THE MODERN MOVEMENT IN NEW SOUTH WALES
A THEMATIC STUDY AND SURVEY OF PLACES

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Prepared by
HeriCon Consulting in association with
Colleen Morris and Peter Spearritt

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Part 4
Ruth Everuss Aquatic Centre in Lidcombe, 1959 – main entrance, shade structures and diving tower (Roy Lumby photographs).

The Canberra Olympic Pool in Allara Street, City, designed by the Canberra Branch of the Commonwealth’s Department of Works, won the Sulman Medal for 1955. Like the aquatic centre at Auburn, Canberra Pool featured a striking entry pavilion and dynamic diving tower (entry pavilion – NAA Image no. J2669, 504; diving tower – NAA, Image no. A1200, L19990).

**Government Impetus**

The State and Federal governments were responsible for massive works programs for major public institutions and services. The NSW Department of Public Works’ Government Architect’s Branch was one of Australia’s most influential and important architectural offices during the 1950s and 1960s. It attracted more than its share of talent.

In the 1930s the work of one Government Architect’s Branch architect, Harry Rembert, leaned towards the Modern Movement. It shared affinities with the work of Willem Dudok. Rembert’s outstanding pre-war work includes the School of Automotive Engineering at Ultimo, Newcastle Technical College and Fort Street Primary School, Observatory Hill.

He was appointed senior design architect 1947. In the early 1950s four young students destined to become major architects and teachers joined the Government Architect’s Branch – Peter Webber, Ken Woolley, Peter Hall and Michael Dysart. They were followed by many other outstanding designers.
From the mid 1950s onwards the various sections of the Government Architect’s Branch produced a vast body of work across the state, which included office buildings, police stations, court houses and hospitals. These buildings were one important way in which Modern Movement architecture was introduced to country centres.

Pre-war Government Architect’s Branch buildings showing the influence of Willem Dudok as interpreted by Harry Rembert – the Newcastle technical College in Maitland Road, Tighe’s Hill, 1938 (left) and the School of Automotive Engineering in Thomas Street, Ultimo, 1938 (Roy Lumby photographs).

Examples of building types designed in the Government Architect’s Branch include the circa 1965 State Office Block in Dean Street, Albury. David Turner was project architect (left) and the 1963 additions to the Registrar General’s Office, Queen’s Square, Sydney. Peter Hall was project architect (Roy Lumby photographs).

Civic buildings designed by the Government Architect’s Branch include the mid 1970s Grafton Police Station (left). The project architect was Colin Still. The mid-1960s Blacktown Court House and Police Station was designed by project architect P Proudfoot (SLNSW GPO – 2 47536 and 29700).
The Government Architect’s Branch played a crucial role in the design of schools and tertiary institutions. Many new schools were constructed to keep up with the Baby Boom – during the 1950s over 40 high schools were completed across NSW. The Wyndham Scheme consolidated the trend to comprehensive, co-educational high schools from 1962, and in 1965 full secondary education was extended from five to six years.

To beat shortages of materials in the immediate post-war era traditional bricks and tiles gave way to aluminium, concrete and timber. Some even had curtain walls, such as Beverley Hills High School (project architect J Van Der Steen, 1957). In 1958 Michael Dysart developed a new concept for country schools: buildings consisting of a single ring of classrooms around a central court, wide eaves overhangs, external access within the court, cross ventilation and lighting from two sides of classrooms. A version was constructed at Belmont Primary School (1964). It was christened the “doughnut plan” and developed into a standard typology.62

A couple of examples show the high standard achieved. Broken Hill Primary School (project architects David Turner and design architect Don Coleman) paid great attention to the local climate. The kindergarten and primary blocks were arranged around courtyards containing play spaces and assembly areas. To combat heat external windows were placed at high level and protected by deep eaves. Those facing courts were fully glazed and shaded by covered walkways. A double roof system was ventilated with louvres. Malvina Street High School in Ryde (project architect Michael Dysart), was exemplary because of its Sydney School influence and siting. It was an informal version of the “doughnut plan”, a picturesque exercise in pitched roofs and natural materials. Split levels, and interlocking courts were an innovative way to cope with a small steeply sloping site.

There was also excellent private school architecture, such as the first stage of the Kings School at North Parramatta by Stephenson & Turner (1961). Buildings were arranged in precincts around courts. Extensive stands of Ironbark trees dictated site planning, based on a square module unifying the scattered building groups. Construction was contemporary – steel framing, precast concrete walls, generous aluminium windows and roof decking – a provided clean, unpretentious modern buildings.63 The St Andrews Presbyterian Preparatory College at Leppington and the CB Alexander Presbyterian Agricultural College at Paterson by Philip Cox and Ian McKay are two of the most celebrated interpretations of the Sydney School aesthetic. Their architecture is enhanced by impressive timber roof structures and, while of its time, also looks to rural building traditions. Both received Sulman medals.
Tertiary education expanded mightily after World War II. It started when the 1944 Commonwealth Reconstruction Training Scheme, provided financial assistance to returned servicemen and servicewomen for training at universities and technical colleges. Huge enrolments in the immediate post-war era meant there was a struggle to accommodate new students. There was much discussion between the universities and Commonwealth over funding until the Murray Committee, headed by the UK’s Chairman of the University Grants Committee, Sir Keith Murray, released its report in 1957. It concluded the Commonwealth must accept more responsibility for universities and the Australian Universities Commission was established in 1958, which allocated funding to the states.

The Government Architect’s Branch designed Colleges of Advanced Education and university buildings. Many were outstanding buildings that were serviceable and cost effective - the Department of Technical Education, for instance, insisted that materials should be as maintenance-free as possible. During the 1960s this led to a combination of off-form concrete, dark bricks and stained timber.

Colleges of Advanced Education were built in many centres in the 1960s and 1970s - Callaghan in Newcastle (now part of Newcastle University), Alexander Mackie at Oatley (now George’s River College), Mitchell at Bathurst, Wollongong and Goulburn are fine examples. William Balmain College of Advanced Education at Lindfield (now UTS Ku-ring-gai; architect David Turner) is the most justly celebrated. Built in several stages from 1973 to 1985, its importance lies in the convincing way it translated Sydney School principles into a large concrete building, treating materials expressively but directly and carefully integrating massive structures into a splendid bush-covered site. Consultation with landscape designers Allan Correy and Bruce Mackenzie minimised disturbance of bush. It was awarded the 1978 Sulman medal.
Teacher’s Colleges that became Colleges of Advanced Education – the campus at Callaghan in Newcastle, J McKinney project architect, 1970 (left) and Goulburn, J Kinstler project architect, circa 1970. It is now part of Charles Sturt University and serves as its NSW Police Academy. (Callaghan - Roy Lumby photograph; Goulburn - SLNSW GPO – Z 47097).

The former William Balmain Teacher’s College, now UTS Ku-ring-gai, Eaton Road, Lindfield: details of exterior (left) and a section of the internal circulation spine that organises this massive complex. (Roy Lumby photographs).

Sydney University expanded as enrolments soared. Its first major project was the Chemistry Building (project architects Peter Webber and Ken Woolley). Here was a radical contrast to traditional neighbours – innovative structural systems, sheer curtain walls, exposed aggregate cladding and functional Modern Movement geometry erupted onto the campus. Nearby, the Fisher Library (project architects Ken Woolley and T E O’Mahony) was a building of equally high architectural quality, awarded a Sulman in 1962. The University consolidated, engulfing Darlington and transforming a part with the robust, sculptural forms and massive scale of Ancher, Mortlock, Murray & Woolley’s Brutalist designs in the Faculty of Engineering.
The University of NSW, Sydney’s second, was established in 1949 and the first building at Kensington was completed in 1955. Many early buildings were restrained and functional but some were outstanding. The circular Roundhouse (Government Architect’s Branch, documented by Edwards Madigan & Torzillo) exploited daring structure - cantilevered trusses supporting a shallow dome - for a memorable result. It was an iconic image of the University, striking whether seen from busy Anzac Parade or from the air at night. The dining pavilion of Sulman-winning Goldstein Hall residential college (Government Architect’s Branch, project architect Peter Hall) was another exemplary building. It demonstrates how the Sydney School interpreted Brutalism, with expressive use of materials and impressive communal spaces.

Sydney’s third university, Macquarie, established its own architect-planner’s office in 1964 led by town planner Walter Abraham, whose masterplan was accompanied by strict controls establishing a harmonious palette of brick and concrete. The resulting buildings, “bold forms in rugged board-marked concrete,” exemplify later 1960s university architecture - “strong forms and tough finishes seem to express youth, strength, non-conformity and an impatience with formality ...”
Buildings were designed by independent architects and the Government Architect’s Branch. The Library (Government Architect’s Branch; project architect Peter Hall), Student Union (Ancher Mortlock Murray & Woolley) and Council Building (Edwards Madigan Torzillo & Briggs) are fine examples of Brutalism, arranged around a quadrangle at the heart of the campus.

Outstanding Modern Movement buildings at the University of NSW include the Government Architect’s Branch’s 1961 Roundhouse and the 1964 dining hall of the Goldstein Hall residential college. Bert Flugelman’s witty and innovative statuary embellishes the courtyard. (Roundhouse – SLNSW, Don McPhedran photograph, Australian Photographic Agency – 10929; Goldstein Hall – photograph courtesy Tanner Kibble Denton Architects).

Early buildings at Macquarie University included Ancher Mortlock & Woolley’s first stage section of the Student Union, 1967 (left) and Stafford Moor & Farrington’s Teaching Block, 1967 (Roy Lumby photographs).

The Council Building at Macquarie University was designed by Edwards Madigan Torzillo & Briggs and completed in 1972 (left). Its northern colonnade encloses part of the central quadrangle, as does the Government Architect’s Branch’s Library, built in several stages between 1967 and 1971. Peter Hall was the original design architect (Roy Lumby photographs).
Away from Sydney, the University of New England at Armidale became an autonomous institution in 1954. The Government Architect’s Branch was involved with masterplanning the campus and designed several of the University’s buildings, which form a handsome and consistent group. Amongst these were colleges, the most celebrated of which is Michael Dysart’s Robb College, a series of square donut-planned buildings around a courtyard that was designed to cope with the harsh New England climate. The Universities at Newcastle and Wollongong both have a fine collection of Modern Movement buildings in beautifully landscaped settings. The Government Architect’s Branch had little involvement here. The early part of the Newcastle campus contains a nucleus of very accomplished Sydney School buildings by Frederick Romberg and Ancher Mortlock Murray & Woolley, while the Wollongong campus is a harmonious collection of crisp International style and Brutalist buildings, construction of which began in the early 1960s. Many were designed by local architects such as Palmer & Wilson and Graham, Bell & Bowman.

Government Architect’s Branch architecture at the University of New England included the Sports Centre, project architect J Paynter, designed in 1963, and Robb College, project architect Michael Dysart, designed in 1959 (SLV, Peter Wille photographs, image accession numbers a22660 and a22608).

Sydney School derived architecture at the University of Newcastle – Frederick Romberg & Boyd’s 1970 School of Architecture (left) and Ancher Mortlock Murray & Woolley’s 1969 Student Union (Roy Lumby photographs).
The Government Architect’s Branch Special Projects involved buildings beyond the range of its various sections. Perhaps the most endearing was at Taronga Zoo. After a master plan was prepared new buildings, structures and landscaping were undertaken, mostly completed by 1972. The works were largely directed by project architect D M Coleman with Alan Correy and assistants looking after landscaping. Australian animals were now not just entertaining but an educational resource and needed to be easily observed in their “natural” environment. A marvellous collection of low-key, appropriately Sydney School buildings, responded to creatures and visitors alike.

At the Zoo: the Platypus House (left) contained a large eye-level tank surrounded by passages with controlled lighting so visitors could look without being seen. The walk-through aviary was the most exciting structure, designed in consultation with structural engineers Taylor, Thompson & Whitting. It consisted of fine cables suspended between two enormous steel parabolas enclosing rock shelves and vegetation to provide a vast safe space for birds to fly (SLNSW – Government Printing Office 2 – 39056 and Government Printing Office 3 – 35125).

Unlike platypuses, daylight was no problem for koalas, but a spiralling timber ramp allowed visitors to see them at eye level, while contented koalas were sheltered from cold winds. (SLNSW – Government Printing Office 2 – 50784; Roy Lumby photograph).
The most significant Modern Movement initiative undertaken by the State government but one that did not involve the Government Architect’s Branch was the Sydney Opera House. Conceived by Danish architect Joern Utzon, and designed in collaboration with a team that included famed structural engineer Ove Arup, it reflects the interest that several Modern Movement architects had in expressive freely flowing shell-type structures and is world-famous because of its memorable shapes and essential relationship with its site. Its design pioneered the use of computers in architecture.

The Sydney Opera House under construction, circa 1970. Contemporary office buildings at Circular Quay East provide a contextual contrast. The clarity of the structure is evident prior to infilling with glass walls (Roy Lumby photographs).

The Federal government may have produced many buildings, but few seem to be memorable, except perhaps for the numerous post offices built across the state. These were essentially large open spaces with work areas behind them. They were generally one or two storeys and small in scale. A Modern Movement-inspired plan and aesthetic made them easy to use, contemporary in appearance and economic to build. As the 1960s progressed they moved towards Brutalism.

The low-key but satisfying Modern Movement derived idiom that was used for post offices across NSW during the 1960s – Pacific Highway, Crows Nest (left) and Caringbah. Both were completed in 1962 (Crows Nest – Roy Lumby photograph; Caringbah - NAA Series Number CA4078, Control Symbol N19023).
Spiritual

There were many churches built after the war, reflecting a resurgence of religious observance and growing population. For instance, by the end of 1954 the Roman Catholic Church had started work on 14 new churches in metropolitan Sydney, along with 25 new schools and other buildings.\(^66\)

Churches were amongst the more inventive post-war buildings, delighting in Modern Movement structural and spatial concepts. Architects managed to combine low cost with spiritual uplift while designing innovative and adventurous buildings. There may have been American influence. A 1955 David Jones’ exhibition displayed American churches that were “imaginative departures from traditional forms,”\(^67\) while in 1958 *Architecture in Australia* published an American article equating new church architecture with “the tent of God … arenas for dramatic encounter with the deity and serene resting places for a church on the march.” Some examples follow.

Kevin Curtin was a prolific church architect, responsible for over 50 new Catholic churches and chapels, and over 200 schools.\(^68\) His St Bernard’s Catholic Church in Ramsgate Street, Botany, exemplifies the new approach. Its distinctive structure, a series of parabolic concrete ribs with concrete beams running between them, is clearly expressed and generates the space within and the congregation was pleased with the result.\(^69\)

St Bernard’s recalls the breathtakingly thin shell structures of Mexican architect Félix Candela. On the other hand, Curtin’s Church of the Blessed Assumption of the Blessed Virgin Mary at Homebush (circa 1955) was more restrained, but then it needed to be a multi-purpose hall accommodating prayer, teaching and dancing. This reflects the changing social role of the church. Gibbons & Gibbons’ compelling St Kevin’s Roman Catholic Church in Oaks Avenue, Dee Why, is a shell structure fabricated out of very thin precast concrete panels assembled and tensioned on tubular steel pipes. The structural system was designed by Concrete Industries.

The interior of the church is equally dramatic, reflecting the complex curves of the roof. It too is reminiscent of Candela’s work. The church originally contained Stations of the Cross and a mural above the altar by artist James Coburn (since removed).

St Bernard’s Roman Catholic Church at Botany. The exterior of the building has been covered with tiles, presumably to combat water penetration. The building is otherwise remarkably original and in good condition (Roy Lumby, photographs).
A number of churches consisted of less complex “A-frame” structures that were economical to construct but achieved an aspiring quality through tall angular volumes and natural light. St Dunstan’s in Lovell Road, Denistone East, is a satisfyingly minimal example of these honestly expressed structures (yet another Modern Movement fundamental). The roof of this multi-purpose hall is supported off deep open web steel trusses extending from the ground to the ridge. The roof is cut back along two sides, allowing daylight to enter.

Liturgical change significantly influenced architecture. The Catholic Church undertook comprehensive reforms after the Second Vatican Council (1962-65). It endeavoured to seek common ground with Protestantism, which was also undergoing reform. The impact of changing liturgies is strikingly illustrated by a series of Presbyterian churches by Stan Smith of McConnel, Smith & Johnson, assisted by structural engineers Woolacott, Hale Bond & Corlett for some if not all.
Smith had worked in Melbourne before coming to Sydney and may have been familiar with influential architect Roy Grounds’ experiments with geometry there. The first church at Croydon Park was traditional but the second, on Lane Cove Road at North Ryde was square in plan to focus the relationship between congregation and Eucharist.

The roof’s ridge was inclined along the diagonal of the square - the congregation entered at the high end of the building and the falling ceiling planes, following the rake of the roof, concentrated attention on the altar at the low end. The next churches evolved to place the congregation around the communion table. Their plans were square (Thirroul, Dee Why, and Liverpool), circular (Terrigal, Toongabbie and Bankstown) and Maltese cross shaped - a cross within a square (New Lambton and Liverpool). Materials - brick and timber with metal roofs - reflected tight budgets.

Three of Stan Smith’s Presbyterian churches: the square-planned St David’s Uniting Church Centre in St David Avenue, Dee Why, 1963 (left), the Maltese cross-planned St James Uniting Church in St James Road, New Lambton, 1966 (centre) and the circular-planned Uniting Church in Kitchener Parade, Bankstown, 1966 (Roy Lumby photographs).

Perhaps the finest response to new liturgies was Don Gazzard’s Anglican Wentworth Memorial Church in Fitzwilliam Street, Vaucluse. It is an epitome of the Sydney School - painted load bearing brickwork, steel roof trusses and timber framed windows and doors - responding dramatically to its site. It is located on a rock outcrop that you results in a convoluted journey to the building, which disappears and reappears from different angles until the forecourt is reached. The journey continues on entering, as the low pitched ceiling of the nave leads to the sanctuary, where walls disappear upwards in a “flood of light” from a hidden skylight located in a prismatic section of roof rising high above the rest of the building. The church is a supreme response to brief, liturgy and site.
Communities could warmly embrace the Modern Movement to fill their needs. Miles Dunphy of Loder & Dunphy, an important practice specialising in church architecture, believed that churches were community centres as well as places of worship and should be modern in form and materials. Their Caringbah Methodist Church in Dudley Avenue, Caringbah, responded to the client’s demand for a high chamber for good acoustics. The response was very up-to-date: a precast concrete portal frame with concrete beams in between, a gently pitched roof, vertical timber boarding, and a glazed precast grille hung off the portal frame. Parishioners assisted with construction and the church is regarded affectionately by the congregation even today. Migrant groups also employed modern architecture to express their faith. For instance, Enrico Taglietti’s Brutalist St Anthony’s Roman Catholic Church at Marsfield is for a predominantly Italian community and hugs the ground, with wide eaves emphasised by deep fascias. The abrupt off-form concrete exterior is modulated by curved corners and amber glazing. Inside, the sloping floor descends to the altar, flooded with light from the skylight high above it. Structure is used symbolically - the two main roof beams intersect to form a cross at the base of the void below the skylight.

Fine new churches weren’t all in suburban Sydney. Loder & Dunphy’s Methodist Church at Casino (1960) contained several unusual elements including a thin parabolic shell roof spanning 24 metres in one sweeping curve. They were assisted by structural engineer J P Hallett & Partners. And Robert G Warren & Partners’ St Bartholomew’s Anglican Church at Crookwell (not built) would have been the town’s most striking building, a circular church with sweeping roof and planning influenced by the “liturgical movement” radiating from a circular sanctuary. The altar was directly under a circular skylight.
The built version of St Bartholomew’s War Memorial Anglican Church in Denison Street, Crookwell (1969) is another example of an A-frame type structure used to great effect, and is still one of the town’s more striking buildings. The 1955 hall next to the church features a vibrant geometric abstract mosaic on one wall (Roy Lumby photographs).

Christianity was not alone in needing new buildings. Sydney’s Jewish population more than doubled between 1938 and the 1950s. Migrants arrived from several parts of the world, reflecting the turmoil and upheaval of the 1940s and 1950s, and greatly affected established communities, stimulating community consciousness and changing their structures, cultural organisations and religious life. Several prominent migrant architects were of Jewish extraction.

At the end of the 1930s the community may well have enjoyed NSW’s most modern place of worship. The Progressive Congregation of the Temple Emanuel (now Emanuel Synagogue) at Woollahra was founded in 1938 and commissioned Samuel Lipson (Lipson & Kaad) along with Copeman Lemont & Keesing to design its Dudok-inspired synagogue in Ocean Street, Woollahra. Lipson & Kaad subsequently designed the Central Synagogue at Bondi. Here spaces, finishes and detailing reflect Modern Movement influence while careful design achieved fine acoustics in the main hall.

Lipson & Kaad’s Temple Emanuel, Woollahra, photographed in 1949 (left) and circa 1960 Central Synagogue at Bondi – the building was destroyed by fire in 1994 and has since been rebuilt (Temple Emanuel - NAA, Image No A1200, L11668; Central Synagogue – NAA, Max Dupain photograph, Image No A1200, L39501.)
HP Oser & Associates’ North Shore Synagogue (Tzedek Ve’Emet) in Treatts Road, Lindfield, was built for a congregation founded in 1947 and was the first north shore synagogue. The architects made much of new concrete technology such as precast and post-tensioned concrete and screening grilles. A stylised menorah cast into the wall of one section of the building, integrated symbolism and architecture. Neville Gruzman’s South Head and District Synagogue on Old South Head Road at Rose Bay (extensively modified) is said to have set new aesthetic limits for religious buildings. It was designed to a tight budget and consisted of a simple hall, a post and beam structure attached to an existing building. An elegant colonnade extended across the front of the hall. Artist Eric Smith designed mosaic panels, stained glass windows and the main doors. Harold Smith’s synagogue at Bankstown (destroyed) was just as striking but rather more exuberant and literally based on the Star of David. Its A-frame structure was similar to numerous churches but glazed triangular projections formed clerestories to light the interior and interpret the Star.

There do not appear to have been any Modern Movement-inspired mosques in post-war NSW. The closest was in Canberra, built by the diplomatic missions of Pakistan, Malaysia and Indonesia. It was designed by Melbourne architects Gerd and Renate Block, who migrated from Germany in 1951. The simple blocky building is punctuated by traditional elements such as a dome and a slender minaret.


The Canberra mosque designed by Gerd and Renate Block, 1961. It is located in Empire Circuit, Yarralumla (NAA, image number A1200, L40561).