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In 1957 Max Bill resigned from the Hochschule für Gestaltung at Ulm over differences with the chairman of the school's new triumvirate board, **Tomás Maldonado**. Maldonado, an Argentine painter and editor of *Nueva Vision* (a journal of art, architecture, and design widely read in Latin America, and the first journal in that part of the world to give coverage to industrial design), joined the founding faculty of the Ulm school in 1954 on Bill's invitation and published a book on Bill in 1955. His educational ideas, however, turned out to diverge substantially from Bill's. The latter's intention had been to continue the original Bauhaus "idea," updating the original curriculum for the needs of postwar society. Maldonado, on the other hand, believed the older school's philosophy of education through art to be obsolete and unable to respond to current conditions. In the following paper tracing the history of design education in relation to industrial development, Maldonado presented a radical manifesto for the Ulm school's new direction and his theory of "scientific operationalism"—a praxis based on "operational, manipulable, real knowledge."

Maldonado's argument was that aesthetic considerations, whether humanist (as in the Beaux-Arts tradition) or empiricist (as in the Bauhaus and other progressive schools), could no longer be paramount in a field determined by economics, technology, and social needs; on the contrary, the latter should determine design. As such, the designer's role was no longer to be an artist (serving Bill's elite of "good form" or catering to presumed popular taste through styling), nor was it even to be a constructor-inventor-planner on the Henry Ford model. Instead the designer should be trained as a *coordinator* of all the diverse requirements of product fabrication and use. The coordinator was to operate "at the nerve centers of our industrial civilization, precisely where industry makes the most important decisions affecting our daily lives."

This argument encompassed architecture, henceforth understood at Ulm basically as industrialized building. Under Bill the program had been divided into five departments: product design, architecture, city planning, information, and visual communication. Maldonado reconstituted it in 1957 into two: industrial design (including product design and industrialized building) and visual and verbal communication. He also revamped the Bauhaus-derived introductory course, downplaying visual and manual training and stressing research methods and mathematics. In the 1960s, through internal debate as well as the influence of visiting faculty, the school's orientation underwent further revisions. The stress on methodology yielded to greater emphasis on praxis, and the technocratic approach to a critical theory of design, communication, and ergonomics.

In 1968 the school at Ulm suffered something of its predecessor's fate in being forced to close when funding was withdrawn by the conservative local government. More fatal to it in a large sense, though, was the paradox of being both ahead of and behind its time: ahead in that the profession of industrial design was still in its infancy during the 1950s; behind in its pursuit of an austere functionalism at a time when Germany had its sights set on new prosperity. For a history of the school's internal developments, see Kenneth Frampton, "Apropos Ulm: Curriculum and Critical Theory," in *Oppositions* 3 (May 1974). For the reception of the following document, see the discussion that followed its republication in *Stile Industria* (no. 21, 1959), including contributions by Reyner Banham, Gillo Dorfles, Ettore Sottsass, Jr., and others. A response by Max Bill to the changes implemented by Maldonado is "Der Modellfall Ulm: Zur Problematik einer Hochschule für Gestaltung," *form* 6 (Cologne, 1959).

Speech delivered at the International Exhibition in Brussels, 18 September 1958. Published in Ulm 2 (October 1958), pp. 25-40. Courtesy of the author.

New Developments in Industry and the Training of the Designer

Tomás Maldonado

The ideas which supply the basis for what might be called the Bauhaus ideology are today, a quarter of a century after that institution closed, difficult to translate into the language of our present-day preoccupations. Furthermore, as we shall see, some of these ideas must now be refuted with the greatest vehemence as well as with the greatest objectivity.

It is, however, an undeniable historical fact that the closing of the Bauhaus ended a particularly fertile period in the history of the training of the designer, perhaps even its most brilliant period to date. From then until recently, design training, cut off from its original context, has passed into that category of subjects whose importance is always recognized but which are rarely favored with discussion and dissemination. This last period has undoubtedly been its least productive.

Nevertheless, during this same period there were a few isolated attempts to modify this state of affairs. It would be more than unjust not to remember them. Above all, I think of the efforts made by Walter Gropius, Josef Albers, and Laszlo Moholy-Nagy: efforts to introduce into America, under the most adverse historical circumstances, the theme of the training of the designer. It is clear that the goal which they set themselves was, at that time, not easy to reach. During those years, powerful external causes—directly or indirectly associated with Nazism or the war—hindered the free international exchange of ideas and experiences. Under such conditions the theme could not prosper; and in fact it did not.

The situation now may be said to have changed considerably. Today, not only has the true importance of design training been recognized, but the dissemination as well as the discussion of the theme has been fully fostered. The specialized magazines are full of articles in which the training of the designer is treated in the most minute detail and in its most subtle implications. The theme is publicly discussed. It is analyzed. One is asked to consider its importance to our technical civilization. Apart from this, there is no lack of purely informative contributions. Thus, these same magazines often publish complete issues documenting the institutions which today, in almost all industrially developed countries, are partially or wholly dedicated to the training of the designer. Each curriculum is minutely described, from the subjects taught up to the number of hours of attendance necessary; notes on the composition of the faculty are also given. This profusion of copious and carefully presented information would lead one to imagine that the schools of industrial design have already reached their maturity in every country, and all in the same way; in other words, that the question is one of institutions whose goals and methods are finally established. On the other hand, the pedagogic question has taken a leading role at the international congresses on industrial design, in the United States just as much as lately in Germany. The debate has sometimes been lively, but basically the differences have always been those of form rather than of content. In general, apart from a few fine shades of meaning, everyone has agreed on the correctness of the educational philosophy which flourishes today.

However, if the above-mentioned publications and international congresses present a very optimistic panorama of the present state of design training—a panorama which displays very few problems and many solutions—then these very same publications and congresses, as well as the best qualified theorists and

specialists, show on the other hand a symptomatic state of disorientation regarding what industrial design is and ought to be.

In other words, while the training of the designer continues to vegetate in the shadow of an already legendary Bauhaus, industrial design itself seems to be in a particularly critical situation.

In the process of cultural assimilation of the most recent conquests of science and technics—a process which to a certain extent depends upon the effectiveness of the designer—it is clear that this contradiction could play a delaying role of prime importance. It will in fact play such a role, if we do not very quickly try to modify the status quo.

Let us now examine the possible ways of modifying it. In my view, this task should not start with general reflections on education, but with an extremely concrete analysis of the present situation of industrial design. Of course, such an analysis presents certain difficulties; above all because its limits must be restricted. However, without wishing to pretend to exhaust the subject, I should like to recount a few isolated aspects whose significance is particularly important in relation to the present situation of industrial design.

The first aspect on which I should like to touch is the so-called aesthetic factor in industrial design. The way in which this factor must be embodied in the product constitutes the preferred subject of all the industrial design theorists. This theme invariably seems tied up with the no less important one of industrial design as a form of art. In the field of industrial design, aesthetic-artistic speculations have particularly complex historical antecedents; their origin is not to be found in one given tendency and in one alone. That is to say that their origins are not unitary but complex. They are the result of a huge developmental process, to which diametrically opposed tendencies have contributed. The historical antecedents of aesthetic-artistic speculations in the field of industrial design are quite inseparable from the antecedents of industrial design itself. In this sense, it is interesting to note that one of the main components, the current of craft revival set in motion by John Ruskin and William Morris in the environment of the nineteenth century, is at the same time one of those which contributed most to the idea of industrial design as art. For Ruskin and Morris, art was the only possible way to restore dignity to man's everyday life. The artist, for his part, was the only one capable of deciding—incontrovertibly—where and where not beauty lay. The artist would recover his paradise lost, find once again his vocation of guide, of judge—above all of judge; the objects which constitute man's world—those which, from the noblest to the humblest, surround man and are at his service—all objects would be inspired by art and by the work of the artist.

But, if one could trace a path from the arts and crafts movement to industrial design, it would be no straight path. The relation between the two is indirect; it is often established through byways. There has been no lack of sharp diversions and crossroads; no less, indeed, than reconciliations of opposing tendencies. It is clear that the artistic romanticism of the arts and crafts movement had little future in its original form.

Its declarations against the machine, its decorative flamboyance made it unadaptable to the new requirements of the industrial world then in formation. Similar causes would later bring Art Nouveau to a dead end.

To understand how, in the course of its development, industrial design could overcome the influence of the arts and crafts ideology, it is necessary to take into

account its other precursors: the current of the great nineteenth century bridge-builders and constructors of utilitarian structures, the current termed—the description is open to discussion—rationalist. Indifferent, even hostile to the aesthetic factor, the representatives of this movement built up a new concept of design. For them, design was to be identified with ideas of productivity in fabrication and assembly, with economy in materials, and with utilitarian function.

At the end of the last century and at the beginning of ours, a few architects thought—still in a confused and vacillating way—of the need for a compromise between the arts and crafts movement and the rationalism of the constructors. In America, Frank Lloyd Wright; in Europe, Hendrik Berlage, Peter Behrens, Otto Wagner, and Hermann Muthesius. Only Adolf Loos took up a brave and argumentative attitude toward the danger of such a compromise. Remember, for instance, his critical and sarcastic attitude in regard to the foundation of the Werkbund. But his theoretical position contained one very grave deficiency: industry was foreign to him.

Van de Velde, originally an orthodox follower of Morris, developed during these years toward a standpoint very similar to that of those who defended compromise. The part played by van de Velde at that time is complex and contradictory.

The inaugural manifesto of the Bauhaus in 1919, at Weimar, announced—not without declamatory *élan*—the union of the arts and the crafts and their future integration in a higher entity: architecture. It is a typical “arts and crafts” manifesto, which Ruskin and Morris could have signed without contradicting themselves.

All the same, very few years later, the Bauhaus took up certain positions which were correct in regard to the rationalist current. To some extent, neoplasticism and Russian constructivism came to replace the arts and crafts and expressionist attitudes. The aesthetic factor became more adaptable to the new requirements; compromise was now possible. The Bauhaus performed the miracle: the rationalist aesthetic of industrial production was transformed into reality. The industrial product posed a problem of form, of creating form artistically. One artistic repertoire was supplanted, but its place was taken by another repertoire, equally artistic. Among new aesthetic values to be taken into account were the so-called “truth” of materials. At the same time, the idea of function, inherited from the great engineers of the nineteenth century, was considered an essential factor. But it now had lost some of its original clarity; it was not quite clear to what it related. In France, Le Corbusier advanced similar views.

In 1928, Hannes Meyer took over the direction of the Bauhaus. Although today his personality and his activities may be very debatable, let us remember that at that time he was the only one who saw the danger of the artistic formalism of the Bauhaus, the only one to denounce it publicly and courageously. “Today,” wrote Hannes Meyer, “the inventive capacity loses its way in empty schemes; the Bauhaus style has turned the head of the formalists.” He added: “How many mysterious things one tries to explain through art, when in fact they are things which have to do with science.”

The American economic crisis of 1930 gave the day to styling—a new variation of industrial design whose influence has in fact extended up to the present day. The Bauhaus, its followers and its sympathizers, denounced from the start the commercial opportunism of styling, its indifference to artistic and cultural values. But the problem was no easy one: from time to time the stylists created products which could not but have been approved by the partisans of the Bauhaus. Stylists such as Henry Dreyfuss or Walter Dorwin Teague were sometimes damned, at other times deified. One verdict seems to have been irrecoverable: the condemnation of Raymond Loewy.

Lately, the problem of styling has been much debated. One of the most lucid critics of industrial design, the Englishman Reynier Banham, asked us a little while ago to consider styling as a form of popular art. Styling of cars would thus belong to the same category of expression as the cinema, illustrated magazines, science fiction, comic strips, radio, television, dance music, and sport. According to Banham, cars should be considered as something more than useful objects; they should be objects with symbolic content. In opposition to the neoacademic slogan of the partisans of "good design," "a few rare flowers," he proposes a new slogan, "many wild flowers." The four principal points of his theory are as follows:

1. employment of the neoacademic aesthetic is not justified in the evaluation of products of mass demand;
2. the aesthetic of a product should be transitory;
3. the aesthetic should not depend on an abstract and eternal idea of quality, but rather on an iconography of socially accepted symbols;
4. these symbols should be immediate, and tied to the use and nature of the product.

In the deserts of boredom of the theories about industrial design, where commonplaces rather than original ideas abound, Banham's thesis seems at first approach very seductive. However, a deeper analysis reveals the fragility of some of his formulations and, above all, underlines much contradiction and inconsequence.

For example, Banham agrees that it is madness to judge industrial design as an art, while proposing to consider it as a popular art. The thesis that the products of styling may be the expression of the folklore of our century certainly has some truth in it; I could perhaps eventually agree with Banham on this point—always on condition that the huge circulating dinosaurs of Detroit are an authentic popular art, the art of the people. I am sure it is a question of art for the people. I am not convinced that the aerodynamic fantasies of vice-president Virgil Exner, responsible for the design of Chrysler automobiles, coincide with the artistic needs of the man in the street.

Today, everyone is aware that, in order to survive, the economic system of free competition demands constant change in consumer goods, but it is not established that this change must always be made in the same way; for example, always through mutations in the aesthetic form of the product. The "transitory aesthetic" is not, as Banham assumes, the only thing capable of responding to the need for change. This aesthetic today favors facade modifications, but hinders fundamental ones. When Banham speaks of a transitory aesthetic, he thinks of the problem of annual change in car models; but in my opinion the criticism that we could make of the automobile industry does not touch on its excess of change, but much more on its lack of change. The stylist sees his task as one of renovation, always renovation; but, with Richard S. Latham, we can recognize that his palette is very limited. Multiple variations in the aggressiveness of bumpers, the ferocity of headlights, or the generosity of tailfins do not in fact constitute a basic change. The automobile industry is in stagnation, for it does not get to the point of passing from artificial changes to essential and revolutionary changes; changes such as those accomplished by Henry Ford in proceeding from Model T to Model A have not recurred in the history of his firm. Many people complain of the disheartening diversity of the products of our economics of free competition, when basically it is more a question of deploring its depressing uniformity.

Finally, this English critic has not seen that the responsibility for the present-day crisis in industrial design should not fall exclusively on those whom he calls "neoacademic formalists," but also on the stylists. He does not wish to admit that formalism and styling

are merely two sides of the same coin: the idea that the aesthetic factor is basic to the creation of the product, i.e. industrial design as art.

Neoacademicism is a right-wing aestheticism, an aesthetic for but few people, "rare flowers"; styling is a left-wing aestheticism, an aesthetic for many people, "wild flowers." The metaphor is doubtless pleasing, but I hold that the new tasks of the designer will have nothing to do with artistic horticulture, be it from the left or from the right.

The aesthetic factor merely constitutes one factor among others with which the designer can operate, but it is neither the principal nor the predominant one. The productive, constructive, economic factors—perhaps, too, the symbolic factors—also exist. Industrial design is not an art nor is the designer necessarily an artist. The majority of the objects exhibited in the museums, and in the exhibitions of "good design," are anonymous and often executed in technical offices by subordinate employees who never imagined that they were producing art. In return, the greatest horrors of contemporary industry have been executed in the name of beauty and of art. General Motors, which has distinguished itself in this direction, published three years ago a sort of catechism of styling for the automobile industry. This is an abundantly illustrated prospectus, in which the words "beauty" and "art" recur every two lines, until the definition is finally reached: "For the stylists, creation is the capacity of materializing beauty."

This example comes from the domain of styling, but the field which Banham calls neoacademic formalism is not poor in similar examples. Here too, in the name of beauty, of "good form," horrors were created which have no need to envy those of styling.

Of course, the question of determining what is a horror, and what is not, could be asked and debated forever. The point is that there is no longer any doubt that aesthetic considerations have ceased to be a solid conceptual basis for industrial design.

The second aspect of importance is the economic factor, i.e. the dependence of industrial design on the world of production and consumption. There are very great difficulties in throwing light on this subject, because up to the present time we lack a scientific study of the true economic role of industrial design. The reports of the market or motivation research organizations do not always deserve our confidence; it is clear that the interviewing methods (above all the style of the questionnaires, the particular sector of the population chosen for interview, and the desire to verify a preestablished thesis) very often efface the scientific rigor necessary to the observation and interpretation of the facts. The books, articles, and conferences on industrial design are generally sensationalistic, anecdotic, or ingenuous.

Let me quote one exception. In a paper read ten years ago at a meeting of the Swiss Werkbund, Gregor Paulsson touched on the subject in quite a different manner. As far as I know, this was the first attempt to analyze the economic implications of industrial design in the light of an economic theory of value. Paulsson tried to determine the place occupied by industrial design in the relations between producer and consumer. According to him, the producer is only interested in the exchange value of the product; the consumer, in the use value alone. For this reason, the "aesthetic void" is born of the indifference of the producer to the aesthetic factor. But very often the producer may see the sales value of the aesthetic factor. This is the moment of "aesthetic prostitution." Thus, styling would be a typical example of aesthetic prostitution, because the aesthetic factor merely serves the interests of the producer and his sales

policy. Paulsson suggests that in order to fight against this opportunism it would be necessary to try to incorporate the aesthetic factor in the use value—to place it at the service of the consumer.

Paulsson's thesis, in spite of its novelty and its possibilities of development, is open to objection on many counts. For example, it does not avoid the error of continuing to consider the aesthetic factor as the only *raison d'être* of industrial design. On another count, from the viewpoint of the economic theory of value, Paulsson exaggerates the simplicity of the problem, most of all when he ensures that use value and exchange value are not interrelated. David Ricardo, commenting on Adam Smith, states: "Utility is not the measure of exchange value, even though it is absolutely essential to it." On the same question, Karl Marx wrote: "I do not separate use value and exchange value as though they were opposites . . . use value materially carries exchange value." We find similar statements in John Maynard Keynes and many other modern economists. Paulsson's thesis, that industrial design should operate with use value and not with exchange value, that it should stimulate the consumer's market and not that of the producer, is indefensible. It is impossible to verify it amid the competitive economic structure in which we live. As we shall see below, the situation is not very different in a socialist economy, where competition either does not exist or adopts more subtle force. The passage from producer to consumer, from exchange value to use value, is very complex. It is a process in which the connections of cause and effect are not easy to establish. It is senseless to design in a process of this kind, for the simple reason that the producer and consumer are also not entities which one can place once and for all in a fixed scheme.

There was a time, for example, when the competitive capacity of a firm was measured by the degree of rationalization of its production and not by the seductive power of its products over the consumer. This was the industrial philosophy of Henry Ford. Around 1930 arose the industrial philosophy of styling; competitive capacity came to depend upon the form of the product. Today, that which we have come to call the "Detroit crisis" could put an end to this period. It is quite possible that automation (to which we shall return below) entails a return, naturally on a different basis, to the industrial philosophy of Henry Ford.

In each of these periods, the producer-consumer relationship differs, for in each one the product functions in a different way. As a result, the designer cannot always have the same function or the same significance. In the first of the periods I have just recalled, the designer was the constructor, the inventor, the planner: Henry Ford himself was the great designer of this period. In the second period, the designer was the artist; it matters little whether his aesthetic was popular or purist. In the third period, he will be the coordinator. His responsibility will be to coordinate, in close collaboration with a large number of specialists, the most varied requirements of product fabrication and usage; his will be the final responsibility for maximum productivity in fabrication, and for maximum material and cultural consumer-satisfaction.

In order to simplify the analysis of Banham's thesis on the aesthetic factor, and Paulsson's on the economic factor, I have been obliged to leave many questions to one side.

One of these questions, and not the least important, concerns the difficulty of knowing objectively what a consumer is, without making abstract generalizations. Although each one of us may be a consumer, or perhaps precisely because of this, the information at our disposal is insufficient. I repeat that today we have many reasons to



[Hochschule für Gestaltung, Ulm. View into studios.]

mistrust our market and motivation research organizations: But we would like to be able to hope that empiric sociology, cultural anthropology, descriptive semiotics, hereditary psychology, the psychology of individual and social behavior, perception theory, etc., could at some time join together in a systematic study of the most subtle aspects of consumption.

Doubtless we know a certain amount about consumption, but it is clear that our knowledge is not at the level of our needs. We know, for example, that the freedom of the consumer is an illusion; or better, we could say (using the distinction made by Anatole Rapoport) that the consumer has the possibility of consuming what he likes, but not the probability of so doing. Here, I am not thinking merely of the material probability, but mainly of the psychological probability of purchase. Our competitive society is constructed on precisely this misunderstanding. Our possibilities are ours and ours alone, but of our probabilities we are not masters. True, we are free to consume; but only to consume what someone or other in some invisible place has previously decided is in our interest—and sometimes against it.

Again, we know that we often consume for projective or compensatory reasons. Through a process of symbolic transference, certain objects bring us real or illusory prestige, reputation, or security; others help us for a moment to temper our feelings of hostility or isolation.

These are the things we know. But many other aspects of consumption are not so easily labeled. Neither the psychoanalysts nor the professional critics of our civilization can give us a comprehensive explanation of all the phenomena of the world of consumption. The Marxists themselves do not succeed. One of them, the French philosopher Henri Lefebvre, recently wrote: "By the side of the scientific study of the productive relations which affect political economy, there is . . . room for a concrete study of appropriation: for a theory of needs." According to Lefebvre, this theory should answer the following questions: "where and in what field do living men make contact with objects of consumption? and how do they find what they look for? do needs form a whole? is there a 'needs system' or a needs structure? what is this structure?"

In the period which is now beginning, a scientific reply to each of these questions will be required by the designer. It will be the only way for him to replace, in his work, abstract generalizations about the consumer with objectively usable material.

The third and last aspect with which I should like to deal is the relation between productivity and industrial design. Productivity displays three attributes:

- 1.** increase in production;
- 2.** decrease in the unit cost price of the product;
- 3.** improvement in the quality of the product.

In present-day large-scale industry, productivity has two complementary methods of attaining its ends:

- 1.** operational research;
- 2.** automation.

("Operational research," according to G. Kimbal and P. M. Morse, "is a scientific method whose purpose is to give management a quantitative basis for decisions relating to operations placed under its control." "Automation," according to Frank G. Woollard, "is the system and method of making processes automatic by the use of self-controlling, self-acting means for performing necessary operations in industrial or commercial undertakings.")

We have already mentioned a possible return by present-day industry to the

productive philosophy of Henry Ford: the idea of productivity as the dominant factor. Little by little, vast sectors of industry realize that frenzied competition in ornamentation of products can seriously compromise their real interests. The first symptom and warning is the Detroit crisis: the surprising and unpleasant discovery of the slump in the sales of General Motors, Ford, and Chrysler cars. To replace a popular "look" with a purist "look" would be no solution to this problem. Large-scale industry seems to have already dimly seen that ornamentation, popular or purist, is an absurdity from the point of view of productivity.

Naturally, many people assert that the problem is incorrectly stated; that even an industry in full automation could produce the most absurd products. I do not doubt that the subtle stone lacework of the Hindu temple of Rajarani could be the subject of a fully automatic mass-production run, if a maharajah had a chance caprice. It is only in the light of productivity criteria that we could establish the justice or falsity of such an action. And I can assure you that the cost price would not be convincing.

There is also the argument that the designer is not faced with a new situation, since he has always been obliged to take into account materials, fabrication, and productivity, too. We agree. But the existence of a different level of acuteness is forgotten. Today, the requirements of productivity are much greater than before. Let me quote an example. At the Builders' Conference held in 1954 in Moscow, the popular ornamentation of Soviet architecture—the neoclassicism of the pastry cook—was condemned by Khrushchev, not because of revisions in the official Soviet aesthetic, but because of the productivity requirements of industrialized building, and because of the need to reduce the cost price per cubic meter.

We may be certain that, in the years to follow, productivity and industrial design go hand in hand; the demands of automation will to a great extent contribute to this. The new phase of industrial development is characterized by a new theory of the relationships between machine and product. The machine designed for the resultant product will be replaced by the machine designed to carry out fundamental operation. This is the thesis of Eric Laefer and John J. Brown; its importance to industrial design is of the first order. If, in the past, the product to a certain extent determined the operative behavior of the machine, then in the future, it will be the operative behavior of the machine which will to a certain extent determine the product. This implies that the designer will, more than ever, have to obey factors foreign to his own individual field. One of the most typical activities of the new period will be what John Diebold terms redesign. "Fully automatic production," writes Diebold, "often begets the need to redesign the product as much as the process of production. . . . In the majority of cases, it will seem easier to renovate the consumer goods than the industrial equipment, which will have to carry out a predetermined function." The full automation of the English radio factory at Shepperton, for example, was only possible through redesign, according to the engineer John Sargrove.

Redesign can nevertheless have other reasons. A product may undergo essential modification in its shape and in its function because of the development of its various organs. In this direction it is most interesting to observe the phenomenon conventionally termed "miniaturization." The engineer J. W. Dalgleish gives the following definition: "The development of techniques that make possible electronic assemblies whose size is reduced to a limit primarily imposed by the smallest valves which are economically available." The radical reduction in the scale of tubes, and the introduction of transistors, has stimulated revolutionary modifications in huge areas of industrial

production. Such modifications will be of profound significance to industrial design. It is clear that the change in scale of the product—considering the scale of use, the human scale, as fixed—poses exceptionally interesting and difficult problems for the designer. On the other hand, the peaceful use of atomic energy will open an absolutely new field of activity to the designer, where tasks await him which are completely different from those it is his habit to imagine.

Having considered the present-day problems of industrial design, we may now draw some conclusions about the training of the designer.

For some time, it was thought that the theme of education for industrial design could be isolated from the general context of higher education. This false conviction was fostered by the habit, inherited from the time of the Bauhaus, of considering training for industrial design as a primarily artistic phenomenon, only marginally pedagogic. But education for industrial design is only a special case of higher education. Many—I do not say all—of its problems should be visualized and solved in relation to other greater problems of education.

In this direction, it is most important to examine the example of the relationship between education for industrial design and the present crisis in scientific and technical education. Every day, it is stated that more scientists, more engineers, more technicians must be trained. Certainly this is a most important question; but in fact it is entered upon with extreme frivolity. Statesmen, educational administrators, and journalists believe that the problem is purely quantitative, that it can be solved by increasing the number of teachers and the construction of new school buildings, and by an ever larger number of students. True, these are indispensable measures, for without them it would be impossible to put the matter on a real basis; but they are not enough. We educators want to know on what educational philosophy to base our teaching. The two fundamental currents of contemporary pedagogy, neohumanist and progressive, are no longer of any help to us today.

This insufficiency is not only a fact of scientific and technical education, but also of education in industrial design. The didactic philosophy, from which the industrial design schools are still nourished, is in fact completely out of date. It is identified today with a tradition which is principally artistic: the Bauhaus tradition. (Thus, although Marianne Brandt's geometric tea-set "Bauhaus 1924" is now considered a museum curiosity, it is asserted that we must regard "Bauhaus 1924" pedagogical ideas as important today.)

But what significance has the Bauhaus tradition, from the viewpoint of the history of educational ideas? How does it express itself? What are its characteristics? It would seem that in practice, as an educational reality, the Bauhaus tradition is almost entirely reduced to its preparatory course. For many, this course constitutes the principal component of the Bauhaus didactical tradition; more, it is considered the indisputable basis for the education of the designer. Thus, I think it important that we examine that which was and is the basis of the teaching of this preparatory course.

To begin with, it must be said that the best qualified historians of the Bauhaus doubt the existence of a unified didactic principle in the preparatory course—as much at Weimar as at Dessau. But let us suppose for a moment that such a principle did exist, and that it had a unified character. We could imagine it as the result of a synthesis of the contributions of Itten, Kandinsky, Klee, Albers, and Moholy-Nagy. For a moment, let us forget their profound differences and look for their common factors. We shall thus discover a didactic principle whose general line could be described as follows: the

student in the preparatory course should, through artistic and manual practice, free his expressive and creative powers and develop an active, spontaneous, and free personality; he should reeducate his senses, regain his lost psychobiological unity—that is to say, the idyllic state in which to see, to hear, and to touch are true adventures; finally, he should acquire knowledge not only intellectually but emotionally, not only through oral explanations but through action, not only through books but through work. Education through art. Education through doing. Such are the constants that we can separate out from the didactic thought of the master of the Bauhaus.

This characterization shows well enough that the Bauhaus was not a miracle. From a didactic viewpoint, it is easy to reveal its origins. For example, we can clearly distinguish the influence of the "movement for artistic education," founded at the end of the last century by Hans v. Marées and Adolf Hildebrandt; the influence of the "work schools" movement of Kerschenshteiner; the influence of the "activism" of Maria Montessori; and the influence of the American "progressive education."

We cannot criticize the Bauhaus on this score. These movements were the most advanced manifestations of educational thought at the time. It was a matter of opposition to philological and verbalist "neohumanism," to philosophical idealism, to the academic crystallization of education. It was a question of argumentative exaltation of expression, intuition, and action, above all of "learning by doing." But this educational philosophy is in crisis. It is incapable of assimilating the new types of relations between theory and practice, engendered by the most recent scientific developments. We know now that theory must be impregnated with practice, practices with theory. It is impossible today to act without knowledge, or to know without doing. Operational scientific thought has bypassed the ingenuous dualisms, the pseudoproblems which so worried the first pragmatists.

Naturally, this crisis in "progressive" educational philosophy is interpreted by some as the great moment of revenge, as if the day of conservative education, of "neohumanism," had returned. "Learning by doing" is in crisis, they think; let us then go back to "learning by speaking." And let us speak only of Plato, of Aristotle, and of Thomas Aquinas. From existentialism to rigor. Such people make a great mistake. If today we must refute "progressive" education, we must also, even more energetically and decisively, refute "neohumanism."

A new educational philosophy is already in preparation; its foundation is scientific operationalism. It is no longer a question of the names of things, nor of things alone: it is a question of knowledge, but of operational, manipulable, real knowledge.

The designer is destined to integrate himself into that reality whose complexity and nuances I hope to have shown. He will have to operate at the nerve centers of our industrial civilization; precisely there, where the most important decisions for our daily life are made, and where, as a result, those interests meet which are most opposed and often most difficult to reconcile. Under these conditions, on what will the success of his task depend? On his inventive capacity, certainly, but also on the finesse and precision of his methods of thought and work, on the breadth of his scientific and technical knowledge, as well as on his capacity of interpreting the most secret and most subtle processes of our culture.

For the moment, one school alone is devoted to the formation of this new type of designer: the Hochschule für Gestaltung at Ulm. This school is the first example of the new philosophy of education. Sooner or later, I am sure, other schools will be able to profit from its experience and begin to follow the same path.

370-78

In an article published in *Architectural Review* where he had recently become assistant editor, Reyner Banham launched an attack on the historicism that had come to the fore in Italy. Entitled "Neoliberty—the Italian Retreat from Modern Architecture," the article condemned the new tendency as a betrayal of modernism and an "infantile" regression. Significantly, the origins of Italian modernism for Banham lay not in the rationalism of the 1930s but in futurism. Banham's widely publicized comments were directed in large part at **Ernesto Rogers**, who had played a major role in the new tendency's formation, both as editor of *Casabella-Continuità* and as a principal of the BBPR, which had recently completed the Torre Velasca in the historic center of Milan. Banham's article elicited a strongly worded response from the Italian architect-editor two months later. Although Rogers's position as expressed here differs little from that expounded in earlier articles, his tone captures a sense of the stakes involved and of the role of the journals in foddering an international debate.

68-69

The term "Neoliberty" had been coined the previous year by Paolo Portoghesi in an article entitled "Dal Neorealismo al Neoliberty" published in *Comunità* (December 1958). Portoghesi noted the pervasiveness of the new tendency, describing it as "that vast impulse to reevaluate the first period of the modern movement (beginning with the neomedieval revivals and ending with rationalism) which has exerted a direct influence on the most recent production of certain Italian architects of both the *younger* generation and that of the *masters*." In his view, the first phase of "postrationalist" architecture, which he labeled "neorealist" by analogy to films like Roberto Rossellini's *Rome, Open City* (1944), had been animated by an empathetic identification with the plight of an Italian populace left homeless and impoverished by the war. Epitomized in the epic populism of Mario Ridolfi's INA housing on Viale Etiopia in Rome (1950-54), it emulated the ambience of working-class life, romanticizing its spontaneity and naturalism, and opposing formalist preoccupations as academic. The successor Neoliberty, in contrast, coincided with the "economic miracles" appearing throughout Europe by the late 1950s. Looking back to turn-of-the-century bourgeois building tradition, it cultivated eclecticism and fantasy while at the same time acting as a critique of rationalism's lack of expressiveness and of material richness. Portoghesi reserved judgment on the new tendency (later to be a background for his own work), relating it to Italy's Art Nouveau style, the brick expressionist school of Amsterdam, and early Frank Lloyd Wright. Wright himself had recently revived the manner in his Morris store in San Francisco (1949) and Masieri Foundation project in Venice (1952). It thus also had links to Bruno Zevi's organicism and to the work of Carlo Scarpa and Ignazio Gardella.

200-4

181-83

But the prime manifesto of Neoliberty was Roberto Gabetti and Aimaro Isola's Bottega d'Erasmo in Turin (1954), polemically published in 1957 in *Casabella*. It was followed (in notoriety) by the Velasca tower. The latter, which extended the stylistic connotations beyond the eponymous Liberty, evoked a medieval fortified tower at skyscraper scale. A few months after his argument with Banham, Rogers presented the building to his international colleagues at CIAM's meeting in Otterlo, justifying its silhouette as the product of functional and technical requirements as well as of a historical analysis of the preexisting urban context. He was attacked again, this time by Team 10 members Peter Smithson and Jacob Bakema. To Smithson's comments that the building was a formalistic exercise and dangerous model for imitation, Rogers replied, "There is one main difficulty that I see and that is that you think in English."

From *Casabella-Continuità* 228 (June 1959), pp. 2-4. Translated by Rebecca Williamson. Courtesy of Studio BBPR and Julia Banfi.

The Evolution of Architecture: Reply to the Custodian of Frigidaire Ernesto Nathan Rogers

There are sensations that one can never get rid of: as in Proust, where certain odors are connected with certain thoughts. Similarly, reading Mr. Banham's article in the *Architectural Review*, I cannot avoid remembering the amusing but decadent Victorian "pub" with its display cases of "stuffed fishes" and all the other customary trifles reconstructed in the cellar of the English review's offices. It is a way of recovering history through a particular society's representations, of painstakingly indulging in the most abstruse, dusty, and also most condemnable examples, to the point of absorbing that society's flavor.

It is probable that this "pub" shows only the negative pole of a cultural attitude to which the review has assumed a commitment with incomparable intelligence and seriousness. But it is clear that every battle conducted with such insistence ultimately has to involve some critical valuation before it may be entirely clarified.

It would be ungenerous to believe, because of possible errors or those that have already been noted, that the whole business ought to be condemned, or that one should go ahead and say that those responsible are oblivious to other problems that are much more significant in the formation of contemporary architectural consciousness.

Architectural Review and *Casabella* are, from the cultural point of view, the most engaged reviews in the world: the most audacious and, as a consequence, the most open to criticism. One may accept or refute their positions, but no one who examines them openmindedly will want to deny that both make valid contributions through their critical discoveries, thorough research, and proposals leading to a more valid framing of the problem of current architecture, thus breaking up the schemas of modernist formalism.

I would like those who speak about us and about Italian architecture to use equally respectful language, and not mistake fireflies for lanterns, nor mix up the cards on the table, nor content themselves with statements that are improvised and, in any case, superficial and hasty.

For this reason it displeases me that the same review for which we have demonstrated so much respect, having even dedicated an essay to it (Matilde Baffa, "L'Architettura al vaglio di una rivista inglese," *Casabella* no. 220), would give space to an editorial like Mr. Banham's "Neoliberty—the Italian Retreat from Modern Architecture."

An editorial cannot be judged by the same standards as just any article, inasmuch as it customarily expresses the opinion of those in charge; it is where the convictions of the journal acquire an official character.

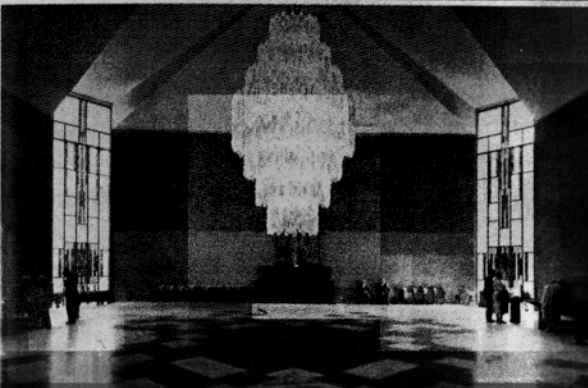
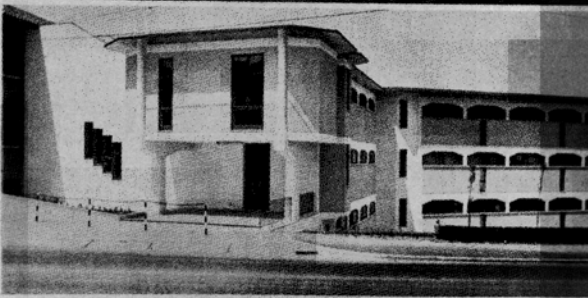
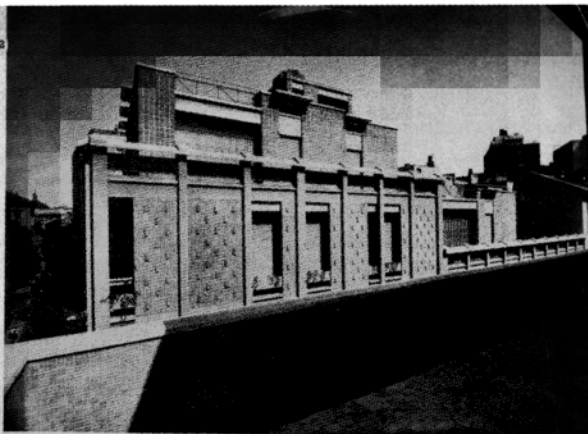
Mr. Banham, oblivious to the environment in which he works, evidently believes he is directing his accusation at those who have considered "the remaining monuments of Art Nouveau in a degree of detail that bespeaks more than historical interest. Works of Gaudí, Sullivan, d'Aronco, Horta, and the Viennese school, in particular [he writes], have been described and illustrated even to the extent of the original drawings and colour-blocks of their exteriors, supported by texts that were far less expository or explanatory than they were eulogistic and rhetorical." If the articles have been rhetorical, we are at fault, as we would be at fault if, for example, we had written what appears in an editorial in *L'Architettura* (no. 37, November 1958, page 439): "Rationalism, consumed in the prodigious metamorphosis of Ronchamp, committed here its subtle,

NEOLIBERTY



The extent to which the famous names of Milanese architecture have retreated to historical precedents can be judged by these two blocks by Figini and Pollini, one of 1940 in the via Broletto, 1, and the other in the via Ciro, completed last year, 2.

3 and 4, the relationship of the retreat to historical precedents can be measured by comparing two illustrations, 5 and 6, of a late villa by Otto Wagner (as they appeared in Bruno Zevi's magazine *L'Architettura*) with two recent works in which Ernesto Rogers was involved, the Aquila offices in Zenle, with their dummy pitched eaves concealing a flat roof behind, and the interior of the Italian Pavilion in Brussels, with its Wagnerian stained glass (and its 'stupendous outburst of Milanese Chandelierism').



[From Reyner Banham, "Neoliberty—the Italian Retreat from Modern Architecture," *Architectural Review*, April 1959, p. 233.]

virtuous, extenuated suicide; at seventy-two, Mies van der Rohe has ended the game. This fact must be the point of departure for judging the various problems of contemporary language: the tending toward Liberty, the formalism of the Milanese school, the complicated research of Scarpa and the brutalism of D'Olivio, the clever empiricism of Gardella in Venice. These are beginnings, attempts, experiments, all of which are open to discussion but vital, real, indicative of the possibility of relaunching modern architecture. Having rendered homage to Mies in the gleaming mausoleum of rationalism, we go out drinking with these friends who are less perfect and respectable, who are at times hedonistic and dissolute, but who at least have the courage to continue a tradition which was, until yesterday, that of Mies, the tradition of anticonformism."

For us, on the other hand, the modern movement is not dead at all: our modernity is really in carrying forward the tradition of the Masters (including Wright). But to be sensitive to the beautiful (and not only to the value of documenting it) in some manifestations that are no longer sufficiently appreciated is certainly a respectable position. And likewise, it is respectable to historicize and update certain values left hanging because of the need for other struggles.

Mr. Banham believes he has found (probably in the dusty drawers of that Victorian furniture) the magic key with which to open the sluice gates of history at any point, enabling the flow to deviate in the direction of his own private breeding farms of blood-thirsty moray eels.

It might be said that, for him, using an old Ford is more justifiable than using a horse because the Ford comes after the Industrial Revolution while the horse is obviously before. This comparison might be deduced from the conventional layout of the whole article, where it is maintained that, as far as imitations go, the architects who today follows De Stijl is better than the one who adopts Liberty since the former "at least revives forms created since the watershed" between our time and a past that is now over. In other words, it is better to steal five lire than ten. Many times I have repeated that "formalism is any use of unassimilated forms: ancient or contemporary, cultivated or spontaneous" (*Casabella* no. 202). Conversely, critical and considered review of historical tradition is useful for an artist who refuses to accept certain themes in a mechanical manner. For Mr. Banham, however, determinism of forms according to an abstract line of development seems to take the place of a concept of history.

From this derives his aptitude for bestowing absolutions and excommunications, which can only mummify reality.

No less objectionable is his system of elevating some poor person so high as to make him totter, only then to throw him so far down as to render him unrecognizable.

And even someone like me who, in line with his principles of freedom of opinion, is ready to consider any criticism, is not disposed to endure that which—like this—is contradictory not only in its evaluation of the facts, but even in its exposition of these facts, which require far more precise information and above all more correct citation.

Personally, it does not flatter me to be called the "hero-figure of European architecture in the late forties and early fifties" if I am then considered one of those responsible (together with Belgiojoso and Peressutti) for having curated the Italian section of the 1958 Industrial Design exhibition in London (with works by Albini and other first-rate colleagues) "which seemed to be little more than a hymn of praise to Milanese *borghese* taste at its queasiest and most cowardly."

I am responding because, in spite of everything (and certainly because of the authority of the journal that sponsors it), the article treating Italian matters with such

presumption has been much talked about here; I am responding because I am the main person condemned and because along with me are cited my two associates; because it is necessary to disentangle the discussion from a prejudice concerning a name, that of Neoliberty, with which, according to the extemporaneous classifications typical of Banham, architects of various ages, responsibilities, and tendencies are associated; and finally because, if this extended meaning of the name is granted, there ought to be included in it all those who attempt to avoid what I want to call by its true name, and that is conformism and formalism. The silence, for example, concerning a Gardella, a Ridolfi, a Michelucci, an Albini, a Samonà, engenders further confusion in the already great confusion of what has been said. I respond because I do not want to be accused of positions that we have not taken. Finally, I respond because, in refuting other people's affirmations, I hope to make it understood that I do not indulge in the attitude of "tout va très bien, madame la marquise," but rather that I worry, at least as much as Mr. Banham, about a certain dangerous trend of Italian architecture, the analysis of which I do not intend to evade insofar as it concerns my own responsibility as artist, critic, and teacher.

Mr. Banham declares himself to be disillusioned because, in the aftermath of the war, he had placed many hopes in us (in us Milanese above all), having even created a myth in order to locate us.

But who substantiates these "illusions" for him? Some Roman architects: Moretti and Vagnetti. The first in particular. He himself, anticipating our reaction, declares that we will, for our part, reject this interpretation of his. In fact, it is obvious that an adroit but willful formalism is not only not indicative of the supposed goals not reached by us, but it also denies the theoretical and above all moral presuppositions of our struggle, which shuns aestheticism and intellectual games.

As far as the work of the young architects goes: of Aulenti; the Novara group of Gregotti, Meneghetti, and Stoppino; as well as of Gabetti and Isola, it is not true that *Casabella* has published them "with evident editorial approval," because if it is obvious that nothing appears in this journal without my consent to its publication, I have openly shown my criticism precisely of the tendentious and conclusory value of these products, limiting myself to considering them significant examples of some young people intelligent enough to react to modernist formalism.

If, then, one wants to accuse them of being led, after an initially correct impulse, by a negative polemic, over and beyond an equally necessary action of positive reelaboration, that corresponds exactly to thoughts I expressed in *Casabella* no. 215 ("Continuity or Crisis?").

But this is not what Mr. Banham maintains, taking an extract as imprecise as it is unfaithful from an article by Aldo Rossi, "Il passato e il presente nella nuova architettura," where, with clearness and honesty, the latter criticizes his own friends on precisely those points concerning which Mr. Banham makes him look like a kind of demagogue of the bourgeois spirit.

On the other hand, in the very same issue of *Casabella*, no. 219, Aldo Rossi, making a critique of Hans Sedlmayr's book against modern art ("Una critica che rispingiamo"), and voicing a position widespread among young people in Italy, underscores the difference between a reactionary critique and a progressive critique of the modern movement: "The rejection of the values of the modern world necessarily implies a new barbarism, since in any case today it is not possible to ignore how much the modern world has characterized the Europe of these last years. . . . In essence the motive of

decisive dissent is still this: that this type of criticism does not point to a prospect of development, an alternative *within* modern culture, but poses itself as negation of modern culture."

Every alternative or development that we have supported has always been *within modern culture*, and it is for this reason that our task is laborious and difficult. Why has Banham, who wants to be the expert on things Italian, not sought to read better and more, rather than insist on his definitions of "Milanese" and "Torinese," which smack of banality?

Nor are Gabetti and Isola and the others in the same category because, if the definition of Neoliberty can be applied to the Bottega d'Erasmus (and to other works by other young architects sprouting up here and there in Italy), it can also be applied only if uselessly distorted to the different groups whose nostalgias, more than to Liberty, hark back perhaps to Dutch expressionism (for Aulenti) or to the eclecticism of Boito and Berlage (for Gregotti and Associates). As for the works of the "Cooperative of Architects and Engineers of Reggio Emilia," they are not at all Neoliberty and could almost be taken for examples of what Banham calls "current architecture."

Nor are Figini and Pollini Neoliberty; this is obvious even when they indulge in naturalistic thinking. If I were not driven to polemic by Banham's tone, I would find some usefulness in the alarm he has sounded, but that little bit of sanity that can be found in his observations and that might readily be agreed with—at least as indication of motives to investigate—finishes by corrupting itself in the tortuousness of his discussion, so much that his generalized accusation against the most recent manifestations not only goes beyond the modern movement in Italy, but displays such a rigid incomprehension of many fundamental events that it ends up indicting the wider developmental possibility of all international history. To listen to him, in modern Italian architecture, "the backstage influence of Marinetti (whom Sartoris once acknowledged in print as a patron of the movement) . . . was most likely to be felt."

What does it matter to us that Sartoris says this? One who has dull vision deforms everything he sees: "'modern' was practiced as a *style*, since it could not be practiced as a total *discipline*—as the literally hollow formalism of Terragni's Casa del Fascio at Como brilliantly demonstrates." Does Banham not see the relationship between form and content and does he not know of Terragni's struggles to give a moral content and form to fascism through his work? (He was unfortunately deceived.) And why did Pagano, Banfi, Labò die, if not because their artistic discipline could not do other than oppose itself to the rules of the dictatorship?

Banham ought to have recognized in a subtler manner that which has repeatedly been observed by our own writers: namely, the continuous dramatic struggle of culture in general against the contingencies of Italian society (before, during, and after fascism); from this he would have had to infer the difficulty of identifying art with life: the dialectical relationship, the persistent lovers' quarrel, the conquests, the misunderstandings, the rejections, the redemptions. Then he would have intuited one of the most interesting aspects of our history: precisely that Italian architecture, in its authentic examples, is a moral act and, at least implicitly, an instrument of political struggle, alternating successes with failures, as in the entire political history of Italian progressive tendencies, but certainly not for this reason worthless or condemnable.

After the war of liberation and the stupendous period of partisan struggle, it seemed that the world, Europe, and Italy were resurrected to a definitely better life, and we fed ourselves on hopes, imagining that they represented reality, even though we

were forced to see that everywhere these were new utopias. Since then all of Italian society—that which is progressive and aware—clamors for breath so as not to be caught on the shoals of officialism. And the fact that there exists an architecture more loaded with feelings than with reason is not owed to a retreat by architects. Quite the contrary! It is a struggle against the current. What happens in the communal offices, in the administrative offices, must be noted. As ever, the small company of those who believe in art must grit their teeth to break a path beyond the barricades.

Is it not the case that Ridolfi, Gardella, B.B.P.R., Albini, Samonà, Michelucci, and Piccinato, among the most strenuous defenders of modernity, no longer do what they did before, and precisely for this reason are consistent; has Banham ever asked himself this? It cannot be believed that these people and many others would all at once have become irresponsible to the point of abdicating the conquests so laboriously achieved.

Their strength has really been that of having understood the modern movement as a "continuous revolution," that is to say, as a continuous development of the principle of adherence to the changeable contents of life.

Little by little the thematic became richer, and as a consequence the exigencies became subtler. Formal issues, therefore, became more difficult, because they tried to encompass an ever greater number of propositions—the widening of the architectural problematic and the immediate effect of critical thought; the historicist revision of all historical periods and especially those closest in time, which had been distorted through the normal opposition caused by the dialectical traffic between generations.

And Liberty too was better understood (and why not?) when there were still energies to collect and channel.

Liberty cannot be considered only in terms of its historical definition, as progenitor of modernity, but must also be considered in terms of its own values, which correspond, moreover, to a recognition so necessary that as a young student I already wrote about it in a thesis project.

What is there to be afraid of?

There is no doubt that it is necessary to look at the experiences of the past (at all of them), though naturally without letting oneself become entangled in them, as unfortunately—and I am the first to recognize it—happens to some.

This complex process of revision, however slow and elaborate, has been misinterpreted by those less prepared, who have been shocked by it. But it must be recognized in any case that such revision could make even the best ignore some cultural component (like the technological) to which more attention was paid in other moments. But progress is the result of choices and of suspensions of judgment, which at every moment can err by incompleteness; progress is paid for also with some mistakes. Yet I am persuaded that along with the dangers that Italian architecture is running, awareness does surface, despite the arrogant goading of Mr. Banham, who plays the part of *custodian of Frigidaires* and who furthermore believes that "the revolution . . . began with electric cookers, vacuum cleaners, the telephone, the gramophone, and all those other mechanized aids to gracious living that are still invading the home, and have permanently altered the nature of domestic life and the meaning of domestic architecture." Now that we are here, I would also add the blender, which would serve to make a nice cocktail together with the other revolutions which, according to him, have their "milestones" in the "Foundation Manifesto of Futurism, the European discovery of Frank Lloyd Wright, Adolf Loos's 'Ornament and Crime,'

Hermann Muthesius's lecture to the Werkbund Congress of 1911, the achievement of fully Cubist painting, and so forth." All that is lacking is a bit of salt.

I am persuaded that the whole experience has been useful. It has been so useful that Italian architectural criticism and production have taken, despite everything, some steps that in many countries are yet to be attempted.

The latter will certainly take these steps, and perhaps in a different direction, in accordance with what the particular cultural and economic conditions suggest, but I do not believe our experience, that of a proven historical consciousness, of the necessary usefulness of culture in the order of space and time—of the relation between new work and those preexisting factors—to be of little import, nor do I believe that these ought to be discarded with such superficiality.

Anyway, we do not presume to be the only ones who are moving forward: much more luminous examples come to us from the Masters: Le Corbusier has created Chandigarh with the echo of all India; Gropius the Embassy of Athens, steeped in Greek history; Mies a "monument" with the Park Avenue skyscraper in New York; and Wright, before he died, works which, while highly consistent in spirit, cannot be confined within the letter of many of his preceding declarations.

No one has stopped; concerning the Masters themselves one could paradoxically paraphrase an aphorism of Nietzsche: "He who remains a disciple rewards his own master badly."

This is so in our case, all the more for those of us who do not like to get frozen in slavish dogmatics.

If all that departs from the configurations of academic modernism or does not succumb, out of ill-advised escapism, to the bravado of formalism is Neoliberty, then we shall be in large and good company.

But if Neoliberty is really that tendency which retraces the steps of Liberty itself, then what we are talking about is giving the right frame to a little picture whose figures are represented, in Italy, by certain young architects who—I hope—are sufficiently aware as not to believe they sum up all of Italian architecture in themselves. And it is also to be hoped that they will soon notice some useless misunderstandings into which they have fallen. To conclude, I would like to invite Mr. Banham, who I believe knows English better than Italian, to read directly from *The Poetry of Architecture* by John Ruskin, a great Englishman, without repeating the outdated interpretation of Marinetti, a "revolutionary" Fascist who died wearing the cap of the Academy: "We shall consider the architecture of nations as it is influenced by their feelings and manners, as it is connected with the scenery in which it is found, and with the skies under which it was erected."

He will find there some starting points for the evolution of architecture.