At the time Frank Lloyd Wright (1867–1959) prepared this address, he and Sullivan were not speaking. Sullivan had summarily dismissed his assistant in 1863 when he discovered Wright was taking on private work during his off hours (they were reconciled shortly before Wright left for Europe in 1910 and remained close thereafter). \(^1\) Wright shared Sullivan’s view concerning the debasement of the profession, and in 1900 he discussed the plight of the architect in a paper read before the annual meeting of the Architectural League of America in Chicago, claiming the architect had sold out, that he had made himself a salesman of prepackaged styles. \(^1\) An even more important indication of his developing philosophy was Wright’s lecture, “The Art and Craft of the Machine,” given at a meeting of the Arts and Crafts Society at Hull House, Chicago, the next year. The way out of the dilemma, Wright proposed, was by embracing the machine, exploiting its potential and developing a new architecture on the basis of this new sensitivity. How this might be done he illustrated in designs for small single-family houses published at the same time in popular journals. \(^1\) Wright slightly revised this lecture for delivery before the Western Society of Architects. \(^1\) See Wright’s Genius and the Machine (New York, 1946), his biographical tribute to Sullivan.


\(^{3}\) “A Home in a Prairie Town” and “A Small House with ‘Lot of Room in It’,” The Ladies’ Home Journal 13 (February and July 1901), pp. 17, 15. There were two of hundreds of designs. Journal editor Edward Bok requested of many prominent and rising architects and published in the magazine between 1895 and 1915.
No one, I hope, has come here tonight for a sociological prescription for the cure of evils peculiar to this machine age. For I come to you as an architect to say, my word for the right use upon such new materials as we have, of our great substitute for tools — machines. There is no thrill in any craft until the tools are mastered; nor will there be a worthy social order in America until the elements by which America does its work are mastered by American society. Nor can there be an art worth the man or the name until these elements are grasped and truthfully idealized in whatever we as a people try to make. Although these elemental truths should be commonplace enough by now, as a people we do not understand them nor do we see the way to apply them. We are probably richer in raw materials for use as workmen, citizens or artists than any other nation — but outside mechanical genius for mere contrivance we are not good workmen, nor, beyond ambitions or propitious respect for property, are we as good citizens as we should be, nor are we artists at all. We are one and all, consciously or unconsciously, mastered by our fascinating automatic "impliments," using them as substitutes for tools. To make this assertion clear I offer you evidence I have found in the field of architecture. It is still a field in which the pulse of the age throbs beneath much shabby finery and one broad enough (God knows) to represent the errors and possibilities common to our time-serving time.

Architects in the past have embodied the spirit common to their own life and to the life of the society in which they lived in the most noble of all noble records — buildings. They wrought these valuable records with the primitive tools at their command and whatever these records have to say to us today would be utterly insignificant if not wholly illegible were tools suited to another and different condition stupidly forced to work upon them; foolishly compelled to do work to which they were not fitted, work which they could only spoil.

In this age of steel and steam the tools with which civilization's true record will be written are scientific thoughts made operative in iron and bronze and steel and in the plastic processes which characterize this age, all of which we call machines. The electric lamp is in this sense a machine. New materials in the machine tools have made the physical body of this age what it is as distinguished from former ages. They have made our era the machine age — wherein locomotive engines — engines of industry, engines of light or engines of war or steamships take the place works of art took in previous history. Today we have a scientist or an inventor in place of a Shakespeare or a Dante. Captains of industry are modern substitutes, not only for kings and potentates, but, I am afraid, for great artists as well. And yet — man-made environment is the truest, most characteristic of all human records. Let a man build and you have him. You may not have all he is, but certainly he is what you have. Usually you will have his outline. Though the elements may be in him to enable him to grow out of his present self-made
characterization, men are ever belied by self-made environment. Certainly no historical period was ever so misrepresented. Chicago in its ugliness today becomes as true an expression of the life lived here as is any center on earth where men come together closely to live or fight or live it out. Man is a selecting being, gathering his like to him wherever he goes. The intensive fusing of his existence by close contact, too, flushes out the human record vividly in his background and his surroundings. But somewhere—somehow—in our age, although signs of the times are not wasting, beauty in this expression is forfeited—the record is illegible when not ignoble. We must walk blindfolded through the streets of this, or any great modern American city, to fail to see that all this magnificent resource of machine-power and superior material has brought to us, so far, is degradation. All of the art forms sacred to the art of old are, by us, prostituted.

On every side we see evidence of inglorious quarter between as they were and things as they must be and are. This shame a certain merciful ignorance on our part mistakes for glorious achievement. We believe in greatness when we have tossed on a Pantheon to the god of money in a night or two, like the Illinois Trust Building or the Chicago National Bank. And it is our glory to get together a mammoth aggregation of Roman monuments, sarcophagi, and temples for a post office in a year or two. On Michigan Avenue Montgomery Ward presents us with a non-descript Florentine palace with a grand canopied for a "farmer grocery" and it is as common with us as it is elsewhere to find the giant stone Palladian "orders" overchanging plate glass shop fronts. Show windows beneath Gothic office buildings the office-middle-topped by Parthenons, or models of any old sacrificial temple, are a common sight. Every commercial interest in any American town, in fact, is scurrying for respectability by seeking some advertising connection, at least, with the "classic." A commercial renaissance is here; the renaissance of "the ass in the lion's skin." This much, at least, we owe to the late Columbian Fair—that triumph of modern civilization in 1893 will go down in American architectural history, when it is properly recorded, as a mortgage upon posterity, that posterity must repudiate not only as usurious but as forged.

We call or we called—"skyrapers" (latest and most famous business-building triumph), good granite or Bedford stone is cut into the fashions of the Italian followers of Piranesi and his Greek slaves. Blocks so cut are cunningly arranged about a structure of steel beams and shafts (which structure secretly robs them of any real meaning), in order to make the finished building resemble the architecture depicted by Palladio and Vitruvius—in the schoolbooks. It is quite as feasible to begin putting on this Italian trimming at the coruscate, and crown on down to the base as it is to work, as the less fortunate Italians were forced to do, from the base upward. Yes, "from the top down," as the actual method employed. The keynote of a Roman or Gothic arch may now be "set"—that is to say "hung,"—and the masons stuck alongside or "hung" on downward to the hoistings. Finally this mask, complete, takes on the features of the statue or "classic," or is a variety of "renaissance" or whatever catches the fancy or fixes the "convictions" of the designer. Most likely, no education in art has "fixed" both our Chicago University, "a seat of learning," is just as far removed from truth. If environ-
ment is significant and indicative, what does this highly reactionary, exten-
sive and expensive scene-painting by means of hybrid collegiate Gothic sig-
nify? Because of Oxford it seems to be generally accepted as "appropriate
for scholastic purposes." Yet, why should an American university in a land of
democratic ideals in a machine age be characterized by second-hand adapta-
tion of Gothic forms, themselves adapted previously to our own adoption by
a feudalistic age with tools to use and conditions to face totally different
from anything we can call our own? The public library is again restitution,
revenues sticking through the flesh because the interior was
planned by a shrewd library board—while an "art architect" (the term is
Chicago's, not mine) was "bired" to "put the architecture on it." The "classi-
cal" aspect of the sham-front must be preserved at any cost. Nine
out of ten public buildings in almost any American city are the same.

On Michigan Avenue, too, we pass another pretentious structure, this
time fashioned as inculcated by the Ecole des Beaux Arts after the ideals and
methods of a Greco-Roman, inartistic, grandly brutal civilization, a civiliza-
tion that borrowed everything but its jurisprudence. Its essential tool was the
slave. Here at the top of our culture is the Chicago Art Institute, and very
like other art institutions. Between lines—realistic—Kenya would have them
so because Bayre did—we come beneath some stone millinery into the
grandly useless lobby. Here French's noble statue of the republic confronds
us—the too, imperial. The grand introduction over, we go further on to find
amid plaster casts of antiquity, earnest students patiently gleaning a half-
acre or more of archaeological dry-bones, arming here for industrial con-
quest, in other words to go out and try to make a living by making some
valuable impression upon the machine age in which they live. Their funda-
mental tool in this business about which they will know just this much less
than nothing, is—the machine. In this acre or more not one relic has any
vital relation to things as they are for these students, except for the blessed
circumstance that they are more or less beautiful things in themselves—
bodily forth the beauty of "once upon a time." These students at best are
to concoct from a study of the aspect of these blind reverences an extract of
antiquity suited to modern needs, meanwhile knowing nothing of modern
needs, permitted to care nothing for them, and knowing just as little of the
needs of the ancients which made the objects they now study. The tyros are
taught in the name of John Rankin and William Morris to snub and despise
the essential tool of their age as a matter commercial and antagonistic to art.
So in time they go forth, each armed with his little Academic extract, apply-
ing it as a sticking-plaster from without, wherever it can be made to stick,
many helplessly knowing in their hearts that it should be a development from
within—but how? And this is an education in art in these United
States.

Climb now the grand monumental stairway to see the results of this
cultural effort—we will call it "education"—hanging over the walls of the
exhibition galleries. You will find there the same empty reverences to the
past at cost to the present and of doubtful value to the future, unless a curse
is valuable. Here you may see fruits of the lust and pride of the patron-
collector but how shamefully little to show by way of encouraging patronage
by the artist of his own day and generation. This is a temple of the fine arts.
A sacred place! It should be the heart-center, the emotional inspiration of a great national industrial activity, but here we find tradition not as an inspiring spirit animating progress. No, Now more in the past than ever! No more, now, than an ancient mummy, a dead letter. A "precedent" is a "hang over" to copy, the copy to be copied for machine reproduction, to be shoddily reproduced until demoralized utterly or unrecognizable.

More unfortunately, however, than all this fiasco, is the fiasco al fresco. The suburban house-parade is more servile still. Any popular avenue or suburb will show the picket fence encampment displaying, on the neatly key little plots, a theatrical desire on the part of fairly respectable people to live in chateaux, manor houses, Venetian palaces, feudal castles, and Queen Anne cottages. Many with sufficient hardness abide in abominations of the carpenter-architect, our very own General Grant Gothic perhaps, intended to beat all the "lovely periods" at their own game and succeeding. Look within all this typical monstrosity-in-variety and see there the machine-made copies of handicraft originals; in fact, unless you, the homely-old, are fortunate indeed, possessed of extraordinary taste and opportunity, all you possess is in some degree a machine-made example of vitiated handicraft, imitation antique furniture made antique by the machine, itself of all abominations the most abominable. Everything must be curved and curved and curved and turned. The whole mass a tortured sprawl supposed artistic. And the floor-covers! Probably machine-weavings of oriental rug-patterns—pattern and texture mechanically perfect; or worse, your walls are papered with paper-imitations of old tapestry, imitation patterns and imitation textures, stamped or printed by the machine; imitations under foot, imitations overhead and imitations all around about you. You are sick in "imitation." Your much-molded woodwork is stained "antique." Inevitably you have a white-and-gold "reception-room" with a few gilded chairs, an overwrought piano, and, withal, about you a general cheap machine-made "profusion" of copies of copies of original imitations. To you, proud proprietors—do these things thus degraded mean anything aside from vague and price? Aside from your sense of quantitative ownership, do you perceive in them some fine fitness in form, line and color to the purposes which they serve? Are the chairs to sit in, the tables to use, the couch comfortable, and are all harmoniously related to each other and to your own life? Do many of the furnishings or any of the window-milliners serve any purpose at all of which you can think? Do you enjoy in "things" the least appreciation of truth in beautiful guise? If not, you are a victim of habit, a6 habit evidence enough of the stagnation of an outgrown art. Here we have the curse of stupidity—a cheap substitute for ancient art and craft which has no vital meaning in your own life or our times. You line the box you live in as a magpie lines its nest. You need not be ashamed to confess your ignorance of the meaning of all this, because not only you, but every one else, is hopelessly ignorant concerning it; it is "impossible." Imitations of everything, copies of copies, cheap-exponents, lack of integrity, some few blind gropings for simplicity to give hope to the picture.

That is all.

Why wonder what has become of the grand spirit of art that made, in times past, man’s reflection in his environment a god-like thing? This is what has become of it! Of all conditions, this one at home is most deplorable, for
to the homes of this country we must look for any beginning of the awaken-
ing of an artistic conscience which will change this parasitic condition to independent growth. The homes of the people will change before public buildings can possibly change.

Gamone for a moment behind this adventitious scene-painting pass-
ing, at home, for art in the nineteenth century. Try to sense the true condi-
tions underlying all, and which you betray and belie in the name of culture. Study with me for a moment the engine which produces this wreckage and builds you, thus cheapened and ridiculous, into an ignoble record.

Here is this thing we call the machine, contrary to the principle of organic growth, but irritating it, working irresistibly the will of man through the medium of men. All of us are drawn helplessly into its mesh as we tread our daily round. And its offices—call them "services"—have become the commonplace background of modern existence; yes, and to say, in too many lives the foreground, middle distance and future. At best we ourselves are already become or are becoming some cooperative part in this machine-
ery. It is, with us, as though we were controlled by some great crystallizing principle going on in nature all around us and going on, in spite of ourselves, even in our very own natures. If you would see how interwoven it is, this thing we call the machine, with the warp and the woof of civilization, if indeed it is not now the very hain of civilization itself, go at nightfall when all is simplified and made suggestive, to the top of our newest skyscraper, the Masonic temple. There you may see how in the image of material man, at once his glory and his menace, is this thing we call a city. Beneath you is the monster stretching out into the far distance. High overhead hangs a stagnant pall, its fetid breath reddened with light from myriad eyes endlessly, every-
where blinking. Thousands of acres of cellular tissue outspread, enmeshed by an intricate network of veins and arteries radiating into the gloom. Circulating there with turbulent ommomous roar is the ceaseless activity to whose neces-
sities it all conforms. This wondrous tissue is knit and knitted again and inter-
knit with a nervous system, marvelously effective and complete, with delicate filaments for hearing and knowing the pulse of its own organism, acting intelligently upon the ligaments and tendons of motive impulse, and in it all is flowing the impelling electric fluid of man's own life. And the latest breathing, murmur, clanger, and roar—how the voice of this monstrous force seeks to proclaim the marvel of its structure! Now at hand, the ghastly, warning boom from the deep throats of vessels heavily seeking the inlet to the waterway below, answered by the echoing clanger of the bridge bells. A distant shriek grows nearer, more ominous, as the bells warn the living current from the swaying bridge and a vessel cuts for a moment the flow of the nearer clanger. Clozing then upon the great vessel's stately passage the double bridge is just in time to receive in a rush of steam the avalanche of blood and metal hurled across it; a streak of light gone roaring into the night on glittering bands of steel; an avalanche encrusted in its flight by slender magic lines, clicking faithfully from station to station—its nervous herald, its warning and its protection.

Nearer, in the building blast with midnight activity, a spotless paper band is streaming into the marvel of the multiple-press, receiving indelibly the impression of human hopes 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. The impressions come forth as millions of neural foldings, perfected in sheets, with vivid appeals to good and evil passions; weaving a web of intercommunication so far-reaching that distance becomes as nothing, the thought of one man in one corner of the earth on one day visible on the next to all men. The doings of all the world are reflected here as in a glass—so marvelously sensitive this simple band streaming endlessly from day to day becomes in the grasp of the multitude—press.

If the pulse of this great activity—automatons working night and day in every line of industry, to the power of which the treasured mammal skeleton beneath your feet is but an awe-inspiring response—it thrilling, what of the prolific, silent obedience to man's will underlying it all? If this power must be unclouded that civilization may live, then civilization is already doomed. Remain to contemplate this wonder until the twinkling lights perish in groups, or follow one by one, leaving others to live through the gloom, fires are banked, tumul slowly dies to an echo here and there. Then the darkened pall is gradually lifted and moonlight outlines the shadowy, sullen masses of structure, structure deepening cut here and there by half-luminous channels. Huge patches of shadow in shade and darkness commingle mysteriously in the black-plain with blue-like skylines—contrasting strangely with the broad surface of the lake beside, placid and resplendent with a silver gleam. Remain, I say, to reflect that the texture of the city, this great machine, is the warp upon which will be woven the wood and pattern of the democracy we pray for. If zealit has been deposited here, particle by particle, in blind obedience to law—law so less organic so far as we are concerned than the laws of the great solar universe. That universe, too, in a sense, is but an obedient machine.

Magnificent power! And it confronts the young architect and his artist comrades now, with no other beauty—a lusty material giant without trace of idleness, absurdly disguised by garments long torn to tatters or contumaciously tossed aside, outgrown. Within our own recollection, we have all been horrified at the costliest of this ruthless development—applauded to see this great power driven by greed over the innocent and defenseless—we have seen bread snatched from the mouths of sober and industrious men, honoraole occupations going to the wall with a riot, a feeble strike, or a stiffened breath, outlasted, outdone, outlived by the machine. The workman himself has come to regard this relentless force as his nemesis and combines against machinery in the trades with a wild despair that flashes itself to pieces, while the artist blissfully dreaming in the halls we have just visited or walking blindly abroad in the paths of the past, berates his own people for lack better senses, rails against industrial conditions that neither afford him his opportuni- nity, nor, he says, can appreciate him as he, panader to ill-gotten luxury, folding his hands, staves to death. "Innocent man upon the cross of art! One by one, tens by tens, thousands by thousands, handcraftsmen and parasitical artists succumb to the inevitable as one man at a machine does the work of from five to fifty men in the same time, with all the art there is diable the far greater sew possibilities due to this same machine, and doing this disgracefully in the name of the beautiful".
American society has the essential tool of its own age by the blade, an lac erated hands everywhere testify! See the m agnificent prowess of this unpolished power—strewing our surroundings with the mangled corpses of a happier time. We live amid ghastly relics whose pattern once stood for cultivated luxury and now stands for an ignorant matter of taste. With no regard for first principles of common sense the letters of the alphabet are recklessly fed into capacious maws of machines until the reproduction, reproduced of, manuscripts, may be had for five, ten or ninety-nine cents although the worthy original cost ages of toil and patient culture. This might seem like progress, were it not for the fact that these butchered forms, the life entirely gone out of them, are now harried by parasites, belittling and falsifying any true perception of normal beauty the Creator may have seen fit to implant in us on our own account. Any idea whatever of fitness to purpose or of harmony between form and use is gone from us. It is lacking in these things one and all, because it is so sadly lacking in us. And as for making the best of our own conditions or re-creating the terms on which this vulgar insult to tradition is produced, therefore inviting and rectifying the industrial fabric thus wasted or enslaved by base imitation—the mere idea is abnormal, as I myself have lost to my sorrow.

And among the few, the favored chosen few who love art by nature and would devote their energies to it so that it may live and let them live—any training they can seek would still be a protest against the machine as the creator of all this igniability, when (God knows) it is no more than the creature.

But, I say, usurped by greed and deserted by its natural interpreter, the artist, the machine is only the creature, not the creator of this igniability! I say the machine has noble possibilities unwillingly forced to this degradation, degraded by the arts themselves. Insofar as the true capacity of the machine is concerned it is itself the crazed victim of artist-imposture. Why will the American artist not see that human thought in our age is stripping off its old form and donning another; why is the artist unable to see that this is its glorious opportunity to create and reap anew.

But let us be practical—let us go ahead for evident instances of machine abuse or abuse by the machine. I will show you typical abuses that should serve to suggest to any mind, capable of thought, that the machine is to begin with, a marvellous simplifier in no merely negative sense. Come now, with me, and see examples which show that these craft-engines may be the modern emancipator of the creative mind. We may find them to be the regenerator of the creative conscience in our America, as well, so soon as a stultified “culture” will allow them to be so used.

First—perhaps wood is most available of home-building materials, naturally then the most abused—let us now glance at wood. Elaborate machinery has been invented for no other purpose than to imitate the wood-carving of early handicraft patterns. Result? No good joinery. None salable without some horrible glued-on hackwork meaning nothing, unless it means that “art and craft” (by salesmanship) has fixed in the minds of the masses the elaborate old-hand-carved chair as ultimate ideal. The miserable tribute to this perversion yielded by Grand Rapids alone would mar the face of art beyond repair, to say nothing of the weedy or fuzzy joinery of spindles and
jig-sawing, beamed, braced and elaborated to outdoors in sentimentality the sentiment of some antediluvian overwrought "antique." The beauty of wood lies in its qualities as wood, strange as this may seem. Why does it take so much imagination—just to see that? Treatments that fail to bring out those qualities, foremost, are not plastic; therefore no longer appropriate. The inappropriateness cannot be beautiful.

The machine at work on wood will itself teach us—and we see so far to have left it to the machine to do so—that certain simple forms and handling serve to bring out the beauty of wood, and to retain its character, and that certain other forms and handling do not bring out its beauty, but spoil it. All wood-carving is apt to be a forcing of this material likely to destroy the finer possibilities of wood as we may know these possibilities now. In itself wood has beauty of marking, exquisite texture, and delicate nuances of color that carving is likely to destroy. The machines used in woodwork will show that by unlimited power in cutting, shaping, smoothing, and by the tireless repeat, they have emancipated beauties of wood-nature, making possible, without waste, beautiful surface treatments and clean strong forms that veneers of Sératora or Chippendale only hinted at with dire extravagance. Beauty unknown even to the Middle Ages. These machines have undoubtedly placed within reach of the designer a technique enabling him to realize the true nature of wood in his design harmoniously with man's sense of beauty, satisfying his material needs with such extraordinary economy as to put the beauty of wood in use within the reach of everyone. But the advantages of the machines are wasted and we suffer from a riot of aesthetic murder and everywhere live with debased handicraft.

Then, at random, let us take, say, the worker in marbles—his gang-saws, planers, pneumatic-chisels and rubbing-beds have made it possible to reduce blocks ten feet long, six feet deep, and two feet thick to sheets or thin slabs an inch in thickness within a few hours, so it is now possible to use a precious material as ordinary wall covering. The slab may be turned and matched at the edges to develop exquisite pattern, emancipating hundreds of superficial feet of characteristic drawing in pure marble colors that formerly wasted in the heart of a great expensive block in the thickness of the wall. Here again a distinctly new architectural use may bring out a beauty of marbles consistent with nature and impossible to handicraft. But what happens? The "artist" persists in taking dishonest advantage of this practice, building up imitations of solid piers with molded caps and bases, cunningly uniting the slabs at the edge until detection is difficult except to the trained eye. His method does not change to develop the beauty of a new technical possibility; no, the "artist" is simply enabled to "fake" more architecture, make more piers and column shafts because he can now make them below! His architecture becomes no more worthy in itself than the cheap faker that he himself is, for his classical forms not only falsify the method which used to be and believe the method that is, but they cheat progress of its due. For convincing evidence see any public library or art institute, the Congressional Library at Washington, or the Boston Library.

In the stone-cutting trade the stone-planer has made it possible to cut upon stone any given molded surface, or to ingrave upon that surface any lovely texture the cunning brain may devise, and do it as it never was possi-
ble to do it by hand. What is it doing? Giving us as near an imitation of hand-tooth-chiselling as possible, imitating moldings specially adapted to wood, making possible the lavish use of miles of meaningless molded string courses, cornices, base courses—the giant power meanwhile sneered at by the "artist" because it fails to render the wafering delicacy of "touch" re-
sulting from the imperfections of hand-work.

No architect, this man! No—or he would exceed that "antique" quality by the design of the contour of his seacans, making a telling point of the very perfection he breeds, and so sensibly designing, for the prolific dexter-
ity of the machine work which it can do so well that handwork would seem insufferably crude by comparison. The deadly facility this one machine has given "book architecture" is rivalled only by the facility given to it by galva-
nized iron itself, and if, incontinently, you will still have tracery in stone, you may arrive at acres of it now consistently with the economy of other features of this still fundamental "trade." You may try to imitate the hand-
carving of the ancients in this matter, baulked by the craft and tenderness of the originals, or you may give the pneumatic chisel and power-plane suitable work to do which would mean a changed style, a shift in the spiritual center of the ideal now controlling the use of stone in constructing modern stone buildings.

You will find in studying the group of ancient materials, wood and stone foremost among them, that they have all been rendered fit for plastic use by the machine! The machine itself steadily making available for eco-
nomic use the very quality in these things now needed to satisfy its own art equation. Burned clay—we call it terra cotta—is another conspicuous in-
stance of the advantage of the "process." Modern machines (and a process is a machine) have rendered this material so sensitive to the creative brain as a dry plate is to the lens of the camera. A marvelous simplifier, this material, rightly used. The artist is enabled to clothe the steel structure, now becoming characteristic of this era, with modestly beutiful, plastic roles instead of five or more different kinds of material now aggregated in confused features and parts, "composed" and supposedly picturesque, but really a species of cheap millinery to be mocked and warred by the sun, eventually beaten by wind and rain into a variegated heap of trash. But when these great possibili-
ties of simplicity, the gift of the machine, get to us by way of the architect, we have only a base imitation of the hand-tooled block—plastercop and base, veneers and carved spandrels of the laborious man-handled monstros-
ity of an ancient people's architecture!

The modern processes of casting in metal are modern machines too, approaching perfection, capable of perpetuating the imagery of the most vividly poetic mind without biassence—putting permanence and grace within reach of every one, herefore forced to sit equine with the Italian at their Belthazzar feast of "remains." Yes, without exaggeration, multi-
tudes of processes, many now, more coming, await sympathetic interpreta-
tion, such as the galvano-plastic and its electrical brother—a prolific hoste,
now cheap makers imitating "real" bronzes and all manner of metallic a-
tiques, secretly daunting all of them in their vital, if not openly giving them away. And there is electro-plating, diminished because its straight lines in clus-
work are too severely clean and delicate. Straight lines it seems are not so
susceptible to the traditional designer's lack of touch. Stream lines and straight lines are to him severely unprofitable. "Curved is the line of beauty"—says he! As though nature would not know what to do with its own rectilinearity!
The familiar lithograph, too, is the prince of an entire province of now reproductive but unproductive processes. Each and every one has its individualities and therefore has possibilities of its own. See what Whistler made and the Germans are making of the lithograph: one note sounded to the gamut of its possibilities. But that note rings true to process as the sheen of the butterfly's wing to that wing. Yet, having fallen into disrepute, the most this particular "machine" did for us, until Whistler picked it up, was to give us the cheap imitation effects of painting, mostly for advertising purposes.
This is the use made of machinery in the abuse of materials by men. And still more important than all we have yet discussed here is the new element entering industry in this material we call steel. The structural necessity—once shaped Parthenons, Pantheons, cathedrals, is fast being reduced by the machine to a skeleton of steel or its equivalent, complete in itself without the artist-craftsman's touch. They are now building Gothic cathedrals in California upon a steel skeleton. Is it not easy to see that the myriad ways of satisfying ancient structural necessities known to us through the books as the art of building vanish, become history? The maturing of their physical existence now removed, their spiritual center has shifted and nothing remains but the impassive features of a dead face. Such is our "classic" architecture.

For centuries this insensible or insani abuse of great opportunity in the name of culture has made clearly, strongly and truly simplicity impossible in art or architecture, whereas now we might reach the heights of creative art. Rightly used the very curse machinery puts upon handmade should emancipate the artist from temptation to petty structural deceit and end this wearisome struggle to make things seem what they are not and can never be. Then the machine itself, eventually, will satisfy the simple terms of its modern art equation as the ball of clay in the sculptor's hand yields to his desire—ending forever this nostalgic masquerade led by a stuftified culture in the name of art.

Yes—but he does not know it, the artist is now free to work his rational will with freedom unknown to structural tradition. Units of construction have enlarged, rhythms have been simplified and externalized, space is more spacious and the sense of it may enter into every building, great or small. The architect is no longer hemmed by the stone arch of the Romans or by the stone beam of the Greeks. Why does he cling to the grammatical phrases of these ancient methods of construction when such phrases are in his modern work empty lies, and himself an inevitable liar as well.

Already, as we stand today, the machine has weakened the artist to the point of destruction and anticipated the craftsman altogether. Earlier forms of art are by abuse all but destroyed. The whole matter has been reduced to mere Bose. Instead of joyful creation we have all around us poisonous tastes—foolish attitudes. With some little of the flavor of the old love, and creditable but pitiful enthusiasm, the young artist still keeps on working.
making miserable mischief with lofty motives: perhaps, because his heart has not kept in touch or in sympathy with his scientific brother's head, being out of step with the forward marching of his own time.

Now let us remember in forming this new Arts and Crafts Society at Hull House that every people has done its work, therefore evolved its art as an expression, of its own life, using the best tools, and that means the most economic and effective tools or contrivances it knows; the tools most successful in saving valuable human effort. The chattered slave was the essential tool of Greek civilization, therefore of its art. We have discarded this tool and would reduce the return of the art of the Greeks were slavery the terms of its restoration, and slavery, in some form, would be the terms.

But in Greek art two flowers did find spiritual expression—the acanthus and the honeysuckle. In the art of Egypt—similarly we see the papyrus, the lotus. In Japan the chrysanthemum and many other flowers. The art of the Occident has made no such sympathetic interpretation since that time, with low credit given to the English rose and the French Fleur de liis, and as things are now the West may never make one. But to get from some native plant an expression of its native character in terms of imperishable stone to be fitted perfectly to its place in structure, and without loss of vital significance, is one great phase of great art. It means that Greek or Egyptian found a revelation of the immest life and character of the lotus and acanthus in terms of lotus or acanthus life. "But was what happened when the art of these people had done with the plants they most loved. This imaginative process is known only to the creative artist. Conventionalization, it is called. Really it is the dramatizing of an object—true "drama." To enlarge upon this simple figure, as an artist, it seems to me that this complex matter of civilization is itself at bottom some such conventionalizing process, or must be so to be successful and endure.

Just as any artist craftsman, wishing to use a beloved flower for the stone capital of a column shaft in his building most conventionalize the flower, that is, find the pattern of its life-principle in terms of stone as a material before he can rightly use it as a beautiful factor in his building, so education must take the natural man, to "civilize" him. And this great new power of the dangerous machine we must learn to understand and then learn to use as this valuable, "conventionalizing" agent. But in the construction of a society as in the construction of a great building, the elemental conventionalizing process is dangerous, for without the inspiration or inner light of the true artist—the quality of the flower—its very life—is lost, leaving a withered husk to the place of living expression.

Therefore, society in this conventionalizing process or culture, has a task even more dangerous than has the architect in creating his building forms, because instead of having a plant leaf and a fixed material as artistic architecture had, we have a sentient man with a fluid soul. So without the inner light of a sound philosophy of art (the educator too, must now be artist), the life of the man will be sacrificed and society gain an automaton or a machine-made moron instead of a noble creative citizen!

If education is doomed to fail in this process, utterly—then the man slips back to rudimentary animality or goes on into decay. Society degenerates or has a more realistic creature instead of the idealistic creature needed.
The world will have to record more "great dead cities."

To keep the artist-figure of the flower dramatized for human purposes—the socialist would bow his neck in altruisitc submission to the "harmonious" whole; his conventionalization or dramatization of the human being would be like a poor stone-craftsman's attempt to conventionalize the beloved plant with the living character of leaf and flower left out. The anarchist would pluck the flower as it grows and use it as it is for what it is—with essential reality left out.

The hereditary aristocrat has always justified his existence by his ability, owing to fortunate propinquity, to appropriate the flower to his own uses after the craftsman has given it life and character, and has kept the craftsman too by promising him his flower back if he behaves himself well. The photocrat does virtually the same thing by means of "interests." But the true democrat will take the human plant as it grows and—in the spirit of using the means at hand to put life into his conventionalization—preserve the individuality of the plant to protect the flower, which is its very life, getting from both a living expression of essential man-character fitted perfectly to a place in society with no loss of vital significance. Fine art is this flower of the man. When education has become creative and art again prophetic of the natural means by which we are to grow—we call it "progress"—we will, by means of the creative artist, possess this monstrous tool of our civilization as it now possesses us.

Grasp and use the power of scientific automatons in this creaturc sense and their terrible forces are not antagonistic to any fine individualistic quality in man. He will find their collective mechanistic forces capable of bringing to the individual a more adequate life, and the outward expression of the inner man as seen in his environment will be genuine revelation of his inner life and higher purpose. Not until then will America be free!

This new American liberty is of the sort that declares man free only when he has found his work and effective means to achieve a life of his own. The means once found, he will find his due place. The man of our country will thus make his own way, and grow to the natural place due him, promised—yes, promised by our charter, the Declaration of Independence. But this place of his is not to be made over to fit him by reform, nor shall it be brought down to him by concession, but will become his by his own use of the means at hand. He must himself build a new world. The day of the individual is not over—instead, it is just about to begin. The machine does not write the doom of liberty, but is waiting at man's hand as a peerless tool, for him to use to put foundations beneath a genuine democracy. Then the machine may conquer human drudgery to some purpose, taking it upon itself to broaden, lengthen, strengthen and deepen the life of the simplest man. What limits do we dare imagine to an art that is organic fruit of an adequate life for the individual? Although this power is now murderous, chained to batchwork and bunglers' ambitions, the creative artist will take it readily into his hand and, in the name of liberty, swiftly undo the deadly mischief it has created.