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THE COVER

The Institute's Director of Public Services, Matthew L. Rockwell, AIA, AIP, designed our "planned community" for this month's special issue devoted to the architect and the homebuilder.
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Letters

About Urban Design

EDITOR, Journal of the AIA:

The recent March Issue of the Journal devoted to Urban Design was a most stimulating and provocative dissertation on the role of architectural planning in the problem of environmental determination. Praise is due the Journal for its fine presentation.

However, such discussions as were put forth by the various authors cannot help but leave some of us, in spite of the validity of their application in a limited scope, with a feeling that a certain lack of penetration into the nature of the problem is present, and that the very “meat” of the issue is left untouched — with the exception of the articles by Dr. Duhl, and Mr. McQuade. In spite of what many of the authors say, I think one would be hard put to find sensitive architects disagreeing with the asserted and reasserted need for a comprehensive approach to the planning of the environment, and who do not long to drop this endless preoccupation with the architectural “gems” in favor of more far reaching programs. In many cases — not all to be sure — architects work with “gems” simply because there is no greater principle to relate the immediate building to, nor is there promise of future plan to which to relate. What is the architect to do? I think in many cases he rationalizes his “gem” approach with the honest conviction that a good individual work may act as an example to what is possible collectively. In spite of the words of our president, Mr. Will, whenever good architects have been asked to think beyond the lot-line such projects as the GM Tech Center, Brasilia, the Fort Worth development, the Capital City of India, etc. have resulted — burying for the moment differences of opinion in subjective esthetic evaluation. I think also that no serious architect challenges the statement that more is needed by way of the purely “formal” considerations of our architectural solutions to the cityscape.

Isn’t the most immediate problem relevant to an adequate solution to our urban design problems a political-sociological one rather than an architectural one? In short, will we not have to wait until “human values” supersede “property values” in our cultural system (instead of the reverse situation which is now present) before the “city problem” will be anywhere near approaching? Wait, not passively of course, but actively as citizens of a nation rather than a profession merely.

No serious person will disagree with this proposition, I expect — but the “how” of this problem is quite complicated, for the problem lies in the realm of what could be called political philosophy, and then only secondarily in the realm of planning. Planning by its very nature implies a collective expression — an expression which may, in many cases, override the interests of singular individuals with individual motive. This is a sore point with many. Witness the difficulty in bringing national resources into the picture of education or urban renewal. The ready bugaboo of “Socialism” is ever present in a political climate where the simple naming of a proposition as “socialistic” renders further analysis of that proposition nearly impossible.

So it appears that the architects now have a “citizen” role which nearly overrides their “planner” role, and, indeed, must be fulfilled prior to any real fulfillment of their professional role. This, I suppose, requires interest, understanding, promotion and sponsorship of political ideas. This point, important as it is, in my thinking, was not adequately covered in the March Issue. I think the problems of planning merely cannot be separated so easily. True, there are some architects — some leading ones among them — who have disclaimed any sociological implication to their work beyond that of the “beauty” experience, but I do not think they number among the majority.

Architecture, I believe, when challenged by a politically, sociologically conscious civilization will respond through individual genius (in spite of Mr Will’s “package”) with an urban environment unequaled in the past. Such a client must wield a great deal of political power, as well as courage and intelligence which has so far not been present. This, of course, as citizens, requires architects to first be clients, doesn’t it?

EDWARD COLBERT, AIA

EDITOR, Journal of the AIA:

The March issue of the Journal is great! The Urban Design is by far the best to date.

We would like to secure more copies for discussion purposes. Am enclosing check for two dollars for four extra copies.

Keep up the good work!

AARON WABASH
Van Nuys, Calif.

EDITOR, Journal of the AIA:

You did a splendid job on the March issue of the Journal. This is the sort of thing we need—not purely technical articles. Congratulations.

EUGENE HENRY KLABER, F.AIA, A.I.P
Quakertown, Pa.

(Continued on p. 10)
NEW

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**Letters (Continued)**

**EDITOR, Journal of the AIA:**

I want to compliment you on the contents and presentation of the March issue of the Journal which was focused on “Urban Design.” It is particularly timely, as you know, and if for no other reason this letter is justified in noting its over-all excellence.

While the foregoing is the major point here, I am also taking this opportunity to add some additional observations on the subject matter of that issue while acknowledging that all facets simply could not be covered there. So, the following notes observations, not reservations, with the view of encouraging future articles of this kind.

1 The emphasis was on the city and “urbanistic” views. Would not some analysis of this in contrast to the milieu of the town be interesting?

2 While aspects of visual homogeneity was commented on as part of cityscape, I think that study of the carry-over of historical architectonic features would be valuable.

3 I note the inference throughout that esthetic agreement is commonplace—at least among the cognoscenti. Would it be considered too academic to run future articles on reaction and response to what is seen (or felt) in viewing urban scenes?

4 As a corollary of that, it would be interesting to stir up more on communicating such reactions as objectively as possible.

5 One last point would examine the reconciliation of town plan forms with those perceptual, as a matter of cultural expression.

Congratulations again on the issue.

M. R. WOLFE, PROFESSOR,
College of Architecture and Urban Planning
University of Washington

**EDITOR, Journal of the AIA:**

We have just had the opportunity to examine a copy of the March issue of AIA Journal and are pleased indeed with the wealth of material presented in the special issue on “Urban Design.” In fact, we believe that this depth focus on the whole span of urban design problems would be a most valuable tool in our teaching and research program.

Would it be possible for you to send us fifty copies of the March issue for our graduate students in city and regional planning?

MRS SHIRLEY F. WEISS
Dept. of City Planning
University of North Carolina

(Continued on p. 12)
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Letters (Continued)

EDITOR, Journal of the AIA:

The March issue of the Journal is great! The Committee on Urban Design has given every architect something of considerable value in this issue. The Journal is more than newspaper to us now.

ANDREW J. SMITH
Tecumseh, Michigan

EDITOR, Journal of the AIA:

I always enjoy reading the AIA Journal, but you surpassed yourself in the March, 1961 issue.

To cover such a large subject as city planning and put it in one edition showed great skill, thought and ability. This, however, seems proper and fitting of the design and architectural profession.

So impressed by this presentation, and shortly after reading Life magazine’s March 17th issue on President Kennedy’s voracious reading habits, what could be better than each month to place in his hands a copy of the AIA Journal. Not only this edition, but the general copy of the Journal, would be of interest to any leader who reads and wants to be informed.

Good architecture should be a part of our every day life. Therefore, important people should read of our efforts and visions to make our cities, towns and countryside a more beautiful and useful place to live.

FRANK R. PERL
Monterey Park, Calif.

We Take a Bow

EDITOR, Journal of the AIA:

Congratulations to you and your staff for an excellent June 1961 Journal. The convention is covered thoroughly and in a very interesting manner. The “Philadelphia Story” is terrific. I’m very proud of our Journal.

JOHN NOBLE RICHARDS, FAIA
Toledo, Ohio

EDITOR, Journal of the AIA:

The June issue of the Journal is great. They all are, but since I could not attend the Philadelphia Convention it was rewarding to get such an excellent report through the efforts of the Journal staff.

Alfred Bendiner’s sketches are always outstanding but this time they provided an additional feeling of the environment of the Convention.

A. QUINCY JONES, FAIA
Los Angeles, California
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Names in the News

The Chicago Women’s Architectural League has donated over $2,200 to the Architectural Department, Chicago Branch of the University of Illinois for distribution to deserving students in furthering their architecture studies. The money represents proceeds from subscription and the annual WAL party. Mrs. Walter H. Sobel is President of the group. . . Norman A. Homsy has been elected to the Needham (Mass.) Town Planning Board. . . James A. Spence is now a member of the Board of the Saginaw (Mich.) Museum. . . John F. Harbeson, FAIA, of Philadelphia, has received the John Howard Benson Award for outstanding contributions to the field of commemorative art presented by the American Institute of Commemorative Art. Harbeson has also been elected President of the National Academy of Design. . . Richard Kimball, New York, was elected to Academicianship in the National Academy of Design. . . Richard Hubbard Howland, former President of the National Trust for Historic Preservation, has been appointed Administrative Head of the Department of Civil History at the Smithsonian Institution. . . Zey Smith, La Grange, Illinois, has been named coordinator of a newly organized council of planning commissions from five communities in Southwest Metropolitan Chicago. . . architect George Rockrise, San Francisco, has been appointed to that city’s Planning Commission. . . Donald Q. Faragher, Rochester, has been named by New York Governor Rockefeller to serve on a newly-created State Building Code Council. . . The Chicago Housing Authority has begun construction of the largest housing project ever contemplated in Chicago. The development will contain 4,415 units and was designed by Shaw, Metz, and Associates. . . Samuel T. Hurst has resigned as Dean of the School of Architecture and the Arts at Auburn University to accept the position of Dean of the School of Architecture of the University of Southern California in Los Angeles.

Brunner Award Winners

The annual Arnold W. Brunner Scholarship of the New York Chapter, AIA, has been presented to architects Richard A. Miller and Arnall T. Connell for their study of visual perception as it is related to design.

Messrs. Miller and Connell, visiting lecturer and assistant professor respectively at Ohio State University, will receive $3,000 to complete their study of relating the psychological and physiological concepts and principals of visual perception to environmental design. According to the Brunner Awards Committee the subject is of vital importance at this time. The materials which evolve from their research will be useful in the practice, teaching, and learning of designing buildings and cities. Presently there is no existing literature applicable to the architectural field on this topic.

In addition to the Scholarship award, two grant-in-aids of $2,000 each were made by the committee. One went to Harold Edelman and Stanley Salzman, associate professors of architecture at Pratt Institute, for completion of their book on principles of architectural composition. Messrs. Edelman and Salzman were given a Brunner grant of $1,000 in 1960 to start their project.

The other $2,000 grant-in-aid went to G. E. Kidder Smith to finish his work “A Guide to Contemporary Architecture in Europe.” Smith was the 1959 recipient of the Brunner Scholarship award which he used to launch his work.

The Brunner award winners were chosen from a total of thirty-six applications from throughout the country which were received and reviewed by the committee.

The Scholarship awards have been made since 1940 through a bequest to the chapter by the late Arnold W. Brunner, New York City architect. Their purpose is to further the development of architecture in the United States through the encouragement of advanced study in some special field of architectural investigation which will effectively contribute to the practice, teaching, or knowledge of the art and science of architecture.

New City in Venezuela

The creation of a new city in Venezuela, as part of a regional economic development program, will be the unusual assignment during the next three years for several members of the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University.

Norman Williams, Jr., formerly Chief of the Office of Master Planning in New York City and Wilhelm V. von Moltke, Chief Designer of the City Planning Commission of Philadelphia, will be the two principal staff members with the $900,000 project. Williams will be over-all director, while von Moltke will be in charge of urban design.

The project will analyze the Guayama region of southeastern Venezuela, an area of such rich resources that it is called the Ruhr of South America. Substantial industrial development has started, including a recently completed dam on the Caroni river, a government-owned steel mill, and railroad

(Continued on p. 16)
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(Inset)
Architect's model of International Building.

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News (Continued)

installations which bring iron ore down the Orinoco.

Williams and von Moltke, representing the Joint Center for Urban Studies, will direct a staff in the preparation of an economic development program for the entire Orinoco valley and a general plan for a new industrial city at the confluence of the Orinoco and Caroni rivers. The city will be called Santo Tomas de Guayana. It was established in July by President Betancourt of Venezuela, and is expected to have a population of approximately 250,000 persons.

Last spring, a contract was awarded to the Joint Center for Urban Studies by the Corporacion Venezolana de Guayana. As part of the study, several scholarly books will be produced by the MIT-Harvard experts. According to Williams, their general theme will be the methods of bringing a semi-underdeveloped country into modern industrial society by a program of industrial decentralization using urban and economic planning techniques and democratic leadership.

Preservation

The Garrick Theater, sixty-eight-year-old Chicago landmark, has bowed to progress and to the high cost of reconstruction. Designed by Louis Sullivan, the theater was the center of a year's life and death struggle by individuals and groups to raise five million dollars to restore and rehabilitate the famous structure. The effort was finally abandoned, however, and a five-story parking garage will now replace the Garrick. In order to save much of the ornamentation on the building, $10,000 has been added to demolition costs for skilled workmen who will cut out the more interesting details which will be used on the facade of the parking garage. Second choice of fragments goes to the Chicago Chapter of the Society of Architectural Historians.

In the Press

No less a newspaper than The Wall Street Journal, recently gave preservation and restoration devotees a front page shot-in-the-arm with an article headlined "Rejuvenated Homes." Written by Donald A. Moffit, the story capsuled the growing exurbia move by thousands who are finding that it's not always "so peaceful in the country."

Taking architect Samuel Wilson Jr, FAIA and his renovation of a gloomy Victorian home in New Orleans as an example, the story tells how

(Continued on p. 18)
MORE PRESTRESSED CONCRETE NEWS:


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Roebling has actively developed and promoted prestressed concrete construction since its beginning in America. For information on tensioning materials, on prestressing in general and for the names of fabricators near you, contact Roebling’s Construction Materials Division, Trenton 2, New Jersey.

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and Chicago come in for their share of renewal
applause because, as the city planning office of
Chicago's Lincoln Park says, "Rehabilitation ef-
forts have been successful in changing the char-
acter of the neighborhood from predominantly
transient and blighted to one of the most attractive
and rapidly growing areas of the city."

Mr Moffit cautions that lending institutions are
sometimes reluctant to lend money for initial proj-
ects in "transitional" neighborhoods, but cites ex-
amples of lenders who feel that this sort of trans-
action is the basis for their continued financial
growth.

All in all, the article should go a long way to-
wards boosting the morale of the oftentimes dis-
couraged preservationist.

Competitions

An international competition for the construc-
tion of the "Peugeot Building," planned as the
tallest building in South America, has recently
been announced. The Foreign Building and In-
vestment Company is the sponsor of the compe-
tition conducted under the rules for international
competitions, and thus open to AIA members.

Registration must be made with the Assessor,
Frederico A. Ugarte, Montevideo 942, Buenos
Aires, Argentina, prior to September 30, 1961.
The Institute Library has a limited number of
registration forms available.

To secure the program, a remittance of ten
dollars must accompany the registration form.
This should be a check or money order against
any banking institution of Buenos Aires and en-
dorsed to the "Sociedad Central Arquitectos." Fee
will be reimbursed to those professionals
participating.

Conference on Government

Current problems and developments in U. S.
Government construction contracting will be the
subject of a two-day Conference for Government
to be held in Washington on November 6-7. The
Conference is sponsored jointly by George Wash-
ington University's National Law Center and
Federal Publications, Inc., a Washington-based
publisher.

Subjects to be analyzed include labor problems,
methods of relief from unfavorable Contracting
Officer's decisions, use of cost-type contracts,
bidding requirements, subcontracting require-
ments, etc. Notices of the meeting have been
mailed to all AIA Chapters.
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The Architect and the Homebuilder

Again the AIA Journal presents an issue devoted entirely to the architect and the homebuilder and their common effort to design and build better communities and better homes.

Edward H. Fickett, Chairman of the AIA Committee on the Homebuilding Industry, is Guest Editor of this issue, and he and his Committee members have been very helpful in getting the material together—indeed, some have written their own contributions. We thank all those who have made this issue possible.

In line with the Institute's current emphasis upon Urban Design, this Architect-Homebuilder issue pays special attention to the need for proper and professional site-planning as the foundation for a successful community. The first step toward the prevention of the blight that is destroying and demoralizing the environs of our cities and the ribbons that connect our metropolitan areas, is thoughtful and intelligent site-planning. This can be done only by men trained for it—whether they be architects, landscape architects or planners. It's not the title that matters, it's the skill.

Our 1960 Architect-Homebuilder issue was a great success. We hope this one will be as well received and have as wide an influence.
Burgener and Tauares project, San Diego, California. Edward H. Fickett, AIA, architect
Frankly Speaking

by Edward H. Fickett, AIA

The Chairman of the AIA Committee for the Homebuilding Industry calls for proper understanding and better relationships between the professions concerned with providing America's housing. His words are frank and pull no punches; they are, unfortunately, too true.

Members of the building industry must work together to create a better understanding and relationship between the professional planning groups and the contractors, builders and developers. This is a basic requirement if we intend to establish successfully a better environment in which to live and work, as well as to provide improved housing for Americans.

Having mutual respect for fellow professionals and other members of the construction and building industry is an absolutely necessary ingredient for a successful building project. I have always felt that one of the reasons for the success of my personal relationships with builders and contractors was because of my background.

Coming from a family of contractors has taught me to respect the builder, subcontractor and other members of the building team. I can remember at an early age the respect that my father elicited from all of the building trades responsible for work on the projects he was constructing. The jobs were always better because of this relationship.

It is a proven fact that there exist many successful builder-architect teams, and the nationwide reception of their end product has been tremendously successful. The homes they build are constantly in demand.

In two recent subdivisions by leading West Coast architects working with competent builders, a sales check showed their homes were selling two-to-one over the typical standard house built from stock plans or out-moded designs. When I called on the builders to find out more about their building program, they had nothing but praise for the architects they were working with. Here again, respect and understanding for the responsibilities of each member of the building team was definitely defined.

It is difficult to understand why many members of the housing industry do not realize that they can no longer ignore design and its direct relationship to sales and profits. Other American industries recognized this fact some time ago.

Many engaged in various phases of the construction field, including some lenders, contractors and land developers, unfortunately know relatively little about the practice of architecture. Furthermore, their past financial successes with stock plans have led them to believe they have no need for professional services. They are somewhat reluctant to consider commissioning an architect because they have heard stories about the successful architect being "temperamental," "doesn't consider construction cost," "is a dreamer," or "has no real knowledge of public taste." Allegations of this type are nearly always unfounded.

Leading architects responsible for the best homes produced today can prove their success rests on the outgrowth of professional know-how combined with close collaboration with them and their builder clients.

Builders with whom I have worked have heard me say many times, "your success is my success." If the builder’s homes I have designed sell readily there is an increased profit for everyone, including the architect.

The type of architect the good development builder needs must possess certain abilities in addition to exceptional design talent. He should have a thorough knowledge of land use and plan-
ning, along with adequate concept of finance and lending procedures. The architect should also understand the planned merchandising arrangements and be aware of good built-in sales advantages. Among his most desirable qualities he should have an inventive and creative touch that will give his homes a look of newness and freshness, an end product that people will clamor to observe and buy. He must always consider the total effect of the neighborhood created by his individual designs.

Many builders complain that good architects are difficult to find. Frankly, I do not think these builders have looked too carefully before making such a statement. During the last few years I have traveled from Massachusetts to Texas, from Oregon to Florida. I have found many capable architects eager to work with a builder or contractor. If you have not had much luck in your own area, seek an architect in another state. After all, it is not necessary for you to live next door to him. Sometimes architects from other areas can add a new flavor to your homes. It is usually not too difficult for an architect to acclimate himself to a new locale or become acquainted with new building techniques and codes.

Public awareness of architecture is rising at a fast pace. Frankly, I believe the taste of the buyer is far better than many builders believe it to be. Art exhibits from coast to coast have never been attended by such crowds of people. Even in the lower income groups there is a great clamor to buy ceramics, good inexpensive paintings, sculpture and other art objects. Certainly art cannot be separated from architecture. Herein lies the secret of the successful and well designed home. There are many people who would like to live in an atmosphere which was conducive to the art they see around them.

This rising interest in art and architecture should cause a spontaneous eruption of excellent housing projects. Unfortunately, such is not the case. Presently there is not much visible evidence of inventiveness in housing developments.

There has not been enough elbow-rubbing between the builder and the architect—not enough mutual understanding. This must come before the houses we build and sell will be better. Most builder-developers feel they have a tremendous financial stake in their projects. This is certainly true. They are purchasers of great parcels of land.
and are highly involved in the financial problems of a new development.

With these huge expenditures the builder and lender should both concern themselves with constructing homes that will not be obsolete before they are occupied. If the builder retains and works with a competent and successful architect and the architect works closely with the builder, there is another voice in any conferences or meetings held prior to groundbreaking.

The architect can be helpful in many pre-construction aspects. Actually, this offers an opportunity to start a project with a mutual understanding of both builders' and architects' ideas, and it can be an important ingredient in the successful building program.

How can a builder select an architect? One method is to find an individual home design or housing project which you like and talk to the architect responsible for the job. Another technique is to select one or two reputable, aggressive architects noted for their residential work and call them in for a conference. Have your construction superintendent, estimator, sales manager and partners, if any, in the meeting. This costs you nothing but your time, and you may ultimately find a new source of income from increased sales.

I like the latter approach to a commission or new contract because, like most architects, I have reservations about the kind of builder I would like to work with. I want to be associated with successful, progressive homebuilders; not "jerry builders" or "construction brokers." I enjoy talking finances, land procurement and development, zoning, construction costs and merchandising techniques, not just land planning and architecture.

Retaining just any architect will not solve all of your problems. As in all professions, there are those who could do little, if anything, to solve your building problems. I am sure that if you make an honest effort you will find capable architects interested in your building program.

Just one more word of caution. Don't select an architect on the basis of the fee he charges. More than likely a lesser fee will mean a lesser service, and this is one area where the builder should be willing to compensate the architect for a thorough service. There have been very few instances in my own personal experience where builders felt my fees were exorbitant when they understood the professional services we were actually rendering.

America has a great need for better housing in all price categories. We, the members of the building industry, can provide buyers with choice homes if each of us becomes more determined to establish proper understanding and better working relationships with other groups in this field of endeavor.
Communities
Are Not A-OK

by Alfred Browning Parker, FAIA

The neighborhood and the community are far more im-
portant for the "good life" than any single individual
house, so says this distinguished Miami architect. His
challenges to architects to spearhead the drive for com-
munity living space make this a provocative article.

Photos from "Cities are Funny," July 1961, Journal

Recently we sent our first man into space. One
of the more picturesque expressions which came
from this outstanding feat was the phrase "A-OK,"
meaning all okay or everything functioning and
alright. Our communities are not A-OK. Every-
thing is not functioning all right.

President Kennedy, despite international situa-
tions that require constant attention, has still found
time to voice deep concern over the physical con-
dition of our cities and smaller communities. He
has taken some political action with regard to this
aspect of national life.

The President of the AIA has clearly stated the
responsibility of the architectural profession. He
has challenged us to "conceive and recreate our
country in convenience and beauty."

The Premier of Russia has, upon many oc-
casions, expressed his disdain of the United States.
He has called us a second-rate power and re-
peatedly made known his conviction that our con-
cept of man and state must crumble before the
"Wave of the Future" he describes as Commu-
nism.

There seems to be at present in this country a
tendency to wallow in our own misery and inepti-
tude. This self-commiseration is equally as bad
as the overwhelming self-confidence from which
we have sometimes suffered. This is the time for a fair appraisal of our virtues and for an honest evaluation of our faults, however agonizing the process. Now we must act. Now we must accept the responsibility that seeks our shoulders.

It is easy to point to our failures. We witness the breakdown and decline of moral principles in large and influential areas of our lives. Study a news stand, watch a complete evening of television, visit many of the so-called commercially successful movies, and you will discover dollar calculation without regard for moral or physical results. We should be utilizing these unused resources of our age for furthering the highest creative impulses in both young and old. Instead, however, these vigorous means are used to assert a denial of the best in man and to encourage insecurity, mistrust and a negation of humanity.

We have ample material from which to build our insecurities and our fears. Today's communications make it possible to read, hear and see the difficulties that beset us on an earthwide scope that leaves little doubt as to the urgency of our problems. Passing from crisis to crisis and bombarded on every side with news headlines, telecasts, special radio reports and a veritable avalanche of magazines and books, we sometimes find ourselves more confused than informed.

We pay lip service to the general concept that we should give more attention to matters of the spirit and less to the material things of life. The opportunities are ours. We are free. But unless we show some newly fashioned interest in the old fashioned virtues, we may not remain long either strong or free. Our civilization will add up to the sum of exactly what each one of us adds up to be in our actions and reactions.

How well the architect accepts his professional responsibility in shaping the physical environment of our country becomes one of the criteria of our civilization. Individual efforts, no matter how spectacular and how well regarded as architecture, do not define a culture nearly so well as over-all excellence in the general standards of building. In other words, what does the neighborhood unit look like; which adds up the community; and the communities multiplying into cities, regions and finally an entire nation. It we measure by this simple test, we see that today we are making a mess of our birthright. Everywhere we see the cities becoming a blight upon the land and conservation seems remote from the thoughts and actions of all of us.

Conservation is a part of our professional responsibility. Conservation means sane use. We should all seek and work toward this sane relationship between man and his environment. The true conservationist does not study so much any particular thing in itself as he studies the relationship of man to things. We should seek to make this relationship between man and his environment conjunctive and reciprocal rather than disjunctive and antagonistic. In a materialistic society this is difficult, however we must learn to use all our resources, human and otherwise, or face eventually the sure destruction of our common welfare.

The late Dr John Gifford, forester, conservationist and ecologist, had this to say concerning a philosophy of use: "Human resources, it seems to me, are the greatest of all resources because man, to an awesome degree, controls earth's other creatures. Nature decrees that man must work despite his innate love of leisure. Organs that are not used degenerate; hence use is the dictator of our being. Hand and brain alike must be used. When they are not, disaster may follow. People that have too much grow smug, become weaklings, and are superseded by the strong, who are themselves then caught in the endless cycle of decadence. Many of us can outlast adversity, but only a few can survive prosperity. Perhaps man is merely another one of the millions of experiments that Nature has been trying on the earth. If he is fit, he will survive; if not, he will pass into oblivion just as numberless other creatures have. Through intelligent understanding of Nature, man can keep himself out of the class of 'living fossils.' "

Our physical environment should demonstrate the use and not the waste of the gifts of nature. Of course there will be a normal wastage due to the ordinary wear and tear of use and to weathering. Conservation tries to eliminate reckless, shameful waste. Architecture acknowledges and utilizes the laws of conservation. It has been said that you can test a civilization by the type of person that it produces. The individuals in a society produce the physical environment and their buildings are a true index of their ideals.

Today in our nation more people own their homes than ever before in history. For the first time in the story of mankind, it is actually as easy for you to purchase a home as it is to rent a place in which to dwell. Tremendous strides have been made in the field of financing and construction. Government insured mortgages, savings and loan institutions, insurance companies, have contributed to the growth of individual home ownership. Techniques of construction utilizing heavy equipment, such as bulldozers, concrete mixers and placing machinery, wood truss fabrication; all of these have reduced the cost of housing and widened the field of those who are eligible to buy. Unfortunately architecture has not kept pace with these strides in financing and construction.

An even greater failure than the design of individual houses is the breakdown in over-all com-
munity planning. It is far more important to have a proper system of vehicular circulation, of business and shopping centers properly related to residential development, of water, sewers, communications arranged for both efficiency and sightliness than to maintain even a reasonable level of individual design. No matter how brilliant the individual effort, if the over-all community pattern is an impossible one, the standard of living will be decreased by it immeasurably. Unfortunately the utilization of land has become so enmeshed with financial considerations that an efficient and handsome layout is almost always rejected in favor of the scheme that creates the most lots for the least money. There are indications that this may be only a temporary situation for even the most hard-bitten "money man" is beginning to eye long range comprehensive planning as a means of protecting his investment.

We have many tools today with which to realize our dream of shaping the earth to our needs. Almost unlimited energy and machines are at hand for man to use in the construction of his environment. It is terrifying to note what we do with the power and equipment at our disposal. Let us take the land for example. We usually root up and scrape off all the trees, level completely any hills and sometimes even mountains. Then we deck the whole thing with poles, wires and signs. This hodge-podge of aimlessness then becomes a new community and after not too many years, a veritable slum.

Population and the Future

Carefully planned communities have always been important. However in the years to come, their importance will be difficult to exaggerate because of the tremendous population increases both in this country and throughout the world. It has been estimated that there are almost fifty million households in the United States and that these are increasing at the rate of nearly one million each year. Through the world the United Nations has estimated that the world population is growing by five thousand each hour or forty-four million a year. It will be impossible for American prosperity to survive in view of the rising population trends amidst abysmal poverty in the huge over-populated countries on the other side of the world. We must tackle this problem of rising population trends amidst abysmal poverty because of the tremendous population increases.

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Homebuilding
and the Urban Growth Process

by Robert C. Ledermann

Mr. Ledermann calls for orderly "urban growth" to replace "urban sprawl"—brought on by complex, often frustrating, zoning requirements in many communities. The author is Director of Community Facilities and Urban Renewal for the National Association of Homebuilders.

In the urban areas, where most new development is taking place today, a pattern of forces and counterforces is evident which is shaping the form of residential development.

The term "urban sprawl" has become a part of our present-day vocabulary, as has another much worn phrase, "exploding population." And like other oft-used generalizations, such as the "jet age" (which now has become the "space age") they have had their origins in the new ways of American life which came into being following, and in many cases as a result of, World War II.

An "exploding population" plus shifts in the economy—fewer but bigger farms and increased industrialization—has led to what we now call the "urban sprawl." And the sprawl has generated a whole host of new problems which many urban areas are either ill-equipped to solve or reluctant to tackle.

In earlier, more quiet days, the pace of urban expansion was less volatile, and was gauged closely to municipal programs of utility extension and other facilities related to residential development. As the postwar surge of population growth and suburban building gathered momentum, however, the rate of development out-distanced municipal capital improvement programs in many areas, and the traditional pattern gave way to a system in which developers have increasingly been called upon to install facilities which long were the domain of municipal agencies.

The greatly accelerated rate of growth also applied a pincer to the supply of close-in, well-located land, with a consequent rise in the price of suitable tracts for residential development.

Local governmental units have mushroomed in the urban fringe areas of greatest growth and have each, by and large, acted in their own fashion to erect a protective wall, and to establish an autonomous government, with a more or less full complement of services, in relative isolation from its neighbors.

To the squeeze on raw land has been added, therefore, a host of "protective" restrictions on the development and improvement of land, so that the building of a residential community today is an exceedingly complex, often frustrating, and quite expensive matter. The effect has been most severe on the housing supply for families with relatively modest incomes.

Planning in the areas where the need has been greatest has been both too little and too late. We see the paradox of a typical metropolitan area in which the strongest planning organization is in the central city, which is almost entirely built up, while planning boards and planning staffs are likely to be weak and inadequate, and possibly even lacking altogether, in the suburban townships and outlying areas where the need for professional guidance to accommodate future growth is greatest. One might almost establish a scale by which the strength and effectiveness of planning in the communities in a metropolitan area would run from high to low in relation to size and age, rather than to need.

A distinction must be made here between planning as an active function and a plan as such. Few communities feel respectable if they have not some time in the past developed a so-called comprehensive plan. The plan is a necessary requisite to the establishment of zoning, and in zoning many communities have found all the authority they want or need in order to control the course of development.
Zoning has, as a consequence, become a substitute for good planning—a role for which it was not intended. Nevertheless, the application of zoning controls, together with its counterpart, subdivision regulations, provides effective and convenient tools for communities which seek to limit development.

Here we must take into account the traditional concept of the early arrivals seeking to contain and insulate themselves against the influx of late-comers. Within their own realms, the individual communities in the fractionated suburban fringe find it preferable to zone and regulate against new growth. The lack of an over-all area-wide governmental structure to counterbalance land uses and densities on a metropolitan basis reinforces this intercommunity competition.

The effect on the builder and architect is obvious. Large lot zoning restrictions spread homes out over a wider area, with lower efficiency of use as density decreases, and requirements for ever more numerous and costly related facilities add up to a sizable outlay for each finished lot before building construction even begins.

Builders quarrel most strenuously with the tendency of some communities to force an added increment on to the package of requirements. Added increment is here defined as that measure of construction outlay which is in excessive proportion to the value it contributes.

Arbitrary and uniform requirements for forty-foot paved streets within a subdivision, for instance, bear no necessary relation to use, function, or even of esthetics. The extra cost of paving be-
yond the width which might be more appropriate does, however, certainly reflect itself in the price of the house.

Here it must be observed that once a community takes itself out of the business of providing what are essentially community facilities, it finds it easier to raise its standards. Since the other fellow is paying, a close eye on possible economies is dropped in favor of luxury standards, without any necessary relationship to the economic character of the neighborhood.

Almost lost in the process by which regulations for development are laid down are considerations of family needs, in both economic and esthetic terms.

There is nothing congenial or comforting about the appearance of a subdivision in which the houses, each identically set back from the street, are separated from those on the other side by a great swath of asphalt which has all the aspects of a raceway. Stimulation of a feeling of neighborhood is completely unaccounted for when the intention seems to have been to isolate each home as much as possible from its neighbors.

The critical matter is that this luxury of waste can no longer be tolerated. Within NAHB there has been a deep concern with this problem and a search for solutions for some time. New procedures are clearly called for; new procedures which, in effect, will subdue new character and charm into contemporary development, and do this at supportable cost.

Much has been written about the evils of the automobile as a land user, and the benefits which mass transportation systems would bring. With present attitudes toward zoning expressed in local regulations, however, effective mass transit become less achievable, as densities are lowered, and excessive sprawl is engendered. Land consumption per capita is increasing at a time when its wise use and conservation is more imperative than ever. It follows that an over-emphasis is placed on higher priced homes, while lower priced housing, for which the need is great, is actively discouraged by many community regulatory practices.

Early this year, "New Approaches to Residential Land Development" was published as Technical Bulletin No 40 by the Urban Land Institute. This Bulletin reported on an extensive survey which was made for NAHB and the Urban Land Institute of ideas and proposals which have been advanced, and of housing developments which have been built, reflecting imaginative thinking about ways in which residential building may be more wisely related to rational land use.

This survey has given encouragement to those who hope for better things in the future. It makes it clear that builders, architects, planners, land planners and landscape architects are concerned with the inefficient waste and sterility engendered by the traditional zoning concept, and are experimenting with new and more productive patterns. Cluster zoning, for example, under which a usable portion of a tract may be saved for open use, with the buildings grouped on the remaining part of the tract, offers the potential advantages of preserving open space, reducing lot sizes, lowered initial and maintenance costs, a better circulation pattern and variety in design.

The further testing and application of this type of development is increasingly being carried forward by architects, planners and developers.

The use of average lot size zoning standards, whereby development may be more closely geared to the terrain by allowing freedom for some lots to be smaller and some larger, is a relatively simple device, but one which offers significant advantage over the standard ordinance, in which a fixed minimum size is imposed.

There are increasing examples also of planned unit developments, in which the advantage is gained of an over-all concept embracing a larger area, and containing a variety of housing and land use types. Many zoning ordinances contain no provision for this type of development.

The much controversial row house has gained new stature as its flexibility and adaptability, when used in an imaginative setting, are appreciated. Maisonettes and patio houses offer further possibilities for desirable accommodation at reasonable cost. Certainly, a fresh approach to the better utilization of land for residential development in metropolitan areas is essential, if instead of "urban sprawl," we are to have orderly urban growth. There already have been real adjustments in other types of construction. Contrast, for example, the notable difference in pattern of pre-war and post-war commercial development. The typical commercial grouping today is, of course, the shopping center, planned as a unit, with parking space provided, and attention given to customer convenience in a manner far different from the old-fashioned retail strip.

Industrial buildings are now locating in handsome parks or districts. These have been pre-planned and designed to accommodate a specific type of activity, in a hospitable and efficient environment.

Certainly, fresh approaches are occurring in the residential field. Their benefits will become apparent, however, only if prevailing community attitudes about zoning and planning are brought into line with the recommendations of pioneers in the field who are pointing the way to better living for America's metropolitan population.
R for America

by Carl Koch, FAIA

If we can go to the moon physically and financially, this
Cambridge, Massachusetts, author says we ought to be
able to make our backyards livable. Here's a provoca-
tive article that will jolt the homebuilder and the architect
— and perhaps the government

Some of us honestly think we're doing all right
— lots of new building improvements constantly
advertised in the building and consumer shelter
magazines—over a million new dwelling units a
year—urban renewal on the front pages daily.

Some of us realize we are doing poorly but don't
see how we can do better, hampered as we are by
restrictive building codes, by the self-defeating
local autonomy of each jealous suburb and sub-
suburb—indispensable, we are told, to the Ameri-
can way of life; planning must be resisted, we are
further told, as a sign of socialism with all its
much-touted comitant evils.

► There is no need in an article addressed to ar-
chitects and home builders to emphasize the im-
portance to all of us of our living environment.
Most of us now realize that we will in the next
forty years double our population and probably
more than double the number of houses in this
country. We have most of us read the statistic
concerning the large numbers of substandard
houses requiring replacement; which must be razed
to make way for highways and replanning; and the
numbers which are being removed by fire. There
is a growing awareness of how fast our recently
built houses are turning into slums. In other words,
most of us reading this magazine are aware of
how inadequately we are facing this challenge.
Nowhere are we more subject to a combination of
complacency, defeatism, unawareness and igno-
rance than in our approach to the problems of our
physical environment.
Some of us just aren't interested—don't realize how our physical environment affects our day-to-day living; are used to things as they are and blind to the gradual deterioration; manage to avoid contact with the all-too-prevalent seamy side of our living spaces—so that we accept without real concern what we have and are building.

Some of us who are vaguely or actively aware of the general ugliness of our man-made environment are ignorant of a better one. We assume that since America is the richest, biggest, most up-to-date country in the world with the highest material standard of living, the way we are living must be the best way to live.

The purpose of these dreary statements is not masochistic. It is to remind those of us who are unaware or have forgotten that America, the patient, has a serious physical sickness. It is assumed that as good Americans we agree that he is worth curing, and that we of all people can find a cure. If we believe we can go to the moon both physically and financially we ought to be able to make our own backyard fit to live in and soul-satisfying too. To do this we must really want to.

One of the best ways to achieve this worthy end which has so far successfully eluded us is to arrive at an understanding between all concerned as to desirable and attainable ways and means to effect a cure. The customer for a better physical environment is generally dependent on the producer, the builder, and now and then the architect. All are helped or hindered toward their goals by local, state and federal government. Each of these is busy at his own pursuits all related to the final product—our total physical environment—but each so independent and unrelated to the other that no one will accept responsibility for the resultant conglomeration.

A catalytic agent is clearly needed to permit these interdependent contributors to work as a unity. Perhaps this agent should be called a magic elixir, for though it has been widely talked about, often prophesied and numerously attempted it has yet to happen. It is the industrialized house. This is not to say that it is sufficient by itself—no catalytic agent is. It has the potential though, I believe, to bring these still indissoluble ingredients into reaction to produce a satisfying physical environment long overdue.

What does the customer say about this industrialized house? So far he has managed to resist quite well the attempts which have been offered to him in its name. He has with some justice asked why he should accept "prefabrication," "machined finishes," metallic surfaces, just for their own sake. Too often he finds that these attempts, except for isolated examples of greatly improved mechanical equipment, have done little to make his over-all life easier, better or less costly than the tried and true methods.

The building material and equipment producer has been in favor of industrialization for some time—in fact, has proclaimed himself an industrialist—and in a piecemeal, irresponsible, fragmented way he is. With his brother producers, however, he creates a mammoth headless centipede who can go nowhere because he cannot coordinate his legs to proceed concurrently in the same direction. Most producers are so far content and indeed insist on producing only one or two unrelated incomplete parts of the whole product. All resist dealing directly with the consumer by offering him the complete product which is all he is interested in. The consumer shelter magazine story house is a good indication of this. Dream house after dream house, created at great expense for an amorphous client, is generally just an advertising display for the producers of unrelated materials and equipment which somehow or other are grafted on to each other to produce a Cinderella tale for the increasingly disillusioned reader.

What of the builder? He is less and less the man he used to be. More and more houses are produced by fewer and fewer builders. This process of change is bound to accelerate as more multiple-family dwellings appear as they must if we are to be able to have any time left over from getting to and from them. The new builder is talking about and trying larger and larger more prefabricated components, often attempting to do his own industrializing—usually with insufficient capital, know-how or design. He is, though, generally conservative, ready for change, uneasy in the knowledge that he is not producing good value or a community of homes he can really be proud of. Every community with vacant land is enacting legislation as fast as it can to block the builder, whereas he might be, and in a few examples is, a large factor in aiding growing communities in solving their building problems successfully. He is all too widely considered as a necessary evil to be guarded against and where possible strait-jacketed.

What of the architect? He has perhaps the most crucial part to play in this reaction between the elements necessary to produce a satisfactory physical environment.

Philip Will, Jr, President of the AIA, in an important policy statement made and widely publicized, included the following remarks:

"The architectural profession should assume responsibility for nothing less than the nation's man-
made environment including the use of land, water and air, an environment in harmony with the aspirations of man... In one form or another, the solutions to all these problems lie in the province of design which is the special province of the architect."

How many of us have done any significant work to implement this statement? The general and easiest answer most of us will make is that our qualifications for working in this area are not recognized and it is therefore impossible for us to make a contribution or earn an adequate living working in this field.

Both of these statements are true, but the fault still lies largely with us. It has been obvious for a long time that a satisfactory living environment is dependent on far more than single buildings. Too few of us have been concerned with more than a single building at a time with its immediate surroundings. This concern with single buildings has in many cases contributed to the very chaotic conditions which we are so quick to deprecate. I can remember, myself, my surprise on my first visit to San Francisco, fresh out of architectural school many years ago, when I saw two single-family houses, each designed by a well-known and revered modern architect, placed cheek-by-jowl on a street in San Francisco. It occurred to me way back then what a fantastic hodge-podge would be made up and down the street by a continuation of the battle these two houses were waging with each other.

As a profession, with certain exceptions, of course, we have not found it profitable, nor has our help been sought, not only because the need for good design has not been recognized but also because we have too often had too little really useful in the way of design to contribute.

The kind of individualism which has led us to develop and follow one cliché after another, has led each of our clients, the producer, the building and the final customer to look for help elsewhere.

Yet there is general recognition that the architect is concerned with industry. "Building USA," edited by Architectural Forum, says that "An architect is a man who is willing to agree that the manufacturer is in the most intimate way a participant in design, that the design of our building parts must be made in the factory, that architecture in an industrial age is no longer an art built on handicraft. It deals with an assembly of ready-made manufactured products. How the individual product has been designed determines the character of the assembly." The connection between the architect and the manufacturer must therefore be more intimate than ever, since architectural design must move into the factory.

On the other hand, an architect is apt to be a man who still agrees with Ruskin that, "Architecture is the art which so disposes and adorns the edifices raised by man, for whatever purposes, that the sight of them contributes to the mental health, power and pleasure." We worry a good deal about the ancient values lost, the landscape plowed under, the ugliness created in the name of material progress. Many architects have escaped from the present into a fairyland of form, usually in an attempt to demonstrate the tremendous technological advances we have made, at the same time searching for a beauty and serenity they feel we have lost. One modern architect after another with whom I have discussed prefabrication and standardization has told me he doesn't like to accept smooth surfaces, rigid machine requirements, and endless duplication of identical parts and places. They insist on freedom. I have listened to them sympathetically and then having looked at their building, I find myself struggling with a paradox. Each one of them has accepted considerable discipline to keep his building from becoming an architectural juke box. Unity, beauty, coherence are all important aspects of good architectural design. All demand discipline—subordinating the parts to the whole, striving for clarity rather than exuberance, finding a simple instead of a complicated way to accomplish a purpose. Throughout history the greatest architecture has been subject to a fascinating combination of discipline and daring. The pyramids, 4,000 years old, today with all our technology would still be quite an engi-

Patio house plans. Airport Circle development for Pennsauken, New Jersey. Webb & Knapp Communities, Inc; Carl Koch & Associates, architects
neering problem to construct. In the classic period architects designed beautiful buildings using identical elements over and over again, refining them over long periods of time. In the middle ages, the cathedrals which expressed man’s hopes and aspirations better than ever before or since derived breathtaking beauty from the necessity of using two materials—stone and glass—in a daring way subject to extreme limitations. The process was one of very slow evolution and the architect accepted the rigorous discipline necessary to build in this medium.

There is much to be learned by looking back that will help us to design better for the future using industrialization. To achieve the beauty and serenity and interest, which living environments of the past have provided, we can follow the principles which gave them the qualities we recognize as filling a need in our own lives—but not by copying the outward forms minus the inward meaning.

Today many of us generally lack the imagination necessary to harness the industrial process by accepting the disciplines imposed by it. This statement sounds paradoxical. Let me try to explain. It is true we do an almost limitless number of things with our new processes and new materials. We can simulate natural materials with various manufacturing processes. We can support buildings with air. We can do almost any job with a bewildering choice of methods and materials. We can as one engineer has said correct almost any design mistake with technology. Yet recent examples—there are depressingly few—of handsome, livable communities which come immediately to all our minds are: Chatham Village, Baldwin Hills, Greenbelt, Vallingby—characteristically achieve their distinction in spite of, or because of,
A rigid discipline in which the buildings per se are quietly anonymous and even undistinguished. The imaginative designer will learn that true freedom is most meaningful within a framework of discipline. In our day the framework we are offered is the so-far untapped potential of the industrial process, which far from inhibiting our individual self-expression, can and will channel our energies in the direction of contributing to the whole man and his society instead of dissipating them in the creation of jewels in chaos.

We have never been further behind in our potential or our needs for better building or in our knowledge of what to do about it. Fast as our industry is moving because of the movement in the rest of our economy, we are further than we've ever been from meeting our opportunities and responsibilities.

All of us, in the designing professions, in industry, and in the building business, and in government must accept a new responsibility, meet this challenge of a better living environment for all Americans.

Perhaps the biggest single reason for the inability of the industrialized house to make its breakthrough to date is an obvious though often forgotten vicious circle of cause and effect. Mass production brings low prices and low prices make
mass markets. Only a mass market can bring mass production but only mass production can effect the economics required by a mass market.

Many will agree that maybe a 10% reduction in price or equivalent improvement in performance — and certainly a 20% one — could tap a tremendous new market — but then the questioning begins. Will FHA approve? How about local building codes? Will the American customer really accept something new? Have exhaustive market surveys been made? This question was answered very well once by the reply — What kind of market survey would have indicated a demand for Mozart before anybody had heard him? The truly industrialized house is, as I see it, at least as far from the house of today as Mozart was from his immediate predecessor — but it is not a one-man composition.

Besides a strong concept fitted both to mass production requirements and techniques, and human aspirations for beauty, efficiency and quality, it needs a courageous producer and possibly a guaranteed market to justify the investment needed to complete the circle mentioned above.

An interesting and apparently successful attempt in this direction is being made in England now. For some years one of the regional authorities has been sponsoring prefabrication in schools. Sufficient experience and good enough results were obtained to warrant an expansion of the program to the point where a new integrated school construction system was designed and pre-sold to enough communities to justify the large capital expenditures necessary to tool up, complete the designs and produce in large enough quantities to make real and actual the economics postulated in the original design.

This kind of encouragement seems to me might help to get the industrialized house off dead center in America. There is certainly as real if less obvious a crisis to be met in our deteriorating physical environment as there is in the more obvious aspects of our national defense. Isn’t it at least as important to make our own world habitable again as it is to attempt to inhabit the moon? And doesn’t an objective look at our own world prove pretty conclusively that we are falling badly behind several countries at least in this regard?

I have from time to time for many years been aware at first hand of the ability of the Scandinavians to improve the livability of their cities while modernizing them but it came as a real shock to me to see recently that we have at least as much to learn from our neighbor to the south, Mexico.

In Mexico City recently, near the University — in itself a fascinating glimpse at a new world— I came upon the physical embodiment of the kind of community which we should be but are not building in America. Though some of the paint was still wet it was a full and happy community. It had the design qualities in modern terms which all satisfying communities have had — homogeneity with individuality — relatively few simple materials thoughtfully handled — discipline combined with imagination.

The natural advantages of the site were made the most of — existing trees treated with reverence and new planting obviously thought of as integral with the whole scheme. Art in the form of sculpture and mosaic wall murals was a basic part of the design. The mosaics in panels six feet wide and building height — occurred in a regular rhythm each a different design executed in natural stone of different colors.

The focus of the neighborhood kept cool by trees and a sculptured fountain coming to life out of a Mayan heritage — an outdoor theater — shops — kindergartens — an elementary school — a number of tot lots — rich green lawns and flower gardens carefully related with textured paving so that children could romp without spoiling their playground. One of the most interesting aspects was the happy way that individual tastes in home furnishings were possible without spoiling the effect of unity and coherence throughout the neighborhood — windows large enough for light and view but small enough so that the owner could be allowed to choose his own curtains.

In summary one of the very most important challenges facing us as a world leader of democracy is being able to prove that our physical environment is in accord with our stated ideals — that we are in fact civilized. To achieve this goal of a civilized physical environment far more responsibility and cooperation is necessary between industry, the present day builder, a revitalized design profession and government cooperation encouraging progress — not the status quo. A strong catalytic agent can be the industrialized house — uniting all three or four contributors to a better environment in an endeavor too large and complex for any segment to handle alone. Good design for democratic human beings must be recognized as basic to any solution of our physical environment worthy of our ideals.

The designer must then use discipline and imagination to provide in housing something both professional and citizen will recognize as being as good as and desirable for their time as in other times. In finally harnessing the most potent force at our disposal in this country and age we may find the best if not the only key to genuine revitalization of our communities and, incidentally, our profession.
Suburbia Revisited

by Allen G. Siple, AIA

From where I sit, in a somewhat dilapidated ivory tower in the City of Beverly Hills, there appear to be two equally popular ways of looking at "housing tracts," or dormitory suburbia for those who prefer the Latin: 1 Through the rose-colored spectacles of the merchant builder, the real estate agent, the lending institution and the eager young couples who sign up for "Non-Vets—No-Down"; 2 Through the smoked goggles usually worn by land philosophers and urban sophisticates, comforting to the jaundiced eye and giving the currently preferred dim view of the suburbs.

A third optical approach seems at the moment not in vogue,—to look at Urban Sprawl as it now is after the fact and without "corrective lenses," to give it the hard look, to try to observe realistically its plus and minus values, to note its appeal by contrast with decaying urbs, the damage already wrought both to the city and the countryside, to see the problem in its entirety, the problem of exploding numbers, more roofs for more people, more houses on less land, and to try to learn what our past mistakes have been, taking full advantage of "twenty-twenty hindsight," a faculty with which we are all so generously endowed.

Thinking about these weighty matters the other noon on the fourth cup of coffee, I recalled a housing development that I had a bit to do with a few years ago, and I felt attracted, as they say in police reports, to revisit the scene of the crime. Accordingly, toward evening I left my tower and drove to that suburb known as Westdale deep in the ever-sprawling outskirts of the Pueblo of the Queen of the Angels. Fifteen years had passed since I last made this eight-mile journey and it seemed timely to investigate how things were doing in that early post-war subdivision, both with my little ziggurats and with the inhabitants now at mid-point on the thirty-year mortgage plan.

In the year FHA 12 and AD 1946, I had accepted an offer to join a tract building team as "design consultant"—a title sufficiently innocuous to relieve me of total responsibility but adequate to justify the monthly stipend of $1500 on a two-year run with all drafting to be performed in and paid for by the tract developer's office.

I may be subjected to disciplinary action but I have always considered the Boiling of the Pot a normal and necessary side-line of the architectural career. I was thus afforded a living while pursuing in off-hours my own elevated professional practice and an undisturbed contemplation of the irregular Greek verbs. I also enjoyed the camaraderie of the company's drafting room—the whistling virtuoso head-draftsman, Ray Abos, doing La Tosca—as the boys apparently enjoyed my early morning recitations of the first chapter of Genesis. Morale was high, in spite of the job at hand and in spite of the beguiling pink horizon of the "brave new world." Bear in mind, if you will and can, that in 1946 the word "modern" had not yet disturbed the calm puddle of FHA policy—in fact, "modern stuff" was then frowned upon and sniffed at, with official skepticism—at arm's length.

"Dream" Houses

We were engaged upon a mildly entertaining enterprise—designing 782 houses—"each to be different with sales appeal," said the office memo from on high! We went ahead on three basic common-sense plans, rather pedestrian in view of later developments but locating the principal rooms generally on the "rear" or garden side. For variation, we had a bedroom wing that could jut or not jut, a sliding trombone garage that could be turned sideways to give the much-to-be-desired half-moon driveway. We had a breakfast alcove that could jut and become a "formal" dining room
separated by a door from the kitchen. There were at least 782 different entrance variations easily inventable. Color schemes suggested infinity. So the show was on the road.

The sales wing clobbered for the “homey” touch. It and the advertising man, known to us as “the enemy,” believed that dormer windows were much desired and low caves gave a bedroom that early girlish nostalgia, a feeling of rain on the roof, and all that sort of thing! Shutters enhanced the hole-in-the-wall window. Treillage and winding stepping-stones enhanced the front entrance, recalling moonlit nights, highschool romance, or something. Our living room fireplaces usually had mantels with a plug for an electric clock and ample width for the household gods and Christmas cards. Our “convertible den” could somehow accommodate a studio couch and a large leather chair for Daddy and the evening paper.

Our garages—not carports!—had doors and were intended for automobiles of modest size, not 300 HP spaceships with fins, and were planned for normal accumulation of junk, without which everyday life was then and still is improbable, even with latter-day storage walls.

As I drove along toward Westdale, I reviewed these plan considerations of times gone by and wondered how far-sighted they really were. And how about the New Look, now so successfully entrenched? I thought of “the enemy”—the sales wing, and for old time’s sake, whistled a strain from La Tosca. I thought of the “population explosion” and what it might have done to the little houses . . . “and God said unto them, be fruitful, and multiply, and replenish the earth, and subdue it.” Surely in fifteen years I could expect or hope for extensive remodellings.

**No Change at All?**

My first impression on turning into the main street of Westdale was crushing! The little houses looked at first sight with the same feeling as I remembered them! Trees had grown and shingled roofs had weathered; but the whole place seemed wrapt in self-sufficient slumber.

True, there were a few applied stone facings, brick plant-boxes, plastic fences, chinoiseries, and other gestures toward contemporary design in treillage, brise-soleils, louvers, perforated cement-block grilles, etc. But not more than a half-dozen out of 782 had gone all out for remodelling on the street-facing side. All of them, however, looked well-kept and freshly painted, the color schemes departing occasionally from the original, featured by touches of black trim intended perhaps as an evidence of advanced taste to point up the status symbol. In fact, the black motif has swept the whole subdivision—a kind of neighborhood comme il faut! If you still have green shutters, you probably still play Canasta.

All of the front yards, imposed by the legal setback restriction, showed signs of hard work and loving care. Many, indeed, were like submissions in a garden club show with groupings of birches, banana palms and bamboo, or an off-center dwarf pine on a mound of oriental grass complete with stone lantern. A few front yard fences had been timidly introduced—little white pickets or rustic rails overgrown with rioting roses, all held down to the restricted height of 3’-6” as required by the building ordinance.

The parkway trees were a positive value after fifteen years of growth since I remembered them with trunks the girth of my thumb. Some had died or for other reasons were no more, and I found the gaps pleasing, especially when other trees in the front yards had achieved enough size to carry the continuity of the leafy tops in and out of the monotonous parkway pattern.

In general, the whole street scene looked inhibited and self-conscious,—contrived to conform to legal restrictions and neighborhood respectability. Pride of ownership and possible “re-sale value” appeared as equally motivating factors.

But a real surprise was waiting back of those pretty and cosmetic façades!

Pushing a few door-bells with due misgivings and in the embarrassing role of a pollster, I found that great things had been happening. Partitions had been torn out, doors walled in, and walls pushed out into the rear patios to gain more elbow room within. One house had doubled its original 1400 square feet! Bedrooms and baths had been tacked on to the full limit of legal land coverage. Garages had been taken over as “family” or “hobby” rooms, carports then being added only to be remodelled again into something else with another carport added in tandem. So-called “service porches” had become “breakfast alcoves” or “offices,” the laundry then moving on into the attached garage with a maid’s room and bath displacing the second car.

When patios were gobbled up by the new “lanai” or added bedrooms to the full limit of the rear-yard ordinance restriction, new patios were built farther back, in many cases with swimming pools. Clothes driers had relieved the demand for service yards. *Sic transit gloria Monday,* with multi-colored undies whipping in the breeze!

But to offset this decorative loss, most householders had bestrewn their own kingdoms (back of the front yards!) with all the normal and healthy clutter accessory to well-adjusted tax-paying life. All the little juniors had left their wagons and battle-ships just where they had left them, as a perfect booby-trap for father sauntering.
forth through the newly installed sliding glass doors in the dead of night. Older juniors had taken over the new pebbled-cement patio for the dissection of a vintage Model-A. Still older “juniors” had left a striped bath-towel, a high-ball glass with lemon rind, and a floating funny-paper to decorate the pool. Most garage gable-ends held basket-ball hoops and high over every sentimental roof-line a TV antenna etched its “contemporary” pattern in the sky.

People Are People

I found the whole expression most heartening! People were behaving like people, in spite of pretty and conforming façades, in spite of “zoning” restrictions. Urban Sprawl was beginning to consolidate, to tighten and occupy its sprawl!

I talked at some length with Doris Palmer, an early purchaser now at mid-way on the thirty-year payment plan. With a balance yet to go of $6500 against a current market value of $45,000, the financial status seems fairly secure. After remodelling her own house to bring it to that handsome value, she went on to do others in the tract as designer-decorator and has worked up an expanding clientele, having special knowledge of the Westdale houses, their problems and possibilities.

“About 70% of the houses have had interior remodellings at least once!” she said. “They were pretty well built to start with, and can take it!”

There is the wise-guy school who wryly remark: “Those shacks won’t be there thirty years from now. The new forty-year mortgage is nothing but a rental plan—with the government holding the bag.” Then the crystal ball, esthetic gentry who look forward with gleeful enthusiasm to massive clearances of the “future slums,” and a chance to say: “We told you so!”

All of these slants on housing theory are based on the notion of more or less temporary structures, nothing to be taken too seriously. But the little house will be standing there a century or two from now in spite of mutations and lean-tos, just as wooden houses still stand in New England after two centuries of useful life. One in Old Lyme that I inspected, built in 1781, had a full course of oak timbers laid into the central stone chimney as a kind of “bond beam” to support the kitchen hearth. The termites had finally begun to chew with enough food on hand for another fifty years!

Well! There would seem to be enough time on hand in which to look at suburbs realistically and constructively, as now built for better or for worse. As architects, we can deplore the stupidity of land waste, the inflicted lot size and street pattern. We can deplore the continued spawning of Mother Goose cottages and the Squirrely Renaissance, and give prizes for designs which at least acknowledge the intelligence and dignity of man. We can plan houses with more thought toward remodelling and adapting to individual needs in a restless age. But as architects in the larger sense, we must hammer away on the basic issues of land use, both for projects now on the boards and with an eye for what must and will happen to suburbs already built.

Looking ahead a few years, maybe fifty, when decreed restrictions will have expired and “set-back” ordinances are certain to have been overruled by a practical and vigorous population, multiplied by “x” according to our prophets, the street scene of Westdale may at last be altered. I find it no strain on clairvoyance to imagine the little houses built out to the front property line, beginning with high walls and screens for privacy, or to see whole streets dead-ended or turned into wooded greenways, the automobile by that time either under control or obsolete. Perhaps an ivory tower rumination—but munching on real grass fresh-cropped from the “grass roots” of Westdale.
Land Planning vs Land Scraping

by Eugene R. Martini, ASLA, AIP

We are better housed than any other people in the world; yet one need not fly often or drive far to see that we have made a mess of our land.

Fortunately we now realize our mistakes. Communities are preparing controls; the home-building industry is alerting its builders; mortgagees are concerned with amenities; and at long last the landscape architect and the building architect are recognizing their joint responsibility. But regardless of controls, or desire, or challenge, talent is needed. Good subdivision regulations do not assure livable homes. The home builder's product must start with land. The architect's dream must rise from the earth. The crying need is for better land planning and better plot planning. To demonstrate the value of land planning is the objective of this article.

With only a minimum of prejudice I can state profoundly that land planning and plot planning are phases of landscape architecture. But I do not propose to digress into semantics lest I stir up a Donnybrook of professional prides. Good subdivision designs have come from the hands of engineers, planners and architects. Nicely fitted plot plans have resulted from collaboration of building architects, landscape architects, engineers and builders. More and more often, builders are paying for complete design services. The market is insisting upon a better product. The application of "tender loving care" to the land, to the lot and to existing trees is at long last being appreciated.

What Is Land Planning?

Land planning involves a healthy blend of engineering intelligence and creative talent. It includes determinations of land use, recognition of land cost and construction problems, and the production of the optimum number of marketable lots—I say optimum because I mean the maximum number feasible to assure attractive parcels for individual buyers who are becoming more discriminating each year.

Land planning is a remodeling job and therefore involves some of the same unknowns as remodeling a structure. It cannot start with a clean drawing board.

What Can Land Planning Provide?

Through an awareness of market trends, of planning programs and of esthetic principles, an experienced land planner can provide values beyond those offered by standard subdivision development practices. These values may be realized in any or all of the following ways:

Cash Values

1 Avoiding purchase of unproductive land. This can be done through careful analysis and evaluation of planning proposals for expressways, schools and other public works. It will involve a study of trends in the area. It should include review of traffic patterns, storm drainage problems and utility systems. It should involve analysis of topography and the preparation of sketch plans to determine yield in relation to cost.

2 Providing the maximum number of marketable parcels. There can be a great difference between the number of lots shown on a flat paper plan and the number that can be realized on the ground. Time and time again the careful land planner can produce, with adjustment of road to topo, a lot to topo and of road to lot, a greater total of buildable lots.

3 Keeping to a minimum the cost of clearing, grading, storm drainage and other construction items. Normal engineering practice on subdivision roads (à la state highway standards) does not always recognize area-wide grading problems, nor does it recognize lateral traffic problems involved in driveways and house sites. Through a careful study of all improvement factors, savings can usually be realized.

4 Designing maximum value into the marketable parcels. Good land planning, with an eye to esthetics, can assure more attractive building sites. It takes advantage of natural features and community facilities. It provides for easier driveway grades, the saving of more trees and a reduction in grading. An accessible, shaded building site brings the top price.

Long Term Values

1 Building a reputation for quality that will assure success with the buying public. The product of a builder gets to be known in the market almost
as well as that of an automobile dealer or other merchant. If he sells too many “lemons,” or if he can’t stand behind his product, the word will get around through salesmen, the press and the public. Good land planning will help to minimize this possibility.

2 Building a reputation for reliability that will assure success with public officials and agencies. Through proper presentation of his exhibits, a good land planner can help the builder establish a good working relationship with community officials and federal agencies. The better the image the builder creates, the better will be his treatment as he returns over the years to the planning commission, the construction department, the chief underwriter, or the loan guarantee officer.

3 Developing a sense of satisfaction in producing one well done job after another. A man works for money and he works for recognition. Management surveys have revealed that recognition often provides the greater drive. There is no greater reward than a job well done. Good land planning provides that certain extra that often makes the difference between a development that people admire and just another subdivision.

Hidden Values

1 A good land planner, like a good lawyer, can anticipate trouble and thereby help his client avoid it.

2 A good land planner has a common background with agency planners and can think with them. This speeds up processing time. Because he “talks the language” a land planner can, in his representation of a client, get a better and faster break. He can more rapidly bring about a meeting of the minds. His familiarity with the details of planning procedure and forms will save time. Through taking the responsibility for much of the “leg work,” a good land planner can leave the builder free to devote his time to the problems of financing and programing.

3 A land planner who is also a landscape architect can help assure a product with maximum appeal. A landscape architect knows the survival probabilities of existing trees and ground cover. He can demonstrate that it is not necessary to scrape everything out of the way; that it is not necessary to provide a bare aseptic platform for a standard model house. Scraping the earth increases the run-off of rainfall. Collecting it in ditches, increases its speed. The jelly mold pattern of grading, whereby each lot is wrapped with a drainage ditch, may have some advantages during construction, but need not be perpetuated in all of its ugly manifestations. A good landscape architect knows how a mulch of hay, straw, or forest duff can be combined with deep cultivation and quick-growing cover crops to serve as a turkish towel that will soak up rain before it causes damage.

Patterns of ground cover, grass and existing trees, along with well-selected, well-placed shrubs can so increase appeal as to assure a more rapid sale. It is the savings in quick turnover that often makes the difference between profit and loss to many a builder.

Retarding Factors

Until recently there have not been enough well-trained land planners available in all parts of the country. They have not be able to demonstrate to the builders that their services provide benefits that cover their fees many times over. On the other hand, most home builders and land developers have been underfinanced. The custom of expecting the designer, the engineer and the sub-contractor to finance the operation has led to dispirited participation if not to shoddy work.

Until the last few years, the pent-up demand for housing has made it unnecessary to provide much more than the minimum to assure a sale. Only now is there a buyers’ market, and only now is the buyer becoming educated by the press to be more discriminating in his choice of neighborhoods and of houses.

Custom has led builders to believe that cut and fill on any one site must be balanced. This belief, and the fact that the cost of grading has been drastically reduced have led to excessive grading to force a site to fit a house. We should learn that earth is a building material and can be brought in if needed. Balancing of cut and fill should not be expected any more than the building of a house with the timber that can be found on the site. The ease with which earth can be shoved around has led to unnecessary devastation of ground form and feature. The preservation of beauty has been left in the hands of diesel powered maniacs.

The free plan service of some agencies has made of land planning a perfunctory step to get approval; and the mail order service has led to mistakes through inadequate site inspection. Outdated zoning ordinances, unrealistic subdivision regulations and Procrustean MPR’s have discouraged invention and imagination. The minimum has become the maximum and the norm has become the ideal. The false sense of status which the home owner gets from a detached house (be it only 10’ from its neighbor) has led to the desecration of more acres than the law should allow. Each man’s cracker box is his castle. More livability could be provided through good row housing than through setting so many identical houses in a row.

A new trend in the home-building industry may present a new difficulty. This is the separation of land development from house building. “Develop-

ers” are preparing improved lots for sale to different builders. Although this may result in more variety in subdivision houses, most of the houses are built from standard plans, and the lots must be arbitrarily graded to fit the houses. The prime difficulty is this: That through the developer’s not knowing house types and sizes in advance he cuts his cloth to a uniform pattern and the tendency to the ordinary is encouraged once more. Yet all is not lost, for the separation of land development from housebuilding has, in some instances, discouraged acre-wide grading operations. In addition, some developers who are graduates of the homebuilding industry—and most of them are—are working with builders to assure good plot plans and are making concessions in lot price for extra landscape planting or for features on entrance lots.

What Hopes For The Future?

The future looks great! Industry-agency conferences are paving the way for better MPR’s and better subdivision regulations, and cities are relaxing their arbitrary, sterile ordinances to recognize the Community Plan concept. This concept provides for a balancing of densities to permit mixtures of housing types and the insinuation of convenient shopping.

We can again enjoy convenient “village centers” or have nearby, the corner grocery of bygone days. The Community Plan, or Community Unit Plan as it is sometimes called, permits of higher density and lower coverage. By the use of “clusters,” trees can be saved. Invention and imagination are encouraged.

Parcels once by-passed are being looked at again. They often afford choice location, and usually are a challenge to the designer and the builder. They have yielded interesting, carefully tailored combinations of house and lot and have encouraged European type homes with cloistered gardens, family courts, and private atria. Edward Stone, FAIA, and Jose Luis Sert, FAIA, have given us superb examples of this type of controlled, but complete, housing. Flexible interpretations of zoning ordinances are allowing for private neighborhood clubs to provide tennis courts, picnic areas and a swimming pool in the immediate vicinity of the houses.

Although expressways have been built like Chinese walls across the face of our land, they have often helped to arrest creeping blight. Commercial developments now leap-frog over our residential neighborhoods and may leave them undisturbed and stable for years to come. The Urban Land Institute, with the cooperation of AIA and ASLA has just published its New Approaches to Residential Land Development. The United States Savings and Loan League is providing guidance to its member lenders, and the NAHB tirelessly fosters better neighborhood developments. Some cities are buying development rights to preserve some open land. Land is, after all, our most limited resource.

Each one of us needs more than an ordinary house regimented into a rubber-stamp type subdivision. New techniques may sometimes make it possible to assure to each home owner or tenant what Claude Stoller, AIA, so aptly called “a sense of place.”
The 1961 seething, expanding and diminishing world steps into the Nuclear Era with its ever-present opposites: One positive, possessing the magnificent promise of progress for the future of all mankind; the other, negative, holding the potential of complete destruction of the human race.

Attempting to bring that promise to fruition on the domestic front, America is concerned with a myriad of problems; the population explosion, the decay of cities, mobile population, slum clearance, and the ghastly tangles caused by the automobile and airplane. These are but a few of the difficulties for which answers are being sought. Professor J. Himes in his book *Social Planning In America* states, “At the core of every culture there are certain values that give form and direction to society.” Broadly classified they are: “. . . (1) the values of social organization; (2) the values of individualism; and (3) the values of social welfare and humanitarianism.” These values are basic for studies in urban design, the physical manifestation of social planning.

The accent on points one and three, in attempting solutions for countless problems including those of the aged, infirm, shiftless and poor, can cloud the needs of the individual. The responsible individual, who as the head of the growing family requires development space and freedom for his children, pays the bills and taxes, votes and participates in government actions. This individual through citizenship initiative, effort and contribution provides the shining example for those unfortunate enough to live in public housing to emulate.

As the son of a poor but sturdy independent immigrant family with a great appreciation for the opportunities afforded by America, it seems appropriate to show concern in this limited article for the fundamental values of individualism apparently obscured by efforts of social planners in the worthy areas of social organization, welfare and humanitarianism. Generalizations have their difficulties, but the following appear to me as self-evident truths:

**Home**

Every normal, healthy, self-reliant, willing and thrifty individual with a family has the opportunity to own a home in America.

In order to avoid excessive criticism, qualifications are in order. A family may have to restrain some expenditures in order to put together the down payment; for example, no TV, liquor, tobacco, horse racing, gambling, contributions, long vacation trips, etc. In fact, one might have to lead a “Spartan” life for a year or so to acquire that down payment for a mobile home. The savings affected in the equity at the time of its sale could then provide a start for the purchase of a modest used home and so on. The important point, building with hope for the independent future.

The fact that Mr Stein seems to be objecting to the miles of spread-out homes in Los Angeles (Journal, March, 1961) only proves the point that the bulk of American families desire to purchase one of the finest free enterprise stakes imaginable, a home in the United States with all its wonderful connotations.

The latest rash of high-rise buildings and the sheaves of rent receipts is not the answer for family living.

**Automobile**

Every normal adult has the opportunity to purchase an automobile in America. It is evident that this mechanical device creates frustration and destruction, but Mr McQuade’s (Journal, March, 1961) petulant treatment of the automobile does not take into account the facts.

This modern instrument provides us with wonderful freedom; it allows the population of our nation to be mobile, to change jobs and to seek new horizons and challenges. It allows wives to shop, attend PTA meetings, to work or play. Even teen-agers too, find broad freedoms provided by the car: the search for work, running errands, dating and plain enjoyment as well as the economic restriction and responsibility of keeping the mechanical steed operating.

As a motorized instrument without thinking powers, it does not force our population to move. Insufficient parking and the fact that there are
only four lanes of freeway crossing L.A. in the East, West, North and South directions is not the fault of the car but of us, the people, who refuse to initiate action that will keep our freeways five years ahead instead of ten years behind our needs.

The tragedy of the needed freeway is the fact that the taxpayer pays for it whether he has it or not. For those who object to the barren roads, the Pasadena Freeway demonstrates the possibility of a pleasant driving environment.

While rapid transit might work in some areas, obviously it is for the other fellow to remove his car from the freeway, making life easier for me. I abhor the inconvenience of strap-hanging, transferring to other rapid cars, having my wife transport me to the station, walking from the rapid transit terminal point to my destination or disciplining my life to a timetable.

Parking

Could the architect and home builder provide automobile parking or storage at my typical home for my wife and each of my three children (five car spaces in all)? Incidentally, a beam strong enough to swing a motor on would please my active seventeen-year-old auto mechanic. This device alone will probably help him establish a teen-age neighborhood “do it yourself” garage. Problems? Yes, but remember the problems grandmother used to have with the stable in the rear and no asphalt!

It goes without saying that all new structures must be required to have sufficient parking space for all cars servicing or visiting that structure. Street parking is the factor of safety.

Speed

California recently passed a maximum 65 miles an hour speed limit. This means that we of the Golden State can cross a city of 3,516 square miles (area of 6 mile circle) in a single hour. Los Angeles has an area of 452.2 square miles. Freeways designed for 65-mile an hour traffic at 5:00 PM combined with single family housing is still the best deterrent to high density.

Instead of sitting apathetically in our traffic-jammed cars, let us promote ample freeways even if deficit financing is involved.

Technology

In order to build these low density, predominantly single-family cities, we will need to bring in the American builder and the magnificent bouncy “carry all,” the “American developers' best friend”—Sibyl Moholy-Nagy, (Journal, March, 1961).

These tools have freed architects of the rule that has come down to us from antiquity, “build with the contours.” The planner can now cross the contours for economic, functional or esthetic reasons. He can develop useless land or sculpture the land to enhance nature. However blame not the machine for the inadequacies of man and remember, it too can be directed to “go with the contours,” if desirable.

Education

Every normal individual has the opportunity to acquire an education in America, a fact so obvious that people take it for granted and seem to underestimate its value. Reams have been written about this subject but it is generally accepted that the broad education which develops the thinking powers and ability to “write, read and figure” is considered the finest. However, have we developed the national thinking power when the advertising agencies of Madison Avenue sway the consumer public to purchase non-essentials before family requirements? Can the home building industry fight “fire with fire” by stimulating a home ownership educational program?

Obligations for the Homebuilding Industry

Make known at government levels the interest of the home building industry and the home owner and encourage free enterprise legislative action in this field.

Encourage a national home ownership objective educational program to include studies of citizenship responsibilities in urban design.

Encourage greater participation in ownership by producing a functional and pleasing shelter.

Encourage a finer environment by demanding better urban design.

Encourage solutions to related home ownership problems (for example: The auto should be provided with ample parking and adequate roads for maximum safe speeds for peak load traffic).

Guard against competitive “easy money” rental schemes which tend to dilute or destroy present values of individualism manifested in home ownership and so important to our culture.

Conclusion

Home ownership has been made possible for many city dwellers by the automobile. Countless individuals have been able to combine the desired qualities of urban and rural living, if so inclined, for the same reason.

Happiness and the full life stem from many experiences, but no one will disagree with the thesis that the benefits derived from independent home ownership encourage good citizenship and provide a giant step toward that "Home Sweet Home." Be it ever so humble, there is no place like home, particularly if it is paid for.
The Community in the Landscape

The new man-made landscape is a nightmare community made of roof tops. It is a jumble of colored gravels on pitched roofs, television antennae sprouting like a forest of tortured trees and vents—all in pastel shades of invented variety. What is new is not the monotony (which could have been a virtue) but the cartoon of individuality, with houses stamped endlessly out of a variety of facade books in a faceless, nameless, surrealist horror.

We are faced by a spread, and an ever-increasing Malthusian number. A new landscape of ugliness. Before this, our communities—villages in the wilderness—were nodules, concentrated groups with a kind of gem-like quality—hard, tight and faceted. New England villages, all white and green with huge elms arched over the streets and white-spired, sat among their farms centered in their countryside. In the midwest, long, dusty prairie streets ran down the section lines between the cottonwoods and the railroad track out in the openness engulfed in a haze of green fields and corn-high farm rows. They made their own easy impact on the landscape and our image of an earlier time is of Tom Sawyer painting a white clapboard fence and wandering off to picnic in the closeby woods on Saturday.

But now the ooze of roofs has begun to spread around the cities so that the endless curving streets faced down with tiny, homely boxes on 60 x 110 foot lots is like an inescapable quagmire. In earlier times, the community was small enough so that the roads and buildings were separated and the native or planted landscape tended to dominate the scene. The quality of community esthetics grew naturally and seemed less self-consciously important. Somehow the rose and lilac, the elm and the mountain ash seemed to have enough space to spread, enough covering ability to enable the landscape to dominate and soften the community scene. What is more important, we used to build slowly and the ugly mistakes had time to be covered by gardens before we perpetrated new ones, new uglinesses. Over the years the houses would grow in easy increments, the Banksia rose would gradually cover the carpenter’s white Victorian fretwork and the trees made a landscape. But this romantic past has no real lesson (except in a negative sense) for us today. No false ranch houses or pseudo country lanes will solve our problems.

A single well-designed house endlessly repeated can form a community which can very easily be dull, uninspired and a blight on the landscape, even a ready-made visual slum. On the other hand, simple uninspired houses which group well into the contours and amongst the hills can be exciting visual additions to the native landscape and form handsome visual communities.

A street lined with handsome houses can be depressingly unpleasant and a street formed of mediocre houses well paced can still pack an

by Lawrence Halprin, ASLA

Our once-neat, tightly knotted communities are now turning into a quagmire of roof tops and a landscape of ugliness. Mr Halprin calls for a renewed effort of building in landscape rather than building as landscape...
The Community in the Landscape

1. Brisbane, California. A fine looking community made up of very ordinary houses nestled in the hills.

2. The geometrical community designed with a compass. A good example of an imposed and sterile rigidity.

3. A community which grew in the landscape. This is the biblical town of Ein Karem in the hills of Judea.

4. The umbilical approach.

5. These were once handsome sand dunes. If you look closely, each facade is different.
The Streetscape

1. The old fashioned street. None of the houses have anything except good taste. The street is for walking.

2. This street is lined by Hansel and Gretel type houses and wires. It is for cars.

3. This street is lined by good, well-designed modern houses. Once inside them, there is much amenity and good design—but the street is no better than the one before.

4. Another new street with buildings grouped around commons areas and walking paths. Married student housing, University of Calif. in San Francisco. Clark & Beulter & Rockrise, architects; Lawrence Halprin, site planner and landscape architect.

5. A new kind of street—for pedestrians and little girls. A low-cost housing development in Richmond, Easter Hill. Hardison & DeMars, architects; Lawrence Halprin, landscape architect.

esthetic impact which is enormously satisfying as a community design and as an environment in which it is agreeable to move about and live.

What is more important, of course, is the concept of building in landscape as against building as landscape. The street as we have known it—that ancient umbilical cord for utilities and conveyances, has overwhelmed our concept of community design. And so has the well-spaced, small baronial estate crowded down onto its 6500 sq. ft. property tied with ribbons around its setbacks.

We are forced by present day financing into a pseudo-economic pattern of property lines and individual packages which are duplicating and wasteful and in many ways completely inefficient places to live.

Our zoning, our lending agency restrictions, our property lines, establish a pattern of sterility and rigidity which defies creative, forward-looking solutions. Modern formalistic subdivision patterns do not solve the problems of communities designed as landscape, no matter how pretty and imaginative the patterns, whether they be curvilinear or snail-like or crystalline in their geometry. The roofs and television antennae dominate, the roads are overly wide, the endless 60 x 110 ft. lots generate their own inbuilt inadequacies, and the whole composition is inevitably dull, sterile and inorganic as a place to live.

If we are trying, as I think we must, to evolve biologically sound as well as esthetically organic communities, then we have to take a leaf from nature's book and evolve our solutions, not impose them. We should not copy nature's outward forms but her method of operation.

Geometry as an attempt to impose some kind of logical order on chaos will itself fail as a technique for community design. Even where geometry becomes subtle, where spaces invade the composition, where three-dimensional thought is given to the composition and the house itself divides and fragments, it fails. Vallingby has its own asymmetrical geometry which, I feel, fails—surely not as
The Roofscape

1 A handsome ancient roofscape, San Gimignano

2 The houses individually are pleasant. The jumble, however, is not

3 The same Hansel and Gretel community as on p. 55. The roofs are fake shingles. The wires are Pacific Gas & Electric. The street is a mess

4 A pleasant community roofscape grouped around a Commons. Lawrence Halprin, landscape architect
miserably as the Levittowns, but still cannot ultimately prove to be the pattern for us to follow. It has an imposed pre-formulated pattern that imposes a sense of unpleasant rigidity and formal sterility which in the long run we resent. So also do most of the new redevelopment schemes we see papered on the magazines. They are clever, they are carefully designed, they make nice patterns—but they are inorganic and pre-digested.

We need to evolve instead a new way to design communities which arises out of man’s biological need for a community-in-landscape. The elements with which we work are clear and simple—the area, wherever it may be, sets up its own configurations and imposes its own requirements. Then there are people and their needs for shelter; but also for other things beyond shelter—space, green, sky, wildflowers, woods as well as structure. Starting from these requirements we need to design a new landscape which is in the landscape and evolves its sculptural forms from it. We need to put together communities as places to live which are as inevitable in their biological structures as our needs are. We need to evolve patterns and configurations in a naturalistic, non-geometric way which will be esthetically satisfying because they evolved in a non-imposed method.

We need to allow process to evolve continuous product and in this avoid geometry. We may need to learn to work with chaos just as nature does—allow for the chance which is implicit in naturalistic processes and evolve patterns of growth to guide community design. We will need to avoid just as much the curvilinear pseudo-naturalistic geometry as the renaissance geometry, for community design is not decoration but evolves from a living reality.

Out of this biology we could design ecologically sound as well as esthetically sculptural groups of communities where people would feel at home as part of the new man-made landscape. But it will mean a new attitude towards the design of environment where the whole configuration of man’s needs becomes vital to the designers and the subtleties of organic processes are allowed to help evolve rhythmical solutions, not merely paper-pretty ones, no matter how urbane or sophisticated. It will undoubtedly involve a new attitude toward land—which will recognize it not as a commodity for sale but as a precious natural resource which is limited in amount and therefore invaluable. There is a limit to our raw material and we need, therefore, to make the very most of it that we can.
During most of the recent homebuilder conventions, I noticed that the meetings which drew the largest crowds were those which taught people how to sell houses.

It was apparent that fewer people were interested in how to produce a better house than in how to sell what we now build, whether what we now build is good or bad.

In recent years Madison Avenue has been telling American industry to create images. These images are designed to motivate buying for any one of a number of reasons.

Maybe the consumer buys a product to massage his status-seeking ego, maybe he needs to get himself out of the doghouse, maybe he is just shamed into buying something but, whatever it is, we are taught that we must create an atmosphere which will bring the buyers running.

The longer I spend in the homebuilding arena, the more I become convinced that a very high percentage of the selling job is already done if the product is right, and by the product we must include not only the house but also the plot around it and the community around the land.

Our trouble is that we are so busy with the many problems thrown in our paths that we don’t take the time or devote adequate study to improve this product.

The decision to change to another design usually comes about because somebody on the other side of town had a smashing success with an idea which we now want to copy.

The boys on Madison Avenue aren’t too far out when they talk about creating an image. We have not sold the idea of home ownership nearly as well as it should be, primarily, I think, because the home buyer has a vague notion that “they don’t build houses like they did in the good old days.”

by Herman H. York, AIA

Today the architect and homebuilder must create areas of enjoyment without and within the home in order to sell their product. Mr York tells us what the home buyer wants from us today and will be looking for tomorrow.

We should spend time getting people to like our houses, to realize that for the most part they represent good value.

A recent best-seller book is entitled “Enjoy, Enjoy!” There is an application for a theme such as enjoy, enjoy to the production of homes for sale. In the design and merchandising of tract built houses we must keep in mind the advantage of having the home owner enjoy the buying of a house instead of allowing him to approach it as a problem fraught with potential danger.

Creating an atmosphere which stimulates all members of the family to become enthusiastic about our product spells the difference between success and failure. The climate necessary for such enthusiasm is often created in the design of the house, from floor plan layout to exterior finish.

From the moment the family steps out of its car at the curb, the house should envelop them in an atmosphere which should make them subconsciously say “We wish this were our home, it would be fun to live here.”

If there is a trend in home design which has made itself apparent in recent years, it is that of creating both within and without many areas of
enjoyment in the form of luxury features. Of course, there are budget restrictions on this kind of thing, but with imaginative thinking often many ideas can be developed which cost very little. Such items take on many forms. They should appeal not only to the woman buyer but to the husband and to the children; particularly if the youngsters are teen-agers.

The builder and his architect are faced with a peculiar problem because the home buyer says he wants more space but if space is provided at the sacrifice of luxury the buyer looks elsewhere—at houses which appeal to his vanity.

Most marketing consultants now agree that the home is the average American's status symbol. If this is true we must provide houses which are not only sensibly planned but which give buyers the desire to acquire them the moment they get their first look.

Yes, they are looking for more than shelter. "They cannot live by bread alone" is demonstrated every day in thousands of model houses throughout our country. To look at some of these houses one would think we live "by guinea hen under glass" alone.

**Built-in Luxury**

The luxury we build in today, and which apparently is necessary to insure sales, is seen in such examples as wide roof overhangs, double front doors, heavy brass door hardware and expensive-looking front entrance lighting fixtures. Once inside we see bluestone, marble or expensive vinyl flooring in the entrance foyer, wood panelled walls, wall paper murals. If there is an upstairs, a stair hall which resembles something built for the plantation owner of the Colonial era.

Today we are creating an image based upon the theory that a house must not only be well laid out for practical everyday living but in addition must provide for enjoyment for every member of the family. They must be convinced, and quickly, that this house above all other houses will give them the kind of enjoyable living worthy of whatever financial sacrifices they must make to meet the monthly mortgage payments.

Let's take a look at what the consumer wants and how this may affect the trend in house design for 1961.

In a recent survey taken by Stanley Edge Associates in fourteen cities across the country, involving about 500 potential home buyers, we find some interesting statistics.

- 53% of those interviewed lived in one story houses
- 19% lived in two-story
- 8% lived in 1 1/2-story
- 7% lived in split level

When asked what kind of house they would buy if they had to do it over again

- 53% want one-story (no change)
- 11% want two-story (a drop of 8%)
- 6% want 1 1/2-story (a drop of 2%)
- 29% want split level (a 22% increase)

There has been this year wide acceptance of a new kind of house, a one-story house in a raised variation. This house, known as a raised ranch, or a split ranch, while often architecturally poor, provides many of the things most wanted by the home buyer. It is a good house because:

1. It is a one-story house, with one floor living convenience.
2. It appears impressively large from the exterior because it is lifted out of the ground, exposing over half of the lower level.
3. It usually incorporates an important status symbol, the two-car garage.
4. It creates habitable area out of the cellar to a greater degree than the original split level houses.
5. It is new but not radically different.
6. It lends itself to both contemporary or traditional style.
7. It builds inexpensively due to its simple design.

Its chief weakness is the poor location of the kitchen as related to the garage and as related to the grade level at the rear. Often a high stair system is required for access from grade to the kitchen door. Two solutions for this problem have been used:

1. The building of a rear dining deck from which a stair leads to grade.
2. A second interior stair system leading down from the kitchen dinette area to the family room below.

Another weakness is the relationship of the family room to grade. In most cases the floor of this room is about three feet below grade, making indoor-outdoor access difficult.

Finally, and most seriously, is the problem of designing an attractive exterior for a house on flat land which has half of its lowest floor exposed, its front door perched up between floors and a garage door at curb height.

For 1961 and 1962 it appears that this house will cut into the sale of two-story houses. In some areas we have reports that it is selling at a twenty to one rate above any other kind of model.

In almost every new project we have had anything to do with in the past six months at least one model house was of the so called "raised ranch" type. This applies to all price levels from $13,000 to $30,000.

Except in high-priced houses ($30,000 and above) the raised ranch has superseded the conventional ranch because it is impossible to provide
as much recreation and garage space in a normal one-story house as can be done in the raised ranch.

The conventional one-story house is without doubt the most popular house in the high price group. There may be regional variations on this, especially where land cost is so high and location so desirable that small plots demand vertical use of space.

Despite the space advantage of the raised ranch, elegance is demanded and achieved by generous space allotted to the split stair entrance, to the open railing leading both up to the main floor and down to the open recreation room.

Another interesting item revealed in the Edge report concerned the bathroom. The importance of a second bathroom was discovered when 76% of those asked listed the second bath ahead of the third bedroom and far ahead of a fourth bedroom. In the order of importance when deciding upon what rooms are a must in an eight-room house (including bathrooms) the answers were:

1. Kitchen
2. Bath
3. Bedroom
4. Bedroom
5. Bath
6. Bedroom
7. Family room
8. Living room

Following these basic eight were living-dining room combined, dining room, entrance hall, den, bedroom.

The importance of both kitchen and bathroom indicates the wisdom of directing much of our attention to these areas. So much has been written and said concerning these two rooms and so much done about it that it may not be necessary for me to spend much time on the subject.

The Bathroom

May I observe, however, in passing, that although we have made great progress in the kitchen, the bathroom is still the poorest designed portion of the house. The bathtub today is as great a menace to safety as it was forty years ago. It has changed its shape slightly, but otherwise the getting in and out of a tub, particularly for older people, is still extremely hazardous. Many of our hot water faucets are still designed to give the home owner a fair chance of scalding himself, others are so streamlined they are virtually impossible to operate with wet hands. Water closets get out of order with the frequency of the television set. Toilet paper holders need replenishing too often. Incandescent lighting for the bathroom has not been well designed, fluorescent lighting too often disturbs radio reception, in addition doing nothing flattering for a woman's complexion.

We spend a lot of time installing huge vanity tops and concealing the plumbing with expensive doors and hardware, but forget that work needs to be done to improve the fixtures and fittings behind all this glamour.

Then, too, there is the ceramic tile in its ancient size of 4½” x 4½” with its soap grab bars one and one-half tiles wide instead of two, requiring cutting at high labor rates, or the chromium, wall applied soap dishes so placed to insure soap drippings slopped all over the lavatory.

Getting back to the matter of elegance, one very marketable but somewhat practical old idea is the splitting of the bath room, putting the water closet and tub in one room separated from the lavatory in a mirrored vanity arrangement with a carpeted floor in the lavatory area. I did this in my own home with good results.

Research

There is one other subject about which I have said nothing but which will have a profound effect upon home building and its design. This concerns the research now being done by the NAHB and by private industry. Many new materials are beginning to reach the home building market place and as public acceptance of these items increases, we may well see a swing back toward contemporary design. At the moment, in the face of the demand for Early American architecture in many sections of our country such an idea seems remote.

However, sandwich panel construction with skins of aluminum, vinyl covered steel, plastic coated asbestos cement, new ideas in plywood, other combinations of new materials, all put together in a system of modular dimensioning will decrease construction cost by eliminating much on-site labor—these things will influence design.

We have made so much more progress in the design of commercial structures than in that of home design, due of course in part to the difference between the greater architectural freedom in the former vis-a-vis a preconceived preference regarding style peculiar to the home buyer.

It is bewildering to understand why a 1961 kitchen with its modern flush surfaced appliances, counter tops, fluorescent lighting, sliding aluminum and glass doors and vinyl floors should be the backdrop for a six-panelled Colonial front door, flanked on each side with wrought iron carriage lanterns and louvered shutters.

There is every indication notwithstanding that home buyers are becoming educated to the advantages offered by many of the new maintenance-free, scientifically designed building materials and as this acceptance grows we will see a trend toward greater demand for houses which look as though they were designed for 1961.
All over America, North — South — East — and West new communities are rising up. With the combined knowledge, effort and work of architect, builder, landscape architect and planner these communities are bringing a greater degree of happiness to their residents than being “just a place to hang a hat.” The community developments on the following pages are typical of those rising up all over the country, and serve as illustrations of what careful planning and collaboration among the building and design professions can accomplish.

A Portfolio of Planned Communities
Began as a 400-acre subdivision for Negroes and revised to include a fifty-acre campus-type high school and shopping center and an additional fifty acres for a college. Houses are priced from $13,500 to $14,500. First photo above shows that trees can be saved! Shamrock Hills, Charlotte, NC; Holroy, Folk and Grox, architects; Spangler Construction Company, builder-developer; Martini and Associates, landscape architects and planners.
Three hundred and twenty-five homes are included in this community development, ranging in price from $37,500 to $49,500.
River Park Cooperative Homes, Wash., DC

Architects-Land Planners / Charles M. Goodman Associates; Wash., DC
Builder / Standard Construction Co., Wash., DC

River Park is a cooperative development of town houses and apartments to be constructed in southwest Washington for occupancy by mid-1962. It is being built for the Reynolds Metals Company and when completed, will be sold to River Park, a cooperative organization now being formed. The community will contain 384 apartments in a high-rise building and 134 town houses. Warmth, color and life are provided by the varied planting, open areas and community facilities. Landscaped pedestrian walkways lead to the nearby Potomac River, to schools and shops.
Northglenn, Denver, Colo.
Architect / Warren A. Flickinger; Denver, Colorado
Builder / Perl-Mack Construction Company; Denver, Colorado
Land Planner / Harman, O'Donnell & Henninger; Denver, Colorado

The NAHB Journal-Life award for excellence in Complete Community Development went to Northglenn, ten miles north of Denver. The community is planned for eventual incorporation into the city of Denver.

There are nearly 1,200 houses completed at Northglenn. Prices range from $11,900 to $32,000. A total of 108 acres of the 2,175-acre tract is reserved for schools, churches and a hospital center. Future employment centers and industrial sites have been mapped.
Red Rock Hill, San Francisco, Calif.
In this planned community soon to get under construction, the San Francisco Redevelopment Agency conducted a competition for designs. Selections were made on the basis of environmental and architectural excellence, land use, suitability for site and other considerations. From the competition entries, ten winners were selected, and from the ten four appearing on these pages will be made available to developers who wish to bid for the Red Rock Hill site. The bidder may then build any one of the four designs presented here. Red Rock Hill is a twenty-two acre crest. The sale of the site to the successful developer will be held next month.
This audience will surely agree that land planning is one of today's most critical problems and that it will become increasingly critical for obvious reasons: rapid population growth and concurrent demands for ever-increasing standards of living. Will it conclude that there is no alternative but the most intelligent use of the surface of the earth? Will it agree with this proposal for eliciting that kind of use? The problem can be divided into four components, and these can be examined consecutively. They are the questions of responsibility, of tradition, of professionalism and of legislation.

Responsibility

This is fundamentally a moral issue which can be put: What is the responsibility of an individual who develops the physical environment, who makes physical changes in it for human purposes? In another form it can be stated: Is such a man entirely free to do as he wishes or must his activities be circumscribed? Experience suggests the latter for a number of reasons; population and conservation are among the more prominent. But one is then led to inquire: To whom and for what is the developer responsible? Is it possible to assume a sense of responsibility to the surface of the earth, or to the flora that cover it? Nature worship has long and honorable human traditions. The surface of the earth, after all, is man’s only place of abode except for the surfaces of other satellites, man-made or natural, but it is recklessly optimistic to assume that he will colonize them on any large scale in any foreseeable future. Even if he does, if his approach continues to be wanton and exploitative, where is it all to end? More satellites in more distant space? So there is a point about responsibility to a physical thing, a dwelling place, a home.

If you are unwilling to grant this, there are facets of responsibility more easily recognizable and more palatable in western culture. One in-

A challenging call for professionalism in land planning.

Patchwork development and design by law have failed, this author says. His proposals for improving our use of land make thoughtful reading
given a voice, and it is for this reason that he must accept the highest sense of responsibility, based in a respect for mankind, an optimism about the possibilities for the future, a belief in free institutions and in the notion that generations to come inherit the right to decide their ways of life. They cannot have such rights if the earth has been committed to ill-conceived patterns of development. The least we can do is to shape those which we undertake for our generation, in the most intelligent, thoughtful, skillful, considerate and respectful ways that we can.

We have inherited examples of resource exploitation and they have led to great efforts at conservation. We have demographic information to add to this experience to make reasonable forecasts. We have living examples of the critical nature of such problems in the Orient, and even in parts of the West. There is, then, no excuse to which we can turn to justify exploitative behavior. As Lewis Mumford pointed out as long ago as the "Culture of Cities"¹, it has been only recently, since the industrial revolution, that Western man, literally for the first time, has deliberately done things less well than he knows how. We suffer from the shortcomings of this attitude. We suffer from a shallow materialism which Mumford traces elsewhere to the lingering of obsolete bronze age ideology. An enlightened materialism rather than a shallow one is needed, comprised of an interest in things, not because they are material but because they are beautiful, because their expressive qualities transform them to the level of art. This kind of materialism can underlie a way of life, a justifiable human condition.

To conclude the comments about responsibility, one of the most critical development problems has to do with the exploitation of the earth's most beautiful places which are rare and perishable. Consider Lake Tahoe in the high Sierras. Few combinations of mountains and water can match its natural qualities. Places of natural grandeur cannot be created; dams can be built and bodies of water accumulated, but the fortuitous combination of magnificent mountain scenery, superb climate and cold clear deep water is one which occurs but rarely.

Historically, Tahoe has been exploited by fishermen, by lumberjacks, and more recently by the vacation trade. Vacation developments are unfortunately stimulated by gambling establishments at the two points where the Nevada and California State lines meet the shore. Without these there would be greater hope for sensitive development. With them, people who are not drawn by natural beauty and so not actively concerned about its preservation are attracted, and the shores of the Lake are in the process of subdivision. Some are ingenious, Tahoe Keys for example, where water access is provided to each lot. Recently I visited another subdivision which is not on the lake but overlooks it and straddles a tributary stream. By acceptable standards it is especially well-designed and well-constructed. Rights-of-way are fifty and sixty feet respectively. Streets are paved of heavy asphalt construction and paving widths are more than thirty feet. Utilities are of the first quality. Lots are well planned with minimum sizes of one quarter acre and many as large as half an acre. Contours have been considered and the plan devised to make the stream significant. By all of the standards of suburbia it is an excellent subdivision. But these standards are invalid at Tahoe. The notion that a subdivision there should have slick metropolitan improvements is repugnant to anyone who is a naturalist, a conservationist, whose feet are still rooted in a relationship to the natural world which produced him. At the point where the subdivision intersects the abandoned stage coach road which offered historic access to Tahoe through the Rubicon River valley, I encountered some English Land Rovers clustered in a puzzled group, their drivers and passengers confused. I stopped to chat with them. They said they had come from Georgetown; it had taken the better part of two days. They had come through one of the most beautifully wild parts of the country, unsettled and undeveloped except for the remnants of the road. They had managed all the difficulties of an exciting adventure and now discovered that the road ended in a subdivision, and they were lost—lost in civilization. They asked the way to the lake and to the highway.

The parts of Tahoe which were developed earlier with rustic houses by people who wanted a connection with nature are serviced by gravel roads or at best by old asphalted roads that are slow and rough and narrow. One with which I am familiar is a single lane and serves wonderful well at least twenty-five houses. There are places where it passes through spaces ten or twelve feet wide between huge cedars and pines. The notion that suburban values should be extended into such a magnificent natural setting is entirely false, thoughtless at best. Even if the sophisticated subdivision in question responds to popular demand, it should not have been built, but I suspect that it was shaped by the zoning laws, building codes and subdivision ordinances of the county. In either case, it is an example of

enormous damage inflicted by the best intentions. References to responsibility and to legislation converge in this illustration, but legislation will be discussed separately later.

**Tradition**

When one develops land, only in theory can he be entirely free because patterns of development which occur to him are shaped by his education, that is his total experience. In structured societies total experience takes the form of tradition, and if tradition operates well it preserves the values of the past that are pertinent to the present. It preserves, I underline, values, not forms. Within a tradition forms can change but the change is gradual and orderly. There have been excellent examples in America in the towns of the colonies, the farm houses of Iowa, and the adobe structures of California, but none of these persisted because the industrial revolution provided methods for rapid technical change and stimulated the eclectic revival of historic forms. Today we have no architectural or planning traditions except those which are being devised within the framework of modern architecture, but even modern architecture has at least two camps and there are a number of divergent views about planning yet to be resolved. Modern architecture and modern planning stem from a revolution, and after a revolution, tradition can be re-established only in time. Perhaps, given accelerated planning, development and building, we cannot wait for tradition but must do the best we can and be quick about it. If this is the case, successful periods of the past might be re-examined in the attempt to derive the values which underlay the forms. Hopefully, then, modern concepts of planning and architectural design could be put to the service of such a framework of values in the hasty birth of a tradition.

One's actions can be shaped by tradition just as they can be shaped by a sense of responsibility, and these influences can produce land development which is at least adequate and at least not destructive. Hopefully they might lead to one of the more successful periods in history. The question which follows logically, is: Who will accept responsibility, who will be influenced by tradition? My answer is implicit in the forthcoming sub-title because only by that technique as it has been applied in other fields can the necessary restraint against whims and against uninformed opinion be achieved in a free society.

**Professionalism**

We do not entrust the practice of medicine, the defense of legal rights, or the building of dams to the untrained. Only competent professionals—doctors, lawyers and engineers—have a reasonable chance of success in performing these tasks. We must come to the realization that the shaping of the earth's surface is at least as crucial and demands at least as much professional training and experience as do these other activities. It is not considered an infringement upon freedom if we as laymen are denied access to a hospital operating room because it is clear that we are incompetent there. Unfortunately, it is not so clear to many of us that we are incompetent at planning physical surroundings because the illusion of the frontier persists. But even if the excesses of the westward movement are excused as appropriate to their time and condition, it is logically impossible to argue in favor of their extension now. It is difficult, of course, to classify esthetic judgment with technical knowledge, and so it is difficult for architects or planners to establish themselves as professionals with the same degree of acceptance as physicians. But the concerns which we confront in manipulating the physical world, though fundamentally, (I think) esthetic, are comprised of substantial elements of technical knowledge and experience as well—elements called planning as distinguished from design, involving engineering, economic and political factors. As a matter of fact, the professions called architecture and planning are expected to be the most broadly trained of all. They encompass design, technology and behavioral science.

Given an apparent unwillingness to accept the responsibilities required to produce well-developed settlements, given the shape of our industrial and commercial institutions and given the lack of a strong tradition of planning and design, the best hope lies in professionalism. Only highly skilled, deeply trained, thoroughly experienced master builders, if you will, or master planners, subject to public scrutiny, should be permitted to shape the surface of the earth. Professionalism is not a perfect answer to a difficult problem. It does not guarantee omnipotence, wisdom, brilliance, but it does guarantee a high level of performance within the confines of the practice of the profession itself. Admittedly the politics of the American Medical Association are suspect, but in the same breath that association must be commended for the general level of excellence within the practice of medicine.

Professionalism involves self-discipline, it involves standards for performance and the guaranteeing of performance in accordance with standards by the membership. It takes away from the public decisions for the practice of the profession in its technical sense, and gives that prerogative to the professional organization, examined by a free press and subject to the influences of
public opinion. I am convinced that were land
developed, were subdivisions planned, were build-
ings designed, were wilderness set aside, were re-
resources protected, were a coordination among
highway planners, recreational planners, resource
planners and city planners effected on the basis
of responsibilities which a professional organiza-
tion must accept, then problems of land develop-
ment could be attacked with intelligence and with
a reasonable expectation for a large measure of
success.

Homebuilders will question whether I ask them
to forgo a measure of freedom and subject their
operations to the decisions of a professional group
entrusted with the privilege and assigned the re-
sponsibility for the development of land, but those
are not necessarily the terms. Alternatively the
National Association of Home Builders might be
asked to raise its activities to the level of profes-
sionalism, to accept professional responsibilities
in exchange for professional privileges which it
already enjoys. I do not claim perfection for pro-
fessions. The Dean of a distinguished college of
engineering reminded his graduates recently, that,
if they wish to be truly professional, they must
accept responsibility for the esthetic consequences
of their work as well as for the technical conse-
quences. Since young engineers are not trained
esthetically, their alternative, according to the
Dean, is to see to it that they are so trained or
retain the services of someone who is. Nor would
I whitewash the shortcomings of the architectural
profession when not many years ago the Institute
was used as a spring-board to resist the philo-
sophic implications of modern architecture and
to discriminate against its practitioners. These are
examples of professions which are striving to at-
tain true profession stature and which are mov-
ing in that direction.

Legislation

The fourth question follows at this point, be-
cause if a segment of man's enterprises are en-
trusted to a profession, legislation is required to
enforce the delegation of responsibility and privi-
lege. This is the most constructive kind of legis-
lation we can look toward in the search for ex-
cellence in physical planning.

It is not difficult to devise such legislation, there
are traditions to emulate. It is easier by legisla-
tion to delegate responsibility and authority to a
group of trusted and trained professionals than it
is by legislation to circumscribe the activities of
untrained men who do not assume and are not
charged with responsibility for the consequences
of their work. This is what we try to do by build-
ing codes, zoning legislation and subdivision ordi-
nances. We try to circumscribe the activities of

men who the law assumes are essentially un-
scrupulous in their actions. At least it assumes
that they are unwilling or incapable of working
in the public interest, and this can be described
as a form of unscrupulousness. The shortcomings
of this system are self-evident. In the attempt to
prescribe minima we produce standards; monotony
is then the norm. In the attempt to devise stand-
ards, we assume that they are unrelated to place
and therefore universal and transferable. We as-
sure that the design of three-dimensional elements
which encompasses esthetics, technique, econ-
omy and purpose can be described in a few pages
of legal verbiage but visual problems can never
be described in words. This is not to suggest that
the present law which regulates building and de-
velopment is incapable of improvement. The re-
cent Technical Bulletin of the Urban Land In-
stitute makes specific suggestions which could
and should be enacted in most communities. But
this approach to legislation is essentially self-
defeating. Law is not a substitute for responsibil-
ity or for competence. It ceases to be effective at
all without the firm support of acceptance and in
the absence of ethical and knowledgeable be-
behavior on the part of the governed.

And so it all comes back to the desperate
necessity for an acceptance of the seriousness of
the situation. This is the last chance to save the
beautiful and fruitful parts of the earth. Emo-
tional responses to the magnificence of nature at
its best cannot be ignored. There is at least some
evidence that man needs a beautiful environment
and needs to return to nature for refreshment in
contact with wilderness. It is certainly evident
that he will have a continuing need for fertile
soil and for all of the resources upon which civ-
ilized life is based. We put too much faith in
technology if we assume that somehow, magically,
all of the exhaustible elements of the earth can
be provided in substitute by the plastics industry.
What happens to the tenets of democracy if 51%
among us are permitted to shape the world in
their image and deny to the other 49% access
to the kind of world they value, or even thirty-
ine, or twenty-nine, or nineteen, or nine?

In 1927, H. L. Mencken wrote bluntly about
attitudes of American people toward the places
they live: "... I have seen, I believe, all of the
most unlovable towns of the world; they are all to
be found in the United States. I have seen the
mill towns of decomposing New England and the
desert towns of Utah, Arizona and Texas. I am
familiar with the back streets of Newark, Brook-
lyn and Chicago, and have made scientific explora-
tions to Camden, NY and Newport News, Va. Safe
in a Pullman, I have whirled through the gloomy, God-forsaken villages of Iowa and
Kansas, and the malarious tidewater hamlets of Georgia. I have been to Bridgeport, Conn., and to Los Angeles. But nowhere on this earth, at home or abroad, have I seen anything to compare to the villages that huddle along the line of the Pennsylvania from the Pittsburgh yards to Greensburg. They are incomparable in color, and they are incomparable in design. It is as if some titanic and aberrant genius, uncompromisingly, inimical to man, had devoted all the ingenuity of Hell to the making of them. They show grotesqueries of ugliness that, in retrospect, become almost diabolical. One cannot imagine mere human beings concocting such dreadful things, and one can scarcely imagine human beings bearing life in them . . .

"On certain levels of the American race, indeed, there seems to be a positive libido for the ugly, as on other and less Christian levels there is a libido for the beautiful. It is impossible to put down the wallpaper that defaces the average American home of the lower middle class to mere inadvertence, or to the obscene humor of the manufacturers. Such ghastly designs, it must be obvious, give a genuine delight to a certain type of mind. They meet, in some unfathomable way, its obscure and unintelligible demands . . .

"Here is something that psychologists have so far neglected: The love of ugliness for its own sake, the lust to make the world intolerable. Its habitat is the United States. Out of the melting pot emerges a race which hates beauty as it hates truth. The etiology of this madness deserves a great deal more study than it has got. There must be causes behind it; it arises and flourishes in obedience to biological laws, and not as a mere act of God. What, precisely, are the terms of those laws? And why do they run stronger in America than elsewhere . . .?"

Many of us have shuddered at the scenes Mencken saw. Today they aren't so bad, but it is still true that public opinion, as it functions in the market-place, is no better qualified to design the physical environment than it is to prescribe medicine, a mixture for concrete or the details of foreign policy. We have tried two unsuccessful alternatives, the anarchy of patchwork development and the strait jacket of design by law. Only a responsible posture which improves public opinion through the educative function of tradition can succeed; its name is professionalism. ▲


Need We Crossbreed?

by John L. Schmidt, AIA

Is the architectural profession suffering from "inbreeding?" Conceding that selective breeding produces thoroughbreds and champions, it seems clear that a profession which is forced to grapple with the problems of design and construction, engineering, business, finance, merchandising and sales, should "crossbreed" with other professions and industries. Crossbreeding is well illustrated by the position in which I find myself—an architect working for the United States Savings and Loan League, a trade association in the finance field. But, you'll ask, of what interest is this to you as architects? Why should you be interested in the savings and loan business? And what can the United States Savings and Loan League do for you and for architects?

Consider the importance of the part played by savings associations around the country in financing home construction. Last year (1960) forty-one percent of the homes bought or built was financed by these institutions. Approximately one out of every three homes built was financed by them. Projections point to an even larger percentage in 1961 and the years to come, with the savings and loan business performing the lion's share of the home financing function.

A savings and loan association (sometimes referred to as a Building and Loan, a Building Association or any of several other names) or a Cooperative Bank is simply a financial institution organized for the primary purpose of gathering individuals' savings and using them for long-term mortgage loans on homes. These institutions are chartered by state or Federal government and are permitted to engage in lending a portion of their assets on projects other than house construction. However, they are most greatly involved in home financing with something in excess of 80% of their total volume in the residential category. The great majority of S&L's are mutual associations although there are in existence some capital stock associations.

There are approximately 6000 of these associations in the fifty states holding approximately 75 billions of dollars in total assets. Individual associations range in size from several hundred thousand dollars up to more than half a billion dollars.

The United States Savings and Loan League counts as its membership approximately 4800 savings associations holding something like 95% of the assets of the industry. The League is a very progressive and aggressive organization helping lead a business that has grown almost ten-fold in size since the end of World War II. As the industry leader the United States League is greatly concerned with encouraging the recognition of quality in home construction and the acceptance of new techniques and materials. To perform these functions they felt the need for a construction specialist and concluded that the spot must be filled by an architect.

As an architect I have an excellent vehicle for promoting a better understanding of the importance of adequate professional guidance in home planning and design. The media for contacting savings and loan executives will include speeches at some of the seven major conferences and conventions sponsored annually by the League; articles in the publications produced by the League such as the Savings and Loan News, Management Di-
gest, Directors Digest as well as special Management Bulletins. And, of course, through these routes close contact will follow with various homebuilding groups. The long term value of inherently better homebuilding must be pointed out to those who occupy positions in the lending field. All too often the money lender has the power of decision in what may or may not get built. In working with savings associations I must be able to demonstrate the financial advantages of using the best possible concepts and techniques. Architectural philosophy strikes out in the commercial batter's box. The "worth" of good design, therefore, becomes a matter of documenting the record of carefully studied neighborhoods and individual houses that reflect sound, legitimate design—houses that are sincere and proper, not poorly conceived and cheaply contrived collections of past imagery, nor badly "styled" attempts at jazz modern.

The loan officer of a savings institution is concerned largely with "marketability" and resale value. Reference to the esthetic improvement of our total environment leaves him cold. My job as the bearer of the great message makes me somewhat of a middle-man instead of a practitioner. I can record and report the results of the efforts and activities of architects and planners with homebuilders.

The success of my fellow architects in developing workable relationships with builders to the end that better communities will be built, of course, is the ultimate objective.

The process of persuading lenders to recognize and evaluate better planning is extremely frustrating. As architects we are trained to react favorably or unfavorably to "new or unusual" solutions solely on their objectively analyzed merits. We continually fail to be cognizant of the fact that J. O. Public (and J. O. Savings & Loan Man, and often J. Q. Builder) most likely reacts negatively to something that is alien to the pre-established set of prejudices or familiarities stashed away in his mind. The sum total of these pre-registered concepts equals his "opinion" as to what a house is and/or should look like. Dependence solely on favorable public reaction for the success of what might be a very sensible design is unreliable since
that reaction is from an accumulation of untrained eyes and unceptive minds. An effort is required to show or explain the concepts behind good planning methods and their resultant visual expression.

This most primary need has been most sadly neglected by our profession and—even hardly recognized. Our years of training in objectivity and design actually tend to "brainwash" us. Meanwhile J. O. Public rides along reacting to architecture as if it is just one big smorgasbord of style from which he just picks what he feels is to his taste. He is himself a housing expert—because he's lived in one all his life. There is, therefore, a denial or lack of recognition on J. Q.'s part of any reason or rationality behind good design. The architect or "trained observer" drifts from the fold of the uninformed and becomes someone "way out" no longer viewing things in the same manner as the individual not having had the luxury of being unbrainwashed. He hardly realizes this fact, and to date has done pitifully little to further the enlightenment of the man on the street. The gap between the man "way out" and J. O. Public must be squeezed closer from the bottom up.

The paradox of having the inhabitants of our communities continually deny himself of the advantages of what we recognize as "obviously" more agreeable planning concepts will not disappear without our concern and our effort. A movement will not generate from the uninformed who are not aware that they are uninformed. And, of course, there is no more effective way of arousing ire, injuring sensitivities and destroying communication than informing someone that he is uneducated, prejudiced or lacking in objective understanding in the areas of design appreciation. The task then, from the diplomatic standpoint alone, becomes rather difficult, time-consuming and demanding of patience.

Now you may ask—what can the United States Savings and Loan League contribute to what we recognize as a common goal—"the enlightenment of J. Q. Public." Last May, at the request of the United States League, thirteen savings association and loan officers assembled for a two-day session in exploring objectives and formulating activity. To help guide the deliberations we called on four men well aware of the builders' problems and the aims of our profession: James T. Lendrum, AIA, Edward H. Fickett, AIA, Professor Walter H. Lewis of the University of Illinois Department of Architecture and Eugene R. Martini, ASLA, AIP. During the meeting we discussed total concepts, long-range objectives and projects and activities for immediate attention. Basically, the resulting outlined program is three-part. First, a definition of the standards for the savings and loan industry will be based on the formulation of quality and performance criteria for construction, house design, land planning and engineering, and lending procedures. US League leadership, it is hoped, will encourage a more careful analysis of the total and lasting desirability of the homes being financed. Proper building techniques are not enough. Long range value cannot overlook pleasing proportions, more liveable functional planning, and all the ingredients of fine architecture.

Secondly, a program of education for people in savings associations is needed. Informative presentations of good design, the value of architectural service, progress in the techniques of building, and related subjects are of great interest to the League membership. I find a sincere thirst for education as to what architecture is really about. The sensitivity of good design is certainly not being imparted as it should. An affiliate of the United States League, the American Savings and Loan Institute, carries on an extensive curriculum of study courses and correspondence courses for employees of savings associations. Courses range from Mortgage Lending to Public Speaking. The present courses in Home Construction are being revised extensively with a new emphasis of design and planning purposes and analysis in lieu of the methodology of "conventional" construction. Several hours of architectural history will be included in attempting to explain the rules of order behind good design. It is my hope that the teaching of these courses can be in the hands of architects wherever possible instead of "un-brainwashed" people not cognizant of the rationality of modern planning and design.

Thirdly, the League feels the necessity for closer relationship between its membership and homebuilders, architects, planners, and others involved in the homebuilding industry. This, of course, calls for a better understanding of what each other is up to (hence, this article). I hope that local chapters of the AIA will become more aware of the savings and loan associations' lending practices in their respective areas. Managers and officers should be invited to local AIA functions and presentations of architectural interest. A closer understanding by savings and loan officers of the architect's purpose is a must.

The total problem of realizing a more agreeable environment is probably as difficult a one as ever faced by a profession. Public opinion of architectural service (and the value of good design) must be lifted greatly. We architects have been too busy, it seems, to stimulate an understanding of our abilities and a demand for our services. Any effort we can make in the way of public education is a must. Crossbreeding is a necessity. The United States Savings and Loan League is one avenue of influence through which such crossbreeding can ultimately be greatly effective.
The Livable Community
and Site Plan Design

by A. Quincy Jones, FAIA

From the moment he arises, to the hour he retires, man is aware of and affected by his environment. The quality of design involved in site planning influences the effectiveness of this environment.

Webster's definitions of "design" and "planning" are interesting to consider in this regard. Design: "To plan or scheme, to conceive in the mind of something to be done" and "to make up a work of art." Planning: "To arrange beforehand."

It is apparent that to design well, and to fit these definitions, one must solve the aesthetic as well as practical functions of any problem. Esthetics truly is a function that affects physical health and emotional reaction.

It follows, also, that imagination is necessary when the definitions are combined and applied to design in site planning. The site planner is successful only if he is able "to conceive in his mind of something to be done" that is, "a work of art" which must be competently arranged beforehand.

Imaginative concepts cannot be stressed too strongly, but it is equally important to consider any given site planning problem in relation to the total community. The place we live in is this total community. In this total community we live, play, learn, work and worship. Not long ago the effective community for an individual family unit was small in geographic area as well as in population. This is no longer true. The total community today is comprised of the neighborhood, city, county, state and nation. When we observe what is happening in planning in each of these entities which are interdependent upon each other, we can hope that the strength of the nation is not based upon the quality of "the weakest link" in this planning chain.

It becomes increasingly apparent that the factors of design and planning problems must include contemporary science and technology. At all times however, we must remember, too, that man is an animal who lives and thinks and who has emotional reactions to his surroundings. It is significant that this man is of a certain scale with a physical make-up that has not changed much during the time of recorded history, despite the tremendous strides made in his achievement of various knowledges. It is interesting that through the thousands of years that man has walked on earth he remains with a stature within a few inches of six feet tall and he continues to have two arms, two legs, two eyes and a nose and a mouth. And all these factors are important considerations in successful planning.

The adequate environment is important for many basic reasons. The medical profession verifies the fact that mental health can be affected adversely by an inadequate environment just as physical health is affected by an inferior water supply. At some point people may stop wearing blinders when they drive down their respective main streets and demand a great deal more than they are getting today in over-all planning. Just as the citizens in a modern community will not tolerate conditions which result in an inadequate water supply, one day they may not accept the planning which results in an inadequate environment. At
such a time more developers will recognize clearly that better communities are "good business," a fact that some leaders do, in fact, realize today.

It is easy to find examples of poor planning and to criticize what has been done in the past. It is not easy to make constructive suggestions with recognition of the problem, however, we can look for a direction toward a solution.

Of prime importance is the bare fact that we have a rapidly expanding population. It seems obvious that we have the need for a higher concentration of this population. Despite the pervasiveness of the problem and the obviousness of the direction toward a solution, planning toward an over-all objective appears to be almost nonexistent.

We waste land. We waste money. We waste effort. We waste time.

Time is short. We cannot afford to continue this pattern of wastefulness.

One step toward a workable framework to correct this situation lies in the underlying need to update our zoning regulations. In relation to housing, present zoning ordinances have seen little modification since the days prior to establishment of FHA.

Up to the time of the middle Thirties, the large operator was a land developer. He subdivided land into lots and sold the property to individuals who built houses, usually for themselves. This condition sets up a completely different set of standards from those of the developer of today who not only subdivides but also builds the dwellings, and the dwellings are built before the ultimate occupant of the house is known.

Today's procedure, in which the developer subdivides and builds in quantity, and all at one time, can provide communities which are nearly ideal. Unfortunately, however, we are not taking advantage of this natural opportunity to provide good communities. The reason may well be that there is a general lack of imagination. Perhaps we can clarify the picture with a review and revision of certain code requirements.

During the thirties when the developer sold lots rather than houses, community "planners" believed that rigid setback rules, such as the twenty-five foot front and rear yards and the five to ten foot side yards, would establish the kind of restriction that would improve the community esthetically.

Looking back, we cannot say that these arbitrary setbacks worked under the single lot conditions for which they were intended, but certainly they do not accomplish the original objective today. Rigid setbacks create monotony in the present day tract house developments.

More important, the mandatory setback rules build in a waste factor that we cannot live with much longer. The side yards are seldom used. Often, they are poorly maintained. When these side yards are used as light wells for bedrooms and baths the privacy factor between dwellings diminishes.

Monotony occurs with arbitrary front yard setback regulations because the minimum footage established by code becomes the maximum in practice. The result is visual repetition. To overcome the feeling of repetition, the builder usually puts four different front elevations on the same plan without regard to appearance. On this the builder receives encouragement from FHA and the lending agencies. The houses should have "variety," they say, and by changing elevations they believe that monotony decreases. Most plans, however, have only one good elevation solution. Most of these attempts to stimulate variation have backfired and the result is esthetic chaos.

Unfortunately, this is one of the prime examples of wasted energy, wasted time and wasted land. The inherent faults which bring about the chaotic conditions go hand in hand when we try to solve a problem from the wrong starting point with the wrong set of rules.

Solving the design problem becomes increasingly important with the growing need for higher densities and greater efficiency of land use. Increasingly, too, the individual house on the individual lot will be built in a smaller quantity than we know today.

At some point, and in some areas we are almost there, the distance one has to travel to work and the cost of this transportation will force an increased density of family occupancy far beyond present standards. If planned properly, however, the communities need not be less desirable or overcrowded because of the increased density.

On the contrary, despite increased densities, we can develop open areas beyond the usual standard
of acceptance known in most communities today. An example of a pleasant environment which is familiar to Los Angeles visitors is Baldwin Hills Village. Although it is twenty years old, it has a higher density than most usual tract developments. The open area of Baldwin Hills Village and its park-like character, however, provide not only a better use of the land for the occupants than most less dense environments, but also a better esthetic experience.

Along with the new “total community” concepts which characterize living patterns today, it seems doubtful that a given area should be totally residential without giving considerable thought to the distances between the family dwelling and the place of work, learning, shopping, worship and play.

The idea of “mixed zoning” may be at the top of the list of improvements which we can consider if we are going to make headway and keep up with the challenges of the times.

The approach of “mixed zoning” permits the development of total communities which might locate commercial and certain types of industrial building in a central area with houses clustered in a manner that allows the family to live closer to its communal activities. Such zoning flexibility eliminates much of the congested commuter traffic which exists today. It seems paramount in the search for a solution to our problems that we change the zoning and code “rules” to workable and logical “standards of intent.”

We can do this now because we are building most of our houses in groups. Under these conditions, we can accomplish the changes we need to make if we are going to improve the communities and eliminate some of the impending chaos which will result if we continue our present path of adherence to arbitrary rules and regulations that are out of step with the needs of the day.

These thoughts are not new. Catherine Bauer in February, 1943, then Vice-President of the California Planning and Housing Association and consultant for the Federal Housing Authority, prophesized in the magazine, Arts and Architecture, “If the trends of the ‘thirties’ were simply picked up and continued after the war, metropolitan areas such as Los Angeles County would simply find themselves with wider and wider circles of blight at the center, and more and more strings of speculative development farther and farther out until the whole county would be grey and formless with buildings everywhere, no community integration anywhere, and hopeless problems of transportation, utilities, service and general amenity.”

It is unfortunate that the then known planning
principles were not followed. Catherine Bauer's predictions of eighteen years ago are now a reality.

City planning approvals should not be based on feet of setback or on square footage of land coverage, etc. Instead, judgment should be based on the quality of the community plan itself and on its functional and esthetic relation to the adjacent communities.

Achievement of thoughtful plans, especially when major changes are under consideration, are hampered by the "built-in prejudices" which prevail in most communities. Many times, these prejudices override logic and thoughtfulness.

When the architect and planner can forget the current philosophy of being different for the sake of being different, and approach each design problem on the basis of solving contemporary problems, then new forms will emerge and be accepted and will undoubtedly relate well to the total architectural community. I apparently am still naive enough to believe that current acceptance, and acceptance that will stand the test of time, is based on logic. An igloo is a form of shell construction. It has been accepted and it is logical. The Eskimo would be shocked at forms of forced structure that would be possible in the Arctic, but not logical.

In all phases of design and planning one must contend with prejudices of our society. It might be interesting to assume that if two thousand years ago the people had glass, concrete, steel, aluminum, plastic, etc, and also had the technical knowledge to use those materials logically and did use them, we then would expect today to design a completely different architecture based on the development of the knowledges as assumed.

Now, if suddenly in 1961, someone found that you could cut a redwood, fir, pine, or spruce tree and then run it through some gang saws and end up with 2 x 4 studs that were capable of use in construction of buildings, I think most people would be shocked. As a matter of fact, it is too bad that it did not happen this way. People are so full of prejudices that in the described case the prejudices would be healthy. Everyone would then be willing to look at a tree with appreciation for its beauty and not permit its destruction for shelter.

When starting a new project the designer and planner might also do well to face up to certain facts of life.

The automobile cannot continually be blamed for poor planning. The automobile is here to stay, therefore, it becomes a "factor" of the total problem and must be included in the statement of the problem to be solved. In the days of the horse and buggy, Paris and London were no more or less beautiful because of the then current means of transportation. After all, the buggy was a man-
made machine. We must include the automobile in our environment and even think ahead of the time, probably soon, when an air transportation system, scaled to family use, will be another factor in the statement of planning problems. It is ludicrous to excuse poor planning and design by blaming the automobile.

Actually, the automobile can provide open spaces. Below-grade parking, with the increasingly expensive land, makes it possible to economically create open usable spaces over the car storage areas. Properly handled, the freeway, or throughway, can be beautiful. The Pasadena freeway is an example.

It seems to me that the new standards and criteria should include a study in the direction of simplicity. What I mean by simplicity is the ability to “state the problem before attempting a solution.” Unless we can state the complexities of today’s problem in simplified terms I don’t think we can hope for a solution.

The traditional concept of an architect’s and planner’s practice is not compatible with a statement of current problems. A group of buildings, or total community, is becoming a more and more common type of project. The population explosion is demanding a higher density and a better land use. The project planned independently of the community can only produce chaos. There must be a coordinated effort from the starting point, and the design team must include the philosopher, economist, psychologist, educator, politician and theologian.

The complexity of the problem which exists in the place we are to work, learn, worship, play and shop can only be simplified in its statement by including all factors required to provide a livable community. The proper “approach” through teamwork between all knowledges is the only means to a successful “result.”

People want pleasant experiences and require beauty. The spring trip to see wild flowers is to satisfy this kind of demand and not because people are botanists. To repeat, doctors agree that health, particularly mental health, is affected by environment. A livable environment is a form of preventative therapy.

No architecture is unimportant. The barn, the tract house, the warehouse, the factory, the service station are equally as important an influence on people and a livable community as are the museum, school, civic center, shopping center and church.

Many have been thinking and planning in these terms for many years. It is my honest belief that the conditions that will force us into a different type of living pattern will provide a better potential living experience for all of us, if well conceived.
Throughout the postwar housing boom architects have been heard to lament those "awful housing projects" and those "awful builder houses."

Any such passive concern should give every architect pause as he drives down a newly built-up country road and is confronted by the "pseudo-colonials," "split-levels," "modified salt boxes," "cathedral ceiling ranches," and whatever else has filled the vacuum of creative residential architecture. For the architect, the fact is that those "awful builder houses" are as much his responsibility as if they were his intentional creation. For to ignore or shirk the opportunity to give professional services and design guidance to the thousands and thousands of people whose only financial opportunity is to buy a "tract house," may prove to be a most serious lack of architectural responsibility.

To review this past decade profile of single-family dwellings, one realizes that there are fundamental reasons why these houses in total are as they are.

Basically, where does house design really come from? It is to this basic question that we have addressed our first efforts of research on behalf of the improvement of residential design. Obviously there are a myriad of direct and indirect factors affecting residential construction.

Perhaps this collection of "isms" aptly identifies the family tree of the past decade of housing genetics.

Yesterdayism: The builder, the banker and the manufacturer all sought financial safety in prior usage, prior design, hence this confusing design reference to tradition.

Substitutionism: Under this safety slogan manufacturers have forced new materials and new building technology into old established forms, thereby reducing basic development progress to a role of substitution.

Something for nothingism: Postwar builder houses have been burdened with the effect of "give-away" dividends. Sample merchandise, free publicity, advertising aids and other inducements all designed to snare a fair share of builder sales. How much free material can one small house display? For the building materials manufacturer, not nearly enough.

Where was the architectural consciousness that could help control, guide and deflect their actions that have left a deep stamp of "design" on all of housing?

This is not to say that (with or without the architect) the postwar house has made no improvement. On the surface it seems as though everyone else is dedicated to the improvement, the betterment of the house. Manufacturers research, engineer and dream their way into the building materials of tomorrow. Builders themselves carefully review trends, analyze designs of competitors and study new materials and products. Mortgage loan people, careful to see that the consumer gets good value, are over-cautious and careful not to finance on unusual or freakish house. Yet the house seems to go on as a static mediocrity, unaffected by all the excitement and furor.

In fact, it is true that there are well-designed builder houses, but there are nowhere nearly enough. Entirely too many houses remain a catch-all of misguided intentions. Not one house in ten outwardly reflects the collective potential of the nation's largest industry, an industry whose primary goals has been expressed as a desire for a better end-product, i.e., a totally improved house.

It is, in fact, the total design of the house that needs to be improved. And this can only be done by a deliberate and positive architectural design program. For such a program, today's homebuilder needs a new form of architectural design service; one in which the problem is similar to that of an industrially designed product, for in today's homebuilding industry the emphasis is no longer on "one-of-a-unit" architectural design, but upon design solutions for reproducible units, which are identical or similar.

Architecturally, the totally-designed house

by Robert Martin Engelbrecht, AIA

A poorly designed house. Is it the fault of the builder or the architect? Mr Engelbrecht, an architect who is also a member of the National Association of Home Builders, discusses the present fee system and its effect on design and presents some interesting case studies
means more than having all the problems of a house design solved in a unifying manner. Perhaps the planning, designing, construction detailing and specifying of the builder house requires a special kind of architect, one who knows the builder, his labor problems, the building materials industry, as well as the consumer and consumer needs. Only understanding these considerations and their importance can give desirable improvement in housing design. These factors and the construction factor that can result in esthetic design, need the over-all molding of an architectural philosophy.

Today's builder houses are not all entirely static in their design quality or completely without architectural guidance. There is a small group of architects who have diligently worked to serve the builder professionally and to design a house of the highest design standards. It is these firms who are pioneering a new form of service, one which is geared to the changing patterns of our homebuilding industry. A hard core of builders rely on these architects, these builders know that architectural design cannot be approached as a commodity, but as a service. They know that there must be a thorough workable understanding between builder and architect if the end results are to be anything but superficial planning and blueprinting. Many builder sales records effectively show the value of continued use of a qualified firm.

However, there are many indirect impeding factors which probably are affecting the builders, use of architectural firms. One is the fact that in the past the builder who built a house of mediocre or even inferior design received the same advantages of financing as did the builder who retained the services of a good architectural firm. The only qualifying standards used by the banker, have been the minimum requirements of rudimentary construction techniques. (In passing, it should be noted that it is rather ironic that any industry which has built 15,000,000 houses in the past decade—15,000,000 houses built to last a minimum of twenty-five years of mortgage earnings—should find progress controlled and impeded by the use of the very limiting experience of an obsolete past, as the basis of appraisal.

Currently the mortgage bankers on the West Coast are beginning to see a marked contrast in market values. Thousands of houses are standing unwanted. Many have depreciated badly; some are salable only through remodeling (even though they have never been lived in). Yet in these same geographic areas there are houses which continue to attract buyers, these architect-designed houses are spotlighting the value of well-designed houses. This is a hard dollars and cents fact that the mortgage bankers cannot ignore.

If there is such evidence that better design and better valuation result through architect-builder teamwork, then why isn't the format universal in project development?

At the MIT Architect-Builder Design Clinic (held July 13-14) sponsored by the AIA and the NAHB, the builders pointed their fingers at the architectural profession. Most architects, they said, aren't interested in learning the basic rudiments of the homebuilding industry. Furthermore, they said that most architects aren't interested in any design problems dealing with repetitive housing units, which are similar or identical. (If true, this point is inconsistent with our willingness to design apartment houses, row-houses and hotels where repetitiveness and standardization are watchwords.) The builders also noted what they considered inequitable fee requirements. But the important charge was the basic lack of architectural interest in the design of tract houses.

The architect is not without his criticism of the homebuilding industry. He reports the builders "shop" for low fees; they have no basic interest in good design; and that they change or modify without consulting the architect. Also, architects are reluctant to enter into a project where the total amount of fee is coupled with an unknown scope, or at best an estimate of scope of final fees. Also, both architect and builder have indicated a diverse understanding as to what architectural services are needed by the homebuilding industry. It is this diversity which obviously accounts for the lack of a fundamental policy on fees. And as yet neither the members of NAHB or the members of the AIA have found a simple universal fee formula. As a result many fees are set too low for the necessary constructive planning and design time needed. Little design progress is made by such conditions, with little more than drafting labor being sold.

However, many teams of architects-builders have found an equitable basis upon which to conduct business. The basis of these fees should serve to assure other industry members. To further the purposes of better understanding between architects and builders, we are conducting a survey of the structures used and the professional services rendered.

This research is intended to find out whether fees are too high for the services extended. Are fees too low for constructive design? Is there an semblance of standardization in fee structure? Has housing design suffered from a lack of understanding about architectural fees and services? Can housing design be improved through a sharpened focus on the amount of housing costs that can be allocated to architectural design?

To date, the surprising discovery about these
CASE STUDY NO. 1

Scope of work: This project was for one hundred houses in the $27,000 to $35,000 price range. When this firm has never worked with a particular builder, then the fee is based on a guaranteed retainer against which royalties are credited. This case study is an example.

Base fees: Retainer based on $2,000 a plan. This project: 8 plans. Unit re-use fee per house, $400.00

Services furnished: 8 basic house designs. General land planning, site plan per house, exterior color program

Breakdown of fees:
- First forty houses paid out of retainer $16,000
- Next 60 houses at $400 per house 24,000
- Total value of fees 40,000
- Total value of project 3,000,000
- Percentage value of fees 1½%

CASE STUDY NO. 2

Scope of work: Twelve houses, $17,000 to $20,000 range. This group of houses had very little variation in the basic plan. Wherever variation was required, this was billed at 2½ times drafting cost plus a $10.00 an hour design charge

Base fees: $2,500 for first plan. $1,000 for the second plan. Two plans were developed for the project. Unit re-use fee: $150.

Services furnished: Supervision of prototype for each plan (when desired by builder). Also furnished are recommendations for furnishings and colors for prototype house, each plan.

Breakdown of fees:
- Base fees for prototype designs $3,500
- Re-use fee on 12 houses at $150 per house 1,800
- Total value of fees 5,300
- Total value of project 216,000
- Percentage value of fees 2½%

Research into Architectural Services and Fees

Mr. Engelbrecht, as Architectural Advisor to the Street and Smith publication, "Living for Young Homemakers," was charged with finding out (1) Where does residential design really come from? (2) How can residential design be fundamentally improved?

To pursue this basic concern, in 1956-57 he organized a research committee called the Committee on Living Conditioning. Under the auspices of this Committee a number of research studies have been and are now taking place. Two current research programs deal with the following: Basic material and design, and architectural services and fees. The case studies used throughout this article grew out of the latter research.

fees lies in the fact that in the leading teams surveyed, the survey to date revealed that the fee costs per project were less than 3% of the appraisal value for the best in design fees. The survey also shows the majority of architectural fee costs to be between only ½% to 2%. Many builders feel that their design programs improved their houses in sales value, in amounts of from 5% to 15%. This would mean that a 3% fee actually is money-making, showing a minimum of 60% profit to the builder per fee dollar. This would suggest that fees for design can be self-liquidating.

For the architect who has a successful builder design practice these fees can readily substantiate a constructive plan development program. On a long-range or continuing basis the architect enjoys several distinct operational advantages. His initial orientation to a particular building firm can carry through one project after another, each time reducing his drafting time and overhead costs to give an increasing efficiency of operation.

Furthermore, he finds that a continuing builder-architect relationship generally requires only a minimum amount of drawings and specifications, with design direction resulting from a process of evolution. And under such a continuing design program the architect has a unique opportunity, through one repeated construction unit after another, to improve and refine his design efforts.

To date our survey shows a number of approaches to fee structure. Almost all existing approaches to fees link the total amount of business to the total final fee. A few examples of the basis of fees:

1. Lump-sum fee for each prototype house.
   Plus revise fee per house reproduced.

2. Lump-sum fee for guaranteed minimum number of houses.
   Above fee payment prorated over the number guaranteed.
   Plus (over the number guaranteed) a fixed revise fee per house unit.

3. Lump-sum fee for guaranteed total scope of project.
   Unit payment based upon a prorated sliding scale.
   40% of fee first ten houses
   20% of fee next thirty houses
   20% of fee next thirty houses
   20% of fee last thirty houses

4. Fee per house based upon percentage of selling cost.
   Payment of fee made per month by rate of sales.

5. Guaranteed yearly retainer plus expenses. Prorated per month.
Under number five the architect acts as a design consultant. This form of service is ideal for the large builder who maintains a drafting department. Here the architect is not selling any labor. This form of architectural service is also ideal for building materials manufacturers, saving and loan, banks and others who need a professional reference in conducting their business.

The architectural firms' survey indicate a varied and broad range of services furnished or available to the builder. However, the scope of service consistently fall into two areas. The first might be identified as primary architectural services typical to most architectural practices and are generally performed under the base fee. These include:

- basic design
- working drawing and specification
- site planning of prototype model
- supervision of prototype construction

However, many of the architects further insured the success of their work by furnishing a number of the auxiliary architectural services listed below. Other architects offer these services on an addendum fee schedule. Services performed under this classification include:

- project land planning
- site planning for each house built
- exterior color-materials program
- interior color-materials program
- interior decorating of prototype models
- landscape design (general limited to prototype
- rendering of houses
- reproduction of drawings

This current concern for a stronger architectural force at the design front of housing may be a little late in the battle. A recommission of the cold facts may show that both the architect and the builder have lost control of housing design.

The bigger guns of industry are enforcing a stronger and stronger design control through larger and larger components, and through totally finished products. With the prefabrications, the aircraft industry, the mobile home industry, and other industrial giants aiming at the home building field, the basic factors of design are slowly but surely being usurped by the industrial designer and the industrial engineer. The end result probably will not be to the architect's liking. In fact his role may be reduced to siting and the builder's only problem may be "where to put it."

The loss of design control will not be the only casualty, for the loss of local profits is also inevitable.

For those who care, the time for a stronger architectural hand in the affairs of housing is well past due. 

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The other day, in a continuing effort to appease the middle level of its estimated 4,000,000 readership, the Los Angeles Times Sunday Home Magazine conducted a symposium to determine what, exactly, was missing in today's development house. More than that, the panel of critics was composed of five young housewives, mothers all, who were indeed occupants of tract houses. These women were articulate, opinionated, well-read, idealistic, suspicious.

The plans, specifications, costs, locations and photographs of some sixty development houses in Southern California were produced for examination and comment by the panel. The verbosity of the panelists was such that little prompting was necessary but out of the thousands of words which the symposium produced it was curious although not entirely surprising to note that not once was reference made to an architect or to architecture as an expression of an individual designer.

Well, what can you expect from housewives looking at photographs of builder houses? My experience from contact with a vast readership whose main strata is middle class, is this: If I were to ask our average reader whether he or she felt that architects were missing the boat in Southern California's general home construction field, the average reader would not exactly be sure what I was talking about. What boat? This is not cynicism. The subject, I feel, is that remote. In other words, the identification of architect with housing for the masses has become, or never was more than, a wispy thing. An awareness of architect and house exists, possibly, among an important fraction of the populace; a rather reverential awareness may exist on the part of a relatively few idealists but the big weight of the masses wants to know how much value lies in a house for how much money down. Design is a consideration but who did the house is beside the point.

This is not easy to take by a publication such as ours, one certainly not dedicated to architects but one which, experts will agree, has done more selling of good design and has had a greater impact on the awareness of good design in Southern California than any other publication in the area.

But there is a paradox in all this. The only way 50% of the potential homeowners are going to have an architect-designed house is through purchase of a development house designed by an architect. But architect-designed tract houses in Southern California aren't so easy to find. Offhand, when I think of these houses, I think of Edward Fickett or, say, Palmer & Krisel. I can think of others but these names come through the clearest. This is the result of rather good public relations, I think, and partly of a personal interest in the two architectural firms. But I am an exception to the rule, and if only two names ring instantly in my memory—I, one close to architects and architecture—then the average consumer must register a blank when the subject of architect tract houses comes up.

The paradox we refer to exists in the fact that a number of tract developments—now several years old—still are being advertised, in the case of resale, as architect-designed. Meadowlark Homes in the San Fernando Valley, built seven or eight years ago, still is referred to in newspaper advertisements for resale as Edward Fickett houses.

But these are exceptions. I think the average Southern Californian has a clearer image of certain builders—through tract identification—than he has of certain architects. The identification of certain builders is not the result necessarily of good house construction but one of name identification through advertising, billboards and literature handed out on the spot. This is something that architects, like physicians, do not care to contemplate—the fact that public relations is what it is, that poor public relations is better than no public relations at all, that it's exposure which counts. Only a few architects among the many I know well are interested in personal promotion. A holier-than-thou attitude is understandable in a profession where dedication to principles probably has no
greater means of personal expression. Yet the price of relative anonymity is great indeed if other, less dedicated interests succeed in capturing not only the market but the public consciousness as well.

Then what has public relations to do with architecture? First, what is public relations? It's the creation of a climate of public acceptance, an awareness of goods and services, the molding of a public identification.

It has occurred to me over the years that some architects have the foggy notion that calculated use of public relations might indicate a lack of integrity on their part or might actually result in a certain loss of freedom of expression to clients who thus might not have a proper respect for the architect's ability. This is because of the nebulous quality of institutional advertising, which the selling of design services (short of outright advertising) most certainly is. However, architectural design services have to be put in their proper light in respect to public relations. I have observed that architects contributing the most to residential development divide their work into three classifications: (1) tract work, in which case a pattern of design similarity is intentional and expected; (2) standard plans for a "custom" house which offer variations but only slight ones; (3) "custom" houses which, except for extraordinary cases wherein a client's money, needs, position and viewpoints are strong enough to dictate something different, look a good deal alike because the architect in all three cases most likely will and must follow familiar framing and finishing principles and techniques.

What's wrong with that? How else do you acquire style and distinction? Is this possibly the architect's own best approach to good public relations? Design as a trademark is a principle that belongs to all lines of creativity. And public identification of architectural design as the work of one individual—if it is repeated often enough—results in public relations. However, the catch is obvious: The capacity of the general public to absorb the principles of good design is not so great that the latter will stand on its own merits.

To the thousands of architects who have largely abandoned residential design as too competitive in face of builder competition, the problem of conducting publicity programs for customer identification is of course behind them now. But a final word for those who think the fight is still worth fighting: For the public, design services can only be interpreted in terms of hard goods—in this case, houses. I know of no other way to inform the public than through public relations. I know of no other way to reach the public on a massive scale than through newspapers, magazines and, to some extent, television. I can think of a broad campaign, on a national level, which would sell the institutional need and values of architects and, as a corollary operation, a concerted, more objective program in specific publications to identify design as the product of good architecture.

Too vast an undertaking at this moment? Possibly, but there exists a built-in acceptance for such a campaign in a number of mediums, particularly newspaper magazines which are not directed toward an erudite few but are fired broadside at millions—a receptive audience, easily impressed, one unencumbered with the prejudices of the professional crowd.

But are public relations on such a scale too blatant, too unbecoming, too common an approach to an uncommon profession? If this would prove to be the opinion of most architects, then we aren't talking about the same thing. My business is to sell a better way of living, to indicate the ideal in living environments, to show the way, step by step, indoors and out, how good design, good taste are an essential background for living. Since my training and that of both my contemporaries is limited to journalism, a continuing need exists for cooperation from and direction by architects, decorators, builders, landscape architects, etc.

Thus, being a magazine dedicated mostly to home and living, we need support from the architects. We in the newspaper and magazine business readily acknowledge this need. Whether it is in turn acknowledged on a large scale by the architectural profession might be guessed at by the amount of public relations most architects receive. 

How much value? How much money down? The architect is beside the point when the home buyer signs on the dotted line for the tract house. The price of anonymity is great indeed if less dedicated interests than the architectural profession capture the market and the public consciousness. Here is an outspoken and hard-hitting discussion on a vital subject.
 Costs and the Production of Houses

by John M. King

Director, Research Services, National Association of Homebuilders

Two-story plumbing core wall is lowered into position at the site of 1959 NAHB Research House in East Lansing, Michigan. New building methods like this are contributing to more efficient use of labor and material and better values in houses.
In the past few years, there has been an increasing interest in bringing about better cooperation and coordination of all facets of the building industry. Particular emphasis has been placed on establishing working relationships between architects and homebuilders. On a national level, the efforts of The American Institute of Architects and the National Association of Home Builders have contributed to a better understanding of the work of the members these groups represent. One objective of this article is to identify several factors concerning the homebuilder's position in a transitional period, spanning from a past steeped in local craft traditions to a future of greater participation in the activities of a mobile and industrialized society.

We hear occasional comments to the effect that the homebuilder is too cost conscious in the sense that his decisions relating to the purchase of materials, equipment and services are based on arbitrary personal judgments of what will or will not sell. The architect has been accused of being unknowledgeable or uninterested in costs as they relate to home building methods and the entire process of planning, building and selling houses. If the truth would be known, both the architect and the homebuilder must become better acquainted with the true nature of costs if they are to contribute to providing better value homes and a better living environment for American families.

The second objective of this article is to suggest one approach to the common problem of the cost of housing.

The NAHB Business Management Committee has proposed a Uniform Chart of Operating Accounts which classifies home building costs. Although the Chart of Accounts is primarily a method of identifying and measuring operating performances on a comparable basis, rather than a standard accounting system, it is indicative of the general cost areas prominent in builders' terminology. The major categories listed by the Chart are land costs, direct construction costs, indirect construction costs, financing costs, sales costs and general and administrative costs.

Widespread use of the Chart of Accounts through the use of builders' supplementary accounting records may eventually provide comparisons of experience data and industry averages and standards. For example, it would be useful to show the relative importance of homebuilding costs by the major categories of the Account and for different sizes and types of businesses which may vary from the custom builder working from his own home, supervising construction at the site and building on a known buyer's lot and with the buyer's financing to the large volume operative builder with an extensive management and supervisory organization including financing, sales, accounting and engineering personnel. The latter builder is also more likely to have capital investment in equipment, land and buildings, possibly including plant fabrication and warehousing facilities. At present, based on a limited number of examples, only approximate ranges of cost percentages can be given. These ranges, however, plus additional comments on the components of the cost categories may shed some light on why home builders must be concerned with costs.

With an increasing demand for urban land, utilities and services, there is little doubt why land costs have increased. Builders developing land must contend not only with greater raw land cost, but also higher costs of material and labor for improving the land before construction begins. Other contributing factors are restrictive zoning provisions, land donation and fee requirements for municipal services and rising development standards. The site to total value ratio of FHA houses increased from 12.0% in 1950 to 16.6% in 1960. In a number of areas it is not uncommon for land to account for over one quarter of the sales price of the house.

The direct cost of the house, generally ranging from 50% to 65% of the sales price, is the largest single category of cost and generally receives the greatest attention. In the past ten years, price increases in the material and labor components of direct costs contributed significantly to the over 30% increase in residential cost since 1950. Wage rates have risen almost twice as rapidly as material prices, a gain of over 50% since 1950. The overall level of building material prices during the same period increased 30%, with gains for indi-
vidual materials ranging from about 50% for structural clay products to 4% for softwood plywood. There appears to be little in the future to counteract these trends except more efficient building methods.

Builders' operating expenses, costs other than direct labor, material and subcontracts, may reach from 5% to 30% of the house sales price. These often variable and elusive costs are difficult to control and deserve more attention than being thrown together under a general overhead category. Although the builder may apportion all or most of his operating expenses to specific houses, the Chart of Accounts distinguishes between different types of these costs. Under indirect construction costs are salaries of field superintendents and others concerned directly with construction, owned equipment costs, rented equipment costs, tool expense, field office expense and inventory and warehousing expense. Financing costs include interest on construction loans, discounts, fees and perhaps closing costs paid by the builder. Sales costs of operative or merchant builders include commissions to outside brokers or the builder's own salesmen, sales office expenses, advertising, general promotion and model home expense. General and administrative expenses include executive salaries, travel and entertainment, automobile expense, office rent or interest and depreciation, repair and maintenance, supplies, taxes and insurance.

The process the builder follows as he plans and builds his houses is related to the analysis and evaluation of the previous cost elements, and complicated by a number of interrelated factors.

The practice of estimating has prevailed in the building industry for centuries, and in the recent past, considerable effort has been expended to develop and disseminate estimating systems and forms for use by homebuilders. The detailed piece-by-piece or item-by-item estimate has, for the most part, replaced the square or cubic foot estimate, the unit cost estimate and "guesstimating." Quantity take-off of materials can be accomplished more efficiently with detailed planning and complete and accurate drawings of the house. Allowances may be made for waste or loss through damage or theft. Experience often serves as the only guide for estimating labor time, or more frequently, the builder relies on subcontract prices. Consideration is given to such factors as expected weather conditions, wage contract negotiations and degree of supervision.

Following the completion of the estimate of all direct construction costs, the builder adds to this total the cost of the developed land and other assignable job costs to arrive at the total direct job costs. Experience and budgeted expenses pro-
vide the basis for computing the amount necessary to cover indirect, sales and general and administrative costs. Finally the builder must arrive at the selling price required to realize the desired operating profit. Making this price decision is complicated by a number of factors including sales volume, FHA-VA valuation, construction and permanent financing, construction and financial scheduling, distribution of overhead costs, working capital requirements, multiple corporations and taxes.

Although estimating systems help provide builders with a means of obtaining house sale prices, they do not furnish certain cost information necessary for the builder to make the most intelligent planning decisions. In essence, the builder knows what he pays for material and labor but he generally does not know what this material and labor should cost. Standards of labor performance, particularly on newer methods of construction, are practically non-existent. The accuracy of estimates is largely influenced by labor time which is not now measured with any degree of precision. It is particularly difficult to predict the time required in transporting and handling materials and other miscellaneous work required during the construction process. Subcontractor operations give the builder fixed prices but may hide actual direct labor and material costs. Dependency on subcontracting may also create problems in changing to new products and construction methods. Comparison of the costs of new products and methods with the builder's existing construction is particularly difficult with an estimating and reporting system based on trade or subcontract work. It is difficult, for example, to determine the total cost of using purchased roof trusses in place of conventional joist and rafter framing when the costs of the latter system are hidden in the general category of carpentry or rough framing.

Other limitations of homebuilding cost systems are evident in the areas of construction cost control and business expense control. The builder's primary purpose in maintaining a job cost accounting system is to ascertain whether construction costs are in excess of estimated costs—or, in other words, to determine the probable amount of profit in the operation prior to completion. Construction job costs during the building process are measured mainly by invoices for materials and subcontracts and by time-card reporting for direct labor. Unfortunately, this kind of reporting does not help identify all construction cost problems or aid in the solution of these problems.

Control of overhead and other variable expenses requires proper planning, adequate standards, good reporting and budgeting. Too often, these control measures are absent. Costs difficult
to assign may be placed into general or miscellaneous categories. The effect of changes in construction methods on indirect costs may not be recognized. As a result of deficiencies in both construction and business cost systems, the builder lacks sufficient facts to enable him to obtain the most effective integration of the key factors of production—labor, material and money.

NAHB has been aware of these problems facing its members and the entire industry and has directed and encouraged better management methods. In 1960, the NAHB Research Institute, as a result of one of its cooperative projects, became aware of the potential benefits of the field of industrial engineering to the process of building houses. The Institute has now established a cooperative program with The Stanley Works of New Britain, Connecticut, and NAHB builder member Robert F. Schmitt of Berea, Ohio, to analyze and evaluate the application of industrial engineering concepts and techniques to home building. Called Project TAMAP, Time and Methods Analysis Program, the study will employ such techniques as stop watch work study, process and methods analysis, work sampling, economic analysis of material, design analysis, value analysis, flow process charting and time lapse photography.

Industrial engineering is a very far-reaching field which can render service in many areas by its approach to investigating and improving production in its broadest sense. Developed and refined over the period of the last eighty years, it is now used to a great extent by all major industries except construction including home building. The essence of industrial engineering is its stress upon integrated systems design and a methodical approach to the solution of management problems. All factors of production are developed to the optimum extent through the use of numerous measuring and control methods.

During the past decade there has been an increasing need for progress in homebuilding technology. Homebuilding by both custom and merchant builders of large and small houses is becoming more of a production process. The trend toward prefabrication or component construction exemplifies the industry's changing pattern of building methods. Increased efficiency in the use of labor and materials, both in the plant and on the site, can be achieved through better planning and design and greater knowledge and control of production. The NAHB Research Institute believes that to achieve the goal of better houses at a lower cost, it is necessary that homebuilders take advantage of the accumulation of knowledge and experience of other industries. If industrial engineering can aid in achieving this objective, homebuilding cannot afford to pass by its contributions.

There are two basic areas where the industrial engineering approach can be utilized in the homebuilding process. Previously commented on were several problem areas that face the builder in his concern with management control, particularly as it relates to cost. Time was noted as the key factor in estimating and controlling the costs of houses and in judging the effectiveness of alternative methods of construction. Industrial engineering provides several methods for measuring time, including stop watch work study with the performance rating of workers to arrive at time standards,
work sampling to determine the relative proportions of time used by a crew in the pursuit of all of its normal work, and time lapse photography which provides a permanent record of both the time and methods of performing work. With these and other fundamental tools for measuring time, additional techniques can aid the builder in aspects of management control such as scheduling, supervision, communications and training. For example, flow process charting provides a graphic display of the entire building process and each of its individual steps.

The second basic area of the application of industrial engineering to homebuilding involves the decisions of management with respect to the planning and design of the house, selection of materials and equipment and choice of construction methods. Motion study concerns itself with the best way of doing a specific job by means of a systematic study of the methods, materials, tools and equipment to be used. It is related to process and methods analysis which is a systematic evaluation of alternatives for performing each individual operation as well as every sequence of operations with the object of finding the best way for accomplishing the job. Economic analysis of material involves the critical evaluation of substitute materials considering all of the economic factors involved in their respective use. Design analysis concerns itself with the structural and esthetic integration of materials in the product. Value analysis considers the relative work of adding value with direct material or labor to accomplish a given function in the product.

The Research Institute has adopted the premise that the concepts and techniques demonstrated by Project TAMAP must be capable of being put into effect by home builders without necessarily hiring staff industrial engineers or consulting firms. The progress of the project to date, has already indicated the practical value of the industrial engineering approach to the construction of houses and the builder's business ways. The greatest contribution of this approach will come through a coordinated use of industrial engineering by all segments of the building industry including subcontractors, suppliers, building product manufacturers, architects and engineers.

Although there may be some disagreement concerning the architect's position relative to construction costs and methods, the architectural profession could evaluate for its own and the builders' benefit, the concepts and techniques of industrial engineering. Architects by training and experience have been disciplined in the methodical approach to solving building problems. The accumulation of additional knowledge and its application to the homebuilding process could increase the value of the architects' professional service to home builders. The coordination of production methods and control with the planning and design of the house and the selection of materials and equipment provide an excellent common ground for a working relationship between architects and homebuilders. The outstanding examples of architect-builder cooperation have demonstrated the architect's knowledge of costs and methods and the builder's understanding of the value of good community and house design to selling houses. These relationships have extended beyond superficial planning and styling to encompass land and site planning, architectural and engineering design, detailing, specifications, supervision of construction, color coordination and landscape design.

As the homebuilding industry progresses, large operative builders, component fabricators, home manufacturers and building product manufacturers continually search for ways to more completely integrate the production of houses. This does not mean to say that the results will be standardized, look-alike factory-produced houses. Rather, the industry will create design systems to provide planning flexibility and design freedom, while retaining with the physical components, the advantages of off-site production. Efficient management by these groups will bring together the talents required to solve the many problems inherent in a complex competitive business.

Small volume and custom builders will find ways of adopting new materials, systems and construction and business methods to retain their traditional and respected identity in their communities.

There is real concern that the industrialization of homebuilding may by-pass the services of private architectural practices with their valuable knowledge of local regulations, land, climate and people. These firms must first participate in the functional and esthetic design of new integrated systems of house construction to relate these systems and their parts to the physiological and psychological needs and desires of people, and secondly, they must utilize new materials, components and systems to help create homes and communities with better living and economic values.

As long as homebuilding operates in a free private enterprise system with competition for the consumer dollar, and as long as the ability of the consumer to buy houses is related to his income and credit financing, cost will continue to be a major criterion affecting the design, building and selling of houses. To meet its objectives the entire building industry must make use of every means at hand to become more knowledgeable of the true nature of cost.
FHA Moderate Income and Displaced Families Housing Program

The FHA section 221 mortgage insurance program for displaced families is made available on more liberal terms and is broadened to apply to low and moderate income families generally.

One- to Four-Family Home Mortgages (New, existing and repair). The dollar limits on a mortgage that can be insured are increased as follows: (2, 3, or 4 family mortgages available only for displaced family)

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Downpayments—$200 per dwelling unit downpayment (including settlement and prepayment expenses) for displaced families. 3% of the Commissioner's estimate of the cost of acquisition of the property including closing costs, in the case of other moderate income families.

Maximum maturity—40 years for displaced families; 35 years for new housing for other families; 30 years for existing housing for other families.

Rental Housing—Low Interest Rate and Market Rate Programs. The section 221 rental housing program for displaced families is amended to provide a "below market" (low interest rate) program of rental housing for displaced families and for other low and moderate income families.

A mortgagor is eligible for a low interest rate insured mortgage if it is a private nonprofit corporation or association, a limited dividend corporation, a cooperative, or a public body or agency which certifies that it is not receiving Federal financial assistance exclusively for public housing.

The statutory limits on a rental housing mortgage are increased. The limit of $9,000 per family dwelling unit or $12,000 in high cost areas is changed to a per room limit, except in the case of a project having less than four rooms per unit. The new per family unit limit is $8,500 if the number of rooms average less than four per family unit, or $9,000 for elevator-type structures. Where the number of rooms in the property averages four or more per family unit the maximum mortgage amount is $2,250 ($3,250 in high cost areas) per room in non-elevator structures and $2,750 ($3,750 in high cost areas) for elevator structures.

Termination of moderate income housing program. The authority to use section 221 for moderate income families terminates July 1, 1963, except that this date is July 1, 1965, in the case of the low interest rate rental program.

FHA Home Improvement and Rehabilitation Loans and Mortgages

Home Improvement Loans. A new program of FHA-insured home improvement loans is authorized. Loans cannot exceed $10,000 per dwelling unit in amount, or the cost of repairs whichever is lesser. The maturity can be up to 20 years, or three-quarters of the remaining economic life of the property, whichever is the lesser, and the interest rate cannot exceed an amount determined by the Commissioner but not more than 6%. A service charge, and appraisal, inspection and design fees can be included in the amount of the loan. Adequate security is required for the loan.

The home improvement loans are available for both 1- to 4-family homes and multifamily structures, except that an insured loan (as distinguished from an insured mortgage under other programs) cannot be made for multifamily structures if they are located outside an urban renewal area. Improvements of structures less than 10 years old must involve major structural changes or correct defects not known at the time of completion of the structure or which were caused by fire, flood or other casualty.

Repair and Rehabilitation Mortgages. The basis for determining the maximum amounts of mortgages covering repair and rehabilitation and insured under the FHA section 220 (urban renewal housing) and 221 (housing for displaced and moderate income families) programs will be the sum of the estimated cost of repair and rehabilitation and the Commissioner's estimate of the value of the property before repair and rehabilitation, rather than value of improved property as under the law before amendment. The new formula is applicable to both 1- to 4-family homes and multifamily housing.

Continuation of FHA Title I Property Improvement Program. The FHA Title I property improvement loan insurance program is extended to Oct. 1, 1965.

FHA Mortgage Insurance for Experimental Housing

A new program is authorized under which FHA can insure mortgages on homes or rental housing incorporating new and untried materials, design, and construction methods and involving experimental property standards and neighborhood design. FHA is authorized to make investigations and analyses of data and to publish and distribute reports on the program. The authorized amounts and terms of the insured mortgages are the same as under the regular FHA sections 203 and 207 sales and rental housing programs. However, the mortgages
and property are eligible for mortgage insurance if the Commissioner finds the project is an acceptable risk (rather than being economically sound as is required under those programs).

**FHA Mortgage Insurance for Individually Owned Units in Multifamily Structures**

FHA is authorized to insure a mortgage covering a family unit in a multifamily structure and an undivided interest in the common areas and facilities which serve the structure (condominiums). The program is restricted to structures that are or have been covered by FHA-insured mortgages (other than cooperative housing mortgages). The structures may be new, existing or rehabilitated. The amount of an insured mortgage cannot exceed (1) the per room and per family unit limits of the section 207 rental housing program or (2) the loan-to-value ratios of the section 203 home mortgage program as in effect prior to the July 1, 1965, except pursuant to a commitment to insure before that date. The October 1, 1965 date does not apply to the title I property improvement loans or section 221 or title VIII mortgages, which have their own termination dates.

**Extension of Title VIII Programs.** FHA’s authority to insure mortgages under the Title VIII programs (military, defense, NASA, and AEC) is extended for one year—to October 1, 1962.

**Nursing Home Program.** The maximum amount of a nursing home mortgage is increased from 75% of value to 90%, thus reducing the required equity from 25% to 10%.

Cooperative Housing Program. Investor-sponsors can be permitted in the discretion of the Commissioner to obtain an FHA-insured mortgage after a previous failure to sell housing to a cooperative.

**Housing for the Elderly.** The maximum amount of an FHA-insured mortgage covering elderly family housing (sec. 231) is increased from $9,000 ($9,400 if elevator structure) per family unit to $2,250 (or $2,750 per room if elevator structure) where the number of rooms in the unit is four or more.

**Housing in Defense-Impacted Areas.** The section 810 mortgage insurance program for housing in defense-impacted areas is changed by removing certain requirements for actions by the Secretary of Defense. The FHA could no longer require him to guarantee the FHA insurance fund against losses on section 810 mortgages which are not an acceptable risk. A provision is also repealed which limited the number of section 810 housing units to those authorized by annual military construction authorization acts.

**Federal National Mortgage Association**

Special Assistance. The FNMA special assistance authorization (under Presidential control) is increased by $750 million. An additional $200 million increase in this authorization is provided by transferring the unused authorization from the special assistance provided in the Emergency Housing Act of 1958.

**Mortgage Ceiling.** The per dwelling unit ceiling on mortgages eligible for FNMA purchase is waived for FHA section 809 mortgages (at military research installations), for FHA section 810 mortgages (in defense-impacted areas), and for section 213 mortgages (cooperatives) on property in an urban renewal area.

**FNMA Loan Program.** The FNMA is authorized to make loans, with maturities up to one year, on the security of FHA or VA mortgages.

**Direct Housing Loans for the Elderly**

Loan Authorization. The loan authorization for elderly housing is increased from $50 million to $125 million.

Eligible Borrowers. Consumer cooperatives and those public bodies which certify they are not receiving...
financial assistance for public housing exclusively are added as eligible borrowers.

**Loan Amount.** The maximum loan amount is increased from 98% to 100% of the development cost.

**Public Housing (Including Elderly)**

Low-rent Public Housing. The remaining balance of the $336 million annual contribution authorization in the 1949 Act is made available, covering approximately 100,000 units.

**Payments as to Elderly.** Where the rentals of units occupied by elderly are so low as to threaten solvency of a low-rent project, an additional Federal payment of up to $120 a year per unit is authorized.

**Demonstration Program.** The Housing and Home Finance Administrator is authorized to enter into contracts to make grants, up to $5 million, to public or private bodies for the purpose of developing and demonstrating new or improved means of providing housing for low-income persons and families.

**Cost Ceiling.** The cost ceiling per unit is increased by $500 for units used by the elderly and for units in Alaska.

**Urban Renewal**

Grant authorization. The urban renewal grant authorization is increased by $2 billion except that $25 million of this amount may be used for contracts for mass transportation demonstration projects as indicated below.

**Non-Residential Exception.** The amount of the authorization available for non-residential projects is increased from 20% to 30% of the amount of grants authorized to be contracted for after the Housing Act of 1959.

**Federal-Local Share.** The Federal contribution is increased from ¾ to ¾ for any municipality having a population of 50,000 or less (or 150,000 or less for a municipality in an economically distressed area).

**Hospitals.** Gives city credit for expenditures for land acquisition and clearance by hospitals near urban renewal areas, in the same manner as such credit is now given for similar expenditures by colleges.

Also increases to 7 years the period prior to the loan and grant contract during which these expenditures may be counted.

**Re-Sale of Property for Moderate Income Families.** Real property in an urban renewal area may be made available to (1) a limited dividend corporation, non-profit corporation, cooperative, public body, or (2) any purchaser who is eligible for a section 221 FHA-insured mortgage for a profit-making rental housing project for moderate income families.

The property can be purchased at fair value for use by the purchaser in the provision of new or rehabilitated rental or cooperative housing for occupancy by families of moderate income.

**Rehabilitation Demonstrations.** Local public agencies are authorized to carry out rehabilitation demonstrations in urban renewal areas, but demonstrations are limited in any area to 100 dwelling units or 5% of the total dwelling units in the area to be rehabilitated, whichever is less.

**Pooling.** A local public agency is authorized to pool its surplus local grant-in-aid credit between projects on the ¾ basis and projects on a ¾ basis.

**Urban Planning**

**Authorization.** The authorization for appropriations for urban planning grants is increased from $20 million to $75 million.

**Federal Share.** The Federal share of the cost of urban planning is increased from ¾ to ¾.

**Mass Transportation Planning.**

**Discussed below.**

**Public Facility Loans**

**Increase in Loan Authorization.** The aggregate revolving loan authorization is increased by $500 million (to $650 million), of which not more than $50 million will be available for loans for mass transportation facilities discussed below.

**Eligible Borrowers.** States are no longer eligible borrowers for public facility loans, thus limiting eligibility to municipalities and other political subdivisions and such State instrumentalities as water and sewer districts which serve localities. Eligibility is also limited to communities having a population of less than 50,000, or, if located in an economically depressed area, less than 150,000.

**Interest Rate.** The interest rate which the Housing Administrator will pay to the Treasury for loan funds under the program will be based on the average annual interest rate on all interest bearing obligations of the United States computed at the end of the preceding fiscal year, and the interest rate charged by the Housing Administrator to borrowers under the program will be this rate plus ½%. Currently this formula will result in borrowers paying 3½%.

**Postponement of Certain Interest Payments.** The Administrator is given discretionary authority to postpone the payment of interest on not more than 50% of any public facility loan for a period up to 10 years where the loan does not exceed 50% of the development cost of the project and the Administrator determines that the applicant will experience more than average population growth and that the project would contribute to orderly community development. The postponed payments will be payable with interest during the remaining life of the loan.

**Technical Advisory Services.** New authority is provided for technical services by the Housing Agency to communities in budgeting, financing, planning, and constructing community facilities.

**Urban Mass Transportation**

**Planning Assistance.** Provisions discussed above increase the present planning grant authorization from $20 million to $75 million and increase the Federal contribution from one-half to two-thirds of the planning cost. Comprehensive planning for mass transportation is expressly made eligible under this program, and eligible agencies include, in addition to certain “official” planning agencies doing metropolitan or regional planning, other agencies where the Governor and the Administrator agree that the special agencies were appropriately chosen for the planning work involved. The Housing and Home Finance Administrator is authorized to provide technical assistance to State and local governments and their agencies undertaking planning, and to make studies on related problems.

**Demonstration Grant Program.**

The Act authorizes contracts to make $25 million in grants to local public agencies for demonstration projects designed to contribute to the improvement of mass transportation or the reduction of mass transportation needs. The grants can not exceed ¾ of the project costs and can not be used for major capital improvements. The funds come from urban renewal grant funds authorized elsewhere in the Act.

**Loans.** A $50 million authorization is provided for loans to public
bodies to provide for financing of the acquisition, construction and improvement of transportation facilities and equipment. The transportation facilities can be operated by local public agencies or by private transportation companies, but the Federal loans will be made only to public bodies or agencies. The $50 million loan authorization is a sub-limitation within, rather than an addition to, the public facility loan authorization referred to above, and funds can be borrowed from the Treasury for these loans in the same manner as for other public facility loans. The interest rate applicable to public facility loans generally will be applicable to mass transportation loans, but mass transportation loans can be made without regard to the population of the community. The transportation loan authority expires December 31, 1962. No loan can be made unless (1) there is being developed for the urban or metropolitan area a program for the development of a comprehensive mass transportation system, and (2) the proposed facilities can reasonably be expected to be required for such a system.

Open-Space Land

A new program of Federal grants is authorized to assist local public bodies in the acquisition of land to be used as permanent open space. The Housing Administrator may enter into contracts to make grants under this program in amounts not exceeding $50 million. The amount of any grant may not normally exceed 20% of the total cost of acquiring the title to, or other permanent interests in, the land. The grant may be as high as 30% if it is extended to a public body which exercises responsibilities relating to open land for an urban area as a whole or which participates in the exercise of such responsibilities for all or a substantial part of an urban area pursuant to an interstate or other inter-governmental compact or agreement. The grants may not be used to defray development costs or ordinary governmental expenses.

No grant may be made unless the open-space land is important to the execution of a comprehensive plan for the urban area and unless a program of comprehensive planning is being actively carried on for such area.

In extending aid under the program, the Housing Administrator is required to take such action as he deems appropriate to assure that the local governing bodies are preserving a maximum of open-space land, with a minimum of cost, through the use of existing public land; the use of special tax, zoning, and subdivision control provisions; and through other available means such as the acquisition of restrictive easements.

Provision is also made which permits the conversion of open-space land assisted by Federal grants to other uses, subject to findings that the conversion is essential to the orderly development of the urban area and to assurances that other open-space land of equivalent value is being provided as a substitute.

Provision is also made for consultation with the Secretary of the Interior; for technical assistance to State and local public bodies; and for technical studies in this field and the publication of information.

College Housing Loans

Increase in Loan Authorization. The aggregate revolving authorization for college housing loans is increased by $300 million on July, of each of the four years from 1961 through 1964. The present $1.675 billion authorization would thus gradually be increased to $2.875 billion. The sub-limitation for such other facilities as dining halls and student unions is increased by $30 million for each of these years and the sub-limitation for student nurses, and medical residents and interns is likewise increased by $30 million for each of these years.

Eligible Borrowers. A non-profit corporation formed for the purpose of providing housing for students of more than one educational institution is eligible for college housing loans, but if the corporation is not established by one or more of the educational institutions being served, the note securing the loan will be required to be co-signed by one or more of the institutions.

Advances for Public Works Planning

Authorization. The program of Federal advances for the planning of specific non-Federal public works receives an increased authorization of $10 million, bringing the total authorization to $58 million.

Long-Range Projects. The requirement limiting planning advances to projects which will be constructed within a reasonable period of time is amended to make it clear that long-range projects to be constructed over a long period of time are eligible for planning advances.

Federal Savings and Loan Associations

Business Development Credit Corporations. Federal Savings and Loan Associations whose reserve, surplus and profits aggregate 5% of withdrawal accounts are authorized to lend to or invest in business development credit corporations. The aggregate loans and investments may be no more than 1/2 of the total loans outstanding in the Association or $250,000 whichever is the lower.

Urban Renewal Investment Trusts. These Associations are authorized to invest up to 5% of their assets in certificates of beneficial interest issued by urban renewal investment trusts. These trusts may be for the purpose of financing the purchase or rehabilitation of real property or the construction or improvement of commercial, industrial or housing properties in urban renewal areas.

Housing for the Elderly. These Associations are authorized to invest up to 5% of their assets in housing or nursing home loans for the elderly, with maturities being permitted up to 30 years and with the maximum permitted loan-to-value ratio being 90%.

FHA Home Improvement Loans. These Associations are authorized to invest in home improvement loans insured by FHA under its new home improvement loan program.

National Banks

National banks are authorized to make home improvement loans insured by FHA under its new home improvement loan program without regard to the loans not being secured by first liens.

Miscellaneous


Records. Every contract entered into by the Housing and Home Finance Agency or any of its constituents for a grant, loan, contribution, or insurance must now provide that the recipient keep such records as the Administrator prescribes. The records will be available for inspection by the General Accounting Office, as well as by the Housing Agency.

Voluntary Home Mortgage Credit Program. The program is extended from October 1, 1961 to October 1, 1965.
by Ralph O. Mott, AIA

Mr Mott is a member of the firms of Mott, Mobley, Horstman & Staton in Fort Smith, Arkansas, and Horstman & Mott in Muskogee, Oklahoma. He is past Secretary of the NCARB, a member and past President of the Arkansas Chapter AIA, and member and past President of the Arkansas State Board of Architects

Architects should have national registration. This idea has often been propounded, more often than not on a single-shot basis, and without quite enough understanding of the reason architects, and members of the other professions, now have state registration and not national registration.

However, I do not recall any convincing arguments for having the profession of architecture regulated by a Federal bureau, and why think that will not be the natural consequence of national registration?

So far as I am concerned, I prefer to have the registration law in my state administered by architects whom I can or do know. And what architect is there who will be appointed or reappointed to the State Board if his fellow architects can find another who will do a better job?

This is not to say that there is not a real need for a convenient means of obtaining interstate registration. On the contrary, architects have in the past needed interstate registration for so many reasons that few can say with certainty they will never need registration in another state.

The NCARB can be the solution. The National Council of Architectural Registration Boards was founded more than forty years ago, prior to enactment of nearly 60% of the present architectural registration laws. It was formed to foster enactment of uniform architectural laws, equality of standard in examinations and establishment and maintenance of reciprocal registration between states having registration laws, and has gone a long way toward accomplishing these objectives.

The NCARB Certificate is the instrument by which many reciprocal registrations have been obtained, and is now the only avenue by which non-residents can obtain registration in a growing number of states. Approximately 700 reciprocal registrations were obtained in this manner during the past year.

All State Registration Boards now recognize the NCARB Certificate. Acceptance has come gradually, if slowly, and at the 1961 Annual Meeting it was possible to announce for the first time that all of the fifty-three State Boards have indicated a willingness to qualify their registrants for the NCARB Certificate, and to accept applications on the basis of an NCARB Certificate.

This is not to say that all state boards accept the certificate as proof sufficient that the applicant is entitled to registration. Some boards do so accept it, while others impose various additional requirements consistent with the standards for registration of residents of that state. In any event it provides architects with the best available instrument for obtaining registration in any or all other states, and will virtually assure registration for those having better than minimum qualifications.

It takes too long to obtain an NCARB certificate. It does take time, that is true, and no one
is more conscious of the time required than the person who before applying for a certificate, has started a project in violation of the registration law. Admittedly this is an extreme situation, but it happens.

The more usual causes for delay in issuing NCARB Certificates are these:

- The applicant does not have the required qualifications.
- The applicant has made inaccurate or exaggerated statements.
- The architects whom the applicant has listed as references have not replied to inquiries. This is the greatest single cause for delay.
- Former employers have made derogatory replies to inquiries, or have failed to reply.
- Former clients have occasionally made derogatory replies. Clients are generally more charitable than fellow architects, especially than those who appear to consider all other architects as competitors instead of fellow practitioners.
- The NCARB staff is less than perfect.

These difficulties point up two things. First, the NCARB Certificate is not issued until the applicant’s qualifications have been proven, and second, that to wait until interstate registration is needed before applying for a certificate is to wait too long.

There is too much delay in forwarding a Certificate. Except for a few isolated cases this complaint stems from the requirement that NCARB Certificates must be dated or brought up to date not more than five years prior to being submitted to state boards.

In the past, NCARB Certificates have been valid for a period of five years and at five year intervals they have been continued in force for additional five year periods after the applicant has submitted evidence of continued eligibility. There was a time when the period of validity was not so clearly stated but in recent years it has been fixed at five years, and the NCARB has endeavored to make this clear to all. Many certificate holders have either forgotten this requirement or have procrastinated so long that it is often necessary to delay forwarding a certificate until a periodic review can be made.

It is understandable that State Boards cannot grant registration on the basis of a record that contains no information concerning the applicant’s practice during the preceding five years, or more. Consequently the obvious solution is to find a means of keeping certificates continuously up to date, and that is one of the prime reasons for the changes in procedure which are now being made.

The solution — we hope: At the 1961 Annual Meeting of the NCARB these conclusions were agreed upon:

- Now that all of the fifty-three State Boards recognize and make use of the NCARB certification procedure, the certificate is of greater value.
- Now that the NCARB Certificate is prerequisite to registration of nonresident architects in a number of states it is more than ever important that the procedure for issuing and forwarding these certificates be as efficient as possible.
- The NCARB Certificate is now so important an instrument to every architect who does now, or may sometime, wish to practice in another state that it should be maintained ready for use.
- The changes which must be made in the NCARB procedures in order to accomplish the above objectives cannot be accomplished within present revenues.
- The benefits which can accrue to holders of an NCARB Certificate are now such as to warrant an annual renewal fee of $10.00.

How it will work: A completely new system of reviewing and renewing NCARB Certificates will be inaugurated as of January 1, 1962.

During November or December, starting in 1961, a form and statement will be sent to every holder of an NCARB Certificate requesting:

- Submission of an affidavit containing such information as is necessary to continued maintenance of the certificate.
- Payment of the annual renewal fee of $10.00.

The author,
Ralph O. Mott

Both the affidavit and the renewal fee will be due on or before January 1st of the ensuing year. In the event that the affidavit is not returned and/or the annual renewal fee not paid on or before January 1st the Certificate will be deemed to have lapsed.

Certificates which have lapsed may be reinstated upon submission of the affidavits and renewal fees which are in arrears, and the payment of a renewal fee of $25.00. No further fee will be required on account of periodic reviews of certificates.

The NCARB will make a periodic review of the record of each certificate holder, using the annual affidavits as a basis for the review. Certificates which have not lapsed will be reviewed at not greater than five-year intervals.

Certificates which have lapsed will also be reviewed at not greater than five-year intervals provided the certificate is first reinstated.

The NCARB will distribute annually to all state boards a list containing the names of all certificate holders who have supplied the annual affidavit and paid the annual renewal fee.
Do Architects Care About Houses?

Houses, housing and housing research have figured extensively in my experience ever since the early days of the Small Homes Council at the University of Illinois (1944). Since that time I have taken part in many roundtables and conferences dealing with problems of single-family housing as produced by merchant builders and have served on the juries of many house competitions.

In the process it has been my privilege to become well-acquainted with many leaders of the home-building industry, a number of architects who design and plan for them, and most of the government officials who deal with housing. What bothers me is that so little has happened to improve house design in that same period of time.

Remember, I am not discussing architect-designed, custom-built houses. Each year the AIA Honor Awards include some very excellent custom house designs which represent true advances. Nor am I making an accusation which depreciates in any way the design efforts of a handful of architects who have been collaborating with progressive merchant builders to produce good architecture and site planning in their subdivisions.

The last jury I served on was the "Homes for Better Living Awards" co-sponsored by Life, House and Home, and the AIA. Our jury looked at entries in the merchant builder class; two other juries gave awards to custom-built houses and apartments. Believe me, the architects on our jury had tough going because few of the entries showed imagination or originality and many of them showed almost nothing worthy of the name of architectural design. We had to quiet our consciences in giving the lowest award to a few selections mainly to "encourage a sound trend" in the design of houses that "offered a great deal for the money." No one felt any better when the AIA audience laughed (at least, they didn't boo) when these "marginal winners" were flashed on the screen at the awards luncheon in Philadelphia.

Who is to blame for this situation in house design? The architects or the homebuilders? The answer seems to lie in the fact that only a very few architects and homebuilders cooperate regularly to achieve outstanding architectural results, with the proof of their achievements on view in a few American cities. Why isn't there more of such teamwork?

"Too many headaches, too little pay," say some architects. "Designs that don't sell," say some builders. Architects or builders responsible for such quotes often base their opinion on one unfortunate experience—sometimes not even their own—when attempted collaboration didn't pan out. The few architect-builder teams credited with outstanding successes have long records of experience, suggesting that they worked out their problems together and have a thorough understanding of merchant-building from inception of a project to completion of the sales of houses to the public.

The homebuilding industry is the target for a lot of criticism of fairly recent origin. "Urban sprawl," "ghettos of suburbia" are epithets applied to the conglomerate result of postwar growth comprising many subdivisions by many builders which mushroomed within a short span of years. Some of these subdivisions were considered pretty good individually when they were built. It is the total result that shocks us when we belatedly become conscious of the problems of metropolitan America. Some of the homebuilders are just as shocked as the architects when they review the problems created by mass construction of housing. This brings me to the two points I wish to make: Our concept of metropolitan planning leaves no doubt that merchant-built housing is one of the most important components of the comprehensive plan; the architectural profession must ally itself with the homebuilding industry to improve subdivision planning and the designs of single family houses.

The alliance is being fostered on a modest scale by the AIA Committee on the Homebuilding Industry, chaired by Edward H. Fickett.

The homebuilders tell me that the "average architect" has too little comprehension of the homebuilders' problems "across the board" of his business to serve him successfully. This is the real complaint instead of the more superficial criticism of architects' designs. I suggest that the homebuilding industry should work with us to produce something like a "manual of information for architectural services to the homebuilding industry." It would comprise much more than the technical aspects of design and construction because the fundamental problems lie in economics and marketing.

With such a tool our AIA Committee would have something to work with in the enlistment of architects—and the younger firms—into the cause of improved suburbia.
Schools

The present list includes a selection from the more recent books on schools in the AIA Library. All are available on loan to AIA members through the Library Loan Service.

General


The American School and University; a yearbook devoted to the design, construction, etc., N.Y., American school publishing corp., 1945-1959/60.

ARCHITECTURAL RECORD

Schools for the new needs. N.Y., Dodge, 1956. 312p.

Bursch, Charles W. & J. L. Reid


Caudill, William W.

Toward better school design. N.Y., Dodge, 1954. 271p.

Engelhardt, Nickolaus L. and others.


Great Britain. Ministry of education.


Herrick, John H.

From school program to school plan. N.Y., Holt, 1956. 482p.

MacConnell, James D.


McQuade, Walter, ed.


Roth, Alfred


Sumption, Merle R. & J. L. Landes


BY TYPE

Waechter, Heinrich H. & E. Waechter

Schools for the very young. N.Y., Dodge, 1951. 197p.

American Association of School Administrators.


Bursch, Charles W. & J. L. Reid


Architecture for adult education, a graphic guide for those who are planning physical facilities for adult education. [Chicago, 1956] 74p.

ECONOMICS

Educational Facilities Laboratories.


Pierce, David A.


Rensselaer Polytechnic Institute, Troy, N.Y. School of Architecture.


EQUIPMENT

Association for Childhood Education.

(International)


Stanford University. School Planning Laboratory.


Terry, Harry.


FIRES

Los Angeles. Fire Department


LIBRARIES

American Association of School Librarians. Committee on planning school library quarters.

Dear Mr. architect. Chicago, American Library Association, 1952. 15p.

American Association of School Librarians


SPECIAL FEATURES

Chapman (Dave) inc., Chicago.


National Science Teachers Assoc.


Palmer, R. Ronald & W. M. Rice.


Prakken, Lawrence W.


Terry, William L.

A guide for planning the school and college swimming pool and natatorium. N.Y., Bureau of Publications, Teachers College, Columbia University, 1959. 73p.

MISCELLANEOUS

Educational Facilities Laboratories.


[New York] 1960

Kaiser Aluminum and Chemical Sales, inc.


U.S. Office of Education.

Basic body measurements of school age children; a handbook for school officials, architects, etc. Washington, 1953. 74p.

VISUAL AIDS

American Association of School Administrators.

School building filmstrips, 1951 to 1960 with discussion guides.

American Institute of Architects.

A school for Johnny. 16 mm. Color sound film 14 min. Rental $5.

For those who like a potpourri, and many do, this is an excellent reference. The Architectural Record has drawn from its morgue a wide range of recently published material all relevant to hospital planning, and much of it worth careful study. Its many authors are prominent in the field.

A considerable variety marks the contents. After a functional introduction on circulation and departmental relationships (Emerson Goble) there follow plans, both total and of departments, for almost twenty units including acute general hospitals and long-term special ones.

Section II, Special Facilities, deals with surgery, pediatrics, radiology and teletherapy (cobalt). The article on operating suites (Kiff and Worthen) merits careful study. It is notable that even in surgery where rigid disciplines would seem to encourage uniformity of facilities, there is evidence of great variety in procedures. The comments listed are most useful. There should be more of this kind of working appraisal of a building.

Rehabilitation centers (twelve), health centers, doctors' offices and clinics (twenty-two) are covered in succeeding sections.

The form of the text is up to the Record's high standards, good photographs, clear plans (most of them with compass points and scales) and a readable text. A few ideasolutions are included with the plans of actual buildings. When the book is revised, it would be helpful to include the areas of departments, useful tools in both analyzing and planning, especially of the patient's room. And why not also include the number of persons using the space. Some site plans and comments on auto parking would be a welcome addition to this collection. The criticism of the finished hospital, in use, given for the Rockford Hospital in the lead article could well be extended even editorially to other plans shown. If this can be done for one, why not for others? Perhaps eventually there can come into being useful architectural criticism not bound by professional reciprocity or fear of libel suits and should there not be some comment about architectural form in relation to hospital function? This subject has long been slighted.

Two matters of patient room design could stand comment by the editors. First, those plans which show double-sized rooms used for single rooms. Are they in fact used as doubles or singles? And second, what is the experience in the numerous hospitals shown with connecting toilets? Is it only the two-entrance feature which is objectionable or is one toilet not enough for four (or eight) patients?

This volume, if used as a reference, but not uncritically, will prove most valuable. The ultimate planning text which describes hospital functions and personnel so architects can translate their needs into physical facilities has yet to be written.

E. TODD WHEELER, FAIA


The subtitle of this quite fine book is "The shaping of man's natural environment." The author is a widely-travelled, experienced landscape architect, vice-president of ASLA, now teaching at Carnegie Tech. In this volume he has collected hundreds of savory quotations, excellent photographs and his own facile marginal sketches to illustrate a text under the chapter headings of: fundamentals—the site—organization of spaces—visual aspects of plan—circulation—structures in the landscape—planning the region.

You will find here neither mulch, insect nor thorn since the emphasis is on the physical abstractions of design and planning, leaving all matters of plant selection and maintenance aside for thoughtful consideration of esthetics. Mr Simonds sees the landscape and the structures within it as a complete system, calling for a complete approach to its design. He sees this first of all as a matter of volume relationships but not omitting man and in fact urgently needing human reference points and sequential treatments which will appeal to the moving eye and foot. He points out the values of programming a handsome view, leading us to it artfully. There are good passages on traffic and transportation (but no graphic illustrations of the helpful points in the text on that everyday problem—the driveway).

Occasionally the writing is over-literary, as in the description of Paris—suddenly the page is over-populated with such characters as "white bearded, pink checked old men in blue berets drowsing on the benches in the sun . . ." While approving of tabular treatment of certain facts, as design of information, we found the lengthy lists à la Rabelais included many quite obvious and not really significant items. These are minor flaws—this is a good book and is far more than an index to what has been done beautifully and why. Near the end, Mr Simonds calls for a forward look, based upon our advances in many salients of thought and practice, toward a new system of physical order he foresees.

E.P.


Wayne Andrews, an editor and historian with a special interest in architectural history (he is the author of "Architecture, Ambition and Americans"), has here put together a highly personal album of his own photographs of buildings he likes. When an architect and/or building strikes his special fancy he gives us an historical tid-bit or anecdote by way of caption or annotation. While the photos are rather conventional, their selection is frankly biased in favor of the romantic and fanciful. One wonders why he included contemporary architecture at all since he rarely seems to approve of it. This handsomely produced volume is thus far from being an authoritative history. It does serve to remind us, however, that much of our architectural heritage is threatened by the wrecking crews. Andrews has included several beautiful and historically important buildings that have already fallen victims to indiscriminate urban renewal or carelessness.

W.V.E.

Fame and fortune failed Louis H. Sullivan at the prime of his life. An all but forgotten, bitter and cantankerous man, without architectural commission to occupy his boundless creative energy, he turned to philosophizing. Sustained by little but cigarettes and coffee, he poured to a tankerous man. without architecturality. all but forgotten, bitter and can­

Sullivan at the prime of his life. An

his zealous idealism into long, ram­

The book attempts "to look clearly,

dancy, simplification, shrillness, and

somewhat sheer silliness" (p. xiv). But clarity, steadiness and reason are, if ever present, totally lost in the loquacity of this mani­

mentary the city planner, the specu­

that the great master's "genius

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simplification, shrillness, and

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dustrial builder, or the architect, that

Crowded countries where no house

complain for inspiration for design.

MARGARET PHILLIPS, Editorial Assistant to Technical Editor

Books Received

The books listed below have been received for review. Their listing here does not preclude their review at a later date.

Architectural Practice, 3rd Ed. Clin­

ton H. Cowgill and Ben John Small. New York, Reinhold Pub­

lishing Corporation, 1959. 272 pp illus. 11" x 8½", $12.00

Come Si Costurisce Oggi Nel Mondo.


C O M I N G  I N  T H E  O C T O B E R  J O U R N A L

Primitive Shelter

by C. Ross Anderson

Former Assistant Professor of Architecture, Univ. of Kansas

A profusely illustrated study of structure and form in the earliest habitations of man. Part one of two.

An Archeologist's Sketchbook

by Alfred Bendiner, FAIA

A delightful picture-story of Al and Betty Bendiner's adventures on an archeological expedition to Guatemala last sum­

mer. Drawings by Bendiner, of course.

The Struggle for Redevelopment

by Fred Smith

Vice President of the Prudential Insurance Company

A strong statement of the problems of urban renewal—one of the best yet.

Of Planners and Primadonnas

by Siybly Moholy-Nagy

Professor of Architecture, Pratt Institute

A critique of the recent AIA convention and the Institute's stand on the position of the architect today. Thorough and thought-provoking, as always from this observer.
We Americans are a strange race (I guess we are a race, by this time). With all our striving for "culture," both organized and personal; with all the effort and money spent on parks, museums, art centers and such; and now, with all the ballyhoo about urban ugliness, suburban sprawl and the waste of our resources—we go right on with our national passion for creating holy havoc wherever we build.

Miles of highways lined with gas stations with their fluttering pennants and other junk. Sweeping interstate expressways with their three hundred-acre interchanges carved out of the forest and the hillside, many of them following (and filling) the natural drainage valleys which should be reserved as the nature and watershed preserves of the future.

Everybody else is writing and talking about it. I had resolved I would try to be more original. We know what's going on and we get a bit tired of being told about it. It's like preaching against sin. But just having seen again the orgy of sinfulness that is being thrown in the face of our beautiful land, I can't help but break my resolution.

I'm sure I don't know why we must commit these sins, but I know that we still do. So apparently all those of us who think we know better can do about it is to stand up and holler and make all the noise we can until gradually, through public awareness and ultimately through legislation, these evils will be overcome. This is an effort that every architect, every landscape architect and every planner can and should join in. If the trained professional designers and planners are to remake the environment of man during the next generation, as President Phil Will has called upon us to do, then our first job is to arouse ourselves, and then the public, to an awareness of the mess that we are in and a realization of the enormity of the task ahead of us.
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In answer to long-needed revisions and improvements in the antiquated building codes of many states, the University of Miami has recently established its ultra Scientific Housing Research Laboratory.

Here, ShoDoCo's rugged Herculum was one of the few Sliding Glass Patio Doors in America to successfully withstand the "Simulated Hurricane" conditions of outside winds pressures up to 100 MPH, and simultaneous "rainstorms" of 2 inches (simulated rain fall) per hour.

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World's largest manufacturer of shower enclosures
AEROFIN Smooth-Fin Heating and Cooling Coils

High ratio of surface area to face area
High air velocities without excessive friction or turbulence

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Do you have a copy of "Man and Masonry?"

Created by Architect Bernd Foerster for the enjoyment of the architect, *Man and Masonry* is a 64-page photographic definition of the aesthetic uses of masonry in terms of human scale, nature, form, light, screens, pattern, texture, sculpture, and emotion. The story is eloquently told by photos gathered by the author from some 20 countries over a year's time. Several thousand copies of this unusual book have been distributed. Reaction from architects, editors, and educators has been highly enthusiastic. First in a family series of professionally-conceived aesthetic references on clay products, the book should be in every architect's office. To help us accomplish this objective, please fill in and mail coupon.

A wall has stood for thirty centuries and its concept is applied again today.

Assyrian Wall; Sculpture, Holland; Architect unknown Sculptor, Henry Moore

Illustrations from "Man and Masonry" by Bernd Foerster, Assistant Professor of Architecture, Rensselaer Polytechnic Institute, Troy, N. Y.
It would not do to leave Georgetown without having a look at the Obelisk Gallery, which was one of the first local art establishments to draw serious attention to Washington as a contemporary art center. This distinguished gallery imports chiefly from abroad. Leading attractions here in recent months have been Max Gunther of Switzerland, Mirko of Italy, Alesandro Obregon of Colombia, and Robert Sadler of Britain. Ironically, it was during a talent search in Europe that the Obelisk Gallery discovered the American, Sam Fischer, on a Fulbright in Italy. His "paintings" in paper and paint have since earned him many awards, and he is well on the way to fame.

Across town, on 20th Street is another gallery which has done much to put Washington art on the map. A whole constellation of world-famous artists exhibit at the Gres Gallery—Grace Hartigan, Larry Rivers, Fernando Botero, José Luis Cuevas, Antonio Tapies and Karel Appel, to name but a few. Like the Obelisk, the Gres Gallery has the hard job of prying valuable new works away from New York dealers. There is a double handicap against them: If a celebrated artist is favored by an eager pack of buyers in New York, his dealer is loath to gamble the bird in hand against possible profits in the bush, no matter how promising. On the other hand, if the artist is not so celebrated, the New York dealer wants to keep his best work in town, so as to be available to the critics who can make him an overnight success. The fact that a large number of leading contemporary artists actually do send good examples to Washington is heartening evidence of their growing faith in Washington's artistic prestige.

Prices of brand-name paintings are astronomical. Many people who indulge in collecting for fun rather than for financial profit, have turned instead to prints. The IFA Galleries, up Connecticut Avenue from the Shoreham, offer one of the best print selections in the country, and, even for the non-buyer, it is an excellent place to see what is being done across the nation with all the new techniques available to the graphic artist. There are as many ways to make a print nowadays as there are printmakers, and the IFA is the place to see them.

Over on Capitol Hill a new gallery has just opened up in the Dodge House, with the express purpose of catering to the 27,000-odd employees of Congress. Another new one is the Wigder, which features Latin-Americans on its bill of fare. Yet another is the West End Gallery, where the contemporary realists will be shown.

Not all the local opportunities for the art collector are in private hands. Few people realize, for example, that the art shown at the Pan American Union is for sale. Perhaps this is the best source in North America for the collector of Latin American art. A series of changing one-man shows here gives an unparalleled opportunity to see what is being done south of the border. And, there can be no dealer's commission to inflate prices.

The annual Pennell Fund Print exhibition at the Library of Congress is another art event of major importance for collectors, being a competitive nation-wide show. Although the prints are brought to Washington primarily for the benefit of the Library's own collection, a catalogue for the public gives names and addresses of the artists, and price information.

From time to time, out-of-town visitors to the Corcoran Gallery ask at the post card desk which paintings in the collection are for sale. While you can't have Samuel Morse's "Old House of Representatives" or the famous "Beardless Lincoln" by Healy, the Corcoran does undertake to sell works in the frequent one-man contemporary shows. In addition, the Biennial Exhibition of Contemporary American Oil Painting is a fine field for window-shopping.

All in all, Washington has far more contemporary art for both collector and browser than meets the eye. George Washington's dream of founding a world cultural capital on the banks of the Potomac may not yet be a reality, but the notion no longer seems as remote as it once did.
More color, more character—with tile. Of special interest in this new Y.M.C.A. natatorium is the colorful tile mural on the back wall, done in large size glazed tile units. Such decorative treatments add warmth and individuality to pool installations. And by extending the use of tile to walls and other surrounding areas you can reduce maintenance costs through the years. Architect-Engineer: J. E. Sirrine. Write for "Swimming Pool Booklet," No. 801.