"Enthusiasm, Energy and Originality": The Influence of Harry Rembert's European Architectural Investigations on Australian Post-war University Design

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Tertiary expansion during the 1950s and 1960s in Australia was unprecedented. With growing student numbers and a global technological revolution came the pressing need for modern scientific educational and research facilities. This paper examines the design of university campus buildings during the post-war decades through the lens and the mobility of European influences both physical and cultural. The NSW Government Architect was charged with the design and construction of new buildings for higher education in Sydney. To meet the design needs of this challenging program, in 1955 Harry Rembert, the office's Senior Designing Architect, embarked on an extended architectural study tour overseas, visiting North America, the UK and Europe. Already a practitioner of Dudokian Modernism experienced at a distance through architectural journals, Rembert was enlightened and excited by his first-hand encounters with the "inherent good taste" of the best modern European architecture. In the only substantive report of his career, he documented the "enthusiasm, energy and originality" of European exemplars of community facilities, administrative buildings and housing, as well as laboratories, schools and other structures. He returned to Sydney to direct, give responsibility to, and then support a group of younger architects striving to make their mark with innovative modernist designs whilst still acknowledging the country's distinctive character and traditions. Drawing on Rembert's report, archival research and interviews, our paper addresses the question "What is Europe?" by examining the concept of Europe and the European through the eyes of an Australian architect charged with the oversight of major state government projects. It explores the influence of his and his colleagues' appreciation and understanding of European Modernism on the design of buildings constructed from the mid-1950s at the University of Sydney and the new University of New South Wales.

Keywords: Modernism; Harry Rembert; University of Sydney; University of New South Wales; School of Chemistry; Fisher Library

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The post-war decades in Australia saw a period of massive growth in university campus construction as the student population rapidly increased and tertiary institutions were required to offer a modern technological education. In New South Wales, the Government Architect's Branch of the Department of Public Works was charged with providing for these needs. However, by the late-1940s, long disrupted by depression and war, the rate of government building had declined and the quality of architecture stagnated leaving the Government Architect's Branch (hereafter GAB) with few enthusiastic and inspired architects and a reputation for mediocre design that failed to acknowledge contemporary innovations.[1] This was also the case with many private architectural firms. Despite this general weakening of design skills, a small number of architects had contrived to break with the past and were producing high quality architecture during this period. Among them was Harry Rembert, whose work in the GAB's general drawing office during the 1930s and 1940s was a major contribution to the small assemblage of modern, inter-war Functionalist-inspired public buildings in NSW.[2]

1 Russell C. Jack, "The Work of the N.S.W. Government Architect's Branch – 1958-1973" (M Arch. diss, University of New South Wales, 1980), 3.

2 Peter Webber, "E. H. Rembert", *Architecture Australia* 74, no. 1 (1985): 51-58, 51.

As building recommenced after the war, Harry Rembert was given responsibility for the design output of the office and commenced a number of initiatives aimed at improving design standards. In 1955, to prepare for the specialised requirements of the looming technologically-challenging tertiary building program, he embarked on a four-month international architectural study tour. Although his brief was to investigate university, school and hospital design innovations, as a practitioner of Modernist architecture Rembert was particularly enlightened and excited by his first-hand encounters with the many examples of the best contemporary European design he saw en-route.[3] In the only substantive report of his entire career, Rembert documented these European exemplars of Modernist architecture in detail and returned to Australia determined to continue to encourage and support comparable design standards amongst the staff of the specialist section of the GAB.[4]

3 Andrew Andersons (trainee and architect with GAB 1959-1989), interview with author 1, March 27, 2019; E. H. Rembert, *Report on Architectural Investigations Overseas 1955* (Sydney: Government Architect's Branch, Department of Public Works of New South Wales, 1955), 3.

4 Rembert, *Report,* 8.

Rembert's individual work has been discussed in a small number of publications as has his position in the GAB, however his role in the introduction of Modernism to university campuses in NSW remains unacknowledged.[5] Drawing on Rembert's report, archival research and interviews conducted by the authors with three of the trainee-architects involved at the time, our paper addresses the question "What is Europe?" by examining the concept of Europe and the European through the eyes of an Australian architect charged with the oversight of

5 Ted Heath, "The Work of the New South Wales Government Architect," *The Architectural Review* (December 1967): 472-75; Peter Webber, *E. H. Rembert: The Life and Work of the Sydney Architect*, 1902-1966 (Sydney: University of Sydney, 1982); Webber, "E. H. Rembert."

major state government projects. It explores the influence of his and his trainees' appreciation and understanding of European Modernism on the design of buildings constructed from the mid-1950s at the already-existing University of Sydney and the newly-established University of New South Wales, and proposes that his oversight of, and support for, their innovative designs led to a significant elevation in the standard of architectural design achieved by the NSW GAB by the mid-1960s.

Harry Rembert, Senior Designing Architect

A quiet and retiring person, Edward Henry (Harry) Rembert was articled in 1920 to Thomas J. Darling, a well-regarded Sydney architect, and studied architecture part-time at Sydney Technical College, qualifying in 1924 aged 22.[6] He then worked in the office of Henry White before commencing at the "remarkably entrenched and conservative" GAB in 1926, the year Walter Gropius completed the Bauhaus Buildings and Le Corbusier announced his Modernist design manifesto, "Five Points of a New Architecture."[7] Certainly aware of Frank Lloyd Wright's dictum that "form and function were one," Rembert's stylistic approach was influenced by European Modernism gleaned second-hand, initially the ideas of Gropius then, from 1936, "strongly and obviously" drawn to the design philosophy of Dutch architect, Willem Dudok, who promoted both "strong social feeling" in design and the privileging of public interest over individual design preferences.[8]

6 Webber, "E. H. Rembert," 51.

7 Webber, *E. H. Rembert*, 4, 10; Richard Ingersoll and Spiro Kostof, *World Architecture: A Cross-cultural History* (New York: Oxford University Press, 2013), 800.

8 Ingersoll and Kostof, *World Architecture*, 796; Webber, *E. H. Rembert*, 58.

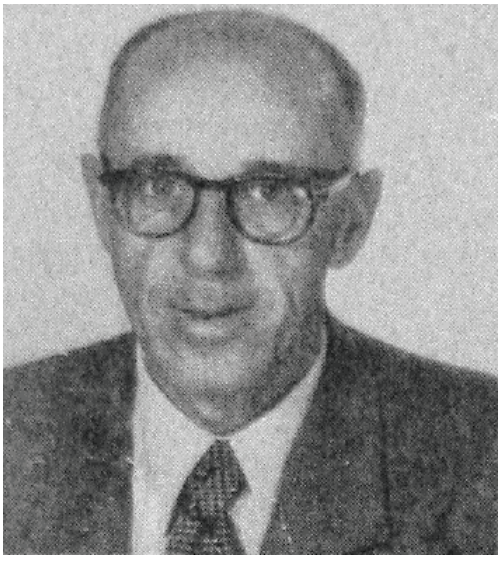

Figure 1. E. H. Rembert, Senior Designing Architect, GAB. (Courtesy of G.P. Webber.)

Rembert appreciated buildings that were "uncompromisingly functional," direct, utilised new techniques and materials and were "well put together," yet were also sensitive to their context, suited to purpose, used natural materials honestly, and drew on a mainly natural colour palette.[9] Notable examples of Rembert's own work include Hunter Technical College, Newcastle (1935-40) and the University of Sydney's Wallace Theatre (1947), in which "greatest attention [was] given to the way in which it fits into the sloping site."[10] Fort Street Public School (1941) on Observatory Hill was also a Rembert composition and has been described as "very much a Functionalist design, very unclassical … with all the bits articulated, given separate expression."[11]

In 1947, Rembert was appointed Senior Designing Architect in the GAB by Cobden Parkes, NSW Government Architect.[12] From this date, his personal design work ceased, replaced with supervision of the design work of the entire office. Fully supported by Parkes, Rembert instituted a number of organisational changes aimed at transforming ingrained practices.[13] He first established the Design Room, a specialised section comprising selected architects, interior architects and engineers to whom he could give "real and substantial opportunities, careful direction, and recognition for achievement."[14] He also hand-picked and mentored a succession of trainee-architecture students chosen for their innate design skills and passion for Modernist architecture.[15] The first four GAB trainees were Peter Webber, Ken Woolley, Peter Hall and Michael Dysart, all soon invited to join the Design Room and subsequently judged to be architecturally "outstanding, and a direct influence on the rise to fame of the GAB."[16] From the time the young trainees were accepted into the specialised section they were entrusted with the creation of major public buildings, with Rembert signing off on every design and therefore "gatekeeper from the design issue."[17]

9 Webber, *E. H. Rembert*, 27; Webber, "E. H. Rembert," 53; Heath, "The Work of the New South Wales Government Architect," 475.

10 Webber, *E. H. Rembert*, 29, 35, 51.

11 Andersons, interview, 2019.

12 Webber, *E. H. Rembert*, 54.

13 Webber, "E. H. Rembert," 54.

14 Webber, "E. H. Rembert," 51.

15 Peter Webber (trainee and architect with the GAB 1949-74), interview with author, December 1, 5, 2018.

16 Jack, "The Work of the N.S.W. Government Architect's Branch," 8.

17 Michael Dysart (trainee and architect with GAB 1954-1969), interview with the authors, April 1, 2019.

Rembert's Report on Architectural Investigations Overseas 1955

In the early 1950s, the GAB program of work included two large higher education projects of a specialised nature, the new School of Chemistry at Sydney University (Sydney) and the School of Applied Sciences at the University of New South Wales (UNSW), with the later addition of Fisher Library at Sydney. By 1955, preparation of working drawings for Sydney's Chemistry School and preliminary sketch plans for the UNSW precinct had revealed the complicated nature of

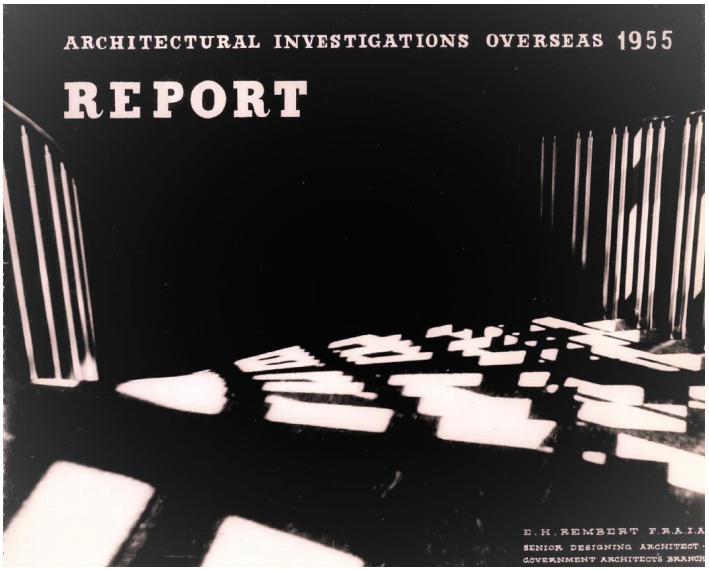

Figure 2. Rembert's 1955 *Report*, cover image: Sunlight on stairs, Organic Chemistry Building, Basel University. (Courtesy of P.W. Webber.)

the projects, which needed up-to-date laboratory facilities, flexible layouts, and variations and alterations to plans during and after construction. These requirements led Harry Rembert to undertake his extensive overseas tour, his first time abroad, visiting more than 50 institutions and more than 90 buildings across the US, UK and Europe to study the technical design of teaching laboratories and more general architectural trends and building methods used in schools, hospitals and public buildings (Table 1).

While travelling though France, Italy, Switzerland, Germany and Holland he was accompanied by Peter Webber, and together they took the opportunity to visit additional buildings selected by Rembert for their "outstanding architectural merit" (Table 2).[18] Although outside the scope of the immediate brief, these buildings were regarded as important exemplars for future GAB projects and enabled both architects to experience at first hand many architectural icons they had previously encountered only in design publications.[19]

18 Rembert, *Report*, 2.

19 Rembert, *Report*.

Table 1. Countries and number of buildings visited by Rembert.

Building types	**Laboratories**	**Schools**	**Hospitals**	**Manufacturers**
USA	5	25	-	2
UK	13	10	4	9
France	1	-	-	-
Italy	3	-	-	-
Switzerland	6	2	1	-
Holland	5	-	-	-
Germany	5	-	-	-
Total visited	**38**	**37**	**5**	**11**

On his return, Rembert reported on the technicalities of laboratory design and architectural innovations in educational and health buildings, remarking that while many university buildings were judged "well-suited to purpose," their architectural expression was uneven and unity sometimes lacking.[20] He reserved his most enthusiastic descriptions and a large number of photographs for the additional buildings he and Webber had visited in Europe, noting their "excellent quality of design," "honesty, simplicity and gracious suitability for purpose," and commending the landscape design, sculpture, glass mosaic murals, sgraffito decoration and other artistic techniques integral to their overall conception.[21]

20 Rembert, *Report*, 3.

21 Rembert, *Report*, 2, 4.

Without exception, the additional buildings were Modernist in style, with the free floor plans made possible by the use of innovative building materials and methods. Characteristics which Rembert remarked upon were: the articulation of building elements; the use of steel, reinforced, or pre-cast off-the-form concrete for structural columns, floor beams and roofs; curtain

Table 2. Major additional buildings and sites visited in Europe (Rembert, *Report*).

	Buildings or sites
France	L'Unite d'Habitation, Marseilles Master Builders' Federation, Paris Salvation Army Hospice, Paris Swiss Pavilion, Paris University Town planning scheme, Abbeville
Italy	Central Railway Station, Rome Power station, Civitavecchia Yacht Club, Ste Margherita Administration building, University of Padua Apartment buildings, Finale Ligure and Rapallo Agip service stations throughout Italy
Switzerland	Congress House, Zurich University Hospital, Zurich Kappeli School, Zurich Federal Institute of Technology, Zurich Science and Administration/Lecture Hall buildings, Basel University Service stations, Basel
Germany	Pharmacy Building, Freiburg University Organic Chemistry Building, Heidelberg University
Holland	Van Nelle Works, Rotterdam Provincial Parliament House, Arnhem

walls or malleable façades of glass and aluminium panels; horizontal windows extending the length of the building; contrasting walls of brick, rugged stone and smooth slabs; cantilevered roofs and balconies; and glazed elevated linking corridors. He also commented on the landscaped terraces; use of timber, stone and other natural materials for interiors; and the integration of artwork and furniture.[22] Rembert judged the buildings he visited to be "superbly conceived and executed," and "first-rate examples of modern architecture" that demonstrated general high standards of design, with European cultural, architectural and artistic traditions "reflected in the inherent good taste exhibited in the best of the modern works."[23] In this context, Rembert's definition of good taste meant "free from mannerisms or superficial fashions of the moment," encompassing simplicity, a structural approach, appropriate materials and colour, and "very apt suitability for purpose."[24]

22 Rembert, *Report*, 4.

23 Rembert, *Report*, 3.

24 Rembert, *Report.*

Although Rembert appreciated the architecture of each of these additional buildings, his highest accolades were reserved for those encountered in Italy and Switzerland. He observed that:

> *the architecture of modern Italy is vital and compelling … the sureness, versatility and imagination displayed by the modern architecture of this country was most stimulating … exhibiting an individual quality suitable to their particular requirements … unanimous in their honesty, simplicity and gracious suitability for purpose*

This he attributed to the "superb structural approach… choice of suitable materials … unerring use of colour … the impact of contrast [between the ancient structures and the new] and introduction of suitable works of art and furnishings."[25] Rembert particularly admired Rome Central Railway Station, which he described as a "superbly designed building" surpassed only by its curved and cantilevered roof.[26]

25 Rembert, *Report*, 4.

26 Rembert, *Report.*

Where the Italian designs were described in terms of excitement, Rembert remarked on the restraint, beauty, sophistication and elegance of buildings in Switzerland. He commended "the universal regard for the human scale and the supreme regard for nature displayed everywhere, in the combination of landscaping, planting and sculpture in their everyday building."[27] Rembert singled out the Administration and Lecture Hall Block at Basel University and the Congress Hall and University Hospital in Zurich, recognising them as buildings that could have been monumental but were instead designed as "friendly [and] informal … incorporating intimate scale."[28] He attributed this to the "intimate relationships achieved between buildings,"

27 Rembert, *Report.*

28 Rembert, *Report,* 5.

inclusion of walkways and under-crofts, the "blending of architecture, sculpture, painted and glass-mosaic murals, and above all, the splendid indoor and outdoor planting."[29]

29 Rembert, *Report*.

Acknowledging the huge government building program underway in post-war Australia, Rembert expressed concern that the style of architecture that might prevail would fail to match the "measured, firm" Swiss work or the "virile and living architecture" of Italy. He recommended that Australian architects take every opportunity to learn from the construction methods and designs put into practice in Europe since 1926 and emphasised that architects in Australia were similarly capable of "display[ing] equal enthusiasm, energy and originality … suitable to the needs and expression of our era."[30] To achieve comparable buildings, he advocated the use of structural steel framing for design freedom and a rejection of historical design references. Instead he felt the architect should be aiming for the "complete simplicity … structural honesty … beauty … [and] fitness for purpose" that characterised the best European Modernist architecture, while ensuring the design was suited to the Australian context.[31]

30 Rembert, *Report*, 7-8.

31 Rembert, *Report*, 7.

Attainment of his goal commenced with the two university campus projects already being prepared. Although it could be argued that Rembert contributed little to the overall conceptions, contemporary documents and interviews with former trainees reveal that his discreet and perceptive design guidance and European sensibility when the plans were on the drawing board, together with his determined advocacy for their construction as conceived, was essential to their quality and eventual accomplishment as planned.[32]

32 Peter Webber, interview with authors, April 12, 2017; Andersons, interview, 2019; Cobden Parkes to Prof. J. P. Baxter, NSW University of Technology, Kensington. correspondence, January 10, 1956, Siting of Main Hall and Science Group of Buildings at Kensington, 1949-1956 Papers re. Building and Equipment Minutes, UNSW Archives: S1894/C1865.

School of Chemistry, University of Sydney 1954-58

The first Modernist university building to be completed under Rembert's supervision was the School of Chemistry at the University of Sydney. Designed in 1954 by newly-qualified architect Peter Webber, with the assistance of Ken Woolley, a final-year trainee, it was planned before they or Rembert had travelled to Europe and so was primarily informed by the images available in Sydney.[33] The building is regarded by Andrew Andersons, former GAB trainee and later Assistant NSW Government Architect, as "very sophisticated … unadulterated Modernist," being completely free of historicist elements and with the various spaces being given separate expression according to their functional relationships.[34] It is strongly reminiscent of Gropius' Bauhaus with elements recalling Le

33 Webber, interview, 2018; Peter Webber, email to author April 1, 9, 2019; David Saunders and Catherine Burke, *Ancher, Mortlock, Murray, Woolley; Sydney Architects 1946-1976* (Sydney: Power Institute of Fine Arts, Sydney University, 1976), 38.

34 Andersons, interview.

Figure 3. School of Chemistry, University of Sydney, 1959. (Courtesy of University of Sydney Archives, G3_224_2120.)

Corbusier's Swiss Pavilion in Paris, although some analyses discern similarities to the work of German architect, Mies van der Rohe, and Finnish-American designer, Eero Saarinen.[35]

Reflecting the Bauhaus paradigm, the School is an arrangement of six blocks, varying in size and external finish, juxtaposed one against another to create a unified multi-faceted composition that surrounds an irregularly-shaped courtyard open to the south-west spanned by an elevated glass-walled walkway.[36] A cantilevered concrete awning is angled and curved over the otherwise unobtrusive front entrance, emulating entrances to public buildings included in Rembert's report.[37] Each of the blocks has a structural steel skeleton, with pre-cast concrete floor beams and slab floor units, and is enclosed with concrete panels, enamelled metal spandrels, and the first glass curtain-walling to be installed in Sydney.[38] The materials and colours are characteristic of the post-war period and include exposed aggregate panels in white and brown, vertical inserts of open blockwork, with the spandrels, chequered paving and curtain-walls in the contrasting colours favoured at the time.

Design of the appended lecture theatre block commenced in 1956, after Webber had returned from touring Scandinavia with Woolley.[39] Michael Dysart observed that, by this time, the young Design Room architects were leaning increasingly towards Rembert's preferred "soft Modernism than the hard-nosed Bauhaus stuff" and the foyer particularly has been described as imparting a "strong Scandinavian feeling."[40] Like Alvar Aalto's Senior Dormitory at MIT and the main entrance to his Viipuri

35 S. Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, (Cambridge, MA: Harvard University Press, 1949), 424-28.

36 Giedion, *Space, Time, and Architecture*, 428.

37 Rembert, *Report,* 9-10; Giedion, *Space, Time and Architecture*, 428.

38 Giedion, *Space, Time and Architecture*, 429; Jack, "The Work of the N.S.W. Government Architect's Branch", 13.

39 Peter Webber, email, April 9, 2019.

40 Michael Dysart (architect with GAB), interview with the authors, April 1, 2019; Jack, "The Work of the N.S.W. Government Architect's Branch", 13.

Library, it is walled entirely in glass, allowing the observer to see through the building to the outside view, and includes Aalto-inspired columns clad in light-coloured timber strips and rear supports for the internal stairs giving the impression the stair-treads float in space.[41] The butterfly-shaped roofline corresponds to the raked interiors of the four paired, opposed and stacked lecture theatres in a "very sculptural" manner.[42]

The exterior of the theatre block, however, has more in common with the buildings Rembert admired in Switzerland and Germany, employing aluminium-framed glass curtain-walls and faceted, precast-concrete panel wall-cladding, and evoking comparable understated refinement. The courtyard includes integrated planting and landscaping, a round stone water-feature similar in shape and location to one photographed in the Technical College in Berne, and service ducts in the under-croft faced with glass mosaic murals. Manufactured in Italy, the mural designs derive from photomicrographic images of chemical crystals provided by the chemistry staff, redrawn by Webber and Woolley under the guidance of Lloyd Rees, their university drawing tutor, thereby recontextualising Le Corbusier's photomicrographic murals for the Swiss Pavilion in Paris and mosaic murals seen in the stairwell of the Organic Chemistry building at Basel University, both buildings seen by Rembert while in Europe and commended in his report.[43] As with Gropius' Bauhaus, all elements of the Sydney University building appear to float above the ground. This effect was achieved by particular treatment of the lower-ground level exterior—setting the walls back behind the façade, using contrasting materials, and integrating open or glass-walled under-crofts in the Le Corbusian manner. As with the Bauhaus, the effect is further reinforced by alternating horizontal bands of

41 Giedion, *Space, Time and Architecture*, 480-81.

42 Giedion, *Space, Time and Architecture*, 466; Andersons, interview, 2019.

43 Webber, interview, 2018; Rembert, *Report*, facing pages 34, 35, 68.

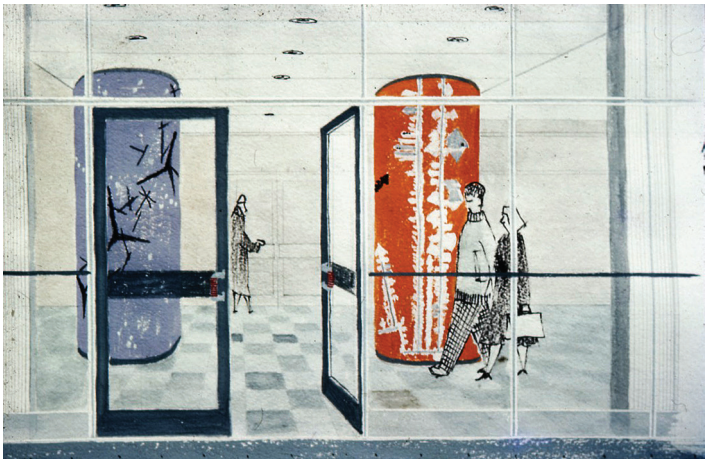

Figure 4. Webber's sketch for the planned mosaic murals, University of Sydney, c. 1960. (Courtesy of G.P. Webber.)

windows and coloured spandrels along the façade and inserting the elevated glass-walled walkway at artificial ground level.[44]

Of all the GAB-designed post-war campus buildings, the School of Chemistry followed the European Modernist style to the strongest degree, with little attention paid to local aesthetic tradition and few design modifications to suit the specific context.[45] The main concessions were to respect the parapet heights of adjacent sandstone buildings, specify tinted glass for the east-facing curtain-wall, and ensure the west-facing walls were either blank concrete end-panels, as in the Swiss Pavilion, or relieved only by narrow, deeply-recessed horizontal strip-windows. Banks of aluminium louvres, since judged acceptable to the style, were installed later to shade the east-facing windows running the length of one block. However, the glass curtain-wall was found to be "thermally disastrous" and its use was discouraged in GAB projects from the early 1960s.[46]

Applied Science group at UNSW

Planning for the Applied Sciences precinct at UNSW commenced after Rembert had returned from overseas and while the School of Chemistry was under construction. Although both projects expressed a Modernist design philosophy, where the School of Chemistry primarily referenced Gropius' Bauhaus and spread over the ground, the UNSW Applied Sciences group more closely accorded with the Swiss institutions admired by Rembert for their elegance and restraint.[47] The overall plan was limited by the site and its realisation has been described as slightly more sophisticated than the earlier Sydney University building.[48]

The precinct comprised five fully articulated blocks positioned around a large centrally placed theatre-block, thus forming a series of small courts. In response to pressure to substitute a single central courtyard, Rembert argued strongly that the lesser spaces were necessary to achieve the intimate relationships between building units and the "sense of scale and seclusion" he had seen in many of the universities inspected on his European tour.[49] He explained that, as with the universities of Basel and Zurich, the design acknowledged the confined site, considered the character and planting of the spaces created, and reduced the scale to that of the "ordinary human being."[50] This was achieved by introducing low-height covered ways, elevated glass-walled linking corridors, under-crofts contiguous with open courts, sculpture, planting, and "delightful small areas" for students.[51]

44 Giedion, *Space, Time and Architecture*, 428.

45 Andersons, interview, 2019; Saunders and Burke, *Ancher, Mortlock, Murray, Woolley*, 38.

46 Andersons, interview, 2019; Heath, "The Work of the New South Wales Government Architect," 474

47 Giedion, *Space, Time and Architecture*, 428; Rembert, *Report*, 11.

48 Parkes to Prof. J. P. Baxter, January 10, 1956; Andersons, interview, 2019.

49 Parkes to Prof. J. P. Baxter, January 10, 1956.

50 Parkes to Prof. J. P. Baxter, January 10, 1956.

51 Webber, interview, April 12, 2017; Parkes to Prof. J. P. Baxter, January 10, 1956.

Figure 5. Applied Sciences group, UNSW, c. 1965. (Courtesy of University of NSW Archives CN945/16.)

The work of Webber, Woolley, Hall and a private architect, each of the four completed buildings is rectangular in plan and the innovative materials and construction methods reflected those Rembert had commended to Australian architects.[52] They have either a structural steel frame or structural columns of reinforced concrete or the more innovative precast vibrated concrete, with cellular post-tensioned beams, concrete in-fill panels, precast trough floor beams and folded plate form roofing panels. The side walls are of aluminium and glass curtain-wall construction, with end walls faced with pre-cast exposed aggregate reinforced concrete panels.[53] Webber's lecture theatre interior recalls that of the School of Chemistry at Sydney, having vertical coachwood panelling, timber parquetry and cork tile or timber floors; and a "floating" staircase with steel structural supports.[54] As with the earlier building, the UNSW designs made few concession to the local climate, with external vertical louvres included only on the western façade of the metallurgy processing wing, and the smaller courtyards included to deflect prevailing winds.[55]

52 Rembert, *Report*, 7.

53 J. S. Fraser, "The University of New South Wales: Its History and Progress," unpublished report, UNSW Library, Kensington, 36; "The New Department of Metallurgy Building – University of N.S.W," *Constructional Review*, March 1961, 21- 24, 22; "£5m University expansion program is taking shape," Sydney Morning Herald, August 23, 1960, 15.

54 "£5m University expansion".

55 "£5m University expansion"; Parkes to Prof. J. P. Baxter, January 10, 1956.

The most striking feature of the UNSW group is the Le Corbusier-style open under-croft beneath the most prominent building, the columns and walls of which are entirely covered with glass mosaic tiles, reproducing in the Australian context the open colonnade of the University of Basel's Administration Building lauded by Rembert in his report.[56] At the request of Woolley and Webber, Rembert approached Cobden Parkes to persuade the Vice-Chancellor to commission the artist, Douglas Annand, to design and make large glass mosaic murals for the building under-croft and smaller works positioned at intervals

56 Fraser, "The University of NSW," 36.

in the tiled interior stairwell.[57] As with the earlier mosaics at Sydney, photomicrographs of scientific subjects were used for design inspiration.[58]

57 Webber, interview, 2018; Rembert, *Report*, facing page 35.

58 Webber, interview, 2018.

Fisher Library, University of Sydney

Planning for the Fisher Library commenced on Woolley's return from touring in the US and Europe, where he saw Aalto's and Mies van der Rohe's work first-hand.[59] It also came hard on the heels of Jorn Utzon's success in the Sydney Opera House design competition.[60] Influenced and directed by Rembert, the young Design Room architects were increasingly tending towards his long-held philosophy that successful buildings needed to be of service to their community and sympathetic to their contexts. Consequently, as with the Chemistry School lecture theatre, their projects could no longer be classed as "outright modernist."[61] As Dysart explained, although slightly "taken aback," they were generally "very interested" in the Scandinavian Modernism that was now circulating.[62]

59 Saunders and Burke, *Ancher, Mortlock, Murray, Woolley*, 39; Webber, interview, 2017.

60 Dysart, interview, 2019.

61 Dysart, interview, 2019; Webber, interview, 2018.

62 Dysart, interview, 2019.

Fisher Library is a fusion of the more intuitive compositions of Scandinavian architects such as Gunnar Asplund and Aalto with Bauhaus Modernism and elements of Mies' work.[63] Conceived by Woolley in collaboration with Tom O'Mahoney, the original design was extensively revised and is now attributed primarily to Woolley.[64] The building comprises three articulated blocks—a five-storey reading-room wing with an accessible roof-terrace, a massive bookstack, and a recessed entrance-link that serves and separates the two functional blocks.[65] As with the earlier

63 Andersons, interview, 2019; Dysart, interview, 2019; Webber, interview, 2018.

64 Saunders and Burke, *Ancher, Mortlock, Murray, Woolley*, 39.

65 "Sulman Award 1962, Fisher Library Sydney University," *Architecture in Australia* (December 1963): 70-75, 72.

Figure 7. Fisher Library, University of Sydney, 1972. (Courtesy of University of Sydney Archives, G74_4_11_012.)

projects, the building has a structural steel column grid and reinforced concrete flat plate floors, with glass curtain-walls in the timber-lined entrance link and bronze-clad reinforced concrete walls in the bookstack. Contrasting with these clean lines, the reading-room wing has bronze-faced columns and slabs that project outwards, being clearly expressed on all faces in the manner of Mies' Farnsworth House.[66]

Spandrels of light-coloured sawn sandstone run the length of the reading-room's north and west elevations, forming horizontal ribbons that repeat those of the School of Chemistry opposite, while the striated bronze cladding of the bookstack is Woolley's response to Aalto's many copper and bronze-clad buildings in Finland.[67] These elements are reminiscent respectively of the black and white horizontality of the Bauhaus and the traditional European court-and-tower model used in Aalto's Seinajoki Town Hall complex.[68] Increasingly attracted to natural materials and to designing buildings that related strongly to their context, the use of sandstone was Woolley's gesture to the traditional sandstone of the surrounding campus while the bronze cladding of the stack block would weather naturally and so allow the "large lump" to sit back discreetly and fit in the best way possible.[69]

Designing for context dictated more than the construction materials employed. As with Rembert's Wallace Theatre and the School of Chemistry, the library building was cut into the sloping ground, respecting the three-storey parapet heights of the buildings on the ridge behind. The reading-room addressed the realities of the Australian sun from its inception, with wide hoods fashioned from the extended floor-plates protecting the large windows beneath from direct sunlight and sky glare, while the reinforced-concrete mass and narrow vertical windows of the book-stack ensured the interior remained cool.[70]

66 "Sulman Award 1962," 72; J.W. Thomson (architect with the GAB) quoted in Jack, "The Work of the N.S.W. Government Architect's Branch," 16.

67 Webber, interview, 2017; Andersons, interview, 2019.

68 "Sulman Award 1962," 70-75, 72.

69 Webber, interview, 2018; Andersons, interview, 2019; Webber, interview, 2017.

70 "Sulman Award 1962," 72.

Conclusion

So, what was Europe to Harry Rembert? To Rembert, Europe was not simply a collection of innovative and exciting buildings to be reproduced unthinkingly in Australia. Instead he saw the European examples as representing a standard of Modernist design that could be achieved when the latent design abilities of Australian architects were stimulated and their architectural skills harnessed and, together, applied to the development tasks which they faced.[71] As Senior Designing Architect for the GAB, supported by the Government Architect and a specialist Design Room staffed with young innovative architects, Rembert had already secured the administrative structure and design talent to

71 Rembert, *Report*, 7.

bring about a comparable "living and vital" architecture tailored to the Australian context.[72] Consequently, the recommendations that emerged from his investigations overseas were put into practice on a scale that was unimaginable only a few years earlier.

72 Rembert, *Report*, 8.

The first indication of the new architectural philosophy at the GAB came with Rembert's mentoring of the ground-breaking design for the new School of Chemistry at Sydney. This was followed almost immediately by the application of comparable design ideas to the UNSW Applied Sciences precinct, championed by Rembert despite opposition from the UNSW architecture faculty and the designing architects. In each case, the architecture was equally modern and employed comparable innovations in construction methods and materials but at UNSW greater weight was given to Swiss design philosophy. The Fisher Library at Sydney University broke new ground again. Over time and after encountering Scandinavian design both overseas and in Australia, the thinking of the trainee architects evolved from their initial position of unalloyed Modernism and more closely echoed Rembert's design philosophy. They became increasingly concerned with their buildings both fitting into and relating to their social and environmental contexts. The Library therefore remained fully functional in the Modernist manner but reflected the influence of Aalto's and other Scandinavian architects' design ideas to a much greater degree.

Fulfilling Rembert's long-held ambition to raise the design quality of the GAB, Woolley's and O'Mahoney's design for the Fisher Library was awarded the Sulman Prize in 1962, the first of many design accolades for the office over the next 30 years.[73] Rembert continued to be a major influence on the high architectural quality of the GAB even after his retirement in 1964, when the position of Senior Designing Architect passed to Peter Webber, his first trainee and a future NSW Government Architect.

73 The Sulman Medal was awarded in twenty of the thirty years between 1962-92 with the NSW GAB the recipient on eleven occasions, the earliest being for the Fisher Library, University of Sydney (1962, Woolley and O'Mahoney) followed by Goldstein Hall, University of NSW (1964, Peter Hall). The GAB was last awarded the Sulman Medal for the NSW Art Gallery Bicentennial extensions (1989, Andrew Andersons).

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