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		KWANJA A KUANGALIA
		Munication by W Plata

University Bulletin

June 1971 No 3

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This issue of the University Bulletin was designed by Mr Walter Plata, of the Department of Design. The cover is an example of the use of humour in visual communication, where it should play no more important a role than it plays in other human activities. The cost of printing this cover is not higher than the cost of printing the previous issue's cover in only two colours.

The design of the text pages of lletin is based on verifiable data experimentally by psychologists.

Walter Plata Visual communication

Mir Plata lectures in the Department of Design. He was educated and trained in Germany, where he started designing visual communication in 1950. In 1961 he began teaching as assistant professor of graphic design at Rhode Island School of Design and has since been both a designer and teacher in many countries. He is a bachelor.

The Department of Linguistics and African Languages furnished this Swahili translation of visual communication: uelezaji kwa njia ya kuangalia. Swahili-speaking ayahs, cooks, lecturers, students translated it back into English as demonstration through watching, to know by looking, to get information by the way of seeing: useful definitions of a term referring to a rather new activity in East Africa.

Visual communication is an exchange of messages which can be seen. Together with messages which can be heard they make up the bulk of human communication, which (in his "On Human Communication") Colin Cherry defines as an activity which establishes a social unit from individuals by the use of languages or signs. Communication is the condition sine qua non of an individual's and of a society's survival and development.

The more industrialised societies became, the more they needed efficient communication systems. These they got with audio-visual telecommunication media. But also the old media of visual communication had to perform more efficiently in more complex communication situations. A new professional was needed to plan, to design visual communication.

The graphic designer appeared, trained in a new kind of school, the school of design (or art and design or craft and design). The most known and influential of this type of schools was the Bauhaus, which operated first in Weimar, then in Dessau, between 1919 and 1932. In all these schools a designer was trained whose ability and capacity rested on intuition, creativity and personal experience, fine qualities which however cannot be measured or described precisely. Neither can such a professional's output — his design — be measured and verified precisely. This largely explains why in 50 years of schools of designs and designers no theory of design has yet been written.





Both symbols were designed for the Association of Medical Students, University of Nairobi, to visualise contemporary medical practice in East Africa. The circular shapes, representing pills, refer to modern medicine while the shapes of leaves and horns refer to traditional medicine. G.G. Kamau and R.C. Aguma, graphic design students of the Department of Design, integrated these shapes into functional signs, semantically precise and legible down to small sizes.



More often than not a photograph alone is semantically imprecise. To readers who do not understand Swedish this photograph will transmit different messages, possibly each reader interpreting differently what he sees. However, given the translation of the text, All advertising is not shit, and being told that this poster was designed by two well-known Stockholm art directors for distribution in the Swedish advertising profession (where golden eggs are awarded annually to selected advertisements), the reader will be able to interpret the photograph as a criticism of a large part of advertising.

For the past 50 years in Europe there has been hardly any communication between schools of design and their graduates, and universities and their graduates. And there was no need for it. Psychology, engineering, mathematics, philosophy, economics, as well as design, were taught and practised for development and progress, which was visualised also in columns of figures: communicating how many cars, chimneys, stockings, soap powders, cigarettes, books, guns, pills . . . were produced and sold. Scientists, artists, commercial artists and designers — among others — were all busy developing Mrs and Mr Citizen into Mrs and Mr Consumer. Visual communication was mostly unilateral, one-way messages from the producer to the consumer, urging, asking, persuading, yelling at him to consume more, to throw away, to buy, to throw away, to buy, to spend . . .

The vast majority of people calling themselves graphic designers are still engaged in "designing" this kind of visual communication, called advertising — 90 per cent of them, according to the BDG in Germany, the oldest professional society of graphic designers. Their training for the design of this kind of visual communication, often to visualise the gags and gimmicks of sales managers and promotion men, was and is adequate. No advertiser rightly is interested in his advertisement as a means to transmit information as fast as possible, because in 95 per cent of advertising no information is transmitted, if we understand by information data which increases the knowledge of the receiver. If we can qualify what is transmitted in the vast majority of advertisements as a special kind of literature, as fiction or fairy tales for Mrs and Mr Consumer, then we may say that the invention of these tales and their presentation to the public are closer to art than to design.

The graphic designer of today who calls this activity "design" should have kept his old designation as commercial artist. Intuition, creativity — if he owns and cultivates these fine yet not precisely measurable qualities — will make his work and himself more successful than if he had these qualities which make a designer find a problem, state, describe and analyse it, programme its solution based on data and the fixation of selected measurable variables, visualise the solution of the problem, implement the programme and control all activities leading to or resulting in the problem's solution. The solution will be a product which fits into and develops an economic and socio-cultural situation of whose many components usefulness and beauty are just two. If the product were only to be useful per se, only engineers would be needed to design it. If the product were only to be beautiful, an artist could cope with the problem.

The commercial artist, now often calling himself a graphic designer, was and still is successful. With his help in the highly industrialised countries called "developed" quasi-perfect consumer societies were established and are functioning.

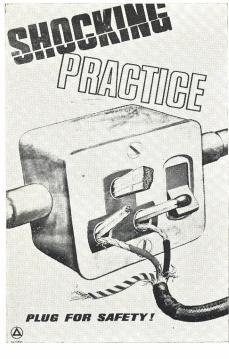
In these societies more and more of their members in the last ten years had similar experiences to that of this writer: walking in the main streets of Birmingham, Frankfurt, Gothenburg, Kyoto or Pittsburgh one has to yell into the ears of one's companion to communicate with her. Not only the Hudsons, Rhines and Thames stink but even the small streams one encounters in "recreational" areas where one spends holidays. In Los Angeles, in Bolton, on the autobahn in the Ruhrgebiet on bright days it suddenly becomes greyish-black: smog: visual communication of societies whose members have highly activated certain parts of their brains but who have lost the ability to reason, who produce as much dirt as soap and consume both.

Recently change has started to take place in these "developed" countries. Politicians campaigning for mayorships in urban areas promise the voter to return to him what he once owned: the pleasure of walking and talking in the streets and a blue sky above him. Economists stop cherishing the national production and consumption growth as the developed countries' holy cow. Students protest and revolt against an education and training inadequate to make them capable of solving problems in a new society in which they no longer want to be powerless specialists and manipulated consumers. An alarmed and scared public backs very expensive educational reforms and new programmes. Implementing them in Europe the first schools of design are being integrated with universities.

Against this background of change and reform in education in general and in the education and training of designers in particular in the so-called developed countries, the first school of design in Africa between the Sahara and the Zambesi was opened. In 1969 a Department of Industrial Design was established at the University of East Africa's College of Nairobi, and shortly after renamed the Department of Design. What was then and still is designed visual communication in East Africa — known as commercial art, graphic design, advertising design — was and is mainly imported from Europe and the U.S. and modelled on it. But here press, magazine, film and television advertising is not thousands of millions of shillings' business as in the Western countries where its halting would probably cause the collapse of those consumer societies. In East Africa this kind of visual communication is directed to a group of consumers totalling up to only about 1 per cent of the approximately 30 millions inhabitants.



Aerogrammes of such shape are sold at the post offices in East Africa. As a medium of visual communication or a channel usable for the transmission of information they are badly designed for use in offices. Because of their size/shape the typing of information, the production of carbon copies and the filing and retrieval of the aerogramme by the receiver present problems. This then is an illustration of the need for African designers with the know-how and authority to design more functional aerogrammes.





No student in the Department of Design should be specially trained to serve this market and group. The artists and craftsmen needed by the agencies handling advertising are more economically trained within the agencies or at a vocational school. At such a school all young people who in East Africa would professionally handle a camera, brush, pen and typographical rule could be trained faster and cheaper than for eleven thousand shillings a year at the University. The costly university education justifies the training and education of designers of visual communication — the relevant programme in the Department of Design is still called graphic design — only if the graduate will be capable of taking part in decision-making at management level. For this he will have to be as qualified a professional as a psychologist, economist, physician or architect. Only within the university can he acquire the necessary knowledge.

Being with the Department of Design from its start, this writer would suggest that such a professional could be produced by it if two major changes were effected: that the present three years of undergraduate studies are intensified into an undergraduate study of four years of three terms each year or three years of four terms each year, and that candidates must have a principal pass in at least one science subject and may leave art as subsidiary only.

Now the Department of Design normally gets students whose art teachers in secondary school had heard something of commercial art and suggested the study of "design" because the student was rather good at handling a piece of chalk, a brush, a pencil. The problem of the Department of Design is to get the right students and also to get the right staff: a combination of an experienced designer and a teacher, able also to tap sources of such relevant knowledge and programme its flow from other departments to the Department of Design which he himself is not qualified enough to transfer to his students.

All the knowledge necessary to make out of the right student a designer is available in this university. This designer of visual communication, a Bachelor of Arts in Design graduating at the University of Nairobi, will depend on and will be the product of successful communication within the university.

Posters used to help in preventing accidents in East African factories are imported. Their design is of low quality and consequently they function badly in their country of origin and worse in East Africa, where the receiver of the messages they transmit lives in a different environment and speaks a different language. In co-operation with the Inspectorate of Factories, Ministry of Works, graphic design students in the Department of Design are re-designing such posters. Reproduced are an imported poster and a stage of its re-design by D.P. Karamu. The design variables – format (size), type faces, type sizes – were fixed also to establish the visual identity of the source or sender of information contained in the journals. Some noise is present in the channel which is the cover of No. 2 issue as a consequence of the too-wide spaces between Vol. and 1, and No. and 2. and the space between V and ol in Vol.

The design of this medium of visual communication is based on European beliefs and opinions - sometimes qualified as creativity or intuition. Scientists have proved that this traditional newspaper design causes a considerable reduction in the functioning of this medium. The short line – increasing the number of fixation pauses - the many word breaks, the recurring over-wide spaces between words and the excessive number of words set in capitals all drastically reduce legibility. A designer of visual communication would say that this type of newspaper is very noisy as a channel of transmitting information. Its traditional design also causes a partial waste of the capacity of the channel, which negatively influences the production costs of the newspaper.

This then is an illustration of the need for African designers with the know-how and authority to re-design their countries' newspapers.

Vol.1 No.1

TRADERS TOLD TO SPECIALISE

TRADERS taking over businesses previously owned by non-citizens have been advised to specialise in trade in order to be successful. The advice was given by the Central Provincial Planning Officer, Mr. D. Kungu, when closing a oneweek course at the Wambugu Farmers' Training Centre attended by 12 traders from Nyeri District.

Above, a cutting (in original size) from the front page of the Daily Nation illustrating the traditional narrow newspaper column. ournal Vol. 1 No. 2

of the Language Association

of Eastern Africa



Patricia M.Larby The library: heart of a university

Right at the heart of the university's main campus and the central focus of its teaching is the Gandhi Library, which is not only the administrative headquarters of the library system but also the library for the main campus of the university.

No university can function without a library to provide the books, periodicals, microfilms, maps and other research materials necessary to back up its activities. Although the Gandhi library owns the largest collection of books in Kenya, its stock, estimated at 120,000 volumes, seems insignificant when compared with some of the giant libraries in Russia, the U.S. or Britain, where stocks run into millions of volumes occupying miles of shelving.

No teacher or research worker can carry out his task without reference to the printed word at some stage (after all, one does **read** for a degree) and nowadays the volume of publishing is so great that one would need almost to be a millionaire to afford all the books relevant to one's work and interests. Not only are books expensive to buy, they also occupy a lot of space; so most people prefer to acquire only the books most relevant to their personal use and leave their other requirements to be provided by the library.

The primary function of the university library system is to provide the books which are needed by the staff and students in order to help them carry out their studies, teaching and research. The growth of the University of Nairobi in recent years has meant that the main campus has become too small to contain all the activities of those who live and work there: the vets and agriculturalists need a farm on which to learn the practical aspects of their studies and budding doctors need a hospital with a ready supply of patients. Around the farm and the hospital have grown separate campuses to house and otherwise cater for those who study there.

The library too reaches out to these students by providing campus libraries containing the necessary materials needed for studies. We now have five sub-libraries at Kabete, Chiromo, the Adult Studies Centre at Kikuyu, the Kenyatta National Hospital and the new Education Library on the main campus which is to become Kenya's national library in this subject area.

To an average user a library can be rather overwhelming at first sight. Rows and rows of books have bewildering numbers and letters written on them which the librarians describe as call numbers; then the staff themselves all look so busy that a shy person would hesitate to disturb them with such a simple query as: where do I find the geography books?

In the case of university students, of course, a knowledge of the way in which the library is arranged and how to use it to the maximum benefit is essential if any intelligent use is to be made of its resources. Busy though the library staff may be they will be pleased to give an explanation of this kind in the hope of encouraging users to make the fullest possible use of the facilities available.

In this university library most of the stock is on open access. This means that users are allowed to go to the shelves and look through the books for themselves and select those they wish to use. The idea of open access was introduced into libraries only at the beginning of this century; before that books were kept under guard (sometimes even chained to tables) and users had to check the book they wanted in the catalogue, fill in a request slip and the book was fetched by a member of staff. In many university libraries closed shelves are still provided, requiring users to ask staff to fetch the books they need and there are many advantages to this system in that books are not easily stolen and they do not become disarranged to the same extent. On the other hand, closed access gives no opportunity for browsing among the books. This is the only way in which one can fully appreciate the wealth of knowledge contained in them.

At present the only parts of the Nairobi University library stock which are closed to general use are the Africana and Reserve Collections. In both cases users request the items they want which are supplied against deposit of a membership card. These restrictions are necessary to prevent loss or theft of materials which are particularly expensive or may be irreplaceable. During the past two years alone more than £200,000 has been spent on building up the stock of the library, making it the most valuable and expensive piece of research equipment in the university.

In common with most open access libraries, this library needs to have its stock arranged in such a way that books on similar subjects are brought together so far as possible. This process is called classification. Up to 1967 the library was classified by an arrangement designed for scientific and technical libraries known as the Universal Decimal Classification.

The remnants of stock left in this classification can be found on the second level of the Gandhi Library. Since 1967 the library has been changing the classification to a new arrangement: the Library of Congress Classification. This is a more complex system in some ways and many people are confused by the combinations of letters and numbers written on the spines of the books. These are **call numbers** and fulfil a very useful purpose, for not only do they guide the user to the correct place on the shelf where the book may be found and identify one particular book from another but to those who become familiar with the numbers they also indicate the subject content of the book. Those who think that these numbers are unnecessarily complex should remember that modern knowledge is also complex and that the arrangement of such knowledge in written form requires sophisticated techniques to handle it. In the United States and other Western countries experiments are being carried out using computers in libraries in an attempt to handle the volume of research material which is published and with which traditional methods are unable to cope.

Meanwhile, here in Nairobi, we continue with the traditional methods, using such aids as are at our disposal and our hard pressed cataloguing section not only processes all new stock but is also making great inroads into the transfer of stock from the "old" classification to the new one. It will be a happy day for us all when the transfer is complete.

As well as classifying the library books, the cataloguing section also does the cataloguing of stock. The library catalogue lists all the books which are available in the librory and where they can be found. Because the stock of a library is continually changing, with new items arriving and old ones being discarded, this list is made in the form of cards which can be interfiled or removed without disturbing the sequence of the rest. To find a book in the library it is necessary to know one of three things about it: what it is called, who wrote it or what it is about. With any or all of these items of information it is usually fairly simple to find the card in the catalogue which describes the book wanted.

The cataloguing section makes a card for each book under the name of the person who wrote it, its title and its subject in the anticipation of a search under any of these aspects. Even so, there are times when a book does prove difficult to trace for some reason. Government publications and those of international organisations such as the United Nations are notoriously difficult to identify in many cases and for this reason many libraries set up documents collections separate from the rest of the stock with specialist staff in charge.



The author of a work is not always easy to identify: sometimes several people collaborate to write a book — do we make an author card for each one? Who is the author of the Bible or the Talmud or this Bulletin? This type of query can pose problems both for cataloguers and the users of the library and when meeting a difficulty like this the solution is to ask for help from the library staff who are skilled at dealing with such matters.

Not all the materials in the library are books. Our holdings include a large intake of current periodicals and the back files of these (a valuable source of reference) take up most of the ground floor, maps, microfilms and even a few gramophone records. In recent years books have ceased to be the major format in which knowledge is stored and increased use is being made these days of these other forms especially microfilm and other forms of micro-reproduction.

These microforms as they are called have two major advantages over normal book form: they are much more compact to store and this means valuable savings in space where library stocks are expanding more quickly than the buildings which accommodate them; also they provide a way of obtaining materials long out of print as the making of a microform reproduction is only a fraction of the cost of publishing by conventional methods. They are particularly useful in obtaining back runs of journals and items such as university theses — a valuable source of research material not usually available in any other way. With the introduction of several new courses in recent years the library has been busily acquiring such source materials and the loan of £100,000 from the British Government for the purchase of such materials has given us the chance to buy many basic materials which have long been needed.

The library is an expensive asset — expensive to stock and expensive to operate. To house a library that will give adequate service to its users, large, purpose-built accommodation is needed — sufficient to contain the stock, the number of readers likely to use it at any one time in reasonable comfort and with the layout of the various departments reflecting the flow of work to give maximum efficiency.

At present-day costs the starting price for such a building is around £2 million. In addition properly designed furniture and equipment such as reading desks and chairs, microfilm readers, photographic and binding machinery are necessary. Shelving needs to be strong enough to carry the tremendous weight of books — one of the heaviest of commodities. (Anyone who doubts this statement is invited to carry an armful of periodicals up three flights of stairs.)

M.H. Abdulaziz A question of language



Mr M.H. Abdulaziz, chairman of the Department of Linguistics and African Languages, joined the university last year as head of what was then a linguistics sub-department of the Department of English. Previously he was acting head of the Department of Language and Linguistics at University College Dar es Salaam. In this article Mr. Abdulaziz briefly describes the current projects in what is one of Nairobi University's newest departments.

The Department of Linguistics and African Languages started functioning in September 1969 following the Report of the Committee of Language and Literature which recommended that such a department be set up. The department was operating in fact as a sub-department within the then Department of English.

Since July 1971 the Department achieved full autonomy when the two separate Departments of Literature and Linguistics and African Languages were created.

The new Department was set up with three main objectives:

1. to accord the study of African languages its proper place as a viable academic discipline in an African university;

2. to help improve the quality of language teaching in schools not only by giving detailed attention to the structure and usage of languages under study, but also by deepening the students' awareness of the structural nature of language; the differences in the way various languages are structurally organised, the role of language in society, and the form and significance of language varieties, both social and geographical;

3. to provide a focus in the Faculty of Arts for those disciplines which are concerned to a greater or lesser extent with language as an aspect of social behaviour, and as evidence of historical processes and cultural change.

The immediate aim of a language department such as this should be to produce adequately qualified teachers of language, since there are very few Kenyan teachers at teacher training college, higher school and secondary school levels with enough qualification in language and linguistics. The other aim is to train future language specialists who could undertake research into the various aspects of African languages, and who could be employed in positions where language qualification is essential or useful.

The department is mainly concerned initially with establishing undergraduate courses in Swahili and linguistics. Other African languages will be added as alternatives, as and when teaching materials and staff become available. In our B.A. syllabus there is provision in the second year for the study of Common Bantu linguistics and also a descriptive study of a Bantu language other than Swahili. This year a phonological and morphological study of Kikuyu was introduced to the second-year students. It is hoped next year's third year will be introduced to a similar study of a Nilotic language.

At the moment the department has one established member of staff. Another, a general phonetician, has already been appointed and is expected to join the department in August. The department has been lucky in receiving help from linguists in the Institute of African Studies (Dr J. C. Sharman and Dr B. Heine), Faculty of Education (Mr D. Elderkin) and Department of Literature (Mr T. Gorman); also a linguist from Sussex University sponsored by the Rockefeller Foundation and ODM. (Mr J. V. McGivney).

The Department has also employed two part-time lecturers (Mr F. Ainsworth and Mr A. Bashir). Without

their help it would have been extremely difficult to offer the range of courses outlined in our syllabus, as well as mount a B. Phil programme. Unfortunately at least two of the lecturers concerned are leaving the university at the end of this academic year: Mr T. Gorman and Mr J. McGivney.

We have been facing the usual problems confronting new departments, such as the lack of books and journals in the field of linguistics in the library. This is now being rectified and it is hoped that by September almost all the important work in the field of theoretical and descriptive linguistics, sociolinguistics and African linguistics will have arrived. Also standard texts for students will be available in the bookshop.

Partly due to our normal fund allocation and partly through a generous grant from the Ford Foundation (which sponsored the Kenya Language Survey), a start has been made towards collecting materials and equipment for further work in phonetics and phonology. So far these include relevant anatomical models, phonetics charts and diagrams, a phonetics typewriter suitable for African languages, an instrument for acoustic and phonological analysis of speech, recording equipment, and taped courses in phonetics. It is also hoped to make use of the language laboratories in the new Education Building from next term onwards.

The department managed to hold regular weekly staff seminars in the first and second terms of this year. These seminars addressed themselves to topics of theoretical linguistics, socio-linguistics and general problems of language policy, engineering and development. A number of guest lecturers from foreign embassies of countries with bilingual or multilingual problems came to address us about the language situation in their respective countries.

Research Activities:

Dr B. Heine has been working on the classification of the non-Bantu languages of Kenya, with emphasis on the study of the remnant languages of Kenya and Uganda. Mr D. Elderkin is working on the grammatical description of Dahalo, a Cushitic language spoken on the mainland opposite Lamu.

Mr T. Gorman has just completed his doctoral thesis on Educational Language Policy and Implementation in Kenya.

Dr J. C. Sharman is making a comparative study of North-Eastern Bantu languages in the light of the Guthrie hypothesis.

Mr J. V. McGivney is researching into language teaching problems and policies in a multilingual setting.

Mr M. H. Abdulaziz is working on the transitivity patterns of the Swahili clause, within the framework of case-grammar theory.

The department has two research associates this year, Mr J. Duran and Mr Philip A. S. Sedlak. Mr Duran is working in the Lumbwa area, his topic of research being "The role of Swahili in a multilingual rural community". Mr Sedlak is working in Kilifi District on "A sociolinguistic description of language use in a multilingual situation".

The smallest Unesco venture on the campus is the School of Journalism. In response to a request by the Kenya Ministry of Education, Unesco originally assisted the university with a short-term consultant. When the School of Journalism became operational Unesco took the school into its long-term plans.

Apart from assisting the school with an adviser, Unesco has also allocated funds for special seminars, various types of equipment and assisted in building up the school's professional reference library. The Unesco commitment to the school is planned to terminate in December 1974 or before if the mass communication adviser is no longer needed.

After assisting in setting up this School of Journalism, Unesco has been asked to assist similar institutes elsewhere. A school along the Nairobi lines is, for example, being planned in Lagos, Nigeria.

Unesco helps to train engineers



Prof. Wilfred Fishwick, Unesco Chief Expert in the Faculty of Engineering, is a former Professor of Electrical Engineering at the University of Wales. He first came to Nairobi in 1967 on sabbatical leave from Wales. Two years later he returned to head the Unesco/UNDP project which was begun in the Nairobi Faculty of Engineering in 1963. This article, written by Prof. Fishwick, outlines the aims and achievements of the project. Prof. Fishwick, who is 51, married, with two children, is an M.A. and Ph.D. of Cambridge University. Before going to the University of Wales he was a lecturer in Electrical Engineering at Edinburgh University. During the war he served in scientific intelligence with the Royal Air Force.

The Faculty of Engineering as first formed prepared students for the B.Sc. (London) degrees in Civil, Electrical and Mechanical Engineering. A Faculty of Professional Studies included a Survey Department which prepared students for examinations of the Royal Institute of Chartered Surveyors. In 1964 the Survey Department was re-organised to prepare students for the B.Sc. degree of the University of East Africa and relocated in the Faculty of Engineering. Today therefore the Faculty has four departments, Civil Engineering, Electrical Engineering, Mechanical Engineering, Survey and Photogrammetry.

In 1963 several important events took place. The plan for the new University of East Africa was accepted and with it the necessity to prepare for a new degree course. The independence of Kenya was imminent and plans were already in being to train many more East Africans to a professional level to replace the numerous expatriates and foreigners holding professional posts in Government services and industry.

A request was made therefore to Unesco for aid in training young East Africans to take up posts in the Faculty of Engineering. Since this depended on an increased output of engineers from the Faculty the request also included equipment and aid in undergraduate teaching.

In September 1963 a Unesco/UNDP Project began. The Plan of Operations specified seven experts, in the fields of Civil Engineering (Soil Mechanics and Foundation Engineering), Mechanical Engineering (Thermodynamics), Agricultural Engineering, Electrical Power Engineering, Telecommunications Engineering and Surveying (Photogrammetry). Since that time the expert in Thermodynamics has been replaced by one in Production Engineering.

An almost simultaneous request to the U.S. had been made for money for a new building and by 1963 the American Wing had been built by USAID and formed the home of equipment supplied by the UNDP and by other sources of aid.

Since then further requests have been made and USAID has again stepped in and provided a further large extension to the Faculty buildings, and the British Government has provided a loan for the purchase of more equipment. Norway has also provided aid in men and materials to the Department of Electrical Engineering, and USAID to the Civil Engineering Department.

The Faculty was equipped to cope with an intake of 120 students, but by careful rescheduling has devised means, with little capital expenditure, of admitting 170 to 180 per annum to meet the increasing pressure for places. As Uganda and Tanzania students withdraw, there will be room for a further expansion of the Kenyan intake.

In 1963, there were 18 British members of the Faculty staff, mostly employed on permanent terms. One of these eventually became a Kenya citizen after independence. Although the Unesco Project had, as one of its main aims, the training of East African junior staff, in fact the first Unesco Fellowship was not awarded until 1967, when a young assistant lecturer in Electrical Engineering was sent to Britain for further training.

In theory each Unesco expert was supposed to be working with an East African academic (counterpart) whilst others would have gone abroad with Fellowships, but such counterparts did not really become available until fairly recently.

The reasons are clear: the pool of graduates who were good enough to be appointed to university staff and who wished to take up such a career was simply not large enough. The three East African countries who supply students to the single Faculty of Engineering in Nairobi of the University of East Africa were looking for professional engineers for Government and industry. Independence had also created wonderful opportunities for rapid advancement.

However, the picture is slowly changing. Although the number of expatriates employed in the Faculty has increased with time, the percentage of East Africans has also increased, though only recently. About 20 per cent of the established academic staff are now East Africans. Some of these are Unesco counterparts who have received training abroad.

The total staff establishment in the Faculty (excluding Unesco) is 50, of which 41 posts are filled. Of these eight are East Africans and 33 are expatriates. In addition there are 14 East Africans in training (mostly assistant lecturers) of whom eight are overseas, five with Unesco Overseas Fellowships. There are also four local Unesco Fellows in the departments engaged in advanced studies. There are also two former holders of local Unesco Fellowships who are obtaining practical engineering experience in Kenya and who should rejoin this Faculty in due course.

The nationalities of the 41 established staff are distributed as follows: 20 Britain, 7 Kenya, 5 Norway,

5 U.S. and one each from Denmark, India, Ireland and Uganda.

The six Unesco experts now remaining include two from Britain and one each from Czechoslovakia, Yugoslavia, Sweden and the U.S. There is a consultant from Norway. The project ends in December.

It will be seen therefore that in addition to the eight East African staff established in the Faculty, there are another 18 East Africans who should be considered soon for established posts in the Faculty. Two years ago there were only three East Africans who held established posts.

The Unesco Fellowships are meant primarily to help train East African graduates for posts on the Faculty staff. The Project Plan of Operations allocated \$220,006 for this purpose, which should finance $486 \frac{1}{2}$ man-months of Fellowships.

Some 138 man-months are allocated to local Unesco Fellowships trainable at the College in Nairobi, and the remaining $348 \frac{1}{2}$ man-months are to be used overseas.

Since 1967 ten East Africans have been sent abroad with Unesco fellowships working at Institutions in Manchester, Oxford, California, Idaho, London, Wales, Purdue and Stockholm. It is hoped that another young member of staff will proceed to Ohio this year, and yet another to Wales.

There have been ten local Fellowships awarded. These Fellowships have proved a great boon. The original project plan did not have these Fellowships, only the overseas Fellowships, but in 1967 they were introduced and immediately filled a need. This was to recruit young East Africans of suitable calibre from which to select future staff. While holding these Fellowships the graduates do some teaching and engage in research, often prior to going overseas for more advanced studies.

It has been estimated that between September 1963 and December 1971 the total costs of the Faculty and all facilities for its students and staff (including services, buildings, houses, hostels, playing fields, etc.) will be about \$U.S. 7,619,000. Of this amount the UNDP/Unesco contribution is \$1,809,331 for salaries, equipment, fellowships, etc. The remaining \$5,810,000 is the Kenya Government counterpart contribution and comes from many sources, including any foreign aid and the Kenya Treasury.

This figure of \$7,619,000 can be examined in several ways. First it has in effect created the Faculty, its buildings and equipment whose replacement value at current costs must be \$4,000,000 or more. Secondly, it will have enabled in the 81/2 years of the project, some 564 graduate engineers to be produced. Thirdly, the Faculty is equipped to go on producing graduates at up to about 170 per year, and to carry out substantial research and development projects.

Undoubtedly new departments will be created, but the most interesting development affecting the future of the Faculty is the splitting of the University of East Africa in 1970 into three universities, one in each country.

Uganda and Tanzania have given notice of an intent to set up a Faculty of Engineering in their universities, so that in due course the Tanzanian and Ugandan students will cease to enter this Faculty (except perhaps.into the Survey Department).

It so happens that this reduction in intake from the above sources will coincide with a planned increase in Kenyan students in the Faculty (in the mid-seventies) so that there is little likelihood of entrants to the Faculty being less than 170, or more, in the years ahead.

Unesco helps to train teachers



Mr Mervyn Pritchard, Chiet Technical Adviser to the Unesco/ UNDP Project in the Faculty of Education, has been associated with the project since its inception in 1968. In this article he describes something of its aims and achievements.

Mr Pritchard has been in education all his life. After graduating in Classics from Manchester University, he began his career as a Classics master. Later he switched to Her Majesty's Inspectorate of schools, becoming a staff inspector for secondary schools throughout England.

For three years, shortly after the war, he was education attaché at the British Embassy in Washington and more recently, was educational adviser to the Ashby Commission on Higher Education in Nigeria.

Mr Pritchard, who is in his early sixties, had just retired from service when he agreed to come out to Nairobi to head the Unesco project in its first stages. Mrs Pritchard, who is also a teacher by profession, accompanied him and has been assisting in building up an education library in the Faculty.

The Pritchards, who have three children, now all married, are shortly returning to Britain.

An international effort to expand as rapidly as possible the training of secondary school graduate teachers in Kenya began in Nairobi in July 1968 with the establishment of a Unesco project in the then Department of Education. The project, extending over five years, is being financed through the United Nations Development Programme, with a substantial contribution from the Kenya Government. In addition to the training of teachers, the project is also concerned with assisting in carrying out research into various aspects of Kenyan education.

Under the terms of the project, Unesco provides, first the services of 12 members of staff, appointed by the university at senior lecturer or lecturer level, led by a Chief Technical Adviser, and their qualifications and experience cover a wide range of specialist interests such as educational psychology, planning and administration, audio-visual aids and methods and other professional fields as well as the teaching of English, mathematics and the sciences.

This Unesco team comprises at present seven nationalities and thus can truthfully be described as international. Secondly, UNDP are providing over \$90,000 worth of teaching equipment of all kinds, to be used in developing new methods in the training of teachers, such as science apparatus, language laboratory, audio-visual and closed-circuit television equipment, and a further \$40,000 for books, publications and resource materials for the new education library, being planned by a Unesco librarian with her Kenyan counterpart. This library is designed to serve not only the staff and students of the university but also educational institutions and teachers.

The installation and use of all this equipment has had to await the erection of the new Education Building on the campus, but it is now being installed and should shortly be brought into use. This building and its facilities should serve as an important centre for educational development, innovation and research to serve the country and to be a meeting place for educational conferences and seminars, both national and international.

Thirdly, under the terms of this Unesco project, 12 Kenyan staff are being appointed by the university to work in close co-operation with the Unesco staff during the period of the project and, at its conclusion, when the Unesco staff withdraw, they assume full responsibility for their particular specialist subject.

Such Kenyan staff are entitled to hold Unesco Fellowships, either in Africa or overseas, to enable them to add to their academic qualifications or to broaden their professional experience. Six such lecturers are now in post, and three of them studying in American universities with fellowships.

Such, briefly, is the pattern of Unesco and UNDP help to the university and the government in this five-year period. The project is very closely integrated with the development of the new Faculty of Education in the university, and Kenyan and Unesco staff are working in close harmony both to increase the number of future teachers in training and to base that training as firmly as possible on the needs and aspirations of Kenyan society.

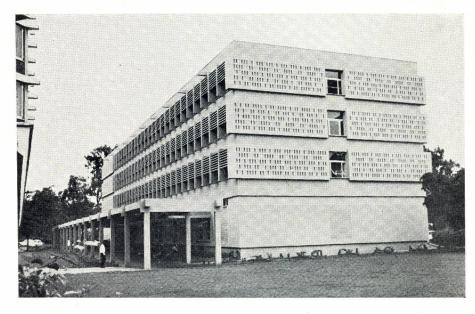
Numbers of students taking a professional course of Education together with their academic studies have risen steadily in the past three years from 160 to 320 and are likely to increase rapidly in the next two or three years.

The very small proportion of science and mathematics students in this total is, however, a matter of serious concern, as the secondary schools of Kenya badly need well qualified teachers of these subjects. New teaching courses and methods, such as in educational planning, testing and measurement, audio-visual aids and methods and microteaching have been introduced with the help of the Unesco staff; and with the new building and its equipment further innovations are planned.

At the same time individual members of the staff are engaged in research and investigation into both theoretical and practical aspects of education given in the schools and colleges of the country, and they collaborate with the Kenya Institute of Education and the Ministry in curriculum development and in the running of in-service training for teachers.

The point, perhaps, to emphasise in conclusion is that the Unesco staff are here for a period not to impose cut and dried foreign ideas and practices but to learn what are this country's needs and problems in the field of education and to contribute what they can from their past experience and their expertise to meeting those needs and to helping to solve those problems. They learn as well as teach.

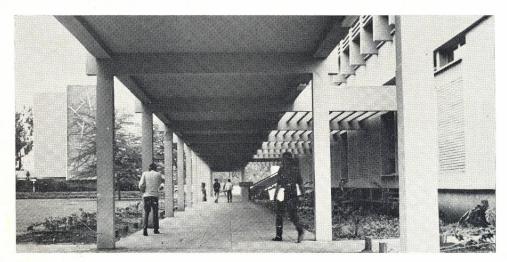
Education centre



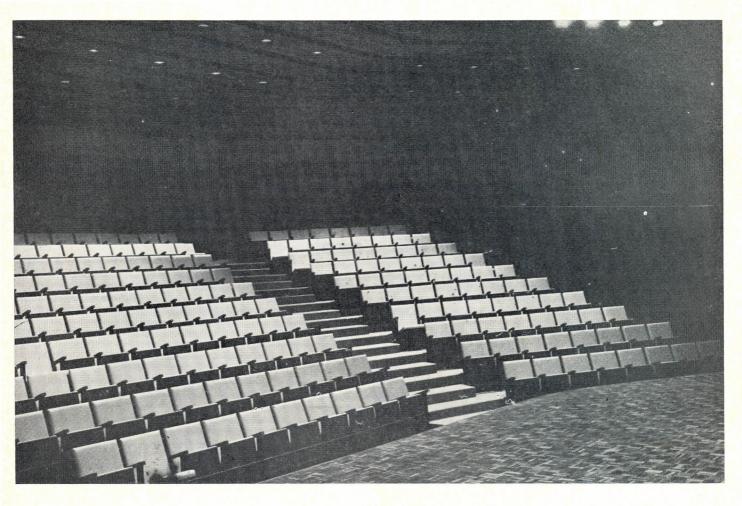
Latest showpiece of the Nairobi campus is the Education Centre, housing the Faculty of Education and, for the time being, the Arts departments of Literature and Language and Linguistics. The centre, costing over £213,000 was designed by Mr Graham McCullough of Triad architectural consortium.

A feature of the building is the two large lecture theatres. The largest,

with seating for 300, is shown here. The other seats 100 and both are fitted out for multi-media equipment: film, television, radio and slides. There is a television and radio studio in the basement, intended to provide support material for the teaching of students and also to allow students to study the functions of such media. Reprographic and photographic units and a centre for the development of

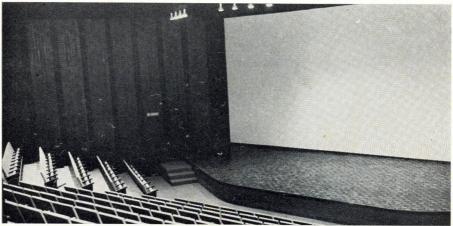






graphic aids are located in the basement. There is also a coffee bar for students.

The large entrance hall on the ground floor is designed for permanent art and other exhibitions, and leading off this are the two lecture theatres and an education library. The Literature and Language Departments occupy the first floor, with above them the teaching floor of the Faculty of Education, which includes a science suite and two small language laboratories and various seminar and tutorial rooms. The third floor is occupied by the staff of the faculty. At each extremity of the first and second floors are two large conference rooms.



Alan H. Jacobs

Research into the cultural modes and myths of Kenya's tribes

Extensive study into the distinctive "modes of thought" of representative tribal groups of Kenya and how these are reflected in their social values, religious beliefs, artistic expressions, etc., is being undertaken by the Institute of African Studies.

The project, called the Kenya Belief Systems Project, seeks, in essence, to provide answers to two basic questions: what material phenomena tend to be significant for particular tribal societies of Kenya; and, how do these societies organise, categorise and classify these phenomena into coherent systems of beliefs?

The primary focus will be on the collection and analysis of a larger and more detailed body of "oral" texts relating to particular beliefs and practices than presently exists for most tribal groups of Kenya. And in focusing on the collection and analysis of such texts, it is hoped to employ some of the ideas currently exemplified in the work of Claude Levi-Strauss, Edmund Leach, Mary Douglas and others namely, that a society's myths, cosmologies and distinctive beliefs are as fundamental to its total form and predictable behaviour as its language and its rules governing intelligible speech. That is, the cultural identity and ultimate aesthetic expression of a people or nation is rooted in the social meanings they derive from, or attach to, particular forms or symbols of expression or behaviour, and that these "forms" are best studied in their myths and ritual acts.

Relatively few detailed or systematic studies of characteristic belief systems of Kenya peoples have been made, nor have any socio-linguistic or "cognitive studies" of belief categories and classifications been undertaken. The fruitfulness of such studies conducted elsewhere in Africa and in other parts of the world in illuminating distinctive cultural forms, such as "African Worlds: Studies in the Cosmological Ideas and Social Values of African peoples, 1954", and "African Systems of Thought", 1965, suggests that a major effort to duplicate such research in Kenya would stimulate new interest in and provide useful information about the essential forms and symbols of local Kenya culture.

Thus, specific aims of this project are:

1. to explore and elucidate the forms and social meanings of local myths, ritual acts and abstract beliefs or distinct tribal groups in Kenya, with the objective of charting important similarities and differences in such forms as they relate to the notion of national culture and national identity.

2. to record, transcribe and compile a research library of oral texts and literature from all tribal areas of Kenya which would form the basis of a permanent collection for study and appreciation by scholars and the public of traditional Kenya belief systems.

3. to promote by publication, seminars and occasional public lectures, an appreciation and interest among students and the public in the significance of distinct "social meanings" embedded in various cultural forms, symbols and expressions.

It should be emphasised that the aim of this project is not simply to record individual customs per se, but rather to analyse how aggregates of beliefs and behaviour are interrelated and integrated as pervading systems of thought, both within individual tribal groups and between groups of different regions.

Indeed, a key assumption underlying this project is that in attempting to promote political unity and a sense of national identity, it is not simply the acceptance of a common sovereign power which unifies, but rather the sharing of a common culture.

Specific aims of this project during the 1970-71 academic year are as follows:

1. to start to compile a research bibliography for the Institute of all published and unpublished work relating to the study of distinctive Kenya belief systems — to be organised by tribal groups and subject categories and including references of theoretical works on belief systems generally, and designed to provide a basic research tool for all future research in this area.

2. whenever possible, to purchase, reproduce or seek the gift of important studies of Kenya belief systems for deposit in a permanent Institute "research library" for this project.

3. to liaise with the Departments of Literature, History, African Languages and Linguistics, and Philosophy and Religious Studies for the purpose of:

a exploring areas of mutual and complementary interest in which specific co-operation and co-ordination could be achieved,

b discussing and hopefully deciding on a common policy or methodology for the collection, inventory and storage of oral textual materials.

4. to discuss and initiate, in collaboration with the Institute as a whole, a publication series (possibly "Occasional Papers") in which results of this project can appear, either in pamphlet, monograph or symposia format.

5. to encourage selected visiting research associates to co-operate in the collection and possible publication of distinctive belief systems.

In addition Dr Alan H. Jacobs proposes to complete the editing of the Lord Claude Hamilton (Maasai) Papers, Vol. II and then begin preparing for publication a short monograph on "Eunoto: A Maasai Rural Ceremony". Dr A. Molnos, Research Fellow, proposes to complete for publication an inventory and critical review of published studies on traditional attitudes and beliefs toward family planning in Kenya as a preliminary to her more detailed study of the same subject. Mr George Mathu, Junior Research Fellow, has begun research on a study of Kiambu Kikuyu traditional beliefs relevant to understanding their response to the new Church Missionary Society.

Mrs Nancy Gray, newly assigned Research Associate to this project, is studying traditional beliefs relevant to economic development among the Taveta and/or Digo.

A number of researchers are currently, or have in the past, worked individually on isolated aspects of various Kenya beliefs systems, employing either social anthropological, historical or literary techniques. However, relatively little joint or co-ordinated assessment of such research has taken place.

Thus, the initial methodological thrust of this project will be to develop permanent archival research resources for the review of such research and to liase with representatives of various university departments as to more specific research strategies and methods for co-ordinating such research in the future.

A special attempt will be made to identify and collect copies of unpublished manuscripts and oral texts currently in existence relating to specific belief systems for deposit in a permanent research library for this project, and to prepare guidelines for future researchers in the collection of oral texts.

During 1968-70, Mr Henry Anyumba, Research Fellow, worked full-time on this project, completing both a study of the classification of Luo Nyatiti songs and initiating a field survey of the forms of Kamba music and dance.

In 1969 Dr Jacobs published an account of "Maasai Marriage and Bridewealth" beliefs and practices while working mainly on the compilation and editing of typed copies of the Lord Claude Hamilton (Maasai) Papers for deposit in the National Archives and University library.

In addition, three visiting Research Associates (Messrs Glazier, Karp and Mahner) were encouraged during 1969-70 to deliver seminar papers on specific or important beliefs and practices of the peoples among whom they were working.

Staff news

some recent promotions appointments and resignations

One of the aims of the new Dean of the Arts Faculty, **Dr John Okumu**, when he assumes office next month, will be to encourage closer relations between staff and students. Dr Okumu, who is chairman of the Department of Government, believes that a faculty must be regarded as a community, where students benefit intellectually and socially not only from the classroom but from all faculty activities.

A former student leader himself (he attended the then Royal Technical College from 1958 to 1960 before going off on a scholarship to the United States), Dr Okumu feels that most students, because of lack of contact, do not fully understand what academic life is about.

Describing his ideas as "perhaps pipe-dreams", he suggests two ways in which life within the faculty could be enriched: first, by involving as many faculty members as possible in the making of decisions in the faculty (as he sees it, it is the staff and not just the Dean who should run the faculty); and, secondly, by creating a forum in which staff and students can informally exchange ideas. Dr Okumu is a Dean who believes in discussion before decisions are taken, and he recognises various alternatives to these suggestions.

It was in the United States that Dr Okumu first began to appreciate fully the essence of scholarship. After taking a B.A. in Political Science and Economics at Grinnell College in Iowa in 1962, he went on to the University of California where he took his M.A. and later, in 1966, a Ph.D. His thesis was "Kenya 1900–1930: A study in conflict". He recalls the "exciting teachers" and the stimulating discussions between staff and graduate students on the California campus. Obviously Dr Okumu would like to see something similar happening here.

Although the United States marks an important landmark in Dr Okumu's career (it was while there also that he met and married his wife), an incident while a student at the then Royal College in Kenya was what determined him to enter academic life.

He recalls that he and two other students were interested in studying anthropology, but he was told by his Dean that anthropology was not really a subject for study by Africans, whose societies did not possess the necessary intellectual base. Moreover anthropology would not help him get a job in the civil service or as a secondary school teacher.

"This bothered me for a long time", Dr Okumu says, and it set him off on his own quest into Africa's history and intellectual heritage. The result was the beginning of a distinguished academic career and his present Deanship at the age of 35. Dr Okumu's main area of interest is political sociology and political development, and he is soon to have a book published on the sociological aspects of political parties in Kenya. In addition to his other book, he is a frequent contributor to several Kenyan and outside publications.

As a young student in Nairobi, Dr Okumu had his first experience of the political realities when he and some others assisted the political parties that emerged in Kenya towards the end of the Emergency. Among those was the late Tom Mboya's Nairobi People's Convention Party. Dr Okumu also made close contacts with the trade union movement at the time.

On his return with his wife from the United States in 1965, Dr Okumu took a post as lecturer in political science at University College Dar es Salaam and, two years later, joined the Department of Government in Nairobi. His wife, a specialist in education, also taught Educational Psychology at the same university and then spent some time as an administrative assistant to the Director of the Institute for Development Studies, University of Nairobi.

Dr Okumu became acting head of the Department of Government in 1968, was appointed senior lecturer the following year and, in July 1970, became chairman of the department.

He has returned several times to the U.S. since his student days: last year, it was as a visiting senior lecturer in Political Science at Yale University on a six-month grant from the Rockefeller Foundation.





At the end of this session the University will lose **Prof. W. B. Palmer**, who, as Head of Department of Mechanical Engineering for the past four years, has contributed greatly to the development of engineering education in East Africa.

Prof. Palmer joined the University of East Africa in Nairobi in April 1967 having been granted four years' leave of absence from the University of Leeds. During his first year in Nairobi the department undertook a thorough review of the syllabus within the confines of the existing degree structure to meet better the needs of the profession in East Africa. This included, in particular, a greater concentration on production technology and engineering design and an introduction to problems of management and administration.

During 1967 the new Engineering Building was being built and this entailed much detailed planning of new laboratories. Equipment was supplied under the UK/Kenya loan and from Unesco. From April 1968 the department occupied the top three floors of the new building upon transfer from the American Wing and retained the single storey workshop and laboratory block at the rear. The new premises and equipment made it possible to increase the number of mechanical engineering graduates from ten in 1967 to about forty in 1971. Prof. Palmer served as Dean of the Faculty of Engineering from the end of 1968 to March 1971. During this time the Faculty drew up far-reaching recommendations for the education and training of professional engineers. At present it is an implicit assumption that the engineering degree should be followed by two or three years' practical training and experience in industry before a man assumes full professional status. It is not easy to obtain such industrial training in East Africa and the assumption would often not be fulfilled.

The object of the Faculty Plan, which has been adopted by the University, was that the University should make a contribution to the more professional side of training, by incorporating some practical training concurrent with the degree programme, and by adding to the normal academic programme two terms of professional courses which would help to bridge the gap between university and professional life.

It is therefore planned that from 1972 or 1973 the engineering course should be of four years' duration and that each year should consist of four terms. One term of each year would be spent on practical training and to make this possible a training workshop must be built alongside the faculty. Students will spend the first stage of practical training in the workshop and subsequently spend their terms of practical training in industry. Prof. Palmer is confident that such a system would ensure that new graduates would be nearer to being professional engineers and that, overall, effective and efficient engineers would be produced faster.

In 1968 Prof. Palmer took over the chairmanship of the Computer Committee. At that time one or two members of staff were managing to borrow facilities on the computer at the Treasury. The job was to obtain staff and the money for a computer. The Computing Centre is now a department in its own right offering teaching and operational facilities to the whole University and beyond. Prof. Palmer has had a deep interest in the training of technicians and consequently also in the position of the "middle grades" within university employment. He was asked to chair a technician training sub-committee, which submitted a report to the Development Planning and Establishments Committee earlier this year and upon which the University has started to act.

Similarly he chaired an exhaustive examination of the terms of service of all the middle grades, and this report has been referred to the Review Commission.

Outside the university Prof. Palmer has served as the University Representative and Chairman on the Council for Engineering Education in East Africa, which comprises representatives of East African Governments, industrial interests, and institutions of technical education at all levels. A committee member of the Kenya Division of the East African Institution of Engineers, he was nominated by that organisation to be a member of the recently established Engineers Registration Board of Kenya.

Asked for his views on the future, he felt that the Faculty had an important role in the development of Kenya. With the opening of Faculties in Kampala and Dar es Salaam there is a built-in expansion for Kenya within the existing facilities, and therefore Nairobi is not likely to have to increase numbers of undergraduates for some years. Together with an increasing flow of graduates, this provides the time and opportunity for an exciting development of post-graduate work that will contribute directly to engineering in Kenya.

Prof. Palmer is leaving Nairobi to become Dean of the Faculty of Engineering at Lanchester Polytechnic, which operates in Coventry and Rugby. The Faculty consists of two departments each of Mechanical and Electrical Engineering, one of Civil Engineering and Building, and one of Production Engineering, and has a total enrolment of about 1,600 students.



Prof. Gerald Munene Mugera, who was recently appointed to the Chair of Veterinary Pathology and Microbiology, is, at 36, the youngest African professor at Nairobi. He first joined the department in 1965 as a lecturer and has been acting head since 1968.

Well known in veterinary and scientific circles, particularly for his research into liver and kidney cancer in cattle, Prof. Mugera is now awaiting the final analysis of his most recent research: the curative properties of a certain natural product to East Coast Fever and other protozoa infections.

Prof. Mugera, who has been associated in this project with other members of the department, Dr Bitakaramire, Dr Munyua and Dr Muhoya, cannot yet disclose the name of the product used but considerable progress has been made and there are some international drug companies interested in the results.

So far there is no known cure for East Coast Fever; nor has any vaccine to prevent it been developed. Efforts to eradicate it have been confined to the spraying of cattle and tick eradication schemes. Prof. Mugera is hopeful that the results of his research will mark a breakthrough in the fight against one of the principal animal scourges of Africa.

On leaving Alliance High School, Kikuyu, in 1954, Prof. Mugera went first to Makerere, in 1954, where he gained a diploma in veterinary science (he was the best student of the course).

In 1962, on a scholarship to Michigan State University in the United States, he took his M.Sc. in Veterinary Pathology and Microbiology, and three years later was awarded his Ph.D. with a thesis entitled "Cycad Toxicosis and Carcinogenesis in Animals".

This thesis was of vital interest not only to veterinary scientists but also to the medical profession in East Africa because it dealt with the cancer-inducing properties of a palm-like plant eaten by cattle in East Africa. Known by the name of Encephalartos hildebrandtii on the Kenya Coast this plant, in the form of a flour, is also eaten by humans. There thus arose the possibility that it could be an agent in causing cancer of the liver and kidney, a common human disease in East Africa.

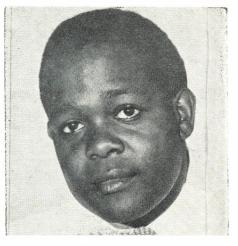
It was while continuing his research, in association with Dr Peter Nderito, formerly of the department, into animal tumours, that Prof. Mugera came across certain plants which the Masai believed contain a cure for their sick cattle.

Prof. Mugera is married with two children. His wife is a nurse tutor at the Kenyatta National Hospital. He likes an occasional game of tennis (a sport which he first took up as a schoolboy at Alliance High), but he finds little time for relaxation.

When not teaching, carrying out research or writing — he is soon to have published two textbooks on animal diseases in tropical Africa — he is often travelling abroad to attend veterinary and scientific conferences. One of the most recent was the International Cancer Research Conference held in Lagos at the end of last year.

Veterinary science is concerned mainly with domestic animals; for most people a "vet" is a doctor who treats illness in horses, cattle, dogs and the like and for whom wild or game animals are interesting only as carriers of animal diseases.

But this traditional view is changing, as scientists turn their attention more and more to game animals for their



own sakes. They have been supported in this by governments' realisation that game, as a tourist attraction, is an extremely valuable economic asset.

One veterinary scientist who takes a keen interest in game animals is **Dr Fred Kayanja**, who was recently appointed chairman of the Department of Veterinary Anatomy and Histology.

Dr Kayanja, a Ugandan, has been a lecturer and senior lecturer in the department since 1967 and during this time has been engaged in research into the reproduction processes of antelopes. In 1969 he took his Ph.D. of the University of East Africa with a thesis on the reproduction of the impala and he is soon to publish a monograph dealing with antelopes generally.

He spent many days out in the bush with departmental colleagues studying the animals, and occasionally collecting specimens.

Most of his research work has been carried out near Lake Elmentaita in the Rift Valley, where there is a virtually isolated population of impala.

He believes that until now much of the research into game animals has been faulty, not because the researcher lacked ability but because, as a visitor usually from overseas, he had not enough time to study the subject thoroughly. Research into animals needs above all time and patience, and even a year's study is sometimes not long enough.

Dr Kayanja's conclusions are based on many years' continuous study and have produced some surprises. He has noted, for example, in the breeding habits of impala "startling variations" related to climatic conditions and feeding patterns. These, and other findings, are documented in his forthcoming book.

The son of a veterinary surgeon in Uganda, Dr Kayanja was educated at King's College Buddo and Makerere, which he entered in 1956. Later, finding that a veterinary science qualification was not obtainable there, he went on a scholarship to the Royal Veterinary College, University of London.

There he took three degrees: a B.Sc. (with Honours in Veterinary Anatomy) in 1962; a Master's degree in Veterinary Science in 1964 and, finally, in 1966 the degree of Bachelor in Veterinary Science and membership of the Royal College of Veterinary Science.

Dr Kayanja was for a brief period a lecturer in veterinary anatomy, histology and embryology at the Royal Veterinary College, University of London before, as he puts it, "Prof. Hofmann hijacked me". The result was that Dr Kayanja joined the Department of Veterinary Anatomy in Nairobi.

A strong academic strain runs in the Kayanja family. Dr Kayanja's sister, Mrs Rhoda Nsimbambi, whose husband is a lecturer in Political Science at Makerere and Warden of New Hall there, is herself a lecturer at Makerere, in language methods. He also has a brother who graduated in medicine at Makerere and is now a medical officer in Uganda. Another sister recently graduated with a B.A. at Makerere.

His wife, whom he met as a student in London, where she was studying home economics, is a trained secretary and helps her husband by typing all his manuscripts. They have two children.



Although he has never lived here before, **Philip Hopkins**, the recently appointed Director of the Institute of Adult Studies, has a long-standing association with Africa. He dates his first real contact in 1957, when he was appointed Warden and Principal of Fircroft College, a residential college for adult students in Birmingham. Many of the college's students are from overseas, including Africa.

Since then Mr Hopkins has visited Africa frequently, meeting lecture engagements and attending educational conferences. He was in Kenya briefly in 1962, and again in 1969 when he attended an I.L.O. conference on workers' education in Africa.

His only daughter, Elizabeth, took an M.Sc. at Ibadan University in Nigeria where she went on a Commonwealth scholarship. She is now completing her doctoral thesis at Sussex University on agricultural economics, undertaken in Senegal.

Mr Hopkins and his wife are particularly pleased that they, too, are now able to live and work in Africa for a couple of years.

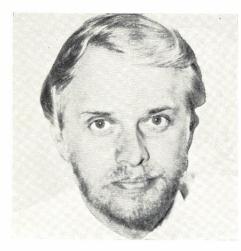
Although not as well known in Kenya perhaps as Ruskin College (where the late Tom Mboya studied), Fircroft College has had several students from Kenya. It specialises in social and economic studies and Mr Hopkins was Principal there from 1957 until taking up his appointment in Nairobi at the beginning of April. Previously he had been a lecturer in the Extra-Mural Department of Southampton University.

Disclaiming any "revolutionary ideas" about adult education, Mr Hopkins has, however, already formed some definite views on how adult education should develop in Kenya. He believes more should be done to co-ordinate rural education which at the moment he finds "very diffuse and fragmented". He pointed out that although Kenya's economy is dependent on the industrial development of the main centres, the real future of the country ultimately lies in the rural areas.

He thinks, however, that compared with other countries of Africa, Kenya stands out well in adult education. He noted particularly the educational programmes relayed for the Correspondence Course Unit by the Voice of Kenya and the potential benefits from the Board of Adult Education, which brings all service agencies together.

Mr Hopkins has nothing but praise for Mr David Macharia who, as acting Director of the Institute for about a year, has been implementing the adult education policies laid down in the 1970–73 Development Plan. "I am taking up a job well on its way to fruition," he commented.

A keen sportsman, Mr Hopkins, although now 55, still plays tennis, table tennis and, when the opportunity offers, cricket. In his younger days he was opening bat for the Dorset county side and as student captained London University at both soccer and cricket.



Algeria, Cuba, the Congo... names that have made newspaper headlines and just a few of the places visited and reported on by **Jorgen Petersen**, the Danish journalist who for the past $2\frac{1}{2}$ years has been Unesco Consultant to the university's School of Journalism.

As foreign editor of the Danish newspaper Demokraten and, later, a roving correspondent for Danish Radio, Mr Petersen has had more exciting assignments in ten years than most journalists get in a lifetime. Although his appointment to Nairobi University marked the beginning of a calmer period in his career, his journalist's enthusiasm has never diminished.

Mr Petersen feels, however, that it is dangerous for a journalist to remain too long as an administrator and so this month he is returning to Denmark. He was originally due to leave at the end of the year, but with the school firmly established and the financing of its third year secure, thanks to a generous grant by the Austrian Government, he thinks that now is an appropriate time to bow himself out.

Jorgen Elg Petersen has always been a writer. First it was short stories: imaginative pieces created by a young man who already had a varied experience of life selling ice-cream, dealing in antiques and planting cabbages on Norwegian hillsides. "Then some of my newspaper friends thought I might make a better journalist than a short-story writer," he says.

But in the years that followed Jorgen Petersen was to make his mark both as a journalist and a writer. In 1955 he joined the Social Democratic Press and three years later became foreign editor of its second largest newspaper, the Demokraten. In 1960 he went to the Nordic School of Journalism and took his diploma.

Already he had had extensive experience in Africa, and while filing his stories from there to newspapers and radio in Denmark he was also collecting material for his books. The war in Algeria was the theme of a volume of short stories published in 1959. Then there was Tunis (his novel "The Rat Chase", published in 1962, is based on the Bizerta incident), the Congo and Sharpeville.

In 1960 he published "The New Africa", the first real compendium on Africa in Danish, and four years later he brought out a revised "The New Africa and its Future". In 1965 he published "Journalism and Newspapers", in which he put forward ideas for the training of journalists in Denmark, some of which are now being implemented by the Danish School of Journalism.

Mr Petersen first came to report on Kenya in 1960. He was back in 1963 to cover the Kenya elections and was granted an interview with the future President of Kenya, Mzee Jomo Kenyatta. It is no coincidence that that he and his wife Lone called their son Jomo. Since then the Petersens have had a daughter, born in Kenya early this year.

In West Germany Mr Petersen was awarded a special medal by the Government for his coverage of the Lengede pit disaster. He reported the Cuban missile crisis from Cuba. Then there was the Indo-Pakistan war over Kashmir, followed by three trips to Vietnam. About this time Mr Petersen became a consultant to the Danish Radio and also started publishing his own monthly magazine Rapport, which specialises in foreign and economic affairs.

In 1968, while on a Danish Foreign Office scholarship to Africa, Mr. Petersen was asked to investigate the possibilities of establishing a school of journalism in Nairobi. His first reactions were that it would not be feasible but soon, in response to the enthusiastic and co-operative attitude of all those involved, he reversed his opinion.

The result was that at the beginning of 1969 he was appointed Unesco Consultant to the school, which opened its first two-year diploma course in April last year with 31 students from several countries of East and Central Africa.

On his return to Denmark, Mr Petersen is to take up an appointment as senior lecturer in the Danish School of Journalism at Aarhus University.

Before assuming his duties, however, he is likely to be off on another exciting assignment: travelling down the Ho Chi-minh trail from North Vietnam and recording his impressions for the Danish Radio.

One of the longest-serving staff members of the university and a former Dean of the Faculty of Architecture, Design and Development

Mr T. P. Le Briero, is retiring next month.

Mr Le Briero joined the Department of Architecture of the then Royal Technical College in 1956, and headed the department from 1957 until he handed over last year to Prof. Jorgensen, in preparation for his retirement this year.

A Frenchman from Brittany, Mr Le Briero studied architecture in Paris before moving to England shortly after his marriage in 1933. There he qualified as an associate of the Royal Institute of British Architects and began practising in Leicester.



At the outbreak of war in 1939 he returned to France to join up.

Thus began what is certainly the most exciting period of Mr Le Briero's career: capture by the Germans in 1940, escape first to unoccupied France and then to North Africa; then, with two other escapees, by small boat to Gibraltar and back to Britain.

After a spell in hospital recovering from his ordeal, Mr Le Briero returned to architectural practice in Leicester and in 1944 joined the staff of the Leicester School of Architecture.

He became a naturalised British subject after the war and, in 1956, came out to Nairobi where the Department of Architecture at the Royal Technical College was being established.

Mr Le Briero was for a time Dean of the Royal Technical College – he laughingly describes himself at the time as a "principal stooge" – and then from 1965 to 1967 was Dean of the Faculty of Architecture, Design and Development. He was a member of the university Building Committee until last September.

When he returns to England next month Mr Le Briero will leave behind him many young East Africans who have trained and studied under him; he also will leave behind a small example of his own architectural achievement: the complex of wardens' houses on State House Road which he designed for the university in 1962. Mr Tom Gorman, a lecturer in English in the Faculty of Arts for the past six years, has been awarded a Research Fellowship in the Institute for Advanced Studies in the Humanities at Edinburgh University. He leaves for Edinburgh next month and during the tenure of the Fellowship he will spend two semesters as a visiting scholar in the Department of English at the University of California, Los Angeles.

Delighted at the award, Mr Gorman modestly expressed surprise that out of all the hundreds of applicants he should be chosen.

Edinburgh is one of the leading centres in the study of linguistics and during his Fellowship Mr Gorman, who has been teaching linguistics at Nairobi, will carry out research into the acquisition and growth of language by children.

Specialising in linguistics since taking a B.A. Honours degree in English language and Literature at Oxford in 1962, Mr Gorman took a postgraduate diploma in linguistics and phonetics at Leeds in 1963 and this year is presenting a thesis for a Ph.D. at Nairobi on the development of educational language policies in Kenya and the patterns of language use and levels of language attainment among secondary school entrants in Kenya.

In 1967–69 he directed a research project, financed by the Rockefeller Foundation, into the reading skills and disabilities of university entrants.

Mr Gorman has been chairman or a member of various language bodies in Kenya, including the Kenya Language Association (chairman 1969–70) and Council of the Survey of Language Use and Language Teaching in Eastern Africa (member, 1967–70).

Before joining the university, he was a lecturer in charge of the Department of English at the Kenya Institute of Administration. Among his many publications he includes the editorship of a Glossary in English, Swahili, Kikuyu and Dholuo, published by Cassells.

Mr Gorman is married with two children.



Dr Angus Calder, a lecturer in the Department of Literature (formerly English) since 1968, leaves Nairobi next month to begin the monumental task of writing a history of the British Empire. Dr Calder, who is 29, has a four-year contract with British and American publishers to carry out his assignment, which will concentrate on the sociological aspects of Britain's colonial history.

He intends making Edinburgh his base, although his researches will inevitably take him to many parts of the world.

Dr Calder is no novice historian. His doctoral thesis for the University of Sussex in 1968 was a history of the little-known Commonwealth Party in Britain (1942–45) and the following year he had published by Jonathan Cape "The People's War", a sociological study of Britain during the 1939–45 War. A paper-back edition of this book is expected to be published soon.

Other publications include, jointly with his wife Jenni, a book on the life and works of Sir Walter Scott and a new edition of Dickens' "Great Expectations". Despite their family commitments (Dr Calder and his wife have three small children) there is always time for research and writing. At the moment Mrs Calder is engaged in writing the history (both in fact and fiction) of the Wild West.

Dr Calder's favourite relaxations those which are completely divorced from his work—are cooking and cricket.

What's going on in the departments

Department of Business Administration

Although understaffed the department is teaching Business Administration courses to more than 350 B.Com. students, in addition to supplying service courses in Management to the Faculties of Engineering and Architecture and Design. It is hoped that a wider range of subjects will soon be offered for the B.Com. degree after the negotiation of a staff-aid agreement with the Canadian Government.

During the past year Mr M. J. Greaves has published an article on "The Future of Management Training in Nigeria", while Mr M. H. Harper has published "Don't Copy Your Competitors".

Current research includes two projects by Mr Greaves. One of these is an investigation into problems of development and training of African Management in a representative sample of 67 companies located all over Kenya. It is hoped that these problems can be related to the social and educational backgrounds and career patterns of the managers concerned, and the information used to design more effective management training. The second project is a study of the subsequent careers of former B.Com. students after graduation in order to evaluate their role in East African industry and commerce.

Mr P. M. G. Ouma is carrying out M.Com. research into management training schemes and activities in Kenya in an effort to show the extent to which they will meet the needs in this field by 1982, the date the Government has set for the Kenyanisation of all personnel in public and private sectors of the economy.

Mr Harper is engaged in a Rural Industry Consultancy project, in collaboration with the Ministry of Commerce and Industry, for the Machakos district. The object of the scheme is to find and assist in the setting up of labour-intensive industrial projects there. He has also prepared a collection of business case studies which will shortly be published in book form.

Mr G. K. Matumo is writing a paper on the nonavailability of capital funds to local entrepreneurs.

Perhaps the most exciting project currently being carried out by the department, in conjunction with the Department of Accounting and the Kenya Institute of Management, is the mounting of an advanced Management Course at the university in August. It is the normal practice of local companies to send their personnel overseas for high-level management courses because of lack of facilities in East Africa.

This Nairobi course is being planned so that it will provide these facilities normally missing in East Africa. Companies will therefore be able to ensure that their senior executives, those at director and policy-making levels, can study key business concepts and techniques, and their implementation, with special reference to conditions prevailing in East Africa.

Department of Chemistry

The Chemistry Department is actively pursuing a programme of liaison with schools and assistance with the development of chemical education at all levels.

We are represented on the Chemistry Panel of the Kenya Institute of Education and assist in its activities. Foremost among these has been the administration of the trials of the School Science Project in Chemistry. This project will certainly have a considerable impact, one way or the other, on the teaching of chemistry in this country.

Recently we have expanded our programme of "Open Days" for sixth form students which was initiated in 1967. Last year, every sixth form in the country was invited to one of our three Open Days; more than 500 students in all visited the exhibits, lecture-demonstrations and films organised by the department. In addition, various members of the department have given lectures to the science societies of schools in the Nairobi area.

During the course of the year we are visited by several chemists or chemical educators. If their schedule permits we try to arrange that they give a lecture to fifth form students. There have been about twelve such lectures in the past three years given by such famous names as Prof. Coulson of Oxford and Prof. Alyea of Princeton. Since we are responsible for the itinerary of our visitors we try to arrange also that they lecture at Kenyatta College and Kenya Science Teachers' College.

In December 1969 we ran a one-week refresher course for HSC chemistry teachers, including participants from Tanzania and Uganda. Dr G. Van Praagh of Nuffield fame was a guest lecturer on the course.

During 1969-70 session we had the services of a VSO volunteer who, under departmental auspices, organised a collection of books and chemicals which he distributed to Harambee schools.

We are at the moment planning our biggest venture to date: a conference on "The Teaching of Chemistry at University Level", to be held from December 14 to 18 of this year. We expect participants from every English-speaking university in Africa. Unesco has agreed to assist us with a grant of \$3000, and we are negotiating for funds to bring four distinguished educators from overseas.

The British Council is sponsoring the visit to the conference of F. R. Jevons, Prof. of Liberal Studies in

Science at the University of Manchester. It is our hope that Prof. Jevons will agree to give a lecture on science as a liberal study to a wider audience in Nairobi during his visit.

Department of Philosophy and Religious Studies

The Department of Philosophy and Religious Studies is only in its second year, but it grows so fast that we spend our time running to keep up with it. With 56 students fully registered in the first two years, and a number of occasional or part-time students, we find our hands full, especially with tutorial work: it looks as though there will be a large intake in the next academic year and we wonder what we shall do then.

What does such a Department do anyhow? It thinks. We have laid it down that, if a visitor should enter the departmental office and find one of the staff members sitting with eyes closed, he must not be so base as to suppose that the learned man is asleep — he is probably practising Yoga and developing those deep thoughts that one day will astonish the world. But we also do some interesting things. Where else in Africa are women students learning classical Greek and appearing to enjoy it (though they wish that the Greek verb didn't have so many tenses). Where else are African students of philosophy required to attend lectures on Asian philosophy and to learn all about Brahman and Atman?

Members of the staff are endlessly busy. Prof. Neill and Dr Nyasani are both well known on the Voice of Kenya. Dr Donders goes far and wide lecturing in schools and colleges. Dr Odera has lectured for the departments of history and fine art. Mr Said Hamdun is chairman of the panel for religious education in schools for Muslims. We do all these things because we believe in public service; but they also help to get the department known.

We are astonished to find how famous we have become in a short time. Hardly a week passes without some entirely unknown person writing to us from some far part of the earth, requesting to be employed. We have to reply, "Welcome if you come carrying your salary with you; otherwise, no go!" We have three salaries at the moment offered on special account; if the university agrees to appoint to all these offered posts, we shall be well staffed for the academic year 1971-72, and shall be able to work towards the M.A. programme which was sanctioned in principle when the department was formed.

In co-operation with the Faculty of Education and the Institute of Adult Studies, and with the sanction of the Senate, we have brought into being the Nairobi Council of Higher Studies in Religion. This has many aims. It will administer the Nairobi Certificate in Theology, the successor of the East African Certificate, which ceased to exist when the University of East Africa came to an end. It hopes to co-ordinate and promote research in the vast and still largely virgin field of African Religions, including the faiths, such as the Sikh Religion, which have more recently come to East Africa.

It is not surprising that academic staff and students alike are eagerly looking forward to the Long Vacation.

Institute of Adult Studies

Plans to start a one-year Diploma Course in Adult Education this September have been approved by Senate. This course will be run within the framework of the existing post-graduate education diploma course and it is hoped to recruit men and women experienced in some branch of adult education, whether with the Government or voluntary agencies. The Ministry of Co-operatives and Social Services has promised to release several of their education officers for the course.

New extra-mural centres have been opened at Nyeri and Kakamega and although they are experiencing "launching problems" they will greatly improve our coverage of these two areas, both of which are heavily populated.

With the arrival of the new director, Mr Philip Hopkins (see page 23), Mr David Macharia takes charge of the Extra-Mural Division and becomes one of three Assistant Directors. The others are Mr Peter Kinyanjui (in charge of the Radio/Correspondence Course Unit) and Mr Tom Okello-Odongo, who is in charge of the Adult Studies Centre at Kikuyu.

A small delegation of the Institute of Adult Studies staff went to Dar es Salaam in mid-April to attend conferences of the African Adult Education Association, of the Inter-University Staff and of the International Congress of University Adult Education. They benefited greatly from an interchange of ideas with representatives from 16 African countries.

School of Journalism

A short documentary film on the inauguration of the university last December is being produced by staff and students of the School of Journalism. It is entitled "A Momentous Day". Two students at the school, Magaga Alot and John Mramba, wrote the script; Paul Martinsen, Senior Lecturer, is the producer and the filming was done by Satwan Singh and Mohammed Amin.

With the departure of Jorgen Petersen, who, as Unesco consultant to the school has been filling the post of director, Mr Martinsen has taken over as acting director. Mr Peter Mwaura, assistant lecturer at the school since its opening in April last year, has been appointed lecturer. Mr Mwaura is at present abroad on a Unesco Fellowship.

Recent visiting lecturers to the School have included Gunnar Naesselund, Unesco's Director-General of Mass Communications, and Mr Halldor Sigurdsson, who conducted a seminar on Latin America.