aiaVT

The aiaVT newsletter is published by AIA Vermont, the Vermont Chapter of the American Institute of Architects.

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architecture week vermont: a celebration of architecture

This year, the members of the American Institute of Architects (AIA) mark their 150 years of service to the profession and the nation by working with communities to create a better future by design.

AIA members, working through more than 280 AIA State and local components, will collaborate with local government officials, other professionals, and fellow citizens to define and advocate a shared vision for healthier, safer, and more dynamic communities.

Your Vermont Chapter of the American Institute of Architects will be celebrating this milestone with the following events:

•Tuesday, April 3 at 7:00 pm
VPR Switchboard – 'Vermont Architects'

•Friday, April 13
Governor's Proclamation
State Capitol - Montpelier

cont.

aiaVT website: *http://www.aiavt.org/*

Architectural Record/ *in the Cause of Architecture*
FEBRUARY 1930

Mass-Production and the Modern Houses [Part II]

Lewis Mumford

http://archrecord.construction.com/inTheCause/onTheState/0312mumford.asp

IN modern architecture, I pointed out in my first article, the emphasis has shifted from building to manufacture. Since the parts of a building have been industrialized, it has naturally occurred to certain intelligent designers that the whole might eventually be treated in the same manner: hence various schemes for single family unit houses, designed for greater mechanical efficiency. Those who approach the problem of the modern house from this angle suggest that the mass house may eventually be manufactured as cheaply and distributed as widely as the cheap motor car.

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This year, the members of the American Institute of Architects mark the AIA's 150 years of service to the profession and the nation by working with their communities to create a better future by design.

•Saturday, April 14
'Architecture Day'
9 am – 12 am — Open Houses at
Firms and College Architecture Departments throughout the State

1:30 pm & 3:00 pm — Building Tours of significant architectural works in Vermont, both historical and contemporary.

Please visit the AIA Vermont website at www.aiavt.org for a listing of open houses and tours in your area.

Until 1857, anyone who wished to call him-or herself an architect could do so. This included masons, carpenters, bricklayers, and other members of the building trades. No schools of architecture or architectural licensing laws existed to shape the calling.

Thus, a small group of 13 'architects' got together in New York to consider a change to the profession of architecture in the United States. The constitution they wrote focused on the advancement of art, standardization of contract documents, and education and licensure standards and was amended shortly thereafter enlarging the mission of the AIA "to promote the artistic, scientific, and practical profession of its members; to facilitate their intercourse and good fellowship; to elevate the standing of the profession; and to combine the efforts of those engaged in the practice of

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Although this development holds out promise for definite improvements in functional relationship and design, there is some reason to doubt, I pointed out, that costs could be cheapened as radically as the advocates of a purely mechanical improvement have supposed. A good part of the total cost of housing is represented by factors which, like the cost of money or land, are outside the province of factory production, or, like the numberless constituent parts of the house, are already cheapened by mass production. The mass house promises a better mechanical integration. That

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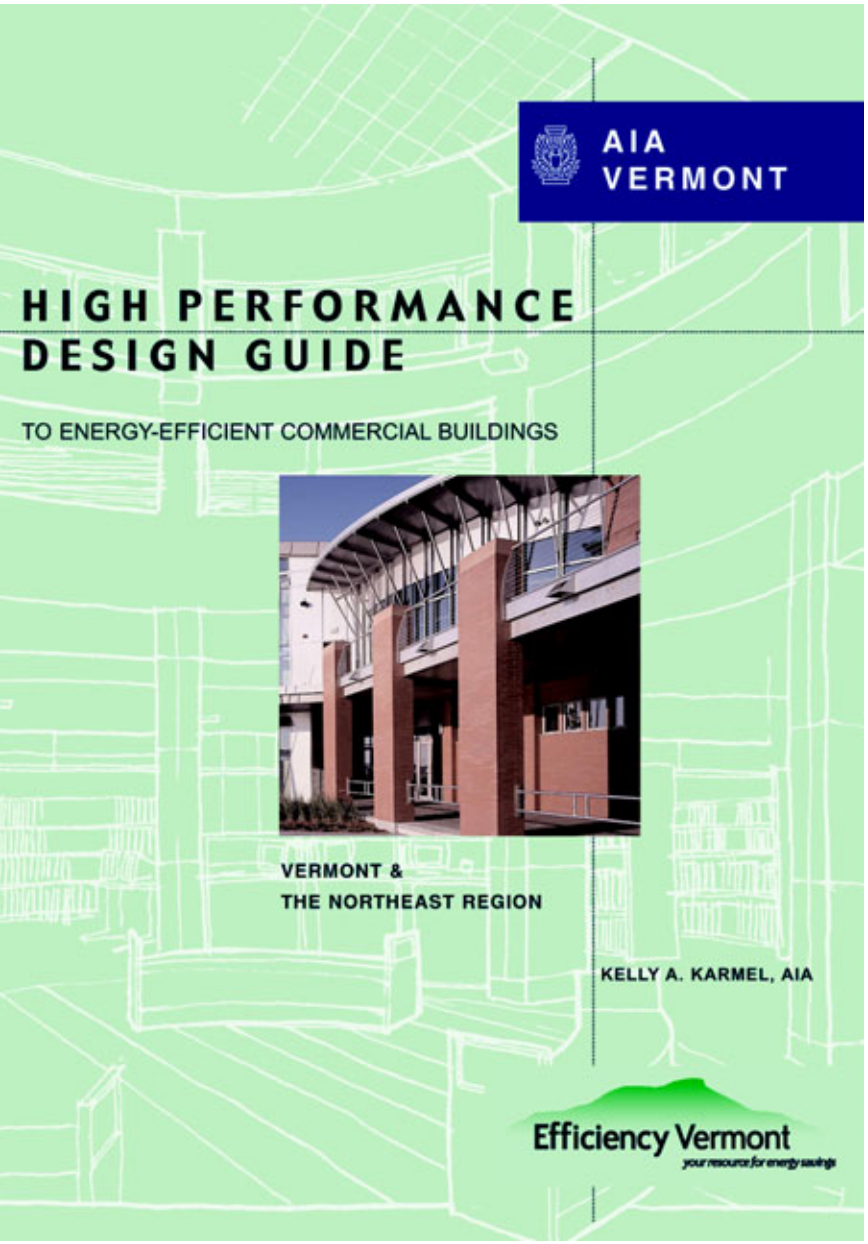

Architecture, for the general advancement of the Art." To this day, the profession remains dedicated to these principles.

In Vermont, a Chapter of the AIA was formally recognized at an organizational meeting at the Middlebury Inn on June 4, 1949. Charter members of the Vermont AIA were Preston Cole of Woodstock, William W. Freeman of Burlington, John C. French of Burlington, Charles Helmar of Woodstock, and Payson Webber of Rutland.

Mrs. Ruth Reynolds Freeman of Burlington was elected the first president of the Vermont Chapter. Other officers included: Vice-president, Kenneth Reid of East Dorset and secretary-treasurer, Payson Webber of Rutland.

Please join the AIA in celebrating. Come see what we do and where we do it, and enjoy an architect-led tour of a local building or two.

cont.

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would constitute an advance; but not an overwhelming one; and the mere ability to purchase such houses easily and plant them anywhere would only add to the communal chaos that now threatens every semi-urban community.**

We have now to see whether there is not a different line of advance which rests upon more thorough comprehension of all the social and economic as well as the technical elements involved. Without abandoning a single tangible gain in technique, there is, I think, a more promising road that, so far from eliminating the architect, will restore him to a position of importance.

II

Taking the individual house as a starting point, it is by now hopeless to attempt to restore it to a central position in domestic architecture. The individuality of such houses is already lost. Except for a bare ten or fifteen per cent of the population, such houses cannot be produced by individual architects,

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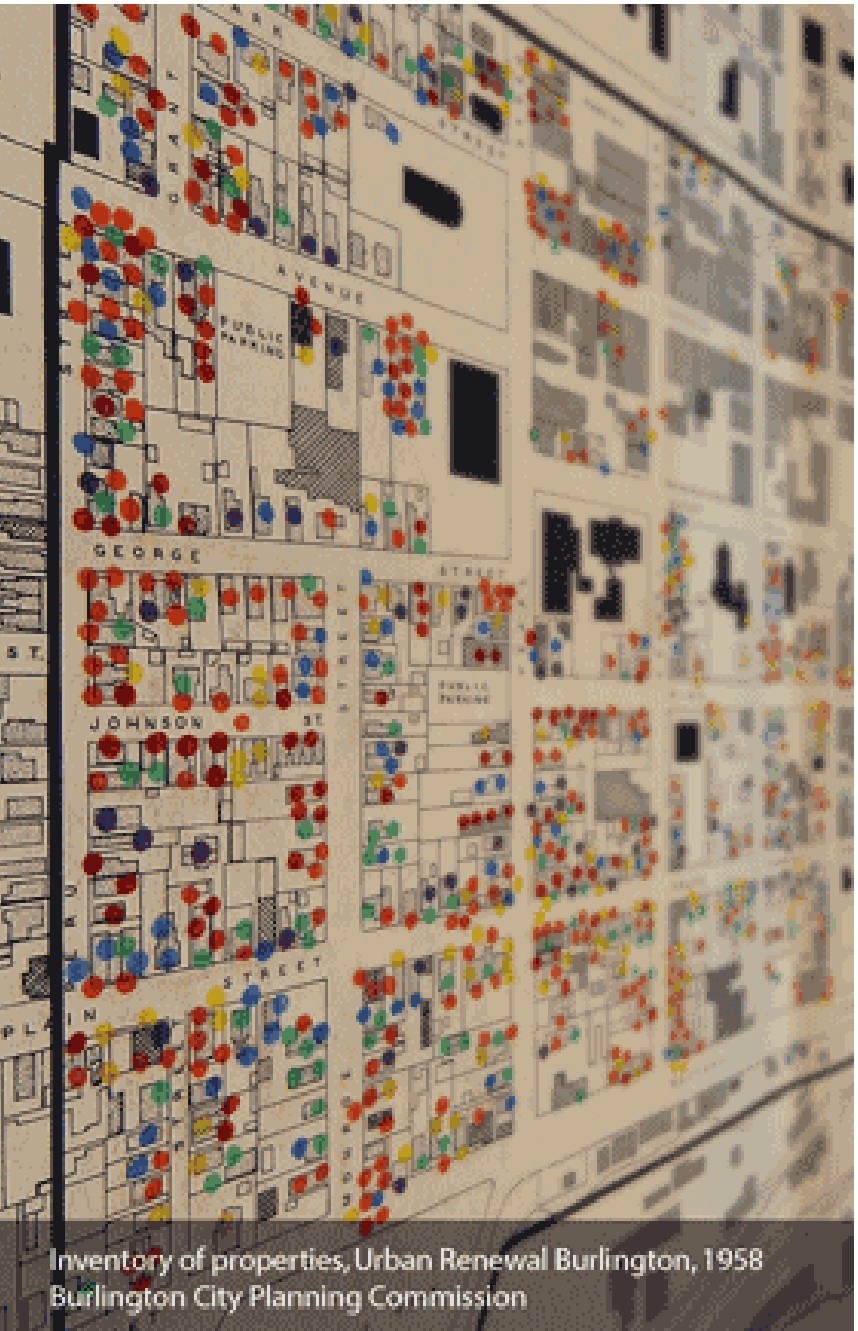

Inventory of properties, Urban Renewal Burlington, 1958
Burlington City Planning Commission

winooski wiped, and burlington blighted, at the Fleming

donald maurice kreis

Although the exhibition "Burlington and Winooski 1920 – 2000" at the Fleming Museum is a bonanza of images, sometimes a few words are worth a thousand pictures.

Of the 80 years covered by this remarkable exercise in urban omphaloskepsis, 1965 was arguably the most significant. It was in that year that a generous swath of downtown Burlington, from Battery Street east to St. Paul, running from Pearl Street to the north to College Street at its southern end, was formally declared a "blighted zone," making it eligible to be wiped clean and redeveloped as part of the federal Urban Renewal program.

And wipe they did. So, too, with an impressive swath of downtown Winooski, across East Canal Street from the Champlain Mill. The exhibition is rife with drawings and photographs of what replaced these working class neighborhoods, what could have replaced them and also what should have. For anyone who has

cont.

attempting to meet the unique wishes of a special client. The words Colonial, Cotswold, Tudor, in suburban architecture are mere attempts to cover by literary allusion the essential standardization that has taken place; and as soon as we approach the price level of the ordinary run of house dwellers, clerks, salesmen, skilled industrial workers, to say nothing of the more unskilled operations and the more poorly paid trades, the game is already lost; the manufactured shingle, the roughly turned colonial ornament, or the plaster "half-timber" show the strain on the purse.

cont.

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Burlington street signage, 20th century.
Courtesy Main Street Landing

so much as heard of Jane Jacobs, or anyone who has ever given directions based on what used to be at various locations as opposed to what stands there now, to say nothing of the likely readers of this newsletter, it is easy to wile away an afternoon taking all of this in.

What makes it all real, however, is the evidence of actual effects on real human beings – as in the growing, working class family whose fate was documented on a bureaucratic form that comprises a relatively unobtrusive part of the exhibit. On a form called a "Site Occupant Relocation Card," created by an outfit called the Burlington Urban Renewal Agency, some bureaucrat had faithfully recorded the occupants of a five-room apartment that had been officially declared blight.

Dad, the breadwinner, was a 36-year-old laborer of Klinklestein's Junk Yard, earning $52 a week and paying $8.50 a week in rent, plus $11 a week for heat and $4.50 a month for gas and electric. There was a 26-year-old mom, four kids and, the city employee noted in 1965, "another coming." In a different handwriting, on the same card, was a notation from 1968 indicating that a sixth child had been born to the family. For purposes of the exhibit, the names of the people themselves have been redacted.

cont.

Admirable as is the layout, the pervading conception, of our first American attempt at a "town for the Motor Age," for example, no candid critic can pretend that the individual one-family houses are particularly triumphant examples of modern architecture; and the reason is that even with large-scale organization and limited dividends, it is impossible to isolate such houses sufficiently and lavish upon them the attention that so graciously humanized the traditional house even as late as 1890. Architecturally, these studiously suburban types fall down badly beside the finer rows and quadrangles of Sunnyside, the work of the same architects; and if anyone

cont.

*cylinders in red box/**john anderson***

We know from the form that the roof of the apartment leaked, that the living unit had a toilet but no bath. But the only indication of the fate of the family itself is a notation that the father "does not want help from city." In effect, the exhibit is saying that these people became nameless and vanished into the maw of slum clearance. This leaves a haunting impression.

It was this process of de-humanization, this lack of regard for real people and their real places, that drove people like MIT professor Robert Goodman to write books like his memorable 1971 volume called After the Planners – the double entendre of the title intended to be both descriptive and imperative. An entire chapter, called "Architecture and Repression," excoriates Bauhaus expatriate Marcel Breuer for designing a 55-story International Style slab for atop Grand Central Terminal, but only to condemn the profession for praising Breuer for having made the best of a bad (i.e., real estate greed-driven) situation. (As Goodman notes, the AIA gave Breuer its gold medal a week after the design was unveiled and Architectural Forum opined that it would be "silly" to "blame" Breuer "for the kind of unrestricted land speculation that makes such buildings inevitable.")

Burlington, the exhibit reveals, suffered its own Bauhaus incursion in the form of the design for what was to replace the blighted neighborhood. The developers who won the right to

cont.

thinks he can do better with the cheap free-standing house, let him try it.

The isolated domestic unit cannot be made sound, beautiful, and efficient except at a prohibitive cost. If we wish to retain the single-family house, we shall have to accept it as a completely manufactured article; and in this event, we must throw overboard every sentimental demand. The advocates of the single-family house have never faced this dilemma: they dream of universalizing the work of Mr. Frank Foster or Mr.

cont.

aiaVT welcomes

james drummond, *aia of burlington*
arthur klugo, *assoc. aia of stowe*

aia**VT** is edited by Andrea Murray, AIA. Published views are the author's and not necessarily the views of AIA Vermont or any other organization.

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AIA Vermont reserves the right to edit articles for available space and determine appropriate content prior to inclusion. Submissions must be received by the 15th of the month prior to publication.

build there commissioned the local firm of Freeman French Freeman to work with the Chicago office of the fabled Ludwig Mies van der Rohe (who died in 1969). The Miesian aesthetic is still visible today, at least somewhat, in the Windham Hotel on Battery Street. And let's just say that the Windham Hotel has not gone down in history as the most successful lake shore development associated with Mies.

Nonetheless, as the exhibit documents, and as the current consensus in the design world seems to confirm, it is a bit too reductionist to dismiss urban renewal outright as the product of megalomaniacs bent on imposing facism through architecture. Yes, Le Corbusier had a vision of bulldozing Paris, but the Radiant City was supposed to replace housing in which 70 people shared one toilet. Yes, Robert Moses was autocratic and racist and he drove that infamous expressway right through the heart of the Bronx. But suddenly there is a laudatory exhibit about him at three New York Museums, and Nicolai Ouroussoff is praising the previously reviled Power Broker as a guy with a "heartfelt populist agenda" who "sought to weave a densely populated metropolis into a broader regional network animated by the freedom of the open road."

In the spirit of that Robert Moses revival, let it be said that there is something beguiling about the original plan for rebuilding the blighted section of Burlington, on display at the Fleming.

Julius Gregory; but the sort of domicile that their ideas actually effectuate for the majority of the population are the dreary rows of West Philadelphia and Astoria.

III

Now, a careful economic analysis shows that there are four possibilities from among which we must choose, if we are to have the renovated domestic architecture we so badly need, namely:

We may reduce the cost of housing from thirty to forty per cent by foregoing all the mechanical utilities we have introduced

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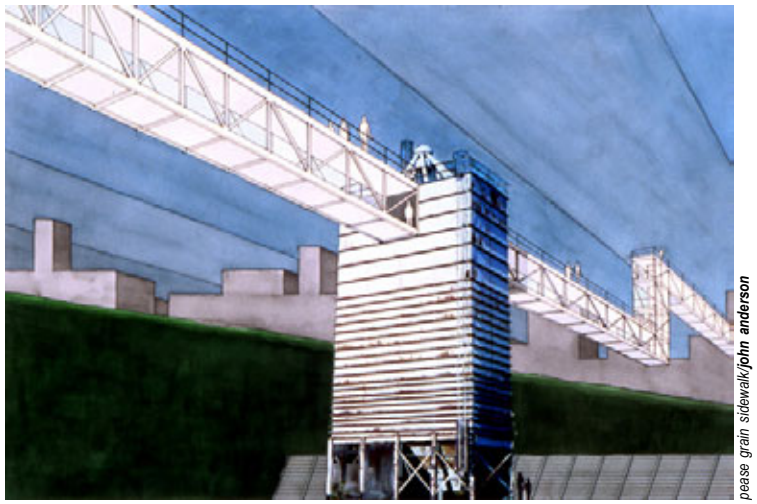
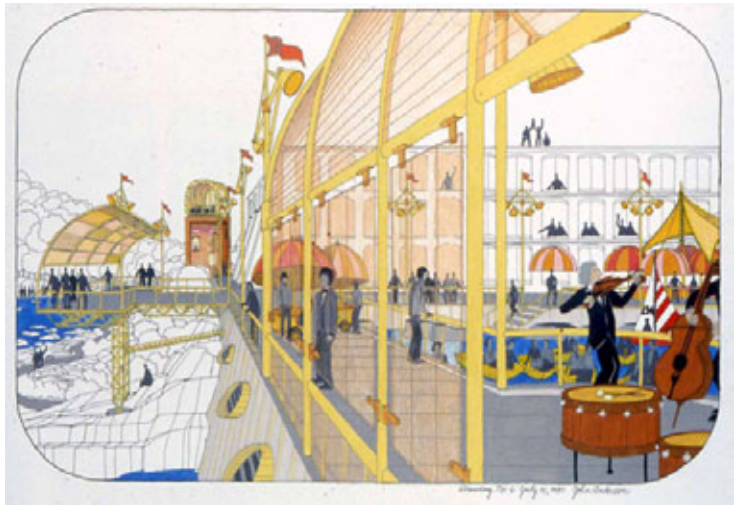


pease grain sidewalk/**john anderson**



winooski dam jam/**john anderson**

Instead of the Miesian muddle that was built, there was a wilder scheme dating from 1964, offered by an outfit called Horizon, Inc. (but with no architect identified). This plan called for a vast plinth containing, (among other things) 2,500 parking spaces, atop which were things like a highrise hotel, on stilts, facing the lake and shaped like a horseshoe crab. Squint a bit and one could almost see this kind of thing proposed today by Machado and Silvetti, Scogin and Elam, Thom Mayne or . . . John Anderson?

Which brings us to the subtitle of the exhibition – or, at least, what should be the subtitle: The Fantasy Life of Architect/Artist Anderson. Alongside the actual evolution of Burlington and Winooski, and the actual projects realized by Anderson, there is a steady stream of unbuilt Anderson ideas, gloriously rendered by him and added to the exhibition as a kind of alternate universe. In that universe, a rebuilt dam across the Winooski River becomes a vibrant outdoor hangout where a jazz combo manages to perform over the roar of the hydro facility. An aerial tramway conveys folks down both sides of Main Street in Burlington. A slide, on the gargantuan scale of Moscow's unbuilt Palace of the Soviets, whimsically whisks besotted undergrads from the UVM campus straight into Lake Champlain. At a similar scale, Winooski thrives beneath a geodesic dome.

cont.

during the last hundred years. This would enable us to spend enough upon the structure and the materials to produce a fairly good looking traditional house. As a practical feat, this could be accomplished only in the country; and nobody would regard it as a serious remedy for the housing problem: so we may dismiss it.

Or, second: we may raise the wages of the entire industrial population to such an extent that they will be able to make a demand for houses of the same grade that the upper middle classes now create. This is not entirely outside the bounds of

cont.

*winooski dome/**john anderson***

As anyone who attends public gatherings within 100 miles of Burlington on the subject of architecture is aware, Anderson to this day remains evangelical about the notion that great design starts with unfettered fantasy, and should only then bother with practicalities like money and the force discovered by Isaac Newton. It is intoxicating to see what he really means.

Thus, a trip to the Fleming to see this exhibition is an encounter with four versions of Winooski and Burlington: what was, what is, what should be and what fortunately never happened, such as the waterfront superhighway that would have severed Burlington from its waterfront just as the Central Artery did in Boston. And, of course, there is the fifth reality – the real lives of the people who were, largely without influence, affected by these evolving notions of how to build urban places in Vermont. In honor of those people, see this exhibit before it closes in June.

cont.

possibility; but it would necessitate an economic revolution, not alone in the distribution of incomes, but in a maintenance of the entire industrial plant up to the pitch of wartime productivity. Since we cannot create decent single houses for the relatively comfortable middle class today, it is doubtful if this could be accomplished even under an energetic and efficient communism. In order to make good housing practicable, the wages of the lower income groups will indeed have to be raised, either directly or under the disguise of a subsidy; but no rise will bring back the one-family house in an urban area that possesses a complete municipal and civic equipment, including waterworks and sewers and schools.

Or, third: we can preserve the individual isolated unit at the price of accepting all the limitations that now accompany it: lack of open spaces, scantiness of materials, lack of privacy, rapid deterioration of equipment, and lack of esthetic interest. Some of these evils would be mitigated or removed completely in the ideal manufactured house; but others, as I showed in my first article, would remain under our current system of commercial production.

cont.

high performance resources: guides available from Efficiency Vermont

In response to ongoing interest in the design community, AIA Vermont and Efficiency Vermont have announced the continued availability of four publications for professionals and their clients engaged in the design and construction of high-performance buildings in the northeast. Efficiency Vermont provides these publications, free of charge, as part of its work to help improve the efficiency of new and existing buildings through technical assistance and financial incentives.

The High Performance Design Guide leads professionals through the process of designing energy-efficient commercial structures that cost less to operate, have a higher property value and have a lower impact on the natural environment. Written by Kelly A. Karmel, AIA, of Design Balance, the guide is organized by design phases to make it easy to integrate performance goals into the design process

cont.

Or, finally, we may seek to establish an integral architecture. This means that instead of beginning with one aspect of the architectural problem, we will begin with the community first, and treat the problems of economics, community planning, technics, and architecture as one, seeking a solution not in terms of the individual "cell" but in terms of the larger unit. This last scheme would derive the character of the house or apartment from the particular social whole of which it is a part; and the solution would not be a fixed quantity, but a variable, adapted to soil, climate, landscape, industrial conditions, racial groupings, and the whole remaining complex that makes up a

cont.

bank of america will offer incentives for green building

As part of a company-wide initiative to promote an "environmentally sustainable economy," Bank of America has announced it will offer mortgage incentives to home buyers who choose to buy "green" homes.

Bank of America will offer the "Green Mortgage Program," with incentives including a choice of a reduced interest rate or $1,000 back for homes meeting Federal Energy Star specifications.

The financial institution, the largest U.S. retail bank, revealed today that it will spend about $18 billion over the next decade on commercial lending and investment banking for "green" projects. The Charlotte, N.C.-based bank also said it will spend another $2 billion for consumer programs. "Over the last decade, Bank of America has implemented programs that have significantly reduced the environmental impact of our own operations," said Kenneth Lewis, Bank of America chairman and CEO. "Today, we have a tremendous opportunity to support our customer's efforts to build an environmentally sustainable economy."

A companion guide by the same author, Benefits of High Performance; Building Owner's Guide, is designed to help you inform your clients about what they can gain from a high performance design. This publication provides information about costs and benefits, payback, financing options, myths, and strategies as well as resources helpful to owners planning a new high performance building.

Commissioning for Better Buildings in Vermont provides designers, construction project managers and building owners with an introduction to building commissioning. The commissioning quality assurance process verifies that complex, integrated building systems and equipment are installed and perform to meet project requirements. The process is designed to identify costly deficiencies in increasingly sophisticated building systems.

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human community. Instead of crabbing our solution by asking before anything else how shall the single family house be preserved, we ask the broader question: how shall the fundamental requisites of domestic life be embodied in a modern community program-and that is a radically different matter!

The last course is the only one that really sweeps the board clear of preconceptions and inherited prejudices and faces the problem of the house as it comes before us in the Western World in the year 1930. Unfortunately, there is a considerable vested interest opposed to it: not merely the interest of the small builder, used to doing things in a small way, or the individual home-buyer who has been vainly dreaming of the twenty-thousand dollar house he will some day buy for a thousand dollars down and the balance in installments, but against it are such organized bodies as the "own-your-own-home" movement, to say nothing of a good many sincere and honest people who have concerned themselves with the evils of congested housing. We have "all these groups, to say nothing of the standard Fourth-of-July orator, to thank for the

cont.

2005 Vermont Guidelines for Energy Efficient Commercial Construction serves as Vermont's statewide commercial building energy code, which went into effect at the start of 2007. This document provides minimum energy use and application criteria specific to Vermont's climate.

For complimentary copies of these publications, or to learn more about Efficiency Vermont's technical assistance and financial incentives for new and existing energy-efficient buildings, call 1-888-921-5990, toll-free. Additional information is available at efficiencyvermont.com.

cont.

notion that the free-standing individual house must be preserved at any cost, as if "home" and America were inconceivable without it.

Most of the arguments that support this sentiment are specious and fundamentally unsound; but they still carry an air of respectability. The individual free-standing house was as much a product of the Romantic movement as Byronic collars: it was the formal counterpart of the completely free and isolated "individual," and to look upon it as an immemorial expression of the "home" is to betray a pretty complete ignorance of human history—an ignorance that one can condone only because an adequate history of the dwelling house in all its transformations has still to be written. Spurred on by this romantic conception of the home, its partisans blindly cling to the poor mangled remnant of a free-standing house that remains in the outskirts of our great cities, rather than the fact that these dwellings are, in fact, sardonic betrayals of all the virtues they profess to admire, and possess scarcely a single tangible advantage. Under the cloak of individuality, personality, free expression, the partisans of the free-standing house have accepted the utmost refinements of monotony and unintelligent standardization. Unfortunately, intelligent planning and design on a community

cont.

scale cannot proceed until this prejudice is knocked into a cocked hat. It is not until the architect has the courage to reject the detached house as an abstract ideal that he will have the opportunity to embody in his designs some of the advantages and beauties that are supposed to go with such a house. That is the paradox of modern architecture: we can achieve individuality only on a communal scale; and when we attempt to achieve individuality in isolated units, the result is a hideous monotony, uneconomic in practice and depressing in effect. We have sometimes succeeded in our synthetic buildings, the hospital, the office building, the apartment house and the domestic quadrangle: we fail, we will continue to fail, in the isolated house. In my first article I pointed out the economic and mechanical reasons for this failure; and I have now to suggest in concrete terms a more favorable program of work.

IV

The aim of an integral architecture, like the aim of the purely mechanical and constructivist architects, is to effect an economy which will raise and spread the standards of the modern house. Where is this economy to be effected, and how is it to be embodied in design? It is here that the difference in approach between the two methods comes out. Are we to attempt to incorporate in the individual house all the improvements made possible by a communal technology, duplicating every item as we now duplicate radio sets and vacuum cleaners, or shall the individual cell be simplified and the costs of all our new mechanical devices distributed through the whole group of cells, careful community planning being used to reduce the cost of equipment?

A concrete example will perhaps make the difference in approach a little clearer. Take a matter like the supply of fresh air. Apart from any human pleasure that may, come from the gesture of throwing wide the window and taking in a breath of purer or cooler air, there is no doubt that the problem of pure air can be mechanically solved by means of an artificial ventilating system, which will clean, humidify, and warm at the same time. In certain places and under certain circumstances this system is highly desirable; but, however practicable it is, no one can doubt that its extension to the dwelling house would only add one further element of expense to that vexatious column of expenses which has been lengthening so rapidly during the last thirty years. Instead of working in this direction, an integral architecture, for the sake of economy, would endeavor to secure through site planning and site development, through orientation to sunlight and wind, a result that can otherwise be obtained only through an expensive mechanical contrivance. In a word: the mechanical system accepts all the factors in house production as fixed, except the mechanical ones: an integral architecture looks upon all the elements as variables and demands a measure of control over all of them.

This demand may seem to pass beyond the limits of pure architecture, and the architect may be reluctant to make it. No matter: he will be driven to it for the reason that the house itself has passed beyond the limits of mere building. The modern house functions as a house only in relation to a whole host of communal services and activities. The rate of interest, the wage-scale, the availability of water and electricity, the topography and the character of the soil, and the community plan itself, all have as great a control over the design as the type of building material or the method of construction. It is fantastic to think that adequate design is possible if all these other elements are determined by forces outside the governance of either the architect or the community. There are, accordingly, two critical places which the architect must capture and make his own if he is to solve the social and esthetic problem of the modern house: one of them is the manufacturing plant, and the other is the community itself. With the part that the architect has still to play in industrial design, I can not deal here; but something must be said further of the relation of modern architecture to the work of the community planner.

V

The unit, bear in mind, is no longer the individual house, but a whole neighborhood or community; and the place where collective economies are sought is not merely in factory production, but at every point in the layout or development. In Europe, where a serious attempt has been made, particularly during the last ten years, to cope with the housing of the industrial worker, such schemes are usually fostered by an existing municipality, as in Amsterdam and London, since there are no constitutional limitations upon the housing activities of cities in most European states: in America, apart from dubiously paternal attempts at better housing, undertaken by mill towns, the integration of architecture and community planning has been the work of the limited dividend corporation, such as the Russell Sage Foundation of the new City Housing Company, or the more farsighted real estate developers, such as the founders of Roland Park in Baltimore.

The right political and economic form for modern community building is perhaps one of the most important social questions that architecture must face; all the more because there is no likelihood that private capital will enter the field whilst fabulous profits can be wrung out of less vital business enterprises. The instigation of such enterprises is not the private job of the architect; but it is a public matter where, the weight of professional opinion may legitimately be thrown on the side of the public interest. Plainly, the architect cannot solve by any magical incantations the problem of supplying new houses to families whose income is not sufficient to cover the annual charges. There is no answer to that question except, as I said earlier, in the form of higher wages or state subsidy: although a wilful blindness to this fact is almost enough to establish a person as a housing authority in the United States. An integral type of architecture, seeking economies at every point in the process, is possible only when the necessary corporate, housing organization has been erected.

Economy begins with the selection of the site itself, since the modern city, with its underground articulation, cannot be cheaply produced on a rocky or extremely irregular terrain. The next step is in the design of the street and road system. Here the differentiation of domestic neighborhoods from commercial or factory areas, and their permanent protections through easements, restrictions, and zoning of the land, not alone keeps the land-values low—since there is no speculative temptation through possible changes of use—but reduces the cost of paving and utilities connections. Mr. Raymond Unwin made a great advance in community planning over twenty years ago, when he proved that there is “Nothing Gained by Overcrowding” since the burden of multiple streets beyond a definite point more than counterbalances the apparent economy of more numerous lots; and Mr. Henry Wright has more than once demonstrated that there is enough wasted street space in the average American neighborhood to provide it with an adequate park—a demonstration which has now been effectively embodied in the plan of Radburn. The grouping of houses in rows and quadrangles, instead of their studied isolation, is a further factor in economy, not merely by making the party wall take the place of two exterior ones, but by reducing the length of all street utilities, including the paving of the street itself; and the result is a much bolder and more effective architectural unit than the individual house.

With control over these exterior developments, the problem of the interior economies is reduced and simplified; indeed, the two elements are co-ordinate in design, and if architects produced their work on the site instead of in the office, and did not habitually conceal the site costs from their clients—as ‘’additional charges”—they would long ago have perceived this. Emerson said that one should save on the low levels and spend on the high ones; and one cannot improve upon this advice, either in living or in the design of houses. It is a mistake in esthetic theory to assume that the demands of vision

and economy, of esthetic pleasure and bodily comfort, always coincide; and an important task of integral architecture is to balance one against the other. Where the means are limited, the architect must exercise a human choice between, say, an extra toilet and a second story balcony, between a tiled bathroom and a more attractive entrance.

This choice cannot be made on any summary abstract principle; it is determined by a multitude of local individual factors: the presence of mosquitoes or the absence of large open spaces may, for example, decide the fate of the balcony. If the architect be limited in such local choices, he may have to spend riotously on mechanical equipment; if he have a free hand in community planning, he may let nature take the place of an extra heating unit, an awning, or what not. Again: if a family is forced to look out upon a blank wall, as so many rich people must do on Park Avenue or Fifth, expensive mouldings, draperies, fineries may be necessary to relieve the depression of the outlook: if on the other hand, sunlight and garden-vistas are available, a wide window may take the, place of much footling architectural "charm."

In sum, mass production which utilizes all the resources of community planning is capable of far greater and more numerous economies than mass production, which only extends a little farther our current factory technique. Such a program for the modern house holds out no spurious promises of a quick, ready-made solution for the difficulties that have been heaping up in every industrial community for the last hundred and fifty years. On the contrary it isolates the problems of housing which are immediately soluble, from those that can be solved only through a drastic reorientation of our economic institutions; and it paves the way for necessary changes and adaptations in these institutions. If we are to modernize the dwelling house and create adequate quarters for our badly housed population—a far more important remedy for industrial depression than merely building roads—the architect must bring together all the specialized approaches to this problem, instead of merely trying to catch up with the latest specialty. The correct attack was initiated during the war in the governmental war housing program; it has been carried further during the last ten years, by, architects and community planners such as Messrs. Stein, Wright, Ackerman, Kilham, Greeley, and Nolen; and although the designs of these men have so far kept close to traditional forms, their approach gives promise of a vital architecture which will in time surpass the work of the present pioneers as their own work surpasses that of the jerrybuilder.

**Part I appeared the previous month.*
***Mr. Buckminster Fuller already perceives this danger. "The Dymaxion Houses," he writes me, "cannot be thrown upon the world without a most adequate 'town plan,' really a universal community plan."*