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Training In Architecture And Planning For Technicians In Developing Countries

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American schools of architecture and planning are attracting a number of foreign students from developing countries. This number will continuously increase during the next few years. Africa, alone, in which continent many new nations have been created, will be sending perhaps hundreds to learn American techniques in architecture and urban planning, to study American fundamentals in building, and American "know-how" in large scale production, mass transportation, mass housing, urban renewal, slum clearance, etc.

The question arises — are the American schools of architecture and planning meeting the educational demands and requirements of the foreign students from tropical countries? Are we training them in the techniques which might be used to the best advantage in their country which is steeped in its own customs, its own traditions, and its own culture?

Likewise, many native born Americans are training in American schools of architecture and planning to work later in tropical underdeveloped countries. Do the curricula in these schools offer the diversity in program and in electives to reveal the techniques and "know-how" for effective production in foreign lands?

If American schools of architecture and planning are to play a significant part in providing educational opportunities of a more useful type, it is necessary that educators recast their thinking and re-evaluate their programs, and broaden the objectives of these schools.

It is fundamental in architecture and planning to investigate the geography or land at the outset — what is on the land, its natural resources on and under the surface, the ethnological characteristics of the people, their movements both

within the country and to and from the outside world, the climate, which includes factors of interest such as rainfall, sunshine, winds, temperature, and humidity, and the regional and local variations of these elements. These factors will condition the thinking of the architect or planner, and modify or alter decisions which he might otherwise make on the basis of his training, which in most instances, in the western world, he will have received in a temperate zone, and which will naturally have a western world cultural bias and a temperate zone emphasis.

In tropical developing countries, local practices frequently reflect construction processes and spatial arrangements which are often interwoven with local customs, local materials, economic conditions, phobias, taboos and religious superstition. Between the advanced technology of American culture, and the unscientific methods and unorthodox procedures of these tropical areas, the architect and planner must effect a compromise solution based on social consciousness, tolerance, understanding, judgment and just plain common sense. Many of the new republics of Africa are embarking on great development programs, in which the services of architects, engineers and planners are indispensable. Opportunities for technicians in the foreign service will be many.

The countries, which heretofore have pursued an agricultural economy for centuries will become industrialized. Their rich mineral resources and deposits will be extracted on a greatly expanded basis. Near centers of extraction of these mineral deposits, towns have sprung up. Greater mechanization, automation and industrialization are taking place, with the result that there is an

increased migratory flow of people from the country to the town or city. Urbanization is inevitable in these countries just as it was inevitable elsewhere, as a result of the industrial revolution.

The architect's and planner's services will be frequently required to make layouts for extensions of these towns in developing countries, to advise on and design pure water supply systems, sewage disposal systems, and design buildings and spatial patterns of physical aspects of communities. It will be their responsibility to render advice and assistance in preparing building regulations, housing ordinances, zoning laws, and related matters. Consultation will be required on construction methods and techniques, the procurement, production, and standardization of building materials, subdividing and partitioning of land, tenant selection in housing schemes, management and operation, estimating future growth and planning for means to channel or guide it, estimating the public utility services and needs of the community, education requirements, traffic flow, recreational facilities, facilities for religious worship, and many other aspects.

In African countries which have large navigable rivers and sea coast lines, food products not used for local consumption, mineral ore, oil, timber, etc., are shipped to other countries, where these items are in great demand, and in return articles which are needed locally but not produced locally, are imported. Commerce, consequently, has, and to a very great extent will continue to be the economic existence of these countries.

The planner should in general be able to comprehend the problems encountered in shipping, such as the general aspects of the planning of wharves, and

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POTOMAC VALLEY CHAPTER
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(continued from page 1)

the development of water-fronts and docks where warehouses may be constructed, and where contacts might be established with rail, roads, and canals. Planning problems of extremely heavy flows of traffic and loading and unloading of ships are extremely intricate, and require considerable study for their solution. The planner should have some conception of the range of tides; the employment of locks or wet docks, and berthing of ships; tidal wharves or piers; floating landing stages with hinged bridges; and the advantages and disadvantages in their use particularly where tide range is large and road and rail traffic is affected; the installation of shore cranes; type of cargoes to be handled and the form of transport to and from which they are transferred. Adequate facilities will be required for storage, warehouse accommodations, and for servicing of ships such as graving docks in which ships' bottoms are cleaned of barnacles, etc., and their attendant workshops, and bunkering berths for refueling.

In these tropical developing countries, animal power for moving vehicles is gradually being replaced by energy produced by steam, electricity, and gasoline. As a result, speed and traction power are increasing, distances are shortened, and geography completely transformed. Planning programs in these countries, however, must not be based on a complete and immediate rejection of animal drawn and human propelled vehicles such as the donkey cart,

the push cart, and the bicycle. Their replacement by motor vehicles will be a very gradual procedure. Hence in road design, very careful study must be made to provide for this slower moving traffic, and for the parking of both fast moving and slow moving vehicles. Cycle lanes must be introduced into the road systems, sidewalks provided, as well as parking areas for horse and donkey drawn vehicles, and sheds for the bicycles which are so widely used.

In these countries the planner will be concerned with the science of land utilization, which in effect determines the most economical use to which the land can be put. He must be prepared to recommend whether a piece of land should be used for industrial manufacturing purposes, for a housing project, or for agriculture. Ownership and the private owner's intention would formerly have been the deciding factor, but in a country with planning ordinances and regulations, land use would be determined by the greatest benefit to be derived from it for the greatest number of people.

With closer collaboration between the countries of Africa there is great need for regional planning and the development of places of historical, archaeological and scenic interest to attract tourists. Tourism should be encouraged, as it is one of the largest producers of revenue. Celebrations, scenic beauty, admirable facilities for boating, fishing, and vacationing in general, waterfalls, old forts, castles, palaces, old churches, mosques, all are sufficiently captivating in themselves to warrant stimulation of the tourist industry. But facilities must be planned to provide for transportation and access to these points of interest and amenities must be provided for the accommodation of tourists, such as lodges, clubs, hotels, motels, golf links, recreational grounds, etc. The architect

and planner with specialized knowledge in this aspect of development planning could render invaluable service toward the economic improvement of the country's welfare.

Training in architecture and planning is an educational progression, being modified as time and conditions warrant change. The successful practitioner is one who will always be a student of architecture and planning, eager to learn, to listen, and to experiment. Experimentation in these areas of learning is being carried on all over the world, and will continue so long as architects and planners with a broad cultural background have tolerance and strong social sympathies about what kind of environment man hopes to live in.

The areas of activity in which problems are, or will be encountered in tropical developing countries, which have been briefly discussed, do not constitute a complete list of areas on which information should be available and taught to foreign students who plan to return to their native country, and to American students who plan to enter the foreign service to work in developing countries. The fields of architecture and planning in a developing country are very broad. Maturity is achieved only after years of experience. When the architect-planner is able to recognize the existence of a planning problem, and gather all the facts necessary to set up the problem; make decisions which are logical, straightforward, and correct; and by his broad imagination and creative efforts, synthesize innumerable details, and relate them to factors of modern living, and thus arrive at a solution of the problem, with all necessary justifications (aesthetic and otherwise) then he has reached that stage of maturity, which when tempered by experience and sound judgment, makes him an architect and a planner.



Under construction in Bethesda, Md., this residence for Dr. and Mrs. Harry Galblum is framed in light steel structural members. Architect, Harold Lionel Esten.

WARREN BALLARD PHOTO

Gold Medal For Corbu

Le Corbusier, the world famous, Swiss-born architect, has won the 1961 Gold Medal of The American Institute of Architects.

Last year's AIA Gold Medalist was Mies van der Rohe. In 1959, Walter Gropius received the coveted honor.

Le Corbusier, whose real name is Charles-Edouard Jeanneret, was elected winner of the AIA Gold Medal by the Institute's Board of Directors meeting at the Octagon in Washington, D. C., AIA's national headquarters.

The famous architect, who resides in Paris, France, and is now a French citizen, has been invited to attend the AIA national convention in Philadelphia, April 25 to 28, to receive the honor in person.

Le Corbusier was born in La Chaux-de-Fonds, Switzerland, in 1887. His career as architect, painter, sculptor and writer began before World War in the studio of Auguste Perret in Paris and Peter Behrens in Berlin, both pioneers of modern architecture.

His first book, "Towards a New Architecture," published in 1923, firmly established him as a controversial but leading prophet of modern architecture and city planning. His work continues to have a profound influence on world architecture.

In 1938 Le Corbusier with the Brazilian architect Oscar Niemeyer and others, took part in drawing up plans for the Ministry of Education in Rio de Janeiro. It was completed in 1943. Many architects consider this building the forerunner of today's best office buildings both in structure and design. It consists of a glassy vertical slab raised on stilts with sun-control louvers and a sculptural superstructure of penthouses containing mechanical equipment and recreation facilities. A freeform structure, housing an entrance hall and garage, is partly "slid" under the raised slab.

Although he visited the United States in 1935 to lecture here, Le Corbusier became best known in this country when he served as representative of France on the United Nations Headquarters Commission immediately after World War II. He participated in the early stage of designing New York's UN headquarters. Most renowned among Le Corbusier's recent work are his revolutionary apartment blocks in Marseilles, France (completed 1952) and his chapel "Notre Dame du Haut" at Ronchamps, France (completed in 1955).

His largest project is the complete planning and design of Chandigarh, the capital of Punjab, a state of India. He received the commission to create a city for 150,000 people on a windswept plain at the foot of the Himalayas in 1951.

The originality and uncompromising nature of his designs kept him from doing much building during the early part of his career. His plans for buildings that were never realized, such as the League of Nations Palace in Geneva (1927), achieved as much fame as those that were, such as the still standing Ministry of Light Industries in Moscow (1929 to 1935) and the Swiss Pavilion at the Paris University City (1932).

Of Chandigarh's first completed public building, the Palace of Justice, one critic has written that Le Corbusier "achieved the timelessness that will make his architecture a permanent treasure of man's history."

Previous winners of the AIA Gold Medal, in addition to Mies van der Rohe and Walter Gropius, include such distinguished architects as Frank Lloyd Wright (1949), Clarence S. Stein (1956), Louis Skidmore (1957) and John Wellborn Root (1958).

ARCHITECTS SELECTED FOR ARTS CENTER

The Architectural Selection Committee for the Montgomery County Arts Center has decided to retain the firm of Keyes, Lethbridge and Condon as architects for the proposed buildings. Pietro Belluschi, Dean of the School of Architecture of the Massachusetts Institute of Technology, will be associated as design consultant. This same association produced the award-winning Unitarian Church of Montgomery County.

THE AMERICAN INSTITUTE OF ARCHITECTS

Office of the JOURNAL

February 24th, 1961

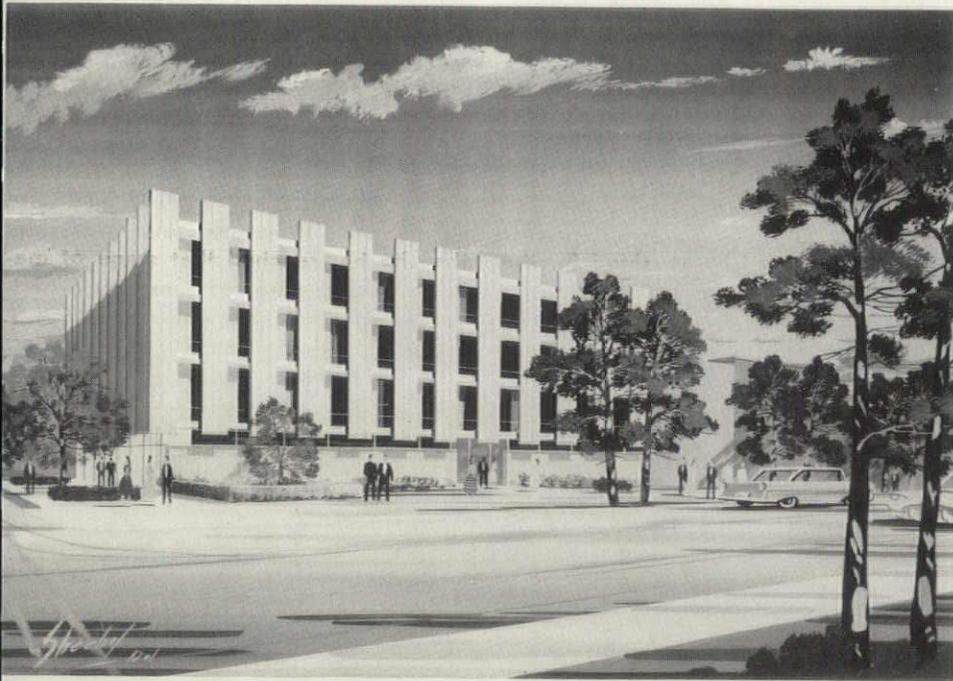
Dear Mr. Esten:

The February issue of The Potomac Valley Architect has come to my desk, and I hasten to congratulate you on the article written by Morton Hoppenfeld. I have talked to Hoppenfeld in the past about writing for the JOURNAL — I'm glad to see you beat me to it!

May I have your permission to reprint it in the JOURNAL? I shall write Hoppenfeld and be sure that it is OK with him. I look forward to hearing from you.

Cordially yours,

/s/ Joseph Watterson, AIA
Editor



The Fenwick Lane Office Building is to be built at Georgia Avenue and Fenwick Lane in Silver Spring. The design features stationary sun-shades; the interior partitioning is flexible. Architects, Cohen-Haft Associates.

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