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Keeping the Profession Open—Donald Canty
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Greater Recognition Of Design Asked in Solar Energy Plan

John P. Eberhard, AIA, president of the AIA Research Corporation, has called for more recognition of "the balance between sensible design decisions and the need for solar activated mechanical systems" in the "national plan for solar heating and cooling" being fashioned by the federal Energy Research and Development Administration.

In testimony before a House subcommittee, Eberhard said a version of the EDRA plan published in March "has a tendency to accept as a fact of life that buildings provide for human comfort with mechanical systems, and to suggest that we find ways to substitute solar collectors on the roof for boilers in the basement."

Yet, "buildings were built for thousands of years before there were any mechanical systems available," he said. And architects found "sensible things to do in order to utilize the heat of the sun in cold periods and reduce the impact of the sun's heat in hot periods."

Such "sensible design decisions should be made first," he said, "and then supplemented with solar energy activated mechanical systems."

Eberhard also urged that the EDRA plan address esthetic concerns, drawing an analogy to automobile design. "The early automobiles," he said, "were literally horseless carriages—that is, they looked like carriages that no longer were pulled by horses but propelled by an engine hidden inside. It took a lot of early design experiments and engineering changes before a vehicle began to emerge that was clearly an automobile."

Similarly, solar assisted houses that look like traditional houses "will be the Model-T Fords" of solar energy, he said. But he predicted that "new designs that are clearly the result of solar energy thinking will eventually emerge."

Architects, he concluded, "are interested in finding as many ways as possible to use sunlight, sunshine and solar energy to add to the quality of our lives."

Reynolds Award Goes To Austrian Radio-Television Center

"Form was the result and not the starting point," says Vienna architect Gustav Peichl about his design of the Austrian Broadcasting Corp.'s ORF radio and TV center in Salzburg which has won the 1975 R.S. Reynolds memorial award. The awards program, administered by AIA, recognizes distinguished architecture using aluminum.

The jury praised the design for the manner in which it solved technical problems of radio-TV broadcasting, for its appropriate use of aluminum and for the structure's "fit" to its site, helped by the "excellence of the landscaping."

The jury said that the building is "real a machine... To redeem the machine-like quality, the central rotunda is a design focus and the commons for employees and visitors. Radiating from this rotunda are wedged-shaped studios and a two-story block of offices. The design concept combines function, engineering, space, materials, color and light. Nothing is concealed.

Peichl, who received the award at the AIA convention in May, is a professor in the school of architecture at Vienna's Academy of Fine Arts.

The jury consisted of Archibald C. Rogers, FAIA, past president of the Institute; James Ingo Freed, AIA, winner of the 1974 award, and Bernhard Winkl of Munich, winner of the 1974 Reynolds award for community architecture.

State Court Outlaws Exclusionary Zoning

The New Jersey Supreme Court has outlawed exclusionary zoning in that state in a landmark decision which could have profound implications for municipalities across the country. The decision emanated from a challenge to the zoning laws of Mount Laurel, a town of 12,000 people about 20 miles from Camden. The town...
Jing On from page 8

ip’s zoning ordinance had permitted industrial and commercial uses but reserved the bulk of its land (almost 70 percent) for residential use, allowing only single-family detached dwellings, one per lot. This practice was contested by two branches of the National Association for the Advancement of Colored People, an organization for Racial Equality chapter and several individuals who were black and Asian-American.

Although the specific case dealt with Mount Laurel, the court noted that the issue was not confined to that community. Since zoning powers are granted to municipalities by the state constitution, the use of those powers “contrary to the general welfare” is invalid. And, said the court, is plain beyond dispute that proper provision for adequate housing of all categories of people is certainly an absolute potential in promotion of the general welfare required in all local land use regulation.

The court ruled that Mount Laurel must “make realistically possible the opportunity for an appropriate variety and choice of housing” for anyone desiring to live there “of course including those of low and moderate income.” Municipalities, the court said, must bear their “fair share” in providing for a region’s housing needs.

“Proper planning and governmental cooperation can prevent over-intensive and too sudden development, insure against future suburban sprawl and slums and assure the preservation of open space and local beauty,” the court said.

The decision so far has influenced a series of new land use laws proposed in both the New Jersey and New York legislatures. Perhaps the most dramatic of these is a proposal by New Jersey Governor Brendan T. Byrne for a law giving the state the right to impose housing quotas for all 547 of the state’s cities and towns.

A reprint of the full decision is available for $1.50 from the Potomac Institute, 1501 18th St. N.W., Washington, D.C. 20036.

ASCE Acts on Role of Women in Engineering

Women, who comprise over half the nation’s population, have been discouraged from participating fully in the country’s normal process of economic and intellectual development, largely due to “stereotyping of roles based on sex rather than intellectual capacity,” according to a policy statement recently approved by the American Society of Civil Engineers’ board of directors. The statement, whose intent is to change this situation and its consequent “waste of human resources,” declares that ASCE will encourage women to enter the civil engineering profession.

In the furtherance of its policy, ASCE will stress professional and paraprofessional job training, counseling and education for women. ASCE will “support legal and moral requirements that discrimination in employment not be permitted” and will invite women engineers “to join ASCE and to participate as ASCE members and especially in policymaking positions in solving problems of exclusion as well as the general problems of the nation.”

An Architect’s Map Of Washington, D.C.

“A map can serve not only as a general guide to a city, but as a demonstration of its architecture and planning, as a graphic means of communication and instruction,” says architect John Wiebenson, explaining why the creation of maps for the bicentennial celebrations can be useful projects for architects.

Washington, D.C., like many other U.S. cities, had no adequate map of its bus routes, nor one that describes as well as directs visitors to the city’s various offerings. Sanctioned by the D.C. bicentennial commission and financed by the Washingtonian magazine, Wiebenson created a map to serve both functions.

continued on page 16

“‘Weathering’ for sale . . .

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One side, there is a 13 x 16-inch diagram of downtown, showing major points of interest; a small map of the subway system; a directory to key places, and finally a large and detailed map of the city, with bus routes. A street directory is included. The reverse side shows six different geographic areas of interest, with carefully plotted walking tours, as well as a larger map of the region. Scattered here and there are bits of information about the general area (facts about its population, historical items) and specific landmarks.

Church Designs Win At Interfaith Conference

"The simplest, most modest church submitted. The plan is clear and beautifully proportioned." So said the jury about the honor award winner selected from 35 projects submitted in the architectural exhibit at the 1975 National Interfaith Conference on Religion and Architecture held in April in San Antonio, Tex. This highest award went to the Sacred Heart Church in Morrow County, Ohio, which was designed by Richard Fleishman & Associates of Cleveland Heights, Ohio. The firm also received one of the seven merit awards for the Church of Our Lady of Perpetual Help.

The other merit award winners:
- St. Stephen Lutheran Church: Bergstedt, Wahlberg, Bergquist, Rohkohl, St. Paul, Minn.
- B'Nai Israel Synagogue complex: Cohen & Haft, Kerstan, Karabekir & Associates, Silver Spring, Md.
- St. Timothy Church: Lawrence B. Cook & David R. Gallagher, Falls Church, Va.
- University Lutheran Church: Ford, Powell & Carson, San Antonio, Tex.
- Peace Lutheran Church: Hill-Armour, Memphis.
- University Presbyterian Church: Pierce-Lacey Partnership, Dallas.

Special citations were given to Haywood, Jordan, McCowan, San Antonio, Tex., for the Second Baptist Arms apartment complex, and to CTA Architects, Houston, for Camp Allen, an Episcopal camp and conference center. The jury also "recognized two projects for their potential in the belief that, after construction, future jurors will recognize their imaginative ideas. They were Frederick J. Bentz/Milo Thompson Associates, Minneapolis, for the Prince of Peace Lutheran Church, and John H. Burris, AIA, Philadelphia, for the Torah Academy of Greater Philadelphia.

The jury, chaired by Robert L. Durham, FAIA, Seattle, also included Robert R. Inslee, AIA, Los Angeles; Howard R. Meyer, FAIA, Dallas, and Downing A. Thomas, AIA, Dallas.

Preservation Conference On Economic Benefits

Regardless of the economic climate, bankers, realtors, developers and others are increasingly coming to the realization that adaptive use of architecturally sound old buildings is a profitable enterprise, both economically and environmentally. In order to encourage greater participation in historic preservation by municipalities, the real estate industry, financial institutions and investors, the National Trust for Historic Preservation and the city of Seattle will conduct the first national conference on the economic benefits of preservation on July 31 through August 2 at the Olympic Hotel in Seattle.

Scheduled speakers are not preservationists, for the most part; they represent the real estate industry, banking and finance and government. Endorsing sponsors of the conference include AIA, American Institute of Planners, National Association of Home Builders, National Association of Housing and Redevelopment Officials and Urban Land Institute.

Among the scheduled speakers are Wes Uhlmant, mayor of Seattle; Bruce K. Chapman, Washington's secretary of state; Richard Crisman, director of project mortgages, Ralph C. Surto Co.; Bruce Rockwell, president of the Colorado National Bank; Wallace A. Wright Jr., managing partner of Trolley Square Associates, and Leopold Adler III, president of Historic Savannah.

Additional information may be obtained from Michael S. Leventhal, NTHP, 740-748 Jackson Place N.W., Washington, D.C. 20006, (202) 638-5200, ext. 203.

Seattle City Conservator

Seattle's City Council recently authorized the organization of an office of urban conservation in the city's department of community development. Arthur M. Skolnik, architect and urban planner, was named city conservator and will head the new office. The title is used widely in European cities, but Skolnik is believed to be the first city conservator in this country.

Skolnik and his five-person staff will administer and coordinate a variety of programs, including historic preservation and the adaptation of old sites and buildings.

AIA Testimony Supports Metric Conversion Act

The Metric Conversion Act of 1975 (HR 254) now before Congress states that it shall be the policy of the U.S. to change to the metric system of weights and measures in a "carefully coordinated manner in order to reduce the cost of such changeover" and that this changeover shall be "through the voluntary participation of the members of every affected sector and group in the nation."

The bill also establishes a National Metric Conversion Board which would coordinate the voluntary conversion to the metric system over a period of 10 years. This board would be composed of 21 persons appointed by the President who would be representative of "industry, labor, business and commerce, the consumer, education, state and local government, science and engineering and other affected groups." Among the board's responsibilities would be to carry out a "broad program of encouragement, coordination and public education" with the purpose of implementing the change to the metric system.

In testimony given before the House committee on science and technology, Subcommittee on Science, Research and Technology, Thomas Clark Tufts, AIA, chairman of the Institute's office practice committee, and Anna Halpin, AIA, who chairs the AIA task force on metric conversion, support was given by the Institute to the Metric Conversion Act. Tufts said that the proposed legislation "fulfills most of the requirements AIA recognizes as being necessary for a planned, orderly implementation of the inevitable and desirable conversion to a metric system of weights and measures."

Tufts said that AIA, however, is opposed to the concept of evolutionary metrification. Without some program of coordination, there would be difficulties that could reach "disastrous proportions," he said. "If parts of the construction industry were to begin to convert only as their particular needs required and completely without coordination, the architect's job would become virtually impossible." Tufts pointed that it is the architect who coordinates activities within the construction industry and interrelates manufactured building materials and components, translating the whole into a buildable structure through construction documents. Without coordination, there would be steeply rising construction costs, he said.

Tufts said that architects could convert to metrication in far less time than the proposed period of 10 years, but that conversion could not begin "until the conversion of product sizes (or at least catalog sizes) and the revision of design tables and their acceptance by the various code groups was well under way." He said that the "mere conversion of product sizes from existing dimensions to corresponding metric measurements will offer few, if any, benefits to architects and the construction industry. We believe that a 'hard' conversion, in which sizes of construction products are changed to rationalized sizes, would provide significant advantages."

Anna Halpin testified that a change to
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metric units of measurement could implement a system of dimensional coordination. She pointed out the benefits of dimensional coordination to architects, engineers, contractors, manufacturers and owners. And, in spite of temporary difficulties resulting from a changeover to the metric system, she said that AIA believes that the “conversion should take place in a planned, 10-year period. Since the design process includes the coordination of materials, we feel that related materials and methods must be changed as simultaneously as possible and not just as materials and methods become obsolete. Thus the conversion will be more orderly, take less time, reduce the necessity of dual stockpiling and dual dimensioning, and allow the easier integration of dimensional coordination standards.”

**Symposium on Response To Tall Buildings**

A symposium on “Human Response to Tall Buildings” will be held July 17-19 at the Sears Building in Chicago. It is being sponsored by AIA and the Joint Committee on Tall Buildings, and is open to architects, planners, managers, engineers, environmental designers and researchers in the social sciences.

Sessions on Friday, July 18, will deal with the tall building as part of a neighborhood and with the social and psychological effects of highrise living on people of different ages and income groups. One Saturday session will examine the behavior of highrise dwellers in fires and other emergencies, another will attempt to identify the most critical research need in the area of human response to tall buildings.

With the exception of the last session, which will be conducted in small working groups, the meetings will be comprised of discussions of papers by leading figures in design and research from both public and private sectors, together with question periods.

For further information, contact Don Conway, AIA, director of research programs (202) 785-7351, or Evagene H. Bond, public relations projects director (202) 785-7267, at AIA headquarters.

**Deadbolt Lock Called Serious Fire Hazard**

The National Fire Protection Association has issued a warning that an antiburglar device can be a serious fire hazard. The device, which contributed to four recent deaths in an Avon, Mich., fire, is a deadbolt type of lock that requires a key to be used from the inside, thus preventing rape escape.

Such locks are designed to prevent burglars from smashing panes of glass in front doors, enabling the thieves to reach through and unlock doors. Too often, however, in an emergency the homeowner cannot find the key or use it quickly enough to escape from a burning house.

NFPA urges that this kind of lock be replaced with one that can be opened from the inside without a key. Persons who keep the key in the lock as a safety precaution are warned by NFPA that in case of fire whoever uses the key should remain as close to the floor as possible to avoid toxic fumes.

**Europe Celebrates Its Architectural Heritage**

Twenty-three countries are participating in European Architectural Heritage Year 1975, the purpose of which is “to awake the interest and pride of the European peoples in their common architectural heritage; to draw attention to the dangers which threaten that heritage, and to secure the action needed for its conservation.” This first continentwide effort to preserve the past is sponsored by the Council of Europe, with organizational work undertaken by an international committee. Books, films, TV shows and awards and competitions programs have been prepared to capture the interest of the public in Heritage '75.

The international committee, whose chief is former British cabinet member Lord Duncan-Sandys, places the responsibility for funding on national and local groups and individuals. Lord Duncan-Sandys continued on page.
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Keeping the Profession Open

The AIA board has placed itself in opposition to a proposed requirement that, with few exceptions, applicants for NCARB certification have degrees from accredited architectural schools. The requirement has been proposed by the NCARB board and will be acted upon by the organization at its annual meeting in New York later this month.

The AIA board's resolution, adopted at its preconvention meeting in Atlanta, affirmed "accredited college education as the best means of attaining the knowledge and developing the thinking processes necessary for competency at entry to the architectural profession." But it went on to say that standards for entry "should serve to keep the profession and universal architectural practice open to persons of diverse educational background, including those without accredited architectural degrees."

The proposed degree requirement is not absolute. For one thing, it applies only to NCARB certification and not to state board registration. But experience strongly indicates that such requirements, once passed by NCARB, are adopted by many state boards.

In fact, one of the arguments advanced for the requirement is that NCARB's standards should be at least as high as any state board's. In effect, of course, such logic would give any individual state board the leverage to escalate national standards.

Proponents of the requirement offer assurances that there would remain some loopholes, but at this point they are rather vaguely defined. One suggestion contained in the proposal is that certification be granted applicants without degrees who are recommended by state boards as having "extraordinary qualifications." The question, of course, is whether "extraordinary" would be defined in terms of a Frank Lloyd Wright or lesser mortals. Also, the degree requirement could be waived after examination of an applicant by NCARB's board of examiners, a national body.

A final qualification of the proposed requirement is that it would not be applied until 1980, allowing time for such matters as the size of the loophole to be worked out. But if the requirement is a dubious idea now in terms of maintaining an open profession, it will be then as well. D. C.

"Energy is the go of things," the 19th century British scientist James Clark Maxwell once said. He was not referring, of course, to solar energy, for only in recent decades has there been concerted effort to develop and apply scientific principles to capture the "go" of the sun's power. In this age when the mandate is to conserve our nonrenewable energy sources, however, solar energy is at long last recognized as having tremendous potential for the benefit of mankind.

Ways to harness the sun's power and to relate such processes to building design are being studied under the Solar Heating and Cooling Act of 1974, which requires that certain government agencies investigate the viability of solar energy for the heating and cooling of buildings.

The AIA Research Corporation is now concluding a major project, the purposes of which are to develop housing design concepts that incorporate solar energy principles and to provide a critical review of the performance criteria of solar heating and cooling systems. The project was funded by the National Bureau of Standards' office of housing technology and the Department of Housing and Urban Development's community design research program.

As reported by Clint Page in his article entitled "New Concepts for Residential Use of Solar Energy" in the March AIA JOURNAL, AIA/RC subcontracted with eight architectural firms and two schools of architecture for an investigation of the use of solar energy systems in single-family, multifamily and mobile homes. Four of the research reports were summarized in Page's article; others are outlined on the following pages. Most of the reports (prices vary) may now be obtained from AIA/RC.

A book that incorporates the AIA/RC research findings will be published this summer. Its tentative title is Dwelling Design and Site Planning for Solar Energy Utilization.

In the manuscript, AIA/RC points out that the earth receives in a single day an outpouring from the sun several times the energy that can be consumed. For example, the roof of a typical residence annually receives 10 times the solar energy that the yearly heating of the structure demands.

According to the AIA/RC analysis, solar dwelling design is related to four critical factors which influence design: climate, human comfort, building characteristics and solar systems. Of necessity, local conditions affect the decisions and choices in solar-oriented architecture. Many of the variables to be taken into account by decision makers are considered in the subcontracted reports. Mary E. Osman
A compressed and comprehensive report on 70 solar houses.

The research report prepared by the Arizona State University's school of architecture (John I. Yellott, principal investigator) differs from the other nine submissions to AIA/RC. The others survey solar energy systems and develop their own design concepts; the Arizona State University report concerns the state of the art of solar energy and its application of scientific principles to building design.

Characterized by brevity and clarity, the report conveys a great amount of information. It begins with terse one-line summaries of data on some 70 dwellings in this country and abroad that receive all or part of their winter heat from solar radiation; some of the dwellings also use solar energy for summer cooling.

The second section consists of more detailed one-page data sheets on the 70 structures. Here there is information about such matters as location; latitude; elevation; average temperatures and horizontal insolation in January and July; subsystems for collecting, storing and distributing heat in winter and cooling in summer. In most instances, there are perspective drawings as well.

The dwellings range from the 1938 Eck-Sloan houses near Chicago (G.F. Eck, architect) to the Copper Development Association's 1975 "Decade '80" house in Tucson, Ariz. (M. Arthur Kotch, architect).

"Solar system concepts and ideas come in an assortment of sizes, shapes and forms, combinations and permutations," says the report. Its third section is an analysis of solar space heating principles and a evaluation of how these principles affect architecture.

The data in the fourth section include more detailed examination of 10 of the dwellings, each of which exemplifies a particular system of solar radiation.

And, finally, there is a list of references that give additional details about many of the 70 structures covered initially.

From top: Colorado State University solar house (Crowther, Cruse & McWilliams); hoenix of Colorado Springs (Design 'roup); David Wright house (David 'right); Decade '80 (M. A. Kotch); Karenerry house (David Wright).
Integrating various solar devices into a single design.

Ever since our cave-dwelling ancestors, the notion of a hearth "has been a primordial house concept," says Don Watson, AIA, of Guilford, Conn., who investigated the development of a design concept for a self-sufficient, single-family solar house for cool-temperate climates. (Consultants: William Meyer for Ezra D. Ehrenkranz & Associates and Everett M. Barber Jr.) Hence, the fireplace and thermal storage are used as a focus of Watson's developed solar heating design concept in order to enrich the meaning of such contemporary technology through house forms long familiar and dear to mankind.

The design concept also controls the heat loss of vertical space and adds clerestory light by the inclusion of architectural features, such as a greenhouse intermediary zone. This zone, then, becomes both an atrium and a solarium for natural heating and ventilation of the dwelling.

Watson's first task, however, was to identify and define solar thermal heating concepts and related equipment that may be applied to the heating of houses, and he ranges from technical research to performance of existing solar concepts. He concludes that if solar heating is to be applied effectively to housing, changes are required in both architectural design and in construction standards. Some changes, he says, can easily be accommodated within existing practice; others require new methods for which both the design professions and the building trades may be unprepared.

Through the incorporation of climate control strategies and an analysis of the dwelling's heated floor area, design heat loss and the energy capacity of various solar systems, a solar dwelling concept is developed which is capable of meeting the total heating and cooling demands of the dwelling.

The design concept illustrates how a range of solar collection and storage systems can be integrated into a single design. Collector concepts are integrated with such architectural features as porches, balconies and greenhouses to accommodate both the negative and the positive effects of cool-temperate climates in specific designs.
A solar house adapted to four climatic regions.

Nobody has to listen to a weather report on any given winter's day to know that residents of Minneapolis have different problems in dwelling comfort on that day from those encountered by people in Charleston, S.C. And a summer's day for Boston dwellers can be another story for Phoenix residents.

One task for the Total Environmental Action group, located in Harrisville, N.H., was to select a solar system that would be applicable to the design of single-family dwellings in four climatic regions of the U.S.: Minneapolis (cool), Boston (temperate), Charleston (hot-humid) and Phoenix (hot-arid).

The team made an extensive analysis of solar systems in order to identify those that would be applicable to the four regions. It discarded some because of such considerations as limited design adaptability, costs and problems of freezing and corrosion. A warm-air system was selected because of its versatility in adaptation to design, storage and distribution systems. The choice resulted in an "active" solar system.

The next order of business was to incorporate the solar energy collection system into the design of a single-family house, approximately 1,000 square feet in area, for each of the four regions. In the development of a design package, it was necessary to establish an impressive body of information regarding such essentials as climatic data, site description, space relationships, heating and cooling criteria and physical design characteristics of the solar structure.

With this information, the team could identify changes in design and site planning that are required to adapt the dwellings and the solar system to the four varying climatic regions. The team developed schematic designs of a single-family house in each region, including floor plans, sections, elevations and perspectives, as well as diagrams of the design and operation of the solar energy systems.

The team had three goals: the use of less than 25 percent of nonrenewable energy consumed yearly by conventional homes; environmentally compatible houses, and reduction of peak electric and gas loads.

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A modular unit that can respond to the sun in varied ways.

Flexibility is the name of the game for the design concepts evolved by the Contin-uum Team, Bridgeport, Conn. The team developed a modular living unit capable of being stacked and arranged in a variety of ways to accommodate different mates, densities, configurations, site conditions and solar systems.

By means of the modular coordination the primary dimensions of the L-shaped unit, designed for a family of four, numerous combinations are possible with alteration of floor plans. The modules can be placed side by side or stacked one on top of the other, making them adaptable for either single-family or multifamily dwellings. By attaching pairs of stacked living units at east and west walls, the units can be clustered, with density depending upon site conditions and zoning requirements.

To demonstrate this adaptability, the designers planned dwellings to be sited either near the cool region of Minnesota or the hot-arid climate of Phoenix. The living unit's basic design stays basically unchanged, except for variations in plan arrangement and orientation, but the solar systems will vary greatly according to climatic region. In clusters, the units are arranged according to specific sites and climates to provide maximum use of solar radiation.

The team selected an optical reflecting collection system for the Minnesota dwellings because it provides temperatures 2.5 times those of a flat-plate collector. Incorporating a hinged reflective member, the collector can be adjusted for seasonal and geographic variations in sun altitude and can be closed on sunless days. When clusters of living units are desired, the module solar units are organized so that they shield habitable spaces from northeast winter winds and at the same time provide maximum opening and surface area for solar collection and natural ventilation.

A solar pond was chosen for Phoenix because of the area's climate and the system's ability to both heat and cool. The team also recognized the time-tested principles of indigenous architecture in such a hot, dry climate and used native building materials, including adobe.
Storage cylinders as centerpieces of a prototype design.

The focus of the investigation by The Architect, Taos, of Taos, N.M., was on solar systems that work with a minimum of outside power. Because the systems were to use only natural energies on site with regulation by hand devices or self-operating controls, the designers had one of two choices: to locate the collectors within the occupied space or to place them on the building envelope. They chose the former alternative.

Consequently, in the design concept for a single-family solar dwelling that would be adaptable to the country's varying climatic regions, the designers included a collection room, whose interior walls collect store and distribute solar energy. The system works by means of thermally convertible assemblies (TCA), which control the energy flow through the dwelling and within interior spaces.

Adaptable to various climates and solar components, the system consists of large vertical cylinders within the dwelling's dividing wall which store the energy received from the collection room (which is rather like a greenhouse). The thermally convertible assemblies are used to control the distribution of stored energy.

The storage cylinders may be used with flat-plate or focusing collectors in cool climates or with rooftop evaporative cooling ponds in temperate and hot-arid regions. The so-called "architectural image" of the dwelling will change according to region, but the basic plan arrangement and solar system operation are retained.

For a prototypical solar dwelling, the designers assumed that the site area would be sufficiently unobstructed for maximum solar collection. The site's size and shape are determined by the angle of the sun about the time of the winter solstice. The shadow cast by the building at this time also determines where another solar dwelling may be sited for unobstructed collection of solar energy.

An entire neighborhood of solar dwellings can be arranged based upon different densities and site sizes. It must be remembered, however, that vertical collectors will require a larger unobstructed area than rooftop angled collectors when clustering is desired.
This is survival time for most architects. But for Robert L. Wilson, AIA, that simply means business as usual: For him, as for most black architects, the problem of daily survival has been a familiar and constant companion in boom times as well as recession. In fact, Wilson long ago designed his approach to architecture around it and coined the term “survival architecture” for the way he operates. It has served him well.

He has had a broad-based practice in Stamford, Conn., since 1966, and during his 20-odd year career has been involved in building housing, corporate office buildings and government facilities, and in land development. He is currently president of the Connecticut Society of Architects/AIA and an ex-officio board member, as chairman of the community services commission. Wilson was also a co-founder of the National Organization of Minority Architects and one of the first black architects to penetrate bastions of corporate America, such as IBM and Litton Industries, whose names appear on his list of clients. Last month he was elected a vice president of the Institute.

What Wilson calls “the old boy system” still exists in the profession. Or as Leon Bridges, AIA, puts it: “Architecture is still an arena in which you have an advantage if you’re a country club man, a sportsman. As blacks, we haven’t been able to fit into that system. So to get a job we have to actively go after it.” Wilson claims that a good deal of work has slipped him by because he wasn’t on the scene. The best of times have not been good times for blacks, which is why Wilson says, “We can offer something to our white brothers right now, because we’ve lived it.

“There are guys who come to me,” he says, “and are down to zero people in their office and two or three days of work a week, and they say, ‘My God, Bob, what do I do?’ I tell them, ‘Man, get off your ass and hustle up some work.’ The think I’m crazy, but it works.

Wilson feels that the problems now being faced by the architectural profession are not new, that recession has merely brought them into sharper focus and given them a more painful edge. “The first thing to do when times are hard,” he observes, “is the architect. That’s because solutions to housing, to take an example, are based in finance, and architects have no capital control, therefore no power. If you don’t have control over capital, people will not respect you or listen no matter how much they may pretend to.”

He thinks society looks upon architects as impractical visionaries who are seriously out of touch with the realities of life. “So,” he contends, “society says, ‘We’ll indulge their tastes and idiosyncrasies when we can, but when the real hard facts of life come down—get these clowns out of here.’ ”

Only by learning to understand business and management principles, Wilson believes, will architects change this image and thereby gain a stronger voice in decisions affecting the built environment. “If you can understand the dynamics of finance and economics, of business management and marketing,” he says, “that gives you the ability to finance yourself to survive. If you can understand and
with whatever it is in the system that
rolls you, that gives you the ability to
increase your salary. While working, he
studied nights at Columbia University and
earned first a bachelor's degree in archi-
tecture, then a master's in urban planning.
For a while, he was in the employ of a
naval architect, then he joined the archi-
tectural firm of Robert J. Reilly (now de-
funct), where he "built Catholic churches
with fantastic curlicues." By 1956, he
had begun to run jobs, and by the time
he left his next employer for Emory Roth
Associates in 1959, he had done his first
highrise, "which made me a highrise ex-
pert." Richard Roth, FAIA recalls, "Bob
made up his mind to work in a number of
offices and learn as much as he could.
And he did just that." At Emory Roth,
he worked on the Banker's Trust build-
ing ("so I became a precast concrete ex-
pert"), which led to work on the Boston
state house and some dozen other office
buildings.

"He knows office buildings well. Tech-
nically he's very competent, a good de-
signer," says his next and last employer,
James Luckman, AIA, of Charles Luck-
man Associates, where Wilson worked
from 1963 until he opened his own office.
During his three years with the Luck-
man firm, Wilson became a consultant to
the Protestant Council of Churches. This
work served as a kind of apprenticeship
for his present mode of operating. His
job was to create nonprofit corporations
for real estate development, mainly to
build housing projects and related facili-
ties. In the process, he developed a
method of putting packages together for
church groups, showing them how to ob-
tain land, how to deal with city agencies,
how to actually proceed with the build-
ing of projects. His hope was, of course,
that when the project was commissioned,
he would be the architect. And it hap-
pened that way in some instances, as with
the West Main Street Community Center
and New Hope Towers, both in Stamford,
which show as well as any of his projects
how Bob Wilson operates.

Hope Towers, above, in Stamford, Conn., and the West Main Street Community
Center, also in Stamford, both products of Robert L. Wilson's advocacy architecture.

Members of the Community Center's
board of directors approached Wilson in
1967 to help them build a new facility.
They had outgrown their old one. And
they had no money. Wilson wrote a pro-
gram, designed a building on the existing
5,000 square-foot site and then helped
obtain approval from the United Way for
a capital fund drive to raise over a mil-
lion dollars. The money was raised and
the original site was later exchanged for
a three-acre, abandoned school property
after long negotiations and after Wilson
had carried out feasibility studies and re-
designed the building. Says Dr. Joyce
Yerwood, founder of the center and presi-
dent of its board: "Bob was involved
more than simply as an architect with
trying to decide what kind of center we
needed for the people we had."

By December 1974, Wilson had com-
pleted an imaginative building, where su-
pergraphics—colorful designs and sign-
age—are used along with a circular stair-
well and deck to give the interior the feel-
The residence of Dr. and Mrs. Marvin Shelton blends into its Riverdale, N.Y., setting.

ing of a ship. "He built it for less than anyone would believe," says Mort Lowenthal, vice president of the center.

A search for an inexpensive way to produce habitable housing impelled the church group sponsors of New Hope Towers, a Stamford urban renewal project, to seek Wilson's help. After analyzing the problems at hand, he came up with a characteristically Wilsonian answer: "Easy. Sure I can do it."

Wilson designed the project and devised an inexpensive prefabricated construction system, using steel-framed flying forms and wall panels that were precast at the site.

"We came up with a cost that the government would allow," he says. "I had to convince the Department of Housing and Urban Development that my ideas weren't crazy. I had to get a commitment from the builder and sell my ideas to a hundred people all at once." He convinced Pitney Bowes to invest $110,000 as seed money, which provided liquidity until the architect's fees were paid. "Cash flow," says Wilson, "is the key to making it work."

In explaining his role as an advocate architect in projects like New Hope Towers, Wilson says: "I am the mouthpiece of the community people. I'm the technical guy who tells them what they can do. And I can influence them, because I know the realities of what is possible with the dollar. I also act as an interpreter to the establishment, because I speak both the language of the street and the language of the board room. I understand what the broker is saying and put it into a form that the man can understand.

"There are a lot of problems with that role, because you're zapped from the top and you have brickbats thrown at you from the bottom. People think you're an Uncle Tom, a representative of the man come to rip them off. The only way to prove yourself is just to stay and take the fire."

During the late '60s, Wilson also ventured into real estate development, in order to get a firmer grasp on the economic wheel. It began because he felt that to do the things he wanted to do as an architect, he had to control the whole show, and that the place to begin was understanding what the developers were doing. He studied real estate on his own and started working with developers. But he soon found that "as an architect, you can get the option on the land yourself, put the pieces together yourself, get the financing. You don't need those guys."

"If Bob wasn't one of the best at hustling up work," says Wilson's brother Jim, who is also the firm's construction manager and office manager, "we'd have no business at all." Despite energetic efforts recession has shrunk the office staff from 25 draftsmen at its largest in 1972 to three today. Wilson does all the design for the firm, often working as many as 16 hours a day, and spends up to 50 percent of his time away from the office hustling up work or pursuing AIA activities. Nixon's moratorium of 1973 on federal housing programs prompted Wilson to launch a marketing campaign centered on the state of Connecticut, where most his business is today.

One of Wilson's top goals for the next five years is to obtain fame and fortune. "I want to become known for the kind of architect I want to be," he says. "All architects need recognition and all architects are hams. I'm always on stage. I live in a dream world. Sometimes I'm a dashing financier, sometimes a master builder. I like the flamboyance. I'm traveling in a world that I idolized as a kid; a dream come true. Flying all over the world; doing this, doing that. There are times when I say, 'Will the real Bob Wilson please stand up.' If you find out who he is, let me know.

"Who are my idols? Kenzo Tange in design, Charles Luckman in sales, John Portman for his entrepreneurial spirit. You ask, Do I want to be all three roles in one? Of course I do. I already am," he chortles. "I may live in a dream world, but as soon as I need to, I come out of and put on my real world hat."

This combination of imagination and hardheadedness has been largely responsible for Wilson's ability to keep afloat. Wilson is also a man blessed with a larger than normal share of energy and enthusiasm. "I have so many things to do," he says. "I'm always up. Maybe that's why I don't drink or use any artificial stimulant. I'm constantly up. Maybe that's why I don't drink or use any artificial stimulant. I'm stimulated by my own adrenalin." Ana O. Dean
Readers' Suggestions For Coping with The Economic Crisis

February, the AIA JOURNAL asked its readers for ideas and suggestions on how architects can deal with the current economic crisis. The request was spurred by harrettes held in January to explore issues of response to the deteriorating economic situation. The following are excerpts from some of the replies. Ed.

The advent of major changes in international relationships, it is generally conceded that the "haves" in the future will be those who have oil, African mineral deposits and American food commodities, to mention but a few, are now available in change not only for more dollars, but in conditions which involve the sharing of our bounty—commodities, but important to us, services. The Trade Center in Moscow is an example of American architectural offices doing major work in foreign lands, and of course, there are many others. Until now it has only been the large offices, and thus the smaller offices for smaller work? Distance is not a barrier, with air travel, but the promotion such work by smaller practitioners is not economically feasible. Is there not a lot to be filled here by the national AIA offices—a good will junket or promoting, competition and utilizing into the building market, all of which is determined by the architect, is a major opportunity for cost reduction efforts. Techniques of design and delivery systems utilizing new materials, industrialized buildings, performance specifications and fast track arc just a few of the approaches that have tremendous potential for cost effectiveness. Third, design decisions cannot be made independently of the marketplace. Contractors, subcontractors, manufacturers and suppliers must be an integral part of the design process. Fourth, owners and the public, and specifically owners, are particularly their implication on cost function, quality and schedule.

In summary, the inflation fight is related to the economic condition because the public, and specifically owners, are turning to other sources. They want and expect someone to provide cost and budgeting control of capital expenditures. They don't expect miracles but they do expect a commitment to do all that is possible to control cost, and we believe there is much that can be done. Richard L. Pearce, Pearce Corporation, St. Louis.

In response to your request asking for ways in which the architect may discreetly offer inducements for clients, inducements which may now appear to be lacking in the architect-client engagements, I feel strongly that a system of training in all codes and regulations be set up for architects so they can be knowledgeable in a field which is of paramount importance—the building and related codes which govern a project.

My regional participation in codes has indicated to me that there is a real void in the average architect's knowledge of pertinent codes, and my membership in the AIA national codes and standards committee has proven to me a national lack of knowledge on the subject matter. It is regrettable indeed that building officials, contractors and code inspectors can say that architects know nothing of codes.

The codes and standards committee has recently published two documents which merit attention—"Educating the Architect: Fire and Life Safety" and "One Code: A Program for Building Regulatory Reform."

If you are really looking for a new need to promote—this is it: "The architect can insure you of this protection."

It can be done, and we have waited too long to do what we should naturally have done. Oresto DiSaia, AIA, Providence, R.I.

My experience of 55 years as a small firm may hearten some of the younger men. My work has been almost exclusively residential, the tenderest flower in the profession.

In talking to the architectural students at the university, I have stressed, "You have to have a passion for what you are doing. There is no creation, physical or spiritual, without passion." It is this passion for architecture which has carried me through. If I could not create, I was lost.

1972, I had an opportunity to purchase a small branch office of a Pennsylvania firm which I had been managing since 1969. School construction slowdowns had alerted us to the worsening construction market and businesses locally were pulling in rather than expanding. I elected to move my office into my home with a part-time secretary and part-time draftsman and accepted a management position with a large insurance agency.

In 1975, I am still able to provide architectural services locally while working in a field that utilizes my background and talents. Insurance companies today are insisting that property be insured to full replacement value, but they haven't the expertise to properly put a replacement figure on property of various sizes and material values. Joseph L. Nichols, AIA, Newport, R.I.

Inflation is a worldwide economic condition that has not been solved by the best brains of all countries. As architects, we are not expected by the public to solve the cause of inflation, but we are expected to take steps to minimize its effect on the building project.

We can and must understand how we can attack cost areas. We must first take a rigorous stand against inflation and rampant cost escalation. This is an attitude and position the architect must support by active involvement in cost reduction activities. Second, material and product costs arc but one part of the total cost picture. Their integration and utilization into the building design, all of which is determined by the architect, is a major opportunity for cost reduction efforts. Techniques of design and delivery systems utilizing new materials, industrialized buildings, performance specifications and fast track are just a few of the approaches that have tremendous potential for cost effectiveness.

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Congress Weighs the Future of Washington's Beautiful Alpine Lakes

Henry Steinhardt, AIA

The Alpine Lakes region in the north central Cascade Mountains of Washington State still retains its primeval character, but there are threats to its “rugged beauty, deep solitude and enduring wildness.” The Alpine Lakes Wilderness and National Recreation Area Bill (HR 3977), now before Congress, indicates that the region is “increasingly threatened by the pressures of a growing and more mobile population, large-scale industrial and economic growth, and development and uses inconsistent with the protection, maintenance and enhancement of its recreational values and wilderness character, including harvest of timber from inappropriate areas and by inappropriate methods, geothermal exploration and development, mining, and inappropriate or poorly planned commercial development and subdivision.”

In order to preserve this unique region and to assure orderly development or use of private lands within its boundaries, the legislation proposes a national recreation area of 1,012,000 acres, of which 575,000 acres would be wilderness forever, with the remaining acres reserved, under strict controls, for multiple use. This legislation is supported by AIA, and in February the board of directors passed a resolution reaffirming the Institute's 1972 support of the same basic concept.

The bill is also endorsed by many outdoor, conservation, sportsmen and civic groups, but two other bills dealing with Alpine Lakes have been introduced in Congress. One, the U.S. Forest Service bill, calls for 292,000 acres of wilderness surrounded by various management units totaling 418,000 acres without statutory protection. The third bill, known as the industry bill, provides for two small separate wilderness units totaling 216,000 acres in the relatively inaccessible high country. These measures will be debated over the next months, with hearings both in Washington, D.C., and in the field.

Mr. Steinhardt of Mercer Island, Wash., who has walked most of the Alpine Lakes country and is a past president of the Alpine Lakes Protection Society, is a member of AIA’s regional development and natural resources committee.

Action by Congress is expected before the end of the year.

Special status for the Alpine Lakes has been sought for over half a century. In the 1930s, the National Park Service proposed an Ice Peaks National Park in the area, and in 1946, the Forest Service set aside a quarter-million acres as the Alpine Lakes Limited Area. By 1963, four mountaineering and conservation groups backed a 300,000-acre Alpine Lakes wilderness. The Alpine Lakes Protection Society, in 1970, proposed a 926,000-acre national recreation area to be established by Congress, including within it a 364,000-acre wilderness core. This was the concept supported by AIA in its 1972 resolution, and it also had the support of over 30 other organizations with a total membership of some 600,000.

At that time, the Forest Service had already undertaken studies of the Alpine Lakes region in order to formulate its recommendations for classification of these lands under the Wilderness Act of 1964. Hearings attracted wide attention, and testimony indicated that public expression of opinion strongly supports wider boundaries than indicated in AIA’s first resolution.

In its primitive grandeur, one may perceive the Alpine Lakes as a monolithic mountain range, but in legal terms it is a tangle of ownerships, jurisdictions and operating units. The land lies about equally within three counties, with a small segment in a fourth. All of the area except some parts in the western end, are within the national forest system, but management is split between two national forests: the Snoqualmie/Mount Baker in the west and the Wenatchee in the east.

Ownership is over 77 percent in federal hands, with most of the private lands being in checkerboard alternate sections, a result of the railroad land grants of the late 19th century. These lands have largely passed to a few large logging companies. If this fragmented region is to be preserved, planning and management should be the responsibility of a single agency with overall authority. Indications are that the responsibility must be assumed by the Forest Service, under powers to be granted by Congress.
This wild mountainous vastness known as the Alpine Lakes is framed by two of Washington's three year-round highways which cross the Cascade Mountains. The Cascades, rising as a wide rugged barrier behind the shoreline of the Pacific Ocean, stretch from British Columbia southward through Washington and Oregon into California. The Alpine Lakes region is 60 miles wide and 40 miles north to south, containing a million acres, about half of which—the core area—is in wilderness condition.

Sparkling mountain lakes nestle mainly at higher elevations in cirques or behind natural dams. Small, icy cold and hidden in wild settings, they are a leading attraction. The valleys are rounded, steep-walled and dramatically deep, forested and crossed by many streams.

The crest of the Cascades meanders through the Alpine Lakes country. Over 40 feet of snow falls on the crest, much of it the fine powder prized by skiers. Six of the biologist's seven life zones are to be found in the Alpine Lakes region, lowest of which—in the west—consists of luxuriant forests of Douglas fir and western hemlock, ferns and mosses, and—in the east—stands of ponderosa pine in open forests. Above timber line, generally over 5,000 feet, is the highest of the life zones, and here are flowered meadows of low-lying hardy plants and few animals.

Although trail walkers frequently hear the whistle of the marmot and sight the Douglas squirrel or the small furry pika, they rarely see many of the region's 56 species of mammals. The largest animals are blacktail deer and mule deer, black bear, elk and mountain goats. There are 148 species of birds. Most of the lakes, barren originally, have been stocked with four species of trout.

The region can only be traversed on trails, for there are no roads through. Thousands of hikers from all parts of the country have found the rigorous trip across the center of the Alpine Lakes one of the most dramatic segments of the Pacific Crest National Scenic Trail. This is not an easy hike: Ten days must be allowed for the 85 miles, climbing up and down 15,000 feet, camping by lonely wilderness lakes, crossing lofty passes, winding along silent wooded valleys among the great peaks.

The vast network of trails, totaling 900 miles, extends throughout, offering superb outdoor experiences. Some trails are easy and popular; others are remote, lonely—truly wilderness trails. Most of the trails suffer from lack of maintenance, and about 500 miles of trail have been abandoned in this century, mostly because of the incursion of logging roads.

Two million people live within two hours driving time of the Alpine Lakes. The highways carry millions of people a year on the spectacular drives over the passes. In winter, tens of thousands of skiers are there, followed in other seasons by throngs on foot and horseback and in boats and vehicles.

Indeed, the Alpine Lakes country is a major part of the regional recreation system, although heavy use not only creates pressure on peripheral lands and the wilderness core, but also conflicts with the interests of the logging industry. Recreation has become a dominant land use. In 1972, it was estimated that 15 million persons traveled along the highways, about 2.9 million of them from out-of-state. Over 2.5 million visitor-days a year are spent in the area, and it is increasing at about 10 percent a year.

The outer 500,000 acres of the Alpine Lakes country offer recreational opportunities for everyone from the nearby large urban area. Activities include skiing, camping, hiking, hunting, fishing, boating, kayaking, swimming, water-skiing, horseback riding, mushrooming, backpacking, mountain climbing, and cross-country skiing.
country skiing, snowshoeing, rock-hounding, picnicking, nature studying, sightseeing. And loafing. The wilderness core also receives heavy use—about 600,000 visitor-days a year by persons who enter the wilderness for hiking, mountain climbing, hunting and other such activities. Resort facilities are growing steadily in the Alpine Lakes country, and such problems as traffic, parking, sewage disposal and landscape management call for stronger planning and control.

Perhaps the most spectacular sport is skiing. Numerous ski resorts at Snoqualmie and Stevens Passes accommodate over 27,000 enthusiasts on a single day during the four-month season. So near to home are these ski slopes for most people that only a small percentage of skiers stay overnight at condominiums and lodges; the majority of them commute by car and bus.

Several small settlements lie along the east-west corridors framing the area. These corridors consist of highways and railroads, plus utilities, including a natural gas pipeline, telecommunication facilities and electric power lines which are so enormous as to constitute subcorridors in satellite photographs. And an oil pipeline from Puget Sound may soon be proposed.
The northern corridor, which crosses from Stevens Pass, is much the more scenic. The highway is smaller, and the traffic is only one-tenth that of the more southerly route, Interstate 90, the main freeway east from Seattle, which leads across the nation to Boston. I-90 has long been fought over, and its completion is still delayed by environmental lawsuits. It has been designed into the mountains with brutality for high-speed driving, with deep cuts, numerous bridges and huge shelves blasted in the mountainsides. At Snoqualmie Pass, climactic gateway to Puget Sound, the landscape has been sadly damaged by clearcuts, ugly ski slopes and poorly planned vacation developments.

The entire I-90 corridor, especially at the pass, cries for thoughtful professional design. Indeed, both corridors, throughout their length, need interdisciplinary study by an agency empowered to manage future development.

One of the region’s principal industries has been logging, and its impact is evident. Much timber has been harvested over the past 100 years, especially along the peripheral corridors where clearcuts in valleys, over mountainsides and ridges face some of the finest mountain scenery in the country. Not only does logging destroy the wilderness and despoil recreation areas, but it also creates other problems: streams blocked, topsoil eroded, spawning grounds lost, fishing ruined.

Logging in the Alpine Lakes supports about 500 workers; jobs in the industry are continually declining. Only one-thousandth of the annual national timber harvest takes place here, and no management scheme has been proposed which would terminate this activity. The reduction of logging is included in all legislative proposals, except the timber industry's, but present management encourages logging.

Mining has been attempted innumerable times in the area, but has not proved to be a profitable activity. Hikers occasionally come across the remains of workings and cabins. From time to time, promoters announce great schemes, but so far the deposits—for which there are hundreds of claims—have not yielded enough to make the industry viable. Mining may become more of a threat as world shortages grow, and geothermal extraction may loom in the future since there is a hot spring site on the western slope.

Other threats—and potentials—include recreational developments. Even helicopter-serviced resorts deep within the wilderness are occasionally proposed. The vacation home developments along the main highways tend to be of low quality, damaging to scenery, forest and stream. The rapidly growing recreation industry profits increasingly on activities in the region and associated sales. It is expected that these economic benefits will considerably outweigh losses in the timber industry if logging is reduced.

The future of Alpine Lakes depends upon action by Congress. The bill supported by AIA includes over a million acres set aside within a classification called “national recreation area,” part of which is wilderness core. The NRA classification, less familiar than such designations as “national park” or “national monument,” is appropriate for scenic areas, such as Alpine Lakes, which are heavily used, already roaded and developed and near large population centers.

The advantages in this case lie in statutory control, requirement of a planning process, regulation of zoning, authority to acquire privately owned lands, limits upon clearcutting, control of commercial and industrial development and designation of wild and scenic rivers. For a threatened area, such as Alpine Lakes, with many problems and conflicts, an NRA classification offers the optimum planning and management solution.

The Alpine Lakes country presents to the arts of planning and management a tangled thicket of issues. In its rugged wilderness, it is a national and regional asset of major scale, a vast recreational complex and a sizable increment of our shrinking wilderness system. Sought for its silent natural splendor and for its tempting resources, Alpine Lakes is much developed and will support more development. It still survives, but it will surely be wasted if we fail to resolve the conflicts through a fair and visionary process of regional design.
The area can survive more development, but only through planning.
The Biography of a Book: Correspondence Between Sullivan and The Journal

George E. Pettengill, Hon. AIA

It was the end of 1921. Louis Sullivan, architect, then 65 years old, was without anything of consequence to keep him occupied. His friends, including Max Dunning and George C. Nimmons, recently nominated as directors of the Press of the American Institute of Architects which published the Journal, were looking for some means to keep him busy, and in funds. Charles Whitaker, editor of the Journal, had recently paid Sullivan a visit. All this apparently served to supply the catalyst for what was to result in the writing of The Autobiography of an Idea. Although Dunning and Nimmons later wrote statements claiming credit for the book's having been written, there are new facts, recently uncovered, that shed a somewhat different light on the situation.

But let Sullivan tell the story in his own words in letters to Whitaker: "As to your suggestion that I write a series of articles for the 'Journal': it is welcome: but my mind is not clear as to the nature of the subjects to be written about—the titles, as it were. I will appreciate it if you will kindly make suggestions in this regard—for I cannot write at random."

A little over a week later, on January 14, 1922, he again wrote Whitaker: "In a talk I had with Andy Rebori a few evenings since, I brought up the subject of articles desired by you for the 'Journal,' and stated that my mind was a curious blank in regard to subjects for miscellaneous art-

ED. NOTE: Spelling and punctuation have been followed as closely as can be determined from the original correspondence. Most of the Sullivan letters in this correspondence are in the AIA library, as well as carbons of many from Whitaker and the Journal. A few of Sullivan’s letters and originals of a number of Whitaker’s letters are available only in the Burnham Library of the Art Institute of Chicago, to whom we are indebted for permission to quote. It is planned to reproduce the entire correspondence for the benefit of scholars and libraries. © G.E. Pettengill 1975

Mr. Pettengill, AIA librarian emeritus, is also the Institute's archivist.

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es, as said mind was accustomed only to the idea of a developed thesis. After some miscellaneous discussion he said ‘Why not you write your autobiography?’ that would be very interesting.’ I de­urred, saying ‘Andy, my ego isn’t built for that line: —I am neither vain nor modest. Andy argued quite eloquently after a while I got a ‘flash’ to the idea that such an autobiography might serve, or be made, an extremely effec­ tive medium, in which to carry the vague ginning, the gradual development and eventual form of my philosophy of architecture.

“This thought aroused my emotional crest (hitherto lacking) and supplied a dominant idea upon which I could con­ trate steadily and about which I could have a most interesting story of a hu­ man trusting to his instincts (a rara avis). The story would lend itself to a free, easy treat­ ment, without egotism and thwart pedantry. Then the plot of stick­ ing to one impulse and idea from the be­ ginning throughout a long intellectual and emotional life has in it the element of ama. As my memory runs back to my second year, you may see that it is a long etch. At 14 I had fully determined to be an architect. When I look back upon incessant hard work I have done and sacrifices I have made— with one end view, I feel, alas, that the young stu­ dent of today is not capable of it: unless be given a definite, positive, stimulus, le­ finite objective;—a star of destiny so speak. It is precisely this human ele­ ment that I would cause to permeate the work and radiate from it.”

The proposal met with an instant and verable response from Whitaker, who wrote Sullivan on the 17th: “How can I believe in psychic phenomena— telepathy—what you will? I have been nified to the house for a week or more, t up to much, but with my head going forty miles a minute all the time—and single thing I can think of wd be more eresting, because, to me, no single thing more interesting than the real story of life.

Sullivan would be paid $100 for each ar­ ticle.

Sullivan wrote: “I am preparing to write the work in the third person, as this method seems to offer greater literary freedom. I have mentioned the undertak­ ing to a number of trustworthy friends, and they hail the idea with enthusiasm.” Such encouragement must, indeed, have been welcome to Sullivan, who with this new work and the drawings illustrating his system of ornament, already under­ way for the Burnham Library, could feel that there was still something left for him to accomplish. Although eager to start, he did warn Whitaker: “Do not announce the event for a while, as I wish a reason­ able start, and, above all I wish to start right.”

The agreement was formally signed by Sullivan on February 8, 1922. By the 16th, he had received his countersigned copy. He also reported that he had com­ pleted the longhand manuscript of chapter 1, and in this same letter, he proposed the title under which the work was to gain fame: The Autobiography of an Idea.

Two days later, he sent off the first chapter with a letter that reported Dun­ ning’s approval. Evidently, it did not meet with the editor’s unqualified approval, however, for about a month later, Sulli­ van indicated his understanding of Whit­aker’s objection to the use of the word “wonder” in connection with child­ hood throughout the first chapter, and suggested its deletion. Sullivan noted that his pro­ gram was to work on the “Autobiog” un­ til late at night and to sleep long the fol­ lowing morning.

In its March issue, the JOURNAL an­ nounced the forthcoming work: “It is our proud and happy privilege to an­ nounce that beginning in a very near is­ sue The Journal will begin the serial publication of a work by Louis H. Sulli­ van. In the “Autobiography of an Idea” as Mr. Sullivan has elected to entitle his work, which promises to run through twelve or more numbers of The Journal, he will develop that idea out of which grew the architectural achievements which have given Mr. Sullivan’s name a unique place in the annals of American architec­ ture. We doubt very much whether an
architect has ever before set out to elucidate a theory or idea or visualisation of architecture by an autobiographical process. Whether our premise is correct or not matters little however. Mr. Sullivan has a tale to tell and a manner of telling it such as will mark an eventful circumstance in the literature of architecture in America." On April 21, Whitaker informed the author that the first installment would appear in June.

By May 13, Sullivan had submitted five chapters and was well ahead of the printer. He was concerned, however, about errors. Not having received proofs of chapter 1, he asked to have the manuscript carefully checked to make certain that Donati's comet of 1858 appeared correctly. Moreover, he did not like the proofreader's changes, writing: "I am curious to know through what avenue of information said proof reader came to learn that my father was 'an enthusiast regarding hygiene,' whereas I had described him as a 'crank on hygiene.' I am still under the impression that I knew my father pretty well." Revealing the human touch more informally, he then went on: "The Club cat is now occupying all of this sheet but the bottom, so I will say: au revoir."

Whitaker replied: "I'm damned if I know who changed your father from a crank to an enthusiast, but I suspect Rosalie Goodyear, who is now in the hospital, such as will mark an eventful circumstance in the literature of architecture in America." On April 21, Whitaker informed the author that the first installment would appear in June.

But amid the favorable comments, there had evidently been a few not so good for in September Whitaker is moved to write for September. When Whitaker read the first installment that it would not be necessary for all chapters to be published in the Journal before the book came out. Unfortunately, this was not to be, as the book was not printed until long after completion of the series.

During a period when Whitaker was in Europe, the JOURNAL received more personal communications on occasion. Sometimes, Sullivan even wrote two letters a day, as on April 17 when he complained because he had not received acknowledgement of chapter 13, sent on the fifth: "Your failure to reply I regard as an inexcusable breach of courtesy not to say exceedingly bad business procedure." The same day he acknowledged a check for $200, bringing total receipts to $1,500.

When Whitaker returned, he found only one chapter on hand, and he wrote asking when chapter 14 would be received. On May 11, Sullivan replied: "Chap #14 entitled 'Face to Face' is the culmination of the work. It bursts suddenly into bloom (or explosion). I have been steadily at work on it for just a month and have 21 pages of long hand to show. I expect to complete it in a few more settings. I have been writing it word by word. Embarrassment of riches has proved a retardant. I have been mentally eliminating and eliminating to keep the thing within bounds; that is I have been endeavoring to compress a volume into a single chapter. The theme is so powerful it requires an iron hand to guide it."

On the 16th, Sullivan wrote that he was formulating plans for publication in book form and that he would present a program after the board meeting. The book was to be entirely reset and made a real piece of typography, "which will please you!" Sullivan reported on May 31 a conversation with Dunning, who had said that the book should be priced at $5, with a royalty of $1 per copy. Also he understood that an English publisher would want 1,000 copies. Whitaker replied on June 5 that the existing agreement provided for a monthly payment of $100 an a 25-cent royalty on each book sold, with a hoped-for sales price of $2.50. He wrote that any change would require board approval and that it would be a mistake to run the price up, especially where architects were concerned.

Whitaker found chapter 14 a "most fascinating excitation," but a bit obscure. He hoped that chapter 15 would deal with the World's Fair episode as originally planned. Ten days later, he wrote again: "Of course what you would say would be pleasant to the old crowd, but nothing needs saying more than that very thing and I had hoped you would get to it in one or the later chapters." Sullivan replied: "You bet I will have a word to say about the Worlds Fair, and it will be a mighty unpleasant word for some. I will write one or two in it in the light of a tragedy."

The chapter proved to be a problem. Sullivan wrote that he already had so much written and had not even reached the fair that he proposed to write a long chapter of 10,000 to 12,000 words to be published under one title but in two installments. "At this moment I feel the need of elbow room."

Whitaker wired him to send half for August and the balance for September. When Whitaker read the first half, which Sullivan had duly postet
liked it: "It is very wonderful and I am deeply moved in reading it. However, I shall always be proud of the fact that I was the editor of the **Journal** that inted the Autobiography of an Idea!" Later, Sullivan told what he tried to accomplish in this chapter. He concluded so much had been left unsaid that he might an addition should be made to the book, especially if there should be a second edition. On July 30, Whitaker raised the possibility of an epilogue or a series of short articles dealing consecutively with outstanding events in the development of American architecture since the fair. He thought this might stimulate interest in the autobiography and the drawings. On August 2, Sullivan reported the final completion of the difficult chapter.

The correspondence during September and October primarily concerned typographical errors and editorial changes. It was in one of these letters that Sullivan terjected the remark that he had received "a few letters of enthusiastic commendation." In November, Whitaker questioned Sullivan's identification, in chapter 11, of London station, revealing his own familiarity with that metropolis's stations. Sullivan admitted that he was wrong, and so agreed that a foreword would be desirable, and suggested Frank Wright. He added that Wright had not read the text in serial form and that writing the foreword might be a hardship for him.

Whitaker countered with Claude Bragdon, but he preferred George Bernard Shaw, to whom he had access. He did, indeed, try Shaw through the kindness of his friend G.D.H. Cole. He also asked Cole to try A.E. (George William Russell), the Irish poet, if Shaw refused. Shaw did refuse, and A.E. replied that he would have been glad to write the foreword but that he had recently committed himself to other projects. The choice ultimately came back to Bragdon, who complied.

Meanwhile, just before he left for a vacation in late December, Sullivan sent Whitaker a list of Chicago newspapers to whom review copies of the book should be sent.

The last letter from Sullivan in this correspondence is worth quoting verbatim, errors and all:

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Feb 1st 1924

Dear Whitaker:

I have just returned to town after an absence of three weeks.

I expected, of course, to find the book and the plates on the market.

I called on Max, for an explanation, only to find that he knew no more than I — not a word from you. Then came your wire asking for a duplicate of the 'Prelude'.

Now this is all exceedingly irritating and I feel that a prompt explanation is due me; an exact statement of fact, devoid of fancy and incertitude. These are my works and you have neglected to keep me posted as to actualities concerning them. I want to know precisely and definitely just what remains to be done in each case, and when the work will appear in fact; and I expect a prompt reply. This request does not in the least minimize my high appreciation of the good work you have done. It is a plain matter of business and common sense.

I learn from Max that you are on the sick list and I surely sympathize and wish you speedy recovery: and in just this sense I trust you will make an effort to assume my point of view.

Very sincerely

Louis H. Sullivan
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P.S. 'Prelude' in hands of typist will forward as soon as done."

Whitaker replied on the fourth that the Autobiography was being printed and should be bound the next week and go on sale the week after. The drawings had proved burdensome, and although he recognized Sullivan's impatience, "yet in matters of printing and typography I have ideals which I will not sacrifice."

The ultimate outcome has often been told — how Dunning wired the **Journal** to get copies to Chicago if at all possible, and how they did arrive as Sullivan lay dying, and how pleased he was. Presumably, he wished to make the royalties payable to AIA, following the precedent of Henry Adams, whose *Mont-Saint-Michel and Chartres* had been entrusted to the Institute for general publication. Sullivan never got to sign the paper, but his brother Arthur recognized the request, and the royalties went to the Louis Sullivan fund, one of the scholarship funds of AIA.

As a final note, *The Autobiography of an Idea* did appear on local best-seller lists, was widely reviewed and has been reprinted by other publishers several times since its original publication by the Press of the American Institute of Architects.
Profile: Vision, Inc.
And the Practice of
Townscape Conservation

Sandra Kashdan

Many high-minded but economically productive schemes are founded upon outrage. A case in point is Vision, Inc., a prolific conservation group on a shoestring budget, based in Cambridge, Mass.

Vision arose out of one urban planner's indignation over this country's capitulation to the automobile. It was formed three years ago by Ronald Lee Fleming as a nonprofit corporation to help reverse, through corporate and governmental change, "a situation where one can drive almost anywhere and it all looks like the road to the airport."

Today, as Vision's executive director, Fleming still exhibits chagrin as he stands presenting his organization's slide show on the consequences of effective conservation and the lack of it to yet another chamber of commerce. It surveys 19th century streetscapes, their gingerbread Victorian jostled by signs of the Kentucky Colonel and Orange Julius, "fast food people who still think they're out on the highway to rip you off at 80 m.p.h It's an environment," says Fleming, "that one is supposed to pass through quickly, designed to pull you in and get you out."

The main involvement of Vision's small in-house staff, headed by designers Brian Mitchener and Nore Winter, is in their ongoing townscape conservation projects, which have taken root in Vermont and New Hampshire, and are now underway in Oyster Bay and Warren, R.I.; in York, Me., and in Plymouth, Mass. With help from a number of outside consultants, the organization has also launched an array of other activities, including a film on the effects of citizen opposition to urban renewal in Newburyport, Mass.; a slide show on statewide land use planning in Massachusetts; a local guidebook on how to fix up old houses, and a handbook on community action for corporate design change. They have also had a hand in the development of massive highway sculpture.

The activities being pursued at Vision revolve around three broad, interfacing issues: 1) historic townscape; 2) community advocacy for visual awareness—finding state and local government and private organizations that will enlist law and public opinion to compel corporate change, and 3) corporate counseling—dealing directly with corporations to encourage their responsibility for the environment.

What Vision is mostly concerned with is "townscape," a word Fleming admits he never heard around Harvard's Graduate School of Design when he was a student there. "It seems to have got lost somewhere between architecture and planning," he says. "In fact, the problem with both the preservationists and architects, and I count myself as a preservationist, is that we have concentrated so much on single buildings, the most historic building on the block, the most interesting, the most nostalgic, leaving the rest of the block to go to pieces. We haven't developed the strategy for saving the block, which, ironically, would make it easier to save the house."

Not that Vision is in the business of museum-type restoration per se. Its overriding goal, Fleming explains, is "to maintain a viable environment for a diversity of activities—to attract people away from the shopping centers by helping them discover a downtown which is fun to be in, which enriches their lives." He adds that even more basic to his organization's effort is its attempt to reawaken a sense of community in a mobile, often rootless society, to use the visual environment as a means of "connecting people back together again."

Out of such theories has come a paying clientele: people who have an interest in, and loyalty to, their town. And Fleming contends that "architects who fail to see the context of their work, who simply do the design and walk away, are deprived of this broad clientele." This is one reason why community involvement and advocacy is for Fleming more than the usual cautious, if courteous, gesture. Vision's theories were brought together and many of its techniques developed in its first townscape project, the conservation of the old seaport town of Portsmouth, N.H. During the summer of 1973, the organization was brought in as a consultant to the town by Robert Thoresen, the city planning director, and by Strawbery Banke, Inc., a private urban renewal project. Both were becoming alarmed over the history of what remained of the town's 17th, 18th and 19th century heritage. Thoresen organized a one year advocacy project for downtown Portsmouth, after obtaining financial aid from the National Endowment for the Arts, the New Hampshire Bicentennial Commission, the National Trust for Historic Preservation, some local private foundations, and, not least of all, local merchants and the chamber of commerce. What began as a demonstration project has since been expanded into a five-year capital improvement program to revitalize the central business district and, thereby, stimulate private investment.

The aim of Vision's plan for Portsmouth was to "re-establish the sense of place in this town, with the least disruption of city life, the least cost, and mostly..."
the face-lift of Exeter, N.H., a civic green space that re-establishes a link between town hall and bandstand.
An advocacy approach 
that can pay off
in expanded markets.

private initiative." The plan had several elements: reviewing and analyzing the man-made environment to determine just what was memorable; creating alternate designs for the town as a whole, as well as for its key districts and spaces and specific eyesores; developing visual guidelines for lighting, signage and facades, and free "design clinics" for the townspeople.

After marking off historic districts and areas of visual discontinuity in Portsmouth, Vision turned to strategic spaces, like the old market square. Located at the heart of the town and dominated by the old Congregational Church, it had "sold its birthright for a mess of parking spaces." The houses on the street bordering it had at one time provided "a model of historic continuity," but they had been allowed to mutate into "shrill egos." It was here that Vision staff members applied their first design solutions, designating this row of buildings as "the model block." Concurrently, they set out—as they customarily do—to enlist the sympathy and support of the community.

In the belief that most people simply are not aware that alternatives exist, Vision devotes a good deal of time to heightening such awareness. Its staff members understand full well that people are reluctant to buy pie-in-the-sky plans. Therefore, they typically start out a community with small projects that are achievable, like a minipark or a square. "You don't have to revolutionize the capital improvements budget of the community to effect change," says Fleming. By showing people that they can indeed shape their own environment, Vision hopes to spark an interest, which will ultimately affect corporate design standards on a national scale and result in a visual code of ethics and design review boards—methods through which qualitative measurement of the environment could be implemented. Says Fleming: "We have regulations for everything from meat to balloons, but haven't done anything about this problem, at least not on a national or state level, and most of the local measures have been inadequate." He finds that it is an exceptional town indeed that has "refused to let the flaming arches in."

Among Vision's techniques is the walk-in exhibit, one of which was strategically assembled at Christmas time in a post office in Windsor, Vt. Making frequent trips to their mailboxes, Windsorites couldn't help but take notice of the display showing what the town could be like.

To help generate a sense of poignancy over the ruined environment, Vision will show what a tree-lined street looked like prior to its conversion to a parking lot. Vision's design clinics, an effort at one-to-one conversations with each merchant and property owner, are perhaps its most innovative technique. They consist of staff members simply listening to people, attempting to understand their fears and reservations. Fleming explains: "Most architects tend to talk only to the people who pay them, the people who probably are already convinced. But what you have to do is reach the people whose incremental decision making will affect the final result—to find that recalcitrant son of a bitch who lives out of town, who doesn't understand what you're trying to do, and who owns the property. You have to convince him that it's in his interest to do this and then show him where to get the dollars to accomplish it. It's that extra kind of push."

In all these techniques, Vision relies heavily on graphics, sometimes drawing out entire blocks. "You can talk up a blue streak, but until you have a drawing of what it will look like, and it becomes a part of the plan, people are not going to buy it," says Fleming.

All these techniques were called into play in Portsmouth, as Vision sought to persuade merchants to reevaluate the familiar environment in which they lived and worked. Staff members showed them alternate ways of handling facades, and more appropriate approaches to signage (pointing out, for example, that banking is not "an instant impulse activity—that people are not apt to leap out of their cars to go banking")., and they helped them to see the advantage of a "quality image." As the merchants began to regard their property in new ways, they became less reluctant to part with the plaster fronts and mansard roofs that had little relation to the structures behind them.

While making every effort to sell their design schemes, Vision staff members never lost sight of practical consideration and the limits they impose. They recognized that the owner of the luncheonette or the hardware store was not about to give up his square footage and that to ask the jeweler to give up his parking lot would be to court crucifixion on a parking meter. Instead, they might suggest that the jeweler mask the parking lot with a strip of trees (bigger than the usual "buggy whips") and maybe a little wall and cap it all off with a minipark. "Not a single parking space has been lost, but some amenity has been captured for the public," Fleming explains.

Vision exhibits similar insight into commercial motives when confronting the corporate "biggies." For example, even before it commenced the Portsmouth project, it was convincing the Arco people there to do an "environmental audit" of their service stations, which dotted the townscape like so many "porcelain exclamation marks punctuating federalist sentences." Vision pointed out to the petroleum giant that there were enormous public relations benefits to be reaped from making changes. And, finally with the backing of the chamber of commerce, and letters of endorsement and support from the townspeople, Arco's oversized signs were scaled down and walls, landscaping and brick sidewalks installed. Although not exactly spontaneous, these did stand as one of the firm's concessions to the public will, and they showed how effective Vision's "public pressure" theory of corporate change could be.

In approaching Exxon, Vision appeals even more directly to corporate public relations instincts. Its inquiries by mail having gone unanswered, it placed a strategic article in the National Petroleum News. As predicted, this succeeded where more conventional overtures had failed;
Fleming's response was swift and cooperative. "It wasn't so much that they wanted to look good, simply that they didn't want to look bad," observes Fleming. It is not only a desire to maintain appearances that effectively elicits cooperation; just as often it's the desire to avoid the hassle of Vision's review board. In Pennington Falls, Vt., for example, Vision was able to convince Gulf Oil to adapt its service station designs, resulting in what Fleming estimates are the first 6-foot caliber trees ever planted by Gulf—$30,000 improvement. And all because the city manager insisted that Gulf go through Vision's rigorous design review process. Gulf opted for what it regarded as the lesser evil. Of course, here, as elsewhere, Vision never pretended to be anything more than an advocate. "It's always up to the city to follow through," Fleming stresses, "and a lot depends on whether the city planner and manager are chicken-hearted or not." Unfortunately, in his experience, they very often are.

But advocacy still has its satisfactions, and it also has its practical advantages for those seeking something beyond volunteer work. It has markedly improved Vision's own fortunes and has generated work for other architects and designers. Fleming accounts for the success of his approach by contrasting it with the more usual client search tactic: "Architects neglect an enormous potential clientele. Everyone waits until there's already a client and then gangs up all at once. Maybe 60 people apply for one job." He cites a recent state-sponsored housing competition in Boston as typical: "I think there were 25 firms—think of the millions of man-hours that went into that competition! If these people had spent the same amount of time going out to places that have character and got their act together and showed people what could be done, they could have generated those dollars from the town and made clients of them. Many towns want to do these things and have the money to do it, but you have to give people reasons for spending their money. The reason is to have a sense of community. If you start building that larger philosophical goal, the money will come. People will find ways of doing things."
Determining an Employee’s True Compensation

James A. Greene, AIA

Direct personnel expense (DPE), as defined by the Owner-Architect Agreement B141, is “the salaries of professional, technical and clerical employees engaged on the project by the architect, and the cost of their mandatory and customary benefits such as statutory employee benefits, insurance, sick leave, holidays, vacations, pensions and similar benefits.” This is a fairly uncomplicated statement, and we all probably understand it—differently. The interpretation varies in different parts of the country—in fact, in different offices across town.

With the advent of cost-based compensation agreements, it is important for the architect to understand his personnel costs and which of these he is allowed to consider direct costs. This is a major factor in AIA’s new Compensation Management Guidelines for Architectural Services.

This article is not going to unravel the intricacies of the problem—that is for each individual to work out between himself and his client. It will, however, outline a procedure which has proved very effective in understanding DPE on one of the most important levels, that of the employer and employee. The employer’s understanding of his cost will better allow him to negotiate with his client on the cost of his services.

Most employees do not know what their total compensation or cost to the firm is, and many are really surprised to find out (and in some cases, so are their employers). Several years ago, we developed a simple form to show each employee his cost to the firm in salary and benefits.

The form shown here is filled out in duplicate when an employee is hired—one copy for the employee and one for the file. At each semiannual salary review, or whenever a salary adjustment or benefit addition is made, a new form is filled out. The office duplicate is stapled on top of the old form, giving us a complete history of raises and benefits for each individual.

We have introduced the form to architects in our area through seminars and chapter programs. Many offices have modified and adopted the form with great success. It is an easy in-house form to develop, but it is usually modified at least once a year because of benefit or tax changes.

The form, as we use it, is broken down into four sections. The first section gives the name, date and salary information. In our firm, salaries are set on a monthly basis and paid bimonthly. This section, on the office duplicate, serves as an easy reference in making salary adjustments on the paychecks.

The second section outlines and totals the cost of vacation, sick leave and holidays which may be included in the salary. This is a real cost that amounts to about a month’s pay a year and should be pointed out to the employee.

The third section outlines the fringe benefits the employee is receiving in addition to his salary. These items are a large part of overall compensation. This is the area also where the benefits that you give may not be allowed by your client or contract. For example, if you have a pension plan where a set percentage of the salary is contributed, then it is usually acceptable as a personnel expense, while a profit-sharing plan or bonus plan in which the contribution is discretionary is not. The same would hold true for such items as refreshments or organizational dues, which are definitely a part of compensation but may not be allowable as “customary benefits.”

Taxes and licenses are included in the last section. These are put in a separate section because even though they are a mandatory cost to the employer, the employee derives no benefit from them. The exception would be if the employee were required to pay his own registration costs. This section includes costs that many employees do not know exist and are surprised to learn about.

The total compensation is the total of first, third and fourth sections, and the total of benefits is the total of the last three sections. From these you can find each individual’s DPE factor (divide total compensation by annual salary). The totals from all the employee’s forms can be used to develop the firm factor.

In the development of your firm’s factor, you should, of course, exclude those costs that may not be allowable by certain owners or governmental agencies. These costs must then be picked up in overhead and included in your indirect expense factor.

The Case & Co. Profit Planning in Architectural Practice, published in 1969, sets the cost of benefits and taxes at about 25 percent. The more recent California Council/AIA document, Cost of Professional Services, states the average cost for recommended personnel policies and benefits is 27 percent, and the Handbook of Professional Practice by the Architectural Society of Ohio/AIA says it may be as high as 30 percent.

Architects whose firms are using the form agree that it is a good tool in their personnel management program. It not only shows the employee just how much he is really making, but also gives him something to compare with in the job shopping market. In our office one employee, in discussing his sheet, requested and got a $3 a week raise instead of a $15 membership that we were offering.

Mr. Greene, who is chairman of the subcommittee on communications, AIA office practice committee, is a principal in the Tampa, Fla., firm of Harvey/Greene Associates.
## Employee Pay and Benefit Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>Arch E. Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date</td>
<td>1 Jan. '75</td>
</tr>
</tbody>
</table>

### Salary:
- **Annual**: $12,000
- **Monthly**: $1,000
- **Semi-Monthly**: $500

### Deductions (Semi-Monthly):
- **Withholding**: $70.10
- **FICA**: $29.25

### Typical Paycheck: $400.65

### Comments:
- Dependent Medical
- (24.85%/mo) deducted at mid-month check.

---

**Included in the above compensation are benefits outlined below:**

- **Vacation** (2 weeks per year): $461.54
- **Sick Leave** (5 days per year): $230.77
- **Holidays** (6 days per year): $276.90
- **Total Cost of Included Benefits**: $949.21

*Additionally, the firm has various benefits. The annual cost of these benefits is outlined below:*

- **Medical Insurance (Including $4,000 Life Insurance)**: $235.20
- **Disability Income Insurance ($500/month)**: $298.80
- **Pension Plan (8% of Pay Includes $6,000 Life Insurance)**: $960.00

### AIA Dues:
- **Office Refreshments**: $40.00
- **Management Seminar**: $100.00

**Total Additional Benefit Cost**: $1,890.00

---

**The firm is required to pay certain taxes and costs attributable to your employment:**

- **FICA** (5.85% of the first $14,100): $702.00
- **Unemployment Taxes-Federal & State** (1.5% of the first $4200): $63.00
- **Workman's Compensation Insurance**: $19.80

### Registration
- **City & County License**: $40.00
- **Total Additional Taxes and Costs**: $914.00

**Total Compensation (Including $2,804 23.4% for Benefits & Taxes)**: $14,804.00
I graduated from MIT in 1918 and immediately entered officers training school. I was not sent overseas so by Christmas of 1918 I was discharged from the Army. A year of work as a draftsman followed. In 1920, one of my fellow draftsmen and I decided to open our own office. We had no work in hand, but the day after we opened our office his church burned down and we had a job.

We had soon started sketches on a second job when one of the older members told the owner he would do the work for 1.5 percent less than we were to be paid, and the work was taken away from us.

A year or so later my partner was awarded a scholarship at MIT to do graduate work. I went back to work for a firm of architects, but this lasted only a year when they dissolved their partnership.

In the next two years, I did two small houses. But by 1925 the situation seemed hopeless here at home. If I stayed, I would stagnate waiting for work to open up. So in the fall of 1925 I went to Pasadena, Calif., as office manager for Wallace Neff. This was a wonderful experience for me for I learned how to do things I had always dreamed of. But 1930 brought an end to his work and his office was dismantled.

In 1929, while working for Wallace Neff, and with his approval, I had started plans for a house in Salt Lake City for which construction started in 1930. In that year, I obtained another house for a client who took advantage of the depression prices to build.

By the fall of 1932, I had to have work and was able to do appraisals for the Mortgage Insurance Co. in Los Angeles (the company was being liquidated) for $150 a month.

By late 1935, I had developed a little work and the next year I was back in practice again, so that by 1940 I had an office with seven men. But the ominous European situation caused work to drop off and, of course, Pearl Harbor put an end to all residential work.

To help out the war work, and to help myself find work, I went to government night classes and through that got work in the drafting department of one of the shipyards in San Pedro. Three years of this with traveling 35 miles a day and with 35 hours of sleep a week proved too much for me, and in 1945 I changed to the drafting department of the moving picture studios. In the early summer of 1946, the carpenters and painters at the studios went out on strike. Because the art department was a part of the Painters' Union, we had to have work permits from the union, which meant that I walked the picket line.

On the picket line one day occurred a conversation which has colored my views since. The strike was lengthening out and the men were losing money rapidly. I was walking with one of the painters and said to him, "You carpenters and painters are missing an opportunity. No one has been able to get odd jobs of painting and carpentry done during the war. If you men were to ring a few doorbells, you ought to find lots of work." His answer was, "I'm getting old and after I walk the picket line I'm tired." As a matter of fact, he was two years younger than I. After I left the picket line, I went home and spent five or six hours developing work which was beginning to come in.

Good work continued until 1953 when my wife died. My daughter and her husband were in Germany in the Army and were uncertain where they would go for his Ph.D. Despite our many friends in the Los Angeles area, I decided to return to Salt Lake City where I had for years had about a third of my work. Work in Salt Lake was good with some fluctuations, and I was able to do some beautiful houses.

In 1964, I had a chance to do a big motel in Cheyenne, Wyo. I had underestimated what my fee should be, so I found myself severely in debt toward the end of my work. But I felt I had no recourse except to complete my contract, which I did. Three years later that paid off and in the next few years I did several million dollars worth of work for that client.

How does one survive? By loving architecture and returning to it again and again after every deflection. Georgius Y. Cannon, FAIA, Salt Lake City.
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Graphic Communications in Architecture.  

This book, the second produced by the author having to do with the standardization of drafting language, "is concerned in general with graphic communications in architecture and the building industry and concerned in particular with architectural working drawings. The book has a three-fold purpose: to explain architectural drawings to architecture and drafting students; to provide a useful format for architectural working drawings for architecture schools, drafting schools and architectural engineering firms, and to improve graphic communications in architecture for the building industry."

From the standpoint of providing an explanation and usable format for architectural drawings for architectural and drafting schools, the book is successful. It defines the types of architectural drawings produced in conventional practices. Its use as a textbook would provide the student with a good basic understanding of architectural drawings, with particular emphasis on working drawings and related terminology.

The author writes, "The design professions, composed mainly of architects and engineers, prepare drawings during all phases of professional service. The ultimate purpose of the drawings is to transform a design concept into a building reality. The drawings are a means to an end, and, therefore, should be prepared efficiently and economically and should convey information concisely and unambiguously."

"Presently each established design firm has its own unique graphic language for working drawings, and each newly formed firm is forced to devise its own. Some are good. Some are bad. They are all different. The proliferation of graphic languages, partly comprised of drafting standards and symbols and techniques for presenting drawings, increases confusion in the building industry resulting in higher construction costs, lower construction quality, and, ironically, lower professional profits."

The author assumes that established design firms have their own unique graphic language for working drawings. It would be good to believe this, but in reality there is a significant percentage of established design firms which have not formed a consistent graphic language and technique for their drawings. For those firms, this book would serve well in presenting a format on what a drafting standards document should be.

For those architects in design firms that already have drafting standards documents, this book serves only for the review of another set of standards. The book can take its place along with the multitude of standards that exist in design firms throughout the country.

The author, however, does make a very important point in the book's introduction: "The design professions, in particular, and the building industry, in general, need a standard, flexible (permitting different dialects), and expandable graphic language (or notation system) to accommodate present and future design, construction and contractual techniques. The building industry needs immediately a standard format for working drawings to complement the nationally known and accepted Construction Specifications Institute Format for Construction Specifications."

O'Connell goes on to explain why such a format is not only desirable but ultimately necessary. It is an opinion well worth expressing and should be solidly supported by the design profession. It is commendable that the author speaks as he does by preparing what could become the basis for discussion of a standard drafting format.

The book contains a lot of solid information that could assist students, young graduates and design firms in understanding architectural drawings and the reasons for standardization. For those in the profession who already have made some attempt at standardization (most recently the AIA standard symbols and abbreviations), the author, through this book, points the way and invites those interested to join him in the crusade for a standard drafting format. He even suggests the possibility of the establishment of a construction drawings institute.

The book is available from Stipes Publishing Co., 10 Chester St., Champaign, Ill. 61820. Jerry Quebe, AIA


This beautifully illustrated book on historical and contemporary urban design focuses on large-scale projects rather than comprehensive planning. Although the inventory and lessons drawn cover European and American projects, there is a definite New York bias. The thesis is that urban design can save cities. There are chapters on such subjects as the downtown, the street, the urban highway, transportation, housing, historic preservation and land use regulation.

Even at $20.50, the book is a bargain. The superb quality in content and production is only possible because of a Ford Foundation grant. Although Rockefeller Center, Ghirardelli Square, John Portma hotels, the John Hancock Center and the Dymaxion House do not solve the social and economic problems of urban environments, such examples, as well as many others included in the book, do give us a glimpse of some creative thinking to which we can aspire. Michael B. Barker Administrator, AIA Environment and Design Department
One thing you can be sure of in the current energy situation; clients are no longer taking electrical systems for granted. People who pay the bills now are concerned about the potential cost of future operations as well as the cost of installation. That goes for all users and specifiers: government, commercial, industrial, and residential. But you probably already know that.

You also know that electrical systems should be designed to operate as efficiently as possible, because when the time comes to install cable, conduit, and fixtures, it might be too late to save energy. That's why it could be helpful to work with a qualified electrical contractor early in the design stages of a project. Planning an efficient electrical system is a lot easier than trouble-shooting a fuel-waster after construction.

Professional electrical contractors can give you just the support you need. They're familiar with lighting, heating, communications, security, motors, standby and emergency power, automatic controls, and a lot more. You'll be obtaining the benefits of specialized manpower, the latest installation equipment, and professional job-management expertise. Can your clients afford anything less?

Professionalism doesn't cost. It pays.

National Electrical Contractors Association, Inc.
Washington, D.C. 20014
'A Woman's Work Is Never Done': We have been collecting basic data for a solar designed house and have discovered a completely overlooked source of heat that should be investigated. Specifically, this has to do with heat generated by people within an enclosed structure—a source of heat available year-round that can be utilized in the interest of energy conservation. In the past, this load was calculated only for total heat gain, on which airconditioners were selected.

A single person emits 140 Btu sensible heat per hour and 98 Btu per hour latent heat, when lying down. If the person is passively active, this goes up to 215 Btu per hour and 500 Btu per hour respectively. Further, since the amount of heat generated by a human body is a function of the clothing worn, it stands to reason that a nude person will emit more heat to the atmosphere than will a warmly dressed (and insulated) person. Therefore, we could reduce the cost of heating our homes if we all went around in the nude.

This, however, is not entirely practical when you study the physiology of the human species. Specifically, children are more susceptible to heat differentiation than are adults; so they should not participate. Further, the male of the homo sapiens burns his personal fuel very rapidly and is soon depleted. If he maintains fairly active duties, or they undertook what he could within those limits, knowing that he could not use many of his statutory powers. The proof of UDC's limits came with the Westchester affair.

Robert S. Sturgis, FAIA
Cambridge, Mass.

New York State Urban Development Corp.: In the February issue, Kenneth Harney's comment that "UDC's biggest problem is not with politics... but with municipal bonds and the people who sell them" does not get at the truth. The decision of why, when and how to float municipal bond issues are political decisions. The statement also implies that politics is something other than the efforts of individuals to get the most of what they want for the tax dollars they must spend. Not so.

Harney's article itself contains the refutation to his statement that "UDC's enabling law... gives it no method of generating subsidy money itself." With the statutory rights to "develop... commercial... and industrial projects without complying with local zoning ordinances, building codes and other restrictive local regulations..." what better source of revenue could be found to subsidize civic and residential projects?

The fact is that UDC's enabling statute was worth no more than the two men who wrote it. Regardless of the words—and in contrast to Harney—Ed Logue knew perfectly well that the whole process depended on his own abilities and motivations backed up by Governor Rockefeller's political and financial power. He undertook what he could within those limits, knowing that he could not use many of his statutory powers. The proof of UDC's limits came with the Westchester affair.

Robert S. Sturgis, FAIA
Cambridge, Mass.

June 23-25: Legal Aspects of Architectural and Engineering Practice course, University of Wisconsin, Madison, Wis.


July 7-9: Design Methods Group International conference, Berkeley, Calif. Contact: Donald P. Grant, P.O. Box 5, San Luis Obispo, Calif. 93406.


July 9-12: Conference on Alternatives in Energy Conservation: The Use of Earth Covered Buildings, University of Texas, Arlington, Tex.


July 14-18: Institute on Industrial Archaeology, Rensselaer Polytechnic Institute, Troy, N.Y.


July 21: Postmark deadline, receipt of entries, Prestressed Concrete Institute awards program. Contact: PCI, 20 N. Wacker Drive, Chicago, Ill. 60606.


Aug. 11-30: International Congress on Metropolitan Development, Amsterdam Holland. Contact: MAUDP, P.O. Box 722, Church St. Station, New York, N.Y. 10008.

Aug. 11-21: Specification Writing short course, University of Wisconsin, Madison, Wis.

Aug. 18-23: Course on Aqueous Corrosion of Engineering Materials, Ohio State University, Columbus, Ohio.


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Continued from page 18

Sandys is quoted as saying in an interview, “If a community isn’t interested in saving its own past, then governments certainly aren’t going to take the trouble and money to do it.”

The projects for Heritage ’75 are diverse. In Great Britain, where the national council established to guide restoration efforts is headed by Prince Philip and made up of representatives from all walks of life, plans are to raise $8 million for the repair of Canterbury Cathedral. At least 500 projects are underway, including the restoration of the Georgian area of Edinburgh, Scotland. But Prince Philip is quoted as saying that “no project is too big and no action is too small to make this campaign the success it needs to be.” An architectural heritage fund has been set up to provide loan capital to assist preservation organizations, and the government will match pound for pound voluntary contributions raised to a maximum of 500 thousand pounds.

Preservation Projects

The Department of Housing and Urban Development has published a new catalog that profiles 100 local neighborhood preservation projects across the country. The catalog, prepared by the Real Estate Research Corp. of Chicago, gives detailed descriptions of 61 such programs and shorter descriptions of 21 others.

Deaths

Walter J. Brach, Lynbrook, N.Y.
Carl Britsch, FAIA, Toledo, Ohio
Leo E. Dixon, Daytona Beach, Fla.
Merton E. Granger, Syracuse
William C. Henry, Scotch Plains, N.J.
Russell S. Johnston, Largo, Fla.
Richard Koehler, Manchester, N.H.
H.R. Land Sr., Monroe, La.
Maurice L. Lavanoux, Hon. AIA, New York City
J. Burnham Maylard, Coral Gables, Fla.
Monroe E. McGibeny, Decatur, Ga.
James P. Milam, Greensboro, N.C.
Rayford L. Newman Sr., Largo, Fla.
William Graves Perry, FAIA, Boston
Walter F. Petty, FAIA, Columbia, S.C.

Harold T. Spitznagel, FAIA: “Spitznagel—Mention the name and it brings out a smile. It makes those who know him remember a joke or a jest or a quick witticism.” So said the AIA Journal in a Practice Profile on the Spitznagel Partners Inc., Sioux Falls, S.D. (see Jan. ’70 p. 35). An avid traveler, Spitznagel once came home from Europe to find that the staff of his firm had turned his office building into a filling station, replete with red gas pumps and banners announcing free prizes.

Harold T. Spitznagel, called “Spitz” by his many friends in all parts of the country, died on April 26 in his home town after many intermittent weeks of hospitalization. A former vice president and regional director of AIA, he also served as president of the South Dakota chapter/AIA. He was an award-winning designer who elected to spend his career in Sioux Falls despite many offers in the East after his graduation from the University of Pennsylvania.

His first design project was for a new front for a bakery, and he received his first commission in bread and cakes. He went on to better paying commissions and designed such structures as the University of South Dakota library; the Bethlehem Lutheran Church in Mankato, Minn.; highrise dormitories for Augusta College in Sioux Falls, and the First Congregational Church in Spencer, Iowa.
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Newslines

William Shurley Vann, AIA, of Alexandria, Va., has been appointed by Governor Jim Holshouser of North Carolina as a member of the Historic Murfreesboro Commission, created to acquire and dispose of properties in and near the North Carolina town, to repair and maintain historic sites and to conduct research on the preservation of such sites. Vann is a native of Murfreesboro.

The Rome Prize Fellowship in architecture for 1975/76 has been won by Peter Kommers, partner in the Bozeman, Mont., architectural firm of Don McLaughlin-Peter Kommers.

A. Quincy Jones, FAIA, has been appointed dean of the school of architecture and fine arts at the University of Southern California.

The Society of Architectural Historians' book award has been given to Laura Wood Roper for FLO: A Biography of Frederick Law Olmsted (see July '74, p. 61). Her book was cited as the most distinguished work of scholarship in the history of architecture published in the two preceding years.

George J. Mann, AIA, president of Resource Planning & Development in New York City, recently represented the U.S. State Department at an international meeting in Nairobi, Kenya, on "Planning Health Facilities under Conditions of Limited Resources."

"Design for People—Or Maybe Not" is the title of a 12-minute, 16mm film with sound that portrays selected citizens' reactions to federal publications, signs, educational materials, etc., focusing on the need for the designer to address specific needs of people. It may be borrowed from the National Endowment for the Arts Film Library, Association-Sterling Films, 866 Third Ave., New York, N.Y. 10022.

Two architectural firms have received the William E. Lehman award for architectural excellence from the Newark Chamber of Commerce. Citations went to Gruzen & Partners of Newark for the design of the Beth Israel Medical Center and to Gruen Associates of New York for the Gateway II complex. The annual award has been given since 1957 to architects of buildings "which contribute most to the city."

The American Society of Civil Engineers has selected the Keowee-Toxaway project, a $700-million generating complex in the western part of North and South Carolina, as the outstanding engineering achievement of 1975.
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