

Johannesburg, won the honour of becoming the first incumbent of the Chair of Quantity Surveying at Wits, thirty years thus having elapsed since the University originally assumed full responsibility for education in quantity surveying.

Furthermore, 1973 saw the establishment of the J C Bitcon Chair of Building in the Department of Building Science, as the result of funds being made available for this purpose by Mr J C Bitcon, a leading builder and industrialist of Johannesburg and a past president of the Building Industries Federation (South Africa), who died on 14 December 1976 at the age of ninety one. Mr T J Olivier, who had joined the staff of the Department of Building Science as a part-time lecturer in 1967 and who had assisted Professor Calderwood in developing the course for the degree of Bachelor of Science in Building, was appointed to this Chair and in 1976 Professor Olivier became Head of the Department.

However, the end of 1973 also saw the retirement of Professor Heather Martienssen and this was followed in 1975 by the transfer of the Department of Fine Arts, which she had headed for nearly twenty years, from the John Moffat Building to its new abode in the east wing of the Senate House. With the Department its library was of course transferred as well and so ended the sharing of common facilities by the Faculty of Architecture and the Department of Fine Arts which to their immense mutual benefit had obtained for some thirty years. This has left room for expansion of the Faculty's library in the John Moffat Building. But it has also left a gap at Wits between architectural education on the one hand and visual and artistic education on the other which is likely to affect them adversely unless appropriate measures are taken to prevent this. The withdrawal in 1976 of the Fine Arts course from the qualifying courses for the Bachelor of Architecture degree would, in effect, seem to be a diminution of the academic content of those courses which may well require enlarging if they are to be as effective as possible in preparing tomorrow's architect properly and adequately for the problems and challenges that await him.

It is the University's intention that the Faculty of Architecture and the Department of Fine Arts will be re-united in the future Environmental Sciences Building which will be located on the campus immediately west and north-west of the John Moffat Building and it is hoped that in due course this will enable the necessary blending of art and technology to be achieved to their mutual benefit.

Today, in spite of the retarding effects of the current economic recession in South Africa,

as in the western world in general, on the national requirements for higher education at university level, the Faculty of Architecture enjoys adequate support from the University and is in a strong position to cope with the demands made on it and with the developments it anticipates in the coming years. It was the first Faculty of its kind in this country to embrace the four related disciplines concerned with the production of the human environment, namely, architecture, quantity surveying, building science and town and regional planning and to house them together under one roof as it were. And with the experience it has gained over the past twelve years it is in a unique position to ensure that justice is done to each and all of these disciplines and to their development as integral elements of a unified whole.

The Government of the Faculty

The University Statutes as amended to date provide for the Faculty of Architecture to be governed by a Board which, as in the case of every other Board of a Faculty, is a committee of the Senate of the University and which, in terms of paragraph 32 (2) of the Statutes shall consist of

- "(a) the Vice-Chancellor and the Deputy Vice-Chancellor, ex officio ;
- (b) the Heads of the Departments, provided that at the instance of a Head of a Department, the Senate may appoint annually a member of the teaching staff of that Department, either in lieu of the Head of the Department or as his alternate, with power to vote in his absence ;
- (c) the holders of such offices, either within or without the University, as may be determined by the Senate ;
- (d) such lecturers and other persons as may be appointed annually to the Board by the Senate."

In accordance with paragraph 32 (3) of the Statutes, the Dean of the Faculty shall, ex officio, be Chairman of the Board of the Faculty, provided that if he is absent from any meeting, the members present shall appoint one of their members to preside at that meeting. The office of Dean of the Faculty is filled by the annual appointment by the Board of a person who is usually a Head of a Department in the Faculty but need not necessarily be one. His appointment is made generally on the basis of seniority in the tenure of the office of Head of a Department. In practice the incumbent of the office of Dean is appointed for a period of three years but he is eligible for re-appointment.

In accordance with paragraph 35 of the Statutes, the Faculty of Architecture, as in the case of every other Board of a Faculty, shall have such functions as the Senate may entrust to it. And in accordance with paragraph 36 thereof the quorum and procedure of the Board of the Faculty of Architecture, as in the case of every other committee of the Senate, shall be as determined by the Senate.

The business of the Faculty of Architecture is for the most part organised by means of ad hoc or standing committees which for the time being consist of the Heads of Departments Committee, the Higher Degrees Committee and the Planning Committee. The Committees advise and make recommendations to the Board of the Faculty and the administrative work of the Faculty is performed by the Heads of its Departments through the Secretary of the Faculty. The Heads of Departments Committee consists of the Heads of the Departments in the Faculty and such members of the teaching staff and of the Board of the Faculty as they may appoint from time to time and deals with the academic requirements and policies including also the accommodation and other incidental requirements of the four disciplines in the Faculty. The Higher Degrees Committee consists of the Heads of the Departments and also such members of the teaching staff and of the Board of the Faculty as they may appoint from time to time. And, as its name implies, it deals with all matters pertaining to the requirements for higher degrees in the Faculty, and, in particular, it makes recommendations concerning the acceptance, supervision and examination of candidates for such degrees. The Planning Committee consists of the Heads of Departments in the Faculty and, in addition, a Chairman, who, because it is essential that he be neutral in all matters dealt with by this Committee, can be anybody of the Heads' choice provided he is not the Dean. This Committee deals with the future academic development of the Faculty, and, in particular, with the quinquennial requirements of the four Departments in the Faculty, and it is intended that from next year it will deal also with the short term and long term as well as the medium term academic requirements of the Faculty, the short term period being twelve months, the medium term period 5 years and the long term period beyond 5 years up to 20 years. The greater part of the current Faculty business has a routine character - it is only occasionally controversial. And according to the Board's traditional conception of the Faculty of Architecture, the governmental machinery of the Faculty is for the furtherance of the teaching and research carried on in the Faculty.

What would correspond to the executive and administrative functions in a political constitution are exercised by the Board of the Faculty only to the limited extent it is

empowered to do so by the Senate. But despite the composition of the Board of the Faculty and, in particular, the fact that it is a mixed body of teachers and professional men, it is nevertheless true to say that within the limits prescribed by the Senate, the Faculty, regarded as a body of graduates, is virtually master of its own affairs. And, what is more, it is autonomous to the extent that its functions are entrusted to it by the Senate which has never dictated how it should be internally governed. However, self-government in the Faculty of Architecture to the extent entrusted to it by the Senate, especially by contrast with that in American universities, undoubtedly lays a considerable and perhaps excessive burden of administrative function upon those whose primary duty it is to teach or to direct and undertake research.

Apart from all matters concerned with the examinations conducted by the Faculty, which, through its Board, exacts from its undergraduates whatever standard of application or attainment it may deem fit as a condition of their continued enrolment, the undergraduates of the Faculty have since 1975 had representation and therefore a share in its government and it is hoped that on the basis of performance their share will increase in the years to come.

The Department of Architecture

At present there are 169 undergraduate and 8 postgraduate students enrolled in the Department of Architecture, the staff consisting of 9 full-time and 9 part-time teachers.

The diploma course in architecture was withdrawn in 1959 and the course for the Bachelor's degree in architecture, which was extended in 1955 from five to five and a half academic years of full-time study, was extended once more in 1960 to a total of six such years. The requirements for the Master's degree in architecture were instituted as far back as 1925 and those for the higher degrees, namely, Doctor of Philosophy and Doctor of Science in Architecture were established in 1955 and 1969 respectively, the requirements for the degree of Doctor of Architecture having been established in 1940, when the Faculty of Architecture was originated.

For many years the maximum possible intake of students per annum in the Department of Architecture has been 65. It remains so for the time being and in view of the uncertain economic outlook in this country for the time being, especially as far as the building

industry is concerned, it is not likely to change appreciably in the foreseeable future.

Since the establishment of the School of Architecture in 1921 up to the present time, 249 diplomas in architecture have been awarded and 592 Bachelor of Architecture, 9 Master of Architecture, 1 Doctor of Philosophy, and 2 Doctor of Architecture degrees have been conferred by the University, the first M Arch, as previously noted, being R D Martienssen, in 1939, the only Ph D in architecture being Doreen E Greig in 1963, and the first D Arch, as previously noted, being D M Calderwood in 1953. Such figures may be allowed to speak for themselves, but in view of the total number of architects in South Africa today, namely, some 2000, they certainly show that the University of the Witwatersrand has provided a large proportion of this total in response to the national demand for architectural services since the University first came into being fifty seven years ago.

The Department of Quantity Surveying

In the Department of Quantity Surveying 108 undergraduate and 2 postgraduate students are presently enrolled and the staff consists of 4 full-time and 6 part-time teachers. One of the full-time teachers, who is a son of Professor C Walker, the present Head of the Department and also Dean for the time being of the Faculty of Architecture, is presently seconded to the Department of Applied Mathematics which is in the Faculty of Science and this inter-disciplinary collaboration is bound to be of considerable mutual benefit to these Faculties and to the students in their constituent departments.

The diploma course in quantity surveying, which had been instituted in 1929 as a three year full-time or part-time course and which was extended in 1930 to a four year course, was withdrawn in 1967 and with the disappearance of this course the University of the Witwatersrand became the first university in South Africa to withdraw part-time courses in quantity surveying as well as in architecture. This induced the other universities in this country with departments of architecture and quantity surveying to follow suit with the result that in the international field South Africa won the distinction of pioneering the elimination of part-time education and training both in architecture and in quantity surveying.

In 1974 the course for the degree of Bachelor of Science in Quantity Surveying, which had first been proposed in 1930 and was instituted in 1940 and which comprised two years of full-time study and three years of part-time study, was changed to extend over not less

than four academic years of full-time study. The requirements of the Master's Degree in quantity surveying were instituted in 1966 and those for the other higher degrees, namely, Doctor of Philosophy and Doctor of Science in Quantity Surveying were established in 1955 and 1964 respectively. The maximum possible intake of students per annum for quantity surveying education is 35 and, as in the case of the Department of Architecture, it is not likely to change appreciably in the coming years due to the current depression in the building and construction industries.

Up to the present time, a total of 341 have qualified at the University for membership of the quantity surveying profession in this country, 184 by way of the diploma course and 157 by way of the Bachelor's degree course in quantity surveying, the first Bachelor of Science in Quantity Surveying at Wits being J J Pansegrouw who received the degree in 1946. As yet no higher degrees in quantity surveying have been conferred by the University.

As the rate of increase of population in this country is such that more than 40 new cities with more than 100 000 people each will be needed in the Republic by the year 2000, that is, less than twenty five years hence, and as the total capital required to meet the demand for buildings alone in the Republic within this period is likely to be of the order of 50 000 million rands, it is clear that the quantity surveyor in this country will play an increasing role in the enormous tasks which the building and construction industries will be called upon to undertake in the coming decades before the turn of the century. And it is equally clear that in order to fulfil his role he will have to rely more and more on the electronic computer and the techniques in the use thereof, with which Wits fortunately is well equipped for educational purposes particularly in the field of quantity surveying. In this regard the full-time course which was introduced in 1974 for the Bachelor's degree in quantity surveying is purposely designed to meet the need for better estimation of cost and better evaluation and cost control, including better budgetary control, than hitherto. It is also designed to provide a basis which, it is hoped, will enable graduates in quantity surveying to enter other sections of the South African economy.

The Department of Building Science

With a total enrolment of 146 students in 1976 which due, no doubt, to the present unfavourable economic climate, has dropped in number to 115 undergraduate and 6 post-

graduate students this year and with a staff of 9 full-time and 8 part-time teachers, the Department of Building Science is the second largest department in the Faculty of Architecture. It is nevertheless and undoubtedly the most dynamic of the Faculty's departments and, indeed, also one of the most dynamic departments in the University. This is largely because from the outset of its development as a newly established division in the Faculty in 1965 it has closely identified itself with the building industry and with the needs of the building industry, from which it has received and continues to receive substantial annual support financially as well as in every other way, particularly by way of the National Development Fund for the Building Industry in South Africa. This it has done most effectively not only at staff but also at student level.

In the process it has always enabled and encouraged the industry to participate in the structuring of its courses, it has systematically and annually assessed its aims and purposes and it has reviewed and improved its academic standards particularly on the basis of consultation with the industry, with its graduates and also with its students. Furthermore, its Heads have visited universities in Britain and the United States of America to acquaint themselves with the latest developments in building education and training and to ensure that it is not behind in those developments. Indeed, in certain respects the Wits Department of Building Science is leading rather than following its counterparts overseas. For example, it has plans to introduce organised training programmes with the building industry, or, as the present Head of the Department, Professor T J Olivier, has put it, 'housemanship', whereby the education of its students will be supplemented by practical training because "the nature of building dictates that education, if it is to be meaningful, should have a practical component so that theory may be tested and its limitations understood in a live situation". Furthermore, together with the Wits Graduate School of Business Administration and the Department of Civil Engineering, it has organised a course with options in construction management for the degree of Master of Business Administration which is to commence in 1978 with the view to forging closer links with other departments in the University, with the building industry and with the National Building Research Institute whose Director, Dr T L Webb, has for the past nine years served and continues to serve as a member of the Board of the Faculty of Architecture at Wits.

The course for the degree of Bachelor of Science in Building extends over four academic years of full-time study and has done so ever since it was established in 1965. The requirements for the higher degrees in building science, namely, Master of Science in

Building, Doctor of Philosophy and Doctor of Science in Building were all established in 1965, that is, at the same time as those for the Bachelor's degree.

Despite the popularity of the course for the degree of Bachelor of Science in Building which has grown considerably since the course was first started at Wits, the maximum possible intake of students per annum has had to be limited to 65. And because of the economic depression which the country in general and the building and construction industries in particular are undergoing at present, this figure is not likely to change appreciably in the next few years.

So far, a total of 103 building technologists have qualified at Wits, of which 100 are Bachelors of Science in Building, 2 Masters of Science in Building, and 1 Ph D in Building. The first five B Sc in Building degrees were conferred by the University in 1968 and the first M Sc in Building was R Levy, who received the degree in 1969, the only Ph D in Building being J Evenwel of the National Building Research Institute, who was awarded this degree in 1969.

Undoubtedly one of the outstanding achievements of the Department of Building Science was to win for itself in 1973 the J C Bitcon Chair of Building, thereby acquiring a second Chair in addition to that of Building Science which was established at Wits in 1965 at the request and with the financial support of the building industry. In 1970 Professor D M Calderwood together with the present writer, were instrumental in persuading Mr J C Bitcon to endow the University of the Witwatersrand with funds for the establishment and subsidisation of a Chair of Building in the latter's name. This Chair is subsidised annually and liberally by the J C Bitcon Trust and the Chair of Building Science is similarly subsidised by the building industry through the National Development Fund for the Building Industry in South Africa. But the real strength of these Chairs lies in the calibre of their present incumbents, Professors D M Calderwood and T J Olivier, who from the very beginning have been the driving force in making the Department of Building Science one of the most dynamic departments in the University. As building is essentially a multi-disciplinary activity, they have gathered and built up a multi-disciplinary staff, its members being graduates in architecture, quantity surveying, physics, civil and structural engineering and business administration. But more than that, they have engendered in the students and staff alike and also in the members of the building industry who are actively concerned with the development of higher education in the field of building, an

esprit de corps which augurs well for the future of the industry in this country, especially as far as its technical, managerial and economic requirements are concerned.

The Department of Town and Regional Planning

With a present enrolment of 71 undergraduate and 19 postgraduate students and a staff of 7 full-time and at least 12 part-time teachers, the Department of Town and Regional Planning is the largest of its kind in this country and until last year, when, for professional reasons, the Royal Town Planning Institute of Great Britain withdrew its recognition from all overseas Universities, which then consisted of the University of the Witwatersrand and three Australian universities, it provided the only full-time degree course in town and regional planning in South Africa which was recognised for membership purposes by that Institute. In this connection, it should be noted in passing, the Wits Diploma in Town Planning will, for the same professional reasons, no longer after 1978 be recognised by the Royal Town Planning Institute of Great Britain as exempting its holders from that Institute's final examinations.

The postgraduate course for the Diploma in Town Planning which, as previously noted, was instituted in 1945, was withdrawn in 1972 and, besides the course for the Bachelor's degree which was established in 1965 and which extends over four academic years of full-time study, the requirements for the Master's degree were instituted in 1970 and those for the Master's degree in the specific field of Urban Design in 1975, by which time the requirements for the highest degrees, namely, Doctor of Town and Regional Planning and Doctor of Science in Town and Regional Planning were also established.

In 1975, too, the first students were registered for the then new Master's course-work degree in town and regional planning, for which graduates from various related disciplines are eligible. The graduates who enrolled then were from the fields of geography, sociology and building science. This year, the requirements for another new higher "umbrella" degree, namely that of Master of Environmental Planning in various areas of specialization and for a diploma, namely, the Higher Diploma in Planning for Developing Areas (H Dip PDA) have been approved by the Minister of National Education and have therefore been duly established and the courses for these will be offered in 1978. These developments are fully in keeping with technological trends and national policy in the field of town and regional planning and are the result of the remarkable understanding,

foresight, determination and energy which Professor N N Patricios has brought to bear in furthering the aims and purposes of his Department especially from the time he became its Head some four years ago, and which undoubtedly give promise of further developments in the years to come.

For the time being the maximum possible intake of students per annum in the Department is 35 for the undergraduate course, there being no limit as far as post-graduate students are concerned and, as in the case of the other Departments in the Faculty, this figure is not likely to change appreciably in the next few years.

To date, a total of 59 postgraduate diplomas in town planning have been awarded and 62 Bachelor of Science and 2 Master of Science degrees in Town and Regional Planning have been conferred by the University since the time town and regional planning education and training were originally undertaken by it in 1945. The first five B Sc in Town and Regional Planning degrees were conferred by the University in 1968 and the first M Sc in Town and Regional Planning was M Kahn, who received the degree in 1973. But as yet none of the highest degrees in Town and Regional Planning have been conferred by the University.

The Composition of the Total Enrolment of Students in the Faculty of Architecture

It has been previously noted, although only in passing, that ten years ago the total enrolment of students in the Faculty of Architecture consisted of European students and also a few Asiatic and Coloured students. But the matter as to what colour or race the Faculty's students are composed of is vitally important to the development and work of the Faculty and of the University itself and, above all, to the achievement of their full academic potentialities. For until April 1959 the University of the Witwatersrand was free to determine for itself such fundamental issues as who should teach and who should be taught and it was one of four South African universities that exercised these rights by admitting anyone on merit and on merit only. Since then it has been statutorily prevented from doing so under legislation ironically termed the Extension of University Education Act, which debar all but people with white skins from attendance at "white" universities. But since then, too, the University of the Witwatersrand has used every possible means consistent with academic propriety to regain its privilege to admit persons of merit irrespective of the colour of their skins. In a referendum last year it signified its overwhelming support for its doors to be reopened to students of all races and it requested the

Government to investigate ways and means of removing restrictions on the admission of brown and black students "so that the only criteria to be applied when deciding who was to be admitted would be academic ones". It is true that since the passing of the Extension of University Education Act in 1959, ministerial permission for Asiatics, Coloureds and Blacks to be enrolled as students in the Faculty of Architecture has in fact never been withheld. But the fact that such permission is necessary, as in the case of every other Faculty of the University, has had a deleterious effect on the University academically as well as in every other respect. Of the 169 undergraduate students enrolled in the Department of Architecture this year, 163 are European, 1 is Japanese, 4 are Indian and 1 is Black. In the case of the Department of Quantity Surveying, in which there are 108 undergraduate students, 97 are European, 5 are Indian, 5 are Chinese and 1 is Black. The Department of Building Science has a total enrolment of 115 undergraduate students of which 114 are European and 1 is Black. And in the Department of Town and Regional Planning there are 71 undergraduate students of which 70 are European and 1 is Chinese. Such figures underline the need for restrictions on the admission of students to Wits and to the other three English-medium universities of this country on the grounds of colour, creed or race to be removed without delay. For if these figures are read in conjunction with the situation, as already pointed out, that on the basis of the rate at which the population in this country is increasing, 40 new cities with more than 100 000 people each will have to be provided by the year 2000, it is only too clear that a task of such magnitude cannot be undertaken with reasonable hope of success unless all the resources of South Africa are mobilised and effectively directed to accomplishing this task. As the most important of these resources are our human resources and as the social aim and object of this task must be to serve human purposes in order to satisfy people's growing sense of their dignity and equality both individually and collectively, the time is long overdue for responsibilities, participation, the free exchange of thought and experience and human respect, especially in such a task, to be shared by all the people of South Africa regardless of their colour, creed or race. And so it is in this light that the student enrolment and staff engagement figures in the Wits Faculty of Architecture, as in every other of the University's Faculties and as indeed also in every other South African university will inevitably have to be seen, understood and dealt with accordingly.

The Appointment of Honorary Professors

One of the most promising developments in the Faculty of Architecture in recent years,

particularly as far as the students as well as the academic staff are concerned, has been the appointment as honorary professors of distinguished members of the professions with the education and training of whose entrants the Faculty is directly concerned. These appointments have been made in the light of the achievements of the appointees and their contributions to the professions of which they are members, the purpose of such appointments being not only to honour those who receive them but also and more importantly for the teaching staff and the students of the Faculty to derive benefit from their practical experience and knowledge and from their ability on the basis thereof to generate ideas in the planning of education and training, to initiate experiments therein and to conduct classes and seminars on modern thinking and new techniques in the disciplines with which they are involved. On these grounds and for these purposes the Department of Town and Regional Planning was the first department of the Faculty to obtain the appointment of honorary professors, namely, Professor J Fassler who in 1968 was appointed Honorary Professor of Civic Design and served the Department as such until he resigned from this office in 1970, and I Schlapobersky who in 1969 was appointed Honorary Professor of Architecture and Urban Studies and in 1975 Honorary Professor of Urban Design and served the Department as such and also as a part-time lecturer in Urban Design and as Director of the Urban Design Programme until 1976. In 1977 C D Burde, a senior lecturer in the Department, was appointed Director to succeed Professor Schlapobersky. The Department of Quantity Surveying followed suit in 1969 by obtaining the appointment as Honorary Professor of Quantity Surveying of C Walker, who served the Department in this capacity until 1973 when he was appointed to the Chair of Quantity Surveying. In 1976 the Department of Building Science obtained the appointment of an Honorary Professor in the person of L J Cohen, a civil engineer by training, a builder by profession and a leading figure in the building industry in South Africa. And this year the Department of Quantity Surveying has again obtained the appointment of an Honorary Professor, namely, G P Quail, an eminent Transvaal quantity surveyor who has for many years served as a part-time lecturer in that Department.

The Teachers

No account of the establishment and development of the Wits Faculty of Architecture would be complete or, for that matter, worth notice, without reference to those who have served as teachers in the Faculty and in the School of Architecture and Quantity Surveying which preceded the Faculty and which, as has been previously noted, is as old as the