Charles Fulton: the regional reach of Modernism in Australia

DOCUMENTATION ISSUES

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Charles Fulton (1905-1987) was an Australian architect who applied influences of European Modernism, particularly the civic architecture of Willem Dudok, into the design for several hospital projects in regional towns across Queensland, at the same time adapting a climatic responsive rationale to the projects.

As with many remote contexts that have been overlooked by a European and American centric focus upon Modern architecture, the account of Australian Modernism has not been widely acknowledged outside its borders, despite a local momentum to effectively document and publish its achievements. Compounding this predicament, Queensland has suffered from its own exclusion relative to the southern states of New South Wales (Sydney) and Victoria (Melbourne), which have always been the dominant centers of the national profession, its conferences and publications.

This paper seeks to address these schisms through the presentation of the work of Fulton, demonstrating how even in remote areas of Queensland, thousands of kilometers from major cities, the reach of Modern architecture found a place. Mobilized by the national federal body, the Office of Health and Home Affairs, drive to improve health services across the country post wwi, Fulton became a leading architect to modernize health facilities and brought about a cultural shift in the reception of Modern architecture across the regions.

Modern Influences

The Brazil Builds exhibition that was held at MoMA in New York in 1943 represents a demonstrable declaration of how modern architecture in the southern hemisphere had differentiated its approach to that in Europe and America through responses to local climatic conditions. The exhibition showcased projects adapting the modern style, including health buildings such as the Santa Terezinha Tuberculosis Sanitorium in Salvador, Bahia which exemplified innovations in concrete construction.1 The regional adaptation of modernism developed gradually in Australia, beyond the initial assimilation of foreign examples, towards innovation in the plastic properties of concrete to respond to local ways of life, conditioned by climate and context. By the 1930's there was "great interest in new building types and new ways of dwelling."2 The impetus of Modernism was championed early on by Robin Boyd³ who promoted

the search for a local architecture appropriate to its place, its landscape and city, mindful of local materials, climate and construction practices.⁴

An important early exponent of the adaptation of European Modernism in Australia was architect and educator Charles Fulton (1905-1987), who made significant contributions from the 1930s onwards through a series

of hospital and residential projects in regional Queensland towns. Fulton was

one of the main architects responsible for introducing the international style to Queensland. He experimented with this style combining it with an interest in climatic design.⁵

At the beginning of his career, Fulton spent a few years working in practices in London, from where he made regular excursions to mainland Europe; the most notable being visits to the Netherlands to see the work of Willem Dudok (1884-1974), and also the 1931 Paris Expo which he claimed "opened my eyes to modern architecture."6 Several of Fulton's projects were published in local professional journals, and received meritorious architecture awards from the Royal Australian Institute of Architects Queensland Awards Programs,7 these confirmed the esteem and peer recognition among the local profession. Despite these accolades, very little contemporaneous national recognition was observed,8 and only recently has his work been retrospectively and more broadly acknowledged in the account of Australian architecture.

The Australian modern hospital holds a pivotal place both in the development of Australian modernism and in the advancement of Australian health. The years between 1930 and 1950

represent the great hospital building era in Australia, when hospitals became an identifiable building type of their own and design of which became the province of specialist architectural firms.9

Fulton's emerging practice corresponds closely with the early Modernism that arised from the other major Australian centers in Sydney and Melbourne. In this respect the work of Stephenson and Turner, and Leighton Irwin, received wide acclaim for pioneering Modernism primarily through the program of government investment in modernizing health facilities across the country.10 Arthur Stephenson had undertaken research trips to the United States of America (USA) and Europe in the late 1920s and early 1930s to observe the latest advances in hospital development. This first-hand knowledge placed the firm Stephenson and Turner as leading experts in the field of hospital design, and many major commissions followed." Their design for the Ballarat Base Hospital (1933-1936) "echoed the fine brickwork of Willem Dudok's Hilversum Town Hall (1928-1930)" which Stephenson had visited while traveling.12 Dudok achieved striking compositional strength in his buildings through the use of brick solids, and horizontal lines through the positioning and detailing of windows, parapets, and canopies. Monumentality was often expressed in the placement of a vertical tower in juxtaposition to asymmetrical grouping of open blocks "scaled according to their different functions."13

John ("Maxwell") Freeland (1920-1983), sets out in his definitively titled book *Architecture in Australia: a history* (1968) an expansive account of architectural development. Within the chapter "Early Modern" (1930-1944) Freeland discusses the concerted momentum of mostly young architects towards the new ideas of Modernism,

to some who could follow the essentials, it was the opening of a new window on architecture. To the few who really understood, it was a transcendental way of life that offered hope for all the ills which had ranked architecture for nigh on a bundred years. ¹⁴

The main schools of influence were

... partly Dudok, partly Wright, and partly Le Corbusier. It was constructivist, organic and mechanical, all at the same time... It was plain and made up of simple individual elements... put together in an austerely cerebral way.¹⁵

Indeed, Dudok's Hilversum Town Hall was cited in "The West Australian" newsprint as early as 1929, as an example "abstract massing"

and "cubistic" architectural innovation underway in Holland as part of review of "New Buildings Abroad." ¹⁶

In Australian Architecture 1901-51: Sources of Modernism (1980), Donald Johnson (1930-) observes the trend of Australian architects undertaking travel scholarships, or journeying under their own initiative, to the projects of the "international style" first hand that had been celebrated in either international or local journals. Sydney Technical College graduates Frank Costello (1903-1987) and Sydney Ancher (1904-1979) went "car touring" in Europe and were "impressed by the work of the Dutch architect W. M. Dudok in Hilversum."17 On his return, Ancher immediately began working on "streamlined modern buildings"18 and would be recognized as a "leader of the Modern Movement in architecture in Australia", 19 Costello became City Architect and Town Planner in Brisbane, where he executed several transport and municipal buildings strongly influenced by Dudok.20 The influence of migrants to Australia, who had either worked or studied within the sphere of the new architectural milieu also added impetus to the momentum of the movement within the country.

Whilst national architecture has been largely underrepresented in the "blind spot" of many global books on modern architecture,21 the work of Fulton has suffered from Australia's own reticence to look beyond its major centers. Despite the important historical contributions of Freeland and Johnson there appears a distinct under-representation outside of Sydney and Melbourne of modernist projects that had been prospering in parallel to these "centers". This schism has been recently rectified largely in conferences, journals and several publications such as: Hot Modernism: Queensland Architecture 1945-1975;22 The Encyclopedia of Australian Architecture;²³ Australia: modern architectures in history;²⁴ and Australia Modern: architecture, landscape & design,25 though reference to Fulton remains limited.

It is into this context of oversight at a national level, and by implication further afield, that the career of Fulton is of importance. Both a practicing architect and educator his significant projects span a decade from 1935 before he consolidated his position within the Brisbane Central Technical College as parttime Head of Department for the Diploma of Architecture, through to his architectural practice partnerships which flourished under the leadership of fellow practice partners.²⁶ Several case study projects are presented as evidence of the development of Modernism in the regions, from an initial close assimilation to European exemplars, through to the emergence of a hybrid adaptation in response

to local climatic conditions and the innovations in concrete construction.

Charles Fulton: The early years

Fulton undertook articled training as a pupil with Sydney architect F. E. Stowe (an architect and civil engineer, 1867-1936) while studying at the Sydney Technical College.²⁷ He obtained a Diploma of Architecture from the Sydney Technical College (STC) in the late 1920s where "he and fellow students were aware of the changing trends occurring in architecture overseas"28 through their access to international journals. Although classical architecture was being promoted at the STC as the preferred canon, students were nevertheless experimenting with modern designs. $^{\tiny 29}\,\mbox{He}$ registered as an architect in New South Wales in 1931 and later Queensland in 1936.30 The propensity for neo-classical architecture dominated practice in Australia at that time, which limited Fulton in finding a practical outlet for his interest in the changing architectural dynamic that was occurring elsewhere in Europe and America. Due to the economic depression that had taken hold in 1931, Fulton decided to head overseas and arrived in England.31

Fulton settled in London and worked as a draughtsman in the architect's office for the large department store chain called Barkers.32 The relative design freedom ranging from entire retail outlets to fit-outs, displays, and furniture afforded great opportunity for modern expression in the work. As such, Fulton regarded the working environment as "tremendously stimulating."33 Using London as a base he frequently traveled through Europe to gain first hand contact and experience with buildings that were gaining a reputation across the continent. Fulton's interest was particularly drawn to the Netherlands, and the buildings of architect Willem Dudok,34 and he made a "pilgrimage" to visit the Hilversum Town Hall (1924-1928) which had been "influential in Britain and Australia in the early thirties."35 Indeed, Fulton was the beneficiary of a personal guided tour around Hilversum by Dudok himself, which gave him an intimate insight into the work,36 and lasting impression that would make a direct relationship in his early work.37 Undoubtedly, the work undertaken by Dudok would have also indicated the propensity for regional areas to adopt Modern architecture and town planning.

Early practice in the employ of J. P. Donoghue

After two years in London, Fulton returned to Australia in 1933 and settled in Brisbane following the introduction and recommendation of a family member to the firm of Hall and Cook where he commenced employment³⁸ but soon found "working on classical

details disheartening, given his exposure and enthusiasm for the ideas of modern architecture."³⁹ Consequently, Fulton changed employer in 1934 and began working for J. P. Donoghue who was an established architect still working along traditional stylistic lines, but who had a very strong client network particularly with hospital and school governing boards. He was however receptive to Fulton's "first-hand observations of the new functionalist style emerging in Europe that had transformed his work."⁴⁰

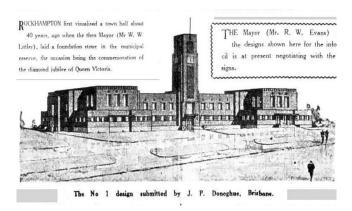
Based on developments overseas, the design of hospitals in Australia had begun to transform towards a technical and functional approach that would adopt

a centralized system of administration, abandoning the old pavilion-style hospital with its dispersed, separate buildings, each of which was almost an independent unit. The consolidation of these wards into large blocks made them easier to manage and service, even allowing the reticulation of oxygen and other facilities, but it also raised the problem of providing sufficient natural light and ventilation.⁴¹

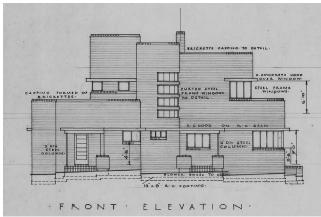
Donoghue began designing a new hospital for Stanthorpe in 1935, a regional town over 200 kilometers (km) inland from Brisbane, the state capital of Queensland, and had applied the new model for the modern hospital design and its functional planning. However, it was Fulton who subsequently brought a new architectural language to the series of regional commissions that would follow. Two projects in particular allowed scope for Fulton to promote his ambition for Modern architecture, these were the competition design for a New Town Hall for Rockhampton in 1935, and in the following year, the commission for a doctor's house in Stanthorpe, a design that "would bring the firm national attention."42

Rockhampton Town Hall (1936 designed)

In 1936, J. P. Donoghue was invited to a limited competition along with three other architects to submit plans for the design of a new town hall for the regional town of Rockhampton. The influence of Dudok's Hilversum Town Hall upon the design is striking, specifically the similar format of Dudok's strong massing with horizontal and vertical interplay. While Dudok's Town Hall articulates an asymmetric composition, Fulton's proposal enjoys symmetrical planning around the central clock tower. Despite the project not proceeding, Fulton had established himself as a capable designer within Donoghue's practice which would allow him latitude to develop in the emerging modern tendency.



Plans for a proposed residence at Stanthorpe for Dr Masel. J. P. Donoghue Architectural drawings, UQFL225. © Source: The University of Queensland Fryer Library.



Masel Residence, Stanthorpe (1936-1938)

In the same year, Fulton undertook the design for a doctor's residence and consulting rooms in Stanthorpe, presumably while Donoghue was primarily occupied with the town's new hospital, and was his first opportunity to design a building in the idiom by which he was so strongly captivated.

Solid, cubic and monumental ... a dynamic asymmetric composition is created by the contrast between different building elements; curved corners are juxtaposed against right angles, horizontal proportions against the verticality of the staircase and carefully composed windows, emphasized by the fine horizontal planes of projecting concrete awnings, highlight the planar qualities of walls.⁴³

An imposing two-story brick building gave form to an "abstract monumental façade"⁴⁴ as a "striking and very intact example of the interwar functionalist style,"⁴⁵ that typically incorporated architectural elements of

asymmetrical cubic massing, expanses of undecorated brick walls, steel corner and strip windows, curved brickwork corners, flat cantilevered awnings and a concealed roof.⁴⁶

The organization of functions in the residence is arranged by open-plan whereby the living spaces occupy the favorable north-easterly aspect relating directly to a garden terrace and garden beyond. The ground level floor also incorporates the doctor's consulting rooms that are independent of the main house, internally linked via a discreet connection, with clients' access from a separate street entrance. The upper floor is occupied by the three-bedroom family home that enjoys good daylight and ventilation with the main bedroom opening onto a balcony with a garden view.

The attention to climate is already stated in the design for the Masel residence, The Queensland Heritage Register notes that,

unlike most Queensland houses, the Stanthorpe house was designed to suit the cold climate of the granite belt. Later buildings designed by Charles Fulton show more adaptations to the generally hot Queensland climate.⁴⁷

The materiality of the house is predominantly achieved through the use of a red-brown face brick to external walls of various bonding to emphasize elements such as the curved wall. Additionally, windows and doors are steel framed that add to the buildings functional and industrial esthetic.

The Masel Residence achieved the Meritorious Architecture Award (RAIA) retrospectively in 1948. More recently, the residence was entered into the Queensland Heritage Register (2005) as a significant architectural project. The citations draw attention to its importance as one of the first house in regional Australia in the Modernist Style and its subsequent affect (sic) on the evolution of Modern architecture in Queensland.⁴⁸

In Partnership with J. P. Donoghue (1937-1946)

Following his impact on the design outputs of the practice, and the positive attention to the Masel residence, Fulton entered partnership with J. P. Donoghue in 1937, three years after he commenced working in the firm as an architect. In parallel, Fulton had been teaching design and history at the Brisbane Technical College as a part-time lecturer (since 1936), and by 1937 he was appointed as Lecturer in Charge of the Diploma in Architecture, thereby embarking on a combined career in practice and education that he would sustain until retirement.

Kingaroy Hospital (1938-1939)

The first major hospital project completed by Fulton through which he could "truly express himself" was at Kingaroy, 200 km north-west of Brisbane, and was "arguably the first truly modern hospital building in Queensland," so as it was a radical departure from the traditional "pavilion" style plan for hospitals that were being constructed in the early 20th century. so

In Queensland, the public were perfectly happy to worship in churches designed on a medieval model, but nobody wanted to be treated in a medieval hospital. For healthcare, everyone wanted the latest and most sophisticated facilities possible, and they presumed that they would find them in a hospital built in a new and striking ultra-modern style. Fulton had seen this style at first-hand in Europe, and was keen to work with it.52

The building was a two-story complex with the design layout comprising the wards in two wings radiating out from a central block. "A design feature of the planning was the narrow wards (just two beds wide)" 53 with both wings flanked by a wide verandah to facilitate natural ventilation, shade, and a relationship of indoor to outside that was a characteristic of the local climate. Indeed, the prominent balconies would be a constant in the hospital buildings Fulton would design from this point onwards.

"The building was modern in every way – planning, stylistically and in the integration of services," with the inclusion of a maternity ward into the main building for the first time in hospital design in Queensland. Fulton was also commissioned to design the Administration and Staff Quarters buildings in 1941; once again the first of this typology in the modern idiom.

Recently, a new building has been constructed in front of the original hospital

TUESDAY. The Courier-Mail MAY 28, 1940 Modern Aspects of Roma's P New £51,000 Hospital

Sketch view of Roma Hospital c1940. © Source: *Courier Mail*, 1940.

thereby disconnecting the building from its original and prominent civic relationship.

Roma Hospital 1940

The Roma Hospital was completed in 1940 and adopted a similar planning approach to the Kingaroy Hospital,56 with perpendicular wings to the main central block.

Fulton again asserts a confidence in the architectural form and design language through the brick and concrete detailing, further evidence of the regional adaptation of "Dudokian" architectural form to local climatic conditions. The balconies on the north-easterly building orientation provide shade to the interior wards encouraging connectivity with the outdoor climate from the patients' wards and rooms.

As with the Kingaroy hospital, a challenging new addition to the hospital complex has subsequently been added which disconnects the main façade frontage of the Fulton building from its original street and civic relationship. Furthermore, Fulton's building is currently under threat of demolition for imminent hospital redevelopment as the building is yet to be protected under the Queensland Heritage Register.

Townsville Hospital (1938-1951) Following a series of regional hospital base projects and maternity blocks, and Donoghue's considerable reputation and influence in the hospital boards of Queensland, in 1938 Donoghue was appointed to the Hospitals Board at Townsville (1300 km north of Brisbane) as "an independent expert to advise the board on modernizing their hospital."57 From this role he was able to secure the commission in 1940 following the presentation of "several drawings of a modern design"58 which have been largely attributed to those of his partner Fulton. The Townsville Hospital provided accommodation for over 250 patients, with "165 Public Ward beds, 45 Intermediate Ward Beds, and 53 Private Rooms."59 Its entry vestibule was lined with Queensland maple, and provided access to the hospital boardroom, administrative offices, main staircase, passenger and services lifts.

The hospital is a significant early example of a high-rise hospital "the largest facility of





View of Townsville Hospital. © Source: Lloyd Jones with permission from RAIA collection, John Oxley Library, SLQ.

its type in Australia outside a capital city."60 The strong influence of European Modernism that Fulton applied in the design is apparent

 $through\ its\ simple\ geometry\ of\ horizontal\ and$ vertical elements, wide cantilevered balconies with rounded corners, flat roof concealed behind parapets and its plain surfaces. 61

It embodies functionality and the technical servicing and operation of the building and its site", and the "integration of the hospital into its urban tissue."62 During its construction, the hospital was beset by a shortage of materials post war, and was subsequently opened more than a decade later in 1951.63 Nevertheless, the

design of the hospital undoubtedly developed from national innovations in concrete construction; "pre-mixed concrete companies were established to become placed amongst the most advanced in the world."64

The functional layout principles that had been established throughout Australia to hospital design in the late 1930s and applied by Donoghue at the Stanthorpe Base Hospital formed the rationale for the Townsville Hospital design. The principal spatial arrangement was the

central services, the elimination of central corridors (to improve ventilation), long open balconies, curved at the ends, these providing the strong horizontal lines of the exterior which were disrupted by pronounced verticals, especially above the central entrance.65

Consistent with the series of early hospital projects the building is arranged symmetrically around a central core tower that establishes the vertical entry point. The projecting balconies provide shade for the wards, designed "open air" specifically for tropical conditions, provide superb outlook across Cleveland Bay and Magnetic Island, and combine to emphasize the building's horizontality.66 The emergence of lightweight balconies in Fulton's work resembles the similar architectural device deployed by Alvar Aalto (1898-1976) at the Paimio Sanitorium (1929-1933),67 and indeed the Santa Terezinha Tuberculosis Sanitorium in Salvador, Bahia included within the Brazil Builds exhibition.

A new hospital for Townsville was subsequently established in 2001, south-west of the city center to accommodate the growing population. The original Fulton hospital building has been since redeveloped into an apartment building named Fulton Gardens, its adaptability an attribute of the narrow building planning, good natural lighting and cross ventilation, ideal for residential repurposing.68

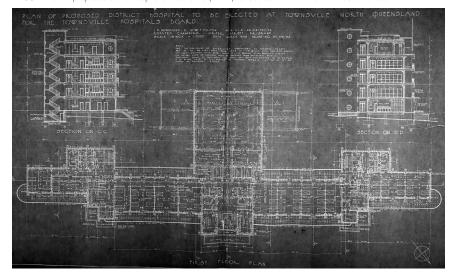
Fulton Residence in Indooroopilly (1939-1940)

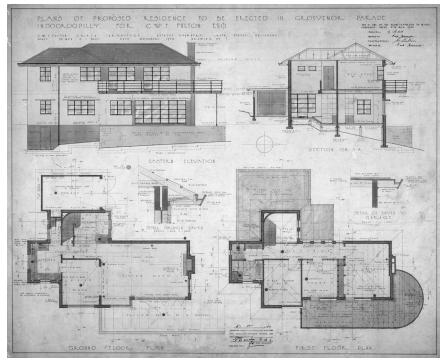
The Fulton Residence won the 1948 Royal Australian Institute of Architects Queensland Chapter award for meritorious architecture.⁶⁹ Its architectural composition is consistent with the Masel Residence in the asymmetrical massing and interplay of horizontal and vertical elements using face brickwork, steel windows, and "the eschewing of internal decoration and an interest in designing for a sub-tropical climate."70 The prominent balcony with curved end borrows from the formal articulation of his hospital projects. The Queensland Heritage Register notes that:

The house demonstrates how, in the interwar period, European architectural ideas were transferred to Australia and modified to local conditions. The Fulton Residence is an important building in the evolution of domestic architecture in Queensland.71

A noticeable departure from buildings that Fulton had designed up to this point is the incorporation of an overhanging tiled roof with the eaves gutter concealed behind a broad facia board, expressed well beyond the line of external walls. This is a further adaptation away from the direct imitation of European influences to acknowledge local climatic conditions. Heavy Queensland rainfall necessitates the practical discharge

Plan of proposed district hospital at Townsville (1942). © Source: Fulton Trotter Architects Archives.





C. W. T. Fulton Architectural drawings. UQFL224, plans for a proposed residence at Grosvenor Parade, Indooroopilly. © Source: The University of Queensland Fryer Library.

of storm water overflow beyond the interior of the building. A pronounced pitched roof would be a consistent feature of subsequent iterations of Fulton's architectural practice with new partners Aubrey Job (1907-2002) and Jim Collin (1936-2013), and later Stephen Trotter (1931-2015), Jack Gilmour and Frank Moss,

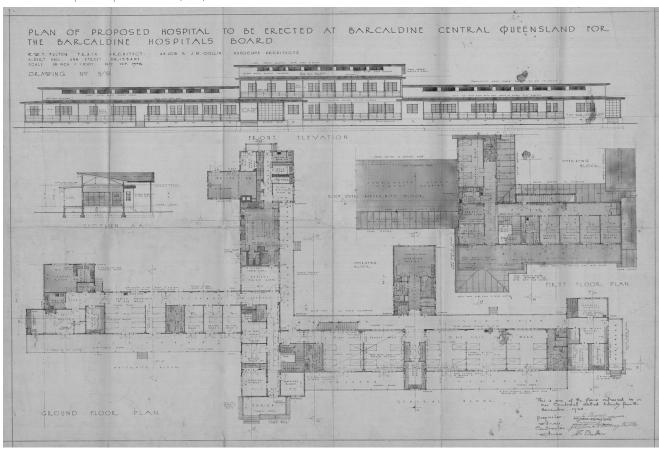
buildings [which] were characterized by lowpitched roofs, linear planning, cross ventilation, wide eaves or awnings and the use of modern materials. 72

The practice of Job Collin and Fulton (1946-1956)

Following the dissolution of Donoghue & Fulton in 1946, Fulton formed a partnership with Job and Collin.73

Charles brought his hospital contacts at Kingaroy, Charleville, Blackall, Barcaldine and Clermont to the new partnership and these formed the base for [the] firm's ongoing practice in western areas.74

08 Plan of Proposed Hospital at Barcaldine (1948). © Source: Fulton Trotter Architects Archives.





109 Interior view of Charleville Hospital (1939), typical internal arrangement whereby extensive glazing allows the penetration of natural light and ventilation.

© Source: Fulton Trotter Architects Archives.



10 Barcaldine Hospital Nurses Quarters in 2019. © Source: Paul Sanders

Hospitals in the early period were governed by individual boards which meant that decisions were made locally, making individual relationships particularly important. The firm was able to develop these relationships through regular "design clinics" of the regions to visit clients, local councils and local communities. These tours would involve thousands of kilometers of road travel undertaken on a monthly basis and shored up a presence of the firm within the regions. The routine visits to the regions became central to the practice model, and continued until well into the late 1990s. This unique approach to client service undeniably retained project work within the regions, adapting remote communities such as those in the north-west of the state to the new climatic innovations observed in modernist building.

Barcaldine Hospital main block and Staff Quarters (1948-1953)

The Barcaldine Hospital project represents a distinctive development of the functional arrangement of an asymmetrical form with perpendicular services wing incorporated into a cruciform plan. The ground level floor main wards extend laterally either side of the central entrance with generous verandahs either side to aide ventilation and connectivity with the landscape setting.

The hospital base building established, like others, a modern facility for a remote regional town, over 1000 kilometers north-west from Brishane. Economical materials and

building systems were therefore a necessity. The interplay of solid building form softened by elegant lightweight verandah elements provides indoor-outdoor climatic comfort for patients, and also give the building its dominant horizontality and relationship to the landscape. Light structural posts are incorporated to support the projecting verandah roofs, and ventilator grilles are an explicit climatic device set below the ridge line of mono-pitched "skillion" roofs, and provide a rhythm to the façade.

In the early 1990s, a comprehensive national capital works program for health services resulted in widespread investment in new and redeveloped hospital campuses.75 Three hospital upgrade commissions returned to original projects at Barcaldine, Clermont, and Emerald that had been "designed in the fifties by a previous generation of the practice,"76 became the catalyst and impetus for what is now Fulton Trotter Architects. In the phase two facility at Barcaldine, the new layout sensitively "echoes" the original Fulton building with a mirrored layout of contemporary forms - differentiating the two historical phases materially with brute honed blockwork and integration of internal courtyard spaces to provide light deep within the plan. A recent field survey, undertaken by the researchers and current practice directors, found all three hospitals to be in very good functioning condition, thriving as a regional health facility due to the success of the master-planning and conservation strategies.

Conclusion

Fulton is regarded as a key practitioner and teacher of modern trends in architectural design in Queensland during the 30s and 40s.⁷⁷

Charles Fulton was a pioneer within Australia concerning the integrated application of Modernism through practice (1937-1980) and architectural education (1936-1971). Furthermore, he adapted international Modernism, particularly that of Willem Dudok, into an Australian context.78 His portfolio of projects established a regional reach of Modernism and "took advanced modern architecture to remote settings,"79 at a time when an extensive program for the delivery of new hospital facilities enabled contemporary health services to be accommodated within the new architectural approaches to planning and form.

In parallel, he had a longstanding thirty-four years' leadership of architectural education at the Central Technical College in Brisbane whereby the study day release of students from full-time employment imbued practical knowledge in design strength in the graduates. He was responsible for the curriculum development and expansion of the history of architecture, and design studios within of the Diploma Course. Subsequent to his retirement, and in recognition of his contribution to architectural education, the Queensland University of Technology bestowed the name Charles Fulton School of Architecture on its facility. 80

Fulton established an important practice with a series of talented architects that was renowned for its design innovation, adaption of modern principles to local conditions within regional Queensland, and as a place where individuals learnt about becoming an architect. He was a highly regarded man, who treated clients, builders, employees, professional partners, and students, all with an even respect, a legacy that has been maintained throughout and into the culture of the current practice of Fulton Trotter Architects.

Aknowledgements

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