF

ARCHITECTURAL SCHOOLING

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Although the first full-time school of architecture seems to have been that established by J. F. Blondel (1705-1774), our present concept of architectural education unquestionably had its roots in the system which originated in Paris in 1671 as part of Louis XIV's establishment of the Académie Royale d'Architecture. In the present context, there is little to be gained from studying the first forty years of the Academy's existence. The lecture courses of the first professors (which exist as books, unpublished manuscripts, or précis reported in the Academy minutes) are invaluable evidence of the theoretical instruction imparted. But despite its royal founder's implied intentions,1 the Academy's educational facilities initially comprised little beyond these lecture courses. Hence the system is best studied in the period following the grant of a Charter in 1717, when experience had taught the academicians how best to proceed, and when the new Letters Patent stated clearly the Academy's basic pedagogical responsibilities.

The general character of the school had inevitably been adumbrated well before this date, as a natural consequence of the characteristics of architectural practice in France in the late 17th and early 18th centuries. It is important to enumerate and emphasize these characteristics because of radical changes which were to occur after the French Revolution, when a very different system—usually called the "Beaux-Arts system"—was put in its place.

The first characteristic stems from the fact that the Academy of Architecture was totally independent of the Academy of Painting and Sculpture founded in 1648 by Cardinal Mazarin, an Italian prelate whose views on art were entirely ultramontane. Hence the Academy School was also completely independent of the school of painting and sculpture.

The second characteristic stems from the fact that the lecture courses given by the Academy of Architecture were libres et gratuits, i.e., they could be attended by anyone and attendance was free of charge. It was only gradually that there emerged a "school" in the current sense of the term: an institution where young aspirants were registered as "students," and where specific qualifications were needed to entitle them to the special educational privileges provided.²

The third characteristic stems from the fact that this was an era in which only the most important buildings were designed by persons designated as "architects." Thus, few architects were initially elected to the Academy, and they tended to regard their title architecte-du-roi as virtually a synonym for "architect." But one of the conditions of election was that they must reside in Paris, so as to be able to attend the weekly meetings. Hence other architects were unrecognized, expecially those who lived in the provinces.

When the Academy was founded, only six architects, plus a professor and a secretary were appointed. When J. H. Mansart became Superintendant of Buildings in 1699, the number of members was increased to fourteen. The 1717 Charter increased this number to twenty. In 1756, membership was finally set at thirty. This restriction on membership of the Academy vitally affected the eventual organization of the School, since the Charter laid down that the number of official "students" should be proportionate to the number of academicians. Thus article 40 stated that every academician was to nominate one student (clearly envisaged as being one of his own pupils or assistants), and that the professor could nominate six students.

The evolution of the Academy School's curriculum and policy conveniently divides itself into three phases. The first lasted from the date of the Charter until 1762 (the date of Jacques-François Blondel's appointment as Academy Professor). The second phase lasted until J. F. Blondel's death in 1771. The third phase ended with the dissolution of all the Academies by the revolutionary government in 1793. This final phase was distinguished mainly by the influence of E. L. Boullée, and others like him, who were political as well as architectural visionaries. It was their grandiose projects, and the doctrines set forth in Boullée's Architecture, essai sur l'art, which formed the bridge between the old academy school and the 19th-century Ecole des Beaux-Arts; and it was their political sympathies with the new régime which put the organization of the new school in their hands.

The second phase was undoubtedly the most important, and its importance was due to the fact that Blondel introduced many of the methods he had perfected in his own private school of architecture. I propose, therefore, to describe the development of this school and its influence on subsequent architectural education. But there were three Blondels teaching and practising architecture in France between 1671 and 1774, so it will be appropriate to begin by explaining clearly which Blondel is the hero of this essay.

Chronologically, the first Blondel was François Blondel,

the Academy of Architecture's first professor, best known nowadays as the author of the *Cours d'Architecture* published in 1675. He was essentially an expert in structural engineering and stereotomy, and had been selected by Louis XIV to teach mathematics to his own son, the Grand Dauphin. The second Blondel (1683-1756), an architect who was born in Rouen, moved to Paris, and became a member of the Academy. He established a creditable reputation as an architect, interior designer and draughtsman, and taught several young architects of the next generation, including Cuvilliès and his own nephew, Jacques-François. Only Jacques-François Plondel concerns us here; so he is the only Blondel who will be referred to in the rest of this text.

Blondel's school started officially (i.e. with the Academy's permission) in May 1743;6 but the date on which he actually started giving organized tuition is uncertain. In his preface to the *Architecture Françoise*, published in 1752, he claimed to have been teaching for fifteen years "publicly and privately," so that he must at the latest have started teaching in 1737. He did not however set up his Ecole des Arts in the rue de la Harpe in Paris until 1740.

"Before 1740," wrote Pierre Patte, who completed the last two volumes of J. F. Blondel's published *Cours d'Architecture*, "there was no school in Paris where a young man might be trained and learn everything he needed, such as architectural and ornamental drawing, perspective, stereotomy, quantity surveying and all the other numerous details involved in building construction. He had to visit successively various teachers to learn each of these subjects, which wasted time, and caused him usually to learn drawing and neglect the rest. It was for this reason that M. Blondel created an Ecole des Arts, where several teachers, specializing in these various subjects taught in one place under his directions."

Blondel himself explained at length the purpose of his undertaking in the August 1747 issue of the Mercure de France. "To train skilled architects," he wrote, "it is indispensable to unite the study of all the relevant arts" (i.e. painting, sculpture, garden design, masonry, joinery, carpentry, locksmith's work, etc.); and this, he asserted, had never been done before. Thus a young man who intended to be an architect was often ignorant of perspective, mathematics, the principles of design, and the arts of drawing. On the other hand, those who were trying other professions, such as painting, neglected to study what they should know about architecture, geometry, optics, etc. Another equally serious inconvenience, in his view, was that most young men started studying architecture and its related professions as a result of advice given them, and rarely from their own inclination. If all the arts were to be explained to them one at a time, they would, he considered, be in a better position to decide for themselves which suited them best.

Another advantage was that they would understand the relationship linking the art they had chosen with all the rest, of which they could at least learn the rudiments. By these means he anticipated that there would be fewer mediocre architects, fewer superficial mathematicians, fewer tasteless decorators and fewer untutored draughtsmen. These reflections seemed to him so important that he thereupon conceived the idea of forming a school in Paris where all the arts relating to architecture would be assembled, and where reputable teachers of each could impart the subjects in which they specialized.⁸

In Blondel's annual inaugural address to the students given in 1754, he said: "From my experience, I judged it essential that these different branches of knowledge should be acquired according to common principles, and taught by several professors who, being united in the same spirit, would teach in a way calculated to bring out the best in each student. Thus, as a result of careful co-ordination, those entrusted to us can progress in regular stages from the knowledge of precepts to an understanding of taste, from theory to experience, and from speculation to practice."

It may thus be fairly claimed for Blondel that he originated, in the first half of the eighteenth century, a system of full-time architectural education which was not introduced into North America for nearly another hundred and fifty years, but which is now the generally accepted method of architectural training both in Europe and America.

As was to be expected, the Academy rather resented the efforts made by an independent architect to set up a school of architecture in Paris, especially when that architect was not even an Academician. After running his school privately for two years, Blondel sought to widen the scope of his work, and to interest the public by putting an advertisement in the press. First, however, official sanction had to be obtained from the Lieutenant-General of Police; but the Academy was opposed to the idea, so permission was refused. Fourteen months later, however, the Academy reversed its policy and decided that "Mr. Blondel's school would be useful to the public and to the progress of young persons who wish to apply themselves to architecture." ¹⁰

The main function of Blondel's school was to give fulltime training¹¹ (as compared with the Academy School, where tuition was only given two mornings a week). We do not know how many attended, either as day students or boarders, but the school evidently enjoyed a high reputation which extended beyond the frontiers of France. One of the school prize-winners of 1755 was Jacques Heumann, a native of Hanover. Sir William Chambers, whose election as first corresponding member of the Academy took place in 1762, was one of Blondel's pupils;12 and such a distinguished and successful architect as Servandoni did not hesitate to send his own son Jean-Raphael to study at Blondel's Ecole des Arts. The reputation of the school was such that the government chose it to teach architecture to the students of the Ecole des Ponts et Chaussées, i.e., the state school of civil engineering. As a result, Blondel received a grant of Fr2,400 per annum to provide these six students with books and drawing instruments, and to defray other expenses, in addition to the normal fees. This stroke of good fortune can be regarded as a reward of virtue, because Blondel himself had, from 1749 onward, awarded twelve free places in his school each year to students who were "more favoured by nature than by fortune."13

The fears of anxious parents who contemplated sending their sons as boarders were allayed by the description which Blondel gave of his establishment, which included a room set apart for, "fencing, music and dancing; exercises to which particular attention is paid, since they should form part of the education of all well-born persons who devote themselves to architecture, and who are destined to live in the best society... Moreover, to make this establishment as useful as possible, I have selected a person of recognised probity who, at my request, and under my supervision, has kindly undertaken to give board and lodging in the same well-aired house situated in a suitable part of Paris. She will supervise the endeavours and good manners of those who, sent to Paris without this help, would often find themselves left to their own devices, and thus lose the fruit of their studies. By these means, they will find under the same roof, and at a reasonable price, the necessities of life, and facilities for becoming skilled in the different branches of the Fine Arts."14

The curriculum of the school, as finally evolved, is given in the introduction to volume three of his *Cours d'Architecture*, published in 1717; and although it is difficult to imagine architectural students of any period submitting fully to such an exacting discipline, the picture it gives is probably no less accurate than most documents of its type.

Tuition was given to architectural students from 8 a.m. to 9 p.m. every day of the week except Sunday, with an hour off for lunch from 2 to 3 p.m. The morning period was entirely devoted to the theory of architecture (later published in book form), and studio work. The latter might consist of copying details, preparing improved designs of well-known buildings, or designing original schemes in accordance with programs carefully prepared and dictated.

Many of the programs were doubtless for the same rather luxurious types of building which were the subjects of the annual Academy competition. Blondel not unnaturally trained his students with an eye to the most influential type of patron; and although few can have hoped to emulate his most distinguished pupil, Richard Mique, who eventually became architect of Marie Antoinette, several rose to be Academicians. Several of the programs were, however, for simple utilitarian buildings, and Blondel makes it quite clear how important it was that this type should be included. When speaking of economy, he asserted that he intended to stop his students from always occupying themselves with luxurious projects, and to teach them to adapt buildings to restricted sites. "Make no mistake," he warned them, "this type of study is no less useful than those large compositions which are often beyond your capabilities, and which you treat superficially, eventually abandoning them for something new and even more vague.'

It was his experience that they should first of all try to make something of a hilly, irregular and restricted site; that they should keep within the conditions prescribed by the program or given by the client; and that they should above all observe a spirit of suitability and economy in every type of building. "Try to reduce the cost of your work to half, then to a quarter," he told them; "it is a process one nearly always has to go through in practice." Already in his first publication, Blondel had remarked that nothing shows more the merits of an architect than when, limited by the site and the money available, he combines good taste and good planning, and nobly relates all the parts of his building. 16

Blondel's general method of dictating programs was based on the Academy system, but there can be no doubt that his were drawn up with much more care and attention to detail:

By program I mean the enunciation of a fairly detailed project, which the professor gives his students that they may understand his intentions, and the sequence they should follow in composing the esquisse under his supervision. The students then do a finished drawing, without being allowed to depart from their first thoughts. It is the professor's duty to explain clearly and precisely the conditions of the program, including the dimension of the site, its various levels, and any special restrictions of the type one always finds in building. Before dictating the program, he should himself, in the tranquility of his office, have made preliminary sketches, as the only means of keeping to essentials thereby in a way preparing the student's work. After having thus conceived it, he should, in everybody's presence, analyse, extend, and develop speculatively the type of project concerned, giving references to precedents, and reminding students of similar buildings by great masters, or those described by the best authors. He should try to make them realize the subtle differences which distinguished buildings constructed for the same purpose... so that those participating can stock their minds with those things bearing most analogy to the project given, and, before

beginning, conceive a clear idea which will enable them to make fewer mistakes concerning the proper arrangements and requirements of each composition.¹⁷

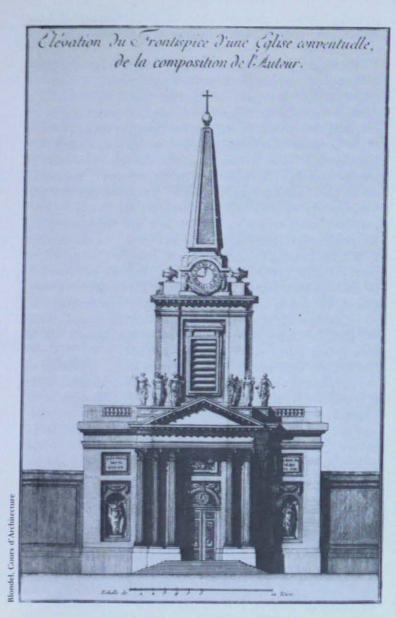
He always advised his students never to hurry. On esquisse days, they were given about twelve hours to finish; and he frequently told them to pass a third of the time thinking over the problem in complete silence, and then to spend the same length of time trying several ways of fulfilling the conditions of the program. The remaining four hours was, in his opinion, adequate time to translate their thoughts and make a precise esquisse to the required scale. "Remember," he would say to his students, "that the better you have digested the program, the easier it will be to produce the finished drawings. You must regard esquisse day as a day of triumph; any weariness you may feel on that day will ensure for you an easy time for the rest of the program; and only thus have you the right to expect the prize awaiting you." But few students followed his advice; and he lamented what a lot there were who, quickly extracting one sentence from the program, immediately grabbed a scale and dividers, and started drawing without comprehending that they should have the concept fully in their heads before putting pencil to paper.

Blondel's programs were of several kinds, according to the purpose of each exercise. The few published in his *Cours d'Architecture* are all exercises in elevational treatment: a triumphal arch, a commemorative column, a fountain, the gateway to an arsenal, a church porch, the doorway to a stable, a palace facade, a belvedere, a lighthouse, and so on. ¹⁸ But programs were also set as exercises in planning and interior design, and a few were devoted to the design of gardens. ¹⁹

In each program the scale required for the esquisse and for the finished drawings was clearly stated. Before the establishment of schools of architecture, there seems every reason to believe that no architects ever drew to a regular scale. After ensuring that their drawings would fit onto the piece of paper selected, they would draw a scale line of convenient but arbitrary length, and then divide it into appropriate sub-divisions by means of dividers. It is for this reason that dividers were always the architect's badge of office, to be held in a prominent position when having one's portrait painted.

The need to establish conformity of scale first appeared when student competitions became an annual feature of the Academy. The first record of a definite scale being imposed occurs in the Academy minutes for January 10th, 1701. The subject proposed for the prize that year was a parish church porch 120 feet wide, and competitors were told to "reduce this on the drawing to 1 inch for 6 feet." From then onward, it became the rule to prescribe a convenient scale, although sometimes the degree of convenience was a matter of opinion. On one occasion, the Academy students complained that their loges were too small for them to make the large scale drawing to the size demanded, and begged to be allowed to plan to a scale of four-twelfths of an inch to six feet instead of to twice that scale.20 The scheme for this particular year (1772) was a royal palace, which was to have an elevation 660 feet long. To the scale demanded, this would have produced a drawing 6'-3" wide, and as the students were asked for two elevations, full plans and a section, we can sympathise with their predicament.

The French units of measurement were: the toise of six feet, the pied or foot (equivalent to 1.066 English feet), the pouce or twelfth of a foot, and the ligne or twelfth of an inch. The scales chosen were not based on an inflexible system; and in the specimen programs given by Blondel in his Course, the scales required for esquisses and finished drawings vary considerably. They are usually expressed as so many lignes or



pouces to so many pieds or toises; but the fractions are frequently awkward, and drawings must still have been scaled with dividers from a specially drawn scale-line.

In addition to designing academic projects, much time was spent examining existing buildings in and around Paris:

It is only by an attitude of comparison that we can judge the relationship of the parts of a building to the whole, so as to take what is best from each, and as it were deduce so many principles capable of leading us nearer and nearer to perfecting our art. Yet this perfection seems to draw further away, because young architects neglect to examine carefully different buildings and the finer points of edifices not generally admired.²¹

Blondel would have heartily endorsed Viollet-le-Duc's dictum, written a hundred years later, to the effect that an architect is not, and never can be, anything but a part of the whole, beginning what others will finish, and finishing what others have begun; that he cannot work in isolation, for his work is not his own personal effort, like the painter's picture or the poet's verse. Thus any architect who claimed to impose an art on a whole epoch would, in Viollet-le-Duc's opinion, be committing an act of pure folly.²²

The assessment of the merits of existing buildings was an intrinsic part of Blondel's system; but it naturally provoked a certain amount of resentment amongst his fellow architects, especially when he published his criticisms in book form, and delivered them in public lectures. The wealth of polite cir-

cumlocution with which he gilds the pill of adverse comment shows how anxious he was not to offend, but he found it necessary more than once to defend his motives, and disclaim charges of partiality. His only aim, he asserted, was the perfection of the arts. Beauties universally approved would be so regarded by him; mediocrity would be censured in his book with suitable restraint. He knew that his sincerity would displease some people, but he contented himself with the thought that the honesty of his intentions and the esteem of scholars would sufficiently repay him for the vexations of those who sought to give a discreditable interpretation to his zeal.²³

Twice a week, during April and May, Blondel spent the afternoons from 3 to 9 p.m. conducting parties of students round Paris to examine on the spot either the exteriors or interiors of churches, or the planning, elevations and interior decoration of domestic buildings.²⁴

We have no record of all the buildings they visited; but the elaborate guide books of Paris published in many editions by Brice and Piganiol de la Force make it clear that most palaces and mansions could be fully inspected, and it seems not unlikely that Blondel's students were able to take full advantage of these facilities. In his Architecture Françoise, Blondel refers to the number of times he has shown visitors round the palace of Versailles, 25 and at the beginning of his Cours d'Architecture he remarks that it is not sufficient just to visit important peoples' dwellings: one must contemplate the facades, walk through the interior, come outside again, remind oneself of the reasons for which it was built, and reflect on the type of edifice, the uses of the rooms, and the people who live there. 26

Nevertheless, he considered that an architect's first care should be to make his facades both elegant and well proportioned; always related to the internal planning, but in accordance with the laws of elevational design.²⁷ When criticizing the Collège des Quatres Nations (now the Institut de France) by François d'Orbay, he brings out this point very strongly. After criticising some of the windows, he writes:

D'Orbay's supporters will not fail to reply that criticism is easy and practice difficult. Moreover, they will say that the interior required this particular type of window. But this excuse, if it is one, does not change the window's unsuitability, and all unsuitable architecture is imperfect, especially when the design of an important monument is involved. For after all, there are not only rules in architecture; there is also ingenuity. With a little thought it will be apparent that the latter, in the hands of a great and skilful architect, provides him with the means of overcoming the greatest difficulties, and of reconciling in a less trivial way the interior with the exterior of a building.²⁸

Unlike most of those who take upon themselves the duties of art criticism, Blondel was not afraid to offer his own works for public appraisal, or make positive suggestions for improving the buildings he criticised. In his first published work, containing his own designs for country houses, he states that unlike the majority of authors who, to have their work admired, show only its most attractive side, he is prepared to criticise the defects he was unable to avoid. "One can even turn these imperfections to profit, and draw lessons from them, of which a regular building would give no clue. When one has already acquired a certain knowledge of architecture, other people's errors serve as a guide. I shall not, therefore have so much vanity as to hide my own from the reader." 29

One of his great pleasures was to redesign celebrated buildings in the light of his own criticism, and his students were given similar practical exercises in criticism. In the third volume of the *Cours d'Architecture*, there are two illustrations of Perrault's celebrated Louvre colonnade. Plate VI is a view of the central portion which Blondel describes and criticizes in five pages of text. Plates VII and VIII, which are an elevation and plan respectively, show the same view "with several changes proposed by the author of these lectures," and are accompanied by four pages of explanation. Similar studies were made for other buildings, and Blondel tells us how, more than once, he got his students to draw suggested changes in the elevation of the palais du Luxembourg, the entrance to the hôtel de Soubise, and many of the other buildings he criticised during his lectures.³⁰

Formal visits were not only made to completed buildings, but to workshops and building sites. "To merit the title of architect, it is not sufficient to have been a draughtsman for several years...Before taking the risk of actually constructing, one should have spent several years visiting workshops and buildings;"31 and at a suitable time, when the weather was fine, we find Blondel taking his students round the various workshops in Paris, so that they would have practical knowledge of building and of craftsmanship, and could examine systematically the totality of systems of construction, the way they fit together, their durability, strength, weight and thrust; so that they could learn the terminology and local trade practices, and the method of drawing up specifications, contracts and site layouts. The examination of these sites continued from the time excavations started until the time the building was completed.32

Blondel advised his students never to waste their free time, but to spend it usefully visiting the studios of celebrated artists and architects, or going to various buildings being constructed in the city. In some of them they could examine the foundations, footings and various kinds of vaulting; in others the roof, roof drainage and carpentry work.³³

During summer, the students spent their mornings surveying, levelling and quantity surveying; and much time was spent in other forms of scientific study and practical work. The senior students spent three or four hours every afternoon studying stereotomy (for which there was a special workshop containing full-size models of masonry), carpentry and joinery details. The junior students also studied stereotomy on Mondays, Wednesdays and Fridays, but took "history of art" (i.e. as described in classical literature) and sketching on Tuesdays, Thursdays and Saturdays. The first two or three hours of every afternoon were devoted to mathematics (for quantity surveying) descriptive geometry and conic sections (for stereotomy), mechanics (for building machinery), water supply and drainage. In November and December, part of each morning was devoted to perspective, and to experimetal physics relative to the art of building.34

These different lessons were given in several rooms which looked out onto a large garden. One room was used by the junior students designing projects; in both of these rooms, sets of finished drawings to large scale were exhibited. Next to it was a room used to display various techniques of drawing, including a number of originals, with specimens of sculpture in the round and low relief. The fourth room was for lectures in mathematics, perspective, fortifications, quantity surveying and theoretical stereotomy. Finally, there was a large room which contained books, instruments, all kinds of models and a fine collection of framed drawings. It was here that lessons were given in experimental physics.

It will be apparent here that Blondel's pedagogical method was what would nowadays be praised as une structure pluridisciplinaire des programmes d'études. It seems clear to me



that it still persists in schools (such as my own) which have always been affiliated with faculties of applied science. At McGill, as elsewhere, there was radical departures from the traditional architectural courses when the influence of Le Corbusier and the Bauhaus led to the general rejection of traditional pedagogical methods; but the basic engineering discipline persisted, and recent disenchantment with Le Corbusier's urbanisme has caused many features of the 18th century design curriculum to be reintroduced, albeit under more trendy names.

NOTES

PU: Procés-Verbaux de l'Academie Royale d'Architecture, MP: J. F. Blondel, De la distrubution des Maisons de Plaisance (1737-8); AF: J. F. Blondel, Architecture Françoise(1752). Cours: J. F. Blondel, Cours d'Architecture (1771,1777). PV i ix: Cours no boxen PV iii 59 18 Cours iv xci PV vi 22 19. Cours wen PV in 58 20. PV vm 135 PV vi 341 21. AF m 17 PV v 314-342 Dictionnaire Raisonné, i vii AF to 90 Mercure de France, August 1747 Cours in Ixxx Discours sur la necessité de AF m 124 l'etude de l'Architecture Cours (433 (Paris, 1754) p. 69 AF m 52 PV 5 May 1743 Cours in 274 Mercure de France, June 1755 MP : 103 Cours m 81, 140 PV vu 96 Discours, 1754, p. 8 Cours in lar Cours in Ixxxx Mercure de France, August 1747 Cours n 336 Cours in xxiii MP : 126 Cours in Ixxxiii

THE SHAPE OF

ARCHITECTURAL HISTORY

A Review of:

History of Architecture on the Comparative Method

By Sir Banister Fletcher

Reprinted from the September 7,1961 issue of The Manchester Guardian.

News of the publication of a completely revised edition of Banister Fletcher's History of Architecture on the Comparative Method will have brought a pang of emotion to the heart of everyone in the English-speaking world who has ever been called upon to study architecture-especially if it was to pass an exam. For years it has been the handy reference book of every serious student and the last refuge of every dullard. Its authority has been accepted-though with decreasing enthusiasm on the part of the more enlightened-for generations, and indeed it has been in use for so long that its origins have become in certain respects forgotten or obscured. Who realizes today, for example that it was not the work of a single author, but (perhaps like the Iliad) was originally written by two men with the same name? For in fact the principal author of the first edition was not the future Knight Bachelor, Officer of the Order of the Legion of Honor, Commander of the Order of Leopold II of Belgium, Commander of the Order of Ta-Shou Chia-Ho of China, (Sir Banister very properly limited himself to five Orders), but his father, the Professor of Architecture and Construction at King's College, London. The latter's name was unostentatiously dropped as soon as the former achieved a knighthood (awarded in 1919 in recognition of the fact that he was the senior sheriff of London in the year the armistice was signed), and doubtless quite rightly, for many modifications were made by the son after his father's death. But the general organization of the text remained unchanged, and there is good reason for believing that this may have been the older man's idea.

Before explaining why this assumption can be made, and before discussing either the important modifications incorporated during his son's lifetime, or the results of Professor R. A. Cordingley's new and careful revision, it will be appropriate to distinguish the three types of general history of architecture which seem generally possible. Firstly, there is the type most common in the nineteenth century, but still occasionally produced today (as for example Sigfried Giedion's Space, Time and Architecture), which is inspired by the distinctive theory of architecture its author seeks to propagate, and which thus constitutes what the French would call an histoire à thèse. Secondly, there is the type—best exemplified by Louis

Hautecoeur's monumental nine-volume history of French classical architecture-which might be described as encyclopaedic; a book which contains a number of critical observations and assessments, but aims primarily at collating and dissecting as many buildings as possible, so as to classify them, like biological specimens, into various species or groups. Thirdly, there is the type best exemplified by Nikolaus Pevsner's Outline of European Architecture; a book in which the text is critical without being doctrinaire or opinionated; discursive, though none the less precise and factual; and where examples and illustrations are in general restricted to buildings which illustrate the introduction or development of specific architectural ideals. This is the most readable kind, and perhaps the only kind which is widely recommendable as a means of comprehensively, objectively and thoughtfully studying the topic; but the other two are both invaluable and indeed essential in their own way, provided the books are properly used.

As first produced in 1896, the History of Architecture on the Comparative Method clearly belonged to the first type. The pattern on which it was based was unquestionably intended to reinforce the mid-nineteenth century theory known as "Rationalism," and thus its form was most likely due to Banister Fletcher senior (who was very much involved with building construction and was for many years a district surveyor), rather than to his son. This Rationalist character is evident from the title alone, for the idea of a comparative history of architecture (analagous to those studies in comparative anatomy which had been made early in the nineteenth century by biologists such as Cuvier) had long been the dream of those who demanded a new architecture based on logical and up-to-date construction, and was one of the first manifestations of the idea of architecture as something "organic." It was first formulated in 1849 by James Fergusson, who put it forward six years before publishing his own great history of architecture which Banister Fletcher's eventually superseded; and it was given its most forcible expression three years later, in France, by Viollet-le-Duc.

"When," demanded the latter, in one of his periodic fulminations against the Ecole des Beaux-Arts, "will our poor school see the arising of its Cuvier to teach us the comparative anatomy of antique and modern monuments, and to teach us not to put rabbit's feet on a monkey's body, or to cloth the skeleton of a lizard with fur?" The answer to this question we now know to be 1896; but in the meantime, Darwin had published his famous theory, so Banister Fletcher not only adopted Fergusson's notion of a comparative history of architecture, but also tried to demonstrate the evolution of architecture by showing the direct influence of environment (geographical, geological, climatic, religious, social and political) on changes in architectural form.

As revised by Sir Banister Fletcher after his father's death the History of Architecture on the Comparative Method still maintained intact those divisions of the text dealing with environmental influences, though these were considerably tempered and (not always felicitously) enlarged. But it became evident, as edition succeeded edition, and as the weight increased to three and three-quarter pounds, that the author was now more concerned with the illustration of ancient buildings (of which over three thousand were eventually depicted and over a thousand more were either succinctly or superficially described) than with discussing ideas. The result was that the original theme of the book became gradually obscured. This was not necessarily a misfortune, since the efficacy of the "comparative method" as a means of throwing light on the evolutionary process of architectural development was always open to question, and the book, in its later editions, had seldom in fact done anything beyond provide a facile method of tabulating the characteristics of the various "styles." But the modified character of the book made the need for a radical revision more and more urgent, and we may all rejoice that after six years' painstaking work on the part of Professor Cordingley and his collaborators, this task has now been successfully fulfilled.

The principal changes needed, once it was accepted that the book had become irrevocably encyclopaedic in character, were such as would ensure a better balance between the various historical periods. Even within the context of the original framework, Sir Banister Fletcher's revisions had always been somewhat erratic, but since the original character of the book had been that on an histoire à thèse, its neglect of certain periods was at first relatively unimportant. For example, it was not entirely unreasonable that, in the original edition, the section on English architecture should terminate virtually with the death of Wren, since the elder Banister Fletcher's theories were incompatible with eighteenth-century Palladianism, and he, like Fergusson, considered that true architectural evolution had virtually ceased once the Renaissance had become an established fact.

He therefore summarily dismissed Lord Burlington's villa at Chiswick (which he then attributed to Inigo Jones) because it had, he said, introduced the "pediment and portico style" which had lead to "the neglect of the fundamental principles of architecture, namely suitability of purpose, utility and appropriateness." But in its encyclopaedic form, with all the original moralizings deleted, the book's continued neglect of architectural developments after 1700 made the work ludicrously inadequate, and it was this, more perhaps than anything else, which caused the reputation of the work to decline.

Professor Cordingley's most urgent task was therefore to bring the book up to date chronologically, and this he accomplished by adding three entirely new chapters, of which two (entitled respectively "Nineteenth and Twentieth Century Architecture in Britain" and "Nineteenth and Twentieth Century Architecture in Continental Europe") were written by him and the third (entitled "Architecture of the Americas") was written by Frank Jenkins. But no less important task

was that of bringing the book up to date in the sense of making the earlier parts accord with recent scholarship. So well has Professor Cordingley matched his literary style to that of the late Sir Banister Fletcher that the full magnitude of these changes is not immediately apparent, and they can only be detected by carefully collating with the earlier edition. But once this is done, it is evident that the revised text is comparable to an elaborately embroidered modern tapestry into which more ancient fragments have been carefully, piously and unobtrusively woven. Even sentences which begin as Banister Fletcher and end as Banister Fletcher usually turn out to be substantially Cordingley in the middle. It is to be hoped therefore that future bindings of the book will follow the policy adopted by the publishers of Simpson's History of Architectural Development, and, by titling future copies of this edition Sir Banister Fletcher's History of Architecture, allow the name of the new author to be embossed on the spine.

The only reservations which architectural historians are likely to have will probably concern the amount of space allotted to the different buildings and periods. No one will quarrel with the increased allotment of eleven pages to Greek architecture (which brings the total number of pages to seventy-seven), especially now that Professor Cordingley's new revision makes it undoubtedly the most thorough, precise and readable architectural account (as opposed to an archaeological account) available. But when one considers the small number of important Greek buildings, constructed between 650 B.C. and 146 B.C., of which any vestiges, however fragmentary, remain, and then compares this with the number of important buildings constructed in Continental Europe from 1830 to the present day, it seems unnatural that only fifty-eight pages should be accorded to the latter.

Furthermore one may question the wisdom of respecting Banister Fletcher's classification whereby the Renaissance ends at 1830 (the end of the "Georgian Period") and modern architecture therefore has to begin at the death of George IV. Admittedly Sir John Summerson's Architecture in Britain 1500-1830 terminates on this date, but here he was making no pretence of specifically studying the "Renaissance," and the fact that Henry-Russell Hitchcock, when writing the companion volume on Architecture, Nineteenth and Twentieth Centuries, felt bound to begin at about 1750 shows clearly where the most recent authorities on the subject consider the roots of modern architecture to lie.

For example, there is little doubt that the ideals of modern architecture were very much influenced by the buildings and writings of C.N. Ledoux (1736-1806). But the new History of Architecture on the Comparative Method only mentions him twice (under the heading "French Renaissance"); once in order to attribute to him (erroneously) the hôtel de Salm, and once to remark that he was "fertile of progressive ideas." But clearly, unless a student of modern architecture knows what those progressive ideas were, his understanding of the subject will be seriously limited.

Such defects in an otherwise impeccable revison were presumably dictated by the obligation to keep as near as possible to the pattern of the original book. But as a result, the latest edition now starts as an encyclopaedia and finishes as a compendium. For the early periods, it is unquestionably more than adequate to fulfil the historical needs of an architectural student. But for the later periods, it is likely to be primarily of value to the laymen; and indeed, given the length, these chapters could hardly be improved upon as a concise and well-balanced account of the main architectural developments which have occurred during the last hundred and thirty years.

A Review of Vincent Scully's

THE EARTH, THE TEMPLE & THE GODS

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It is probably fair to say that this is the most distinguished book of its kind to be published in the English language since the publication of Ruskin's Stones of Venice. Like Ruskin, Scully writes prose which exudes a tense emotional involvement with his topic; like Ruskin, he has the gift of writing euphoniously as well as persuasively; like Ruskin, he has the power of transforming factual statements into a special poetry of his own, transmuting archaeological descriptions into passionately articulated assertions of an aesthetic vision. That each of his perceptions is transfused by a mystical vision of Space, rather than by Ruskin's mystical vision of God, is simply an accidental characteristic of the age. This book is a delight to read, even for its narrative alone, and it should not be long before Scully's description of the Parthenon (which concludes his ninth chapter) rivals Ruskin's description of St. Mark's in popular esteem. But more important than this, his book will also be highly valued as a completely new and refreshing interpretation of Greek architectural ideals by everyone called upon to study the subject.

For if this book were simply a felicitously phrased interpretation of a well-worn theme, like Henry Adams' Mont St. Michel & Chartres, it would have little architectural or historical interest. As it is, its author shows that he has not only literary talents of exceptional value, but also that he possesses the rarest of all abilities to be found amongst archaeologists, namely the gift of historical imagination. Reading this book, one cannot but marvel that it has taken two centuries of staring at ruins and rumaging amongst fallen stones for an architectural historian to raise his eyes at last to the horizon, and see the Greek temple in its totality, that is to say, as forming, with its environment, an inseparable whole, whereby earth, temple and god are but one.

Not that this book is simply a modernized Voyage Pittoresque de la Grèce. On the contrary, it was only after careful study of the various literary sources available (notably the vast amount of periodical literature published by the various archaeological schools) that the author visited each site, and related all the ascertainable facts to his own observations. He sensibly divides his book according to the dedication of each temple (rather than according to chronological or stylistic criteria) and is thus able to preface the study of each group with a discussion of the type of site evidently considered appropriate by the Greeks for each god or goddess. He then proceeds to analyse each building so dedicated, and to explain not only how its location corresponds to the Greek notion of propriety (which was doubtless what Vitruvius meant to some extent in the sentence: "Decor perficitur statione, quod graece $\theta \epsilon \mu \alpha \tau \iota \sigma \mu \delta \varsigma$ dicitur"), but also many other features which have hitherto been regarded as eccentricities or even errors in Greek design.

Inevitably there are passages in which the author's efforts to substantiate his thesis are not entirely convincing, and even the thesis itself seems curiously unsupported by the kind of solid literary evidence one might expect. His insistence that everything the Greek architects did was always motivated by profound aesthetic or religious reasons (as for example in his novel justification of the lack of curvature in the stylobate at Bassae) sometimes taxes the reader's credulity. Moreover, one could have hoped for a clearer indication of the extent to which the Greeks went *inside* their temples. But this is a splendid book, magnificently written, and its only blemish is to be seen in the photographic illustrations which, though profuse and more than adequate to illustrate the text, are of a quality which does less than justice to the theme.

Scully will readily be forgiven, especially by those who have visited Greece in the summer, for preferring to travel there in winter; but dull skies and shadowless buildings ill convey the impression of the Greek landscape at its best. It is to be hoped therefore that the next edition of this book will be a de luxe edition, with larger and brighter photographs, and that many of these will be in colour to form a harmonious accompaniment to the author's dazzling prose.

FRANKLEUDREIT



A Review of:

Frank Lloyd Wright: A Study in Architectural Content

By Norris Kelley Smith

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During the last 50 years, there have appeared about a dozen books on architectural history that can justifiably be described as masterpieces. This is one of them. It is quite short, but in it Professor Norris K. Smith expounds with sparkling lucidity an interpretation of Wright that not only clarifies numerous hitherto apparently inexplicable facets of Wright's life and work, but deftly pulls the rug from under the whole cumbrous intellectual superstructure published so far in honour of the master.

The chapter titles are, respectively: "The Cause Conservative," "Wright and Romanticism," "The Oak Park Years," "Crisis," "A New Beginning and Its Destruction," "Depression and Resurgence," and, finally, "Assessment." But the book is dominated by two grand themes. The first is that of the fundamental and dramatic antagonism that rends assunder the personality of any proselytizing nonconformist; for, obviously, the more he finds that success crowns his preaching, the less nonconformist he becomes himself. The second theme is the influence on 20th-Century architecture of non-Hellenic modes of thought. I shall not discuss the first theme, since any commentary might diminish the intensity of the reader's pleasure when confronted with Professor Smith's impeccably organized and inspiring prose. However, the second theme is susceptible of constructive comment, since it is is more controversial than the author's plausible presentation may lead one to suppose.

Basing his deductions on Thorlief Boman's Hebrew Thought Compared With Greek (a book originally written, it should be noted, in German), Professor Smith writes: "What

I shall try to demonstrate is that (Romanticism and Classicism) derive from the two main sources of Western thought, the Hebrew and Greek respectively" (pg. 36). He then convincingly quotes Bowman to show that the Greek concept of "being" implied something objective and inert, and the Greek concept of "form" implied tranquility, moderation, and the harmonious expression of the intellect, whereas the Hebrew concept of "being" implies becoming and "the Israelite finds the beautiful in that which lives and plays in the excitement and rhythm" (pg. 40). Professor Smith approvingly follows Boman in commenting that the beginning of St. John's gospel (which, in English, is translated as, "In the beginning was the Word," and, in German, as "Im Anfang war das Wort") is rendered by Goethe ("who goes back to the Hebrew (Aramaic) original," pg. 56) as, "In the beginning was the Deed"-a curious sort of corroboration in that (a) Goethe was not exactly an authority on Aramaic, (b) St. John's gospel was written in colloquial Greek, and (c) the quotation is from the Poodle scene in Faust. But from all this, and much more evidence, Professor Smith concludes that "Wright thought in Hebrew" (pg. 39).

Now it is incontestable that a person's thoughts are intrinsically affected by the language in which he thinks them, and thus one cannot thoroughly understand any architect's thoughts unless one is familiar with the language in which they were expressed. But Wright, unlike St. John, not only shows no evidence of ever having thought in Hebrew; he was if anything, antisemetic. The phrases with which, in his Autobiography, he describes the Jewish draftsmen who were working for Adler (who was the son of a rabbi); his offensive description of Ottenheimer; even his taut reference to his Uncle Jenkin's

friend Rabbi Hirsh, demonstrate this conclusively. How, then, are we going to reconcile Professor Smith's conclusions abstracted from Boman with the demonstrable facts concerning Wright's intellectual growth?

The solution of this dilemma is not, I think, hard to find; and, if correct, must have important implications for the historical interpretation of the whole evolution of contemporary architecture. My contention is that, whereas it is true that Wright and especially Sullivan were primarily stimulated by the writings of—or conversations with—Jewish intellectuals, both these men were essentially stimulated by Germans, whether of Jewish or Gentile blood; and though there may well be a large element of Jewish influence in 19th-Century German aesthetic philosophy (stemming, for example, from Moses Mendelssohn), it is not hard to prove that the more obviously non-Classical aspects of Wright's philosophy, of the Bauhaus philosophy, and indeed of Le Corbusier's philosophy, stemmed essentially from a century-old synthesis of German mystical and philosophical beliefs.

As regards Wright, he himself states in the Autobiography that he was mainly influenced by Carlyle, Coleridge, and Emerson; in other words, by the three 19th-Century writers most keenly engaged in promoting translations of German thought into English. As a young architect, he came under the influence of a superman who, from the beginning, he significantly refers to as Lieber Meister—a term of respect easy to understand when we realize how much Sullivan owed to his German-Jewish friends Edelmann and Adler. It was Edelmann who taught Sullivan "the highest transcendentalisms of German metaphysics" (i.e., Kant's doctrine that the Critique of Pure Reason was an architectonic plan for a new science) and introduced him to Wagnerian opera, just as it was Edelmann who "led Louis to Adler" (Autobiography of an

Idea). Sullivan certainly did not have much respect for Adler's racial origins, since he referred to him as a "short-nosed Jew"; but Adler obviously had a great influence on Sullivan's mind by introducing him to the works of Gottfried Semper. And Goethe, Wagner, Semper, Adler, and the Bauhaus all have this and only this in common—they were associated with Weimar.

In Professor Smith's final chapter, "Assessment," quoting Karl Löwith, he calls the Communist creed "a pseudomorphosis of Jewish-Christian messianism." But it seems more important to emphasize that, although Karl Marx's father became a Christian and cut himself off from the Jewish community, Karl Marx thought and wrote in German. And it was the affinity of Marx's abstract politico-historical theories with the Teutonic philosophy of his age that made Wagner the leading exponent of the artistic implications of The Communist Manifesto and caused Gottfried Semper to flee from Saxony after the revolution for which the "Manifesto" was written and seek protection through the British Prince-Consort, Albert of Saxe-Coburg-Gotha. Indeed, when Semper published his first book (based on his experience in organizing the 1851 London Exhibition), this book, which was the ultimate source of Arts-and-Crafts philosophy, was written not in English but in German, and printed in Bruns-

Professor Smith is absolutely convincing in his assessment of the reasons that prompted Frank Lloyd Wright, in 1909, to desert his family and architectural practice and go into voluntary exile in Europe. But I am less surprised than he that Wright handed over his practice to "a German-born architect who had no particular knowledge or sympathy for Wright's work." Nor am I surprised that when Wright left the shores of America, he went straight to...Berlin.



URBAN RETROSPECTION

A Review of:

The Historian and The City

Edited by O. Handlin and J. Burchard

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Symposia are ideal media for the exchange of scholarly opinions because the governing bodies of universities and foundations have not yet realized that "symposium" is simply the Greek word for "a drinking party." Admittedly, this symposium shows only slight evidence of the stimulating influence of alcohol, though the affluence of printer's inkohol is evident in M.I.T.'s well-produced paperback text. The editing is a bit fuddled, for the origins of Philadelphia are described 120 pages after the description of the city's development in the 19th century, whilst on page 71, the assertion "Professor Brogan has cited..." seems clearly nonsensical, since Professor Brogan's paper does not appear until page 146. However, these lapses are evidently due to a rearrangement of the original sequence, and it must be admitted that the published sequence is ideal, provided it is read in reverse.

Literary "stylists" doubtless favor an arrangement whereby a book becomes more and more absorbing as it reaches its end. But there must be many who, like Soames Forsyte's great-uncle James and myself, happily display their senility by gobbling the most succulent morsels first, so that satiety results only when the most unappetizing parts remain. Anyway, I strongly recommend readers of *The Historian and the City* to start with the final chapter; and the fact that the editor himself has contributed this chapter, rather than a preface, suggests that he himself would secretly approve such advice.

Let us begin, then, by considering "Part VII: Conclusion," written by John Burchard in his most brilliant mood. The aim of the symposium was, he states, to confront those who teach city planning, or the history of city planning, with other kinds of historians—economists, political scientists, and philosophers—in the hope of determining how the history of cities can most profitably be studied in relation to the actual problems of urban design. The result, as he frankly observes, was futile; only the most callous and credulous reader will find logic in his prophecy that the next symposium on the subject will prove more helpful. This conclusion is almost an insult to the eminent and distinguished contributors to the volume under review.

The futility resulted mainly from the fact that "there was no real effort to define what we were talking about, either history or the city. The definition of the latter was of course the more slippery." However, there is no reason to assume that the failure to produce viable definitions was due either to the oversight or the incompetence of the participants. Dean Burchard might usefully have added that the main danger in studying cities historically is precisely that the scholar is irresistibly led to escape from considering what a city is by elaborating on what it was in the past. His own favorite definition of a city as "the congeries which multiply the opportunity to exercise choice" seems excellent; but, as he himself points out, the most important discrepancy between the attitudes of the various speakers revolved around the problem as to whether every city is unique, or whether, on the contrary, all cities have enough common characteristics to permit the notion of "the city" to be studied in abstract concepts.

This discrepancy was never resolved. Indeed, none of the speakers whose ideas are published seems to have even grappled with the dilemma during the symposium. Those who discussed cities abstractly talked a good deal about "parameterization," but were singularly reticient about the precise character of the parameters they envisaged. Those who concentrated on individual cities only became eloquent when describing economic developments during the Middle Ages or the Renaissance, whilst the occasional desperate endeavors of economists and social historians to introduce architecture into the argument often lacked conviction.

"Another question that went largely unasked," writes Dean Burchard, "was whether the study of urban history had any utility." He noted that Henry Millon had asserted that the historian was under no obligation to find a utilitarian value for history, and admitted himself that he saw "no reason why the life of a city may not be as good a thing to start from as anything else in the examination even of young ladies." This latter argument is extremely cogent, as I can verify after conducting a summer course on the History of Paris for Smith College. But, clearly, the purpose of the symposium at M.I.T. was not to discover what teachers of urban history can learn about their female students, but what the students themselves can learn about the present and future states of a city

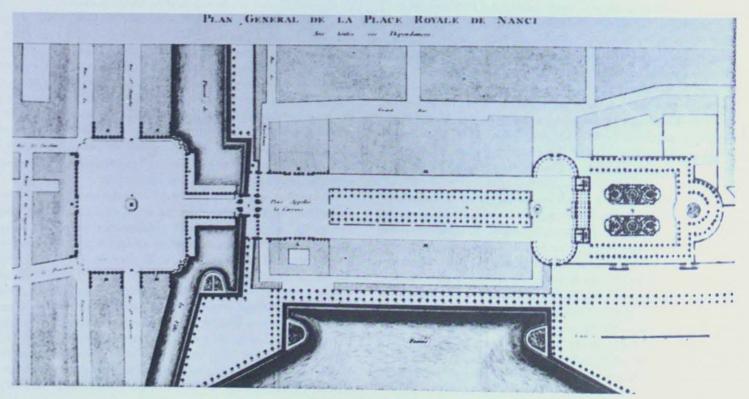
by studying its history; for there seems little point in having the symposium at all if it is already taken for granted that all knowledge is useful.

However, the participants in the symposium had the right to assume, for the sake of argument, that if the history of cities is of practical use, there must be some ways of studying it that are superior to others; and, in this respect, the best part of The Historian and the City is the penultimate section in which Sir John Summerson, in a characteristically explicit and lucid paper, demonstrates that Mumford's superficial approach does more harm than good, for, as he emphasizes, it is essential to study the history of cities in minute detail after having obtained all the available evidence relating to the social, psychological, economic, and technological forces by which they were formed. Nevertheless, Sir John Summerson would probably be the first to admit the validity of Mr. Warner's complaint regarding the inaccessibility of so many of the documents necessary for a complete assessment of even the smallest urban units, and the unmanagability of the

mass of documents that are accessible for the larger units.

Perhaps the clue to the whole problem is to be found in Christopher Tunnard's paper, where he makes a firm distinction between "city planning" and "urban design." He seems to suggest that historical studies are only really relevant to the small groups of buildings that form the nuclei of larger urban agglomerations. Here, as he points out, qualitative measurements of the constituents of environmental appropriateness can be studied accurately and comparatively. It thus seems likely that the professional planning consultant, faced with the problem of advising administrators and financiers on future expansion, must rely more on studies of current economic, sociological, and psychological forces, rather than on the history of such forces; and that the history of cities is only useful to future planners in so far as it deals with the evolution of architectural forms, and the formulation of architectural ideals, made manifest when groups of buildings were designed by a single architect, or organized by a concerted team.





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