

In the CAUSE OF ARCHITECTURE

By
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IV. FABRICATION AND IMAGINATION

TIME WAS WHEN the hand wrought. Time is here when the *process* fabricates instead.

Why make the fabrication a lie or allow it to become one when we try to make it "beautiful"? Any such lie is an abuse of Imagination.

All Man has above the brute, worth having, is his because of Imagination. Imagination made the Gods—all of them he knows—it is the Divine in him and differentiates him from a mere reasoning animal into a God himself. A creative being is a God. There will never be too many Gods.

Reason and Will have been exalted by Philosophy and Science. Let us now do homage to Imagination.

We have suspected it and punished it and feared it long enough.

Imagination is so intimately related to sentient perception—we can not separate the two. Nor need do so.

Let us call Creative-Imagination the Man-light in Mankind to distinguish it from intellectual brilliance. It is strongest in the creative-artist. A sentient quality. To a degree all developed individuals have this quality, and to the extent that it takes concrete form in the human fabrications necessary or desirable to human life, it makes the fabrication live as a reflection of that Life any true Man loves as such—Spirit materialized.

The Machine is an obedient, tireless fabricator of a non-sentient product. A shaper and drawer of steel, a weaver of fabrics—"casting" forms continually in every material solvent by fire or water.

So the study of the process is as important as the study of the Machine. It is another phase of the Machine and in the method of the process too lies the

opportunity for the artist. Unless he understands it what can he do with it—to qualify its product—from within? To modify it externally is not enough. He has been on the surface, as intimately related to its nature as a decalcomania on a tin box-cover is to the Nature of the thing going on inside. He has been a decorative label when he has been at all. Let us, then, get inside.

We will find all the magic of ancient times magnified—Aladdin with his wonderful lamp had a poor thing relatively in that cave of his. Aladdin's lamp was a symbol merely for Imagination. Let us take this lamp inside, in the Architect's world.

Where begin? With mechanistic processes like weaving? printing? stamping? Or with casting? Or with plastic, chemicalized materials like concrete, plastering, steel making, glass making, paper making, ceramics?

One must serve for all. Then let us take one that is both a chemical-process and casting—concrete.

Concrete is a plastic material but sets so slowly as yet that moulds or so called "forms" are used to give it *shape*. It must be held, until it hardens sufficiently, to hold the shape desired.

Ordinarily in itself it has no texture unless the mould leaves it on the surface. It is, however, possible to use fine colored-gravel or crushed-marble or granite in the mixture so the superficial-cement (retarded in setting by some substance like soap applied to the interior surfaces of the "forms") may be easily washed away, leaving the hard gleaming aggregate exposed in almost any color or texture.

All composite materials like concrete

have possibilities of bringing out the nature of the mixture in some kind of surface treatment, and the materials may be variously composed in the substances mixed to secure these effects of texture and color desired in the finished product.

But, mainly, concrete is still a mass material taking form from moulds, erroneously called "forms."

The materials of which the moulds themselves are made, will, therefore, modify the shape the concrete naturally takes, if indeed it does not wholly determine it.

Unity Temple at Oak Park was entirely cast in wooden boxes, ornamentation and all. The ornament was formed in the mass by taking blocks of wood of various shapes and sizes, combining them with strips of wood, and, where wanted, tacking them in position to the inside faces of the boxes.

The ornament partakes therefore of the nature of the whole, belongs to it. So the block and box is characteristic of the forms of this temple. The simple cubical masses are in themselves great concrete blocks.

The design makes a feature of this limitation as to form as they are grouped to express the great room within.

Here is a building, a monolith in mono-material, textured as described above, left complete as it came from the moulds—permanent architecture.

The whole is a great casting articulated in sections according to the masses of concrete that could safely be made to withstand changes of temperature in a severe climate.

It is a good record of this primitive period in the development of concrete building when it was necessary to pour the material into boxes to "set it" into shape.

It is a "natural" building therefore, in a transition-period of the development of the use of concrete.

I say a period of transition because concrete is essentially a plastic material, sometime to be used as such; used as a plastic material by plastering upon cores or upon steel fabrications. The resultant form may then take the shapes charac-

teristic of drifted snow or sand or the smooth conformation of animals perhaps—as they become finished buildings.

But at the present time there comes a less cumbersome and a cheaper because less wasteful method than the moulds on a large scale that built Unity Temple. It was necessary then to build a rough building complete in wood as a "mould" into which the temple could be cast.

Now, in this easier more plastic method, standardization enters as the *unit-system*.

A unit-mass of concrete, size and shape determined by the work intended to be done and what weight a man can reasonably be expected to lift and set in a wall, is fixed upon. This in order to avoid the expensive larger moulds—say, the slab block we make 16-in. by 16-in. x 2½-in. thick.

Mechanical steel or aluminum moulds are made in which to precast the whole building in a small "unit" of that size. Grooves are provided in the edges of the slab-blocks so a lacing of continuous steel rods may be laid in the vertical and horizontal joints of the block slabs for tensile strength. The grooves are large as possible so they may be poured full of concrete after each course of blocks is set up, girding and locking the whole into one firm slab. Here ultimately we will have another monolith *fabricated* instead of *poured* into special wooden moulds. The moulds in this case are metal, good for many buildings, and take the impress of any detail in any scheme of pattern or texture imagination conceives. The whole building "precast" in a mould a man can lift.

Here the making of the structural-unit and the process of fabrication become complete synchronized standardizations. A building for the first time in the world may be lightly fabricated, complete, of mono-material—literally woven into a pattern or design as was the oriental rug earlier referred to in "Standardization": fabrication as infinite in color, texture and variety as in that rug. A certain simple technique larger in organization but no more complex in execution than that of the rug-weaving, *builds* the building. The diagrams and unit moulds are

less simple. They have much study put on them, and organization becomes more than ever important.

When Machine-Standardizing enters, all must be accurate, precise, organized.

The Machine product can stand no slovenly administration for it can make good no mistakes.

The limitations of both process and material are here very severe, but when these are understood and accepted we may "weave" an architecture at will—unlimited in quality and quantity except by the limitation of imagination.

Several mechanical moulds may be thrown into a Ford and taken where gravel and sand abound. Cement is all else needed, except a few tons of $\frac{1}{4}$ in. commercial steel bars, to complete a beautiful building. This—and an organization of workmen trained to do one thing well.

The ground is soon covered with slab-blocks, the block-stuff curing in moisture. After that, it is all a matter of reading the architect's diagrams, which is what his plans now become. They are not tediously figured with haphazard dimensions any longer. They are laid out by counting blocks, corner blocks and half-blocks; so many blocks wide, so many high, and showing where specific blocks go is like counting stitches in the "woof" and threads in the "warp." Building is a matter of taking slab-block stitches on a steel warp.

So, a livable building may be made of mono-material in one operation!

There is an outer shell and an inner shell separated by a complete air space.

The inner walls, floors and ceilings which this inner shell becomes are the same as the outside walls, and, fabricated in the same way at the same time.

Windows? made in the shop, standardized to work with the block slab units. Made of sheet-metal finished complete and set in the walls as the work proceeds.

Piping? Cut to the standard unit-length in the shop and set into the hollow spaces.

Plastering? None. Carpenter work? None. Masonry? None. "Form" work? None. Painting? None. Decorations?

All integral, cast into the structure as de-

signed with all the play of imagery known to Persian or Moor.

The process of elimination which *standardisation* becomes has left only essentials. Here is a process that makes of the mechanics of concrete building a mono-material and mono-method affair instead of the usual complex quarreling aggregation of processes and materials: *builds* a building permanent and safe, dry and cool in summer, dry and warm in winter. Standardization here effects economy of effort and material to the extreme, but brings with it a perfect freedom for the imagination of the designer who now has infinite variety as a possibility in ultimate effects after mastering a simple technique.

I give here only one instance of many possibilities in this one material.

What precisely has happened?

Well, one consistent economical imperishable whole instead of the usual confusion of complexities to be reduced to a heap of trash by time.

A quiet orderly simplicity and all the benefits to human beings that come with it.

A simple, cheap material everywhere available, the common stuff of the community—here made rare and exquisite by the Imagination.

Imagination conceives the "fabric" of the whole. The "unit" is absorbed as agreeable texture in the pattern of the whole. Here, too, is certainty of results as well as minimum of costs assured to the human being by free use of the Machine, in perfect control. The whole now in human scale and thoroughly humane. Here is true technique. The technique of a principle *at work*; at work in every minor operation with this material—concrete. Here the material is affected by a process suited to the result desired to such an extent that Architecture may live in our life again in our Machine-age as a free agent of Imagination.

Copper, glass—all materials are subject to similar treatment on similar terms according to their entirely different natures.

The forms and processes will change

as the material changes—but the principle will not. In the case of each different material treated the expression of the whole would become something quite different with new beauty. So comes a true variety in unity in this, the Machine Age.

Coition at last. The third dimension triumphant.

The sickening monotony achieved by a two-dimensional world in its attempts to be "different" mercifully ended, perhaps forever.

True variety now becomes a *natural consequence*; a *natural* thing. We can live again and more abundantly than ever before. Differently, yet the same.

Such harmony as we knew in the Gothic of "Le Moyen Age" is again ours—but infinitely expanded and related to the individual Imagination, intimately, and therefore to the human being as a unit of scale.

Is Machine-Standardization a hindrance? No, a release.

Boundless possibility, and with that comes increase of responsibility. Here, in the hand of the creative-artist, in *fabrication* in this sense, lies the whole expression, character and style, the *quality*, let us say, in any spiritual sense, of modern life.

The integrity of it all as an *expression* is now a matter of the creative-artist's Imagination *at work*.

Where is he? And if *he* is, may he be trusted with such power? Yes, if he has the Gift. If he is "God" in the sense that "man-light" lives in him in his work.

But should he fall short of that, if he is faithful, looking to principle for guidance, he is sufficiently disciplined by the honest technique of fabrication to be sure to produce steady quiet work.

Inspiration cannot be expected in any total fabric of civilization. It may only be expected to inspire the whole and lay bare the *sense of the thing* for others.

The whole is safe when discovered principle is allowed to work! Going *with* Nature in the use of Imagination may

seem little different from going against Nature—but how different the destination and the reward!

It has been said that "Art is Art precisely in that it is not Nature," but in "obiter-dicta" of that kind the Nature referred to is nature in its limited sense of material appearances as they lie about us and lie to us.

Nature as I have used the word must be apprehended as the life-principle constructing and making appearances what they are, for what they are and in what they are. Nature inheres in all as *reality*. Appearances take form and character in infinite variety to our vision because of the natural inner working of this Nature-principle.

The slightest change in a minor feature of that "Nature" will work astounding changes of expression.

When the word Nature is understood and accepted in this sense, there is no longer any question of originality. It is natural to be "original" for we are at the fountain-head of all forms whatsoever.

The man who has divined the character of the ingrown sense-of-the-pine, say, can make other pine trees true to the species as any that may continually recur in the woods; make pine-tree forms just as true to the species as we see it and as we accept it as any growing out of doors rooted in the ground.

But, principles are not formulas. Formulas may be deduced from Principles, of course. But we must never forget that even in the things of the moment principles live and formulas are dead. A yardstick is a formula—Mathematics the principle. So, beware of formulas, they are dangerous. They become inhibitions of principle rather than expressions of them in non-sentient hands.

This principle understood and put to work, what would happen to our world? What would our world be like if the Nature-principle were allowed to work in the hands of Creative imagination and the *formulae* kept where it belongs?

Note.—The chemicalization of concrete or cement is too well-known to need any attention here.

V. THE NEW WORLD

THE NEW WORLD? A dangerous title.

But for a sense of humour in this old one there would be no new one. Length and breadth—with just enough thickness to hold them together for commercial purposes we have had in the old world, and all *that* implies in Art and Philosophy.

The new world begins to be when the little "thickness" we have had in the old one becomes *depth* and our sense of depth becomes that sense of the thing, or the quality in it that makes it *integral*—gives it integrity as such. With this "quality" the new world develops naturally in three dimensions out of the one which had but two.

The abstractions and aesthetic lies of a canned pictorial-culture crumble and fade away, worn out and useless.

"Institutions" founded upon those abstractions to serve that culture, crumble. And Architecture now belonging to, and refreshing as the forests or prairies or hills, the human spirit is free to blossom in structure as organic as that of plants and trees. Buildings, too, are children of Earth and Sun.

Naturally we have no more Gothic Cathedrals for the busy gainful-occupations. No more Roman or Greek Sarcophagi for the sacred Banking-business. No more French châteaux for Fire-Engine houses. No more Louis XIV, or Louis XV, or Louis XVI, or any Louis at all, for anything at all!

The Classics? A fond professorial dream.

The Periods? Inferior desecration.

Picture-Post-Card Homes? Museum relics affording much amusement.

The Skyscraper—vertical groove of the landlord? Laid down flat wise. A trap that was sprung.

Churches? We fail to recognize them.

Public Buildings? No longer monuments.

Monuments? Abolished as profane.

Industrial Buildings? Still recognizable—for they were allowed to be themselves in the old world.

Commercial Buildings, industrial, or

official? Shimmering, iridescent cages of steel and copper and glass in which the principle of standardization becomes exquisite in all variety.

Homes? Growing from their site in native materials, no more "deciduous" than the native rock ledges of the hills, or the fir trees rooted in the ground, all taking on the character of the individual in perpetual bewildering variety.

The City? Gone to the surrounding country.

The landlords' exploitation of the herd-instinct seems to be exploded. That instinct is recognized as servile and is well in hand—but not in the landlord's hand.

A touch-stone now by way of the human-mind lies in reach of human-fingers everywhere to enable the human-being to distinguish and accept the quick and reject the dead!

It would seem after all, that this "new world" is simply a matter of being one's *self*.

Beech trees are welcome and allowed to be Beech trees because they are Beeches. Birches because they are Birches. Elms are not Oaks and no one would prefer them if they were, or get excited about making them so if they could.

Nor are Evergreens Christmas-trees.

Materials everywhere are most valuable for what they are—in themselves—no one wants to change their nature or try to make them like something else.

Men likewise—for the same reason: a reason everywhere working in everything.

So this new world is no longer a matter of seeming but of *being*.

Where then are we?

We are in a corner of the Twentieth Century emerging into the Twenty First—and the first Democracy of *being* not seeming.

The highest form of Aristocracy be it said the world has ever seen is this Democracy, for it is based upon the qualities that make the man a man.

We know, now, the tragedy of a civilization's lying to itself. We see the futility of expecting in hope, that a cul-

ture willing to deceive itself could or would know how to be sincere with others—or allow them happiness, or know happiness itself.

What an inglorious rubbish heap lies back there in the gloom of that duo-dimensional era! In that "Period" of superficial length and breadth with just enough "thickness" to make them hang together—for commercial purposes!

The "Period" of Fashion and Sham in which the "Picture" was the "cause" and not the consequence.

And the rubbish-heap gradually grew back there, useless, as the great simplicity of an Idea that was in itself an integrity rose to smite the Sham for what it was and proclaim, in fact, the Freedom we then professed.

SHAM and its brood—inbred by the ideals of "the classic" and its authority in education—fostered that duo-dimensional world beyond its ability to perform; educated it far and away beyond its capacity for life.

Character is Fate and invariably meets it. That old world was ripe for the rubbish heap and went to its destruction by the grinding of universal principles, grinding slow, nor yet so exceeding fine. For the awful simplicity of the Nazarene saw this "new world" at hand more than two thousand years ago. And here we are, two centuries later, only beginning to see it for ourselves.

Beginning to see it prepared by this simple enrichment of our *selves* in this sense of the "within" for our outlook. Beginning to understand and realize that the "Kingdom on Earth as it is in Heaven" of which He spoke was a Kingdom wherein each man was a King because Kingdom and King consisted of that quality of integrity of which, for lack of a better term, I have tritely spoken as the third-dimension. That all of the Beyond is within, is a truism.

And just so simple, although at the time less obvious, is the initiation of all great evolutionary changes whatsoever.

But this simple first principle of *being* that is now at work, for some strange reason came late and last.

Why?

We who have walked the Earth in

eager search for the clear wine of Principle, tortured and denied or instead offered polluted water to quench an honest thirst, would like to know—why?

Were the Greeks poison? For us—yes. The Romans? More so.

Back there in the two-dimensional era we lived bewildered in a Roman-world—Romantic!

Not for nothing were we Romantic and did we speak a composite language corrupted from the Romance languages.

The honest Celt or Gaul or Teuton was corrupted by the Graeco-Roman corruption of the finer ancient culture of the Hellenes.

The Anglo-Saxon sanctified and re-corrupted the corruption, and polished sophistries, imprisoning abstractions, became recipes for good life in the name of the Good, the True and the Beautiful.

Hypocrisy for all cultivated men became as necessary as breathing and as "natural."

In order to be Beautiful—it became imperative to *lie*!

In order to *be* it became necessary to *seem*.

Art was a divorce from Nature.

"Nature" became the world of appearances round about us in our industrial life and all aspects of other individuals in relation to those appearances.

In the "Democracy" of the Nineteenth Century we witnessed the triumph of the insignificant as the fruit of the lie. A triumph by no means insignificant.

Some few unpopular individuals inhibited the "classic" in their education in that era, being afraid of it—seeing what it did to those who yielded to it, how it embalmed them in respectability and enshrined them in impotence. Seeing how it cut them off from Life and led them by the intellect into a falsified sense of living.

The precious quality in Man—Imagination—was shown the enticing objects man had made and shown them as so many "objectives." Therefore Imagination was offered patterns to the eye, not truths to the mind; offered abstractions to the Spirit not realities to the Soul. This was "Education."

To turn away from all that meant then,

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owing to the supreme psychology of the herd, well—what it has meant.

Since one need no longer turn from reality to be respectable, all sacrifices in former worlds are made a privilege, something to have enjoyed.

For the scene has shifted. The burden—there is no burden like artificiality—has lifted.

Art having been "artificiality" for centuries has come through its terrible trial, hard put to it by the Machine—which stripped it to the bone—and lives.

It is living now because the Artificer survived the Artificer.

The Man has survived the Mime.

Be comforted—my young architect!

The "pictorial" still lives, for what it is, extended in this our new Usonian world, but as "consequence" not as "cause."

All we were given of love for the picturesque in gesture, form, color or sound—gifts to the five senses—is realized. Appearances are expanded into a synthesis of the five senses—we may call it a sixth if we please—and all become manifest materialization of Spirit.

Appearances are now a great assurance. A splendid enrichment of Life. The Pictorial is merely an incident, not an aim, nothing in itself or for itself or by itself; no longer an *end* sought for its own sake.

The picturesque? Therefore it is a by-product inevitably beautiful in all circumstances, from any and every point of view.

What wrought this miracle?

NATURE gradually apprehended as the principle of Life—the life-giving principle in making things with the mind, reacting in turn upon the makers.

Earth-dwellers that we are, we are become now sentient to the truth that living on Earth is a materialization of Spirit instead of trying to make our dwelling here a spiritualization of matter. Simplicity of Sense now honorably takes the lead.

To be good Gods of Earth *here* is all

the significance we have here. A God is a God on Earth as in Heaven. And there will never be too many Gods.

Just as a great master knows no masterpiece, and there are no "favourite" trees, nor color, nor flowers; no "greatest" master; so Gods are Gods, and all are GOD.

Be specific? I hear you—Young Man in Architecture.

Shall I too paint pictures for you to show to you this new world?

Show you "pictures" that I might make?

Would you not rather make them for yourself?

Because any picture I could make would not serve you well.

A specific "picture" might betray you. You might take it for the thing itself—and so miss its merely symbolic value, for it could have no other value.

This new world so far as it lives as such is conditioned upon your seeing it for yourself—out of your own love and understanding. It is that kind of world.

As another man sees it, it might entertain you. Why should you be "entertained?"

His specific picture, the better it might be the more it might forestall or bind you. You have had enough of that.

For yourself, by yourself, within yourself, then, visualize it and add your own faithful building to it, and you cannot fail.

We are punished for discipleship—and, as disciples, we punish the thing we love.

Who, then, can teach? Not I.

It too is a gift.

Already I have dared enough. Try to see—in work.

Idealism and Idealist are the same failure as Realism and Realistic. Both the same failure as Romance and Romantic.

Life is. We are.

Therefore we will loyally love, honestly work and enthusiastically seek, in all things—the one thing of Value—Life.

It is not found in pictorial shallows.