This article commemorates the first decade of the School of Architecture, University of Pretoria from 1943 to 1953. The reminiscences are based on interviews with early graduates and focuses on their memories of the school and of three of its prominent personalities: Hellmut Stauch, Bob Cole Bowen and Basil South. The article examines their teaching styles, influences on students, and the developing ethos of the school in this seminal decade.

Figure 1: Class photo, 1949, in front of the Pretoria City Hall (obtained from Jan van Wijk)

Reminiscences:

The Pretoria School of Architecture as remembered by early graduates, 1943-1953

Alta Steenkamp

BACKGROUND

Teaching in Architecture and Quantity Surveying commenced at the Transvaalse Universiteitskollege (TUK)[1] with the appointment, on 18 April 1929, of H Bell-John as Head of the Department. It had been decided by the Secretary of Education, Dr S F N Gie, that the education of architects and quantity surveyors was to be a function of the universities (and not the technical colleges). The two courses were moved to the TUK with the understanding that education would take place in collaboration with the University of the Witwatersrand (Wits). From the end of 1931, diplomas and degrees in Quantity Surveying were awarded by the University of Pretoria (UP)[2] and those in Architecture by Wits. The wish to institute its own Chair in Architecture was raised by the Council of the University of Pretoria in 1940, but it was decided to honour the agreement with Wits until the end of 1942. At the beginning of 1943 the Department of Architecture and Quantity Surveying became an independent department within the Faculty of Mathematics and Science, and Mr A L Meiring was appointed the first Professor and Head of the Department (*Ad Destinatum* 1960:142).

The School of Architecture came into being during the chairmanship of the Council of the University of the architect Gerard Moerdijk[3] (18.10.1935-25.6.1942)[4] (*Ad Destinatum* 1960:102). He is credited with fostering the use of Afrikaans in Council meetings and establishing the first Afrikaans Medical Faculty in South Africa. The decision to break ties with Wits and establish an autonomous school of architecture was taken on 28 May 1942[5] at his penultimate meeting as chair. His daughter, Irma Moerdijk (now Vermeulen), became one of the first graduates of the school when she obtained a diploma in 1948.

Classes commenced in March 1943 in the extramural building of the University of Pretoria in Vermeulen Street. Early graduates remember the small school as having a friendly atmosphere with everybody working in one studio. Students could enrol for either a degree or diploma course. Because of financial difficulties being experienced during World War II (1939-1945), it was not uncommon for students to change courses from the degree to the part-time diploma course so as to be able to work and thereby sustain themselves. The diploma students had early morning lectures and could be in their offices by 9 o'clock in the morning. Lectures resumed at 5 o'clock in the afternoon. They followed the same curriculum and did the same projects as the students studying full-time. That is not to imply that the full-time students had an easier time. A demanding programme necessitated a well-developed work ethic and good discipline. Of the students who registered between 1949-1951, fifty-four percent abandoned the

Figure 2: Hellmut Stauch 1962, photo by David Baker (Nation 1985)

course while twenty-five percent were still studying in 1958 (Sandrock 1960:13).[6] The economic slump that followed World War II was the main obvious contributor. From 1955 onwards, student numbers increased and fewer students abandoned the course.

Although some students enrolled at Tukkies[7] to be able to study Architecture in Afrikaans, most lectures were presented in English. The three key personalities who shaped the school were English speaking (Stauch's first language was German). Early graduates (fondly) relate their surprise at being taught mainly in English. Most students accepted this and did not make an issue of language. Jan van Wijk[8] (2001) sums up:

> Lectures were mainly in English, but you spoke Afrikaans to those that could. It did not bother us; we were there to learn how to make buildings. We were concerned with how to put a building together, how to place it on a site, how to build for different activities.

Daan Kesting[9] (2001), who describes himself as a language rebel, was more irritated by some Afrikaans lecturers who presented classes in English. Johan de Ridder[10] (2002) mentions the fact that there were very few Afrikaans-speaking architects at the time. He says studying architecture at the University of Pretoria offered him the opportunity to enter a profession that was traditionally perceived to be English-speaking. However, the fact that they had to annotate drawings in English concerned de Ridder. Already as a student, he started annotating drawings in Afrikaans and translated specifications into Afrikaans.

PERSONALITIES

From the interviews conducted by the author, it became clear that Stauch, Cole Bowen and South were the most prominent lecturers at the Pretoria School of Architecture during the first decade. Brief biographical sketches and recollections reflecting their personalities and teaching styles are provided in the following sections.

Hellmut Wilhelm Ernst Stauch (1910-1970)[11]

Hellmut Stauch (figure 2) was born in Germany and studied design at the Ittenschule and thereafter at the Technische Hochschule, Berlin. A visit, in 1929, to see his family[12] introduced him to the southern African climate and landscape. He returned to Germany and immigrated to South Africa in 1935, where he took up an offer of employment by Aubrey Nunn in Pretoria. By 1940 Stauch was considered among Pretoria's forward-looking architects in a special edition of *The Architectural Review*[13] that focused on Modernism in the Commonwealth. Considerations of function, climate and a preference for local and practical materials can be seen in the projects featured. He joined the staff of the School of Architecture at the University of Pretoria in 1943.

Stauch is remembered as a perfectionist who was very self-confident and generally well liked. He spoke German by preference and had a good rapport with the students who could speak German. Jan van Wijk (2001) remembers:

> Helmut Stauch was a typical German, correct, perfect, he always referred to 'ziz dezign', 'ziz houze', and he was brilliant in design, and a wonderful person and artist. He always said: 'architecture is not drawing, drawing is a means to make a building'.

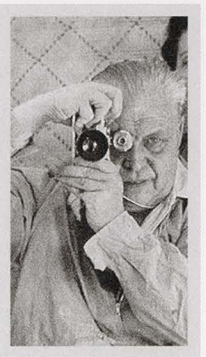
The principles of Functionalism were expressed in Stauch's work and teaching through a philosophy that focused on economy in design, in particular the design of space. In his work, this translated into buildings that were tailor-made to a specific function. Stauch's practical perfectionism meant that designs constantly evolved. According to Shelagh Nation[14]:

> He'd take a 6B pencil, he used to throw anything harder than an HB out of the window, and pens went out of the window, somebody's hat went out of the window because he didn't like the hat. He took his 6B pencil and he changed everything. With Helmut the thing was never finished. He was practical but if he thought it wasn't perfect he would change it. So in that way he was meticulous, if you like, but always with a soft 6B pencil.

He conveyed his ideas with very few words. Few students remember him teaching them formally; rather they remember the informal design discussions with his 6B pencil always at hand. Learning from Stauch was through conversation and debate, getting involved with his design approach, and by means of frequent visits to his buildings that were under construction. His preference in architecture was not limited to Functionalism; he had a sound knowledge of and high regard for the works of Le Corbusier, Mies van der Rohe and Oscar Niemeyer. In the early 1950's, Stauch travelled to South America, especially to visit Niemeyer and to discuss his work.

After five years of teaching, Stauch left the school in 1948 but he still visited it regularly for design discussions, and most graduates from the first ten years remember him well.

Robert Edward Cole Bowen (1904-1976)[15]



Bob Cole Bowen (figure 3) attended the School of Architecture at the University of the Witwatersrand intermittently from 1923 onwards. Financial problems forced him to generate an income. In 1924, he started working for the Public Works Department in Pretoria on a temporary basis, and was appointed a permanent member of staff in 1929. Being well known for his drawing skills, both architectural and as a cartoonist, he was frequently employed to produce perspectives for architects and calendars for local businesses. Cole Bowen enlisted for military service with the outbreak of World War II, and later became a Troop Com-

Figure 4: Basil South 1949 (detail from class photo obtained from Jan van Wijk)

Figure 3 (left): Bob Cole Bowen 1950's (Cole Bowen 1957)

mander in the Fourth South African Armoured Division in North Africa. In 1944 he was wounded and lost a leg, and was repatriated to South Africa. He returned to the Public Works Department in Pretoria and qualified as an architect. In February 1946, he left to join Norman Eaton on the design of the Ministry of Transport, planned for Pretoria. At about this time Cole Bowen was appointed senior lecturer at the School of Architecture in Pretoria.

Cole Bowen is described as a formidable and strict man who took no nonsense from students. His occasional gruff invitations to students ("I expect to see you tonight at my house") for *braais* (barbeques) at his home on Silverton koppie became a welcomed institution. The accompanying discussions on architecture are remembered as an appreciated substitute for the lack of magazines and books on architecture at that time. Two physical traits seem to stand out in the memories of students taught by Cole Bowen: his height of 6' 4" (1.87 meters) and the variously described sounds of his approach owing to his artificial leg. The sound of his approach generally caused a flutter of hearts and jingle of nerves. Shelagh Nation (2001) remembers:

> Cole Bowen was a bit grumpy, he'd lost a leg in the war and he used to come up the corridor going eek onk eek onk. We'd always hear him coming. The first day, 36 of us, 32 men and four women were sitting waiting for him and he came in and looked around at us. He talked to the men mainly, told them what they were going to be up against, first day, first year, and he turned to us women and he said: 'as for you bitches, …' and we froze, because you know one didn't talk like that in those days, and he said 'you don't belong here, don't waste my time, you're not here to be serious students, I'll put up with you, but I'm not going to waste time on you.' We sat there and we just watched him… He was serious and we were so intimidated. Mind you, he was funny also. At eighth scale (1:96) he used to count the number of brick courses we put into a brick wall.

Students admired Cole Bowen's straightforward approach to design, drawing ability and meticulous detailing. Like Stauch, he had a holistic approach to design and imparted this to students. Jan van Wijk (2001) remembers:

> Cole Bowen used to come into the class and say: 'you are a carrot, find your way from where it is grown to somebody's table and build a house around it'. He liked the idea of systems, referred in the same breath to the flow of blood in the human body and the nervous system of a building, 'where are the services, how do they fit together?'

Cole Bowen cultivated a school of young designers who could draw skilfully, and the perfectionism that flowed from him had a significant influence on his students. According to Swanepoel (2001),[16] Cole Bowen said: "If it doesn't work it's not architecture".

Cole Bowen gave up teaching in 1953 but still visited the school for design discussions. In 1956, he left South Africa to join the architect John Gauldie in Salisbury (now Harare, Zimbabwe).

Basil Hugh South (1915-1952)[17]

Basil South (figure 4) was born in Mafeking, South Africa, and trained at the Wits School of Architecture. Unlike Stauch and Cole Bowen, students found Basil South easy to communicate with and relate to. Referred to as a bearer of knowledge, 'ons koning' [our king] and 'a honey', he is remembered as a positive force with a keen ability to recognise potential, especially among young students.

Because he was well read, South offered a wealth of information and seemed to have been more philosophically and theoretically inclined. At the same time, he emphasised practicality and used the word 'pastiche' frequently to identify clutter in a design. A true Modernist, cleaning up the design and distilling it to its purist form was imperative. Like Cole Bowen, South frequently invited students for visits, initially to his flat in the Hochstetter Building (designed by Stauch) and later to his farm on the Pienaars River, north of Pretoria. Students remember listening to gramophone records while South related his philosophy that everything happens in a context, and that architecture, music and art are interlinked.

South had an easy studio manner. Students were keenly aware of his presence and ability to instantly identify a problem. He roamed the studio, sometimes with a cigarette dangling from his mouth, but when he lingered over work in progress a mumble or vague comment would indicate to the hapless student that something was amiss. A fine critic, South established doubt and left it up to the student to discover the problem. Daan Kesting (2001) remembers:

> One of the first perspectives we did, I worked myself to death in watercolour that I had not mastered yet, with an Indian ink pen. It took some time to work out how to get the ink in the pen, so Basil was walking through the class and commented on almost everything. He came to my desk and said: 'look, this is wonderful, there's enough architecture in this design for ten buildings', without sarcasm or malice, and I realized I'm far off the mark. His comments were our most important schooling.

South always congratulated students on small improvements saying: "yes, I think you've got it." He died at the age of 37 in 1952. Students were informed of his death on their return after the Easter break. Everybody felt the great loss of a talented mentor and accomplished architect.

INFLUENCES

The character of the Pretoria School of Architecture, according to Shelagh Nation (2003), was greatly influenced by a relief from stress following World War II and a tremendous

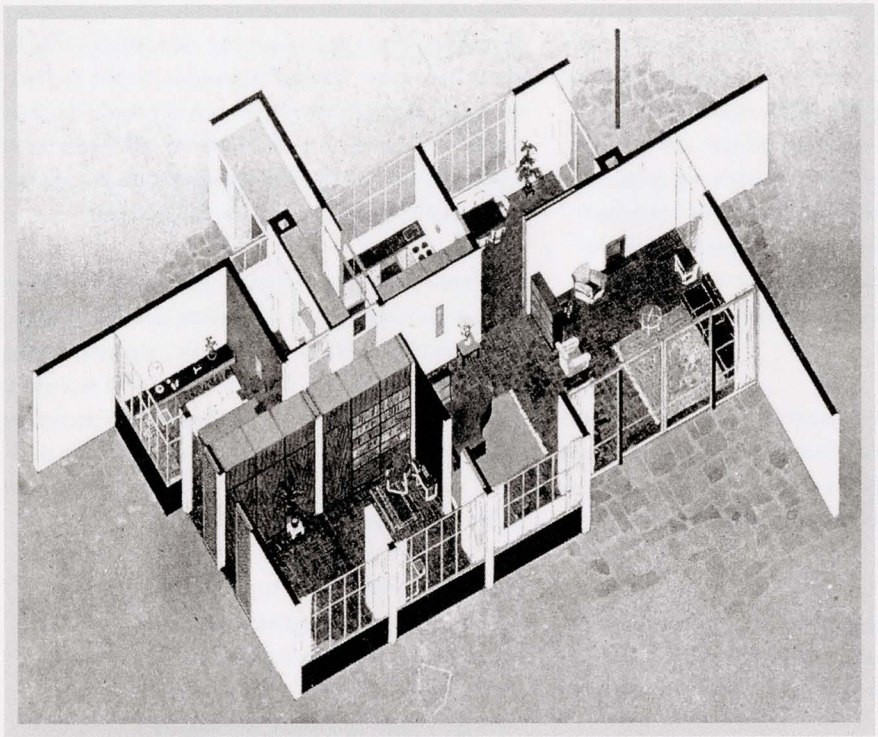


Figure 5: Isometric view of a house in Pretoria (Stauch 1941:62)

optimism and excitement about the future among students. Encumbered by shortages during and after World War II, the students and staff learned to make do with what they had rather with what they would have liked to have. It was difficult to get textbooks and instruments. This probably explains why former students, for example, still own their original copies of books such as Banister Fletcher's *Comparative History of Architecture* and Sigfried Giedeon's *Space Time and Architecture*. Journals were scarce. Students were issued with an old style drawing-pen; paper and ink were available but very expensive. Jack Van Rensburg (2001)[18] remembers their delight when the architect Robert Gustav Schmikl, on receiving a consignment of good quality pens, made some available to the students. Drawings were prepared with a T-square and a set-square on a board propped up on bricks on trestle tables. Parallel rules became available but were generally too expensive; Gawie Fagan[19] made his own and many students followed suit.

There was little appreciation for 'old' (pre-Modern Movement) architecture, although students enjoyed studying the history of architecture. Herbert Baker's work was thought outdated and over-designed. Moerdijk, who had been instrumental in establishing the school, was considered too traditional. According to Kesting (2001):

> Typically senior students used to ask the junior students who their favourite architect was. Most said Moerdijk, him being the only architect we knew, then they would make a lot of noises to indicate their displeasure.

Similarly, Van Kerken (2001)[20] remembers:

> We considered Moerdijk's work 'way-out', we knew his churches and obviously the library but thought we knew much more than him. We did not appreciate him. We were revolutionary and Le Corbusier was our hero.

The works of the Masters of the Modern Movement (Le Corbusier, Mies van der Rohe and Walter Gropius) were favoured, and like all pioneering students in architecture, they placed themselves above the preceding tradition. The work of Le Corbusier and Mies van der Rohe was especially admired, but many considered the work of Frank Lloyd Wright too 'fussy' and conservative. At the same time, many students were initially shocked with Le Corbusier's deviation from the Modern Movement with the design of Ronchamp (1952). Gawie Fagan (2001) remembers the reaction: "Ons dog die ou is die kluts kwyt" [We thought the man had lost his grip on reality].

Students regularly visited buildings by Stauch, Cole Bowen and Norman Eaton, and Eaton regularly visited the school as guest critic. He is remembered as soft-spoken, but some students found it difficult to communicate with him and thought him inarticulate. Van Rensburg (2001) recounts: "I always thought him arrogant and realized too late that he was just very shy." Nonetheless, the earthy basics, patterned brickwork and subtle and fine detailing in Eaton's designs and buildings greatly influenced students; students were required to gain practical experience in the fourth year and Eaton was a popular choice as employer.

Excursions to Johannesburg exposed students to the work of neighbouring practitioners such as John Fassler and Norman Hanson, which they found less inspiring. The strong bond among the students and staff meant that they became biased towards designs from their own environment: the architects by whom they were taught and the architects they came to know in practice.

The Pretoria School of Architecture developed a distinct identity and direction mainly through the influence and design preferences of the lecturers and local practitioners. Stauch and Cole Bowen propagated the combination of functionalism and regional concerns in their teaching and work. House Winckley (Villeria, Pretoria 1944) by Stauch clearly demonstrates these characteristics.

Form was dictated by function and the drawing, devoid of context, strongly resemble the spatial configuration developed by Mies van der Rohe (figure 5). The plan became the generator and the roof the spatial indicator. A module of 3'4" (three foot four-and-a-quarter inches, 1022mm), generated from the width of a standard steel window frame and the distance that a purlin can easily span, determined the order of the plan (figure 6). Within the module careful planning and economy of space generated a simple, uncomplicated plan. All structure adhered to the module. Spaces corresponded with the plan size so that larger spaces benefited from the height and gradient of a monopitch roof and the butterfly roof developed by Stauch from a belief that a pitched roof combined with a flat ceiling wasted valuable space (figure 7). Cole Bowen preferred a pitch roof at a low angle. The dramatic spatial qualities (figures 8 and 9) achieved was Stauch's main consideration, as Shelagh Nation (2003) explains:

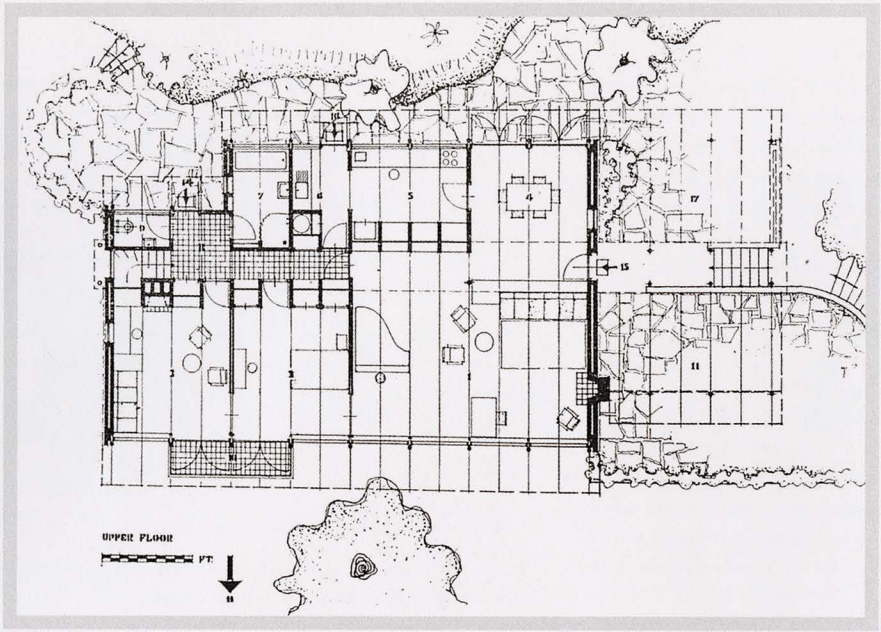


Figure 6: Plan of Winckley House, Pretoria (Stauch 1945:210)

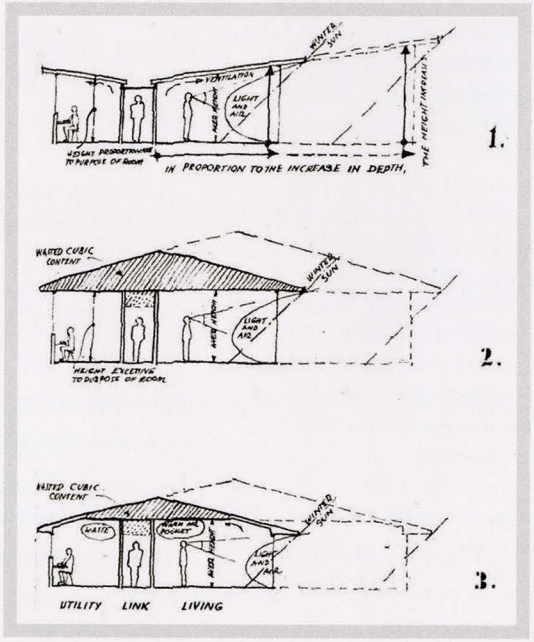


Figure 7: Diagram by Stauch (Stauch 1945:207)

He liked the spatial drama resulting from the sloped ceiling, he liked the way interior and exterior space flowed when windows went up to the ceiling. A major factor in his work was the drama he created with juxtapositioning of spaces, of materials and movement routes through the building.

Stauch and Cole Bowen stressed the role of architecture to regulate the internal climate. Students were required to draw diagrams analysing sun-angles for the north façade. Both favoured local materials, such as stone from the koppies and bricks for walls and floors. These materials were not affected by post-war constraints (figure 10). This prescribed and pragmatic approach culminated in meticulous detailing and maniacal precision in construction. Students were required to work out brick courses to eliminate cut bricks. Cole Bowen could judge at a glance whether they had achieved this end.

South's influence was not as direct as Stauch's and Cole Bowen's. He did not lay down rules to follow, but rather instilled a theoretical and philosophical approach towards the making of space, the 'feeling' of space, in students. He is remembered as having a high regard for the work of Le Corbusier, Mies van der Rohe and Oscar Niemeyer, and he cultivated a deeper understanding of their work.

The use of proportion systems established a strict discipline in the work of the graduates. In time two methods became established: the module and *modulor*. The module originated from the Bauhaus and the theory of Functionalism. The *modulor* was developed by Le Corbusier and substantiated in the Pretoria School by studies from *The Elements of Dynamic Symmetry* (Hambidge 1920). This approach recognized the importance of function, but not as a principal concern. Some students thought the module had more slender proportions and criticized Le Corbusier's *modulor* for being arbitrarily based on the six-foot "pommie" (Swanepoel 2001). On the other hand, some found the *modulor* more dynamic and organic and felt it was less restrictive, prescriptive and formal. Two distinct design approaches were generated from these divergent views:

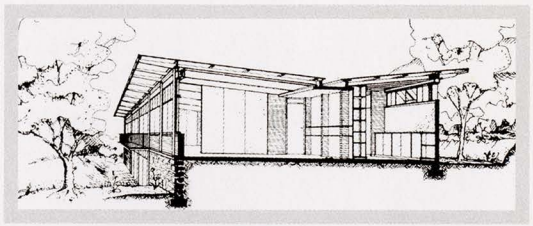


Figure 8: Section, Winckley House, Pretoria (Stauch 1945:211)

Figure 9: Interior, Winckley House, Pretoria (Stauch 1945:212)

Figure 10: Exterior, Winckley House, Pretoria (Stauch 1945:209)

- A rational, pragmatic and functional approach intermarried with concerns of local climate, materials and technology as propagated by Stauch and Cole Bowen. Fisher (1998) names this approach Pretoria Regionalism and describes it as "The Third Vernacular".
- An expressive, robust approach (with regard to material and form) that can be sculptural (for example, in the work of Jan van Wijk) or mathematical (for example, in the work of Karl Jooste[21]). Jooste developed the *modulor* beyond that which Le Corbusier himself could have envisioned; it is no wonder that Cole-Bowen referred to Jooste's group as "the clique of golden squares" and "God's little golden sections" (Swanepoel 2001).

CONCLUSION

In 1953, the year that the school celebrated its tenth year of existence, Cole Bowen left, possibly due to a language dispute.[22] South had died the previous year and Stauch was visiting less often as his practice began to grow. There is no doubt that they had made their mark on the character of the school and students, and it can therefore be assumed that their absence would also have been felt. Gerneke (1994:24) believes that "[w]ith hindsight it seems as if the creativity and fervor of the early days of the Pretoria school fizzled out, at least for a period, after the first decade."

Stauch, Cole Bowen and South brought to the Pretoria School of Architecture their knowledge and experience, but above all a passion for architecture. Their influence on the developing character of the school was through an aesthetic of place (climate and material) and space (planning as determinate of order and form). By the mid-1950s, their mark was already appearing in the built works of the new practitioners, who acknowledged the ethos of the school but never to the detriment of innovation and originality.

Endnotes

1 Transvaalse Universiteitskollege (TUK), founded on 11 February 1908, initially subjugated under the University of the Cape of Good Hope. In 1918 it acquired greater autonomy when it was incorporated into a Federal University, better known as the University of South Africa (UNISA). For a complete history see *Ad Destinatum - Gedenkboek van die Universitieit van Pretoria 1910-1960*.

2 The University of Pretoria, with full autonomy, came into being on 10 October 1930 (previously the Transvaalse Universiteitskollege).

3 The spelling Moerdyk is used in all official material at the University of Pretoria.

4 Vermeulen (1999:119) erroneously gives the dates as 1930-1937.

5 Document R2454, p221-222. Archives of the University of Pretoria

6 A valuable statistical analysis of student profile and numbers up to 1960 can be found in the first Masters by research awarded to Brian Sandrock in 1960. He obtained a diploma in 1953 and a BArch in 1954. He went on to design various buildings on the campus of the University of Pretoria.

7 Derived from TUK, Tukkies refers to the University of Pretoria and its students.

8 Van Wijk, Johan Carel (Jan), BArch 1950

9 Kesting, Daniel Pieter (Daan), BArch 1958

10 De Ridder, Johannes (Johan), BArch 1950

11 Biographical information from unpublished electronic data-base, Department of Architecture Archives, University of Pretoria.

12 His father, August Stauch, had discovered diamonds in South West Africa (present day Namibia) in 1908. He spent half of the year in South West Africa to attend to his business interests. He went bankrupt in 1929. For further information see Nation (1985).

13 *The Architectural Review*, August 1940.

14 Nation, Shelagh Suzanne (Shelagh), neé De Kock, BArch 1958

15 Biographical information from unpublished electronic data-base, Department of Architecture Archives, University of Pretoria.

16 Swanepoel, Charles Bilson (Swannie), BArch 1956

17 Biographical information from unpublished electronic data-base, Department of Architecture Archives, University of Pretoria.

18 Van Rensburg, Jacobus Johannes Janse (Jack), Diploma 1952

19 Fagan, Gabriël Theron (Gawie), BArch 1952

20 Van Kerken, Henry (Henry), Diploma 1957

21 Jooste, Karl Johannes (Karl), Diploma 1949, BArch 1956

22 According to Cole Bowen's daughter, Elizabeth van Rensburg, he came under pressure to teach in Afrikaans although he spoke very little Afrikaans.

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