

The Development of a School

An Account of the Department of Development and Tropical Studies of the Architectural Association

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FOUNDATION OF THE ARCHITECTURAL ASSOCIATION DEPARTMENT OF TROPICAL ARCHITECTURE

In March 1953, a conference on 'Tropical Architecture' was held in London. The initiative for this came from a Nigerian student, Adedokun Adeyemi, who approached Otto Koenigsberger — then a research fellow at the London School of Hygiene and Tropical Medicine — for support in mounting a short course on designing and building in what is now referred to as the Third World. Adeyemi, who was in his fourth year at the Manchester School of Architecture, recognised that he had been well trained to practice effectively in the UK, but did not feel that he was equipped to design for the climate, culture and economy of his own country — to which he was shortly to return with the title of Architect. He also observed that there was a growing number of students from the Commonwealth and colonies in the same position as himself, as well as English architects with ambitions to practise overseas although with no experience of conditions in the Tropics. Rather than mount a course straightaway, it was decided to hold a conference of experienced professionals to examine areas of specialist study needed in the training of architects for work in developing countries and to drum up support for such training.

An Organising Committee of eminent professionals, academics and government advisers was assembled and the conference was duly held at University College London. During the week's proceedings, 15 papers were read, many of which still have considerable significance. However, of most importance was a resolution unanimously carried on the last day of the conference that called upon members of the Organising Committee to "... continue its work and foster:

- (1) Improved educational facilities for students and architects interested in work in the Tropics and particularly the establishment of permanent centres for the study of architecture and planning at ordinary and postgraduate level.
- (2) The encouragement of local building crafts and their proper use in contemporary building.
- (3) The publication of information on Tropical Architecture and Planning.
- (4) The establishment of research and information centres on a regional basis.
- (5) The organisation of further conferences."

With this mandate, Otto Koenigsberger designed a graduate level course in Tropical Architecture and started negotiations with three London schools of

architecture to find a home for it. These concluded with the Principal of the Architectural Association (AA) School of Architecture agreeing to the establishment of a Department of Tropical Architecture at the AA that offered a full-time six-month course, on the condition that it was self-financing. Koenigsberger, whose research fellowship at the London School of Hygiene and Tropical Medicine was coming to an end, had already accepted an appointment in the Gold Coast as Housing and Planning Adviser to the Preparatory Commission on the Volta River Project. Therefore he could not run the new course himself and the post was advertised and accepted on a part-time basis by Maxwell Fry, who had just returned to London after three years in India with Le Corbusier as an architect to Chandigarh, the new capital of Indian Punjab. Fry accepted the detailed course plan, syllabus and timetable that had been prepared by Koenigsberger and the Department opened with its first intake of 24 students in September 1954. Most of these students were English, a few of whom had had some experience in tropical countries. Half of them were still in their final year at the AA.

In the second year, the numbers on the course dropped and by 1956 the intake was only three students. Max Fry and Jane Drew's London-based practice was expanding rapidly and he found that he could spend less and less time with the course. In 1955, he appointed an assistant tutor who took over most of the day-to-day administration and teaching. Nevertheless, early in 1957 he advised the Council of the AA that the new course was no longer viable through lack of demand and should be closed down. The Council did not accept this advice and re-advertised the post of Course Director.

In the meantime, Otto Koenigsberger on completion of his work in the Gold Coast had spent a year as a visiting professor in the US, where he ran a seminar on 'Urbanisation in Africa' jointly organised by the University of Chicago, Roosevelt University, and Northwestern University. He returned to London in 1957 in time to take over the Department of Tropical Architecture at the AA. This he did on the understanding that, although his commitment to teaching and running the Department would be absolutely full-time for the six-month duration of the course, he would be free from May to September each year to undertake work for the United Nations and other international agencies.

The Department's intake that year (1957-1958) dramatically jumped to 36 full-time students of whom all but two were from developing countries. Although this number was not reached again for several years, it never dropped below 20. Also, from this point on, the composition of the student group remained predominantly from the developing countries — principally the newly-independent nations of the Commonwealth. Although it was specifically intended for qualified architects, a few places on the course were always made available to final year students of the AA School who, in addition to attending all components of the course, undertook their final 'design thesis' under the supervision of the Department. The timetable was organised so that all the major lectures took place in the evening in order to allow them to be attended by architects working in London who could not attend the course full-time. However, there were never more than five or six 'lectures only' students, and this scheme was dropped in 1965.

THE FIRST COURSE STRUCTURE AND CONTENT

The course which Koenigsberger had designed in 1953 and which he developed from 1957 onwards had to respond to a complex set of conditions and circumstances. It had to provide a supplement to the regular architectural training that its participants had received in widely varying situations with very

different standards and approaches to design. It was not possible to teach — even less re-teach — design in six months, although the essence of the course was that of design in its broadest sense spanning a multiplicity of conceptual and technical issues that had to be approached at an academic level. Furthermore, in its earliest years the course had to operate with a staff:student ratio of 1:20 or 1:30, so there was little chance of effective individual tuition. In response to these conditions, the course had to be highly structured. It was based on a carefully prepared lecture programme that was supported but not dominated by exercises and project work. The principal lectures, which were given by leading authorities on each particular subject, were always introduced by Koenigsberger, who would also lead a discussion at the end with the intention of ensuring that the relation between the content of the lecture and the exercise on its topic had been clearly understood. Over time, this procedure developed into a system of weekly modules, each on a particular topic or aspect of environmental design. Each was introduced by the Department staff in a series of elementary lectures which were accompanied by an exercise or short project. The week's work ended with a simple multiple-choice test, to ensure that the students had fully understood the language of the subject, and a lecture by an invited specialist on the most recent advances in the field.

Using this system the first term of the six-month course concentrated upon a thorough introduction to the climatic factors that impinge on thermal comfort in the Tropics and the techniques of building design and construction that should be employed to mitigate their effects. The students were given a good grounding in the climatology of different regions of the tropical and subtropical world and were introduced to the basic physiological functions that maintain the heat balance of the human body. They were familiarised with the physics of heat transfer through building materials and design techniques for the control of direct solar radiation and the principles of air movement.

The range and order of first term project exercises changed as the teaching methods of the Department developed. In the earlier years of the course, projects that were principally intended for the exploration of the principles and techniques of good climatic design tended to be based on the design of dwellings for low-income families in order, at the same time, to introduce some of the dominant social, cultural, economic and technical constraints to design in developing countries. However, it was found that the socio-economic issues often eclipsed the physical/technical aspects of design or *vice versa*. So, from around 1960 onwards, the climatic design exercises were based on such buildings as a school, museum or middle-class home, and included considerations such as: industrialised building; the effective use of indigenous materials; and the problems of noise and daylighting in the Tropics. The wider aspects of housing provision were then treated later in the course.

The second term of the six-month course was always devoted to one or two major design projects, often done as group work. In the first courses these concentrated on architectural design problems such as a health centre or a district headquarters complex. However, by the early 1960s they had developed much more into larger-scale planning projects with an emphasis on the provision of low-income housing. These often stemmed from work that Koenigsberger had been involved in during the previous year. Thus projects were set for planning in Tema New Town in Ghana, and Gaborone, the capital of Botswana (then the Protectorate of Bechuanaland). The UN-sponsored pilot housing project of Pulo Mas in Djakarta was taken as a second term programme in one year, as was an examination of neighbourhood planning in Singapore in another.

The lecture programme in the second term developed into an introductory series that dealt with the principal economic, social, demographic and administrative issues of development and urbanisation in the Third World. It

also covered — largely through case studies — different approaches to planning and public sector housing provision.

THE BROADENING SCOPE OF THE COURSE: SPECIALISATIONS

In response to this broadening of the concerns, in 1961, the Department changed its name from Tropical Architecture to Department of Tropical Studies and in 1963 started a specialist Educational Building Course.

Governments of the newly-independent countries of Africa and Asia laid considerable emphasis on the development of education, the eradication of illiteracy, and the provision of universal free primary schooling. In 1961, UNESCO held a series of very influential regional conferences on manpower needs and educational policies and, later in the decade, established Regional School Building Centres for Africa, Asia and Latin America in Khartoum, Colombo and Mexico. Post-war developments in the British educational system were of significant interest to many governments throughout the developing world, as were the approaches of many British local authorities to the design and construction of school buildings. At this time, groups of local education authorities were combining their resources through the formation of school building consortia and developing a series of rationalised building systems in their efforts to meet the urgent need for new schools that had resulted from demographic change and a large stock of obsolete buildings. A great deal of research was being done into new teaching methods and the space and equipment most suitable for them.

The staff of the Department of Tropical Studies, which by this time included two permanent full-time members, in addition to many visiting specialist lecturers and tutors, was augmented by the part-time appointment of a specialist to manage the Educational Building Course. In its first years this course had a somewhat different identity from the rest of the Department. Although the students undertook all the climatic and environmental components of the course together, those on the Education Building Course also had a very full programme of lectures, visits and projects that related the UK experience of educational planning and school design and construction to the needs, conditions and resources of their own countries.

However, by 1967 the structure of the Department had changed substantially. The teaching programme was extended to cover all three terms of the academic year and the certificate of attendance was upgraded to an AA Diploma in Tropical Studies. The first term, which was common to all students, continued to cover all the climatic and environmental design topics as a series of workshops that combined lectures with short exploratory exercises. It also included the introductory lecture courses on the social sciences and issues of development that had previously occupied the second term. This term now was devoted to the major inputs of a series of course options on Educational Building, Housing, and General Design. The last of these options was for those students who wished to go into greater depth in climatic and environmental science or look into an architectural problem relevant to their countries that did not fall into the broad spectrum of housing or educational building and planning.

In 1968, an option on Medical Facility Planning and Design was introduced. However, this was transferred the following year to the Medical Architecture Research Unit (MARU) at the Polytechnic of North London (PNL), which already had considerable specialist expertise and experience and for some time had planned a similar course for overseas architects and health administrators.

The third term of the Department's course was principally devoted to individual projects or studies on topics or issues of particular relevance to each

student's country in the area of his specialist option. In the mid-1960s the majority of the third term projects took the form of architectural designs or planning studies. However, over the subsequent five years, this emphasis on physical and environmental projects changed to studies of policy issues and the implications of alternative development strategies. Koenigsberger drilled into every student that the central concern of the Department was 'problem solving, not just problem studying' and all third term dissertations were expected not only to analyse a problem but to make proposals for realisable remedial action be it on the level of policy, programme or project.

INTRODUCTION OF URBANISATION PLANNING

In 1969 the Department, again in response to the broadening areas of its interest and teaching, changed its name to Department of Development and Tropical Studies. In the same year, in conjunction with the postgraduate Department of Urban and Regional Planning of the AA, it established a one-year course on Urbanisation Planning for Developing countries. The foundation of this course, which subsequently was to have a major influence on the direction of the Department and its successor, the Development Planning Unit (DPU), grew out of a variety of different ideas and demands.

In the autumn of 1963, Otto Koenigsberger had given a public lecture at the AA on his advisory mission to Singapore for the United Nations of earlier that year, entitled "Action Planning". This had been published in the *Architectural Association Journal* in May 1964 and by the late 1960s the concept of Action Planning and the implications of its central theme of planning as a process of public sector promotion, as opposed to the control of private sector initiative in urban development, were becoming intellectually accepted, if not widely adopted. Thus, there was a growing demand for a forum for the discussion of alternative approaches to urban planning and the planning of urban development in the Third World, based on Koenigsberger's ideas.

From the other end of the planning spectrum there was also a demand for information on the planning of post-war Britain; the operation and results of the 1947 *Planning Act*; and the New Towns Programme. This came not only from the New Commonwealth — the inheritors of British planning legislation and procedures — but also from the rapidly-urbanising countries of Latin America. This demand was seen as an opportunity to discuss the irrelevance of many aspects of British planning to the cities of Africa, Asia and Latin America, as well as the promotional mandates of the New Town Development Corporations as examples of one of the basic principles of Action Planning.

In 1964 the new Labour Government created the Ministry of Overseas Development to manage Britain's aid programme to the Third World and throughout the following decade the Government laid increasing emphasis on Technical Cooperation, a large measure of which was in the form of scholarships for study on the UK. As there was no other course in the UK specifically for planners from overseas encouragement was given to the establishment of the Urbanisation Planning Course at the AA, by the Ministry of Overseas Development, in 1970.

It was intended that the students of this course should spend most of the first term in the Department of Urban and Regional Planning reviewing the British post-war planning experience and most of the second term in the Department of Development and Tropical Studies analysing its relevance to the Third World. The third term was to be spent on individual studies jointly tutored by the two departments. However, this system did not work well in practice and the joint administration of the course was abandoned the following year and it was

absorbed entirely into the Department of Development and Tropical Studies as one of its course options. More than the other options, the urbanisation course was influenced by the changing character and demands of the student body at this time. During the 1950s and early 1960s the majority of the Department's students came from Asia and the Caribbean and during the mid-1960s the number from Africa increased, but it was not until the late 1960s and early 1970s that there was a regular intake from Latin America. It was largely this group that stimulated a more articulate political awareness in the Department, together with an involvement in the European debate of the New Left that stemmed from Paris and Berlin in 1968 and the hopes for radical political change that were spreading through the Third World in the wake of the independence in Africa and Asia and the growth of Leftist movements in Latin America. Analysis of the major issues of underdevelopment, imperialism and dependency were incorporated into the teaching of the Department and projects tended to concentrate more on policies and planning than on projects and programming. Nevertheless, the emphasis of the Department on the prescription of realisable solutions to problems in student projects and dissertations was maintained.

CONCERN FOR THE EFFECTIVENESS OF TRAINING

By the end of the 1960s several schools of architecture and planning in Europe had started or were in the process of setting up courses of Third World studies. Although most of these differed from the AA Department of Development and Tropical Studies, in that they took the form of options within regular university courses and, therefore, principally addressed European students, it was felt that experiences should be shared. So in July 1970 the Department hosted a three-day workshop on London that was attended by representatives of some ten institutions from the UK, the Netherlands, Germany, Sweden and France. The workshop was considered such a success as a forum for the exchange of common pedagogic problems and views of professional training that it was repeated the following year in Rotterdam, this time jointly hosted by the Bouwcentrum and the Technische Hogeschool, Delft. Among the principal concerns of both these workshops was that of the effectiveness of education and training for housing and planning in the rapidly-urbanising countries of the Third World. This theme of effectiveness was set by Otto Koenigsberger in his opening address to the first workshop in which he recounted how, at its foundation the AA Tropical Department had been seen as a stop-gap measure that would do itself out of a job as professional *cadres* in the Third World developed and indigenous training institutions were established. Some 18 years later, there was little evidence of this happening. The concern of the Department for the effectiveness of its teaching at this time stemmed from three observations which were presented to the European Workshops, as were the Department's strategies for meeting them, each of which was being planned or was operative by the second workshop in 1971. These were: the introduction of a teaching methods course for design and planning education; the establishment of an Extension Service to run short intensive courses at educational institutions in developing countries; and the launching of a Special Programme of short courses on development planning for senior urban managers, administrators and planners.

TRAINING FOR TRAINERS

It was observed by many students in the Department that, although the number and size of schools of architecture and planning in the Third World (particularly

in Asia) had been growing dramatically during the 1960s, the content of their *curricula* and the structure of their teaching programmes often seemed of doubtful relevance to the social, economic or professional reality for which they were ostensibly preparing their students. Many schools had been closely modelled on those of Europe or North America and, in their concern for academic respectability, had retained not only the style but, in many cases, a large measure of their content, without adequate regard for their pertinence. Teachers, concerned with this, had from time to time enrolled in the Department, not only to study the substance of its course but also its teaching methods, and more particularly those of the AA undergraduate school. This *ad hoc* facility was strengthened in 1969, when the Department launched a formal course option in Teaching Methods, that concentrated on: the techniques of small group instruction; the use of projects in design education; and the administration of architecture and planning courses. Students were attached for short periods as auxiliary tutors in different units at various levels of the AA undergraduate school, and visited other schools in the country to observe and discuss the operation of training for different aspects of the design and construction professions and different approaches to tertiary-level education.

In 1970, the Department was asked to assist in the establishment of a new Faculty of Architecture in the University of Costa Rica. A major component of this assistance was to be the training of the staff of the new Faculty. The first four, full-time teachers — amongst whom was the Dean of the Faculty — joined the Department of Development and Tropical Studies in 1970–1971 for the Teaching Methods course, the main vehicle of which became the design and detailing of the new course syllabus and *curriculum* for Costa Rica. In conjunction with the Institute of Education and the Open University Design Methods Unit, a lot of work was done on theories of design and on the application of educational psychology and student motivation. These considerations were firmly cast in the social and economic context of the development of Costa Rica and, therefore, had to be prefaced with a careful clarification of the professional roles for which the Faculty would train architects and planners. The Department's work with this first group of Costa Rican educators formed the basis of what was later to become a two-year Diploma Course in Design and Planning Education for developing countries.

THE EXTENSION SERVICE TO THIRD WORLD SCHOOLS

In parallel with the Teaching Methods Option, in 1972, the Department (with a three-year grant from the Nuffield Foundation) set up an Extension Service to run short project-based courses in universities and professional training establishments in the Third World. As with the Teaching Methods course, the principal intentions of the Extension Service were to both question the content and the concerns of schools of architecture, planning and environmental administration, and to demonstrate alternative teaching methods. In planning this, the Extension Service not only incorporated the principles that underpinned the Teaching Methods course, but also drew heavily on the direction and content of the Diploma Course Housing Option and on the techniques employed in the teaching of climatic design.

Over the preceding four years, the Department had developed and refined its first-term teaching on Climate and the Design of Buildings into a five-day programmed-learning event for architects and engineers. As well as in the Department, this course was run regularly at several other schools in Britain, the Netherlands, Germany and Switzerland, where there were tropical studies' programmes. It had also been conducted by the Department in Baghdad and

Costa Rica, and, although the climate course covered an entirely technical subject, its approach and teaching techniques had proved so successful that they were used by the Extension Service as the basis for the design of a six-week course entitled 'Housing in Urban Development'.

The terms of the Nuffield grant, which covered the salaries of three full-time members of staff, allowed for an initial six-month preparation period, which was used to design the structure and content of the housing course and to prepare teaching material for it. The course took the form of a project for the design of a housing policy and strategies for its implementation, in the city in which it was taking place. Deliberate emphasis was given to the demographic, political and economic aspects of urban housing provision, as it was rightly anticipated that the course would be conducted, in the main, in schools of architecture and planning, where the understanding of these essential issues normally get scant attention. Great emphasis was also given to the pedagogic management of the course, and the discussion of it with the teachers of the host institution — one or two of whom were meant to join the Extension Service team as counterparts. It had originally intended that the counterpart staff of one course would be able to join the Extension Service team for the preparation and running of the next but, largely for financial reasons, this only happened once — when a teacher from the Bombay Academy of Architecture rejoined the Extension Service as a team member for a course at the Asian Institute of Technology, Bangkok.

The Extension Service housing course was run in seven different institutions in India, Pakistan, Thailand, Iraq and Kenya, between 1973–1975. There can be no question that each course project individually made an impact on both the staff and students who participated in it. However, because of the lack of follow-up and continuity of the sort mentioned already, it cannot be said that the Extension Service had the lasting impact at an institutional level that was hoped for at its inception. Furthermore, although it had been demonstrated that individual requests for Extension Service courses would be supported by the British Government's Technical Cooperation programme, the making of such a request for teaching assistance by an institution in the Third World could be construed as an admission of its own inadequacy, in an atmosphere of competitive academic pride. For this reason, together with the low priority given by governments to both training and urban issues in the use of their aid allocations, there were insufficient requests for courses to sustain the Extension Service beyond the Nuffield grant period.

SPECIAL PROGRAMMES FOR SENIOR EXECUTIVES

The Department's third major innovation of this period was the establishment, in 1972, of its Special Programme in Urban Development Planning. It had often been commented by students returning to planning offices, after studying in the Department's Urbanisation option, that many of the perceptions, concepts and techniques that they had acquired in London remained untried and unexploited. Their superiors did not understand them, nor did they understand the intellectual or operational context that often demanded fundamental changes in their approach to planning; and, although it was not necessary for executives at that level to have to understand the actual manipulation of techniques or the details of plan implementation, it was important that they should be brought up to date with the new concepts and approaches to urban and regional planning and management that, during the 1960s, had revolutionised the discipline — particularly with respect to the rapidly-urbanising countries of the Third World. It was also important that they should sufficiently understand the application and limitations of the new techniques of analysis and appraisal to be able adequately to direct their more recently trained technical and professional staff.

So the Department established an annual three-month workshop on Urban Development Planning for senior executives. This was treated both as a taught course for the imparting of information and instruction and, at the same time, as a forum for the exchange of ideas and experience between its participants and the Department staff. In the early years of the Special Programme, participants, as well as coming from all parts of the world, usually represented a very wide range of specialist interests and experience in the field of urban planning and management. This greatly enhanced the effectiveness of the simulation gaming which the Special Programme employed as one of its main teaching tools in the examination of the institutional implications of Action Planning and the entrepreneurial role of the public sector as promoter and leader of private and community sector initiative.

THE TRANSFER TO UNIVERSITY COLLEGE LONDON AND THE DPU

In 1969, the Council of the AA opened negotiations with Imperial College of Science and Technology (ICST) for the transfer of the AA School of Architecture into London University, as the fourth school of Imperial College. The Department of Development and Tropical Studies was to be incorporated as a recognised department of the School with a tenured staff allocation. The reasons for the proposed merger were principally financial. Although highly efficient in its use of resources, as an independent school, the AA had to compete with the State system for students. Furthermore, the 50-year lease on its premises was about to run out and a drastic rent increase was anticipated. However, on the eve of the ratification of the transfer, in 1970, the Board of Governors of ICST withdrew from the negotiations and cancelled the merger. The AA had to make what immediate short-term economies that it could and review its strategy for the future.

The two graduate departments — Development and Tropical Studies, and Urban and Regional Planning — were instructed by the AA Council to substantially reduce their expenditures or to find a new home. After informal discussions with other institutions, the Planning Department opted to remain in the AA, but the Department of Development and Tropical Studies felt that in no way could it, on a reduced budget, provide the range of courses and programmes that it currently ran or was planning. So negotiations were opened with the School of Environmental Studies (later the Bartlett School of Architecture and Planning) of University College London, which — upon their conclusion — the Department joined in the academic year 1971–1972 — as the DPU. This transition from the AA to UCL was facilitated by a two-year, ‘seed grant’ from the Ford Foundation. Otto Koenigsberger received a tenured professorship from University College, but all other salaries and costs were to be met out of the Unit’s earnings. It was to be completely self-supporting.

At this time, the Department had a permanent, full-time, academic staff of six, plus a librarian and two clerical assistants. The Diploma Course had an annual student intake of around 40, and a further 15 were expected on the first Special Programme. The transfer to the University did not occasion any immediate change in the operation or style of the Department. For this reason, the foundation of the Special Programmes and the Extension Service has been described here as a part of the history of the Department of Development and Tropical Studies. They grew out of the experience and concerns of the Department, although it had become the DPU by the time that they had become operational.

Over the subsequent decade, however, the DPU has changed significantly.

The urbanisation option enveloped the whole Diploma Course, as the General Design, Educational Building, and Design and Planning Education options were abandoned, because the demand for them diminished. A Masters degree course in Development Planning was established, in order to cater for those students with recognised first degrees who needed an analytical, academic education, to prepare them for university careers. The diploma programme became a professional course in Urban Planning Practice for middle-level staff in public planning offices and development authorities concerned with the design, administration and implementation of plans.

The general Special Programme in Urban Development Planning was changed into a series of specialist, three-month courses covering various different, specific aspects of urban planning and management which, in turn, seem likely to become even more specialist and country specific. The inheritor of the Extension Service became an Overseas Services operation that provides consultancy in international development and training programmes in the Third World.

Although the DPU apparently has very different concerns to those of the Department of Tropical Architecture of 30 years ago, there has been a clear consistency in the development and transformation of the one into the other. This is not only reflected in the way that it has responded to changing demands for professional training, but — more importantly — in the major intellectual and pedagogic contributions that it has made to the environmental planning and development disciplines in the Third World. For these, the AA Tropical Department (as it was always known), the DPU, and Otto Koenigsberger are recognised throughout the world by a far wider circle of professionals and academics than just that of their *alumni*.