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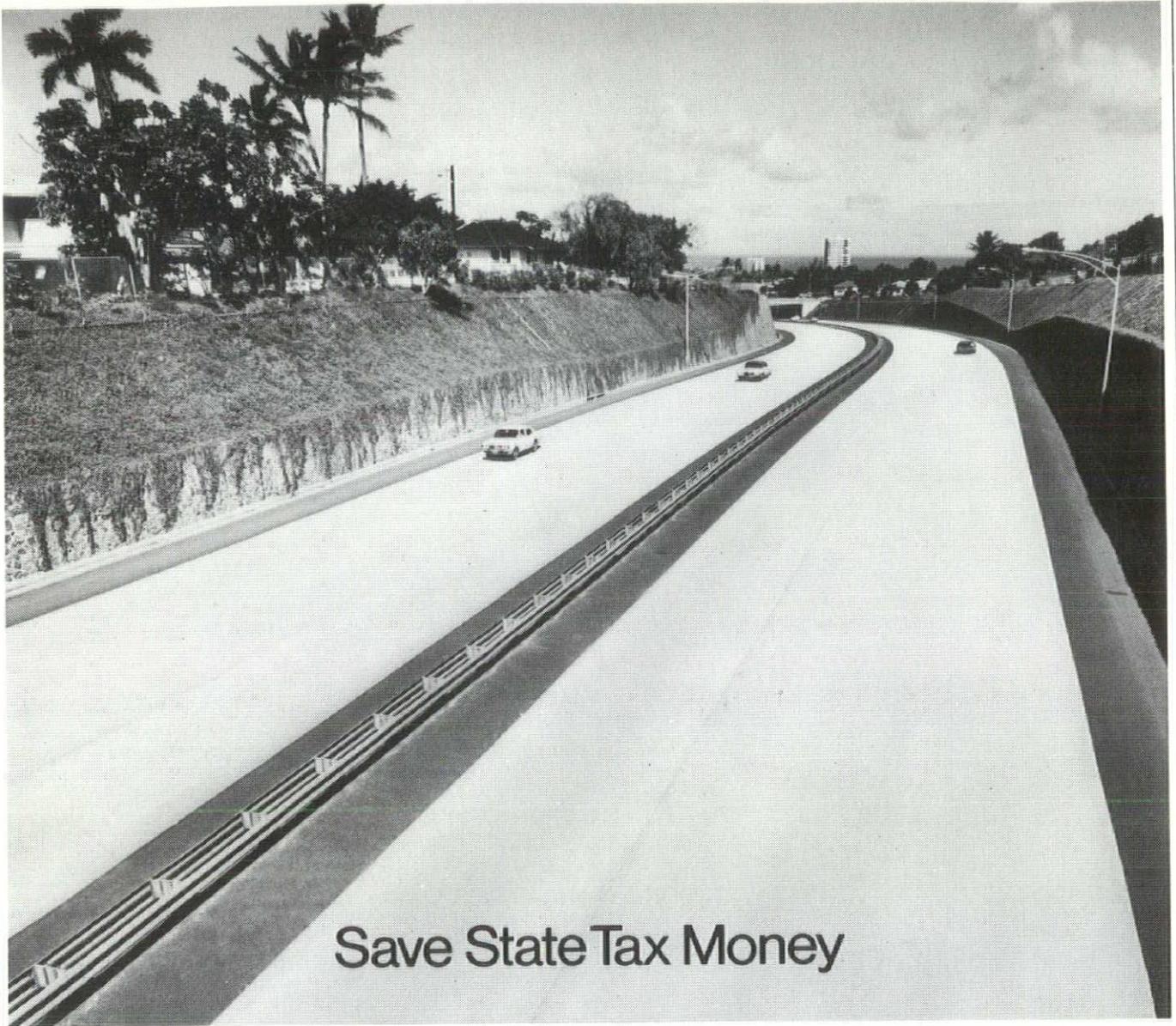
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the journal of the hawaii chapter, american institute of architects





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PRESIDENT'S MESSAGE

By Don Dumlao AIA

The Editorial Board's "Where Does the AIA Stand?" is an important statement on Hawaii planned growth policy and I feel it should preempt my prepared President's Message.

AN EDITORIAL

Where does the AIA stand? We talk about a better quality of life, a better environment, more community involvement, a national growth policy, public relations, a better image, etc., etc.

When it comes down to real issues, personal involvement of real choices between a controversial stand or a safe noncommitment, where does the AIA stand?

We as architects abhor the current housing situation in Hawaii. We condemn speculative developers who profiteer from the land while giving so little in return. We cringe at the continuing over-built condition of Waikiki. We pay lip service to better planning, better architecture, a better quality of living for all of our citizens. When the count is tallied, where does the AIA stand?

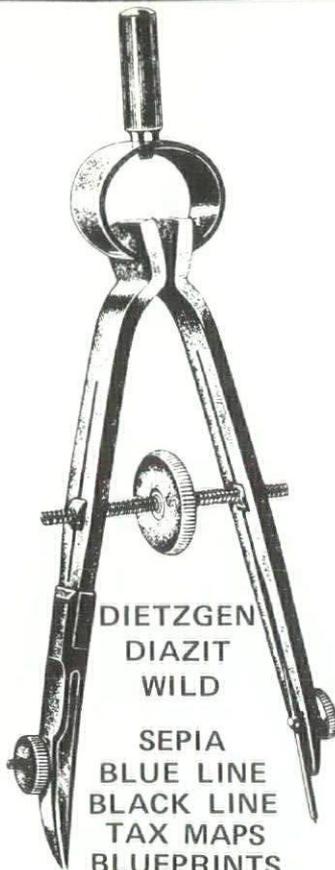
This year the State Legislature passed another developers bill which is designed to circumvent planners and architects in the name of "the people and progress." The very things which we have been advocating for years: comprehensive planning, movement away from land-inflating speculation, a well-studied and directed growth, have been side-stepped by this bill. Where does the AIA stand?

The City Council has passed an amended Civic Center Plan (Council Bill 64-1971) which spells disaster to the bold "Great Park" concept, with its great vista from the sea to mountains. Every portion of the amended bill is designed to give a building advantage to one special interest group or another at the expense of the original park plan. To add insult to injury, they removed jurisdiction for the review of the amended plan from the planning department and placed it in their own hands. Where does the AIA stand?

Some members of the AIA continue to produce buildings and complexes of buildings which contribute to the further deterioration of our environment. We cannot speak out against them for they are fellow architects — members of the club. How much longer can we condone, justify, and protect malpractice in the name of architectural ethics? How much longer can we continue to be a protectionist organization of self-perpetuators and still hope to gain respect and credibility? Where indeed does the AIA stand?

The time has come for architects to stand up and be counted in the continuing fight for our environment. The AIA is people, you and me . . . indeed, where do you stand?

I don't know where each of you stands, but as your President, I feel it is time that the Hawaii Chapter, AIA commits itself to full equality public interest versus private interest and begins to take it out of rhetoric and put it into practice. Those of you who feel the same, please contact me and commit yourself to the task; and those of you who don't, had better let your feelings be known.



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The Department of Architecture And Allied Studies — It's Philosophies and Goals

By A. BRUCE ETHERINGTON, Chairman
B. Arch., M.A., MRAIC, AIA

The unique geographical situation of the University of Hawaii offers many opportunities for the school to create and participate in programs not available elsewhere. These include Marine Programs, Asian Studies and conditions unique to archipelagoes and tropical environments.

These special characteristics manifest themselves in several emphases offered by the school, all of which are based on the concept of regionalism as a viable factor in design. For purposes of defining these emphases, a triangular region extending from Hawaii to Taiwan to Indonesia was evolved. The significance of the triangle described lies in the surprising number of features common to the areas and countries lying within this triangle. For example, all are either surrounded by or intimately connected with water, all have some or all regions of fairly recent volcanic origin, all share a wet humid tropical climate, almost all are in a transition state from a rural-agricultural to an urban-industrial economy, all include some range of racial intermix from black through brown and yellow to white, all include at least two religious faiths, and some include up to four, and all have at least 80% of their population concentrated along their shorelines.

Architecture and planning within this region faces the problem of housing vast numbers of people with relatively few supporting technical or economic resources. This constraint calls for a multi-educational process since the various parts of the region are developing at different rates. Hawaii, Pago-Pago, Djakarta and Singapore for example are all at different stages of development.

Architecture and planning in this region therefore must range from the development of housing under the most primitive of conditions to the complexity of solving Honolulu's mass transit headache. Education in the tech-

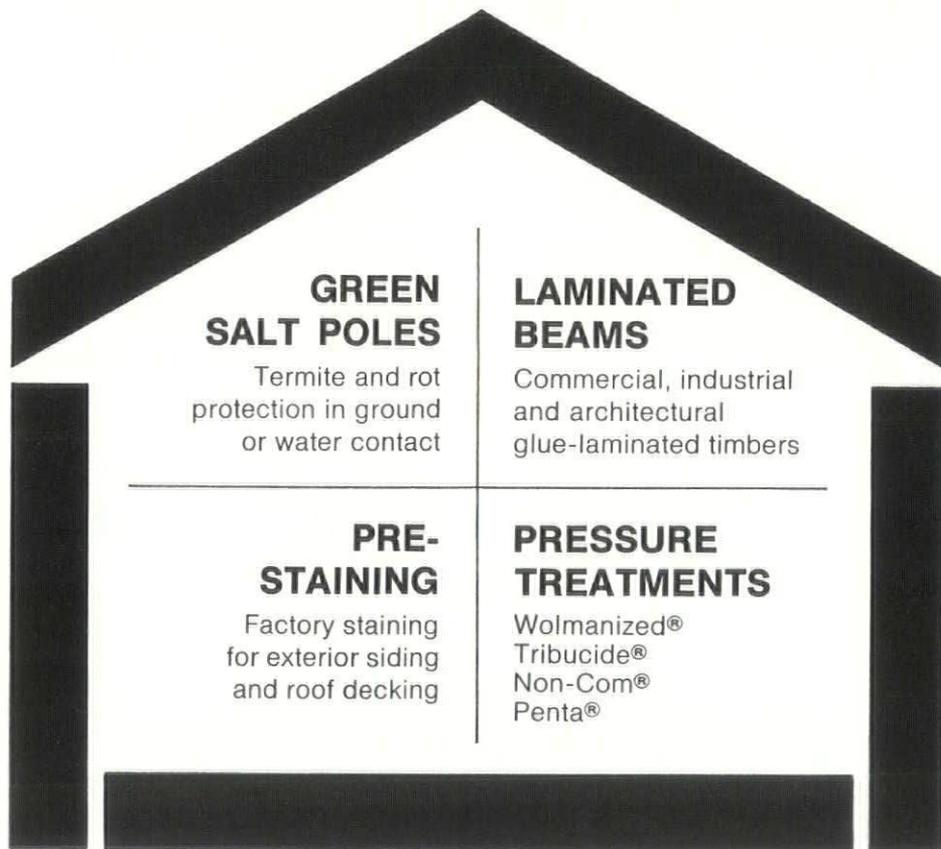
niques of design and construction must, consequently, have an equally wide range.

On one hand architecture and planning can be expected to become involved in projects of larger scale and complexity, working with other specialists in such fields as engineering, planning and landscape architecture as part of an integrated team. On the other hand, future architects may be called upon to provide services at a very low technical level, but one requiring considerable resourcefulness and ingenuity. The development of the more primitive areas of the Pacific Basin for example, requires the adaptation of native techniques and materials, the utilization of unskilled labor and a limited amount of modern building equipment. Solving these kinds of problems calls for basic training in such courses as engineering, sanitation and other utilitarian sciences necessary to raise minimal physical standards of living to an acceptable level. At the same time architectural and planning solutions have to be of such a character as to maintain harmony with the historical and cultural links of the primitive societies involved. The architect, in this case, must be very much aware of the social and aesthetic sensibilities of the people for whom he is designing.

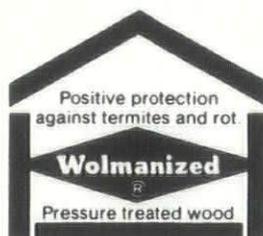
(Continued on page 12)

In order to keep the local architectural community up to date and informed, this month *Hawaii Architect* focuses on the University of Hawaii Department of Architecture—on the facility, the faculty and the programs. The past few years have brought significant maturity to the department and its graduates reflect this, through increased capabilities. The accreditation team from the National Architectural Accrediting Board "left smiling" after their recent visit.

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ARCHITECTS SKETCH

Bruce Etherington, Hugh Burgess, David Terazaki

By J. M. NEIL

The Department of Architecture at the University of Hawaii has come a long way in just nine years. Beginning as a pre-professional program in 1963 with one faculty member, one room (216 George Hall), and about 30 students, it has grown to be a department with undergraduate and graduate professional degree programs, nearly 300 students, a large faculty, and a very comely physical plant misleadingly known as "George Annex."

Many people have played important roles in this success story, not least the students. Without their dramatic (and technically illegal) occupation of the old Hale Aloha in 1964, to cite only one example, the Department might not have survived various kinds of administrative and financial threats to its existence. Nevertheless, no one knowledgeable of the Department's history would deny that three faculty members have been crucial in its development: A. Bruce Etherington, Hugh Burgess, and T. David Terazaki. Their skills, backgrounds, and particular interests have

blended to set the pace and direction of departmental growth.

Bruce Etherington, chairman and original faculty member, has shown the administrative ingenuity and tenacity so vital for any fledgling institution. Bruce comes from Canada, born in Hamilton, Ontario in 1924. After undergraduate training at McMaster, Toronto, and Cornell Universities, he set up his own practice in Toronto in 1951. For the next twelve years, while maintaining his practice, Bruce also lectured at the University of Toronto and the Ontario College of Art. Hankering for a change, he came to the University of Hawaii as a result of several earlier visits to Hawaii and contacts with Fred Preis and Murray Turnbull. Since then he has worked hard and effectively to build up what is now the Department of Architecture. Although those efforts have left no time for architectural practice, Bruce has certainly not rested content with his work as a teacher and administrator. His list of publications now numbers forty-three items, of which thirteen appeared since 1963. Last year he received a master's degree in Development Planning from the Department of Political Science, with a fascinating thesis on the Tondo (a squatter ghetto in Manila), and he is now writing his dissertation for the Ph.D. in Development Planning and completing a master's degree in Environmental Planning at the University of the Philippines.

Bruce has strongly emphasized three criteria in faculty selection and curriculum development, in addition to the obvious and essential need to have a well-balanced program of high quality: a faculty that embodies a crosscultural dimension, the need for focus on the distinctive design and planning characteristics of Hawaii, and the potential of Hawaii to be the architectural leader of the Pacific Basin.

Because he shared these aims, as well as being a talented and socially conscious designer, Hugh Burgess joined the faculty in 1964. At first glance Hugh may not seem to enhance all that much the cross-cultural, Hawaii, and Pacific Basin criteria: He was born in Colville, Washington, in 1932 and educated at the Universities of Washington and Idaho. But his background actually fits far better than might at first appear. He is an American Westerner, to balance Bruce's eastern Canadian heritage.

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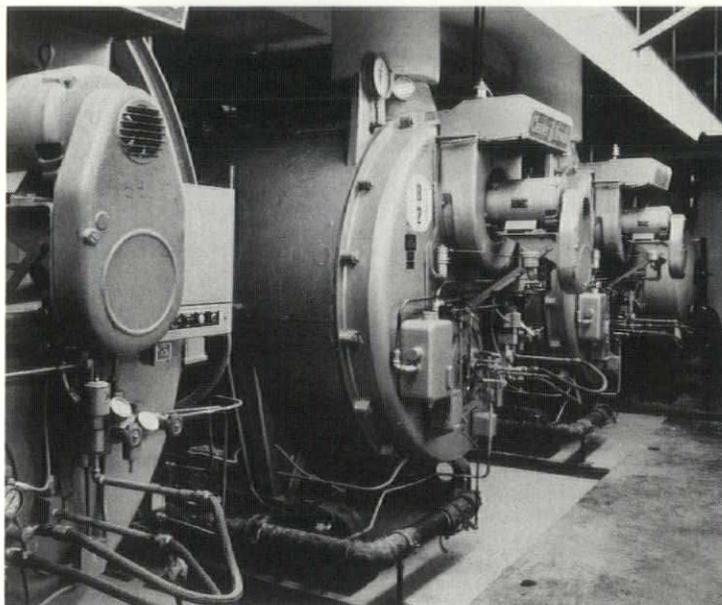
Hugh's degree from the University of Washington (1955) was in Asian architecture, after which he served for three years in Korea and Japan as a captain in the Air Force. Following his architectural training at the University of Idaho (B.Arch., 1960), Hugh came to Hawaii and worked for four years with a number of Honolulu firms. In addition to his teaching duties he has led the Hawaii Community Design Center, which, by its nature, emphasizes advocacy architecture and planning, requiring formulation of local design criteria. Hugh completed his professional training in 1969 with a Master's degree in Architecture and Community Design from Columbia. His achievements at Columbia gained him a traveling fellowship in Europe.

The major barrier to Hugh's traveling in and studying the South Pacific is the fact that institutional ties, transportation systems, and the flow of information in the Pacific region is dominately east-west rather than north-south. He and I are now trying to develop ways and financial means of countering this pattern.

In the meantime, the dominant east-west connection to Hawaii has brought the Department the third of its faculty leaders, David Terazaki. Although he has been a full-time faculty member here since 1966 he maintains his connection with Nihon University, teaching there each summer and at other times as his duties in Honolulu permit. His background and interests provide a highly stimulating balance in the Department. Born in Tokyo in 1923 and graduated from the University of Tokyo in 1947, David focuses on architectural engineering, with particular interests in climate control, acoustics, and modular construction. He has already published three books on structures and one on acoustics (all in Japanese). He worked in Japan for nine years after graduation with a variety of firms, including Skidmore, Owings & Merrill and T. B. Bourne. His work with the latter brought him briefly to Hawaii in 1956. Upon the recommendation of the University of Tokyo, Cornell appointed him an assistant professor in 1956. Unable to renew his visa, he returned to Japan in 1959. Two years later, with an appointment from the Japanese government, David went to the University of Singapore where he taught for three years. Returning to Japan in 1964 to teach at Nihon University, his globe-trotting brought him back to Hawaii in 1966 with his appointment as

(Continued on page 9)

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The Metamorphosis of Architectural Design Education

By HUGH BURGESS, AIA
Associate Professor of Architecture

Among the many crises and changes that have formed the present profession of Architecture, two significant changes stand out as having an increasingly deeper effect on both the practice and education of the designer. The first is the expanding scope and scale from the design of individual minor monuments for the elite: private, corporate, religious, or political client, to the design of collective complexes comprising major networks of housing, towns, and villages for the middle class. Demographers estimate that the population explosion and corresponding urbanization patterns, which account for the change will collect 80 per cent of the world's population in urban towns and cities.

The designer's task, as architect, urban or regional designer, is of special significance. The homes, buildings, and towns designed for these new clients and the corresponding change of scale, imply not only the use of the new methodology, i.e., computer and the techniques of industrialization, but also the complex relationships of the inhabitant to his shelter. Architecture must continue to serve at a higher level than mere function and the new architecture must also continue to enhance and reinforce the activities it contains in such a way that it gives meaning to its inhabitants. Thus, the educational stage is set for a change of direction.

This change of direction is the shift or transition from architecture as the objet d'art to the objet humaine. Corresponding to this shift, there is evidence of the new influx of the social sciences into the architectural curriculum. Concomitantly, more effective scientific approaches to architectural design problems that incorporate both experience and intuition have done much to replace the superstition surrounding "design." With these changes in mind, it is perhaps necessary to review some of the various realms of man's knowledge before describing changes in design education and how the curriculum attempts to accomplish the awesome task of educating for present needs in light of projected future scenarios.

The study of the entire universe and man's attempts to explain it can be

divided into these categories of Arts and Sciences: Mathematics and information Sciences, Physical Sciences, Biological Sciences, Language and Literature, Communications, Social Studies, Humanities, and Fine Arts. This list also comprises the basic list of the new division of the College of Arts and Sciences. The professions, to which Architecture belongs, can be regarded as applied knowledge from one or more of these areas of knowledge. Just as the physician applies knowledge from both the physical and biological sciences and becomes a skilled specialist, the architect also takes his basic facts from several of these areas of knowledge.

Since he is charged with the legal responsibility of providing shelter meeting standards of health and safety, he must, therefore, know something of biology and physics. The applied mathematical calculations and facts taken from physics constitute the specialized courses in structural and environmental design. The architect must have a sure grasp of building construction and creative ability to handle the techniques of construction. From geography and geology, he applies knowledge about the macro- and microclimate and the formation of the earth. From the social sciences of anthropology and sociology, he learns something of cultural patterns

UNDERGRADUATE STUDIES, PRE-ARCHITECTURE

1st Year:

FALL

| | | |
|----------|-------------|----|
| Math 150 | Calculus | 3 |
| Art 101 | Visual Arts | 3 |
| Arch 113 | Perception | 3 |
| Arch 115 | Space | 3 |
| Eng 160 | English | 3 |
| | | 15 |

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| | | |
|----------|---------------|----|
| Arch 374 | Computer | 3 |
| Arch 114 | Light & Color | 3 |
| Arch 116 | Time & Motion | 3 |
| Sci 124 | Ecology | 4 |
| Econ 150 | Economics | 3 |
| | | 16 |

2nd Year:

FALL

| | | |
|----------|-----------------------|----|
| Phys 151 | General Physics | 3 |
| Arch 271 | Human Settlements | 3 |
| Arch 275 | Environmental Careers | 2 |
| Soc 322 | Social Organization | 3 |
| Psy 322 | Social Psychology | 3 |
| Eng 251 | Literature | 3 |
| | | 17 |

SPRING

| | | |
|----------|------------------|----|
| Phys 152 | General Physics | 3 |
| Arch 274 | Presentation | 3 |
| Arch 276 | Basic Design | 3 |
| Arch 273 | Design Processes | 3 |
| Eng 252 | Literature | 3 |
| | | 15 |

3rd Year:

FALL

| | | |
|----------|--------------------|----|
| Arch 471 | Environmental Psy | 3 |
| Arch 375 | Design with Nature | 3 |
| Rel 150 | Religion | 3 |
| RE 300 | Real Estate | 3 |
| Art 270 | Art History | 3 |
| | | 15 |

SPRING

| | | |
|----------|-------------------|----|
| Arch 476 | Arch. Archetypes | 3 |
| Art 280 | Art History | 3 |
| Law 300 | Business Law | 3 |
| Mkt 300 | Marketing | 3 |
| Psy 215 | Sensory Processes | 3 |
| | | 15 |

GRADUATE PROFESSIONAL STUDIES: MASTER OF ARCHITECTURE

4th Year:

FALL

| | | |
|----------|------------------------|----|
| Arch 331 | Architectural Design | 5 |
| Arch 301 | Structures | 3 |
| Arch 311 | Construction Materials | 3 |
| Arch 321 | Climatology | 3 |
| Arch 351 | Landscape Architecture | 3 |
| | | 17 |

SPRING

| | | |
|----------|-----------------------|----|
| Arch 332 | Architectural Design | 5 |
| Arch 302 | Structures | 3 |
| Arch 312 | Surveying & Drafting | 3 |
| Arch 322 | Mech. & Elec. Equipt. | 3 |
| Arch 371 | Architectural History | 3 |
| | | 17 |

5th Year:

FALL

| | | |
|----------|----------------------------|----|
| Arch 333 | Architectural Design | 5 |
| Arch 303 | Structures | 3 |
| Arch 411 | Building Economics & Codes | 3 |
| Arch 372 | Planning & Land Use | 3 |
| Arch 421 | Environmental Control | 3 |
| | | 17 |

SPRING

| | | |
|----------|--------------------------------------|----|
| Arch 431 | Architectural Design | 5 |
| Arch 401 | Structures | 4 |
| Arch 412 | Working Drawings, Estimating & Specs | 3 |
| Arch 451 | Urban Design Theory | 3 |
| or 452 | | 15 |

6th Year:

FALL

| | | |
|----------|-----------------------------|----|
| Arch 616 | Professional Administration | 3 |
| Arch 432 | Architectural Design | 5 |
| Arch 402 | Structures | 4 |
| Arch 488 | Design Internship | 3 |
| | | 15 |

SPRING

| | | |
|----------|--------------------------|----|
| Arch 671 | Architectural Psychology | 3 |
| Arch 800 | Thesis | 6 |
| Arch 399 | Special Projects | 3 |
| or 400 | | 12 |

and the laws of interaction between human beings.

The study of health codes, environmental conditions, ecology, and their relations between living organisms including man are taken from the study of biology. The designer also hopes to influence the behavior of the building's inhabitants and hopes that they will be happy while carrying on various activities in the spaces he has designed. For this, he must be something of a psychologist. Every building contains, in its imagery, a significance beyond that which is perceived at the primary level, and every building's image continually changes, also, as it reflects minute cultural changes. Architects must visually communicate an image from both cultural and intellectual developments and from a consideration of the physical environment.

Each culture develops its own particular elements of architectural imagery, yet as each culture contains the same underlying elements, each satisfying architectural image contains certain archetypal ingredients or motifs that form a language which produces the sensory communication of unconscious and conscious ideas necessary for man to comprehend architecture as designed by man — for man. Imagery and symbolism are inseparable from man's existence. A new course titled "ARCHITECTURAL ARCHETYPES" has been developed to study this symbolic language of architecture.

In any architectural system, the building structure and methods of envi-

ronmental control can be calculated and understood accordingly: the scale of spaces and forms perceived by man through his sensations of light, texture, sound, heat, odor, taste, and kinesthetic experience in a frame of time, form the content of basic design theory and principles. These courses mold the visual and sensory language which architects employ in the formal aesthetic creation of buildings as systematized three-dimensional masses in an environmental setting. Further, these masses are rhythmically changed and modified by the seasons, climate, flora, fauna, light, sound, matter, motion, and man.

The architectural designer does not create alone. Besides studying the physical function of buildings, he must also cooperate with the structural engineer, the specialist for structural dimensions, and with the mechanical and electrical engineers, the specialists for environmental control. At the urban scale, he consults the sociologist when dealing with special factors of urban and regional design. For special components of the building design, he consults with the interior and graphic designers. To simulate these professional interrelationships the various design studios are being combined to create situations where specialized student designers rub shoulders with each other. In addition, consultants will complement the guidance of the design instructor.

The graduate design studio courses are graduated in both complexity and scale of assigned problems. They stress dual emphases on rapid sketch tech-

niques and the more refined in-depth studies of major projects. Each studio contains special subject matter relating to environmental conditions, activity functions, economic considerations, and human factors. The final studios, prior to the thesis, synthesize knowledge from previous studio work, as well as structural, environmental, and historical course work in the designing of highrise buildings and community design.

Architects react to the climate of their time and want to reform their surroundings, and the architectural design curriculum attempts to reinforce this by providing a relevant curriculum. As society changes, so must the professions that serve it. The curriculum should and must respond to these social necessities and keep pace with accelerating changes of the present. Each time our clients, our society, and our students expect something quite different from architecture, a metamorphosis is inevitable. A metamorphosis then, in architectural education, is one that is continuous, assessing, and incorporating as best it can — the biological and psychological expectations of the student, the profession, and the society it must serve.

ARCHITECT'S SKETCH (Continued from page 7)

Professor of Architecture at the University of Hawaii. Thanks to his many contacts in Japan, the Department's summer tours to Asia include visits with some of the leading Japanese authorities. David set up the very popular summer course here in Japanese architecture and landscape design and has been instrumental in persuading well-known Japanese designers to come and teach the course. These and other distinguished visiting faculty from Asia have provided a most noteworthy addition to the Department's offerings.

The full story of the Department cannot, of course, be told here. The cross-cultural criterion is further enhanced by Luciano Minerbi (director of the urban and regional design), by visiting professor Jorn Utzon (who designed the Sydney Opera House), and many other permanent and visiting faculty members. The Hawaii criterion gains strength from the numerous Honolulu designers who teach part-time and serve on juries.

On the other hand, Bruce Etherington, Hugh Burgess, and David Terazaki certainly deserve our mahalo for their efforts in building a praiseworthy architectural program at the University of Hawaii.

ARCHITECTURE FACULTY

BASIC DESIGN STUDIES:

Melvin Fielding, George Ikenoyama, Kazuo Ishihara, Leighton Liu, Ronald K. Lee, Boone Morrison, Robert Palmer

ARCHITECTURAL STUDIES

Hugh Burgess, Jay Anderson, John Hara, Roger Lee, Francis Oda, John Rummell, Jorn Utzon (Visiting Professor 1971-72)

ARCHITECTURAL ENGINEERING & TECHNOLOGY:

T. David Terazaki, Endre Toth,

INTERIOR DESIGN:

Michael Kosko

LANDSCAPE ARCHITECTURE:

Joan Brooking, Donald Wolbrink

TROPICAL & DEVELOPMENT STUDIES:

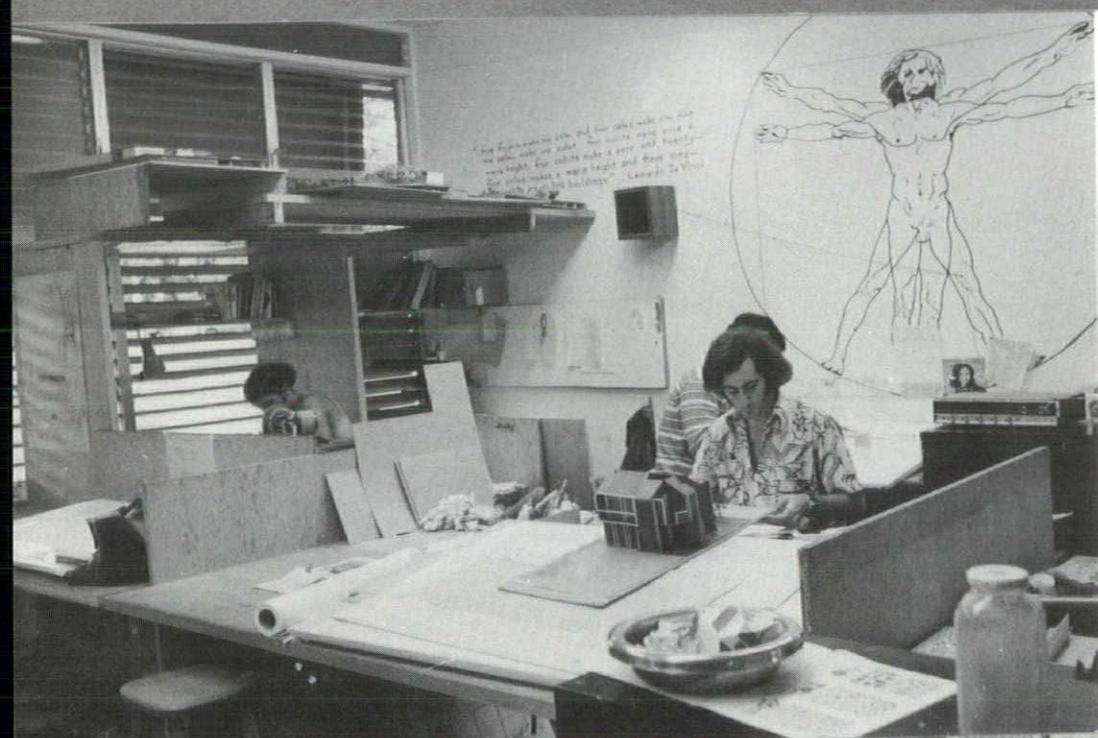
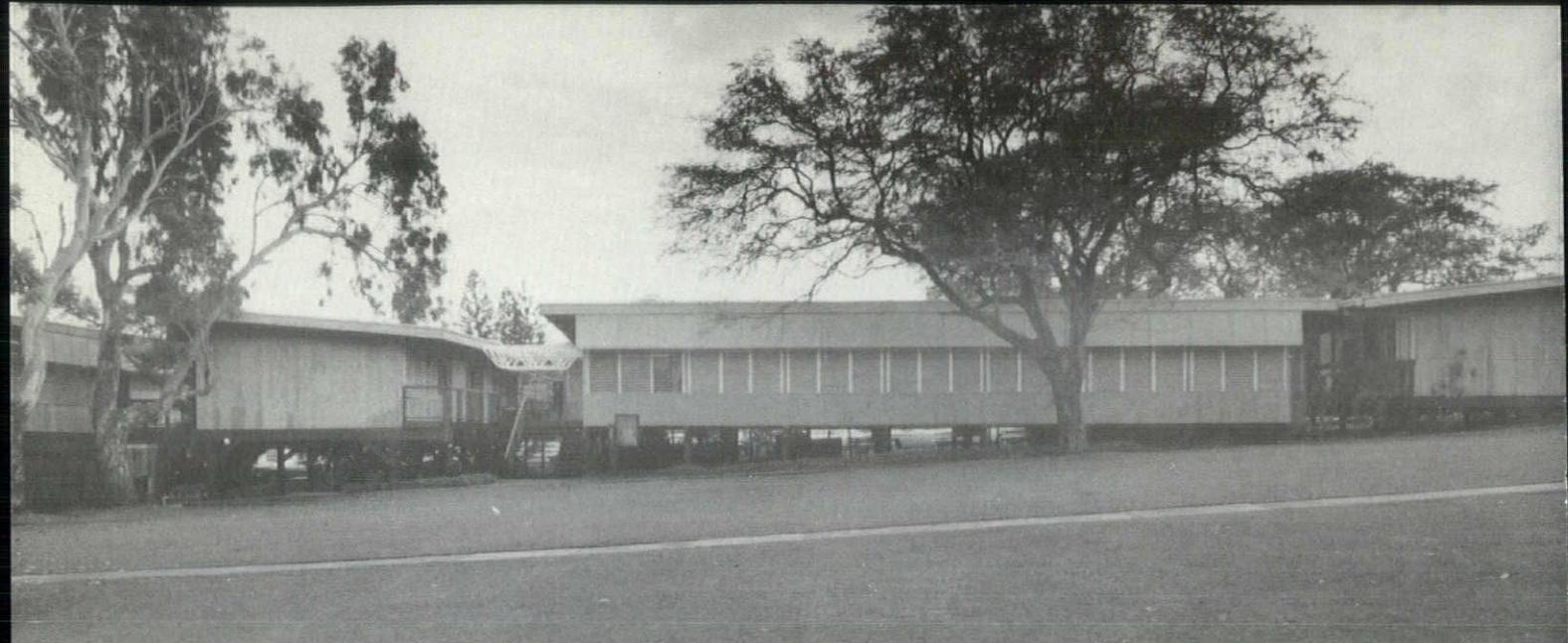
A. Bruce Etherington

URBAN/REGIONAL PLANNING:

Luciano Minerbi, Herbert Mark, Jack Sidener, James Yamamoto

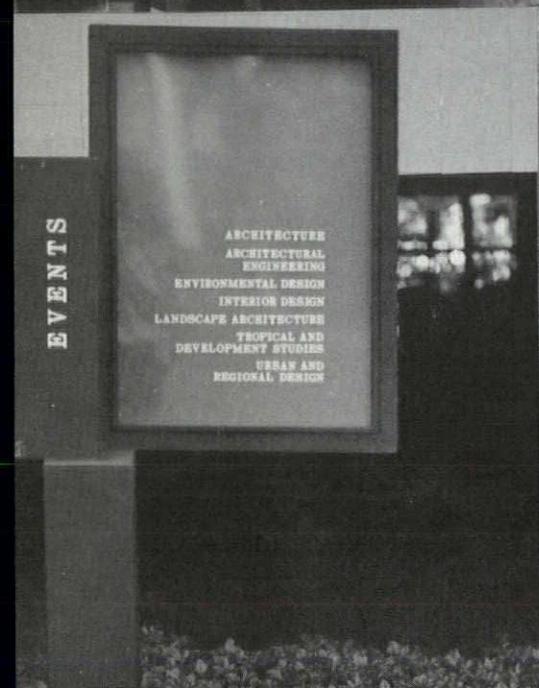
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Thomas Creighton, Francis Haines, Richard Kapololu, William Merrill, Rolf Preuss



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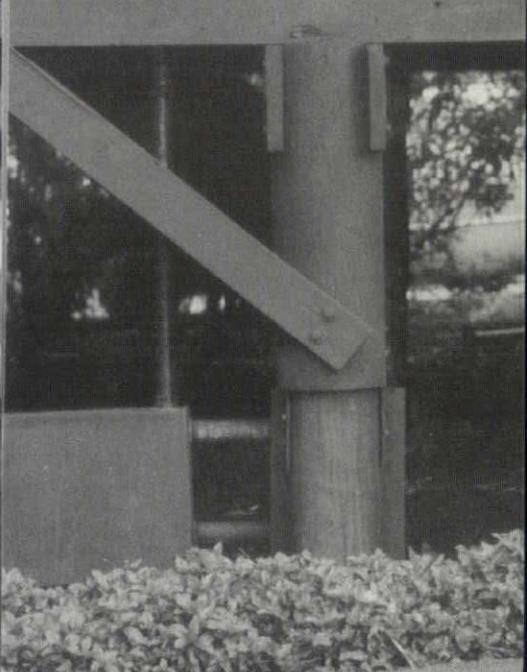
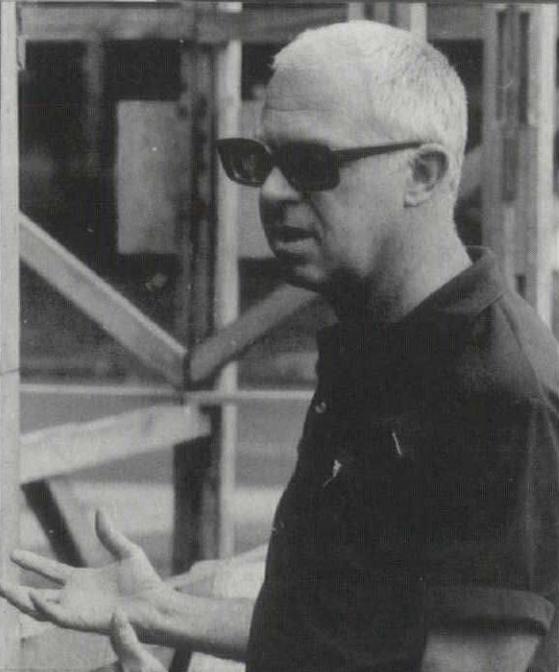
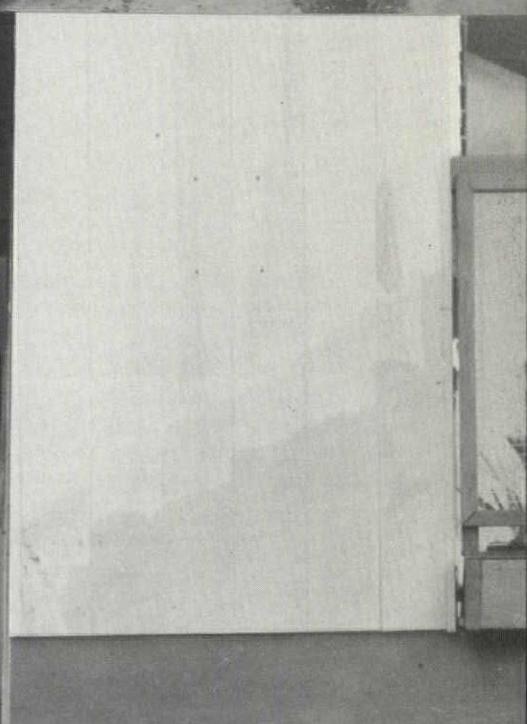
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 TROPICAL AND
 DEVELOPMENT STUDIES
 URBAN AND
 REGIONAL DESIGN





A Student's View of the Role of the Planners

By THOMAS NAGAHISA, Student

Much criticism has been leveled at the Urban and Regional Planner during the past decade. And quite readily, much of this criticism has been deserved. Some of the reasons for this criticism have been clumsy zoning practices, spot zoning, lack of coordination among planners themselves, and the awkward position of planners in the community today. Though some of the areas of criticism have not been wholly the blame of planners alone, to the public the planner is almost always the villain in cases of public outcry against any major change in the community today.

In order to understand the position of the planner today, one should take a quick look at the evolution of the planning discipline and its role in the growth of today's cities.

Urban or city planning is a relatively young discipline. The history of city planning goes back about 50 to 70 years. Yet as long as men have come together and created cities, someone has had to accept the responsibility of planning for its physical growth. The planner or planners of many of the older cities of Europe and the Orient was the ruler of that city or of that province. In many cases, just as today, the ruler sought the aid of consultants. And in many instances, the consultants were architects, engineers, artists, or even businessmen. In many of these cities, the final plan for the city worked;

it worked because of control. One or a few persons had the final decision and many of the problems of today such as technological change and population growth were not influential decision factors. Today however, times, thoughts, and socio/economic and technological areas have emerged as factors in the growth of urban areas. Consequently, as new and greater problems arose, so did the need for people to handle these special problems.

Taking into account the history and evolution of planning, the planner is part of the painful growing pains of his discipline, open to criticism from all sides. However, in all fairness all professions are open, and must be open, to criticism. Only in this way can any discipline grow and reach full maturity. And even at maturity, any discipline must not stop evolving or quit listening to its critics or it will stagnate and die. A case in point is the discipline of architecture. It has been in existence since man propped up his first shelter. Yet after several thousand years, architecture is still evolving and is still being criticized by both the public and by architects themselves.

But where architects and engineers have evolved to a specialized discipline, planning, because of its youth, has managed to remain flexible to approach a multiplicity of problems. Where an architect deals with a set land area,

dealing primarily with space relationships and circulation patterns, the planner must handle whole land areas and approach the urban form holistically. The planner must deal with the problems of population, traffic, housing, social concerns and other factors. He must analyze the existing urban area and project for its growth in many areas, or project the growth and effect of one problem area in relation to other areas. Or to take another perspective, the planner deals with both static and dynamic space and form on a macro scale while the engineer or architect approaches problems on a static, micro scale.

Yet when it comes to urban design, the planner is put in a position of suggesting alternatives and effects to the design put forth by the architect, engineer, or developer. He has little or no say in the crucial final decision. Yet after that particular overpass or housing project has been established, and should problems arise, the public finger points to the planner. Though the planner does not always shoulder all the blame, the public has been left with the impression that any sort of development or lack of it is somehow part of the planner's fault. The planner is aiding a political system based on democratic principles, where each person has the right to do his own thing. The cities are looking for aid in planning their growth, yet at the

(Continued on page 15)

DEPARTMENT OF ARCHITECTURE PHILOSOPHIES AND GOALS

(Continued from page 4)

In another sense the geographic isolation of the Department and the fact that it is the only institution in an area of approximately 25,000,000 sq. miles offering education in environmental design forces it to assume burdens normally parceled out among a number of educational facilities. For this reason the Department has taken upon itself, and perhaps prematurely, to assume responsibility not only for architecture but also the related design disciplines of landscape architecture, urban/regional design, interior design, building technology and environmental design itself. The reason for this ambitious undertaking stems from the geographic isolation of the state and the consequent economic and spatial difficulties that

students of the state have in securing education in these disciplines.

Surveys and the enrollment figures of the Department are visible evidence that young residents of the state wish to study for these professions. Unlike the mainland where a variety of schools are usually within commuting distance of a prospective student's residence, students from Hawaii must traverse 2,500 miles of ocean, spend considerable more for transportation and education costs and make many social and living adjustments. This presents a hurdle which only the most ambitious students over-leap. The more cautious, timid or improvident have, in the past, usually forsaken their first career choice, if it was in the design professions, and chosen a career from those professions that were already offered by the University of Hawaii such as Business Administration, Nursing, Medicine, and

so forth. For this reason many potentially good students have been lost to the profession in the years preceding the founding of the Department.

This accelerated growth has placed an undue strain on the resources of the Department and consequently has called forth a number of innovative measures in teaching methods and organizational structure. By fostering a cooperative attitude among the faculty, creating a series of courses in the various design disciplines which serve both major and interdisciplinary roles and by co-opting courses and faculty from the University at large the Department has been able to meet the needs of the local community. Expressed another way, the Department organizational structure is organic in nature permitting concentrations to develop without inhibition and to freely join together to serve new needs as they occur.

Architecture Library

By JOAN BROOKING,
Landscape Architect

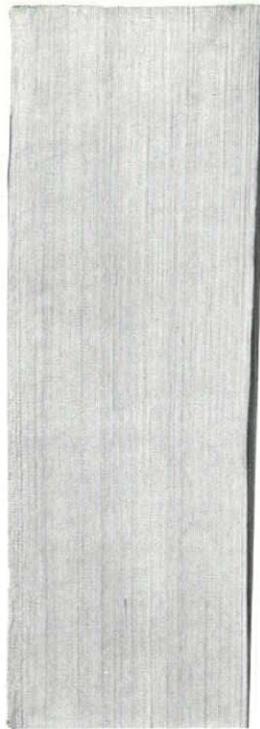
The Architecture Library is administratively a part of the Department of Architecture existing to serve the needs of the students and faculty of the Department, the general university community, and the local practicing environmental design professions. Financially, operation of and acquisitions for the library are dependent upon departmental funds and an annual donation from the Women's Architectural League; no funds are received from the University Library System.

The collection contains basic reference and course-related books and periodicals for architecture, architectural science and technology, environmental design, interior design, landscape architecture and urban and regional design. Special materials include manufacturers catalogs, materials samples, drawings and plans of outstanding buildings, microfilms of student award projects, audiotapes of special lectures, and an extensive slide collection. A union holdings card file is nearing completion. It contains author and title cards of architecture collections in Hamilton and Sinclair Libraries at the University, the Hawaii State Library, the Municipal Reference Library, the Planning Library of the City and County of Honolulu and the Honolulu Academy of Arts Library as well as those of the departmental Architecture Library.

Library operations are closely coordinated with the instructional program. Many books from personal libraries of faculty members are brought in to be placed on special reserve for the use of students and faculty. Desk copies of all text books used in the departmental curricula are placed on reserve in addition to those books from the open shelves specifically requested for reserve status by faculty members. Recommendations and requests by faculty members, AIA Library Committee recommendations, and the decision of the Architecture Librarian form the basis for choice of acquisitions.

Upon request, bibliographies are compiled for individual research projects.

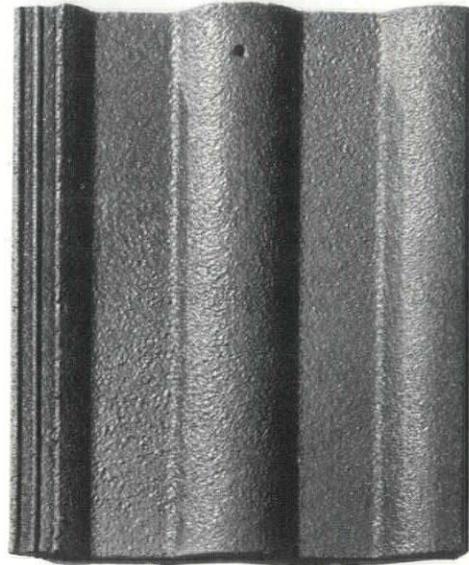
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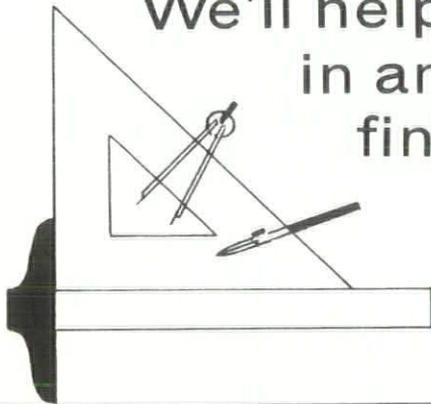
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Architectural Engineering & Technology

By T. DAVID TERAZAKI
Professor of Architecture

Contemporary architecture, as well as any human environment at any scale, is a synthetic art to be created and evaluated by the techniques of aesthetics, science and engineering. Designers and producers of any environmental creation should be aware of the highly interrelated nature of such objects and acquire the skill and technique of coordination and integration of various aspects involved in this total process. New demands and challenges for architects and architectural scientists or engineers are constantly generated because of the highly technical, versatile character, and continuous development observed in contemporary buildings and total human environments.

The architectural engineering program in the Department of Architecture is designed to emphasize the importance of this totally integrated approach to the architectural design process, offering an opportunity for the student to acquire comprehensive training and skill in one or more areas of architectural engineering. The present options provided by the Department include architectural structures and environmental control technologies. The curriculum and instruction emphasize the scientific and technological approach and method of solution in the context of broadening environmental studies to meet the diverse demands of a growing society and developing technical resources.

Courses in Architectural Structures allocated to the undergraduate program are so designed and shaped that students in environmental studies can acquire a basic training and knowledge of structural principles and systems in architecture and building. Courses in the graduate program are so planned and formed that qualified students who wish to integrate architectural design and engineering can study applied design at the professional and advanced structural level, thus developing their professional skills and furthering exploration of creative concepts.

Architecture and environmental design are the artistic and scientific solution for controlling the human environment, encompassing the physical layout and organization of form, space, and

(Continued next page)

mass. The courses of environmental studies offer comprehensive training and knowledge in the environmental control technologies and systems of architecture, building construction, and community design.

This curriculum offers a sequence of study on scientific and technical evaluation of environmental design in building services and equipment thus providing a substantial background for qualified students in the creation of better total environments for balanced human living and social activities.

A STUDENT'S VIEW

(Continued from Page 12)

same time rejecting this aid when it appears that the government will assume a Big Brother approach to control all phases of individual city growth.

What then are the alternatives open to the planner in his relation to the growth of cities today? Primarily the planner must more aggressively take a firm stand on his need to affect the final decision concerning the growth of cities. The public and the educational system must be made aware of what role the planner plays now and what role he could play in the future to aid tremendously in the design of urban forms. The planner must remove himself from the role of acting merely as a feedback system offering alternatives to the developer's scheme and have the ability to reject completely the developer's or engineer's design if the planner sees possible conflicts arising.

If we look holistically at the possible role offered to the planner, a rough comparison could be drawn with the role of an auto designer in creating a new model. The designer is creating a whole system and is aware of the need for good detail work, yet does not let this awareness completely dictate his final design. Instead he starts with the overall design of the car and gradually works his way into finer and finer detail work as his model begins to take shape. Thus he arrives at a totally designed automobile.

Likewise, cities in the past have been governed by a single factor. Cities in the past and even today, have managed to coin a new term, "urban sprawl" because of their lack of planning or because a single factor has managed to control the city's growth.

The planner must be made to take a firmer control in the growth of cities, and the public and other disciplines made to understand that if cities are to remain livable in the future, something must be done soon.

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The Urban and Regional Design Emphasis

By LUCIANO MINERBI, Dr. Arch., AAIP, RSA
Assistant Professor of Urban and Regional Design

Students interested in the solution of urban problems and the improvement of the man-made environment are offered the Urban/Regional Design Option.

This area of concentration provides an opportunity for architecture students to go beyond the scale of single building and plot area design in order to explore: (a) At the infraurban scale; the mutual relationship between the micro-activity system operating in the urban setting and the physical form of the structures which accommodate them. (b) At the supra-urban scale; the micro-activity system and its alternative locational patterns of employment centers, residential areas, and transportation networks, as metropolitan form gives which shape the built environment.

While studying form and texture of the urban physical structure the students understand the social fabric of individuals and groups living in the area.

Students from other urban-related disciplines are exposed to skills and techniques of environmental design surveys, to theories of city design and urban morphology. They learn how their own knowledge of urban matters should be ultimately applied to alternative design solutions.

The urban design program provides a place at the University where issues and problems of the Hawaiian Community are explored in the practical terms of use and fruition of the physical environment.

Urban neighborhoods and towns are chosen as studio projects to elaborate planning analyses which can be used by the residents as "community reference guides," or as aids to improve anticipatory problem solving, clarifying the options available to the residents.

The basic philosophy is that the design dimension should be included in the public policy planning. Legislation should explicitly make use of innovative design criteria in assisting private developers' design initiatives and should formulate regulatory measures at the infraurban scale, while incorporating design and environmental consideration in policy and in guidelines of growth at the supraurban scale. The premise of the philosophy is that design creativity should be a part of the decision-making process which shapes and affects the

man-made environment.

The educational objective of this philosophy is to train young men to the skills of design as a decision-making tool in community planning, where planning issues have strong physical implications which require design solutions. The design process in which the students are involved maintains the implications and constraints of real world situations, such as public-private, entrepreneurial activity and conflict, in order to make them equipped to move realistically in the professional arena.

After completing college and environmental design requirements, students may enroll in the Urban/Regional Design option. The course sequence consists of two seminar courses, and one studio course for seniors, two graduate seminar-studios and one graduate studio in Urban Design. Through academic advising the students select recommended courses in urban and regional related fields. Students are encouraged to become involved in the Community Design Center projects and work at a thesis emphasizing urban design and planning. Some students particularly interested in planning pursue the Certificate Program

in Planning Studies by taking four additional courses.

An understanding of the forces which shape the environment, and of the issues that the community faces is developed through the analysis of the present planning situation seen in an historical perspective.

The role of urban design is discussed within the framework of contemporary planning process and of future land use guidance systems and growth policy.

Methods and techniques for visual and perceptual analysis are investigated and applied to single villages, towns, and city neighborhoods, while methods and technique for locational, impact, and environmental analysis are emphasized at the metro and regional scale.

Strategies and approaches for the formulation of design solutions and for the generation and selection of design alternatives are explored also with the aid of operational research methods and computer programming technique.

The learning process is geared to a team work situation with individual but integrated work. Through problem analysis the student expands his outlook toward public and private agencies and



Fig. 1 We can formulate urban design oriented shoreline legislation to provide alternatives to this type of development in Waikiki. (Ernest Takahashi photo)

STUDENT VIEWPOINT

By KIM THOMPSON, Student

For my 'student's viewpoint' contribution to the Hawaii Architect: Just what does the AIA have to do with architecture? Such chaos is as poor precedent for any regeneration process, and such is why the majority of students are apathetic towards the AIA.

Landscape Architecture

By JOAN BROOKING,
Landscape Architect

Proceeding from Malcolm B. Wells' dictum: "The single fact remains, there just isn't any building as beautiful, or as appropriate, as the bit of forest it replaces," students in the landscape program are expected to develop a close acquaintance with the basic elements of land, water, vegetation, and the forces of nature.

The emphasis of the basic Landscape Architecture course is on developing and applying methods of site analysis: on the design process as it relates to site planning and landscape design, and on historical and theoretical precedents in landscape planning. Also emphasized is landscape materials and construction, plant identification and use, world vegetation and soils, and on the conservation and preservation of natural beauty. The continuum idea of man as a dependant part of nature is stressed rather than the more popular idea of a man versus nature "balance."

Problem-solving projects completed during each semester include application of the above curriculum emphases to actual sites. During the 1971-72 terms, site analyses and plans were developed for Kualoa Beach Park and for Kaneohe Marine Air Station.

Succeeding studio courses within the landscape program apply analysis and planning processes to larger scale urban environments with an emphasis on communications graphics, design methods, and project management. Students majoring in this pre-professional program at the present time will receive the BFA with an emphasis in Landscape Architecture.

community groups.

The following are some specific research topics explored by the students:

a. Thesis level:

- The housing industry in Hawaii
- International sharing programs for housing construction in the South Pacific region
- A theoretical approach for the study of Central Oahu
- Urban growth pattern and residential land on Oahu
- Comparative urban design analysis of public housing neighborhoods.

b. Course level:

- University district urban design and planning study
- Halawa district urban design and planning study
- Urban design study Waikiki
- Haleiwa community reference guide and planning study
- Spatial analysis of Oahu Island
- A city block development in downtown Oahu
- Design approach for new community in Central Oahu.

These and many other topics can be explored with the motivation and the

interest of students and faculty and the outside support of the community and the profession.

Many initiatives could be taken to improve the urban design emphasis. Among them are:

a. An "interprofessional forum:"

To provide a meeting place for the urban design and allied professions to exchange ideas and experiences with the intent to improve the quality of professional performance.

b. A resource center:

Where continually updated information on the Hawaiian environment should be made available for consultation. The resources could include library catalogues, books and pamphlets, slide collections, aerial photos, basic data on housing, community facilities and population, and a series of computer programs for physical planning analysis.

c. A continuing educational program:

Where short courses and topical conferences are initiated to cover basic techniques and approaches in physical and environmental planning, with particular attention for the sub-professionals.



Fig. 2 Lack of urban design and unplanned growth in Waikiki. (Ernest Takahashi photo)

Building Out Obsolescence

by
Bob Jones
Ducommun Metals and
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This is the initial column of many that will be appearing monthly in *Hawaii Architect* discussing all types of materials that are especially suited to construction in the Hawaiian islands. Corrosion, dry rot, oxidation, bug damage, and many others will be the targets. Obsolescence is unnecessary when proper methods and materials are used.

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Urban Design and the Prisoner's Dilemma

By JAMES T. YAMAMOTO, AIP
Department of Architecture

Returning from Cape Cod on a Sunday afternoon, motorists were held up for a mile or more, at a creeping pace, by a mattress that had fallen off the top of some returning vacationer's station wagon. Nobody knows how many hundreds of cars slowed down a mile in advance, arrived at the mattress five minutes later, waited for the oncoming traffic and swerved around before resuming speed. Somebody may eventually have halted on the shoulder just beyond the mattress and walked back to remove it from the traffic lane. If not, it may still have been there the following Sunday.

Again there was no bargain. Failing the appearance of a driver in a mood to do good — not a common mood on a hot highway with hungry children in the back seat — somebody would have had to be elected to the duty or compensated for performing it. Nobody gains by removing the mattress after he has passed it, and nobody can remove it until he has passed it.

Thomas C. Schelling,

"On the Ecology of Micromotives," *The Public Interest*, Fall 1971

Designers face situations all too familiar to us — a variant of the prisoner's dilemma noted above. Picture if you will choices reflective of the client's interest and the collective interest. The client's interest is a narrowly circumscribed building enveloped within a site. The collective interest, on the other hand, is all pervasive — that is, all of the sites at any point in time. Given this tension between the narrow and the broad, how does one go about rationalizing the design process which will impart, at the same time, the interest of the client and the interest of the community?

In the good school of design we learn to respect the environment and to take note of our neighbors. However, the nature of the enterprise system that we find ourselves in cautions our design perspective with a distinctive caveat "let the buyer beware." The nature of our enterprise system may offer no return to those who contribute to the community. An individual's contribution may be negligible in its singular contribution to urban design. It is only in the aggregate wherein the many contribute to urban design in a collective sense. Such is the dilemma facing those of us who practice.

How do you encourage individual contribution which through its aggregate effect contributes to the collective interest — that is, enhancing spatial arrangement and form of our environment. How do we encourage these individual efforts when our clients are "compelled" to play the enterprise game of sustaining their self-interest? We establish land use controls; that is, the public intervenes in behalf of the collective interest. These controls, with

an understandable concern for equity, establish uniformity via application of zonal standards and regulations.

The upshot of these approaches is limitation of the worst while constraining the imagination of the best. These approaches recognize the character of our enterprise system, in part. They are not, however, effective in sustaining or encouraging contributions to urban design since they do not compel each and every builder or developer to provide "good" products — a characteristic which is all too often judgmental and, unfortunately or fortunately, constrained by popular taste.

This is the profession's dilemma — a twofold constraint. On one hand, the enterprise system does not reward contributions in the minutiae. On the other hand, we are dealing with matters of taste except in the grossest cases where reason impels better design. There are those among us who would plead that there are some positive signs. That there are positive signs does not avoid the need for better design. Indeed, if there were no positive signs we have found a replacement for that dismal science. While we may not be able to legislate "good" design, we are able to encourage better design through the generally accepted approach of public intervention — that is, planning.

Planning is a way of avoiding the cop-out. It responds to the situation illustrated at the beginning of this paper. It avoids the pall of individual ethics somewhat. It calls for the establishment of an urban design component within our community. Need we ask ourselves which of us will stop along the highway to retrieve the mattress?

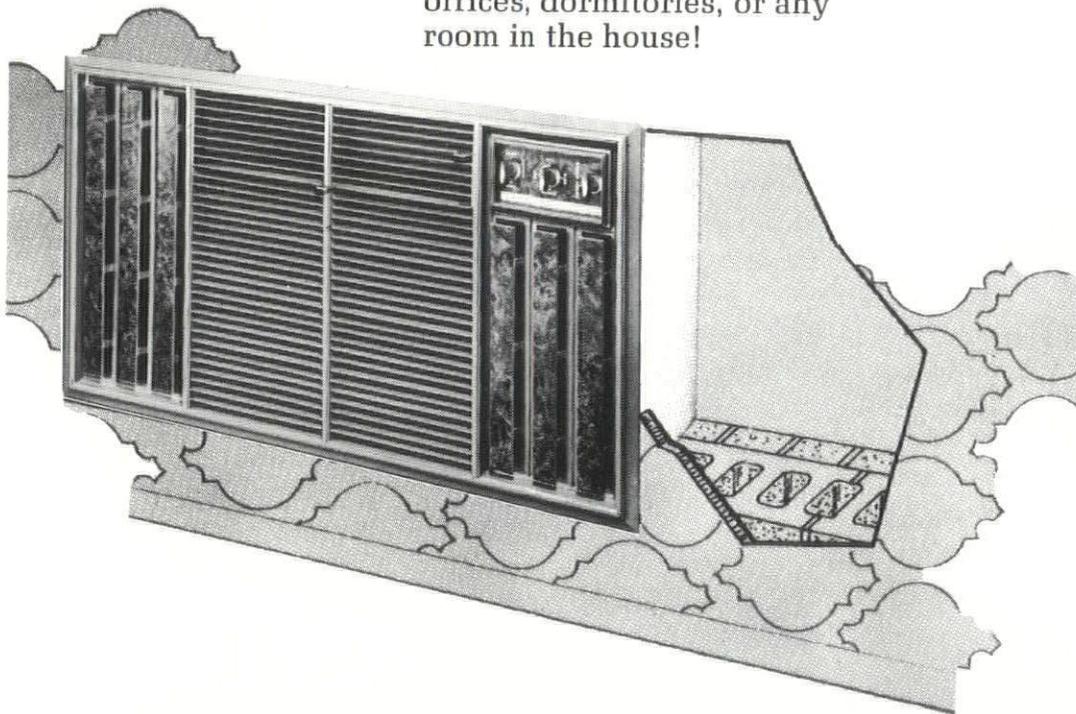
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