



ESSAI
SUR
L'ARCHITECTURE.



A PARIS;
Chez DUCHESNE, rue S. Jacques, au
Temple du Goût.

M. D C C L III.

Avec Approbation & Privilège du Roy.

035

ART
NA2515
L2913
1977
(LC)

Copyright © 1977 by Hennessey & Ingalls, Inc.
All rights reserved
Printed in the United States of America

Library of Congress Cataloging in Publication Data

Laugier, Marc-Antoine, 1713-1769.
An essay on architecture.

(Documents and sources in architecture; no. 1)
Translation of Essai sur l'architecture.

1. Architecture—Early works to 1800. I. Title.

NA2515.L2913 720 75-28448

ISBN 0-912158-55-7

CONTENTS

Laugier's ESSAY ON ARCHITECTURE	vii
Preface	1
Introduction	7
Chapter I General Principles of Architecture	11
Article I The Column	14
Article II The Entablature	22
Article III The Pediment	25
Article IV The Different Stories of a Building	27
Article V Windows and Doors	32
Chapter II The Different Architectural Orders	39
Article I What All Orders Have in Common	41
Article II The Doric Order	44
Article III The Ionic Order	48
Article IV The Corinthian Order	51
Article V The Different Kinds of Composite	56
Article VI How to Enrich the Various Orders	59
Article VII On Buildings without any Orders	61

Chapter III	Observations on the Art of Building	68
Article I	On the Solidity of Buildings	68
Article II	On Convenience	81
Article III	On How to Observe <i>Bienséance</i> in Buildings	90
Chapter IV	On the Style in Which to Build Churches	100
Chapter V	On the Embellishment of Towns	121
Article I	On Entries of Towns	122
Article II	On the Layout of Streets	127
Article III	On the Decoration of Buildings	130
Chapter VI	On the Embellishment of Gardens	134
<i>Avertissement</i> to the Second Edition		147
Index		159

Laugier's ESSAY ON ARCHITECTURE

The *Essai sur l'architecture*, presented here in an English translation, appeared in the bookshops of Paris in the early spring of 1753. The first comment we have on the book was given six months earlier, however. The publisher, as required by law, had submitted it to the censor, who appreciated its quality—*plein de gout et de génie* he calls it—but thought that the author had been too outspoken in his critical remarks and that some moderation in this respect was called for. Therefore, before granting the *approbation* he had a word with the author or, more likely, with the publisher or a friend acting as go-between for a writer determined to remain anonymous.¹ Reading the book in its published form, one finds it difficult to believe that the censor succeeded in softening the peremptory tone in which it was written.

The anonymity of its author was maintained for a little while. At this time, when *philosophes* entertained what were considered to be subversive ideas, all literary production was subjected not only to a comparatively tolerant censorship but also to a strict surveillance by the police who, of course, were taking a special interest in books published anonymously. In this case they did not rest until they had found out—and it

¹Paris, Bibl. Nat. MS. fond franç. anc. 22139, fol. 142.

037

Introduction

Of all the useful arts, architecture demands the most accomplished talent and the most extensive knowledge. It needs perhaps as much genius, *esprit* and taste to become a great architect as is needed for a first-rate painter or poet. It would be a great mistake to believe that in architecture only mechanics are involved, that it is confined to digging out foundations and raising walls, all according to rules which, becoming a routine, only require eyes accustomed to judge a plumbline and hands fit to handle a trowel.

When one speaks of the art of building, the chaotic mess of clumsy debris, immense piles of shapeless materials, a dreadful noise of hammers, perilous scaffolding, a fearful grinding of machines and an army of dirty and mudcovered workmen—all this comes to the mind of ordinary people, the unpleasant outer cover of an art whose intriguing mysteries, noticed by few people, excite the admiration of all those who penetrate them. There they discover inventions of a boldness that proclaims a great and fertile genius, proportions of a stringency that indicates severe and systematic precision, and ornaments of an elegance that tells of a delicate and exquisite feeling. Whoever is able to grasp true beauty to this extent will, far from confounding architecture with the lesser arts,

be inclined to range it among the more profound sciences. The sight of a building, perfect as a work of art, causes a delightful pleasure which is irresistible. It stirs in us noble and moving ideas and that sweet emotion and enchantment which works of art carrying the imprint of a superior mind arouse in us. A beautiful building speaks eloquently for its architect. In his writings M. Perrault is at most a scholar; the Colonnade of the Louvre makes him a great man.

Architecture owes all that is perfect to the Greeks, a nation privileged to have known everything regarding science and to have invented everything connected with the arts. The Romans, able to admire and capable of copying the excellent models which the Greeks had left them, wished to add something of their own and thereby only taught the world that when the stage of perfection is reached there is no other way than to imitate or decline. The barbarism of succeeding centuries, having buried the fine arts under the ruins of the only empire that had preserved taste and principles, called forth a new system of architecture in which neglected proportion and ornament childishly crowded produced nothing but stones in fretwork, shapeless masses and a grotesque extravagance—a new architecture which for too long has been the delight of Europe. Unfortunately, most of our cathedrals are fated to preserve the remains of this style for generations to come. Let us admit, however, that in spite of innumerable faults this architecture had its beauty. Although its most spectacular creations show a coarseness and clumsiness in feeling and spirit that is altogether shocking, we cannot but admire the bold outline, the delicate chiseling and the untrammelled grandeur of some buildings which through these qualities display a kind of inimitable recklessness. But in the end some men of genius, more fortunate, were able to discover in the ancient monuments proof of the universal aberration and the means of reversing the process. Capable of appreciating the marvels which had been on view for so

many centuries in vain, they closely observed the proportions and imitated the accomplished workmanship. Through their thorough investigations and experiments they revived the study of sound rules and re-established architecture in all its ancient authority. They gave up the absurd fancy ornaments of the Gothic and Arabesque styles and put in their place the virile and elegant adornment of the Doric, Ionic and the Corinthian. Frenchmen, slow to invent but quick to adopt successful inventions, envied the Italians the glory of having revived the splendid creations of Greece. Many monuments around us are witness to the fact that our forefathers eagerly and successfully competed. We have had our Bramantes, our Michelangelos, our Vignolas. The last century produced masterpieces in architecture worthy of the best ages because at that time nature almost spent itself by lavishing upon us a gift of talent. But at the very moment when we were approaching perfection, as if barbarism had not lost all its claim on us, we fall back into a low and faulty taste. Everything now seems to threaten us with a complete decadence.

This danger, which comes closer every day but can still be averted, prompts me to offer here in all modesty my thoughts on an art that I have always greatly loved. In this I am not motivated by an ambition to criticize, an ambition I detest, nor by any desire to say something new, a desire I believe to be at least futile. Full of respect for our artists, many of whom are renowned for their skill, I confine myself to informing them of my ideas and doubts, which I ask them to scrutinize thoroughly. If I decry as an abuse a number of customary features, universally accepted by architects, I do not expect them to accede to my personal opinion which I gladly submit to their intelligent criticism. I only ask them to give up willingly some prejudices which, though common, are yet detrimental to the progress of art.

Do not let it be said that, because I am not a professional

architect, I cannot speak with sufficient knowledge. This, surely, is the least of all difficulties; every time we watch a tragedy, we judge it without ever having written a single word. Nobody is barred from knowing the rules, although to apply them is given only to a few. One should not cite respectable but by no means infallible authorities as evidence against me, since to judge what should be by what is would spoil everything. The greatest men have sometimes gone astray—to take their example always as a rule is therefore not a safe way to avoid errors. No one should try to check me in my course on the pretense of fancied difficulties; idleness finds many, where reason sees none. I am convinced that those of our architects who are genuinely eager to bring their art to perfection will be grateful for my good intentions. They may find in this essay thoughts that had not occurred to them before; if they consider them to be sound, they should not be too proud to make use of them; this is all I ask. *[Therefore to see only with regret that an alien hand carries the torch of truth into mysteries not yet penetrated, to reject out of repugnance to the source from which it comes a light which is offered, to meet with blind contempt an amateur eager to try and find routes leading to the goal missed by other routes, to be passionately against the success which his efforts could attain out of fear of finding thereafter critics more attentive and judges more severe, such a frame of mind is merely that of artists devoid of talent and feeling.]*¹

¹Passages set in italics and enclosed in brackets are additions made by Laugier for the second edition of 1755.

Chapter I

General Principles of Architecture

It is the same in architecture as in all other arts: its principles are founded on simple nature, and nature's process clearly indicates its rules. Let us look at man in his primitive state without any aid or guidance other than his natural instincts. He is in need of a place to rest. On the banks of a quietly flowing brook he notices a stretch of grass; its fresh greenness is pleasing to his eyes, its tender down invites him; he is drawn there and, stretched out at leisure on this sparkling carpet, he thinks of nothing else but enjoying the gift of nature; he lacks nothing, he does not wish for anything. But soon the scorching heat of the sun forces him to look for shelter. A nearby forest draws him to its cooling shade; he runs to find a refuge in its depth, and there he is content. But suddenly mists are rising, swirling round and growing denser, until thick clouds cover the skies; soon, torrential rain pours down on this delightful forest. The savage, in his leafy shelter, does not know how to protect himself from the uncomfortable damp that penetrates everywhere; he creeps into a nearby cave and, finding it dry, he praises himself for his discovery. But soon the darkness and foul air surrounding him make his stay unbearable again. He leaves and is resolved to make good by his ingenuity the careless neglect of nature. He wants to make himself a dwelling that protects

040
 but does not bury him. Some fallen branches in the forest are the right material for his purpose; he chooses four of the strongest, raises them upright and arranges them in a square; across their top he lays four other branches; on these he hoists from two sides yet another row of branches which, inclining towards each other, meet at their highest point. He then covers this kind of roof with leaves so closely packed that neither sun nor rain can penetrate. Thus, man is housed. Admittedly, the cold and heat will make him feel uncomfortable in this house which is open on all sides but soon he will fill in the space between two posts and feel secure.

Such is the course of simple nature; by imitating the natural process, art was born. All the splendors of architecture ever conceived have been modeled on the little rustic hut I have just described. It is by approaching the simplicity of this first model that fundamental mistakes are avoided and true perfection is achieved. The pieces of wood set upright have given us the idea of the column, the pieces placed horizonally on top of them the idea of the entablature, the inclining pieces forming the roof the idea of the pediment. This is what all masters of art have recognized. But take note of this: never has a principle been more fertile in its effect. From now on it is easy to distinguish between the parts which are essential to the composition of an architectural Order and those which have been introduced by necessity or have been added by caprice. The parts that are essential are the cause of beauty, the parts introduced by necessity cause every license, the parts added by caprice cause every fault. This calls for an explanation; I shall try to be as clear as possible.

Let us never lose sight of our little rustic hut. I can only see columns, a ceiling or entablature and a pointed roof forming at both ends what is called a pediment. So far there is no vault, still less an arch, no pedestals, no attic, not even a door or a window. I therefore come to this conclusion: in an architectural Order only the column, the entablature and the

pediment may form an essential part of its composition. If each of these parts is suitably placed and suitably formed, nothing else need be added to make the work perfect.

We still have in France a beautiful ancient monument, which in Nimes is called the *Maison Carrée*. Everybody, connoisseur or not, admires its beauty. Why? Because everything here accords with the true principles of architecture: a rectangle where thirty columns support an entablature and a roof—closed at both ends by a pediment—that is all; the combination is of a simplicity and a nobility which strikes everybody. [*The author of the Examen¹ disapproves of my intention to establish a strict relation between all parts of our buildings and those of the rustic hut. He should have explained to us in detail the laws which make this relation faulty because if it is based on solid grounds, as I maintain and as all masters of the art have suggested, then no way exists any longer of attacking the rules which I establish in the articles that follow. They are all necessary consequences of this simple principle. If I am to be refuted, the whole line of action amounts to this: either show that the principle is wrong or that the conclusion does not follow from it. One will strike in vain as long as one does not use one or the other of these two weapons against me. All declamations, even all insults will be to no purpose. The judicious reader will always come back to this question: is the principle wrong or the conclusion? The only reason brought up against the proved relation between our buildings and the rustic hut is that we should be allowed to move a little away from this coarse and shapeless invention. We have, indeed, moved far away from it through the grand gout of the decoration which we have put in place of the careless faults of such crude composition, but the essential must remain—the rough sketch which nature offers us. Art must only make use of its resources to*

¹*Examen d'un essai sur l'architecture*, Paris, 1753. See p. 148. (Translator's note.)

embellish, smoothe and polish the work without touching the substance of the plan.]

Let us now consider in detail the essential parts of an architectural Order.

Article I

The Column

(1) The column must be strictly perpendicular, because, being intended to support the whole load, perfect verticality gives it its greatest strength. (2) The column must be free-standing so that its origin and purpose are expressed in a natural way. (3) The column must be round because nature makes nothing square. (4) The column must be tapered from bottom to top in imitation of nature where this diminution is found in all plants. (5) The column must rest directly on the floor as the posts of the rustic hut rest directly on the ground. All these rules find their justification in our model; all deviations from this model without real necessity must, therefore, be considered as so many faults.

1. Fault: when columns, instead of standing free, are engaged in the wall. The column certainly loses much of its grace when even a small obstacle obscures its outline. I admit that circumstances frequently seem to rule out the use of free-standing columns. People want to live in closed spaces, not in open halls. Therefore, it becomes necessary to fill in the space between the columns and consequently to engage them. In this case, an engaged column will not be regarded as a fault, but as a license sanctioned by necessity. It should, however, always be remembered that any license points to an imperfection and must be used cautiously and only when it is impossible to find a better way. If, therefore, the columns have to be engaged, the degree of engagement should be as small as possible—a quarter at most or even less so that, even

when constrained, they retain some quality of the freedom and ease which gives them so much grace. We must avoid getting into the awkward situation where engaged columns have to be employed. It would be best to reserve the use of columns for peristyles where they can be completely free-standing and to omit them altogether whenever necessity compels us to back them onto a wall. After all, even though we have to submit to *bienséance* why should we not disengage the column so that it can be seen in the round? Would the facade of St. Gervais not be improved if the Doric columns were free-standing like those of the upper Orders? Is there anything impossible in this? [*The architect, who to justify this fault shelters behind the argument that the part of the architrave over the center door looked too weak to carry the entablature and the crowning pediment, does not notice that instead of preventing one irregularity he sets up two which are considerably worse. What necessity is there for a complete entablature if its weight cannot be carried by the architrave? Will he even have us maintain that the first pediment is within the rules? Had the columns of the first Order been free-standing, the upper Orders would have had nonetheless all the necessary diminution because of their smaller module and greater lightness.*]

To dare criticize a work which the public commonly takes for a faultless masterpiece suggests that one defers little to public opinion. However, pointing out the defects of this building gives me the right to be unsparing in my criticism of any other building without hurting anybody's pride. That is why I shall speak bluntly. After what I have said, it will be less surprising that the connoisseurs set so little value on the Church of the Jesuits in the rue St. Antoine. Without counting other faults, of which there are many, the effect of the three Orders of engaged columns is most disagreeable. This, as M. de Cordemoy so adroitly says, is no more than architecture in relief to which the eyes of enlightened people will