Journal of The American Institute of
ARCHITECTS

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September, 1946

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PUBLISHED MONTHLY AT THE OCTAGON, WASHINGTON, D. C.

JOURNAL OF
THE AMERICAN INSTITUTE OF ARCHITECTS

SEPTEMBER, 1946 VOL. VI, No. 3

Contents

ILLUSTRATIONS

The *Journal of The American Institute of Architects,* official organ of The Institute, is published monthly at The Octagon, 1741 New York Avenue, N. W., Washington 6, D. C. Editor: Henry H. Saylor. Subscription in the United States, its possessions and Canada, $3 a year in advance; elsewhere, $4 a year. Single copies 35c. Entered as second-class matter February 9, 1929, at the Post Office at Washington, D. C.

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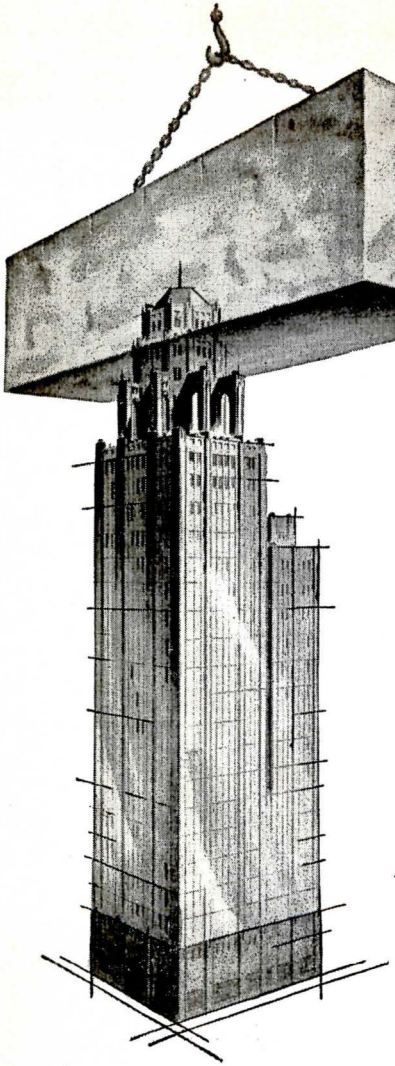

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—Luke, XIV, 28

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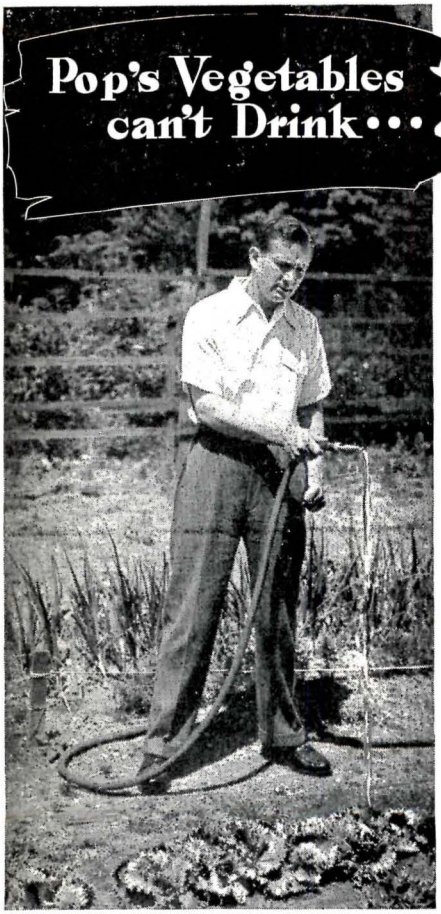

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Today's Draftsmen—I

By Charles F. Cellarius, F.A.I.A.

Expansion of informal remarks by the author before the Miami Beach meeting of the Association of Collegiate Schools of Architecture on May 7, 1946. Part II, dealing with the qualities desired by a practitioner in his draftsmen, will appear in the October JOURNAL.

THERE probably has never been a time when architectural offices were as confused in organization as they have been over the last few years. In the War period most of the younger draftsmen left for the armed services; the older draftsmen in considerable numbers moved to Government drafting-rooms or to the few larger offices that had extensive commissions for War industries.

The thousands of small architectural offices in the United States saw most of their draftsmen disappear. This was not a calamity, because most of these offices had little or no work. The offices of those architects which did have contracts for War factories grew in some cases to previously unknown size, with some offices having more than 500 draftsmen.

Following the end of the War, there has been a considerable shifting of personnel. Some of the large offices have remained large, though considerably reduced from their Wartime peaks; but on the whole there has been a movement from the Wartime offices and from Government drafting-rooms back to the small architectural firms. The draftsman returning from the armed services has usually come back to his previous employer or to some firm in a similar category.

There has, however, been a certain loss in this shifting. Some draftsmen have permanently left the architectural field, thus creating a shortage of draftsmen. This shortage has been made more acute by the fact that during the War period very few boys were trained in the architectural schools and very few young men entered architectural offices as cub draftsmen. This would create a problem in a normal period; it creates an even more serious problem in the present period, which is going to show

an abnormal amount of work for the private practitioner of architecture.

We hear a great deal today about the very serious shortage of small homes, particularly for veterans. While this may not be of great importance to the architect, excepting those in small communities, and those young men in the early years of practice, there is an almost equally severe shortage of many other kinds of buildings.

The G.I. Bill of Rights has offered educational facilities to the returning veterans. Colleges which would normally have been crowded after the War are now utterly swamped. They have an urgent need of new dormitories as well as additional classroom buildings.

During the War, with a scarcity of materials, churches did little building. Now hundreds of them are anxious to expand their present facilities or to build new edifices. Hospitals and other institutions, likewise, met only their most urgent maintenance requirements during the War and are now in need of considerable expansion. To this there must be added the tremendous hospital program that the Government is undertaking. Likewise, school building throughout the country is starting upon a tremendous expansion.

We have not yet felt the real impact of this building program. The continued scarcity of materials and now the restrictions designed to channel construction facilities to veterans' housing have so far prevented any great amount of actual construction, but larger architectural offices are loaded with commissions for work that will be built as soon as conditions permit. Many architects have had to turn clients away. Some of the smaller offices that do considerable residence work have been greatly retarded by the present restrictions for veterans' housing, but as soon as those restrictions are raised, they also will probably be busy.

We may safely say, therefore, that there is a greater need for draftsmen throughout the entire profession than has been seen before in the lifetime of most of us.

I know that you of the architectural colleges are doing all that you can to make up for the lost years, and are starting the training of as many young architects as possible. It is obvious, however, that you cannot turn out many draftsmen next week or even next year. The architect will have to take care of his present need for

draftsmen by bringing in young men, new to the architectural field, with the addition of such draftsmen as he can get from allied professions. These are not likely to be many, because the engineering profession, from which most of them would come, is likely to be as busy as the architectural. Moreover, any practicing architect knows that it is sometimes as difficult to make a good architectural draftsman out of an engineer as it is from a boy with no experience at all.

The practicing architect realizes, therefore, that a training program for apprentice draftsmen is likely to be of very great value. The colleges can render an important assistance by giving some theoretical training to these apprentices. I would take it that there are going to be two problems in this field: (1) The training of new draftsmen from civilian life; and (2) The training of returning veterans under the Government program.

It is to the interest of the profession, and it certainly is the desire of the A.I.A., to cooperate with the schools in the training of draftsmen and of future architects. The profession can be counted on for advice and for assistance in placing men. There should be definite effort made for closer cooperation between the schools and the profession—in the matter of the present emergency as well as in the matter of architectural education generally.

I hope that its Department of Education and Research, presently to be established by the A.I.A. as a part of the reorganization of its structure, will bring the schools to a better understanding of what an architect needs as the foundation for his profession, and that it will also bring to the profession a greater interest in the problems of the schools.

As far as the veteran program is concerned, the Government offers to the returning veterans financial assistance in securing an education. Most of you are familiar with the part of this program that permits him to attend college and get paid for doing so. Possibly you are not as familiar with the program for on-the-job training. In brief, it permits any returning veteran to enter a factory, firm or professional office which has qualified as being competent to offer training in a particular field. During the period of training the veteran is paid by the employer whatever he

The Social Significance of Urban Planning

By Jerrold Loebl

Excerpts from an address before the 78th Convention, A.I.A. at Miami Beach, May 9, 1946.

URBAN PLANNING presupposes that the acts of men shall be cooperative and responsible—rather than uncooperative and irresponsible. Urban planning recognizes that, just as a whole is greater than any of its parts, so the common interest of the community is greater than any separate interest. Indeed, the capacity to think and act wisely for a common good is what differentiates a society from a horde or a mob. This, I hold, is the essential social significance of urban planning.

The rights and the needs of the individual can be protected only if men acknowledge a common responsibility to protect the welfare of all men. We might truly say that a good life is possible only in a good community. We, today, who are citizens of a world piteously broken and ruined by despotism, racial tyranny, and by wars that shake the nerveless earth, must know by now that the only safeguard of life, liberty and the pursuit of happiness is social responsibility, moral and mature. This is the very citadel of mankind.

If urban planning is not based on responsibility to human life, it is socially insignificant. It is a counterfeit—unreal and therefore valueless. For *life itself* is the only reason for planning.

True urban planning must deal with human needs, with reality. The nineteenth century ignored the human needs of city planning altogether. Our great industrial city, with its ominous slums, its smoke-laden air, its noisy and dangerous streets, its sprawling disorder, is but the expression of ignoring needs.

Yet today counterfeit city planning equally ignores human needs. It deals instead with expediencies. It deals not with reality, but with deceptive assumption; not with facts, but with phantoms. This false city planning — based not upon principles and knowledge, but upon some moment-to-moment inspiration, some wishful thinking —is more than merely ineffectual. It can cause the greatest mischief.

Despite the best intentions, *it really deals with the devil.*

Such city planning, quite sincerely aghast at the slums, proposes to tear down the old buildings and build new tenements on the same ground. Since the greater portion of every large industrial city is already a slum, the proposal carried to its logical end really means tearing down most of the city. But like a magician, this city planning pulls a rabbit out of a hat. Much to everyone's surprise, a label on the bunny's neck says "Free Enterprise." Apparently, tearing down a city is to be a profitable business. Investors will be glad to invest their money in slums. They only await a word of encouragement. It matters not a whit that billions have already been lost in the shrunken real estate values. This is now Utopia. Everyone makes money, and no one ever loses.

In the real world, however, a slum is not at all a business opportunity. It is simply a place where no one wants to live. A slum does not satisfy human needs. And there are reasons.

The industries of the nineteenth century were located without any regard for the community as a whole. Aside from the need to be on a railroad line, location was purely arbitrary. As a result, great sections of the city were blanketed under industrial smoke and fumes. Naturally, as the industries spread and thickened through the years, people who could afford it moved to the country-like outskirts of the growing city. The old buildings were then divided into smaller quarters and rented to the poor. Because the poor could not pay an adequate rent, the owners could never afford to repair or replace the old tenements, now tumbling.

As the city spread ever outward, ever more miles of masonry and pavement imprisoned the slum dweller within the center of the city. Adequate parks and open spaces were, of course, in that benighted era, never provided. Iron doors banged shut. Trees and grass and the springtime air belonged to the outside world. To generations of children, the farmer's cow was as legendary as the unicorn. *Factories* were the forests of the slums. The streets were the playgrounds of the young. Hangouts and brothels were the schools. Alleys were the lanes, and filth was the flowers. *Gray* are the gardens of the poor.

Yet some city planners tell us that the slum is really the choicest

city were otherwise perfect and desirable, it still could not continue. For the only safe defense against aerial attack is urban dispersal. If we merely count on peace, we may soon be both wrong and dead.

Lewis Mumford, in "Values for Survival," clearly states the problem of our time: "We live in a world that in less than fifty years has become mechanically *unified* by the radio, the airplane, the motor car; but morally and spiritually this world is more disrupted and confused and beset by conflict than it was at the beginning of the nineteenth century. We have created a civilization in which the machine has become a miracle of applied science and rational effort while men themselves have become the victims of misapplied science and irrational effort. Men have regimented machines only to become themselves the victims of that regimentation. Man's own culture has not grown in maturity to keep pace with the energies and materials he must now, at his own peril, control. Infantilism in many forms, in the form of superstition, wishful thinking, irresponsible frivolity . . . has reached gigantic proportions, at a moment when our democratic society needs the constant support and guidance of mature, responsible, active citizens in every part of the body politic."

Notwithstanding, if we as architects recognize plainly the predicament of our time, we could take the first step forward. By planning we could begin. Our plan, however, must be more than a plan in the sense merely of lines—something higher than the curbstone level. It should be a framework for life and a restoration of lost values, for a man surely is more than an ant in an anthill. Our plan should give us back again the good things of life that the great cities destroyed: pure air to breathe, sweet with the smell of the seasons, and sun-filled houses, and a piece of earth to till for pleasure or for fruit and vegetables to eat. The world is wide enough for gardens and apple trees, as well as factories. It is wide enough for parks and forests, where children can play and really belong in the scheme of things; where lovers have lanes; and the aged can sit in the sun—in a city where machines are the servants of men, rather than men the sad degenerate mimics of machines.

If there are clear heads and eager hearts, we are not lost. Men

ever have beaten swords into plowshares. If we are good smiths—good architects—and *have the courage,* we can sieze metal white-hot, and shape it nearer to our hearts' desire.

"Mr. Chairman, Ladies and Gentlemen—"

By R. W. Crum

Excerpts reprinted by permission from an address before the American Concrete Institute by one of its past-presidents, under the original title of "Technical Tedium or Otherwise." The trials of the oratorical aspirant are not limited to the engineering profession.

AT LAST your time has come; after hours of waiting through the interminable and boring speeches of your fellow conferees the chairman is about to call upon you. He announces your paper; you rise and, accompanied by a scattering of perfunctory applause, walk briskly to the platform, only stumbling on the top step and getting your feet tangled in the wires strewn around the floor for the loud-speaker apparatus.

"Mr. Chairman, ladies, and gentlemen," you say, and reach in your inside coat pocket for the paper. Consternation reigns for a moment when you find it isn't there, but you haven't quite lost all of your presence of mind yet and remember that you put it in your left-hand outside coat pocket. Fishing it out, you are ready to go ahead after first disburdening yourself of the few ill-chosen introductory words that you have been mulling over for the last hour and a half.

Your labored joke doesn't get much of a laugh but you are too flustered to bother about that. Grasping your bulky manuscript firmly but shakily in both hands and carefully avoiding the "mike," if there be one, you start to read. After reading one page you are somewhat appalled by the magnitude of the remaining task. You wonder momentarily if you are going to be able to get through in the allotted twenty minutes. But you haven't time to worry about that now, and anyway time alone will tell. Gluing your eyes to the page you proceed. About this time some ill-mannered person in the rear of the room calls "Louder." Rather resentfully you raise your

voice for a few lines but you can't think of that and keep your place at the same time, so your voice soon fades down to your usual tone and thence forward you pay no attention to such unwarranted distractions.

By this time you have recovered some of your self-confidence and most of the shakiness is gone and you are forging ahead full-steam. But you don't dare glance at the audience or it will return and you will lose your place. On and on you go without thought of time. By and by you become aware that the chairman is trying to convey some sort of signal to you, but you can't take on his troubles too, and you keep on reading 'till you realize that you have come to that welcome period when you can show the pictures.

Saying, "I have some lantern slides that I would like to show if there is time," you start a search for the pushbutton that will signal the operator; finding it, after some confusion, grasped firmly in your right hand.

The first slide comes on and, turning your back to the audience, you rather confidentially tell the screen what the picture is about. This takes some time as it is a complicated table with lots of data. This part of the speech doesn't take over a half hour, as there are only about a dozen of the slides crammed with tabulated data and intricate curves. In doing this you repeat practically everything you read before the pictures came on.

As the lights return you notice that the chairman is about to have apoplexy, and there is a red light shining on the reading desk in front of you, but the whole point will be lost unless you read your conclusions and so you struggle on manfully to the bitter end.

At last there is no more to read. You say, "I thank you" and stagger from the platform with the beginning of a mild inner glow that says to you "Well done." This feeling is heightened by the applause which is louder this time, indicating that the audience's feeling of relief that you are through is slightly greater than its courtesy in giving you a hand when you started. To tell the truth, no one has listened for the last 45 minutes.

The chairman is now saying, "I am sorry that on account of the fact that we are way behind our schedule it will be necessary to defer the discussion of this interesting paper and proceed to the next item on the program."

You think, resentfully, that if the speakers before you hadn't taken so much time there might have been some interesting discussion of your absorbing topic. But you are too overwhelmed with relief at having the thing done to cherish that feeling long, and settle down on the end of your spine to enjoy the next paper in a rather comatose condition.

But instead of being soothed by a gentle flow of monotone as you expect, something seems to be happening; your lethargy is being dispelled; the man on the platform is talking in such a way that you are becoming interested in spite of yourself. He is reading from a manuscript but from the way he is holding it you can tell it isn't very long. And he seems to know what he is saying so well that he can look up and actually talk to the audience most of the time.

It doesn't take him very long to tell what the paper is about and why, and then he jumps right over the tedious details of what he did, which took so much time in your paper, and goes on to tell what he found out. Soon he comes to a place where some illustration is indicated. Without pausing in his stride, he signals the operator and a slide comes on the screen; just a simple little table that anyone can grasp at a glance but full of significance. Glancing over his shoulder to make sure the picture is the right one, the speaker describes it quickly and goes on to the next thought in his paper. Presently he comes to the next slide. This time it is a diagram; just a single curve, but illustrating a telling point forcefully and without loss of time.

Well, time has been getting on and the chairman even in this case signals the speaker that his time is about up. Strangely, this doesn't seem to disconcert him; he just goes for the last sheet of the manuscript, reads it quickly and makes a graceful exit. Too good to be true—for a burst of appreciative applause wakes you up and you realize that at least part of this remarkable performance has been the figment of a dream, but the man has done a good job and got through almost on time. Maybe he took the secretary's letter of instructions seriously.

Musing on this while sticking out the rest of the program you think, "I wish I could present a paper like that," and later, being a person reasonably quick on the intake and still having plenty of self-confidence, you say to your-

self, says you, "By heck, I *can* do a job like that." And so, being a confirmed convention hound and a man of experience and ideas, besides having opportunities to write technical papers, you make yourself over into a forceful and interesting speaker by means of a few simple principles based upon your illuminating flash of insight while drowsing through a dreary session.

1. You realize that most technical papers have to be long enough to cover the subject thoroughly with supporting data to satisfy the studious reader who will ultimately use your material, but you also realize that there is no need to present all this orally and that no one would get it even if you did. No one can get the good out of a technical paper by reading it just once. Many passages must be read and reread and studied, so why should you expect anyone to grasp it all instantly while you read it to him? Better just read him the significant parts that he can assimilate as you go along.

2. It is apparent therefore that the first thing to do is to prepare a condensed version of the paper that can be read in the allotted time. Twenty minutes is about right, although some gifted persons can hold an audience with a dry subject for thirty.

In this version, tell what you did and why you did it, and then jump right over the dreary details of how you did it and tell about what you found out that is new and interesting.

3. Having written the condensed version, read it aloud for timing. Then rewrite it so that the time will just be nicely filled. Then rehearse it—to your wife, or secretary, or the mirror until you can deliver it with some degree of animation and direct appeal to the audience. (It sometimes helps to pick out someone who looks as if he agrees with you and aim many of your remarks at him. His nods will spur you on, or else pick out a dumb-looking one and see if you can wake him up.)

4. But let's not forget the slides. If well done they can add greatly to the quick comprehension of a technical talk. Just remember to express only one idea on a slide and make it so simple that about all you need to do is name it. It is best to use the slides to illustrate points as you go along. If left to be shown all together at the end there is a great tendency to waste time repeating what has already been said.

5. Sometimes you do miscalculate and the chairman calls time on you before you are quite through. Why not provide in advnace for this contingency and if it arrives, just turn to the closing statement you have already prepared, read it and stop?

6. After you have prepared and delivered a few papers in this way you will probably discover for yourself that there is an even better way. Go ahead and write the short version, then write an outline of it, then memorize the outline and soak yourself in your subject 'till you don't need a manuscript. Just talk and follow the outline in the back of your head. Of course it is a good idea to have a copy of the outline on small cards in your pocket in case of emergency. You are not likely to need it, but if you do it will save the day. Doing it this way it is also easy to go too long and bring the chairman's warning down on you, so have that prepared closure all ready to grab and read if you haven't had time to memorize it.

7. This is not intended for a discourse on technical writing, but one principle should be mentioned that is of particular importance in preparing a short paper for oral presentation.

Write simply, using short common-usage words and as few of them as possible.

For instance, to say: "When concrete is being placed during cold weather and the air temperatures may be expected to drop below 35 degrees Fahrenheit, a sufficient supply of straw, hay, grass or other suitable blanketing material shall be provided along the line of the work and any time when the air temperature is expected to reach the freezing point during the day or night, the material so provided shall be spread over the pavement to a depth to prevent freezing of the concrete before it has thoroughly hardened," may be perfectly good specification writing, but if you want to make the point in a speech why not say: "During freezing weather freshly laid concrete pavement should be protected by a suitable insulating layer."

On reading this thing over, it doesn't seem so difficult; I don't think one needs to be an expert to follow these rules. I think I will try it myself some day.

Inventory of Destruction in Italy

A summary of War damage in Italy by Professor ERNEST T. DEWALD, of Princeton University, who has resumed his academic duties in the department of art and archaeology after three years of service as director of the Monuments, Fine Arts and Archives Subcommission of the Allied Commission in the Mediterranean Theater.

WITH the exception of eighteen paintings, all of the movable works of art in important Italian collections survived the war undamaged. The missing paintings disappeared while being transported in a German truck from Florence to a Nazi art cache in the Southern Tyrol. Not even the Germans, Professor DeWald said, have any idea what happened to the pictures.

Nearly three-quarters of Italy's great works of art reached the sanctuary of the Vatican by various means. Even the Germans deposited some there. Others were secreted in back-country monasteries and other spots of presumed safety. Still others were carted off by the Nazis and were recovered from the Austrian salt mines where they had been stored.

Important buildings were not so fortunate in escaping war damage, but considering the intensity and scope of the military action, it is amazing that so much survived.

Professor DeWald gave the following general summary of damage in various Italian centers:

BENEVENTO: Cathedral demolished by air raid; Arch of Trajan intact.

POMPEII: Only slight damage to important monuments, despite 200-bomb raid.

PAESTUM: Ancient temples unscathed.

NAPLES: Fourteenth-century Church of Santa Chiara, containing tombs of Angevin kings, gutted; a dozen other churches damaged.

MONTECASSINO: Abbey destroyed.

ROME: Western half of Church of San Lorenzo demolished; damage to other structures minor.

TIVOLI and FRASCATE: Widespread destruction, particularly at latter which was German headquarters; Temple of Diana at Tivoli escaped.

UMBRIA region (Assisi and Perugia): Little damage.

TUSCANY region: Siena untouched; railroad area at Arezae

OFFICE OF THE PRESIDENT OF UNION OIL COMPANY
LOS ANGELES, CALIFORNIA

KAUFMANN, LIPPINCOTT & EGGERS, ARCHITECTS
Kem Weber collaborating in design of the furniture

The president's office is an extension of the Board Room, shown on the following page

BOARD ROOM OF THE UNION OIL COMPANY
LOS ANGELES, CALIFORNIA

KAUFMANN, LIPPINCOTT & EGGERS, ARCHITECTS
Kem Weber collaborating in design of the furniture

This room and the president's office (preceding page) are in effect one room, separable by a folding partition

wiped out, but little damage to important works.

FLORENCE: Ponte Vecchio, oldest bridge, is only bridge standing; colorful part of old Florence around Ponte Vecchio wrecked, but no first-class monuments ruined.

PISA: Thirteenth-century Campo Santo, containing fourteenth-fifteenth- and sixteenth-century frescoes and ancient and Renaissance sculpture, gutted; baptistry, cathedral and Leaning Tower of Pisa intact.

BOLOGNA: Damage to Church of San Francesco, containing tomb of Pope Alexander V, and the Archiginnasio, city library.

RIMINI: Badly damaged, as were most east-coast cities; Malatesta Temple injured.

GENOA: Baroque and Renaissance palaces damaged.

MILAN: Center of town burned out; cathedral untouched; Leonardo da Vinci's "Last Supper" survied unharmed behind protective wall of brick, despite bomb explosion in courtyard which blew down one wall of the room.

The Allied Subcommission made only temporary repairs to damaged monuments, leaving permanent restoration to the community or national government.

Professor DeWald said that damage to archives and libraries had been slight. For the most part, books, papers and records had not been moved, during the War, from their normal repositories.

Speaking of the inherent pride of the Italian and the Austrian in his country's art, Professor DeWald told of exhibitions of treasures staged by the Allied Subcommission in Rome and Vienna for the enjoyment of the inhabitants and the occupying troops. Thousands of persons came to see the exhibitions. The fact that these art objects were safe and were again on public display after so many years seemed to lift the morale of the populace of the two cities.

> "We may give up too much in an effort to obtain the theoretical maximum of sunlight . . . There is something to be said for a plan in which all the rooms do not have exactly the same aspect and in which all the blocks do not look exactly alike."
>
> —Prof. Sir CHARLES REILLY, F.R.I.B.A.

Design and People—II

By Richard M. Bennett

CHAIRMAN, DEPARTMENT OF ARCHITECTURE, YALE UNIVERSITY

An address before the Boston Society of Architects and architectural staff and students from Harvard, Yale, M.I.T. and Boston Architectural Center, May 4, 1946. Part I of the address appeared in the August JOURNAL.

NOW MY MAIN POINT: the relation of architecture, industry and industrial design. As industrialization proceeds, we must accept the fact that more and more parts of our buildings will not be designed for that building, but the building will become as assembly of the parts. Agree on this we must, and then let us ask ourselves how much the profession of architecture is concerning itself *directly* with the quality of the design of the parts of buildings. I don't mean the architectural parts that are fastened in, I mean the furniture and radios, plug-in electric equipment, Venetian blinds, carpets. I invoke the spirit of Vitruvius, who established the idea that the province of the architect is the design of all useful things. You will find that ancient fellow discoursing on the design of cities as well as buildings, and he includes waterclocks and musical instruments too.

I would like to emphasize the fact that manufacturers would *like* to put out the best possible quality of merchandise — and quality includes *design*. Rightly or wrongly, the manufacturer feels he is limited by public taste; he wants design the success of which can be measured.

In industrial production, departments of quality control are common. It is possible for the physicist and chemist to establish tests to fix standards of strength, durability, color-fastness, washability and other tangible factors in a piece of merchandise, but they offer no measurement for appearance, design fitness — the transcendental qualities for which we as designers have the greatest concern. Unfortunately, the controllers of the machine are not very much interested in transcendental matters. They need design reassurance as to how many people will desire a product. Their production schedules, tooling costs and advertising budgets must be based on some reasonable prediction of success in their ventures. Although these

men know that design is an important factor in that potential success, they distrust the architect as an influence on this product. The fact is that for two generations that portion of our society entrusted with creative design has failed to measure up to its total task; it has looked backward to established forms, denied the power of the industrial revolution, retreated to historical rather than creative disciplines.

It was in desperation, during the great depression, that the advertisers created a separate profession to design for the machine. For a while this has proved a happy hunting-ground; the novelty of new shapes paid off; but now that all manufacturers have fancy new shapes, things are even again.

Once more the producer needs assurance beyond the opinions of designers, and, for the goal of quality, there has been built a new objective called "acceptance." Acceptance can be measured. The consumer-survey works for design and art as well as it does for political predictions. The stockholders of the Curtis Publishing Company have recently been informed of that company's delight in this new tool. For they have supplemented the editor's art with measurable acceptance. A story submitted to a panel composed of a proper cross-section of readers can be diagnosed into percentages of readership, and it is possible to predict how many of those who do read it will like it. The same is true of movies, to the extent that the same movies may have a happy ending in one region and a tragic one in other areas. The same accurate gauging can be applied to consumer products — architectural design. This pleasing of the public, aiming at weaknesses, is appalling to the Puritan spirit. This calculated subservience to average taste, the waste of effort in confirming existing attitudes, this tool for the philistine, is abhorrent to the artist mentality, because the artist wants change, wants improvement if possible, wants to create a fresh world. The picture ahead seems black.

But there are two factors to lighten the blackness. First, taste does change. The rug liked most this season will not test out to be the best-seller of next year. The consumer wearies of this year's fashion, this month's story idea. There is trend, there is influence at work. Our people are not static; they, too, continually seek something better.

Second, the manufacturer cannot stand a saturated market, and is forced to introduce new styles or fashions in order to stimulate business. To do this he must undertake adult education, using advertising and publicity to set different standards of taste, creating new acceptance values. He must have new design. True, the objective the manufacturer sets will be fashion, not essential rightness, and his final choice will be chosen on its predictable successful acceptance. But, this, too, is not as bad as one might at first think, for tests prove that the public is often more advanced in taste than the salesman—that mass taste is more to be applauded than the prejudices of an individual producer.

So, we get back to education again; the controllers of the machine can test the acceptance, but they cannot control the results of the taste test. Our task is to play a stronger part in educating mass taste, for architecture can be a more decisive factor in our total culture. It is often easy for me to be overoptimistic, to read more into a situation than exists, but I believe a great deal of the cleanness that there is in contemporary design, and the direction toward simplicity, is to a great extent due to the influence of modern architecture. Just a few years ago one could tell the relative value of a motor car by the amount of chrome trim; today it is the popular-priced car which is embellished, and the expensive models are trim, by being trimless.

It is the responsibility of the architectural schools to provide designers for the parts of buildings, even as they provide building designers and those whose concern it is to plan the spaces between buildings. Not that they are not doing it now, but indirectly. Many of the principal assistants to the professional industrial designers are architect-trained. Industries maintaining their own design staffs want architects. In both cases the architect undergoes retraining; new values are established, and far too often merchandising, rather than excellence, becomes the design objective.

Though our curricula seem crowded now, some means must be found to teach industrial production as well as construction and assembly. The architectural profession must do more than recognize the existence of the industrial revolution, must do more than attempt to do prototypes for ma-

chine-age buildings, to be built by craft methods. The architectural approach, the professional attitude, must begin to do a better job *within* industry. I do not care what these students call themselves later in life—architects or industrial designers; history can determine that. Our job in education is to fill the need.

Great art has had its roots in the life of the people. Sensibility must be returned to the consumers of machine products. Our art education must aid in the task of reawakening this appreciation of fundamental design. Our architectural schools, critics, teachers, must make a greater effort in lay education, and must recognize the fact that the arts of design are the integrating force in our material chaos.

But not only does art rise up from the mass of society; fashions and good design also can filter down from the top. Here our designer must work within industry, patiently, hopefully for the nature of our production is such that the consumer exercises his power by his choice and selection, and the designer must see that there are proper things from which to choose.

Now I do not believe that we are going to have any great renaissance or overnight change in popular taste. I do believe that we as designers must accept responsibility to do all we can to increase awareness of good design.

The tool we must sharpen is our method of reaching the public. The public relations of our profession are bad. But before we improve our relations with the public, we must have better relations between architects.

If we believe in a future development of our society, if we believe in planning, if we believe that the machine is a powerful tool that we can use—that need not use us—then we must realize that this gigantic task is not an individual responsibility. It is a mission not in the custody of one school, or region. It is a collective responsibility in the domain of all artists, designers, architects and planners. We must trust one another, unite on common objectives.

At the moment, the gulf between the old guard of traditional-minded men and the young-minded of all ages is passing through the final spasms of the issue of modern and traditional. I do not mean to deceive you by suggesting that there will not still be progressive

and conservative groups. But I believe we should be able to hope for a profession that, while it might be divided within its own ranks concerning the quality of modern design, would be united in a basic belief in contemporary, modern design, and united in relation to the lay public.

As a profession we have been too individualistic. We fight too many battles in the open arena. We appeal to popular verdicts. We fight each other and curry the favor of sectors of our society. If lawyers did that, the respect for the law and the power of the lawyer in the land would be a lot less.

The separation of the architectural profession into opposing schools has been necessary, due to the revolution in architectural thinking in this country. I use the word revolution, although I might just as well have said "the return to a creative tradition." The breach had to be there. But from now on, the more often we can find good to say of other men's work, the stronger our total influence can become.

The day of isolated giants fighting against the force of a society which had turned backward—as Sullivan and Wright had to do after 1893 — is no longer here. There is still a little glory in being an individual reformer or sect in a world of evil, but I venture to say that the fun of the battle ahead is going to be as a cooperating member of a strong movement which can, and will, improve the parts and spaces of man's environment.

The Women's Architectural Leagues

By Mrs. Irwin M. Johnson

IT WAS A DAY of great rejoicing in October, 1940, when the California architects were meeting for convention at Del Monte and the word went around that the wives were officially invited to attend a session. All the women rallied to the scene, the program of the group was outlined by Norman K. Blanchard and the wives were requested to form auxiliaries to the local groups to help carry out their plans. They were to return to their communities and call the groups together in an effort to have auxiliaries formed.

The specified projects were given to Mrs. Irwin M. Johnson, of Oakland; Mrs. Harold Weeks, of San Francisco; and Mrs. Kenneth Palmer, of Los Angeles.

The past six years have been wonderfully successful ones and a brief survey of accomplishments follows.

Work first started with the women of the East Bay, with Mrs. Johnson and Mrs. Weeks holding small meetings in the homes so the women would become better acquainted. By March, 1941 they were ready to elect officers and adopt a constitution, and started with forty-two charter members. This process was then repeated in San Francisco and they became an active auxiliary in May, 1941 with twenty-two charter members.

The first project to be undertaken was an Architect-Planned-Homes Tour. The men selected the homes to be shown and made arrangements with the owners. The women sold tickets and acted as hostesses. Approximately one thousand people viewed the homes in the East Bay, Contra Costa County, San Francisco and the Peninsula. Their first great venture showed that the public was vitally interested in a tour conducted by people well qualified to bring out all the advantages of an architect-planned home.

The efforts of the women were then directed to the Home Shows, which were conducted annually. They encouraged the men to assemble very fine exhibits, helped to arrange them and manned them during the show hours.

Both groups have legislative committees who keep an ear to the ground for all legislative measures before the legislature which affect the architectural profession. They have qualified speakers on legislative measures come to their meetings, prepare material, get the men to lobby and, thus far, have been able to do some constructive work. We all know that it is only by being thoroughly informed and working together that good legislation can be effected, so this is considered one of the most important committees of the group.

The monthly meetings are given over strictly to business and to speakers on subjects relating to the profession. Past speakers have included Frederick Frey, Jr. on Interior Decoration; Alec Stern on Etchings; Willa Cloys Carmach on Landscaping; Mrs. A. Smith on Oakland's Plans for a New Civic Center; John Bolles on

Federal Housing and Richard Gump on Old Silver.

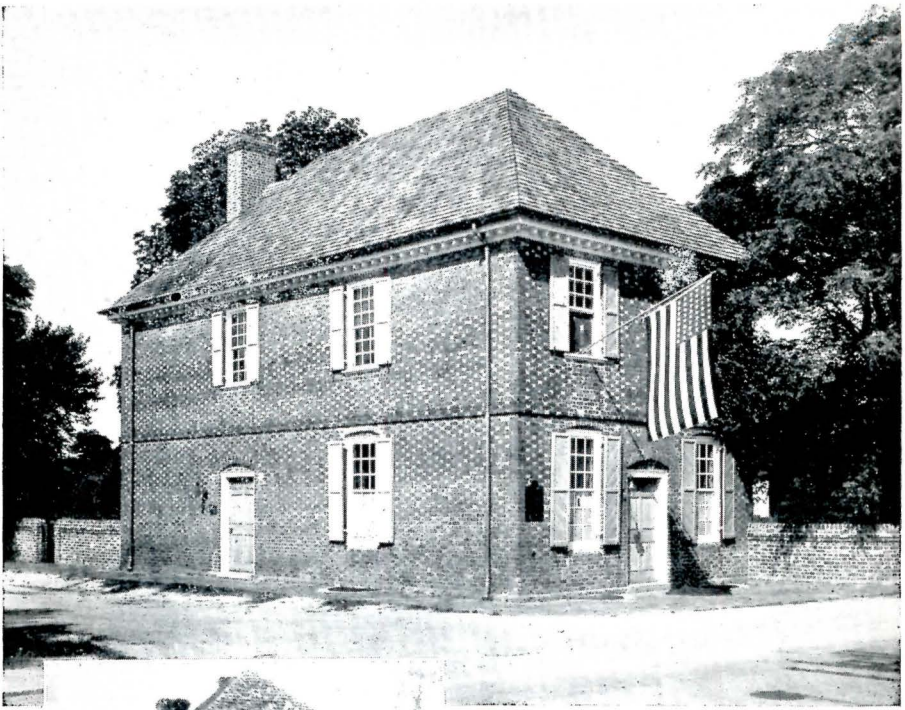
At the 1942 convention the President of the San Francisco group, Mrs. Harold Weeks, gave a very fine bit of advice to all wives present when she said: "As wives of architects, we should all be well informed concerning what is going on about new trends and new thinking. Often we shall have time and opportunity to be better informed on these matters than our husbands. You can talk about architecture and planning to your friends, at your clubs, through the organizations to which you belong, wherever your are, as long as you are well enough informed on your subject to make it interesting."

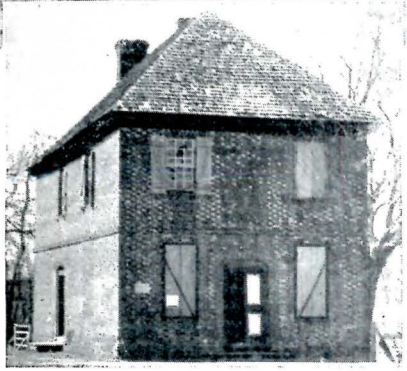
With this in mind, the meetings are planned to help the women better to know the problems and work being done in their communities.

The East Bay has established two annual social functions a year. In March the husbands are entertained at dinner and in September a picnic is held for the families. From working and playing together a unity of friendship and understanding has developed within the profession which has untold value.

During the War years members were busily engaged in the many demands made on them, so their own programs were suspended in an all-out effort to aid in winning the War, but it was only a matter of months following V-J Day until they were prepared to sponsor the biggest undertaking of all. In March, 1946 they opened a series of lectures on "The House I Want." These were given in the East Bay in the mornings and repeated in San Francisco in the afternoons. Speakers were brought from a distance and, in this way, they could give both lectures on one trip. The average attendance on each side of the Bay was four hundred. It was encouraging to find that eight hundred women were interested in the securing of basic information regarding the complete planning of their homes. The schedule of lectures included: Gardner A. Dailey, John S. Bolles, Paul R. Williams, Pietro Belluschi, William C. Ambrose, architects; Thomas D. Church and Edward A. Williams, landscape architects; Frances Elkins and Maurice Sands, decorators; Dorothy Liebes, textile designer; and Raymond D. Smith, realtor.

It will take years to evaluate this course. A better public in-





CUSTOMS HOUSE (1706), YORKTOWN, VA.
Before and after restoration by
DUNCAN LEE, ARCHITECT

Do you know this building?

UNITED STATES MINT (1835) NEW ORLEANS
(Now U. S. Coast Guard Receiving Station)

WILLIAM STRICKLAND, ARCHITECT

Photograph by Richard Koch

variably makes for a better client. In a project of this sort the realization was brought home that the women could better handle an undertaking of this nature. The men are all trained for one profession, whereas in the women's groups there are trained advertising people, writers, librarians, teachers, employment managers, typists, secretaries and many other professions represented. Whatever the job to be done, the women seem to have a group with the necessary background. When all these resources are pooled, there is no task too great to be undertaken.

In the publicity for "The House I Want" series, newspapers and magazines over the nation carried the story, and thirty-one radio programs gave a generous amount of time.

The future venture of the groups is to work for an art center. Thus far, the East Bay group has collected a great many books toward the project.

Late in 1945, when the State Association underwent a complete reorganization, the Auxiliaries found themselves outmoded in name. Committees were quickly formed and new constitutions were written, which are now available. The name was changed and hereafter they will be known as "The Women's Architectural Leagues."

Honors

ERNEST WILBY, F.A.I.A., formerly of Detroit but now of Windsor, Ontario, has been made an Honorary Fellow of the Royal Architectural Institute of Canada — an honor conferred only five times in the long history of the R.A.I.C.

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GEORGE M. BEAL, Acting Head of the Department of Architecture, University of Kansas, returning from service in the armed forces, has been re-elected to the chairmanship of the Lawrence City Planning Commission.

EUGENE STERNBERG, Czech architect and town planner, has been appointed to the faculty of the College of Architecture, Cornell University. Since the War, Mr. Sternberg has been active in the replanning of bombed areas in London, serving as senior assistant architect to Sir Patrick Abercrombie, eminent British town planner who prepared the new County of London Plan.

Opportunities in Theater Design

*By Jo Mielziner**

Excerpts from a talk before a joint meeting of the Municipal Art Society and The Architectural League of New York, January 24, 1946.

MY SUBJECT is the setting for the theater—not the stage setting, but the more permanent setting which embraces the audience and actors alike; the theater structure itself. The legitimate theater has been told it was dying for many years, but it never has and it never will. Like an ancient oak tree, it has weathered many a hurricane. Branches have been torn away, but the roots are deeply entrenched in our society. In spite of the inevitable high costs of theater tickets, the theater still retains a passionately loyal audience. What is even more interesting is the fact that no matter what success in terms of glory or financial recompense writers, actors, directors and designers gain in other media, they almost inevitably turn back to work in the theater.

In analyzing the ideal theater structure, the problem is divided into two main elements, that which houses the performer and the opposite half which houses the auditor. Before discussing the separate parts, I would like to say a word about the "magic" on the audience side of the footlights. No matter how perfect the performance, if there is no real audience out front there is no real theater. Theater exists only when the real audience is present. Time and again I have witnessed a technically perfect performance during a rehearsal, which, the following evening in the presence of an audience seemed completely different. The difference was not necessarily on the other side of the footlights—in fact, I am inclined to think that the change was a psychological one that came over me the moment I became a member of the body of the audience. In other words, it is a communal experience. The

* Mr. Mielziner, born in Paris, acquired his education in art in New York, Philadelphia, Paris and Vienna. As a stage designer his work is found in the settings for The Guardsman, Strange Interlude, Street Scene, The Barretts of Wimpole Street, Winterset, I Married an Angel, and other plays. In addition to industrial design for night clubs and department stores, he found time to fight in World Wars I and II.

understanding of this is essential to the understanding of the theater. The most uninhibited person enjoys a fuller, richer laugh in the presence of 700 equally amused spectators than he did the preceding night, sitting alone at a dress rehearsal. Therefore the audience and everything the audience reacts to must be judged as an emotional experience and a truly communal one.

Now, briefly, to analyze the two halves of the playhouse. The stage, functionally, simply needs the place where the performers are so placed that the audience may see and hear them. To heighten the art of the theater we must add the visual and oral arts, costumes, properties, scenery, lights, music and all the technical equipment to facilitate the handling of these complements to the drama. Adequate storing and handling facilities for productions other than the one currently playing are imperative. If you gave the theater all these elements without restrictions, you would have an ideal theater, on the performer's side of the footlights.

For the auditors, functionally, all you need is a place in which they can be sheltered from the weather, where lighting may be controlled, and seats on which they may sit. But this is not enough. Being an emotional experience, theater-going is, in a sense, a ceremony. The excitement of the theater should begin the moment the audience approaches the entrance to the building which houses the drama. Everything to make the evening an occasion is as important to the fulfillment of the experience as giving the actor a glamorous setting. The truth is, the performance is really on both sides of the footlights. The ticket window, the hat-check concession and the lobby are as important as the seats and the auditorium itself. Whether the performance is comedy or drama, the essential appeal is one of release from the actualities of daily life. Very few people go for purely intellectual or academic enjoyment. The sooner you take the audience out of the humdrum world, the more complete the enjoyment of the evening, and the less tedious and more exciting the delay awaiting the raising of the curtain or the necessary intermission time.

The basic plan was a rat-race between theater-seat salesmen, enthusiastically backed up by business managers, as opposed to the architect and what few professional

advisers were ever called in. Not only were auditoriums crowded with not the slightest understanding of the relation between the audience and the stage, but the stage itself became smaller, narrower in width and shallower in depth. For a nation with our proud record of architectural and engineering achievements, we have the worst theaters of any country in the world.

Like many other fellow designers, my heart sinks when I turn the first page of a new manuscript and read the author's description of the setting: "As far as the eye can reach, the sunlit haze of the Arizona desert stretches in all directions"—and all I can see is a brick wall with a radiator pipe 25′ and 6″ away from the curtain!

Our theater buildings are, to a great extent, owned and managed by people whose interests and training are essentially wrapped up in real estate and commercial investments, with very little technical and professional knowledge of the problems of theater producing.

The approaches to our theaters are appallingly bad in their psychological effect. There is hardly a single theater with a lobby large enough to hold 30% of its audience. Crowded and inadequate box-office facilities tend to shorten the tempers of box-office treasurers and make all the more unpleasant the already difficult problem of getting seats at the window. Checkrooms are fantastic. They are not large enough to hold 10% of the hats and coats, providing the audience wants to check them. The average space between the rows of seats is so narrow that it discourages patrons from getting up to go out in the intermission, if they have to climb over neighbors who are seated. All these things are definitely physical and psychological determents from the full enjoyment of the evening.

How much wiser and more progressive are the planners and designers of most of our moving-picture theaters! They discovered years ago that the audience thrives on a presentation and revels in the luxuries of comfort. Did you ever hear anyone say "Let's go to the X legitimate theater and see the play there" as they do say "Let's go to the Music Hall (or the Roxy or the Paramount)?"

Now the solution. I won't go into a lot of technical, detailed or mechanical improvements backstage, nor even elaborate on a lot

of luxurious and obvious improvements to the front of the theater.

To the pessimist who says that if theaters hardly pay now, with conditions as they are, how can you hope to make money on the ideal theater outlined above, I reply: I believe that not only can the ideal theater be built to give every sense of luxury and comfort that the legitimate theater deserves, but I think this theater can be incorporated in an architectural unit capable of earning a healthy return on the investment.

We must have a completely new point of view towards theater building of tomorrow.

In the early 1930s we had about 80 legitimate theaters on Manhattan Island. Today there are approximately only 35 available to the legitimate theater. Some of the missing theaters have been torn down, but many have been leased by radio networks or turned over to the movies.

The first thing I want to point out about the weakness in our theater conception is the fact that the potential earning power of the theater building, as we know it, is terribly limited by the fact that it is only available to the public *about 24 hours each week!* In the same neighborhood a moving-picture theater is averaging over four times that number of potential money-earning hours. In other words, in terms of days the theater is only working 6 days a week, barely 3 hours per day, and even now, in this boom period, only averaging 35 weeks per year. In the same location a movie is using a 7-day week and a 52-week year. This means that with the same approximate investment in the building, a moving-picture theater has six times the number of money-earning hours as its legitimate neighbor.

That brings up the idea that we must find a new concept for the theater building, which will make it available to the public 52 weeks during the year and at least 8 hours per day, or more. We know that the theater is a lure; we know that when people buy a ticket to the theater it creates a mood of both excitement and relaxation. Therefore, why not make of the theater a focal point for other outlets associated with an evening of relaxation? This can be both direct and indirect. I can envision a couple from Scarsdale driving into town for dinner and the theater. Mr. Smith has bought a pair of tickets for this Theater of Tomorrow. These tickets are not

only theater tickets. As he steps out of his car, a uniformed attendant takes a section of his ticket, which becomes his check for the parking of his car for the evening. They enter an enormous lobby, which has already earned its keep as a display showcase of luxury goods during the 8 preceding daylight hours. From the lobby they enter an attractive restaurant and bar. Part of Mr. Smith's ticket stub is surrendered to the headwaiter, where a table has been reserved in the name of Mr. and Mrs. Smith, who have seats 105-7, Row C. Their wraps have been checked on another section of the ticket. This intermission lobby is large enough to hold the entire audience, not packed in like sardines, but free to move about, enjoying concessions of food and drinks. The displays in this lobby can reflect many of the qualities which people admire in a walk down 57th Street or Madison Avenue. What better place, and in what better mood, could you show luxurious wearing apparel or jewelry or fine arts? Again, the space in this super-lobby is not going to depend on two ten-minute intermissions to earn its upkeep. It is large enough for dancing and for parties, being also adjacent to catering service and bars. After midnight it might be turned into an ideal night club. At the end of an evening's performance, if Mr. Smith and his wife are going to make an evening of it, his stub might also entitle him to this supper and night club.

Examine the ground plan of a currently licensed theater and notice the enormous unused but necessary area given over to fire alleys. There is nothing in the Safety Code that prevents an imaginative designer from turning that area into an additional attraction to the audience and revenue to the owner. Both the stage proper and the auditorium itself need not remain idle during all the 21 hours when not used as a legitimate theater. If the stage is sufficiently large to handle and store both current and repertory productions, the same theater could be used for concerts and meetings on non-matinee days; fashion shows, trade shows and conventions. This mental approach to the problem is only skimming the surface.

During the hours between midnight and four in the morning, hundreds of thousands of dollars are spent in a city like New York in converted rat-holes called night

clubs. True, they are a hangover of the Prohibition era, but you cannot tell me that if you had a choice between an over-crowded, badly-aired, so-called "hot-spot," as it exists today, and a magnificent theater transformed into a night club (which could be done in a matter of half an hour) that there would be any question as to which investment paid off better.

This "super-duper" theater naturally would take a much larger plot of ground than the average New York theater now occupies. However, the very element of attracting attention as a focal point would make the building a natural location for a hotel or a business building, combined with retail stores. Luxury trades would gain enormously with the contact, of this sort, in very much the same way (and to a larger degree) than we see the arcades in Rockefeller Center gaining prominence from their location in that focal center. There was a time when business buildings were named after towers that attracted attention by their extreme height. Why not attract that business by the glamour, the beauty and the popularity associated with a theater center?

Having designed scenery for actors for the past twenty years in New York, I have recently begun to realize that the audience has been a bit neglected. They, too, need a setting and lights and glamorous costumes.

The theater is a brilliant jewel, whose setting is a little smeared and faded, but the jewel itself is sound and bright, and the new setting would immeasurably increase both its brilliance and its worth.

Dimensional Coordination Abroad

Excerpts from *Industrial Standardization* for July, 1946, published by American Standards Association.

THE INTERNATIONAL NATURE of the housing shortage is bringing to the United Nations Standards Coordinating Committee suggestions for international standards to help bring about more rapid progress in building. The French national standardizing body, Association Francaise de Normalisation, has asked the UNSCC for an international project through which a standard

building unit could be established for the coordination of dimensions of all building materials and equipment.

Before the War, France had started to study this question. At about the same time, certain experts in the United States, particularly Albert Farwell Bemis, evolved a precise definition of the module concept. Other countries, such as Germany, had also done some work along these lines.

French standards are based on the standard NF P 01-001, which calls for a module of 10 cm and allows the use in some cases of the submultiples 5 cm and 2.5 cm. This standard might be taken as the basis for discussion. It might be pointed out that the American Standard Basis for the Coordination of Dimensions of Building Materials and Equipment, A62.1-1945, recommends the use of a 4 in. (10.16cm) module which is very near the French module in view of the tolerances which must be allowed in building.

In Sweden the problem of reorganizing the building branch from a handicraft into an industry has been particularly interesting due to the shortage of housing which occurred in Sweden during World War II. To facilitate this reorganization a special state institute, Byggstandardiserigen (Building Standards Institute), for the standardization of building materials was established in 1942, affiliated with the Sveriges Standardiseringskommission, SIS (Swedish Standards Association).

In 1943 an investigation was commenced, in collaboration with representatives from the entire Swedish building materials industry, with regard to uniform measurement standards, the so-called "Module investigation." The investigation resulted in the determination of a building module of 100 mm which therefore differs by only 1.6 mm from the building module of 4 in. suggested in America.

The Producers' Council

RECENTLY ELECTED to membership in the Producers' Council are the following Company Members, with the names of their Official Representatives and Alternates:

Devoe & Raynolds Company, Inc., New York, N. Y.; Renshaw Smith, Jr., and E. F. O'Callaghan.

Harbor Plywood Corp. of California, San Francisco, Calif., (Regional Membership); Wayne I. Rawlings.

The Structural Engineer in Modern Building Construction

By Charles P. Baulsir

ASSOCIATE: PARSONS, BRINCKERHOFF, HOGAN & MACDONALD, ENGINEERS

Third in a series of articles stressing the need for closer collaboration between the professions working in the building industry.

THE TERM Modern Building Construction should imply—"Modern Design." Modern design used in this sense does not mean streamlining or cubical shapes that have become associated with a particular school of architecture; furniture designs; and many industrial products. Here, modern is used in its literal sense—up-to-date. Such design calls for the services of all the professions that contribute to the successful execution of a modern building project.

One of the important contributions of the war effort has been the creation of the term "Architect-Engineer," and the setting up of Architect-Engineer offices. Their purpose is well defined by the term itself; the close coordination of the professional services of the architect and the engineer.

There are three principal steps in the development and prosecution of a building project: One, the formulation of the basic elements and requirements of the project; Two, the basic data so set up must be transposed by means of technical service and advice into the plans and specifications which are necessary for the obtaining of bids and the execution of the construction itself. The third step is that of actual construction.

In the first step, the architect and the landscape architect play the major role. They establish matters of policy and administration, as well as set forth the basic concepts for the design.

In the second step, the professional services of the engineer, working in close harmony with the architect, become of utmost importance. These services include that of the mechanical and electrical engineer as well as those of the structural engineer.

The third step of the project begins when all bids have been received, reviewed and the contract let for construction. In this step also the professional services of the

various engineering professions are important.

It is obviously important that these three steps or phases of a building project be coordinated under one central head. However, it remains important that the coordinator be fully cognizant of the steps to be followed, and that he staff himself with those who can provide these expert services, and make provisions for so doing even before entering into the contract for the execution of a project for his client. The architect, and rightfully so—not the engineer—is the usual coordinator selected by a client for a building project. The client expects, pays for and is entitled to the best professional talent that can be obtained for all phases of the project. In the days when structures for buildings were less complicated in their geometric and mechanical arrangements, there was little, if any, separation between the services to be performed on the part of the architect and those designing the engineering phases thereof. The architect then was capable of designing all phases of the project with equal ability and efficiency. However, along with our modern living and its other complications, have come the vast intricacies which go toward providing additional comfort, safety and health for those who inhabit our present-day buildings. Thus, the scope of our building construction programs have now become so complicated that it should not be expected that one branch of the professions should have all the knowledge necessary to perform the complete designs without placing undue stress on one phase at the sacrifice of another.

In the past, it has often been the practice for the architect and the engineer to enter into separate contracts for their services with the client. This was neither to the best interests of the client nor to the professions involved. Each holder of the contract, while sincerely trying to do his best for the client, was, which is only human, trying to do the best for himself. This type of arrangement naturally did not make for harmonious relations throughout the execution of the project, nor did it make for the most efficient one either.

To the structural engineer goes the important responsibility of transferring the architect's design into a safe, economical, functional and enduring structure. Certain shapes or arrangements are frequently much more costly to con-

struct because of structural requirements than a modification or rearrangement of the same concept. Often, by a slight compromise or change in the architect's original design shape for, or arrangement of, some parts of the structure, the same esthetic and functional effect can be obtained with a material saving in construction cost. Such studies and economical designs can be best arrived at by the architect and the structural engineer working in close contact and harmony.

Because of the interest and control that municipal or Federal authorities have exercised in many housing projects, they have set up certain over-all recommendations and standards for such projects. Here again, the structural engineer must work in close harmony with the architect to interpret and incorporate into the design these various recommendations and see that all the requirements of the standards are fulfilled. However, the engineer's experience must be of such a broad nature that, where conflict occurs between the requirements of the particular project under consideration and the "Standards and Requirements," he can successfully use his professional skill to deviate from the mandatory requirements, satisfy all the conditions of good design, and at the same time secure the approval of such a change from the mandatory standards of the governing authority.

The imagination and ability of the structural engineer is not, by any means, limited because of the existence of such standards. They are set up so that the basic requirements for a good housing project, and one having sound and durable construction, will, in all cases, be fulfilled. Neither the engineer nor the architect should accept such standards in their stereotyped form, but they should constantly strive through their experience and training to seek improvements in the arrangement and planning of the structure; the use and adoption of new materials; all toward the desired goal of increased facility at lower cost.

Occasionally, because of the inability of a contractor to secure the particular item or kind of material specified, or because the contractor offers a substitute material, which, because of some circumstance he may be able to purchase at a considerable reduction below that of the material specified, many dollars can be saved by the acceptance of

a substitute material. In the first instance, a serious delay in the completion of the project might occur because of the inability to secure the specified material. Such delay, of course, would incur either loss-of-use of, or loss-of-revenue from, the finished project. This represents real money. In the second instance, the contractor may offer to share such saving with the owner. This represents real money also. However, it would be extremely dangerous for the client, who is usually a layman, to pass upon the advantages of the offered substitution as he usually does not possess the professional knowledge and experience necessary to pass upon such a question.

An analysis of the more common types of building construction projects, such as warehouses, school buildings, hospitals, institutions and the like, indicates that the construction costs for the structural features thereof runs between 30 and 35 per cent of the total project cost. Of course it is obvious that where structures are of a monumental nature, such as a church, a memorial building or an exposition type of public auditorium, the cost of the structural features thereof will be considerably less and the architectural costs expressed as a percentage will be very high.

In conclusion, it is apparent that for a successful project there must be close and competent coordination of complete architectural and engineering services. This effect can best be secured by the client's engaging the services of an architect-engineer firm. Thus, there is no divided responsibility. Such service can usually best be secured by the client engaging a firm of outstanding architects in association with an engineering firm having equal qualifications.

Because of the complications and many phases of a modern building project, it is unlikely that any architect can justly claim to be an outstanding architect and engineer at the same time; and, conversely, it is also unlikely that an engineer will be an outstanding engineer and architect at the same time. By so engaging the services of the architect-engineer, the client is assured of complete services in both professions, and the coordination of these functions under one unified control. Thus the client can be assured of the proper attention to all phases of the project without placing unwarranted stress upon one phase at the expense and neglect of the other.

A New School of Architecture

THE FIRST school of architecture in seven states in the Colorado and Rocky Mountain region will be established at the civic center campus of the University of Denver with the opening of the fall quarter. The new School of Architecture and Planning will offer five-year degree programs in architecture and planning in the College of Arts and Sciences.

Carl Feiss, formerly planning director of the planning commission of the City of Denver, now planning director of the department of development at the University of Denver, has been named director of the new school. He held a city planning fellowship at Cranbrook Academy of Architecture in Bloomfield Hills, Mich., where he prepared the first master plan of Cleveland. He also held a fellowship at M.I.T., where he received the degree of Master of City Planning.

Assisting Director Feiss will be Joseph Shelley of Mercersburg, Penna., formerly an architecture fellow at the American School of Classical Studies at Athens, Greece. Shelley served in the U. S. Army for five years, having been discharged recently with the rank of Major. He received his Bachelor of Philosophy degree from Yale University in 1927, and his Bachelor of Science in Architecture degree from M.I.T. in 1930.

The nearest School of Architecture at the present time is at the University of Nebraska in Lincoln. There are no schools of architecture in Colorado, Wyoming, South Dakota, Nevada, Arizona, New Mexico or Utah.

❖

Teachers of Architecture Needed

INCREASED ENROLLMENTS at the schools of architecture will require additional instructors for the fall semester. The need is urgent, particularly for instructors to teach architectural design and structural courses.

Those qualified and interested in teaching positions should send their personnel records to Professor Paul Weigel, Secretary, Association of Collegiate Schools of Architecture, Department of Architecture, Kansas State College, Manhattan, Kansas.

The Editor's Asides

DR. FISKE KIMBALL, F.A.I.A., who is now chairman of the Committee for the Restoration of The Octagon, came down from Philadelphia the other day. He wants the vines stripped from the old house—every last one of them. Says they obscure the clean stately lines and fine brickwork of Dr. Thornton's conception. Perhaps some will disagree with him as to the role of vines in architecture. They have been called the architect's greatest benefactor, and in some cases—which shall be nameless here—architects other than the ones who designed the buildings will heartily agree.

❖

JULES GUÉRIN is dead at 79. I wonder how many of the younger architects and students hold the man and his work in the high admiration and respect that we of an older generation did and still do. Fortunately his mural frieze in the Lincoln Memorial in Washington will keep forever green our memories of Jules Guérin, as the seated Lincoln does for Daniel Chester French and the temple itself does for Henry Bacon. But more familiarly the architects knew Guérin for his superb renderings of architectural subjects—renderings in quiet tones of warm gray, with color even more restrained than in the early Chinese prints they vaguely recall. I have one of his originals hanging in my living-room — a drawing of the building of Education and Social Economy at the Chicago Fair of '93. One unusual feature is that only a little above the base of the building appears as a direct view; the whole front is shown as a reflected image in the surface of the lagoon in the foreground. Typical of Guérin's favorite media, it is done in crayon on gray charcoal paper with highlights in an off-white wash.

❖

FOR REAL INDOOR SPORT on a rainy day I recommend unpacking and sorting old architectural books —a pleasant task that I undertook in connection with several of the libraries bequeathed to The Institute by gracious benefactors: Richard Morris Hunt, Donn Barber, Arnold W. Brunner and others. Lacking adequate shelving in The Octagon, these treasures have been in storage for many

years. In one of the last boxes I opened, the books were protected with newspapers of 1932. To unwrap a calf-bound edition of, say, a Vignola revised by Jacques Barozzio and steel-engraved in 1755, or a ponderous tome commemorating the completion of Cologne Cathedral, October 16, 1880, brings a real thrill to the bibliophile or even to a feeble imitation thereof. I wonder what architects now do with the money they formerly put into architectural books.

❖

AND YET money *is* now being spent for architectural books — contemporary works. "Hospital Planning," the recent book by Charles Butler and Addison Erdman, sold its entire first edition before publication date. "The Handbook of Architectural Practice" keeps the Octagon staff ordering new printings in spite of their optimistic estimates in advance. Thomas T. Waterman dropped in the other day chuckling over the receipt of a second fat royalty check from the publishers of "The Mansions of Virginia," so recently published that the JOURNAL has not yet reviewed it; and Louis Justement's "New Cities for Old," published in January, is going into a second edition.

❖

JUST BACK from a flying visit to Charlottesville, Va., to address the University's architectural students on "Architects Dead and Alive"— a title which, it must be admitted, has about it some suggestion of ambiguity. Edmund Campbell showed me the priceless collection of Thomas Jefferson's yellowing architectural drawings and some of Cornelia Jefferson Randolph's small wash renderings of her father's projects. Jefferson's amazing ingenuity combined with his love of the Classical frontispiece never fails to renew deep impressions with every visit to Charlottesville. Monticello, in the sympathetic hands of Milton Grigg, has been so painstakingly restored, even to the garden flowers specified in Jefferson's notes, that if he could revisit the hilltop he would find it very much as he left it. Remembering the multitudes of his house guests, he might even find today's visitors changed not so much in quantity as in clothing. On a good day fifteen hundred persons make their way to the shrine and I doubt that a single one goes away disappointed.

OUR OLD FRIEND Bill S.191 is no longer a bill—it's an Act of Congress, signed by the President, though he mentions two minor objections. The bill never had any formidable enemies, but it did have to leap the hurdles of faint praise on the part of some of its friends. It authorizes an appropriation of $375 millions during the next five years for the construction of hospitals and health centers; also $3 millions for State-conducted surveys of need, on the basis of which surveys Federal funds can be granted for construction. Thus, for the first time in our history, hospital facilities are about to be planned on a nationally integrated concept.

In order to share in the movement a State must designate a single State agency to carry out the survey, and must appoint an advisory council to consult with that agency. Medical and hospital authorities doubtless will be appointed to these advisory councils; the architectural profession is an equally logical source. Already eight States have named architects to their respective advisory councils; it is up to the profession to see that other States follow suit.

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VICE-CHAIRMEN of Louis Justement's Committee on Urban Planning met here the other day to carry forward one of The Institute's most important projects. Robert Alexander from Los Angeles, Jerrold Loebl from Chicago, Henry Churchill from New York and Robert F. Smith of South Florida—a rather broad geographical coverage — sweated over the drawing-room table from early morning until dark. Great plans must be in the making, none of which came to light at the brief lunch I was invited to attend. JOURNAL illustrations were mentioned, including our upside-down captions, whereupon it occurred to all of us in a synchronized flash that a next step would be to print the buildings upside down—particularly some which any of us would gladly nominate as possibly looking better in that position.

A tired man paused for breath at the corner of Fifty-Seventh St. and Fifth Avenue, New York, and was accosted by a uniformed doorman who said to him politely but firmly, "I'm sorry sir, but people do not *lean* against Tiffany's."

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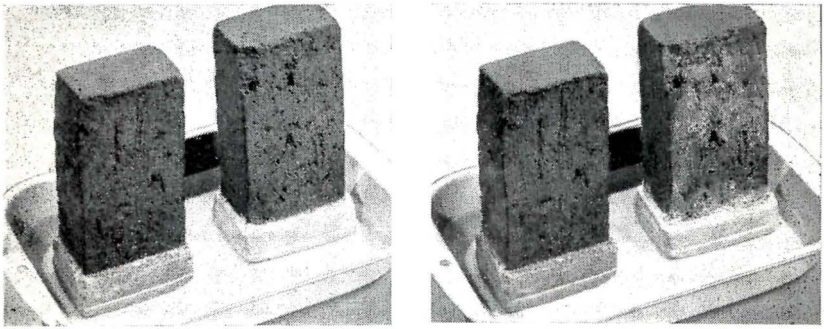

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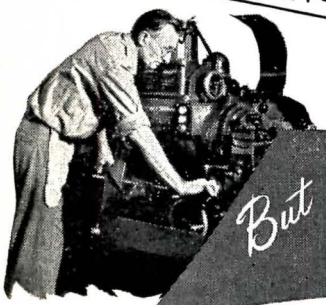

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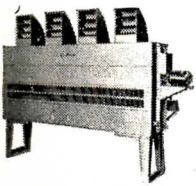

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