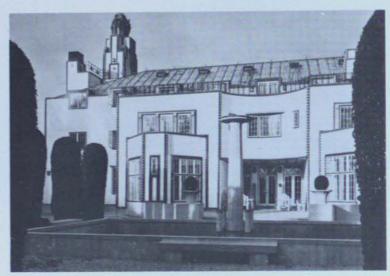
FORM FOLLOWS FURNITURE



Josef Hoffmann: Palais Stoclet, Brussels

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It was not until about 60 years ago that the ultimate test of architectural genius became whether or not one could design a new kind of chair. There were of course architects in earlier eras who made names for themselves as chair designers, such as Robert Adam. Moreover, as early as 1883, Montgomery Schuyler criticized a building by McKim, Mead & White as looking "less like a work of architectural art than a magnificent piece of furniture." But it was only when the German Arts and Crafts Movement was established at the beginning of this century that the ability to design chairs was regarded as important evidence of architectural aptitude, and the idea of regarding a man like William Morris as the first of the "Pioneers of the Modern Movement" would have been inconceivable before the era of what industrialists call "styling," and what architects (who understandably hate this word) usually term "industrial design."

By a curious paradox, it was largely because of the unquestioned belief, in the mid-18th Century, that architecture was the Mother of the Arts that this new idea asserted itself. Immanuel Kant, in his Critique of Pure Reason (1781), used "Architectonics of Pure Reason" as the title of the penultimate chapter of his book, because "architectonics" was the best word he could think of to express the notion of a complex system of rationally assembled components in the domain of abstract ideas. But a century and a quarter later, the word "architectonics" came to be used by German industrialists as a synonym for what they also called "pure functional art" (reine Zweckhunst)—presumabaly because, in some vague way, they thought that "pure reason" could be equated with "pure form."

It was in this sense that Hermann Muthesius, the Prussian civil servant who was sent to London in 1896 to study British architecture and industrial design, used the word "architectonics" when justifying the establishment of the Deutscher Werkbund. Form, he proclaimed, was above all "architectonic," and he cited the Greek temple, the Roman thermae, and the Gothic cathedral. Most significantly of all, he

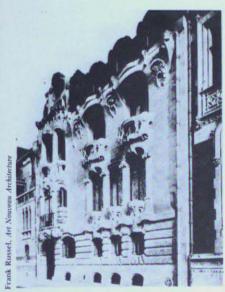
also cited "the princely salon of the 18th Century"—i.e., the decoration and furnishing of luxurious interiors, with which, at that time, industrial design (or, as it was then called, "decorative art") was mainly concerned. Thus, the reestablishment of an "architectonic culture" was for him a basic condition for the improvement of all the products of industry. "Germany's vocation is to resolve the great problem of architectonic form...the whole class of educated Germans, and above all wealthier private individuals, must be convinced of the need for pure Form."

Ideals such as these were responsible for the general philosophy of the Arts and Crafts School founded in Germany at this period, the most influential being the school at Weimar directed by Henry van de Velde, the famous exponent of Art Nouveau.

The role played by Art Nouveau in reinforcing the idea that architectural forms are anagolous, if not interchangeable, with those of furniture is only too obvious, as anyone can see by comparing the illustrations of Art Nouveau furniture and Art Nouveau buildings in S.T. Madsen's welldocumented monograph. Even Sigfried Giedion has remarked that "in Austria around 1900, the movement was from handicrafts to architecture and from architecture to handicrafts," and that "as late as 1914, in Hoffmann's Stoclet House in Brussels, the influence of the cabinet-maker is still evident"—a fact also remarked upon by Eric Mendelsohn. Now Art Nouveau's principal ancestor was unquestionably the Rococo style of the mid-18th Century, and Madsen very properly draws attention to the fact that the city of Nancy, which contains some of the finest architecture of the Rococo period, is also the city where French Art Nouveau first emerged. What he fails to emphasize, however, is that the characteristics generally described as Rococo were, in France at any rate, specifically confined to the interiors of buildings, and that the only Rococo features on the exteriors of the buildings surrounding the plazas at Nancy are confined to the ornamentation of the keystones and the vases which surmount the balustrades.

This fact is of considerable importance in the present context. The façades constituting the two main plazas at



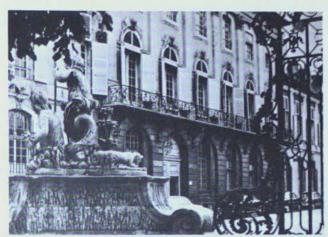


Schoellkopf: Hôtel Guilbert

Nancy were by Emmanuel Héré de Corny (1705-1763), who based them on those of two buildings in Nancy by his master, Germain Boffrand (1667-1754). Boffrand was not only one of the greatest architects of his day, but, together with Jean-François Blondel (1681-1756) and Robert de Cotte (1656-1735), was one of the first to estabish himself as an interior designer. His interiors, to which his designs for furniture (such as console tables) were carefully fitted, have been described by one recent author as being among "the great masterpieces of Rococo art." Yet his exterior façades, and those of his pupil Héré de Corny, are as severe and as classical in their use of standardized tectonic elements as those of his own master, J. H. Mansart, and indeed depart little from the French tradition of the previous 100 years.

Boffrand's own views on this matter are quite explicit, and, in view of the popular misunderstanding of the nature of French Rococo, are well worth quoting. "Fashion, at various times (and especially in Italy) has taken pleasure in torturing all the parts of a building, and has often tried to destroy all the principles of architecture, whose noble simplicity should always be preserved," he wrote in his Livre d'Architecture, published in 1745. "Ornamentation has (in the work of Guarini and Borromini) passed from the interior decoration of houses, and from the carved woodwork for which delicate work is suitable, to exteriors, and to works in masonry, which require to be worked in a more vigorous and more masculine way."

Since the notions which Boffrand condemned were also popular in Germany, Spain, and the Spanish Netherlands, it is not surprising that a Belgian Art Nouveau decorator should so easily introduce into Germany the idea that architecture and furniture are designed in much the same manner, especially after Muthesius had paved the way. Van de Velde, whose training and experience prior to opening his Decorative Art Workshop near Brussels in 1894 had been that of a painter, naturally showed himself less sensitive than Boffrand to the distinctions between architecture and furniture, or to those between the private, ephemeral interiors of buildings and the public, permanent character of exterior structures. Moreover, not having even been trained as a craftsman in wood or metal, he had no sense of the nature of materials, as



Germain Boffrand: Hôtel de Beauvau-Craor

Auguste Perret soon demonstrated with respect to his facade for the Théâtre des Champs-Elysées (a commission which van de Velde then resigned in Perret's favor). Thus, when van de Velde's attention was called to the fact that his furniture was constructed in open conflict with the nature of wood, he declared, according to Kurt Behrendt, that for a long time he had been convinced of wood's inadequacy as a material for his designs, and that he anticipated the discovery of a more suitable material which could be cast.

Since cast furniture can be massed-produced with relative ease, few people will regret that the influence of Art Nouveau was so short-lived. Indeed, it would not have lasted as long as ten years had not its reputation been artificially inflated by the energetic enthusiasm of Sigfried Bing, who made a living out of selling its more exhuberant manifestations, and by the sudden appearance of a number of new Decorative Art magazines. What is surprising is that it was succeeded not by something more rational, but simply by something more angular. Thus whereas van de Velde's chairs, though structurally irrational, were at least sufficiently sinuous to accommodate themselves to human posteriors, those designed by Constructivist, and Neo-Plasticists, such as Gerrit Rietveld (who should have known better, since he was a master cabinet-maker), were pure geometric abstractions, and seem to have had no merit except in terms of the Dutch art movement that was known as De Stijl.

The *De Stijl* movement was, in general, undoubtedly instrumental in promoting the cause of non-representational art (if by this one means painting and sculpture). But the *De Stijl* chair was not; for all chairs are nonrepresentational, from the most archaic three-legged stool to the more sophisticated masterpieces of fiberglass and foam rubber produced today. Where the *De Stijl* movement was original, as regards furniture design, was in creating the first chair deliberately designed, not for comfort, not for dignity, not for elegance, not for rational assembly according to commonly accepted principles of woodwork, but simply "designed." Even Theodore Brown, Rietveld's biographer, has had to confess, in the five lengthy pages he devotes to this chair, that "the jagged, angular quality of the piece, as well as its hard surfaces, are not



Mackintosh: Hill House—Hallway

conducive to bodily comfort, and those who have used it, including Rietveld himself, have complained about bruising their ankles on it. Obviously factors other than comfort determined its design."

These factors were, according to Brown, economic, social, and aesthetic, but it seems fairly clear that the aesthetic motive predominated, and it was this which caused the chair to be "determinant" (as Brown calls it) of the much publicized house that Rietveld designed for his friend and collaborator, Mrs. Truus Schröder, in 1924. The historical importance of this house (and this is at least the sixty-ninth time, to my knowledge, that it has been discussed in print) resides essentially in the influence it exerted on the teaching methods of the Bauhaus. But it is also important in being the first architectural monument to be designed by a cabinetmaker; that is to say, by a man whose only architectural training, after working as a cabinet maker for 20 years, was gained during three of those years by studying architectural drafting at evening classes. By 1928, he was sufficiently influential to be a founder-member of CIAM.

The influence of Rietveld's chair on the work produced by the Bauhaus under the influence of Walter Gropius—the last of the "Pioneers of the Modern Movement"—is only too apparent. Gropius, unlike his precursor at Weimar, Van de Velde, was an architect by training, and has always been an architect to his very fingertips. But after graduating, he went to work immediately for Peter Behrens, a painter, who at the age of 39 had just been appointed industrial design consultant to the German General Electric Company, and who de-



G. Rietveld: Own House, Utrecht (1924)

signed not only their trademarks, type-faces and electric kettles, but their factories and probably their furniture as well.

Doubtless because of Behren's influence, Gropius not only accepted Muthesius's interpretation of the word "architectonics" in its totality, but saw the Arts and Crafts Schools as the ideal places in which a New Architecture could be created. He therefore accepted with alacrity the offer to succeed van de Velde in 1919, and, by combining the Weimar School of Arts and Crafts with the Weimar Academy of Fine Arts (i.e., the Academy of Architecture, Painting and Sculpture), he was not only able to take responsibility for training designers of furniture, stained glass, pottery, metalwork, weaving, stage-scenery, wall-painting, and typography, but also for training architects, who had never been linked academically to the so-called "decorative arts" before. No machine technology was introduced into the Bauhaus curriculum until 1923, and even after that date, all architectural students were trained essentially as building craftsmen (whereby "the pupil, if proficient enough, obtained his Master-Builder's Diploma from the local Trades Council"). It is therefore evident that, for Gropius, the principal virtue of the Bauhaus (or "School of Design," to give it its official title) was that all these specializations could be treated as variations of the same kind of activity. The world of furniture could be treated not only as a microcosm of the world of architecture, but also as a laboratory for experiments in the organization of urban space.

When Gropius was established at Harvard (where virtually every element of the Bauhaus curriculum, except for the Basic Design courses, or *Vorlehre*, was abandoned), he still contended that "the approach toward any kind of design—of a chair, a building, a whole town or a regional plan—should be essentially identical, not only in respect to their relationship in space but to social aspects as well." In 1947, he was even more explicit, insisting in his essay "Is There a Science of Design?" that "the process of designing a great building or a simple chair differs only in degree, not in principle."

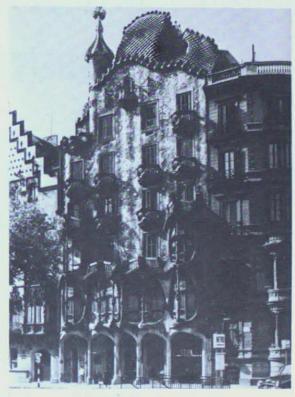
Whether or not Gropius's assertion is true, it is a fact that the only graduate of the Bauhaus to have signally furthered his ideal of "realizing a modern architectonic art" in the



G. Rietveld: Chair Design

purely architectural sense has been Marcel Breuer, who studied only furniture design there (or rather taught himself, since the carpentry workshop seems to have been virtually unsupervised until he took charge of it himself, on graduation, in 1925). Breuer's architecture is probably no more like furniture than that of the other European "Form-Givers." But it is certainly no less. His UNESCO Secretariat stands on legs; its façades may not unfairly be likened to a filing cabinet with the drawers removed; and its compositional form, though obligatorily curved on one side to relate to the Place de Fontenoy, is curved likewise on the other two sides to look good from the air: i.e., from the point of view from which one normally sees furniture when entering a room.

"Aside from the obvious differences in scale," writes Theodore Brown, in The Work of G. Rietveld, Architect, "chairs are as much spatial creations as buildings." But the diference in scale is crucial to the whole problem. Whereas architecture is related fairly directly to structural engineering by techniques of assembly, as well as by other factors and objectives (although here again, it is differences in scale which make the two disciplines essentially distinct), it is related only analogically to the discipline of furniture design. Undoubtedly, between 1900 and 1930, furniture design, being both functional and nonrepresentational, and requiring a pleasing appearance, proved to be an analogy of the utmost value in allowing architecture to escape from the more inept aspects of Revivalism, and was heuristically far more successful than the other well-known analogies-biological and mechanical-by which architectural theorists had tried to escape from Revivalism during the preceding 50 years. But the linking of architecture so closely to furniture, pottery, weaving, typography, etc., would seem now not only to be less defensible but in some cases demonstrably harmful. For as Arnold Toynbee has observed in the last volume of his Study of History: "Two or more phenomena may have facets which genuinely correspond with each other and between which analogies can therefore be properly drawn; but we may fall into error by failing to abstract the genuinely corresponding features precisely, or by making the unwarrantable assumption that an analogy which holds good just for these facets is also



A. Gaudi: Casa Battlo, Barcelona

applicable to the phenomena in their entirety."

With Revivalism no longer a living issue, there seems no good reason why architectural students should not simply study architecture from the very beginning of their course, as they did in the days when the art of building evolved steadily and rationally in harmony with the technological and sociological evolution of the people it was intended to serve. Indeed, such is in fact what generally happens in our leading schools, depite the lip-service paid to the Bauhaus ideal. But this is not to say that architectural students should not also study the design of interiors. On the contrary, the architect's role as a co-ordinator of interiors and exteriors is more vital than ever before. But co-ordination, as Gropius has been the first to insist, must be by means of collaboration, and collaboration implies respect for the peculiar skills which each member of the team brings to the task.

The criticism levelled here is thus aimed not at the idea that certain gifted architects are capable of designing good furniture (which would be nonsensical), but at the notion that there is some mystical skill called "design" which, once it has been mastered, entitles one, without further ado, to design anything from a toothpaste tube to an ocean liner, which obviates the need for a prolonged, specialized study of the respective techniques and materials by which various structures and artifacts are made. It is this notion which has produced the "stylist," and it is the stylists, whether they accept the title or not, who are producing today most of the bad archtecture and bad interior designs.