

# ART HUMANITIES: PRIMARY SOURCE READER

## Section 11: Wright and Le Corbusier

### Art Humanities Primary Source Reading 50

#### *Frank Lloyd Wright*

Although he is best known for his long architectural career in America in the first half of the 20<sup>th</sup> century, Frank Lloyd Wright (1896-1959) was also a prolific writer, presenting and publishing numerous papers on architecture, landscaping, Japanese art and architecture, and even life in Chicago, throughout his career. The speech below, also known as the "Hull House Lecture" for the venue where he presented it for the first time to the Chicago Arts and Crafts Society, is an early example of his written work. He revised the lecture three times, presenting it again at the Western Society of Engineers in 1901, publishing it in the catalogue of the 14<sup>th</sup> Annual Exhibition of the Chicago Architectural Club in the same year, and delivering it in 1904 to the Chicago convention of the Daughters of the American Revolution. It represents the first written statement by an American architect who embraced the use of the machine in his craft. Wright was responding to the English Arts and Crafts movement which was exercising strong influence over American design at the time, and which he saw as a movement that anachronistically relied on handicraft, at a time when industry was conceiving new materials and techniques. At the time when he was presenting this paper, Wright was formulating ideas about a new type of home design known as the "prairie house," which was to become the signature building style for the domestic spaces he built between 1903 and 1913, such as the Robie House. (Introduction by Christine Sciacca)

#### "THE ART AND CRAFT OF THE MACHINE," 1901

As we work along our various ways, there takes shape within us, in some sort, an ideal – something we are to become – some work to be done. This, I think, is, denied to very few, and we begin really to live only when the thrill of this ideality moves us in what we will to accomplish! In the years which have been devoted in my own life to working out in stubborn materials a feeling for the beautiful, in the vortex of distorted complex conditions, a hope has grown stronger with the experience of each year, amounting now to a gradually deepening conviction that in the Machine lies the only future of art and craft – as I believe, a glorious future; that the Machine is, in fact, the metamorphosis of ancient art and craft; that we are at last face to face with the machine-the modern Sphinx-whose riddle the artist must solve if he would that art live – for his nature holds the key. For one, I promise "whatever gods may be" to lend such energy and purpose as I may possess to help make that meaning plain; to return again and again to the task whenever and wherever need be; for this plain duty is thus relentlessly marked out for the artist in this, the Machine Age, although there is involved an adjustment to cherished gods, perplexing and painful in the extreme; the fire of many long-honored ideals shall go down to ashes to reappear, phoenix like, with new purposes.

The great ethics of the Machine are as yet, in the main, beyond the ken of the artist or student of sociology; but the artist mind may now approach the nature of this thing from experience, which has become the commonplace of his field, to suggest, in time, I hope, to prove, that the machine is capable of carrying to fruition high ideals in art – higher than the world has yet seen!

Disciples of William Morris cling to an opposite view. Yet William Morris himself deeply sensed the danger to art of the transforming force whose sign and symbol is the machine, and though of the new art we eagerly seek he sometimes despaired, he quickly renewed his hope.

He plainly foresaw that a blank in the fine arts would follow the inevitable abuse of new-found power, and threw himself body and soul into the work of bridging it over by bringing into our lives afresh the beauty of art as she had been, that the new art to come might not have dropped too many stitches nor have unraveled what would still be useful to her.

That he had abundant faith in the new art his every essay will testify.

That he miscalculated the machine does not matter. He did sublime work for it when he pleaded so well for the process of elimination its abuse had made necessary; when he fought the innate vulgarity of theocratic impulse in art as opposed to democratic; and when he preached the gospel of simplicity.

All artists love and honor William Morris.

He did the best in his time for art and will live in history as the great socialist, together with Ruskin, the great moralist: a significant fact worth thinking about, that the two great reformers of modern times professed the

artist.

The machine these reformers protested, because the sort of luxury which is born of greed had usurped it and made of it a terrible engine of enslavement, deluging the civilized world with a murderous ubiquity, which plainly enough was the damnation of their art and craft.

It had not then advanced to the point which now so plainly indicates that it will surely and swiftly, by its own momentum, undo the mischief it has made, and the usurping vulgarians as well.

Nor was it so grown as to become apparent to William Morris, the grand democrat, that the machine was the great forerunner of democracy.

The ground plan of this thing is now grown to the point where the artist must take it up no longer as a protest: genius must progressively dominate the work of the contrivance it has created; to lend a useful hand in building afresh the "Fairness of the Earth."

That the Machine has dealt Art in the grand old sense a death-blow, none will deny.

The evidence is too substantial.

Art in the grand old sense – meaning Art in the sense of structural tradition, whose craft is fashioned upon the handicraft ideal, ancient or modern; an art wherein this form and that form as structural parts were laboriously joined in such a way as to beautifully emphasize the manner of the joining: the million and one ways of beautifully satisfying bare structural necessities, which have come down to us chiefly through the books as "Art."

For the purpose of suggesting hastily and therefore crudely wherein the machine has sapped the vitality of this art, let us assume Architecture in the old sense as a fitting representative of Traditional-art, and Printing as a fitting representation of the Machine.

What printing – the machine – has done for architecture – the fine art – will have been done in measure of time for all art immediately fashioned upon the early handicraft ideal.

With a masterful hand Victor Hugo, a noble lover and a great student of architecture. traces her fall in "Notre Dame."

The prophecy of Frodo, that "The book will kill the edifice," I remember was to me as a boy one of the grandest sad things of the world.

After seeking the origin and tracing the growth of architecture in superb fashion, showing how in the middle ages all the intellectual forces of the people converged to one point – architecture – he shows how, in the life of that time, whoever was born poet became an architect. All other arts simply obeyed and placed themselves under the discipline of architecture. They were the workmen of the great work. The architect, the poet, the master, summed up in his person the sculpture that carved his facades, painting which illuminated his walls and windows, music which set his bells to pealing and breathed into his organs there was nothing when was not forced in order to make something of itself in that time, to come and frame itself in the edifice.

Thus down to the time of Gutenberg architecture is the principal writing the universal writing of humanity.

In the great granite books begun by the Orient, continued by Greek and Roman antiquity, the middle ages wrote the last page.

So to enunciate here only summarily a process, it would require volumes to develop; down to the fifteenth century the chief register of humanity is architecture.

In the fifteenth century everything changes.

Human thought discovers a mode of perpetuating itself, not only more resisting than architecture, but still more simple and easy.

Architecture is dethroned.

Gutenberg's letters of lead are about to supersede Orpheus' letters of stone.

The book is about to kill the edifice.

The invention of printing was the greatest event in history.

It was the first great machine, after the great city.

It is human thought stripping off one form and donning another.

Printed, thought is more imperishable than ever – it is volatile, indestructible.

As architecture it was solid; it is now alive; it passes from duration in point of time to immortality.

Cut the primitive bed of a river abruptly, with a canal hollowed out beneath its level, and the river will desert its bed.

See how architecture now withers away, how little by little it becomes lifeless and bare. How one feels the water sinking, the sap departing, the thought of the times and people withdrawing from it. The chill is almost imperceptible in the fifteenth century, the press is yet weak, and at most draws from architecture a superabundance of life, but with the beginning of the sixteenth century, the malady of architecture is visible. It becomes classic art in a miserable manner; from being indigenous, it becomes Greek and Roman; from being true and modern, it becomes pseudo-classic.

It is this decadence which we call the Renaissance.

It is the setting sun which we mistake for dawn.

It has now no power to hold the other arts; So they emancipate themselves, break the yoke of the architect, and take themselves off, each in its own direction.

One would liken it to an empire dismembered at the death of its Alexander, and whose provinces become kingdoms.

Sculpture becomes statuary, the image trade becomes painting, the canon becomes music. Hence Raphael, Angelo, and those splendors of the dazzling sixteenth century.

Nevertheless, when the sun of the middle ages is completely set, architecture grows dim, becomes more and more effaced. The printed book, the gnawing worm of the edifice, sucks and devours it. It is petty, it is poor, it is nothing.

Reduced to itself, abandoned by other arts because human thought is abandoning it, it summons bunglers in place of artists. It is miserably perishing.

Meanwhile, what becomes of printing?

All the life, leaving architecture, comes to it. In proportion as architecture ebbs and flows, printing swells and grows. That capital of forces which human thought had been expending in building is hereafter to be expended in books; and architecture, as it was, is dead, irretrievably slain by the printed book; slain because it endures for a shorter time; slain because human thought has found a more simple medium of expression, which costs less in human effort; because human thought has been rendered volatile and indestructible, reaching uniformly and irresistibly the four corners of the earth and for all.

Thenceforth, if architecture rise again, reconstruct, as Hugo prophesies she may begin to do in the latter days of the nineteenth century, she will no longer be mistress, she will be one of the arts, never again the art; and printing – the Machine – remains the second Tower of Babel of the human race.

So the organic process, of which the majestic decline of Architecture is only one case in point, has steadily gone on down to the present time, and still goes on, weakening the hold of the artist upon the people, drawing off from his rank poets and scientists until architecture is but a little, poor knowledge of archeology, and the average of art is reduced to the gasping poverty of imitative realism; until the whole letter of Tradition, the vast fabric of precedent, in the flesh, which has increasingly confused the art ideal while the machine has been growing to power, is a beautiful corpse from which the spirit has flown. The spirit that has flown is the spirit of the new art, but has failed the modern artist, for he has lost it for hundreds of years in his lust for the letter, the beautiful body of art made too available by the machine.

So the artist craft wanes.

Craft that will not see that human thought is stripping off one form and donning another, and artists are everywhere, whether catering to the leisure class of old England or ground beneath the heel of commercial abuse here in the great West, the unwilling symptoms of the inevitable, organic nature of the machine, they combat, the hell-smoke of the factories they scorn to understand.

And, invincible, triumphant, the machine goes on, gathering force and knitting the material necessities of mankind ever closer into a universal automatic fabric; the engine, the motor, and the battle-ship, the works of art of the century!

The Machine is Intellect mastering the drudgery of earth that the plastic art may live; that the margin of leisure and strength by which man's life upon the earth can be made beautiful, may immeasurably widen; its function ultimately to emancipate human expression!

It is a universal educator, surely raising the level of human intelligence, so carrying within itself the power to destroy, by its own momentum, the greed which in Morris' time and still in our own time turns it to a deadly engine of enslavement. The only comfort left the poor artist, side-tracked as he is, seemingly is a mean one; the thought that the very selfishness which man's early art idealized, now reduced to its lowest terms, is swiftly and surely destroying itself through the medium of the Machine.

The artist's present plight is a sad one, but may he truthfully say that society is less well off because Architecture, or even Art, as it was, is dead, and printing, or the Machine, lives?

Every age has done its work, produced its art with the best tools or contrivances it knew, the tools most successful in saving the most precious thing in the world – human effort. Greece used the chattel slave as the essential tool of its art and civilization. This tool we have discarded, and we would refuse the return of Greek art upon the terms of its restoration, because we insist now upon a basis of Democracy.

Is it not more likely that the medium of artistic expression itself has broadened and changed until a new definition and new direction must be given the art activity of the future, and that the Machine has finally made for the artist, whether he will yet own it or not, a splendid distinction between the Art of old and the Art to come? A distinction made by the tool which frees human labor, lengthens and broadens the life of the simplest man, thereby the basis of the Democracy upon which we insist.

To shed some light upon this distinction, let us take an instance in the field naturally ripened first by the machine-commercial field.

The tall modern office building is the machine pure and simple.

We may here sense an advanced stage of a condition surely entering all art for all time; its already triumphant glare in the deadly struggle taking place here between the machine and the art of structural tradition reveals "art" torn and hung upon the steel frame of commerce, a forlorn head upon a pike, a solemn warning to architects and artists the world over.

We must walk blindfolded not to see that all that this magnificent resource of machine and material has brought us so far is a complete, broadcast degradation of every type and form sacred to the art of old; a pandemonium of tin masks, huddled deformities, and decayed methods; quarreling, lying, and cheating, with hands at each other's throats – or in each other's pockets; and none of the people who do these things, who pay for them or use them, know what they mean, feeling only – when they feel at all – that what is most truly like the past is the safest and therefore the best; as typical Marshall Field, speaking of his new building, has frankly said: "A good copy is the best we can do."

A pitiful insult, art and craft!

With this mine of industrial wealth at our feet we have no power to use it except to the perversion of our natural resources? A confession of shame which the merciful ignorance of the yet material frame of things mistakes for glorious achievement.

We half believe in our artistic greatness ourselves when we toss up a pantheon to the god of money in a night or two, or pile up a mammoth aggregation of Roman monuments, sarcophagi and Greek temples for a post office in a year or two – the patient retinue of the machine pitching in with terrible effectiveness to consummate this unhallowed ambition – this insult to ancient gods. The delicate, impressionable facilities of terra cotta becoming imitative blocks and voussoirs of tool-marked stone, badgered into all manner of structural gymnastics, or else ignored in vain endeavor to be honest; and granite blocks, cut in the fashion of the followers of Phidias, cunningly arranged about the steel beams and shafts, to look "real" leaning heavily upon an inner skeleton of steel for support from floor to floor, which strains beneath the "reality" and would fain, I think, lie down to die of shame.

The "masters" – ergo, the fashionable followers of Phidias – have been trying to make this wily skeleton of steel seem seventeen sorts of "architecture" at once, when all the world knows except the "masters" – that it is not one of them.

See now, how an element – the vanguard of the new art – has entered here, which the structural – art equation cannot satisfy without downright lying and ignoble cheating.

This element is the structural necessity reduced to a skeleton, complete in itself without the craftsman's touch. At once the million and one little ways of satisfying this necessity beautifully, coming to us chiefly through the books as the traditional art of building, vanish away become history.

The artist is emancipated to work his will with a rational freedom unknown to the laborious art of structural tradition – no longer tied to the meager unit of brick arch and stone lintel, nor hampered by the grammatical phrase of their making – but he cannot use his freedom.

His tradition cannot think.

He will not think.

His scientific brother has put it to him before he is ready

The modern tall office building problem is one representative problem of the machine. The only rational solutions it has received in the world may be counted upon the fingers of one hand. The fact that a great portion of our "architects" and "artists" are shocked by them to the point of offense is as valid an objection as that of a child refusing wholesome food because his stomach becomes dyspeptic from over – much unwholesome pastry – albeit he be the cook himself.

We may object to the mannerism of these buildings, but we can take no exception to their manner nor hide from their evident truth.

The steel frame has been recognized as a legitimate basis for a simple, sincere clothing of plastic material that idealizes its purpose without structural pretense.

This principle has at last been recognized in architecture, and though the masters refuse to accept it as architecture at all, it is a glimmer in a darkened field – the first sane word that has been said in Art for the Machine.

The Art of old idealized a Structural Necessity – now rendered obsolete and unnatural by the Machine and accomplished it through man's joy in the labor of his hands.

The new will weave for the necessities of mankind, which his Machine will have mastered, a robe of ideality no less truthful, but more poetical, with a rational freedom made possible by the machine, beside which the art of old will be as the sweet, plaintive wail of the pipe to the outpouring of full orchestra.

It will clothe Necessity with the living flesh of virile imagination, as the living flesh lends living grace to the hard and bony human skeleton.

The new will pass from the possession of kings and classes to the every-day lives of all – from duration in point of time to immortality.

This distinction is one to be felt now rather than clearly defined.

The definition is the poetry of this Machine Age, and will be written large in time; but the more we, as

artists, examine into this premonition, the more we will find the utter helplessness of old forms to satisfy new conditions, and the crying need of the machine for plastic treatment—a pliant, sympathetic treatment of its needs that the body of structural precedent cannot yield.

To gain further suggestive evidence of this, let us turn to the Decorative Arts—the immense middle-ground of all art now mortally sickened by the Machine-sickened that it may slough the art ideal of the structural art for the plasticity of the new art—the Art of Democracy.

Here we find the most deadly perversion of all—the magnificent prowess of the machine bombarding the civilized world with the mangled corpses of strenuous horrors that once stood for cultivated luxury—standing now for a species of fatty degeneration simply vulgar.

Without regard to first principles or common decency, the whole letter of tradition—that is, ways of doing things rendered wholly obsolete and unnatural by the machine—is recklessly fed into its rapacious maw until you may buy reproductions for ninety-nine cents at "The Fair" that originally cost ages of toil and cultivation, worth now intrinsically nothing—that are harmful parasites befogging the sensibilities of our natures, belittling and falsifying any true perception of normal beauty the Creator may have seen fit to implant in us.

The idea of fitness to purpose, harmony between form and use with regard to any of these things, is possessed by very few, and utilized by them as a protest chiefly—a protest against the machine!

As well blame Richard Croker for the political iniquity of America.

As "Croker is the creature and not the creator" of political evil, so the machine is the creature and not the creator of this iniquity; and with this difference—that the machine has noble possibilities unwillingly forced to degradation in the name of the artistic; the machine, as far as its artistic capacity is concerned, is itself the crazed victim of the artist who works while he waits, and the artist who waits while he works.

There is a nice distinction between the two.

Neither class will unlock the secrets of the beauty of this time.

They are clinging sadly to the old order, and would wheedle the giant frame of things back to its childhood or forward to its second childhood, while this Machine Age is suffering for the artist who accepts, works, and sings as he works, with the joy of the here and now!

We want the man who eagerly seeks and finds, or blames himself if he fails to find, the beauty of this time; who distinctly accepts as a singer and a prophet; for no man may work while he waits or wait as he works in the sense that William Morris' great work was legitimately done—in the sense that most art and craft of to-day is an echo; the time when such work was useful has gone.

Echoes are by nature decadent.

Artists who feel toward Modernity and the Machine now as William Morris and Ruskin were justified in feeling then, had best distinctly wait and work sociologically where great work may still be done by them. In the field of art activity they will do distinct harm. Already they have wrought much miserable mischief.

If the artist will only open his eyes he will see that the machine he dreads has made it possible to wipe out the mass of meaningless torture to which mankind, in the name of the artistic, has been more or less subjected since time began; for that matter, has made possible a cleanly strength, an ideality and a poetic fire that the art of the world has not yet seen; for the machine, the process now smoothes away the necessity for petty structural deceptions, soothes this wearisome struggle to make things seem what they are not, and can never be; satisfies the simple term of the modern art equation as the ball of clay in the sculptor's hand yields to his desire—comforting forever this realistic, brain-sick masquerade we are wont to suppose art.

William Morris pleaded well for simplicity as the basis of all true art. Let us understand the significance to art of that word—SIMPLICITY—for it is vital to the Art of the Machine.

We may find, in place of the genuine thing we have striven for, an affectation of the naive, which we should detest as we detest a full-grown woman with baby mannerisms.

English art is saturated with it, from the brand-new imitation of the old house that grew and rambled from period to period to the rain-tub standing beneath the eaves.

In fact, most simplicity following the doctrines of William Morris is a protest; as a protest, well enough; but the highest form of simplicity is not simple in the sense that the infant intelligence is simple—nor, for that matter, the side of a barn.

A natural revulsion of feeling leads us from the meaningless elaboration of to-day to lay too great stress on mere platitudes, quite as a clean sheet of paper is a relief after looking at a series of bad drawings—but simplicity is not merely a neutral or a negative quality.

Simplicity in art, rightly understood, is a synthetic, positive quality, in which we may see evidence of mind, breadth of scheme, wealth of detail, and withal a sense of completeness found in a tree or a flower. A work may have the delicacies of a rare orchid or the stanch fortitude of the oak, and still be simple. A thing to be simple needs only to be true to itself in organic sense.

With this ideal of simplicity, let us glance hastily at a few instances of the machine and see how it has been forced by false ideals to do violence to this simplicity; how it has made possible the highest simplicity, rightly

understood and so used. As perhaps wood is most available of all homely materials and therefore, naturally, the most abused-let us glance at wood.

Machinery has been invented for no other purpose than to imitate, as closely as possible, the wood-carving of the early ideal-with the immediate result that no ninety-nine cent piece of furniture is salable without some horrible botchwork meaning nothing unless it means that art and craft have combined to fix in the mind of the masses the old hand-curved chair as the ne plus ultra of the ideal.

The miserable, lumpy tribute to this perversion which Grand Rapids alone yields would mar the face of Art beyond repair; to say nothing of the elaborate and fussy joinery of posts, spindles, jig sawed beams and braces, butted and strutted, to outdo the sentimentality of the already over-wrought antique product.

Thus is the wood-working industry glutted, except in rarest instances. The whole sentiment of early craft degenerated to a sentimentality having no longer decent significance nor commercial integrity; in fact all that is fussy, maudlin, and animal, basing its existence chiefly on vanity and ignorance.

Now let us learn from the Machine.

It teaches us that the beauty of wood lies first in its qualities as wood; no treatment that did not bring out these qualities all the time could be plastic, and therefore not appropriate-so not beautiful, the machine teaches us, if we have left it to the machine that certain simple forms and handling are suitable to bring out the beauty of wood and certain forms are not; that all woodcarving is apt to be a forcing of the material, an insult to its finer possibilities as a material having in itself intrinsically artistic properties, of which its beautiful markings is one, its texture another, its color a third.

The machine, by its wonderful cutting, shaping, smoothing, and repetitive capacity, has made it possible to so use it without waste that the poor as well as the rich may enjoy to-day beautiful surface treatments of clean, strong forms that the branch veneers of Sheraton and Chippendale only hinted at, with dire extravagance, and which the middle ages utterly ignored.

The machine has emancipated these beauties of nature in wood; made it possible to wipe out the mass of meaningless torture to which wood has been subjected since the world began, for it has been universally abused and maltreated by all peoples but the Japanese.

Rightly appreciated, is not this the very process of elimination for which Morris pleaded?

Not alone a protest, moreover, for the machine considered only technically, if you please has placed in artist hands the means of idealizing the true nature of wood harmoniously with man's spiritual and material needs, without waste, within reach of all.

And how fares the troop of old materials galvanized into new life by the Machine?

Our modern materials are these old materials in more plastic guise, rendered so by the Machine, itself creating the very quality needed in material to satisfy its own art equation.

We have seen in glancing at modern architecture how they fare at the hands of Art and Craft; divided and still-divided in orderly sentence with rank and file of obedient retainers awaiting the master's behest.

Steel and iron, plastic cement and terra-cotta.

Who can sound the possibilities of this old material, burned clay, which the modern machine has rendered as sensitive to the creative brain as a dry plate to the lens-a marvelous simplifier? And this plastic covering material, cement, another simplifier, enabling the artist to clothe the structural frame with a simple, modestly beautiful robe where before he dragged in, as he does still drag, five different kinds of material to compose one little cottage, pettily arranging it in an aggregation supposed to be picturesque-as a matter of fact, millinery, to be warped and beaten by sun, wind, and rain into a variegated heap of trash.

There is the process of modern casting in metal-one of the perfected modern machines, capable of any form to which fluid will flow, to perpetuate the imagery of the most delicately poetic mind without let or hindrance within reach of everyone, therefore insulted and outraged by the bungler forcing it to a degraded seat at his degenerate festival.

Multitudes of processes are expectantly awaiting the sympathetic interpretation of the master mind; the galvano-plastic and its electrical brethren, a prolific horde, now cheap fakirs imitating real bronzes and all manner of the antique, secretly damning it in their vitals.

Electro-glazing, a machine shunned because too cleanly and delicate for the clumsy hand of the traditional designer, who depends upon the mass and blur of leading to conceal his lack of touch.

That delicate thing, the lithograph-the prince of a whole reproductive province of processes-see what this processes becomes in the hands of a master like Whistler. He has sounded but one note in the gamut of its possibilities, but that product is intrinsically true to the process, and as delicate as the butterfly's wing. Yet the most this particular machine did for us, until then in the hands of Art and Craft, was to give us a cheap, imitative effect of painting.

So spins beyond our ability to follow to-night, a rough, feeble thread of the evidence at large to the effect that the machine has weakened the artist; all but destroyed his hand-made art, if not its ideals, although he has made enough miserable mischief meanwhile.

These evident instances should serve to hint, at least to the thinking mind, that the Machine is a marvelous simplifier; the emancipator of the creative mind, and in time the regenerator of the creative conscience. We may see that this destructive process has begun and is taking place that Art might awaken to the power of fully developed senses promised by dreams of its childhood, even though that power may not come the way it was pictured in those dreams.

Now, let us ask ourselves whether the fear of the higher artistic expression demanded by the Machine, so thoroughly grounded in the arts and craft, is founded upon a finely guarded reticence, a recognition of inherent weakness or plain ignorance?

Let us, to be just, assume that it is equal parts of all three, and try to imagine an Arts and Crafts Society that may educate itself to prepare to make some good impression upon the Machine, the destroyer of their present ideals and tendencies, their salvation in disguise.

Such a society will, of course, be a society for mutual education.

Exhibitions will not be a feature of its programme for years, for there will be nothing to exhibit except the short-comings of the society, and they will hardly prove either instructive or amusing at this stage of proceedings. This society must, from the very nature of the proposition, be made up of people who are in the work – that is, the manufacturers – coming into touch with such of those who assume the practice of the fine arts as profess a fair sense of the obligation to the public such assumption carries with it, and sociological workers whose interests are ever closely allied with art, as their prophets Morris, Ruskin, and Tolstoy evince, and all those who have as personal graces and accomplishment perfected handicraft, whether fashion old or fashion new.

Without the interest and co-operation of the manufacturers, the society cannot begin to do its work, for this is the cornerstone of its organization.

All these elements should be brought together on a common ground of confessed ignorance, with a desire to be instructed, freely encouraging talk and opinion, and reaching out desperately for any one who has special experience in any way connected, to address them.

I suppose, first of all, the thing would resemble a debating society, or something even less dignified, until some one should suggest that it was time to quit talking and proceed to do something, which in this case would not mean giving an exhibition, but rather excursions to factories and a study of processes in place – that is, the machine in processes too numerous to mention, at the factories with the men who organize and direct them, but not in the spirit of the idea that these things are all gone wrong, looking for that in them which would most nearly approximate the handicraft ideal; not looking into them with even the thought of handicraft, and not particularly looking for craftsmen, but getting a scientific ground-plan of the process in mind, if possible, with a view to its natural bent and possibilities.

Some processes and machines would naturally appeal to some, and some to others; there would undoubtedly be among us those who would find little joy in any of them.

This is, naturally, not child's play, but neither is the work expected of the modern artist.

I will venture to say, from personal observation and some experience, that not one artist in one hundred has taken pains to thus educate himself. I will go further and say what I believe to be true, that not one educational institution in America has as yet attempted to forge the connecting link between Science and Art by training the artist to his actual tools, or, by a process of nature-study that develops in him the power of independent thought, fitting him to use them properly.

Let us call these preliminaries then a process by which artists receive information nine-tenths of them lack concerning the tools they have to work with to-day – for tools to-day are processes and machines where they were once a hammer and a gouge.

The artist to-day is the leader of an orchestra, where he once was a star performer.

Once the manufacturers are convinced of the respect and appreciation on the part of the artist, they will welcome him and his counsel gladly and make any experiments having a grain of apparent sense in them.

They have little patience with a bothering about in endeavor to see what might be done to make their particular machine endeavor and restore man's joy in the mere work of his hands – for this once lovely attribute is far behind.

This proceeding doubtless would be of far more educational value to the artist than to the manufacturer, at least for some time to come, for there would be a difficult adjustment to make on the part of the artist and an attitude to change. So many artists are chiefly "attitude" that some would undoubtedly disappear with the attitude.

But if out of twenty determined students a ray of light should come to one, to light up a single operation, it would have been worth while, for that would be fairly something; while joy in mere handicraft is like that of the man who played the piano for his own amusement – a pleasurable personal accomplishment without real relation to the grim condition confronting us.

Granting that a determined, dauntless body of artist material could be brought together with sufficient persistent enthusiasm to grapple with the Machine, would not some one be found who would provide the suitable experimental station (which is what the modern Arts and Crafts shop should be) – an experimental station that

would represent in miniature the elements of this great pulsating web of the machine, where each pregnant process or significant tool in printing, lithography, galvano-electro processes, wood and steel working machinery, muffles and kilns would have its place and where the best young scientific blood could mingle with the best and truest artistic inspiration, to sound the depths of these things, to accord them the patient, sympathetic treatment that is their due?

Surely a thing like this would be worth while – to alleviate the insensate numbness of the poor fellows out in the cold, hard shops, who know not why nor understand, whose dutiful obedience is chained to botch work and bungler's ambition; surely this would be a practical means to make their dutiful obedience give us something we can all understand, and that will be as normal to the best of this machine age as a ray of light to the healthy eye; a real help in adjusting the Man to a true sense of his importance as a factor in society, though he does tend a machine.

Teach him that machine is his best friend – will have widened the margin of his leisure until enlightenment shall bring him a further sense of the magnificent ground plan of progress in which he too justly plays his significant part.

If the art of the Greek, produced at such cost of human life, was so noble and enduring, what limit dare we now imagine to an Art based upon an adequate life for the individual?

The machine is his!

In due time it will come to him!

Meanwhile, who shall count the slain?

From where are the trained nurses in this industrial hospital to come if not from the modern arts and crafts?

Shelley says a man cannot say – "I will compose poetry." "The greatest poet even cannot say it, for the mind in creation is as a fading coal which some invisible influence, like an inconstant wind awakens to transitory brightness; this power arises from within like the color of a flower which fades and changes as it is developed, and the conscious portions of our nature are unprophetic either of its approach or its departure"; and yet in the arts and crafts the problem is presented as a more or less fixed quantity, highly involved, requiring a surer touch, a more highly disciplined artistic nature to organize it as a work of art.

The original impulses may reach as far inward as those of Shelley's poet, be quite as wayward a matter of pure sentiment, and yet after the thing is done, allowing its rational qualities, is limited in completeness only by the capacity of whoever would show them or by the imperfection of the thing itself.

This does not mean that Art may be shown to be an exact Science.

"It is not pure reason, but it is always reasonable."

It is a matter of perceiving and portraying the harmony of organic tendencies; is originally intuitive because the artist nature is a prophetic gift that may sense their qualities afar.

To me, the artist is he who can truthfully idealize the common sense of these tendencies in his chosen way.

So I feel conception and composition to be simply the essence of refinement in organization, the original impulse of which may be registered by the artistic nature as unconsciously as the magnetic needle vibrates to the magnetic law, but which is, in synthesis or analysis, organically consistent, given the power to see it or not.

And I have come to believe that the world of Art, which we are so fond of calling the world outside of Science, is not so much outside as it is the very heart quality of this great material growth-as religion is its conscience.

A foolish heart and a small conscience.

A foolish heart, palpitating in alarm, mistaking the growing pains of its giant frame for approaching dissolution, whose sentimentality the lusty body of modern things has outgrown.

Upon this faith in Art as the organic heart quality of the scientific frame of things, I base a belief that we must look to the artist brain, of all brains, to grasp the significance to society of this thing we call the Machine, if that brain be not blinded, gagged, and bound by false tradition, the letter of precedent. For this thing we call Art is it not as prophetic as a primrose or an oak? Therefore, of the essence of this thing we call the Machine, which is no more or less than the principle of organic growth working irresistibly the Will of Life through the medium of Man.

Be gently lifted at nightfall to the top of a great down-town office building, and you may see how in the image of material man, at once his glory and menace, is this thing we call a city.

There beneath, grown up in a night, is the monster leviathan, stretching acre upon acre into the far distance. High overhead hangs the stagnant pall of its fetid breath, reddened with the light from its myriad eyes endlessly everywhere blinking. Ten thousand acres of cellular tissue, layer upon layer, the city's flesh, outspreads enmeshed by intricate network of veins and arteries, radiating into the gloom, and there with muffled, persistent roar, pulses and circulated as the blood in your veins, the ceaseless beat of the activity to whose necessities it all conforms.



Like to the sanitation of the human body is the drawing off of poisonous waste from the system of this enormous creature; absorbed first by the infinitely ramifying, thread-like ducts gathering at their sensitive terminals matter destructive to its life, hurrying it to millions of small intestines, to be collected in turn by larger, flowing to the great sewer, on to the drainage canal, and finally to the ocean.

This ten thousand acres of flesh-like tissue is again knit and inter-knit with a nervous system marvelously complete, delicate filaments for hearing, knowing, almost feeling the pulse of its organism, acting upon the ligaments and tendons for motive impulse, in all flowing the impelling fluid of man's own life.

Its nerve ganglia! – The peerless Corliss tandems whirling their hundred ton fly-wheels, fed by gigantic rows of water tube boilers burning oil, a solitary man slowly pacing backward and forward, regulating here and there the little feed valves controlling the deafening roar of the flaming gas, while beyond, the incessant clicking, dropping, waiting – lifting, waiting, shifting of the governor gear controlling these modern Goliaths seems a visible brain in intelligent action, registered infallibly in the enormous magnets, purring in the giant embrace of great induction coils, generating the vital current meeting with instant response in the rolling cars on elevated tracks ten miles away, where the glare of the Bessemer steel converter makes a conflagration of the clouds.

More quietly still, whispering down the long, low rooms of factory buildings buried in the gloom beyond, range on range of stanch, beautifully perfected automatons, murmur contentedly with occasional click-clack, that would have the American manufacturing industry of five years ago by the throat to-day; manipulating steel as delicately as a mystical shuttle of the modern loom manipulates a silk thread in the shimmering pattern of a dainty gown.

And the heavy breathing, the murmuring, the clangor, and the roar!-how the voice of this monstrous thing, this greatest of machines, a great city, rises to proclaim the marvel of the units of its structure, the ghastly warning boom from the deep throats of vessels heavily seeking inlet to the waterway below, answered by the echoing clangor of the bridge bells growing nearer and more ominous as the vessel cuts momentarily the flow of the nearer artery, warning the current from the swinging bridge now closing on its stately passage, just in time to receive in a rush of steam, as a streak of light, the avalanche of blood and metal hurled across it and gone, roaring into the night on its glittering bands of steel, ever faithfully encircled by the slender magic lines tick-tapping its invincible protection.

Nearer, in the building ablaze with midnight activity, the wide white band streams into the marvel of the multiple press, receiving unerringly the indelible impression of the human hopes, joys, and fears throbbing in the pulse of this great activity, as infallibly as the gray matter of the human brain receives the impression of the senses, to come forth millions of neatly folded, perfected news sheets, teeming with vivid appeals to passions, good or evil; weaving a web of intercommunication so far reaching that distance becomes as nothing, the thought of one man in one corner of the earth one day visible to the naked eye of all men the next; the doings of all the world reflected as in a glass, so marvelously sensitive this wide white band streaming endlessly from day to day becomes in the grasp of the multiple press.

If the pulse of activity in this great city, to which the tremor of the mammoth skeleton beneath our feet is but an awe-inspiring response, is thrilling, what of this prolific, silent obedience?

And the texture of the tissue of this great thing, this Forerunner of Democracy, the Machine, has been deposited particle by particle, in blind obedience to organic law, the law to which the great solar universe is but an obedient machine.

Thus is the thing into which the forces of Art are to breathe ill of identity! A SOUL!

An address by Frank Lloyd Wright to the Chicago Arts and Crafts Society, at Hull House, March 6, and to the Western Society of Engineers, March 20, 1901.

## Art Humanities Primary Source Reading 51

### Frank Lloyd Wright

This key text by the architect Frank Lloyd Wright represents the gathering of many of the ideas he had expressed in previous speeches and publications into a comprehensive statement of his own philosophy of architecture. He presented the essay for the first time before a group of architects in 1908, and it was published in the *Architectural Record* in the same year. Eighty-seven illustrations accompanied the article, which was the largest number of his designs to appear in print up to that point in time. This core set of ideas became so important to Wright that he presented numerous speeches over the next 20 years under the same prefatory title, elaborating upon the central theme of this text. Wright mentions that the context of many of his buildings at this

time was the Midwestern United States, which was characterized by a prairie landscape. This was the inspiration for his designs for domestic dwellings during this period of his career, of which the Robie House is the quintessential example. By the time of the publication of this paper, Wright had also erected Unity Temple and the Larkin Building, both of which he mentions here. (Introduction by Christine Sciacca)

## "IN THE CAUSE OF ARCHITECTURE," 1908

Radical though it be, the work here illustrated is dedicated to a cause conservative in the best sense of the word. At no point does it involve denial of the elemental law and order inherent in all great architecture; rather it is a declaration of love for the spirit of that law and order and a reverential recognition of the elements that made its ancient letter in its time value and beautiful.

Primarily, Nature furnished the materials for architectural motifs out of which the architectural forms as we know them today have been developed, and, although our practice for centuries has been for the most part to turn from her, seeking inspiration in books and adhering slavishly to dead formulae, her wealth of suggestion is inexhaustible; her riches greater than any man's desire. I know with what suspicion the man is regarded who refers matters of fine art back to Nature. I know that it is usually an ill-advised return that is tempted, for Nature in external, obvious aspect is the usually accepted sense of the term and the nature that is reached. But given inherent vision there is no source so fertile, so suggestive, so helpful aesthetically for the architect as a comprehension of natural law. As Nature is never right for a picture so is she never right for the architect—that is, not ready made. Nevertheless, she has a practical school beneath her more obvious forms in which a sense of proportion may be cultivated, when Vignola and Vitruvius fail as they must always fail. It is there that he may develop that sense of reality that translated to his own field in terms of his own work will lift him far above the realistic in his art: there he will be inspired by sentiment that will never degenerate to sentimentality and he will learn to draw with a surer hand the every-perplexing line between the curious and the beautiful.

A sense of the organic is indispensable to an architect; where can he develop it so surely as in this school? A knowledge of the relations of form and function lies at the root of his practice; where else can he find the pertinent object lessons Nature so readily furnishes? Where can he study the differentiations of form that go to determine character as he can study them in the trees? Where can that sense of inevitableness characteristic of a work of art be quickened as it may be by intercourse with nature in this sense?

Japanese art knows this school more intimately than that of any people. In common use in their language there are many words like the word *edaburi* which, translated as near as may be, means the formative arrangement of the branches of a tree. We have no such word in English, we are not yet sufficiently civilized to think in such terms, but the architect must not only learn to think in such terms but he must learn in this school to fashion his vocabulary for himself and furnish it in a comprehensive way with useful words as significant as this one.

For seven years it was my good fortune to be the understudy of a great teacher and a great architect, to my mind the greatest of his time — Mr. Louis H. Sullivan.

Principles are not invented, they are not evolved by one man or one age, but Mr. Sullivan's perception and practice of them amounted to a revelation at a time when they were commercially inexpedient and all but lost to sight in current practice. The fine-art sense of the profession was at that time practically dead; only glimmerings were perceptible in the work of Richardson and of Root.<sup>1</sup>

Adler and Sullivan had little time to design residences. The few that were unavoidable fell to my lot outside of office hours. So largely, it remained for me to carry into the field of domestic architecture the battle they had begun in commercial building. During the early years of my own practice I found this lonesome work. Sympathizers of any kind were then few, and they were not found among the architects. I well remember how "the message" burned within me, how I longed for comradeship until I began to know the younger men and how welcome was Robert Spencer, and then Myron Hunt, and Dwight Perkins, Arthur Heun, George Dean, and Hugh Garden. Inspiring days they were. I am sure, for us all. Of late we have been too busy to see one another often, but the "New School of the Middle West"<sup>2</sup> is beginning to be talked about and perhaps some day it is to be. For why not the same "Life" and blood in architecture that is the essence of all true art?

In 1894, with this text from Carlyle at the top of the page—"The ideal is within thyself, thy condition is but the stuff thou art to shape that same ideal out of" — I formulated the following "propositions." I set them down here much as they were written then, although in the light of experience they might be stated more completely and succinctly.

I -- Simplicity and Repose are qualities that measure the true value of any work of art.

But simplicity is not in itself an end nor is it a matter of the side of a barn but rather an entity with a

graceful beauty in its integrity from which discord, and all that is meaningless, has been eliminated. A wildflower is truly simple. Therefore:

1. A building should contain as few rooms as will meet the conditions which give it rise and under which we live and which the architect should strive continually to simplify; then the ensemble of the rooms should be carefully considered that comfort and utility may go hand in hand with beauty. Beside the entry and necessary work rooms there need be but three rooms on the ground floor of any house, living room, dining room, and kitchen, with the possible addition of a "social office"; really there need be but one room, the living room, with requirements otherwise sequestered from it or screened within it by means of architectural contrivances.

2. Openings should occur as integral features of the structure and form, if possible, its natural ornamentation.

3. An excessive love of detail has ruined more fine things from the standpoint of fine art or fine living than any one human shortcoming-it is hopelessly vulgar. Too many houses, when they are not little stage settings or scene paintings, are mere notion stores, bazaars, or junk shops. Decoration is dangerous unless you understand it thoroughly and are satisfied that it means something good in the scheme as a whole, for the present you are usually better off without it. Merely that it "looks rich" is no justification for the use of ornament.

4. Appliances or fixtures as such are undesirable. Assimilate them together with all appurtenances into the design of the structure.

5. Pictures deface walls oftener than they decorate them. Pictures should be decorative and incorporated in the general scheme as decoration.

6. The most truly satisfactory apartments are those in which most or all of the furniture is built in as a part of the original scheme considering the whole as an integral unit.

II-There should be as many kinds (styles) of houses as there are kinds (styles) of people and as many differentiations as there are different individuals. A man who has individuality (and what man lacks it?) has a right to its expression in his own environment.

III -- A building should appear to grow easily from its site and be shaped to harmonize with its surroundings if Nature is manifest there, and if not try to make it as quiet, substantial and organic as She would have been were the opportunity Hers.\*

We of the Middle West are living on the prairie. The prairie has a beauty of its own, and we should recognize and accentuate this natural beauty, its quiet level. Hence, gently sloping roofs, low proportions, quiet skylines, suppressed heavysset chimneys and sheltering overhangs, low terraces and outreaching walls sequestering private gardens.

IV-Colors require the same conventionalizing process to make them fit to live with that natural forms do; so go to the woods and fields for color schemes. Use the soft, warm, optimistic tones of earths and autumn leaves in preference to the pessimistic blues, purples, or cold greens and grays of the ribbon counter; they are more wholesome and better adapted in most cases to good decoration.

V -- Bring out the nature of the materials, let their nature intimately into your scheme. Strip the wood of varnish and let it alone--stain it. Develop the natural texture of the plastering and stain it. Reveal the nature of the wood, plaster, brick, or stone in your designs, they are all by nature friendly and beautiful. No treatment can be really a matter of fine art when these natural characteristics are, or their nature is, outraged or neglected.

VI -- A house that has character stands a good chance of growing more valuable as it grows older while a house in the prevailing mode, whatever that mode may be, is soon out of fashion. stale, and unprofitable.

Buildings like people must first be sincere, must be true, and then withal as gracious and lovable as may be. Above all, integrity. The machine is the normal tool of our civilization. give it work that it can do well-nothing is of greater importance. To do this will be to formulate new industrial ideals, sadly needed.

These propositions are chiefly interesting because for some strange reason they were novel when formulated in the face of conditions hostile to them and because the ideals they phrase have been practically embodied in the buildings that were built to live up to them. The buildings of recent years have not only been true to them, but are in many cases a further development of the simple propositions so positively stated then.

Happily, these ideals are more commonplace now. Then the skylines of our domestic architecture were fantastic abortions, tortured by features that disrupted the distorted roof surfaces from which attenuated chimneys like lean fingers threatened the sky; the invariably tall interiors were cut up into box-like compartments, the more boxes the finer the house, and "Architecture" chiefly consisted in healing over the edges of the curious concoction of holes that had to be cut in the walls for light and air and to permit the occupant to get in or out. These interiors were always slaughtered with the butt and slash of the old plinth and corner block trim, of dubious origin, and

finally smothered with horrible millinery.

That individuality in a building was possible for each homemaker, or desirable, seemed at that time to rise to the dignity of an idea. Even cultured men and women care so little for the spiritual integrity of their environment; except in rare cases they are not touched, they simply do not care for the matter so long as their dwellings are fashionable or as good as those of their neighbors and keep them dry and warm. A structure has no more meaning to them aesthetically than has the stable to the horse. And this came to me in the early years as a definite discouragement. There are exceptions, and I found them chiefly among American men of business with unspoiled instincts and untainted ideals. A man of this type usually has the faculty of judging for himself. He has rather liked the "idea" and much of the encouragement this work receives comes straight from him because the "common sense" of the thing appeals to him. While the "cultured" are still content with their small chateaux, colonial wedding cakes, English affectations, or French millinery, he prefers a poor thing but his own. He errs on the side of character, at least, and when the test of time has tried his country's development architecturally, he will have contributed his quota, small enough in the final outcome though it be; he will be regarded as a true conservator.

In the hope that some day America may live her own life in her own buildings, in her own way, that is, that we may make the best of what we have for what it honestly is or may become, I have endeavored in this work to establish a harmonious relationship between ground plan and elevation of these buildings, considering the one as a solution and the other in expression of the conditions of a problem of which the whole is a project. I have tried to establish an organic integrity to begin with, forming the basis for the subsequent working out of a significant grammatical expression and making the whole, as nearly as I could, consistent.

What quality of style the buildings may possess is due to the artistry with which the conventionalization as a solution and an artistic expression of a specific problem within these limitations has been handled. The types are largely a matter of personal taste and may have much or little to do with the American architecture for which we hope.

From the beginning of my practice, the question uppermost in my mind has been not "what style?" but "what is style?" and it is my belief that the chief value of the work illustrated here will be found in the fact that if in the face of our present-day conditions any given type may be created independently and imbued with the quality of style, then a truly noble architecture is a definite possibility, so soon as Americans really demand it of the architects of the rising generation.

I do not believe we will ever again have the uniformity of type which has characterized the so-called great "styles." Conditions have changed; our ideal is Democracy, the highest possible expression of the individual as a unit not inconsistent with a harmonious whole. The average of human intelligence rises steadily, and as the individual unit grows more and more to be trusted we will have an architecture with rather variety in unity than has ever arisen before, but the forms must be born out of our changed conditions, they must be true forms, otherwise the best tradition has to offer is only an inglorious masquerade, devoid of vital significance or true spiritual value.

The trials of the early days were many and at this distance picturesque. Workmen seldom like to think, especially if there is financial risk entailed; at your peril do you disturb their established processes mental or technical. To do anything in an unusual, even if in a better and simpler way, is to complicate the situation at once. Simple things at that time in any industrial field were nowhere at hand. A piece of wood without a molding was an anomaly; a plain wooden slat instead of a turned baluster a joke, the omission of the merchantable "grille" a crime; plain fabrics for hangings or floor covering were nowhere to be found in stock.

To become the recognized enemy of the established industrial order was no light matter, for soon whenever a set of my drawings was presented to a Chicago mill-man for figures he would willingly enough unroll it, read the architect's name, shake his head, and return it with the remark that he was "not hunting for trouble"; sagacious owners and general contractors tried cutting out the name, but in vain, his perspicacity was ratlike, he had come to know "the look of the thing." So, in addition to the special preparation in any case necessary for every little matter of construction and finishing, special detail drawings were necessary merely to allow the things to be left off or not done and not only studied designs for every part had to be made but quantity surveys and schedules of millwork furnished the contractors beside. This, in a year or two, brought the architect face to face with the fact that the fee for his service "established" by the American Institute of Architects was intended for something stock and shop, for it would not even pay for the bare drawings necessary for conscientious work.

The relation of the architect to the economic and industrial movement of his time, in any fine-art sense, is still an affair so sadly out of joint that no one may easily reconcile it. All agree that something has gone wrong and except the architect be a plain factory magnate, who has reduced his art to a philosophy of old clothes and sells misfit or made over-ready-to-wear garments with commercial aplomb and social distinction, he cannot succeed on the present basis established by common practice. So, in addition to a situation already completed for them, a necessarily increased fee stared in the face the clients who dared. But some did dare, as the illustrations prove.

The struggle then was and still is to make "good architecture," "good business." It is perhaps significant that in the beginning it was very difficult to secure a building loan on any terms upon one of these houses, now it is easy to secure a better loan than ordinary; but how far success has attended this ambition the owners of these buildings alone can testify. Their trials have been many, but each, I think, feels that he has as much house for his money as any of his neighbors, with something in the home intrinsically valuable besides, which will not be out of fashion in one lifetime and which contributes steadily to his dignity and his pleasure as an individual.

It would not be useful to dwell further upon difficulties encountered, for it is the common story of simple progression everywhere in any field; I merely wish to trace here the "motif" behind the types. A study of the illustrations will show that the buildings presented fall readily into three groups having a family resemblance; the low-pitched hip roofs, heaped together in pyramidal fashion or presenting quiet, unbroken skylines; the low roofs with simple pediments counteracting on long ridges; and those topped with a simple slab. Of the first type, the Winslow, Henderson, Willits, Thomas, Heurtley, Heath, Cheney, Martin, Little, Gridley, Millard, Tomek, Coonley, and Westcott houses, the Hillside Home School and the Pettit Memorial Chapel are typical. Of the second type, the Bradley, Hickox, Davenport and Dana houses are typical. Of the third, atelier for Richard Bock, Unity Church,<sup>3</sup> the concrete house of The Ladies' Home journal, and other designs in process of execution. The Larkin Building is a simple, dignified utterance of a plain, utilitarian type, with sheer brick walls and simple stone copings. The studio is merely an early experiment in "articulation."

Photographs do not adequately present these subjects. A building has a presence, as has a person, that defies the photographer, and the color so necessary to the complete expression of the form is necessarily lacking; but it will be noticed that all the structures stand upon their foundations to the eye as well as physically. There is good, substantial preparation at the ground for all the buildings and it is the first

grammatical expression of all the types. This preparation, or water table, is to these buildings, what the stylobate was to the ancient Greek temple. To gain it, it was necessary to reverse the established practice of setting the supports of the building to the outside of the wall and to set them to the inside, so as to leave the necessary support for the outer base. This was natural enough and good enough construction but many an owner was disturbed by private information from the practical contractor to the effect that he would have his whole house in the cellar if he submitted to it. This was at the time a marked innovation though the most natural thing in the world and to me, to this day, indispensable.

With this innovation established, one horizontal stripe of raw material, the foundation wall above ground, was eliminated and the complete grammar of type one made possible. A simple, unbroken wall surface from foot to level of second story sill was thus secured, a change of material occurring at that point to form the simple frieze that characterizes the earlier buildings. Even this was frequently omitted, as in the Francis apartments<sup>4</sup> and many other buildings, and the wall was let alone from base to cornice or eaves.

"Dress reform houses" they were called, I remember, by the charitably disposed. What others called them will hardly bear repetition.

As the wall surfaces were thus simplified and emphasized the matter of fenestration became exceedingly difficult and more than ever important, and often I used to gloat over the beautiful buildings I could build if only it were unnecessary to cut holes in them: but the holes were managed at first frankly as in the Winslow house and later as elementary constituents of the structure grouped in rhythmical fashion, so that all the light and air and prospect the most rabid client could wish would not be too much from an artistic standpoint; and of this achievement I am proud. The groups are managed, too, whenever required, so that overhanging eaves do not shade them, although the walls are still protected from the weather. Soon the poetry-crushing characteristics of the guillotine window, which was then firmly rooted, became apparent, and singlehanded I waged a determined battle for casements swinging out, although it was necessary to have special hardware made for them as there was none to be had this side of England. Clients would come ready to accept any innovation but "those swinging windows," and when told that they were in the nature of the proposition and that they must take them or leave the rest, they frequently employed "the other fellow" to give them something "near," with the "practical" windows dear to their hearts.

With the grammar so far established, came an expression pure and simple, even classic in atmosphere, using that much-abused word in its best sense; implying, that is, a certain sweet reasonableness of form and outline naturally dignified.

I have observed that Nature usually perfects her forms; the individuality of the attribute is seldom sacrificed, that is, deformed or mutilated by cooperative parts. She rarely says a thing and tries to take it back at the same time. She would not sanction the "classic" proceeding of say, establishing an "order," a colonnade, then building walls between the columns of the order reducing them to pilasters, thereafter cutting holes in the wall and pasting on cornices with more plasters around them, with the result that every form is outraged, the whole an abominable mutilation, as is most of the architecture of the Renaissance wherein style corrodes style and all the forms are stultified.

In laying out the ground plans for even the more insignificant of these buildings, a simple axial law and order and the ordered spacing upon a system of certain structural unit definitely established for each structure. In accord with its scheme of practical construction and aesthetic proportion, is practiced as an expedient to simplify the technical difficulties of execution, and, although the symmetry may not be obvious, always the balance is maintained. The plans are as a rule much more articulate than is the school product of the Beaux Arts. The individuality of the various functions of the various features is more highly developed, all the forms are complete in themselves and frequently do duty at the same time from within and without as decorative attributes of the whole. This tendency to greater individuality of the parts emphasized by more and more complete articulation will be seen in the plans for Unity Church, the cottage for Elizabeth

Stone at Glencoe, and the Avery Coonley house in process of construction at Riverside, Illinois. Moreover, these ground plans are merely the actual projection of a carefully considered whole. The "architecture" is not "thrown up" as an artistic exercise, a matter of elevation from a preconceived ground plan. The schemes are conceived in three dimensions as organic entities, let the picturesque perspective fall how it will. While a sense of the incidental perspectives the design will develop is always present, I have great faith that if the thing is rightly put together in true organic sense with proportions actually right the picturesque will take care of itself. No man ever built a building worthy the name of architecture who fashioned it in perspective sketch to his taste and then fudged the plan to suit. Such methods produce mere scene-painting. A perspective may be a proof but it is no nurture.

As to the mass values of the buildings the aesthetic principles outlined in proposition III will account in a measure for their character.

In the matter of decoration the tendency has been to indulge it less and less, in many cases merely providing certain architectural preparation for natural foliage or flowers, as it is managed in, say, the entrance to the Lawrence house at Springfield. This use of natural folia and flowers for decoration is carried to quite an extent in all the designs and, although the buildings are complete without this efflorescence, they may be said to blossom with the season. What architectural decoration the buildings carry is not only conventionalized to the point where it is quiet and stays as a sure foil for the nature forms from which it is derived and with which it must intimately associate, but it is always of the surface, never on it.

The windows usually are provided with characteristic straight-line patterns absolutely in the flat and usually severe. The nature of the glass is taken into account in these designs as is also the metal bar used in their construction, and most of them are treated as metal "grilles" with glass inserted forming a simple rhythmic arrangement of straight lines and squares made as cunning as possible so long as the result is quiet. The aim is that the designs shall make the best of the technical contrivances that produce them.

In the main the ornamentation is wrought in the warp and woof of the structure. It is constitutional in the best sense and is felt in the conception of the ground plan. To elucidate this element in composition would mean a long story and perhaps a tedious one, though to me it is the most fascinating phase of the work, involving the true poetry of conception.

The differentiation of a single, certain simple form characterizes the expression of one building. Quite a different form may serve for another, but from one basic idea all the formal elements of design are in each case derived and held well together in scale and character. The form chosen may flare outward, opening flower-like to the sky, as in the Thomas house; another, droop to accentuate artistically the weight of the masses; another be noncommittal or abruptly emphatic, or its grammar may be deduced from some plant form that has appealed to me, as certain properties in line and form of the sumach were used in the Lawrence house at Springfield; but in every cue the motif is adhered to throughout so that it is not too much to say that each building aesthetically is cut from one piece of goods and consistently hangs together with an integrity impossible otherwise.

In a fine-art sense these designs have grown as natural plants grow, the individuality of each is integral and as complete as skill, time, strength, and circumstances would permit.

The method in itself does not of necessity produce a beautiful building, but it does provide a framework as a basis which has an organic integrity, susceptible to the architect's imagination and at once opening to him Nature's wealth of artistic suggestion, ensuring him a guiding principle within which he can never be wholly false, out of tune, or lacking in rational motif. The subtleties, the shifting blending harmonies, the cadences, the nuances are a matter of his own nature, his own susceptibilities and faculties.

But self-denial is imposed upon the architect to a far greater extent than upon any other member of the fine art family. The temptation to sweeten work, to make each

detail in itself lovable and expressive is always great, but that the whole may be truly eloquent of its ultimate function restraint is imperative. To let individual elements arise and shine at the expense of final repose is, for the architect, a betrayal of trust for buildings are the background or framework for the human life within their walls and a foil for the nature efflorescence without. So architecture is the most complete of conventionalizations and of all the arts the most subjective except music.

Music may be for the architect ever and always a sympathetic friend whose counsels, precepts, and patterns even are available to him and from which he need not fear to draw. But the arts are today all cursed by literature; artists attempt to make literature even of music, usually of painting and sculpture and doubtless would of architecture also were the art not moribund; but whenever it is done the soul of the thing dies and we have not art but something far less for which the true artist can have neither affection nor respect.

Contrary to the usual supposition this manner of working out a theme is more flexible than any working out in a fixed, historic style can ever be, and the individuality of those concerned may receive more adequate treatment within legitimate limitations. This matter of individuality puzzles many; they suspect that the individuality of the owner and occupant of a building is sacrificed to that of the architect who imposes his own upon Jones, Brown, and Smith alike. An architect worthy of the name has an individuality, it is true; his work will and should reflect it, and his buildings will all bear a family resemblance one to another. The individuality of an owner is first manifest in his choice of his architect, the individual to whom he entrusts his characterization. He sympathizes with his work; its expression suits him, and this furnishes the common ground upon which client and architect may come together. Then, if the architect is what he ought to be, with his ready technique he conscientiously works for the client, idealizes his client's character and his client's tastes, and makes him feel that the building is his as it really is to such an extent that he can truly say that he would rather have his own house than any other he has ever seen. Is a portrait, say by Sargent, any less a revelation of the character of the subject because it bears his stamp and is easily recognized by anyone as a Sargent? Does one lose his individuality when it is interpreted sympathetically by one of his own race and time who can know him and his needs intimately and idealize them, or does he gain it only by having adopted or adapted to his condition a ready-made historic style which is the fruit of a seedtime other than his, whatever that style may be?

The present industrial condition is constantly studied in the practical application of these architectural ideals and the treatment simplified and arranged to fit modern processes and to utilize to the best advantage the work of the machine. The furniture takes the clean-cut, straight-line forms that the machine can render far better than would be possible by hand. Certain facilities, too, of the machine, which it would be interesting to enlarge upon, are taken advantage of and the nature of the materials is usually revealed in the process.

Nor is the atmosphere of the result in its completeness new and hard. In most of the interiors there will be found a quiet, a simple dignity that we imagine is only to be found in the "old" and it is due to the underlying organic harmony, to the each in all and the all in each throughout. This is the modern opportunity to make of a building, together with its equipment, appurtenances, and environment, an entity which shall constitute a complete work of art, and a work of art more valuable to as a whole than has before existed because discordant conditions endured for centuries are smoothed away; everyday life here finds an expression germane to its daily existence: an idealization of the common need sure to be uplifting and helpful in the same sense that pure air to breathe is better than air poisoned with noxious gases.

An artist's limitations are his best friends. The Machine is here to stay. It is the forerunner of the democracy that is our dearest hope. There is no more important work before the architect now than to use this normal tool of civilization to the best advantage instead of prostituting it as he has hitherto done in reproducing with murderous ubiquity forms both of other times and other conditions and which it can only serve to destroy.

The exteriors of these structures will receive less ready recognition perhaps than



the interiors, and because they are the result of a radically different conception as to what should constitute a building. We have formed a habit of mind concerning architecture to which the expression of most of these exteriors must be a shock, at first more or less disagreeable, and the more so as the habit of mind is more narrowly fixed by so-called classic training. Simplicity is not in itself an end; it is a means to an end. Our aesthetics are dyspeptic from incontinent indulgence in "Frenchite" pastry. We crave ornament for the sake of ornament; cover up our faults of design with ornamental sensualities that were a long time ago sensuous ornament. We will do well to dismiss this unwholesome and unholy craving and look to the simple line; to the clean though living form and quiet color for a time, until the true significance of these things has dawned for us once more. The old structural forms which up to the present time, have spelled "architecture" are decayed. Their life went from them long ago and new conditions industrially, steel and concrete and terra-cotta in particular, are prophesying a more plastic art wherein as the flesh is to our bones so will the covering be to the structure, but more truly and beautifully expressive than ever. But that is a long story. This reticence in the matter of ornamentation is characteristic of structures and for at least two reasons: first, they are the expression of an idea that the ornamentation of a building should be constitutional, a matter of the nature of the structure beginning with the ground plan. In the buildings themselves, in the sense of the whole there is lacking neither richness nor incident but their qualities are secured not by applied decoration, they are found in the fashioning of the whole, in which color, too, plays as significant a part as it does in an old, Japanese woodblock print. Second: because as before stated: buildings perform their highest function in relation to human life within and the natural efflorescence without; and to develop and maintain the harmony of a true chord between them making of the building in this sense a sure foil for life, broad, simple surfaces and highly conventionalized forms are inevitable. These ideals take the buildings out of school and marry them to the ground; make them intimate expressions or revelations of the exteriors, individualize them regardless of preconceived notions of style. I have tried to make their grammar perfect in its way and to give their forms and proportions an integrity that will bear study, although few of them can be intelligently studied apart from their environment. So, what might be termed the democratic character of the exteriors is their first undefined offence-the lack, wholly, of what the professional critic would deem architecture; in fact, most of the critic's architecture has been left out.

There is always a synthetic basis for the features of the various structures, and consequently a constantly accumulating residue of formulas, which becomes more and more useful; but I do not pretend to say that the perception or conception of them was not at first intuitive, or that those that lie yet beyond will not be grasped in the same intuitive way; but, after all, architecture is a scientific art, and the thinking basis will ever be for the architect his surety, the final court in which his imagination sifts his feelings.

The few draughtsmen so far associated with this work have been taken into the draughting room, in every case almost wholly unformed, many of them with no particular previous training and patiently nursed for years in the atmosphere of the work itself until saturated by intimate association, at an impressionable age, with its motifs and phases, they have become helpful. To develop the sympathetic grasp of detail that is necessary before this point is reached has proved usually a matter of years, with little advantage on the side of the collegetrained understudy. These young people have found their way to me through natural sympathy with the work and have become loyal assistants. The members, so far, all told here and elsewhere, of our little university of fourteen years standing are: Marion Mahony, a capable assistant for eleven years; William Drummond, seven years; Francis Byrne, five years; Isabel Roberts, five years; George Willis, four years; Walter Griffin, four years; Andrew Willatzen, three years; Charles E. White, Jr., one year; Erwin Barglebaugh and Robert Hardin, each one year; Albert McArthur, entering.

Others have been attracted by what seemed to them to be the novelty of the work, staying only long enough to acquire a smattering of form, then departing to sell a superficial proficiency elsewhere. Still others shortly develop a mastery of the subject,

discovering that it is all just as they would have done it, anyway, and, chafing at the unkind fate that forestalled them in its practice, resolve to blaze a trail for themselves without further loss of time. It is urged against the more loyal that they are sacrificing their individuality to that which has dominated this work; but it is too soon to impeach a single understudy on this basis, for, although they will inevitably repeat for years the methods, forms, and habit of thought, even the mannerisms of the present work, if there is virtue in the principles behind it that virtue will stay with them through the preliminary stages of their own practice until their own individualities truly develop independently. I have noticed that those who have made the most fuss about their "individuality" in early stages, those who took themselves most seriously in that regard, were inevitably those who had least.

Many elements of Mr. Sullivan's personality in his art-what might be called his mannerisms-naturally enough clung to my work in the early years and may be readily traced by the casual observer, but for me one real proof of the virtue inherent in this work will lie in the fact that some of the young men and women who have given themselves up to me so faithfully these past years will some day contribute rounded individualities of their own and forms of their own devising to the new school.

This year, I assign to each a project that has been carefully conceived in my own mind, which he accepts as a specific work. He follows its subsequent development through all its phases in drawing room and field meeting with the client himself on occasion, gaining an all-round development impossible otherwise, and insuring an enthusiasm and a grasp of detail decidedly to the best interest of the client. These privileges in the hands of selfishly ambitious or overconfident assistants would soon wreck such a system; but I can say that among my own boys it has already proved a moderate success, with every prospect of being continued as a settled policy in future.

Nevertheless, I believe that only when one individual forms the concept of the various projects and also determines the character of every detail in the sum total, even to the size and shape of the pieces of glass in the windows, the arrangement and profile of the most insignificant of the architectural members, will that unity be secured which is the soul of the individual work of art. This means that fewer buildings should be entrusted to one architect. His output will of necessity be relatively small-small that is, as compared to the volume of work turned out in any one of fifty "successful offices" in America. I believe there is no middle course worth considering in the fight of the best future of American architecture. With no more propriety can an architect leave the details touching the form of his concept to assistants, no matter how sympathetic and capable they may be, than can a painter entrust the painting in of the details of his picture to a pupil; for an architect who would do individual work must have a technique well developed and peculiar to himself which, if he is fertile, is still growing with his growth. To keep everything "in place" requires constant care and study in matters that the old-school practitioner would scorn to touch.

As for the future the work shall grow more truly simple; more expressive with fewer lines, fewer forms; more articulate with less labor, more plastic, more fluent, although more coherent; more organic. It shall grow not only to fit more perfectly the methods and procure that are called upon to produce it, but shall further find whatever is lovely or of good repute in method or process, and idealize it with the cleanest most virile stroke I can imagine. As understanding and appreciation of life matures and deepens, this work shall prophesy and idealize the character of the individual it is fashioned to serve more intimately, no matter how inexpensive the result must finally be. It shall become in its atmosphere as pure and elevating in its humble way as the trees and flowers are in their perfectly appointed way, for only so can architecture be worthy in high rank as a fine art, or the architect discharge the obligation he assumes to the public-imposed upon him by the nature of his own profession.

"In the Cause of Architecture" by Frank Lloyd Wright is reprinted from the Architectural Record, 1908,

## ENDNOTES

\* In this I had in mind the barren town lots devoid of tree or natural incident, townhouses and board walks only in evidence.

1. Architects Henry Hobson Richardson (1838-1886) and John Wellborn Root (1850-1891). Richardson, architect of the 1885 Marshall Field Wholesale Store in Chicago, was primarily known for his very individualistic --"Romanesque-like"-rock faced masonry buildings on the East Coast, Root, who moved to Chicago in 1872 following the great fire, as best known for the tall office buildings he designed in partnership with Daniel Burnham during the 1880s.

2. H. Allen Brooks identifies "New School of the Middle West" as Wright's phrase and states that it first appears here, at least in print, in this essay of 1908. Thomas T. Tallmadge about the same time coined the phrase "the Chicago School," which included at least some of the same people Wright mentions here. By 1912 the term "Prairie Style" had also appeared. The definition of these "schools" or "styles" of architecture shifted over time and continues to be confusing (H. Allen Brooks, *The Prairie School*, New York: W. W. Norton & Co., 1972. p. 10-11).

3. Actually Unity Temple in Oak Park, designed by Wright in 1904.

4. Francis Apartments. The Francis Apartments were built in Chicago in 1895 for the Terre Haute Trust Company of Indiana. They were demolished in 1971.

***Le Corbusier/Pierre Jeanneret***

**"FIVE POINTS TOWARDS A NEW ARCHITECTURE," 1926**

The theoretical considerations set out below are based on many years of practical experience on building sites.

Theory demands concise formulation.

The following points in no way relate to aesthetic fantasies or a striving for fashionable effects, but concern architectural facts that imply an entirely new kind of building, from the dwelling house to palatial edifices.

**1. The supports.** To solve a problem scientifically means in the first place to distinguish between its elements. Hence in the case of a building a distinction can immediately be made between the supporting and the non-supporting elements. The earlier foundations, on which the building rested without a mathematical check, are replaced by individual foundations and the walls by individual supports. Both supports and support foundations are precisely calculated according to the burdens they are called upon to carry. These supports are spaced out at specific, equal intervals, with no thought for the interior arrangement of the building. They rise directly from the floor to 3, 4, 6, etc. metres and elevate the ground floor. The rooms are thereby removed from the dampness of the soil; they have light and air; the building plot is left to the garden, which consequently passes under the house. The same area is also gained on the flat roof.

**2. The roof gardens.** The flat roof demands in the first place systematic utilization for domestic purposes: roof terrace, roof garden. On the other hand, the reinforced concrete demands protection against changing temperatures. Overactivity on the part of the reinforced concrete is prevented by the maintenance of a constant humidity on the roof concrete. The roof terrace satisfies both demands (a rain-dampened layer of sand covered with concrete slabs with lawns in the interstices; the earth of the flowerbeds in direct contact with the layer of sand). In this way the rain water will flow off extremely slowly. Waste pipes in the interior of the building. Thus a latent humidity will remain continually on the roof skin. The roof gardens will display highly luxuriant vegetation. Shrubs and even small trees up to 3 or 4 metres tall can be planted. In this way the roof garden will become the most favoured place in the building. In general, roof gardens mean to a city the recovery of all the built-up area.

**3. The free designing of the ground-plan.** The support system carries the intermediate ceilings and rises up to the roof. The interior walls may be placed wherever required, each floor being entirely independent of the rest. There are no longer any supporting walls but only membranes of any thickness required. The result of this is absolute freedom in designing the ground-plan; that is to say, free utilization of the available means, which makes it easy to offset the rather high cost of reinforced concrete construction.

**4. The horizontal window.** Together with the intermediate ceilings the supports form rectangular openings in the façade through which light and air enter copiously. The window extends from support to support and thus becomes a horizontal window. Stilted vertical windows consequently disappear, as do unpleasant mullions. In this way, rooms are equably lit from wall to wall. Experiments have shown that a room thus lit has an eight times stronger illumination than the same room lit by vertical windows with the same window area.

The whole history of architecture revolves exclusively around the wall apertures. Through use of the horizontal window reinforced concrete suddenly provides the possibility of maximum illumination.

**5. Free design of the façade.** By projecting the floor beyond the supporting pillars, like a balcony all round the building, the whole façade is extended beyond the supporting construction. It thereby loses its supportive quality and the windows may be

extended to any length at will, without any direct relationship to the interior division. A window may just as well be 10 metres long for a dwelling house as 200 metres for a palatial building (our design for the League of Nations building in Geneva). The façade may thus be designed freely.

The five essential points set out above represent a fundamentally new aesthetic. Nothing is left to us of the architecture of past epochs, just as we can no longer derive any benefit from the literary and historical teaching given in schools.

#### **Constructional considerations**

Building construction is the purposeful and consistent combination of building elements.

Industries and technological undertakings are being established to deal with the production of these elements.

Serial manufacture enables these elements to be made precise, cheap and good. They can be produced in advance in any number required.

Industries will see to the completion and uninterrupted perfecting of the elements.

Thus the architect has at his disposal a box of building units. His architectural talent can operate freely. It alone, through the building programme, determines his architecture.

The age of the architects is coming.

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