

ARCHITECTURE AND INDUSTRIALISM*

BY architecture we mean building considered as a fine art—that is to say, an art which subserves mental and not merely physical necessities. Art is primarily simply skill—thus we rightly speak of the art of the dentist and the art of the pickpocket, and there is great art in washing up. Upon this lowly base is built up the grand erection of human accomplishment. To do or make something well is the root of the business.

But as it commonly happens that human works are used by human beings as well as *done* by human beings, it follows that the idea of suitability as well as that of utility occupies the mind of the workman. Hence even in the simplest articles of use the two ideas combine, coalesce or conflict, and the chair-maker who sets out to make simply a thing which will fit the sitting human body finds himself involved in all the complexity of the problems aroused by the question, what human body, or whose human body—am I making a child's chair or an office stool, a chair for the dining room or one for the bishop in his cathedral?

Thus has grown up the distinction between art and fine art. By art is meant simply the skill to do what needs doing or the skill to make what serves a physical use simply. By fine art is meant skill to do or to make that which is simply delightful to the mind. At the one extreme are such things as dentistry and pure engineering (though even dentists play about with gold stoppings for no real utilitarian reason), such things as working a London tube lift or mixing concrete for foundations, making horse shoes (nearly a lost art), or minding a telephone exchange—at the

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other extreme are such high things as Byzantine mosaics, the paintings of Picasso (which, whether you are delighted by them or not, are only intended for your delight), musical symphonies, poetry and dancing, and even sculptured stones.

But only rarely, if ever, do we get things pure. Only rarely are the works of men either purely utilitarian or purely delightful. Even the Forth Bridge is not purely utilitarian—the lower side of its great cantilevers are curved for no other reason than that its designer had the naïve idea that a curve was more pleasant to behold than a straight line, and, he remembered, all old and venerable bridges had arches, so the arch was the correct thing—the necessity of one age becomes the ornament of the next. And most things of use, when made by human beings, from kettles to cathedrals, are given by their makers an ‘ornamental’ quality, if only because thus work becomes delightful to the worker. And by ornamental, of course, I do not mean simply added ornament or pattern business, but that quality in the form of things themselves which makes them delightful to look at, so that we are tempted to buy them, or steal them, merely to have them in the house, whether we have a ‘use’ for them or not. And this delightfulness is not mere fancifulness; it is, as in the case of the chair, the quality by which things are suitable to rational minds, and not merely fitting for physical uses, even though the two things are not easily separable.

And most things whose primary purpose seems to be simple delightfulness and not usefulness at all, as musical tunes or poems, have an element of physical usefulness. It is said that the poem originally was simply a trick for aiding the memory (as in the well-known poem: ‘many nouns in *is* we find to the masculine assigned’), and much fine writing is simply the building in which useful information is housed.

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Architecture is thus the type and mother of all the arts. Herein is combined, in equal balance and each in its highest degree, both what is useful and what is delightful. Architecture is not merely good building—*though good building is absolutely necessary to architecture.* Architecture is delightful building. It is building by which the mind of man is delighted.

But architecture, more than any other of the arts of man, is a social art. Even if it were possible for a single man, all by himself, to build a house, or even a garage, it would not be possible to build a house which he alone would see and use unless he were a hermit in a desert. Architecture more than any other art depends upon the collaboration of many men working and living together. What many combine to build many must necessarily see and live with.

It is not possible, therefore, to discuss the art of architecture as one might discuss the art of painting, or even the art of music. Architecture is not to be thought of in isolation. You cannot hang up a building on the wall of your bedroom or listen to it in the privacy of your boudoir. Nor can you say thus and thus *I will build this building*, as though you alone were going to do the work and you alone see it when done. You are forced, by the nature of the case, to take into consideration the facts that whatever you design will depend for its execution upon the labours of others, and that any building is a public monument.

And I am not urging this social view of architecture merely upon moral grounds. I am not simply saying that one should love one's fellow men and not give them jobs they don't like to do or things that are offensive to them when done. I am not simply urging humanitarianism, nor am I endeavouring to inculcate a civic sense. Kindness to workmen or to one's fellow citizens is right enough in its place, but it is not the business of architects *as such*.

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The social nature of the art of architecture is important to architects primarily by reason of the fact that what is done by several or many men working in collaboration is necessarily different in kind from what is done by an individual working by himself, and what is necessarily used and enjoyed by many is different in kind from what is made for a private use. But the first consideration is the more immediately important here. Architecture needs an architect and it needs builders—design and execution.

And the first thing to notice about the building conditions of to-day is that, as far as the architect is concerned, builders are not men, but machines—they are not men while they are working, but only in their spare time—they are not artists (that is to say, responsible workmen), but hands, tools to be used by the designer, the architect, under whose direction they are guided, and whose word is absolute law. And not only so, but this condition is all they are capable of, and is indeed all that they demand. The builder is only too pleased to work according to the plans of the architect; the labourer or craftsman, whether trade unionist or not, is only too pleased to do whatever he is told.

I am not now going to bother myself as to whether this state of affairs is good or bad, or whether things have ever been different. The point is that this is the state of affairs *now*, and to act as if it were otherwise is simply foolishness. Let the social reformer do what he can about it; the architect's business is as much to make the best use of his 'hands' as it is to make the best use of his materials. If his hands are fools, then his designs must be 'fool-proof.' If his materials are machine-made—the product of mass production and mechanized industry—then his designs must be of a kind that is suitable for such materials. In a word—we live in an Industrial world and, therefore, all

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ideas which derive from a time before Industrialism must be ruthlessly scrapped.

From certain points of view it is reasonable to hate this Industrialism. To a moralist it should be hateful because it is a tyranny; it was not voluntarily entered into by the workers; it was imposed upon them by grasping and avaricious merchants who had no aim but to make themselves rich. It is difficult to think of any introduction of machinery into already existing workshops which had any other object than that of lowering the costs of production and increasing the quantity of things made, and therefore the profits. No machine has ever been invented *for improving the quality*. Nothing has ever been done better by machinery than it has been or could be done by hand. Even now the best mathematical and astronomical instruments are hand-made, and the only things which can be said to be better done by machinery are things, like fountain-pens and typewriters, which could not otherwise be made at all except at a price which would make their use absurd, and indeed impossible except for those persons who don't really need them.

Also to a moralist Industrialism should be hateful because it degrades the workman to a sub-human condition of irresponsibility. Of no factory article can you say, 'John made it—kick him'—or even 'bless him.' In a factory no one is responsible for anything except for doing without delay what he is told.

To an 'aesthete' also this Industrialism should be hateful, because it may seem to him that things made by the million lack that intimate personal quality which is proper to things made by men for men. He may look back to some pre-Industrial time as to a sort of paradise wherein all things made were works of art because all workmen were artists. He may think of the squalor and shapelessness of factory towns and the shrieking effrontery of commercial advertisement as

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things inseparable from Industrialism. He may think of the noise and mad hurry of modernism, and he may

‘dream of London small and white and clean,
The clear Thames bordered by its gardens green.’

But though, as a man, the architect may be a moralist, and, as a man, he may be an aesthete, nevertheless as an architect he is neither of those things. As an architect his business is the real business of building. And it is real building with real stone or wood or iron, and made by men as they really are—*just now*—and not as they were or as you would they were.

Architecture, I have said, is *delightful building*. What, under our present circumstances, can be really delightful? What can be the proper architecture of Industrialism? The Industrial magnate is primarily the avaricious man (except of course when he is making speeches about ‘honesty and strict attention to business’), and the Industrialist workman is an irresponsible machine-minder for whom there is no delight save what he can procure in his spare time—a man whose culture is not the product of his working life, but a compound of cheap sweets and highbrow welfare work—the cinema and evening lectures on the ‘wireless.’ What that is ‘delightful can come out of a system in which the delight of the workman is absent, in which the delight of the workman is definitely ruled out as unnecessary and even undesirable? It is said in the Bible that ‘a man shall have joy in his labour and that this is his portion,’ but from the point of view of Industrialism this is simply ‘bilge water.’

Up to the present the architects, soaked in past traditions and trained in museums of antiquities, have sought to obtain the necessary element of delightfulness (without which architecture is merely building) by what may be called the *veneering* method—that is to

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say, by the application of classical or medieval façades and ornaments to buildings of which the true nature is nineteenth or twentieth century commercial. Thus it has been considered proper that banks and town halls, even if they are built with a steel framework and brick partition walls, should have, at least in front, a classical composition of pillars and pediments, and that all details of doors or windows, door-knobs and fireplaces, should be moulded and ornamented with adaptations of classical mouldings and ornaments. Similarly, churches were thought to be properly in the Gothic style and private houses either Queen Anne or Elizabethan—a complete disregard of the progress of science or the real needs of men of commerce, and not only disregard, but even shame! Engineers were ashamed, and proud to be ashamed, of engineering. The engineer of the Tower Bridge, though the Tower Bridge is not a church, was proud to have his work completely covered over with imitation Gothic ornamental building.

But this veneering method of obtaining delightfulness is now approaching its end. With great pain and labour and in the face of much contumely and the opposition of snobbish interests and prejudices, a more honest, and that is the same as saying a more intelligent, method of dealing with the problem is coming to birth. Not a few architects, especially in France and Germany and Russia, have come to see that the same process as that by which the funny old 'Rocket' evolved into such an excellent and good-looking thing as a modern locomotive could be allowed to take place in the business of building and furniture; that though architecture is concerned with what is suitable as well as with what is simply utilitarian, nevertheless the simply utilitarian is the proper basis for the development of the beautiful—that which is pleasing when seen. The labours of historians have dispelled the

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romantic clouds which had gathered round medieval and classical remains. Gothic architecture is now seen to be primarily engineering in stone—a method of stone construction developed with strict regard to the necessities of the case, with hardly any eye to the picturesque effects it attained, with the word ‘beauty’ hardly known, and never mentioned. Even Gothic sculpture is seen to be the product of ‘honesty and a strict attention to business.’ The sculptors did not talk about what Mr. Epstein calls ‘relations of masses,’ and confined their attention to the most vivid presentation of the subjects ordered of them by their customers.

But, for one reason and another, stone is no longer the material economically reasonable to-day. The size of buildings, the elaborate plumbing and lighting demanded, the provision of many floors, the necessity in modern towns of making buildings as fireproof as possible, in a word the countless conveniences required by modern standards, all combine to make it impossible to spend more than can be helped on walls and floors and roofs. Stone walls and groined roofs have gone, in fact, long ago. Only the outward skin of such things has remained, and now the skin in its turn, though it has hitherto seemed to be the chief reason for the existence of the architect, and is still the pre-occupation of many old practitioners, is in its turn seen to be both unnecessary and ridiculous. The modern architect, if only to save himself from complete unemployment, is forced to be intelligent.

And the basis of intelligent building is ‘honesty and attention to business.’ Honesty; that is to say, facing the facts both of men and materials and construction, and making the most of them: attention to business; that is to say, keen consideration of the purpose for which the building is required that it may be both useful and suitable.

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Now under our Industrial conditions the most obvious fact is that men are mechanical and things are machine-made. To put into the design things which cannot be done by mechanics, or which cannot be properly made by machines, is simply silly. And all ornaments, even plain mouldings, are of this kind. Good modern building is plain—stark, staring plain.

Would any intelligent person have oak furniture in his dining room which was covered, or even partly covered, with machine-stamped carving? Why, then, do comparatively intelligent architects think it right and proper to have the equivalent of machine-stamped carving on their town halls and churches? If your workman has been turned into a machine, then what he does with his hands is only 'hand-made' in a sense entirely unimportant. Modern architectural carving is as much machine-made, and rightly so-called, as anything done with an American carving machine. You can do good plain printing by machinery, but you obviously cannot do medieval illuminated missals that way, and nobody now tries. But a lot of people still do not see that Corinthian capitals and Gothic traceries, egg and dart mouldings, and crockets and pinnacles, are just as impossible in an age of machinery. The old-fashioned architect, and of course his clients, think this outlook is gloomy. So it may be morally. So it may be economically. But it is not at all gloomy architecturally.

Good building, that is to say architecture, in an industrial age, is *plain* building. Plainness is a necessity. And plain means plain; it does not mean 'comparatively plain' or 'more or less plain.' It means completely devoid of all carvings and mouldings. It means completely devoid of all those things which in any way spring from the exuberance or inventiveness of the man on the job. The man on the job is devoid

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of exuberance and inventiveness; it is no use designing his exuberance for him in the office.

But Plainness means more than merely devoid of all those things which spring from the exuberance of the man on the job; it means devoid of all those things which do not spring from the nature of the building as such—devoid of those things which do not spring from the nature of the building as a constructed thing or from the necessities of its nature as a thing to be used for such and such a special purpose.

Architects have during the last four hundred years regarded a building entirely from the outside—both metaphorically and actually—and having designed the outside, they have then, more or less reluctantly or patronizingly and as a sort of concession to their clients, gone inside and contrived a few elegant interiors. They have continued to do this long after all semblance of constructional necessity has departed from Gothic or Classic mannerisms.

But this is to view things entirely inside out. The primary necessity and origin of human building is the provision of habitations, of coverings, of roofs, of shelters—whatever word you like to use. Architecture is not to be thought of as a thing with a hollow space inside it, but as a covered space—a hollow space with a covering, and a covering naturally has an outside. The Greek Temple and the medieval cathedral both alike were designed from the inside outwards. The outside is the consequence of the inside, and owes its whole character and quality to the character and quality of the inside. A contrary view turns architecture into play-acting, the making of stage scenery, and stage-scenery is the only name really applicable to most architecture since the Renaissance until quite recent times. From St. Paul's Cathedral to the new Regent Street Quadrant we have had nothing but stage

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effects obtained by viewing the job of building entirely from the outside.

The only architecture which is *properly* viewed thus is that of which some Indian temples and most cemetery mausoleums are examples. But these things are not really architecture so much as sculpture—they are not pies, they are a sort of blanc-manges—they are not covered spaces, they are built-up shapes—they have no insides.

The root idea of building, and therefore of architecture, is the covering of a space, and the root of this idea is a physical need. These ideas have been submerged for four hundred years; they are now emerging again and forming a new architecture. And in this matter of mouldings and ornamentation these root ideas have their inevitable consequence. Cornices and pillars, pilasters and pediments, have obviously no place at all to-day because they spring from no necessity either of construction or suitability. And mouldings—what are they, after all, but a way of playing about with the edges of things? And playing about is just the one thing which is ruled out, because you cannot play about by proxy. Mouldings, however simple and however many miles there are of them, demand that the mason shall be, in however limited a degree, a responsible workman, an artist. The medieval workman, the Greek workman, whether they were chattel slaves or serfs, were artists, however little they knew it, because they were responsible workmen. They were responsible workmen because in the absence of machinery and our highly organised methods of division and subdivision of labour; in the absence of paper on which to draw out full-size details of every stone they cut, *they had to be*.

But the thing that remains when all carving and ornament is omitted is, it comes to be seen, the thing with which the architect as architect is

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chiefly concerned—the plan and proportions of the building—the thing which makes the building what it is. What sort of building *is* a bank? What sort *is* a church? What sort *is* an astronomer's telescope-house? Such different buildings are not distinguished by their carvings and ornaments. They are distinguished by the differences of their functions. Plainness, therefore, is not a hardship to the *architect*, even if other people find it depressing. The necessity of plainness is actually a release from the tyranny of things which of their nature are to-day both irrelevant and ridiculous.

Architectural sculpture, therefore, has no place in modern building. Sculpture, it is now abundantly clear, is not a thing you can exactly measure, and, therefore, it is not possible to make full-size details of it. If you do not make full-size details the trade-carver cannot proceed, and if you do not employ the trade-carver you must employ the studio artist, and that is ridiculous, because his work is of a different order of things from your machine-made building. The two goodnesses do not go together. It is like putting arts and crafts wrought-iron work on the Forth Bridge. It is like employing an illuminator to decorate your motor-car. It is like putting vases of flowers on gasometers.

The only possible occasion for the sculptor on good industrial architecture is the provision of heraldic signs; to distinguish the Church of St. James from that of St. Jude a statue on a corbel would be useful. To distinguish the building of the Prudential Insurance Company a statue of Prudence might be appropriate. To manifest the spirit which inspires our mechanistic industrialism the sculptures of Epstein on the Offices of the Underground Railways at St. James's Park are admirable. The inhuman monster, the Moloch which is devouring our millions, body and soul, is there dis-

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played. Whether the architects knew it or not, whether the sculptor knew it or not, *there* is a machine-made building, a building dedicated to machines and a building made by machines. And whether they know it or not, *there* are sculptures which are the appropriate symbol of such things. And this is not to say that they are not beautiful. They are beautiful as death and night. The building displays the frozen death of the north. The sculptures display the putrescent death of tropical swamps. They are admirable heraldry, and heraldry offers the chief occasion for modern architectural sculpture. There are many such occasions. But for architectural sculpture, properly so-called, *i.e.* sculpture which is, as it were, the flowering of the actual walls of the building, there is now no occasion and no reasonable possibility. The enthusiasm of architects in the immediate future will find its proper field, therefore, in the development of plain building and plain building, as has been shown by many recent experiments in that direction, gives scope not only for the greatest possible grandeur, but also for the erection of the only proper monument to the grand but inhuman genius of Industrialism.

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