## 4 Monumental modernism

In 1929, after it had been decided that the education of architects would in future be entrusted to the universities rather than the technical colleges, courses in Architecture and Quantity Surveying were introduced at the Transvaal University College in Pretoria, with H. Bell-John as head of department. Soon afterwards it was mutually agreed that the Transvaal University College would award qualifications in Quantity Surveying and the University of the Witwatersrand those in Architecture, although the courses were offered on both campuses.

This arrangement was terminated in 1943 with the establishment of the Pretoria School of Architecture at the University of Pretoria. The School's first graduates qualified in 1948, the year the National Party came to power. Wynand Smit was one of the first graduates to become a part-time studio master at the School. Another early graduate who subsequently taught was Karel Jooste, and he was followed by two of his partners, Carl (Gus) Gerneke and Anton du Toit. Other noteworthy early tutors were Gordon McIntosh, Norman Eaton, Helmut Stauch and Robert Cole Bowen. McIntosh was prominent in the Transvaal Group and one of the original protagonists of the Modern Movement with Rex Martienssen and Bernard Cooke.<sup>3</sup>

Under the tuition of a largely English-speaking teaching corps the Pretoria School developed a strong, pragmatic identity. Two common factors seem to have characterized the teachers: they were all South Africans born and bred, with strong rural ties; and many had felt the formative influence of the Public Works Department.

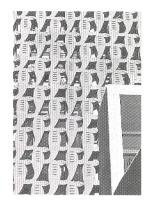
Cole Bowen, for instance, a functionalist but creative designer who worked with a clear and simple rationale, had been employed in the Department, designing a good Dudok-influenced building for the Krugersdorp Post Office. He introduced an adventurous and somewhat less academic strain of thought into the School.<sup>6</sup> He taught the design of an economical courtyard house, for instance, using excellent examples from his own work, and advocated accuracy based on detailed anthropometric data – sizes for furniture and sanitary fittings, the sizes of folded sheets for linen cupboards, the minimum height required to hang a long evening dress.

In the year the Pretoria School was founded, the Museum of Modern Art in New York staged the 'Brazil Builds' exhibition. This exhibition moved modern architecture out of the preserve of the privileged and into the public realm and established it as an expression of newly independent state-hood, exemplified in Brasilia and Chandigarh. The book Brazil Builds was to post-war students in Pretoria what Vers une Architecture had been to Martienssen's generation in Johannesburg, and in the years to come its influence left an enduring mark on the architecture of Pretoria. Nikolaus Pevsner later called Johannesburg 'a little Brazil', but the description may have suited Pretoria even better.

The transatlantic influence was soon felt on the campus. The shortage of sheet-iron during the war years had encouraged experimentation with roofs of formed concrete, and this developed a confidence in the use of the material.8 The skills of engineers and builders were tested to the limit by daring concrete inventions — ribbon stairs, pioneered by the Roberto brothers in Rio's Santos Dumont Airport (and tried out on penguins in London), along with hyperbolic, folded or saddle-curved canopies and roofs. The first free-standing ribbon stair in South Africa (now demolished) was tacked on to the outside of the Aula on the University of Pretoria campus.

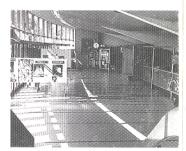
The idea of building a hall to celebrate the 1938 centenary of the Great Trek, like the idea for the Merensky Library, was first mooted in 1920. The 'gedenksaal', or memorial hall, was back on the agenda in 1929, and there was talk of a 'Hall of One Thousand' on the campus in 1935, but the Library was the only project that came to fruition. However, a Voortrekker Hall designed by Eaton's mentor Gordon Leith was built in the city. It is appropriate that Karel Jooste, who continued the Leith-Eaton lineage, should have designed the Aula.

Although the project was initiated in 1951, the hall was finally built between 1956 and 1958. Had it been built immediately, the Aula might well have been the first monumental modernist building in the country, ahead of Stauch's Meat Board Building. The university authorities certainly succeeded



Meiring and Naudé, Heavy Machinery Building, 1959.

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The Aula, main entrance and south-eas