Distance Looks Back
Edited by Victoria Jackson Wyatt, Andrew Leach and Lee Stickells

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Distance Looks Back

Distance is both conceptual and actual. It is overcome or exploited in all manner of ways that have consequences for the history of architecture. It is fostered in the critical attitude. And collapsed when history is invoked in the present. It shapes the relationship of Europe to its Antipodes, as well as of Europe to its neighbours. Its presence is necessary for claims upon disciplinarity; its absence, the dissolution of disciplinary boundaries. In what ways has distance figured in the history of architecture? What has it altered? What has it prevented? What has it allowed? What does it permit, even now?

This theme opens the door to questions of representation and communication in the history of architecture; questions of travel and migration; and of the mobility of expertise, institutions and ideas. As a lens, distance allows us to reflect on the construction of identity in and through architectural works both defined as such (Architects and Architecture) and “grey”. It invites us to consider moments of counterpoint, imaging or critique. It provokes us to clarify, recalibrate, expose, suppress, or legitimise. Works, projects, architects and other agents in the conceptualisation and construction of architecture, cities and landscapes are, from a remove, perceived on terms different from the immediate and the close. Artefacts and ideas subjected to distance acquire something of this perspective, whether they are physically moved or subject to representation at a remove. Distance can be inconvenient; and useful.

The conference welcomed original papers that explored the import of distance for architectural history from any direction. Proposals treated a diverse range of temporalities and geographies. They addressed the consequences of literal distance for architectural culture in its history: communication, travel, mobility, isolation, exile, or technical and intellectual networks. They also considered the figurative role of distance in forms of criticality, historicity and thought. Some papers reflected on the mechanisms and nature of architectural history through such concepts as immediacy, instrumentality or relevance; or of neutralization or obsolescence. An idea of distance was used by some contributions to think through distinctions (in disciplines, practices or institutions) between architectural history and criticism, architectural history and archaeology, architectural history and area studies, architectural history, urban history, histories of science and technology, the history of art, etc. These distinctions were also invoked in order to reflect on architecture and its neighbouring
professions and practices. Similar attention was paid to the devices used by architectural historiography to manage distance: historiographical and critical nomenclature; theoretical terms and tropes; and other means of negotiating proximity. Consideration was even given to the very historiographical valence of distance – as, for instance, productive criticality or problematic estrangement.

One strand of the conference theme responds to the special issue of Architectural Histories (2018) asking “What is Europe?”. The theme invokes, too, the ideas at the centre of the lecture series convened by New Zealand historian Keith Sinclair in 1960: Distance Looks Our Way; and in Australian historian Geoffrey Blainey’s Tyranny of Distance (1966). What are the effects of remoteness on an antipodean response to architecture’s historical metropole? Or of the significance of the globe beyond its “centres”? What occurs when isolation is made operative? The idea of distance, in this sense, invites self-reflection as much as advancement of new knowledge. It was therefore particularly pleasing to receive papers that reflected on distance in order to reflect on the concept of Europe and the European and its consequences for architecture beyond a strictly defined European geography. Welcomed, also, were papers that considered the architectural history and culture of Asia, Australasia and the Pacific in their global contexts.

Following an immensely rewarding set of conference sessions, and the lively conversations that revolved around them, a selection of the presented papers are reproduced here as proceedings.
The story of new Iran started in 1921 when after a dark period of socio-political denigration, strong nationalist sentiments resulted in coup d’etat by a charismatic military leader, Reza Shah, who became the new Iranian ruler in 1926. When Reza Shah seized power, motivated by the elite, he immediately embarked on constructing Iran’s national identity and international prestige and called for intensive programs of reforms. For achieving his nationalistic goals, however, media of expression was needed, one of the most significant of those was indeed architecture. As a result, Western-educated architects started travelling to Iran and were officially employed by the Iranian government for construction purposes. They replaced the traditional Iranian architect (me’mar) and became agents of change in charge of modernizing the appearance of the country and instilling it with a desired national identity. Due to the long-lasting Franco-Iranian cultural relationship, Beaux-Arts diplômés became among the most significant architects of the state, among whom André Godard was the first Beaux-Arts architect who worked for the Iranian government for years and critically contributed to the revitalization of Iranian national identity through architecture as well as dissemination of Beaux-Arts ideas in Iran. This article, by referring to the interwar architecture of André Godard, will unveil the critical contribution of the Ecole des Beaux-Arts, its architecture and architectural education, in the construction of Iranian national identity during the interwar era through architecture, and the way it was modified and transplanted in the Iranian context of that time.

Keywords: Iranian nationalism; architecture and identity; Iranian interwar architecture; Ecole des Beaux-Arts; Beaux-Arts education; André Godard
André Godard, a French architect and archeologist, was an influential graduate of the Ecole des Beaux-Arts who played an unforgettable role in bringing a Western-based architecture to Iran. However, his architecture was produced in an era of Iranian nationalism when most Western products were subjected to a nationalist modification. Recently, significant scholarly activity has given attention to André Godard’s works or the connection between Iranian national identity and architecture, in which Godard’s architecture is always an integral part. However, analysis of a significant aspect of his work, which vitally contributed to the creation of his architecture, is still unexplored in scholarly texts. That critical gap is, in fact, the agency of his education at the Ecole des Beaux-Arts, and the way the Beaux-Arts’ design method and doctrine assisted him in the expression of Iranian national identity through architecture. This paper, therefore, aims at unearthing the significant influence of the Ecole des Beaux-Arts in in Godard’s architectural expression during the reign of Reza Shah (1926-41). However, before digging into Godard’s architecture it is necessary to clarify the nature of Iranian interwar nationalism, the connection between nationalism and architecture, as well as the Beaux-Arts’ design methods and the way it could establish connections to history and tradition.

History and Nationalism

Until the early nineteenth century, all golden ages in Iranian history were the product of natural growth of national sentiments rising from within Iran. From the nineteenth century on, however, European penetration into the Iranian lands caused a rupture in the natural evolution of the Iranian mind. While the Renaissance was directing Europe towards an uninterrupted path of modernization, Iran was experiencing an era of downfall and soon became a destination for the colonial ambitions of superpowers. As a result, Iranians gradually became conscious of their backward position in the world’s equation and found themselves obliged to resort to learning Western science and technology in order to survive.

Meanwhile, from the early nineteenth century topics such as racism, national and historical consciousness received great attention by European scholars. From the beginning of discussions concerning these issues, Iran was at the centre of attention. The civilization of pre-Islamic Iran and the Aryan race of its people proved to be capable of aiding Europeans to invent an “ancient proto-European civilization.”

1 Mostafa Vaziri, Iran as Imagined Nation (New York: Paragon House, 1993), 3.
Iranians gradually became aware of the grandeur of their past and reached the belief that they deserve equal respect as those people of the West.\textsuperscript{2}

The consequence of the events of the nineteenth century was the rise of Iranian nationalism, the first substantial manifestation of which was the Constitutional Revolution of 1906. However, the constitutional movement proved to be incapable of creating significant change. It lacked a strong social base and soon became the victim of more direct interference by European powers in Iranian affairs. The defeat of the first national movement of twentieth century Iran fired intellectuals’ demands for the rise of a strong leader to unify Iran, revitalize its national identity, and direct the country towards Western modernity. That leader turned out to be Reza Shah, a military leader in the Persian army, who organized the Coup d’état of 1921, crowned himself monarch by 1926 and established a dictatorship. It was only during this new era that the nationalist demands of reform-minded Iranians could be materialized, the trends of which were based on two paradoxical notions: a desire for wholeheartedly borrowing from the West while also trying to revitalize their own identity by making a return to Iranian history.

Although traits of Iranian nationalism are usually compared by scholars to that of Turkey where Ataturk aimed at constructing a new capital with a new identity, the result was less successful. Iranian intellectuals had to provide an answer to one of the most complicated questions in the shortest period: to what extent should Iran absorb Western civilization and to what extent should the nation maintain its own? It was for the first time that this question required a concrete solution. However, a problem appeared when it became clear that in Iran “there was no general acquaintance with the West, no gradual preparation for modernization to make it easier and almost consistent, nor was there any possibility of a radical transformation, as in Japan.”\textsuperscript{3} Therefore, the solution to the confluence of the West and the East in Iran remained an ambiguous one throughout the interwar period. The result was that most products of the era remained at a superficial level and could not establish a long-lasting influence on the mind of Iranians.\textsuperscript{4}

**Architecture and Identity**

From the ancient period onward in Iranian history, architecture was an inseparable part of the identity of the land. Throughout different periods in Iranian history, Iranian architecture underwent a gradual path of progress along with culture,
religion, and traditions embedded in society. However, the unwanted events of the nineteenth century and the influence of the West gradually broke that continuous path. During Reza Shah’s era, the rise of Iranian nationalism could once again lead to close links between architecture and identity. Architecture, which held a great portion of the identity of the past, was considered of vital potential for the state through which the grandeur of Iran’s past and its ancient civilization could be remembered. However, the language of new architecture had not much in common with traditional Iranian architecture. Architecture became a means for fulfilling the desires of those reform-minded elites who were seeking modernization along Western lines. Traditional architects—who had learned architecture traditionally from a master—were conceived as incapable by the state and replaced by Western-educated architects (both foreigners and Iranians). Architecture, therefore, was not any more the manifestation of the mysteries of the land, but a profession the principles of which had to be learned from Europe.

The arrival of a Western-based architecture to Iran, accompanied by the ambiguous nationalism of the time, turned architecture into a sophisticated product of the era. Throughout the whole period, there existed neither a prescription for architects to follow, nor an architectural publication for the dissemination of architectural ideas, nor an agreement among architects over the best means for architectural modernization. As a result, a definite and homogeneous way of expressing identity through architecture could never be established. Architecture turned into an object of “shaky nature” which could jump from one style to the other depending on the aim and nature of each individual project. For instance, some architectural works of high cultural and national significance were mostly connected, at least symbolically, to history, a reminder of a memory from the past while the architecture of the bourgeoisie and highly secular institutions were competing with the avant-garde architectural movements of Europe.

However, the most important factor in determining the appearance and the depth of connection of a building to the Iranian past was the individual architect in charge. Those architects who were educated in Europe, each with a different knowledge of Iranian architecture and diverse educational background, could borrow concepts from Iranian architecture and elements from two poles of Islamic and pre-Islamic Iran (or both), or could ignore connections to Iranian architecture and imitate the West. The deeper the architect’s knowledge
of Iranian architectural history and concepts, the better that architect would be able to juxtapose Western and Eastern ideas and establish connections to Iranian tradition.

The Ecole des Beaux-Arts and the Traditions of Other Lands

Even though the Ecole des Beaux-Arts was a European school of architecture based on a Western ideology, it provided students with possibilities to absorb and apply architectural traditions of other countries within their projects. The reason was that the Ecole did not aim at providing students with an architectural style. As Pai has highlighted, the Beaux-Arts system was not “local and specific” but a “method” through which the student could attack and study any design problem.⁵

The Beaux-Arts architectural education aimed at teaching students principles of composition. Most architectural problems at the Ecole were mere exercises of composition initiated with an *esquisse en loge* (sketch executed in small cubicles) where the preliminary ideas of composition would be generated. The preliminary ideas executed *en loge* were called *parti* (choices/to make a choice), a figure or diagram that highlighted “the main characteristics of a program’s distribution of an ensemble and the axes of composition.”⁶ At the Ecole, a symmetrical *parti* was preferred over an asymmetrical one. The axes that the *parti* generated played a key role in arranging various elements of design as well as determining the dominant element, the focal point, located along the principal axis.⁷ The aim was to single out an appropriate composition that could address all practical and aesthetical requirements of a given program. However, there was a relative freedom on the kind of spaces to be located along those axes, which made it possible to instil into a design, while following the Beaux-Arts’ principles, some spatial characters linked to the traditions of a country.

The style, or the character of a building, however, came after composition. Conceiving the Beaux-Arts system as a method left the Beaux-Arts architect with a freedom to shape the exterior facades according to the given program and its assumed location. This approach was apparent in design projects with topics related to the East, in that most award-winning projects were the ones who had applied oriental decorations and elements in their designs (fig. 1). Moreover, by the 1930s the acceptability of modern materials, particularly reinforced concrete, encouraged students to eliminate decorative elements from both interior and exterior and rid their projects more than ever before of

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⁷ Lucan, *Composition, Non-Composition*, 181-83.
the burden of Western history. This provided plain surfaces which could be embellished with architectural elements and decorations of those countries seeking to construct their national identity. The Beaux-Arts’ principles were, therefore, well-suited to the character of Iranian nationalism in the interwar era. A building’s outer appearance could jump from one character to the other, and unique architectural spaces could be implemented in a design project, without losing the sense of the Beaux-Arts.

André Godard in Iran

The propagation of Beaux-Arts ideas in Iran was highly indebted to Godard.8 Godard studied at the Ecole des Beaux-Arts from 1901 to 1909. There, he showed a great interest in decorative designs and small-scale projects. Perhaps this was the first motive that persuaded him in 1910 to embark on his career as an archeologist. With the East an archeological hub for the Westerners, Godard departed from Paris in 1910 first to Iraq, then to Egypt and in 1922 to Afghanistan where he became the director of Institut française d’archéologie.9 Godard’s next destination was Iran, to which he travelled as the result of both Iranian nationalism and a long-lasting Franco-Iranian cultural relationship.

The Franco-Iranian cultural relationship was initiated in the early nineteenth century first through education and was later intensified through the travel of French archeologists to Iran. By the start of Reza Shah’s reign, nationalist sentiments changed Iran’s foreign policies which fired reactions against

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8 Godard’s role in disseminating Beaux-Arts ideas culminated in 1940 when he contributed to the foundation of a school of fine arts in Iran modelled after the Ecole des Beaux-Arts and became its director.

French archeological rights in Iran. The key event that led to the flow of the Beaux-Arts graduates to Iran happened in 1927 when to compensate the French for the cancellation of the 1900 archeological convention between the Iranian and the French governments—which granted to the French the exclusive right of archeological excavation throughout Iran—the Iranians agreed on the employment of a French citizen as the first director of the “Antiquities Service of Iran.”10 That nominated Frenchman, chosen by the French government, was André Godard.11 He travelled to Iran in 1928, remained in his post until 1953 and returned to France in 1960.

Godard’s arrival in Iran was welcomed by Iranian nationalists who were enthusiastically in favour of recovering Iran’s cultural identity. He travelled to Iran with a twenty-year contract on November 19, 1928, as an archeologist, but soon became known as an expert of the history of Iranian art and architecture. Besides his archeological responsibilities, Godard became in charge for the restoration and documentation of many historical buildings, the results of which were published in books and various articles. Years of studying Iranian art also made him believe that “Iranian architecture is the greatest and most representative of Iranian arts.”12 Gradually, he also developed a feeling for Iranian architecture. He even settled in a traditionally designed Iranian house surrounded by an Iranian garden and wrote an article about it.13 Within the article he expressed his respect for and adherence to traditional Iranian architecture:

> Eventually, a day will come that our houses will traverse a path to perfection ... If one day, our miserable world could retrieve its lost peace, the beauty, peace and comfort of the past will be recognized. At that moment, this small house of Jamal Abad will regain its fame [...].14

Godard’s historical knowledge of Iranian architecture made him an architect capable of addressing challenging and sudden confluence of Iranian nationalism and demands for Western modernity and, therefore, working towards the creation of a new architecture suitable for the Iranian context of the time.

The Architecture of André Godard

Even though Godard’s primary reason to travel to Iran was not to practice architecture, by the early 1930s, when the Iranian economy flourished and the State’s involvement in cultural affairs increased, he became in charge of some of the greatest

11 Following Godard, three other influential Beaux-Arts graduates, two Frenchmen and one Iranian travelled, to Iran during the 1930s.
14 Godard, et al., Athar-e Iran, 255.
architectural projects. However, the main factor that led Godard to extend his career beyond archeology and scholarly activities was indeed the new Minister of Education, Ali Asghar Hekmat (in office from 1933 to 1938), with whom Godard could establish a close relationship. It was during Hekmat’s tenure as the Minister of Education that Godard was appointed as the chief architect of three of the most sensitive cultural and national projects of the state, namely the National Museum of Iran, the University of Tehran, and Hafez Mausoleum.

As specified before, there was no architectural movement, or what in Europe was called “style,” existing in Iran. The relative freedom of architectural expression in Iran left Godard with a challenging question: what must be his approach towards creating a new architecture in Iran? The answer to this question was embedded in his education at the Ecole. In all Godard’s designs in Iran, the character of buildings greatly matches the function, purpose, as well as cultural and national values embedded in that particular project.

The National Museum of Iran

The foundation of a national museum was one of the oldest demands of Iranian elites: a project of national significance, to restore and exhibit Iran’s ancient grandeur and civilization. The idea of establishing a museum first appeared in 1922. It was among the objectives of a group of nationalist Iranians who had founded the Society of National Heritage, aimed at protecting Iran’s cultural heritage, restoring historical buildings, as well as venerating cultural figures of Iranian history. However, first

15 At first, in September 1933, Hekmat was appointed as the acting minister of education, and was promoted in March 1935 to the Minister of Education. With regard to their relationship, in Hekmat’s account of his trips—published in 2004 by the society of Cultural Heritage—Godard’s name appears frequently as the one accompanying Hekmat in most of his trips to different provinces for the inauguration of new schools or site inspections for those under construction.
steps towards its materialization were postponed until 1933, only a few days after Hekmat’s new post in the Ministry of education, when Godard was appointed as the architect in charge of designing a national museum, this time as an asset of the Ministry of Education.16

The national importance of the museum had made its Iranian character almost an inevitable aspect of its architecture. The main architectural character of this project was the direct result of Godard’s knowledge of Iranian architecture as well as the function of the museum itself. The museum was to be a modern building mostly for exhibiting archeological findings related to the pre-Islamic period; a driver for Godard to make dominant a pre-Islamic character in the design of the museum.

In many other projects of the state, such as Iran’s national bank, architectural elements were taken from the Achaemenid era (550 BC to 330 BC)—an era in pre-Islamic Iran, when Iran was one of the biggest empires of the world praised by many Western scholars and archeologists. In this project, Godard made a direct return to the Sasanian (224 AD to 651 AD) architecture, to the main elevation of Ctesiphon palace, as he believed it was from the Sassanid era that Iranian architecture revitalized and the continuous path of architectural development began (fig. 2).17

In the plan, while following the symmetry and axiality rooted in the Beaux-Arts, spaces of Iranian character were also included. Placing two courtyards designed with small pools and gardens, and entrance ıvan (a vaulted space that opens on one side) on the central axis (where according to the Beaux-Arts’ principles the dominant element of design is located), as well as the limited


17 Godard, Art of Iran, 179-95.
brick decorations on the outer elevations, was an endeavor to instill into his design an Iranian spirit (fig. 3).

The University of Tehran

Education transformations in the Reza Shah era mark the beginning of a systematic attempt to counter traditional Iranian schooling governed by the clergy, in favour of a secular and Western-based educational program and curriculum to be modelled after European schools and universities. The establishment of a university was the culmination of Iranian intellectuals’ attempts to further the development of higher education in Iran. From the rise of Reza Shah to power, the establishment of a university was on the elites’ agenda but was postponed until early 1934 when the proposal for the foundation of a university was presented to the Shah by Hekmat and approved. The arrangement and educational programs of the university were mostly modelled after French systems and academic staff consisted of both Western-educated Iranians and foreigners.18

When the proposal of a university was approved by the Shah, Godard was immediately entrusted by Hekmat as its architect. Godard’s occupation with other responsibilities did not allow him to go further than the design of the site plan and a minor building attached to the School of Medicine, but he was the one who determined the configuration of the campus buildings and, more importantly, their character. The Western spirit of the university as a centre for spreading Western science and a hub of Westernized intellectuals had convinced Godard that

Figure 4. The School of Medicine, general configuration defined by Godard, designed by Maxime Siroux, a Beaux-Arts graduate. (Photograph courtesy of the Central Library of Tehran University, Section of Digital Archive.)

18 An example of the French influence was the Faculty of Fine-Arts established in 1940, directed by Godard and modelled after the architectural education of the Ecole des Beaux-Arts.
the University must be of a European character: monumental, but undecorated classicism, with cement facades. This was an architectural approach propagated by the Ecole during the 1930s without any explicit references to Iranian architecture (fig. 4). However, this did not mean that the University was completely deprived of spaces familiar to Iranians. The design of the University campus as a garden, the implementation of courtyards and semi-enclosed yards wherever possible, as well as limited water pools, were all limited returns to Iranian tradition (fig. 5).

The Mausoleum of Hafez

Hafez was one of the greatest and most loved Iranian poets of the Islamic era, who did not stand only as an essential figure in the Iranian history, but his poems were of profound religious and spiritual value to many Iranians. The construction of his mausoleum was a part of the project for venerating Iranian cultural figures initiated by the Society of National Heritage. In 1934, however, the society was dismissed by the Shah, and most of its projects were handed to the Ministry of Education directed by Hekmat.

Hekmat entrusted the design of the mausoleum to Godard in around mid-1935. In this project, Godard, in constructing a character for a mausoleum representing an Islamic poet of a divine character, referred mostly to Islamic elements such as a dome decorated with geometrical tile-work and the muqarnas
decoration of column capitals (fig. 6). More important than that is the spiritual atmosphere of the place, which for Godard seems to have been a significant factor in the design of the mausoleum. Godard’s conception of the mausoleum was not only in line with Beaux-Arts principles but had a lot in common with Iranian gardens as “representative of paradise on earth.” The entrance to the mausoleum would lead the spectator to a garden of Iranian character with two linear pools surrounded by a profusion of trees and flowers. Passing through the garden, one would face a linear ıvan (porch) composed of twenty decorated columns. The next space is the courtyard, decorated with small gardens, at the centre of which the building of mausoleum and the tomb is located.

Conclusion

Interwar Iran, from the time Reza Shah took power, marked a new era in which nationalist demands materialized that borrowed concepts from Europe. However, the quick pace
of change, as well as the ambiguity that existed in Iranian nationalism, did not allow the creation of a coherent architectural style or movement towards modernity. On the other hand, the Ecole did not offer an architectural style and expression of character in architectural design that was the matter of personal preferences defined according to the function and location of a design project. Godard was the first influential Beaux-Arts graduate that travelled to Iran, in an era which a new architectural language was demanded. The Beaux-Arts education and knowledge of Iranian architecture allowed Godard to express an Iranian identity in his projects while jumping from one style to the other, considering the function and national significance of each project. Godard’s endeavours were indeed the beginning of a new path towards creating an architecture categorized as both modern and Iranian. A path which attracted greater attention in the next decades and which has continued up until today.
At the end of the 1930s, Spain suffered a Civil War which led to the establishment of a dictatorship that lasted about forty years and whose ideology separated it from the main powers in the West. At the same time, the war had devastated the country’s economy and culture, thus further widening the gap between Spain and other developed countries. In the realm of architecture, the Civil War extinguished the budding modernity that had begun to develop in Spain in the 1920s and some of its significant figures, such as Josep Lluís Sert or Antonio Bonet went into exile. In spite of this complex situation, during the 1950s, a new generation of young Spanish architects, aware of their estrangement from European culture, embarked on a search for the modernity that had been denied to them. The results of their efforts started to be manifest even beyond national boundaries, as various international journals began to cover Spanish architecture. For instance, in 1959 L'Architecture d'Aujourd'hui applauded “the praiseworthy effort of various architects in the country to reach for an architecture with a contemporary spirit.” Spain’s presence in the international architecture media continued to grow into the 1960s, with special issues in such journals as Zodiac, Baumeister, Werk, L'Architecture d'Aujourd'hui, Architectural Review, etc. And by the 1980s, architecture criticism was enthralled by contemporary Spanish architecture. The initial gap appeared to have been bridged. It is important to highlight the role played in this process by some Spanish architects, who, desiring to build bridges and to show Spanish architecture to the world, served as critics or commentators for a variety of international publications. The goal of this paper is to analyze the role played by architecture journals as a means of disseminating and bringing closer together architectural realities that were distant or peripheral, as documented by the Spanish experience between the 1950s and 1980s.

Keywords: Architecture journals; modern Spanish architecture; diffusion; twentieth century
In August 1975, the architect Lew Martin published an article in the *NZIA Journal* in which he expressed his enthusiasm for a group of low-cost flats in Reus (Spain) called the “Gaudi District,” developed by the Spanish architect Ricardo Bofill and his architectural studio. Martin, as the article describes, discovered the project through an article published in *Architectural Review* in 1973. His interest in the project was so intense that he visited the buildings while on a tour of Europe in 1974, and he conveyed his positive impressions of the trip in the article.  

Going beyond the value found by the New Zealand architect in this Spanish building, this paper focuses on the role played by architectural journals. The example provided, *Architectural Review*, serves as a way of bringing closer a distant Spanish reality. Spain, as we know, is at the antipodes of New Zealand. Distance is sometimes not just a matter of geography, though, but also one of lack of knowledge, and the event described above is neither isolated nor random. From the 1950s onwards, modern Spanish architecture started to gain recognition within international circles, and architectural magazines played an important role in this process. My objective in this context is to analyze the role played by international architectural periodicals as a vehicle to bridge the gap between modern Spanish architecture and the international context, and I will do so by analysing the origins of this process through to its consolidation in the 1980s. This idea takes on a particular strength in a country like Spain, which has traditionally been on the periphery, far away from Europe and the world. Before delving in, however, I must outline some key points which help give context to this perspective on the country.

During the twentieth century, the country was marked by the Civil War it suffered between 1936 and 1939. The war brought Spain’s reality to the world’s attention—“never had there been so much interest in Spain in other countries”—and it would lead other nations to take sides in the conflict. However, Spanish society, economy and culture were completely destroyed, generating an important gap in relation to other developed countries. Within the world of architecture, war took with it the incipient modernity which had begun to grow in Spain in the 1920s, relevant figures such as Josep Lluís Sert or Antonio Bonet had to live in exile. Others suffered worse fates and died during the conflict.

Once the war was over, a new political regime was established: Franco’s dictatorship, which would retain power for nearly forty years. From an ideological viewpoint, the newly established
order was also very distant from Western powers. During the dictatorship (1939-75), and despite some signs of opening up to the world, the shadow of a repressive regime was a constant obstacle in its relation to other developed countries.

The First Approach to Spanish Modernity

In the 1940s, the Franco regime embarked on the process of reconstructing a country that had been devastated. In the realm of architecture, as pointed out by Esteban-Maluenda, the government grounded this process in “the memory of other more ‘glorious’ moments in the history of the nation.” In this sense, it “supported the search for a so called ‘national style’ in architecture, which was generally limited to official buildings, whereas a folkloric style was employed in regional and rural works.”

In this context, some international outlets voiced the prevalent poor appreciation of Spanish architecture at that time. For example, the Dutch journal *Forum*, in an article from 1950, collects the impressions of Dutch professors during a Spanish trip, explicitly remarking on “the very low appeal of recent Spanish architecture.”

Even if the majority of Spanish architects initially produced work based on the academic and nationalist models supported by the regime, from the late 1940s some voices began to question those models. They started, albeit with some hesitation, a search for the modernity that the Civil War had inhibited.

This period would start a new stage in the country in which “contemporary Spanish architecture, conscious of its lag in regards to European culture ... would begin an intense adventure.” The results of this modernizing effort would start to show beyond Spanish borders, through the pages of different architecture journals. For instance, in the fall of 1953, the British publication *The Architects’ Journal* published a review of an exhibition of recent Spanish architecture in which the author perceives the ongoing change of course: “it is only in the last year or so that designs of important buildings have broken away from the Escorial-nationalist style and the contemporary style is now firmly entrenched.”

In this initial stage, two events favoured the discovery of Spanish architects by international critics. First of all, the American Institute of Architects awarded the 1957 Reynolds Prize to the canteen of the SEAT factory (fig. 1), designed by the Spanish architects César Ortiz-Echagüe, Rafael de la Joya


and Manuel Barbero. And one year later, in 1958, Spain would win acclaim again with the pavilion presented by Antonio Corrales and Ramón Vázquez Molezún to the Universal Exhibition in Brussels, the first celebrated after World War Two. The Spanish pavilion won the competition’s gold medal.

Both works were built in the second half of the decade and appeared in a variety of international magazines. Sixteen publications included the SEAT canteen, and nineteen, the Spanish pavilion.

The appeal of both these works, in addition to their intrinsic artistic merits, lies in the fact that the authors used them to make the most of their international relevance—for the prize awarded by the American Institute of Architects, Mies was part of the jury; and the Brussels pavillion was part of a Universal Exhibition—in order to present their work to the outside world and, in doing so, open new venues for Spanish architecture as a whole. We could say that they became a focus that allowed international critics and editors to pay attention to Iberian architecture. In this connection, we must highlight the appreciative comment made by J.M. Richards, director of the Architectural Review, who noted the number of people who “were introduced to modern Spanish architecture by the Spanish pavilion at the Brussels International Exhibition of 1958.”

Dieter von Schwarze, in the sixth edition of Baumeister (1967) refers to the pavilion in similar terms, remembering “how the Spanish pavilion surprised us in the Universal Exhibition in Brussels, because of the architectural quality of the building.”

At the same time, from 1957 onwards, a variety of articles introducing Spanish work to the international reader started
to be published. In 1957, the French journal *L'Architecture d'Aujourd'hui* decided to include Spain in an edition dedicated to the work of young architects around the world, which compiled the works of over 80 architects from 21 countries (fig. 2).

A year later, in 1958, the Italian architect Alberto Sartoris published an article titled “Current Spanish Architecture” in *Architectural Design*, in which he described his vision of contemporary Spanish architecture. This publication is particularly relevant. It is the first time that an international critic produced a broad overview of the country’s architectural scene. In these pages and not without a tone of surprise, Sartoris made note of the advances made by Spanish architecture, remarking on the influence that “modern theories” had on this new impulse, which had guided it “on an objective course of development, such as it has not known for a long time.”

Towards the end of the decade, in 1959, another noteworthy article appeared in *L'Architecture d'Aujourd'hui*. The origin of this chronicle can be traced to a letter written by the Spanish architect Miguel Fisac to the journal editors after the rather brief mention of Spain in the aforementioned issue on young architects around the world. In this letter the Spaniard reprimanded the French publication for “not paying enough attention to the work done in the country.” In response to this, the editorial board published a lengthy article giving a complete overview of Spanish architecture in these years, in which, as the editors describe, “interesting and promising works” are compiled. The magazine asked Fisac to provide the material, and an article by him provides a context for the production of the country’s architecture, giving a description of its evolution since the early twentieth century to the current moment, in which, in his own words, “the new generation of architects tends to a renovation” oriented towards “helping Spanish architecture walk on a firm and secure path.” On receiving the material, the editors stated they were “glad to publish some recent Spanish productions,” while at the same time acknowledging the
“commendable effort made by various architects in the country to achieve a modern spirit in their architecture” (fig. 3).\textsuperscript{19}

Through these comments we can see that during the 1950s, Spain went from being completely unknown within the international editorial sphere to gaining some attention from various magazines, with a growing presence as the years went by (fig. 4).\textsuperscript{20} But, as we will see next, the most remarkable aspect of this is that said attention went deeper than the usual attraction produced by something new or exotic.

A Growing Interest in Spanish Architecture

This process of bringing Spanish modernity closer to the world would consolidate in the following decade, as articles on Spanish architecture increased in number—reaching up to 67 magazines in 18 different countries. But this period was marked mainly by the appearance of the first special issues devoted to Spain in international publications.

The 1960s were an heterogeneous period for architecture in Spain, as a result of architects overcoming the International Style and exploring new paths of modernity. This process coincided, from an editorial perspective, with a moment during which architectural periodicals left post-war reconstruction to concentrate on revising modernity and expressing the plurality of the architectural debate from a variety of perspectives, both locally and internationally.
Spaniards had slowly consolidated their architectural production and had garnered a critical mass of projects that had allowed the publication of these monographic issues. In them we find broader studies that contextualize and detail the country’s architecture. Due to the very nature of these “special” editions, their impact and visibility was greater. Between 1962 and 1971, up to thirteen such issues appear in such well-known international magazines as *Werk, Zodiac, Baumeister, L’Architecture d’Aujourd’hui.* But despite this growing interest in Spanish architecture, some of these publications would highlight “gaps” that had yet to be breached, which weren’t related to architecture so much as the country’s political situation. As we have seen, Spain was a dictatorship and this affected the way its architecture was perceived by other countries. In fact, in the monograph produced by *Werk* in 1962 (fig. 5), its director, Lucius Burckhardt states:

*Should we dedicate an entire edition to the young generation of Spanish architects? Would this be misinterpreted in Switzerland—and even Spain? ... Whoever believes in real change in authoritarian governments is wrong. But so is whoever boycotts the cultural ambassadors of a country who have remained in it because of that reason.*

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22 Lucius Burckhardt, “Spanische Architektur,” *Werk* 6 (1962): 185. This is the first monograph published on Spain by an international magazine. The Spanish architect César Ortiz-Echagüe collaborated in its publication.

Figure 5. Special issue on Spanish architecture. (Reprinted from *Werk* 6 (1962), cover.)
Three years later, in 1965, in the monograph on Spain by the Italian *Zodiac*, Vittorio Gregotti points out:

*When we developed this number, about a year ago, we established an objective: to overcome our personal objections to the regime, and to try and go past the traditional figure, based on the fight between regime and resistance, which Spanish life shows to the world.*

As evidenced by their comments, both Burckhardt’s and Gregotti’s approach to the architectural reality of Spain is partly conditioned by the political situation. That is, however, an obstacle that does not halt their interest in the work of Spanish architects. In spite of their ideological distance, they do not despise, and even value, that work. They advance, however, a somewhat overly optimistic or naive view, since Spanish architects held diverse political views under the unifying umbrella of Francoism. As Pérez Escolano argues, “those committed to the uprising, or those who carry it out immediately, are then followed by those who sympathize or compromise out of convenience or necessity.”

In contrast, critics like Bruno Zevi are more radical in their assessments of the country’s political situation. In 1964, in his journal *L’Architettura Cronache e Storia*, Zevi calls on Italian architects not to participate in Spanish architectural competitions as a sign of condemnation of that country’s politics.

At any rate, this approach seems to be unrepresentative of the majority of publications, since looking at the data as a whole we see that in the 1960s the presence of Spanish architecture in the international scene continues to grow (fig. 6). Furthermore, Spanish architecture is also able to overcome the boundaries of Western publishing. So, in 1963, Spanish architecture becomes known in Japan, a country distant not only geographically, but also socially and culturally. The platform for this was the Japanese magazine *Kokusai-Kentiku*, which dedicated an

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extended monograph to the subject.\textsuperscript{26} It is of interest to analyze the genesis of this "exotic" edition.

The origin of this first reference to Spanish architecture in Japan\textsuperscript{27} can be found in the exhibition organized in 1962 by the General Direction of Cultural Relations of the Spanish Foreign Office in the Institute for Spanish Culture in Munich, under the title "Thirty years of Spanish Architecture (1930-1960)." The panels presented at this exhibition were taken to Japan by the final-year students of the Architecture School of Madrid as part of a trip they made in 1962, during which they recreated the Munich exhibition in Tokyo. The Spanish journal \textit{Arquitectura} captured the good impression the exhibition made, which would translate into a "monograph dedicated to Spain ... in the important Japanese magazine \textit{Kokusai Kentiku}.\textsuperscript{28} Adding to this, various Spaniards, such as Carlos de Miguel and Antonio Fernández Alba, collaborated in the edition.\textsuperscript{29}

As in the case of Miguel Fisac, these collaborations are proof of the desire of Spanish architects to build bridges and make their work internationally known. Throughout the decade, more than twenty professionals would provide advice for the issues on Spanish architecture. Foreign editors, when faced with a reality they often barely knew, would travel to Spain or make contact with nationally prominent architects who would help in the selection process for these monographs and helped them understand the important elements of their architectural history. In some cases, this is reflected in the acknowledgements written by the directors of these special editions. For example, in \textit{Baumeister}, in the 1967 monographic edition, they acknowledge the "cordial support, advice and hospitality" which "Francisco Cabrera, Carlos Flores, Ferenç Lantos and Vicente Bonet"\textsuperscript{30} had provided for the creation of the magazine edition.

As well as providing advice, Spanish architects wrote many of the articles included in these editions. Normally they would...
author articles that provided a panoramic vision of Spanish architecture, where they covered its history or the current situation with the objective of getting the reader to understand their national architecture.\textsuperscript{31} Other Spaniards would also collaborate more regularly as special correspondents or by becoming members of the editorial boards of some magazines.\textsuperscript{32}

Spanish Architecture Bridges the Gap

After this wave of monographs that introduced it to the rest of the world, Spanish architecture maintained its place in the pages of international journals\textsuperscript{33} during the first half of the 1970s. But between 1975 and 1986 it would achieve even higher levels of diffusion (fig. 7). In 1975, after the death of Franco, the country started a transition to democracy, culminating in 1986 with its entry into the European Union. Naturally, Spain’s new political situation attracted the attention of international publications and the optimism held for the country influenced how its architecture was seen.

In this last decade, the number of references to Spain in architectural periodicals increased, almost reaching the same number of articles as the entire previous period of study, and producing up to 21 monographic issues.\textsuperscript{34}

International journals give prominence to new names like Rafael Moneo, Juan Navarro Baldeweg, the Solá-Morales brothers, Studio Per and many others. Yet the masters—those architects who had started the path to modernity in the 1950s—are still present. Many of the special issues, such as those published by Architectural Review, Abitare, Controspazio or International Architect, offer a sound perspective on the influence of those masters on the new generation. In this way, those articles establish a kind of genealogy of Spanish architecture that anticipates later important historical works, such as the third edition of Kenneth Frampton’s Modern Architecture, published in 1992.\textsuperscript{35} In Peter Buchanan’s words, at a moment in which modernity seemed to be exhausted, Spanish architecture became relevant because it was able to show “the various approaches still possible with the language of Modernism.”\textsuperscript{36} At the same time, other voices gave a name to the peculiar contribution of Spanish architecture to the international debate, identifying it as “critical regionalism.”\textsuperscript{37} Alexander Tzonis, for instance, argued that in that moment [during the 1980s] we could find in Spanish architecture something that we missed in the


\textsuperscript{32} For example, César Ortiz Echagüe was a member of the editorial board of the Portuguese magazine Binario and a correspondent for Werk. Oriol Bohigas was part of the editorial board at Lotus. Xavier Busquest was a correspondent for Architecture, Formes et Fonctions, etc.

\textsuperscript{33} In these recent years, 191 articles have been located in 72 international magazines.


\textsuperscript{37} The monographic issue on Spain in Techniques et Architecture includes a text on this matter by Antonio Benet Correa with the title “Analytical Regionalism.” But even before, it had been introduced by Alexander Tzonis in “Moderne Spaanse architectuur. De kritisch-regionalistische benadering,” Bouw 1 (1986): 9–15.
main current of postmodern architecture promoted by the media. Spanish architecture was defined by a profound sense of belonging, as opposed to the uniform display of postmodern compositions.\textsuperscript{38}

In the face of international trends that attempted to unify architectural expression in the West through new linguistic and formal patterns, Spain paradoxically gained prominence by opposing those mainstream trends and offering as an alternative an architecture that corresponded to the context and place in which it arose.

\textbf{Conclusion}

The more than 1400 references to Spanish architecture found in about 180 international journals make for a broad and varied sample. The international presence of Spanish architecture through this medium can thus be considered a rich and complex phenomenon. In this paper I have tried to present a general picture highlighting the role played by international architecture journals in the diffusion of Spanish architecture beyond national boundaries.\textsuperscript{39} It is clear that the foreign perspective on Spanish architecture changed substantially in only three decades and international journals were of decisive importance for this change.

In the beginning, international journals started to acknowledge modestly the reality of postwar Spanish architecture, almost entirely unknown in their respective countries. This process became, as it were, normalized over time. Spanish achievements received increasing attention and stopped being a \textit{rara avis} to be registered only exceptionally by international media.

Architecture journals have proven to be a privileged showcase for the diffusion of new ideas and achievements throughout the twentieth century. Their periodical nature and their use to spread news and to exchange opinions made them the most fitting means of making Spanish architecture, which had been considered merely peripheral until the last decades of the last century, available to the rest of the world. One might think that this discrepancy with respect to international trends ended up being a blessing. Modernity came to Spain late, but Spanish architects, detached from the initial euphoria that accompanied it, were able to reinterpret it reflectively, while responding in a coherent and fitting way to the demands of their own local context. At the same time, one should stress the important


\textsuperscript{39} The high complexity of the phenomenon makes it impossible to address it in full within the limits of this paper. Still, having analyzed the data and established a general framework, I am addressing in ongoing research some of the crucial aspects of the process under study, such as the role of Spanish architects in the diffusion of Spanish architecture abroad, the treatment of Spanish architecture by certain foreign critics, and the critical reaction to the work of those Spanish architects who won international acclaim. See Pablo Arza Garaloces, “Exportando Torres Blancas. La recepción de la obra de Sáenz de Oiza en la prensa arquitectónica internacional,” RITA 10 (2018): 154-62; Pablo Arza Garaloces, “Técnica ‘made in Spain’. Detalles constructivos de arquitectura española en The Architects’ Journal (1969-74), in La tecnología en la arquitectura moderna (1925-1975): mito y realidad, ed. Pablo Arza Garaloces and Josee Manuel Pozo Municio (Pamplona: T6 Ediciones, 2018), 117-24.
role that some of them played in the diffusion and appreciation of Spanish architecture abroad. Their contribution was accomplished through the writing of articles, the coordination of monographic issues, as well as through several tasks performed as members of editorial boards or as correspondents for various international publications.
A Tale of Two Buildings Separated Only by the Distance of Time

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In 1850, after designing the Gothic Quadrangle for Queen's College Cork, Sir Thomas Deane designed a new medical building (the Clarendon) on an adjoining site which included a museum, lecture theatre, and demonstration rooms. The Clarendon has withstood times relentless corrosive forces but has undergone many alterations and additions resulting from social, economic and pedagogical needs. O'Donnell and Tuomey's new scheme incorporates adaptive reuse of this building and a contemporary extension to form a new building called the Hub at University College Cork (UCC). The Hub was opened in 2019 and houses many previously dispersed student amenities and a variety of flexible learning spaces. This paper narrates the evolution and transformation of the Clarendon into the Hub while comparing the works of these two acclaimed Irish architects. This longitudinal study of the building seeks to relay and compare a perspective of society through its lifespan. Focusing specifically on the relationship between architecture and pedagogy, this study attempts to ascertain how changes in different learning theories have affected the built environment. The historical study benefits from original archive drawings as well as campus masterplans, conservation reports and historical photographs. While project documents, drawings, visits to the construction site and interviews with the design team support the study of the contemporary works. Although it is easier to differentiate their style and approach to architecture, commonalities exist between the work of Deane and Woodward and O'Donnell and Tuomey.

Keywords: O'Donnell and Tuomey; Deane and Woodward; University College Cork; Queens College Cork; hub; renovation
Sir Thomas Deane (1792-1871) was an architect and builder born in Cork. In 1845 he was appointed Architect for the new Queen’s College Cork (QCC), and the following year he engaged Benjamin Woodward (1816-61) as his assistant. In 1850 his son, Thomas Newenham Deane (1828-99) joined the practice, and in the same year, they began work on the Clarendon Building at QCC. The following year both new employees became partners of the firm. Sir Thomas Deane then became less involved in design work and concerned himself more with the administration. Woodward took the primary responsibility for design work, while the younger Deane looked after the financial matters (see figs 1-3). The firm is acclaimed for their role in the Gothic Revival, and their most famous projects include the Trinity Museum and the Oxford Natural History Museum (figs 4 & 5), completed in 1857 and 1860 respectively.

Architecture responds to the velocity of contextual change, and, as a result, many relatively recently constructed buildings fall into dilapidation, are demolished or become replaced. Buildings designed by renowned architects including Deane and Woodward are not immune from this fate. The 1916 Easter Rising, the Irish Civil War, as well as economic reasons and carelessness are blamed for much of this destruction. In the 1960s, even their most acclaimed project, the Oxford Natural History Museum, narrowly escaped destruction. Fortunately, at the heart of the campus of University College Cork (UCC, formally QCC), two Deane and Woodward buildings survive today. The first is the Gothic Quadrangle completed in 1849 and the second is the Windle Building (formally the Clarendon Building), the first stage of which was built in 1850 (figs 6 & 7).

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Figure 1. Left. Photograph of Sir Thomas Deane (www.artstor.org).

Figure 2. Middle. Photograph of Thomas Newenham Deane (www.artstor.org).

Figure 3. Right. Photograph of Benjamin Woodward (www.artstor.org).
Figure 4. Trinity College Museum, Dublin. (Wood engraving by W.E. Hodgkin, Courtesy of the Wellcome Collection (www.artstor.org).

Figure 5. University Museum, Oxford. (Wood engraving by W.E. Hodgkin, 1855, Courtesy of the Wellcome Collection (www.artstor.org).

Figure 6. Queen's College, Cork. (Wood engraving by C.D. Laing, 1848. Courtesy of the Wellcome Collection (www.artstor.org).

Figure 7. University College Cork Campus. (Map courtesy of UCC. Overlay notes by author.)
In 2014, another acclaimed Irish practice, O’Donnell and Tuomey (ODT), were appointed architects to design the new Hub building at UCC which would incorporate the renovation and extension of the Clarendon.

O’Donnell and Tuomey

Sheila O’Donnell and John Tuomey (fig. 8) were born in 1953 and 1954 respectively and met as students at University College Dublin. After graduating, they went to work in London for James Stirling and Colquhoun and Miller. They returned to Dublin and established their own architectural practice in 1988. As recipients of many international awards, ODT have numerous acclaimed university projects to their portfolio, including the Glucksman Gallery at UCC, the Saw Swee Hock Student Centre at the London School of Economics and the

Figure 8. Top Left. Photo of Sheila O’Donnell and John Tuomey. (Image courtesy of O’Donnell and Tuomey.)
Figure 9. Top right. Model of the Glucksman Gallery at UCC. (Image courtesy of O’Donnell and Tuomey.)
Figure 10. Bottom left. Model of the Saw Swee Hock Building. (Image courtesy of O’Donnell and Tuomey.)
Figure 11. Bottom right. Model of the Central European University Redevelopment. (Image courtesy of O’Donnell and Tuomey.)
redevelopment of the Central European University in Budapest which were completed in 2004, 2014 and 2016 respectively (figs 9-11). ODT were also selected to design the Academic Hub Building at the Technological University Dublin. In 2019 the practice won an international design competition for the new Student Hub at University of Leeds and another for the School of Architecture at the University of Liverpool.

To have had such renowned practices share the role of architect for the Clarendon/Hub, across the divide of time, adds to its distinctiveness. A quotation, which Tuomey has cited from Melville seems fitting to describe the significance of the building’s endurance: “for small erections may be finished by their first architects; grand ones, true ones ever leave the copestone to posterity. God keep me from ever completing anything.” 5 Despite the passage of time, and the obvious differences in the architect’s approach to architecture, certain parallels between Deane and Woodward and ODT are easily accounted for. Both practices have completed a significant number of highly commended university buildings. Both practices were engaged by the same client (QCC/UCC) to carry out another campus projects before being commissioned for this building. Deane and Woodward had completed the Quadrangle while ODT had designed the Glucksman Gallery. Additionally, both firms worked in the same geographical areas, established studios in Cork, London and Dublin while achieving international acclaim. Furthermore, another resonance between the two firms is their connection with Ruskin.

Ruskin’s Endorsement and Influence

Ruskin’s endorsement of Deane and Woodward is well acknowledged and is exemplified by his description of their Trinity College Museum as “the first realisation I had the joy to see of the principles, I had until then been endeavouring to teach.” 6 Along with Pugin and Butterfield, Ruskin’s influence on Deane and Woodward’s work is much accredited. Blau states that Ruskin’s writing, which included his books *The Seven Lamps of Architecture* and *The Stones of Venice*, “struck a responsive chord and not only articulated ideas already nascent in the firms work but gave direction and form to these ideas.” 7 *The Seven Lamps of Architecture* was first published in 1849 and detailed the seven architectural principles or moral attributes Ruskin believed to be inseparable from design. 8 Given the book’s powerful and pervading influence on architecture in the nineteenth century, I suggest it could have already begun to

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influence the work of Deane and Woodward by the time the Clarendon was constructed. The fact that this book is also said to have had an immediate influence on William Butterfield’s All Saints, London (which similarly began construction in 1850), makes this theory all the more conceivable.

In 2015 ODT were presented with one of the world’s most prestigious architectural prizes; the RIBA Gold Medal. At a conference later that year, Tuomey discussed this accolade and reminded the audience that Ruskin was awarded the same prize in 1874 but refused to accept it. Tuomey also stated that *The Seven Lamps of Architecture* was the first book his father gave him early in his architectural education. He focused on one main disparity: Ruskin believed that architecture could be measured only by that which is unnecessary, whereas ODT would “aspire towards an architecture of useful beauty.”

However, this rather inimitable connection and comparison suggests that *The Seven Lamps of Architecture* could provide an interesting framework by which to compare the work of these two firms. It is acknowledged that Ruskin’s principles are complex, often contradict each other and would by themselves require considerable analysis and discussion which is out of the bounds of this study. For this paper, they nonetheless provide a touchstone to compare and contrast the work of the two aforementioned architectural practices across the divide of time.

**Perspective of Society**

This paper provides a discursive analysis of the Clarendon, tracing its origin from the medical teaching facilities into its role as UCC’s new hub building. Through this analysis, a perspective of society through the building’s lifespan is exposed. Ruskin argued for the conservation of ancient buildings because of their links with the past and to communicate eternal human truths. This viewpoint is echoed in Tuomey’s writing: “The language of architecture is not written like in a poem or depicted like in a tapestry, yet intentions are embodied and ideas are communicated by buildings, which speak to each other across the divide of time.”

The many additions and alterations (fig. 12), invariably demonstrate needs arising from different demographic, technological, economic, social and pedagogical forces. I argue that the deepening of the plan in the 1900s for example, is firstly representative of a sudden increase in student numbers; secondly, demonstrative of the introduction of electricity onto the campus, whereby the depth of the plan is not as dependent on natural daylight; and thirdly, illustrative of

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Figure 12. Timeline showing main additions and renovations of the Clarendon Building floor plan from 1850 to present, based on drawings by Jack Coughlan Associates.
the availability of newer faster forms of construction. I maintain that through analysis of the building, through time, the changes in pedagogical theory and practice are most evident in the form and fabric of the building and thus are the focus of this study.

The Quadrangle, 1845-49

Under the Queen’s Colleges (Ireland) Act 1845, three Colleges of Belfast, Cork, and Galway were established “for the better advancement of learning of all classes of Your Majestys subjects in Ireland.”¹¹ The prior success of medical education in Cork is acknowledged as one of the motives for placing a college there.¹² When QCC officially opened in 1849, medicine was one of the three founding faculties. However, despite this, there was no provision for medical facilities. In February 1849, as the construction of the Quadrangle was nearing completion, the QCC President wrote to the Board of Works highlighting the absence of medical accommodation being provided for: “There has been no prospect made for the more specifically medical lecturers, nor the anatomical dissections and demonstrations.”¹³ The reply pointed out that no reference to this accommodation had been made in the original instruction. Subsequently, the lack or inadequate nature of medical teaching facilities at QCC became a recurrent issue. Murphy discusses many accommodation problems with the Quadrangle in its inaugural year but lists the absence of medical facilities as the most serious. A disparity between the failure to deliver these essential teaching spaces and the provision of residences for the College President and Vice-President, which were, in contrast, successfully added to the brief after the estimates were approved is highlighted by Murphy and O’Sullivan.¹⁴

The Clarendon Building, 1850-65

The Clarendon Building was the first Medical building at QCC and was built in 1850. It was constructed at a cost of £1000 and was named after the Earl of Clarendon, who had funded part of the building while the Bord of Works had funded the rest of the project.¹⁵ The building was faced in squared local rubble limestone with cut limestone to the openings and a steeply pitched slate roof. The building possessed several chimney stacks with one laterally placed on the front façade. Along the elevation, several twin-pointed arched openings with small-pane metal pivot casement windows were also positioned (original archive drawings in figs 13 & 14).¹⁶ These features created


13 Murphy.


a building similar in character and style to the Quadrangle. However, in comparison, I argue that the Clarendon is simpler and more austere than it and most of Deane and Woodward’s other work. Without the carved decoration and ornamentation which is a hallmark of Deane and Woodward, it is difficult to credit the Clarendon with the same “spirit of generosity and joy in the diversity of the work” that Blau has praised the Quadrangle of possessing. I suggest that in the design of the Clarendon, less attention was given to the principles outlined in Ruskin’s Lamp of Beauty: Aspiration towards God expressed in ornamentation drawn from nature. The lack of ornamental decoration here may indicate that Woodward did not contribute to this particular project. His involvement in the Quadrangle is not under question, and conversely, archive drawings pertaining to the Quadrangle indicate that Deane first produced the outline drawings and that the detail drawings of ornamentation and

decoration were later produced by Woodward. In contrast, archive drawings of the original Clarendon are signed solely by Sir Thomas Deane.

The floor plans comprised of a professor’s room and preparation room at ground floor level flanked on one side by a lecture theatre and a museum on the other. On the first floor, a dissecting room and demonstration room were positioned to each side of the stairwell. The construction of this building was an attempt to take account of the requirements that had been overlooked in the building of the original Quadrangle and therefore were urgently required. With this in mind, a link can be made between the more austere nature of the Clarendon and the principle outlined in the opening chapter of The Seven Lamps, “The Lamp of Sacrifice.” Here Ruskin attempts to distinguish carefully between Architecture and Building and places priority on creating a basic structure and enclosure of space over decoration and ornamentation to provide a required function: “Do the people need place to pray, and calls to hear His word? Then it is no time for smoothing pillars or carving pulpits; let us have enough first of walls and roofs. Do the people need teaching from house to house, and bread from day to day? Then they are deacons and ministers we want, not architects.”

Within a few years after the opening of the Clarendon, a Medical Council Report acknowledged a very unsatisfactory state of affairs, low morale and poor building conditions. It considered that the theatre was “injurious to health” while concluding that a new medical building was crucial. A dramatic increase in the number of medical students registered (27 in 1864 to 133 the following year) greatly exacerbated things. Here a tragic yet compelling case in point of Zille’s axe and building analogy can be made; overcrowding and lack of ventilation allowed the spread of typhoid fever and tuberculosis which was directly linked with the death of two students. In 1865 a complaint was made through the College Council that the demonstration and dissection rooms were insufficient and that ventilation “was positively prejudicial to health.” Although the Board of Works retorted that there were only funds for essential maintenance and repair, later in 1865, the Treasury agreed a new lecture room was necessary.

Extensions, 1865-88

Thus, two building projects ensued shortly afterwards. The first of these involved the construction of a lecture building to
the southernmost side of the Clarendon in 1865. The second incorporated a central portion which was added a year later to link the previous work to the original building (fig. 15). An additional phase of work was carried out in 1878 under the presidency of Sullivan who placed importance on physical science and medical education as well as a new emphasis on practical instruction. This addition consisted of a two-storey extension of five bays to its northern gable as well as a double-height museum building further to the north. The next phase of work consisted of renovations to the southern-most building involving raising the roof to provide a double-height lecture theatre and tiered seating.

The architecture of these first extensions and alterations were carried out in the same style as the initial Clarendon to such an extent that the original building was asserted to be “barely distinguishable as a once separate entity.” The accommodation provided for in the original building of these first extensions are listed in Table 1 and illustrate the emphasis on the lecture theatre as a space of learning, but also highlight the emergence of other learning spaces such as the museum and places that facilitate practical instruction.

<table>
<thead>
<tr>
<th>DATE</th>
<th>1850</th>
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<th>1866</th>
<th>1877</th>
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<td>Lecture Room</td>
<td>Preparation Room</td>
<td>Professors Room</td>
<td>Museum &amp; Gallery</td>
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<td>Lecture Theatre</td>
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<td>Museum</td>
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22 Murphy, The College.


Figure 15. Top. R. French & W. Lawrence, Queen’s College, Cork City, Co. Cork (1866-77). Courtesy of the National Library of Ireland.

Table 1. List of Accommodation provided for in the first five phases of work of the Clarendon building.
The Windle Building, 1900-70

Early in the 1900s, the Clarendon became known as the Windle Building after Professor Bertram Windle was appointed President of QCC. Since then other phases of work included a miscellany of smaller ad hoc additions to the western side of the building. These additions generally consisted of single-storey flat roof extensions of poor construction that demonstrated little respect for their historical context.

The Lamp of Memory: Resisting Destruction, 1970-2011

The fact that the client and function of the Clarendon have remained the same since 1850 has undoubtedly helped its durability. Nevertheless, like the Oxford Museum, the Clarendon narrowly escaped demise. The 1970s UCC Development Plan, produced at the height of postmodernism, concerted to demolish and replace the building in its entirety. However, the 1993 Development Plan conceded that “funding for this building programme would not keep pace with the continuously increasing demands for places” and thus it survived. The building continued to be used by medical anatomy students up until September 2011 when the department relocated to the new Western Gate Building with state of the art laboratories.

The Hub, 2014 to the Present

ODT were appointed architects for the Hub in 2014 (figs 16, 17, 18 & 19). Construction commenced in 2017 with a contract value of €12.1 million and the building was finished in December 2019. The Hub is 3,800m² spread across six storeys. The height was established so as not to exceed the roofline of the Quadrangle tower. ODT developed a site-specific sculptural concept, “which uses the Windle Building as its organising element.” They refer to the solidity of the historic Windle Building which they recognise as “a stable anchoring element around and through which the building accommodation is woven.”

The Lamp of Power

In its most basic form, the Hub can be broken down into four spatial elements: firstly, the linear monolithic volume of the Windle Building; secondly, the double-height curved cut-stone...
Figure 16. Site Plan illustrating campus spine by O’Donnell and Tuomey. (Drawing courtesy of O’Donnell and Tuomey.)

Figure 17. Ground Floor Plan of the Hub. (Drawing courtesy of O’Donnell and Tuomey.)

Figure 18. Top. East Elevation of Hub. (Drawing courtesy of O’Donnell and Tuomey.)

Figure 19. Bottom. West Elevation of Hub. (Drawing courtesy of O’Donnell and Tuomey.)
wall which encloses the open plan area of the “Market Hall” and responds to the established campus movement patterns (fig. 16); thirdly, the vertical volume of the upper three floors of the “Lantern” which protrudes up through the market hall volume; and finally, the external landscaped plinth which includes a grove of trees, a projected canopy and brick paving that extends through the ground floor of the Hub. It is clear that the scheme aligns with Ruskin’s Lamp of Power and that it has been thought about in terms of its massing, setting and in relation to its line of view which goes through the building.

Lamp of Truth

In consonance with the principles outlined in Ruskin’s Lamp of Truth, both Deane and Woodward and ODT tried to display an honesty of materials and structure. A comparison can be made in terms of the standard palette of materials used by the two firms. Tuomey suggests that their selection of brick, concrete and timber is made because of the character these materials possess to be robust and resilient to time. Deane and Woodward generally used those materials which were endorsed by Ruskin; clay, wood and stone. A substitute for concrete instead of stone is an obvious difference. However, Tuomey offers a compelling comparison between concrete and stone in that both are monolithic materials which reveal elements of their formation: “poured-in-place concrete reveals the conditions of the construction site in the finished building, in the same way quarried stones connect a medieval tower-house to its surrounding field pattern.” Nevertheless, it is acknowledged that a comparison of the materials used in the Hub diverts slightly from their standard pallet. It is evident that not just in terms of materiality, the historical context has influenced the contemporary. For example, the limestone around the market hall is cut to reflect the angle of the original limestone reveals and mullions in the Quadrangle and Windle building.

Internally a monumental and monolithic style of architecture is created which responds to a human scale and, which I contend, is comparable to much of Louis Kahn’s work or to Denys Lasdun’s National Theatre in London. Like these buildings, much of the concrete structure of the Hub is exposed and left bare and textured brick is also a prominent material used.

Tuomey offers an insight into the reason brick is often used as a building material by their firm. Stating that “the beauty of bricks comes from its closeness to raw material - portable packs
of clay pigment. Brickwork gives an intricate close-up scale, like a basket weave, and malleable heft when viewed from afar.30 In contrast, a stark disparity in the architects’ approaches is also evident in the materiality of the building. ODT have chosen to whitewash interior sections of the Windle Building and paint the historical timber roof trusses white. We can only assume from the following quote by Ruskin that this is an approach that neither he, nor Deane and Woodward would have followed: “If the intermediate shell of a Gothic roof were made of wood instead of stone, and whitewashed to look like the rest, – this would, of course, be direct deceit, and altogether unpardonable.”31 The approach by ODT was intended to homogenize the building and its many modifications. The whitewash section of wall, for example, brings coherency to the inconsistent cut stone, poor quality brick and concrete infills while retaining the evidence of its many alterations.

Lamp of Life

In cognisance with Ruskin’s Lamp of Life, the two firms tried to use local materials and indigenous skills. Much of the work of Deane and Woodward took place after the devastation of the Irish famine and used local materials and craftsmanship to boost the local economy. It is thought that like the Quadrangle, local stone quarried to the North of the site would have been used for the Clarendon. Tuomey has discussed his motive for using local material and craftsmanship, stating: “We are looking for a way of thinking which could provide an integration between construction and site, are recasting of the redundant craft condition which, by tradition, would exploit local materials and harness indigenous skills.”32 For the Hub, the design team went to great efforts to use local materials. Roscommon limestone was used for the wall surrounding the Market Hall, but due to the scarcity of skill and facility in cutting stone in Ireland it was deemed more feasible in terms of scale and economy to send the stone to Portugal for cutting before being delivered to site.

A Change in Pedagogy and in Function

Today, UCC is a research-intensive and student-centred university. The current Strategic Plan and Academic Strategy outline an ambition to create a connected university by enhancing and strengthening its long-standing connections and providing opportunities for innovation and creativity.33 The Hub will provide a space to promote collaboration, innovation

30 Tuomey, Architecture, Craft and Culture, 42.
31 Ruskin, The Seven Lamps of Architecture, 30.
32 O’Donnell + Tuomey Architects in:Situ, 43.
and new ways of learning at the centre of UCC’s campus. The building contains a significant number of integrated student services, learning spaces, as well as a new home for the campus radio station and is intended to be flexible and adaptable to current and future learning needs.

Today, the consequences of connection with nature and the outside world for well-being and learning is acknowledged and affirmed. Visual connections of this scheme, in the form of views into, out of, and through the building, help to create a sense of connection with the campus, city and with other spaces within the building. This also helps to express university life in a transparent manner. The Hub offers views out over the city’s skyline through the “Lantern” of the upper floors. Furthermore, the broadcasting windows proposed for UCC 98.3fm, positioned on the ground floor, allows views into and through the working radio station which ensures links are developed and maintained between students and the community of Cork. I envisage that the visibility and new location of the station, overlooking the entrance to the Hub, will help to create a sense of connection between UCC and the wider community.

Lecture-Based Learning

As I have discussed, the accommodation provided for in the original Clarendon Building as well as its first extensions, illustrate the emphasis on the lecture theatre as a primary space of learning during that time. The origin of lecture theatres can be traced back to about 500 BCE with the Theatre of Dionysus in Athens and to the auditoria of ancient Rome. Such a space was first used for education purposes by Pope Gregory VII to educate the clergy around 1079. These auditoria were filled with monks copying the words read by the reader (lecturer). The first universities in Bologna and Paris perpetuated this model and so too did the universities that followed. Despite the fact that the lecture theatre has remained the most common type of learning space in universities, there will be no formal lecture theatre in the Hub. The provision of a large multipurpose auditorium for the university was explored at the feasibility stage but was later discarded. This represents a move away from the traditional lecture room with emphasis placed on the more social aspects of learning. It should be noted however that the Irish economy had by then entered into a recession and economic depression and therefore the ability to finance a large auditorium may have proved difficult to accommodate. The facilities provided for in the Hub are reflective of the change in pedagogical practice and
theory whereby learning is more recognised as a social activity that takes place as a result of interactions between people. In any case, the design of the building responds to this and aligns with Edwards proposals for “an island of reflection” in a central atrium or an internal “street” like space to promote social interaction.34 A welcoming open-plan space, coined the “Market Hall,” is positioned on the ground floor of the Hub is intended to be a flexible space which is crisscrossed and flanked from above by bridges and balconies which provide additional informal space. The student-centred nature of the Hub is in stark contrast to the hierarchy evident in the architecture of the Quadrangle and the original Clarendon, which prioritised professors and presidency residencies over medical teaching facilities. The student-focused nature of the project is also apparent in the provision of an informal tiered seating area that was not entirely explicit in the initial project brief. This learning space emerged in part due to requests received by the Students Union representatives and by the Teaching and Learning Steering Group at the preliminary design stage. It is intended to be used both formally and informally and, like many other spaces in the Hub, to be bookable by students and staff of UCC.

Practical Learning

Despite the emphasis placed on the lecture theatre as a place of learning, practical learning spaces began to be commonly used by academics, in the science disciplines, internationally in the 1800s. These types of spaces are represented in the original Clarendon Building and early extensions with its dissecting rooms. Bologna was the first university in Europe to undertake dissection for anatomy teaching in 1156 while officially approving human dissection in 1406. The dissecting room at Bologna was designed so that a professor could sit at a height and oversee the proceedings while a lectern was provided for a reader below who provided instructions from the texts. While the design of this and the hierarchy represented in it are said to have had a significant impact on universities still today, the first dissecting room in the Clarendon is simpler in design with little resemblance. The 1870s addition, however, has more in common and perhaps represents the emphasis placed on active learning and practical instruction by the president of UCC during this time.

Today active learning is integral to learning across all disciplines and students are encouraged to engage with the material, participate in the class, and collaborate with each other. The
Hub responds to this change in practice while prioritising group work and open-plan spaces that encourage interaction. Flexible and active learning spaces such as the Makerspace and university radio station, positioned on the ground floor, are also given priority to encourage students to learn while doing.

Object-Based Learning

The presence of a medical museum at QCC in 1850 highlights the importance placed on the museum in Ireland. During this time, the museum was perceived to be acting as a contributor to new knowledge and research and was reflective of a gradual shift away from a perception that education was solely for the elite. In the museological context, object-based learning outlines learners’ active engagement with museum collections within a student-centred framework. While the history of anatomical museums in Europe can be traced back to 1699 when the anatomical museum at the Barber Surgeons of Edinburgh was opened, the oldest university in Europe (Bologna) did not create a medical museum until 1788. It wasn’t until the nineteenth and early twentieth centuries that the museum widely became an integral part of the student experience and this is manifested in the design of the original Clarendon and its extensions of the 1800s. The emphasis changed in the intervening years and is reflected in the Clarendon’s alterations of the early 1900’s when the double-height museum space was floored over. The 1980s is said to have brought back “a revolution in academic understandings of objects” which Paine proposed gave “back to museums and their collections an academic importance they had lost.” The renewed interest in the museum as a place of learning is reflected at UCC today through the Glucksman Gallery. Through the Gallery’s curatorial and educational programmes, UCC embodies, again, a culture of innovation and endeavours to welcome and engage with the public while learning from its artefacts.

Conclusion

The Clarendon, designed by Sir Thomas Deane in 1850, has since undergone many alterations and additions. The phases of work conducted on the building in the 1800s illustrate the emphasis on traditional teaching in lecture rooms while also reflecting the new importance placed on the museum and practical teaching. The ad hoc extensions of the 1900s together with the development plans of the 1970s and 1990s, however,
reflect a lack of respect and regard for the architectural heritage of the historic building. These items also reveal a fundamentally pragmatic approach to the burden of supplying teaching space for rapidly increasing student numbers. Today, a new scheme designed by ODT incorporates adaptive reuse of this building and a contemporary extension to form UCC’s Hub. This scheme demonstrates consideration and value for the original structure and materiality of the historic building while reflecting the importance of connectivity, flexibility and social spaces for learning. The historic building is used as an organising element in the overall design of the Hub. Other influences of the Clarendon and the Quadrangle on the new scheme is apparent in terms of its scale, form, sightlines, rooflines, route through and the materiality employed. Although it is easier to differentiate between their style of architecture this paper draws upon the many similarities between the work of Deane and Woodward and ODT, including the importance placed on truthful construction and the use of indigenous materials and craftsmanship. This paper has charted the history and evolution of the Clarendon through a linear progression while focused on architectures temporality. This process reveals a building which directly reflects social, pedagogical, economic and institutional mores in any given period. Due to its survival as well as its comparatively austere and less precious nature, the changes, additions and extensions of the Clarendon offer a strong perspective of pedagogical change through its lifespan.
In the 1970s, the Jewish émigré architect and writer Paul Ritter (1925-2010) initiated a series of experiments with modelled concrete in Western Australia. Paul Ritter taught at the Nottingham School of Architecture from 1952 to 1964 and became the first City Planner of Perth, WA, in 1965. After his very own Planned Environment and Educreation Research Institute (PEER) licensed a machine to model concrete by using polystyrene moulds, Ritter was asked to design a series of seven pedestrian underpasses in Rockingham Park in Perth. These walkways formed a footpath system in a pioneering Radburn-style housing scheme often used by children on their way to school. By decorating the distance between home and school with animals and inserting games on the concrete surface, Ritter wanted to make the “anxiety-ridden” walkway from home to school into an “attractive playspace” or a “clubroom for children.” This paper takes Ritter’s experimental so-called “sculp-crete” designs and his collaborations with school children as a starting point to reflect on the architect’s position in the civic realm and in non-professional education.

Keywords: Environmental education; Paul Ritter; childhood; urban planning; civics
With architecture becoming a registered profession in the early twentieth century in most western countries, architecture and design communities started to question who should be enfranchised to talk about and make the built environment.

One specific instance of this debate that has largely remained under the radar is the rise of “Environmental Education” in the 1960s and ‘70s, often-short-lived programs dealing with people’s relationships and their natural and man-made surroundings. These studies were not only added to curricula in architecture schools, but also made their way into formal and informal education of children.1

Architectural journalist Ellen Perry Berkeley already observed these programmes in the US in the mid-1960s.2 The “MATCH box project” initiated by the Children’s Museum in Boston in collaboration with the US Office of Education and architect Tunney Lee, for instance, introduced children to the concept of the city.3 Kevin Lynch’s Growing up in Cities, to give another example, was the result of a 1977 UNESCO project designed to involve young people in the planning and creation of their urban environment, and focused on the cities of Cracow, Melbourne, Mexico City, Salta, Toluca and Warsaw.4 One year later, the anarchist writer and educator Colin Ward (1924-2010) interpreted the city as an educational resource, not only for aspiring architects but also for children.5

According to Jeff Bishop, Eileen Adams and Joan Keen, who were at the base of the Environmental Education phenomenon in Britain, the movement was framed by several strands of theoretical inquiry and by different actors.6 It was firstly rooted in the writings on community, citizenship and participation by, for instance, Paul Goodman and Jane Jacobs.7 To a lesser extent, it also integrated sociological studies on people and their environment of, for instance, Kevin Lynch, Robert Sommer and Donald Appleyard.8 And lastly, it took elements from early-twentieth-century childhood development theories and progressive educators, such as Friedrich Froebel and Jean Piaget.9 The focus of these environmental education projects was on how children could gain active, urban agency and thus on how to decrease the distance between children and their day-to-day environments. Or, as Berkely noted, their goal was not “a better professional, but a better citizen, an adult with a developed sensitivity toward his surroundings and a sense of interactions possible between himself and his environment.”10 These ideas were echoed in the report on the 1972 UN Human Environment conference in Stockholm, made by the British Department of Environment:


3 Tunney Lee and MA Children's Museum Boston, Teacher's Guide to the City: The MATCH Box Project; Prototype Edition (Washington, DC: ERIC Clearinghouse, 1965). Other educational projects discussed by Perry Berkeley were workbooks (developed by Richard and Hatch Associates, or by the architectural firm Murphy Levy Wurman), mini-courses, electives, classroom toolkits, a model city project consisting of a set of lego blocks, urban walks and urban photography projects.


Environmental education and the exercise of citizenship go hand in hand: the opening-up of opportunities for public participation in decision-making is the most important of all means to environmental education, which should aim at developing a critical, moral and aesthetic awareness of our surroundings. 11

This paper is the second part of a diptych study on the notions of architecture, childhood and civics in the work of the eccentric and provocative Jewish émigré architect Paul Ritter (1925-2010). Paul Ritter was born a Jew in Czechoslovakia and was 13 when he saw the Nazi tanks rumbling in. 12 As one of the oldest boys on the refugee children’s train, the so-called Kindertransport, he escaped to the UK in 1939. 13 He started his studies in architecture at Liverpool University in 1942 and in 1946 he married a fellow-graduate Jean Patricia Finch, who was trained in botany, zoology and education. Ritter lectured at the Nottingham School of Architecture from 1952 to 1964. After being dismissed (but reinstated) in Nottingham, he was appointed Perth’s first city planner in 1965. 14 His incapacity to deal with bureaucratic structures and his fierce and successful opposition to the plans for an eight-lane freeway stirred the emotions in the Perth City Council and, two years later, he was wrongfully dismissed following false allegations by the Town Clerk. 15 Many Australian architects who studied in the 1960s will also remember Ritter as a colourful guest at the 1966 AASA student conference Education in Architecture in Perth.


13 He was first fostered in Cleethorpes and later in Penzance. Correspondence with Leonora Ritter, August 23, 2019.

14 Ritter was dismissed because he submitted a false medical certificate after the Education Sub-Committee had refused his application for leave of absence in order to undertake a lecture tour overseas. The doctor who wrote the Medical certificate backed Paul’s successful appeal against the dismissal. He was reinstated, but when the School moved to the University and all lecturers had to reapply for their jobs, Ritter was not appointed. Letter from the Director of Education to the Members of the Governing Body of the College of Art and Crafts, March 23, 1964 (State Library of Western Australia, 9289A/26, 1964).

15 Again, he successfully appealed his dismissal. He received damages, but was not reinstated. Correspondence with Leonora Ritter, August 23, 2019.
where he circulated his ideas on creativity and self-regulation in architecture education.\(^{16}\)

The first part of the diptych study focused on Ritter as an educator at the Nottingham School of Architecture and looked at how ideas of childhood creativity and the notion of innocence played out in the profession as a means to bolster the discipline when architecture was ostensibly losing ground to engineers and building specialists. This paper rather opens up the field of non-professional architecture education and zooms in on Ritter’s artistic educational projects for and with children in Western Australia in the 1960s and 1970s. Ritter not only developed a theoretical understanding of children’s creativity and the environment in his written oeuvre, but was also actively seeking opportunities to test out his ideas within and beyond school walls.

As Roy Kozlovsky argued in *The Architectures of Childhood*, the dominant approach of studying public art often is the design-centred perspective, “which raises questions of aesthetic value or themes autonomous to the architectural discourse such as style and authorship.”\(^{17}\) This paper proposes another way of analysing these projects by reflecting on how children were constructed as active citizens through non-professional environmental education. I will position Paul Ritter in the environmental education movement by employing primary archival sources kept

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in the State Library of Western Australia alongside unpublished material and interviews with Paul Ritter’s close relatives. Erica Ritter shared her memories, showed some of the remaining art projects and gave me access to the personal archives. Leonora Ritter let me read and use her extensive, unpublished biography of Paul Ritter. And David Nichols has kindly sent me an interview he did with Paul Ritter in 2007.

From Designing for to Designing with Children

Paul Ritter established the Planned Environment and Education Research Institute (PEER) in 1953, together with Jean Ritter. The Institute aimed to integrate art and science in professional and non-professional education and to provide art teachers and school directors with “professional architectural advice.”

In the 1970s, the institute promoted a technique called “Sculpcrete,” obviously a merger between the words concrete and sculpture (fig. 3). By using heated carving tools on a polystyrene surface, a mould was created. After adding colour to the polystyrene

Figure 3. Early sculpcrete technique in Rockingham Park Kindergarten operated by Paul Ritter, Erica Ritter and Ralph Hibble. (Reprinted from Paul Ritter, Concrete Fit for People, 62.)
mould, concrete was poured into the bas relief pattern. Once the concrete was dry, the polystyrene mould was dissolved by using a chemical solution. Ritter went as far to assert that the revitalisation of an “open ended technique” such as sculpcrete would:

[…] bring a new richness to architecture, longed for by people and seemingly forgotten by architects. The emasculating sameness of our city centres, our schools, the world […] the most negative aspect of internationalism could now change into an enlightened network of local and appropriate styles.\(^{19}\)

Some traces of the Institute’s first sculpcrete application for children can still be found in Rockingham, a coastal city south of Perth. In 1969, Ritter was asked to design a “show-piece” kindergarten and seven underpasses that were part of a footpath system in a pioneering Radburn-style housing scheme indebted to Clarence Perry’s inter-war neighbourhood-unit concept and carried out by Clarke-Gazzard Partners and the city of Rockingham (fig. 4).\(^{20}\)

In Rockingham Park, all access roads were moved to the outer margins of the neighbourhood. All houses—mostly white, middle class single-family houses—had a private yard and

Figure 4. Rockingham Park, sketch by Paul Ritter. (Courtesy of State Library of Western Australia, 9289A/344.)

19 Paul Ritter, Student Participation in School Architecture with Sculp-crete, undated manuscript (State Library of Western Australia, 9289A/237, 1979).

20 An Educational Experiment. Rockingham Park Kindergarten, brochure (PEER Institute; State Library of Western Australia, 9289A/519). Ritter, Concrete Fit for People, 62. The Kindergarten is also mentioned in Philip Goad, “Post-War And Polygonal,” Architectural Theory Review 15, no. 2 (2010), 177. Various newspaper clippings are kept at the State Library of Western Australia (9289A/8).
immediate access to a pedestrian walkway that connected all houses to a shopping area, park, playgrounds, a primary school and the kindergarten. Though the idea of the school at the heart of the community gained public popularity in mid-century America, it was not unprecedented in Australia either. In their article “Educational Spaces and the ‘Whole’ Child,” Sianan Healy and Kate Darian-Smith observed that Victoria’s Town and Country Planning Association in the mid-1940s suggested that modern schools “erected at various easily accessible points within each community were core to the requirements of the modern city.” Ritter’s sculpcrete experiments thus unfolded at a time that ideas of civic renewal were consolidated in planning and education. Ritter himself was a fierce advocate of safe communities through the separation of motorised traffic and pedestrians, and had already developed this line of argumentation in his book Planning for Man and Motor (1964, fig. 5).

The kindergarten was erected out of six prefabricated, pre-moulded concrete sections (figs 6 & 7). A building composed of six hexagonal pavilions and connected semi-closed verandas, forming a seventh in the centre, supposedly allowed for a variety


Figure 6. *Top left.* Rockingham Park, kindergarten ground plan. (Courtesy of State Library of Western Australia, 9289A/9.)

Figure 7. *Top right.* Newspaper article on the opening of Rockingham Park Kindergarten (Courtesy of State Library of Western Australia, 9289A/319.)

Figures 8a and b. *Left top and bottom.* Two of the seven underpasses in Rockingham Park. Ritter depicted underwater scenes, paradise birds, kangaroos and a series of iron windows in walls. (Photographs by author.)
of learning activities. Children could work in small groups, and teachers had a full overview from the central space. The exterior was completed with a continuous sculpcrete frieze of smiling children’s faces and, on the outside wall at the entrance, the words “Welcome, we love you” were added. Ritter’s ideas were clearly in line with postwar progressive pedagogies which stimulated creative expression as a basis for academic skills at a later stage.

For Ritter, however, creativity not only had to be stimulated in schools, but also beyond school walls (figs 8a&b). The seven decorated underpasses, which a journalist at that time called “participation sculptures,” each held a sculpture panel, variously depicting kangaroos and typical Australian landscapes, underwater scenes, paradise birds and a series of iron windows in walls. Children were invited to caress the sculptures, look for and excavate hidden treasures under thin layers of glaze and concrete and to use the images in their play. As Ritter wrote in his book Planning for Man and Motor, these separate path

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23 Goad has made a survey of post-war polygonal plans in Australia. See Philip Goad, “Post-War And Polygonal,” 166–86. See also “A new type of kindy” (newspaper clipping, source unknown, no date, State Library of Western Australia, 9289A/8).


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Figure 9. School kit promotional leaflet published by the PEER Institute, no date. (Courtesy of State Library of Western Australia, 9289A/343.)
systems were to make “meaningful and plentiful connection with the surrounding areas, satisfying ‘desire lines’ and giving opportunities for creative additions and citizen-participation.”

After their work in Rockingham, the PEER Institute marketed a school kit with sculpcrete tools, which they tried to sell for $250 dollars each in schools in West Australia and Victoria, relying on similar claims of childhood creativity. Paul Ritter actively sought the support of the Western Australian Education Department, which introduced the tool kit in many schools by means of a circular sent out by the Superintendent of Art R. S. Sampson, who believed the tool kit “linked very positively with art curricula.” The many order forms in the archives show that the kits were ordered by principals and art teachers of both primary and secondary schools (fig. 9). An early example of a big-scale project with school children was the Townscape Aborigine Serpent Project, initiated by Paul Ritter, Ken Colbung and the Nyoongah Community in 1969. Another project was the “Perth Pageant,” a series of sculpcrete panels that were displayed all over the city to celebrate the 150th anniversary of Perth and which handily coincided with UNESCO’s International Year of the Child in 1979. Eighty students from different schools


27 These networks might well have been established by Jean Ritter, who was a member of many educational boards and advisory committees from the 1950s until the late 1970s. See Ritter and Ritter, A Fascinating Record, 6.
collaborated on these glass-reinforced concrete panels which depicted different aspects of the history of Western Australia such as the history of architecture, transport, railways, bridging, mining, water supply, wine-making and agricultural machinery (fig. 10).

With these later sculpcrete projects, Ritter stimulated sketching with freehand tools invented by Ralph Hibble, thus allowing for material experimentation and creative expression on the polystyrene moulds. In retrospect, Ritter’s experiments show a deep-rooted, almost naïve, belief in the transformational power of the arts and culture on the built environment. His claim that his sculpcrete experiments enabled citizen-participation might be considered over-ambitious. Whereas Ritter’s statements on the effects of his projects on the environment and on the creative development of children should be accessed critically, it is not my intention to merely focus on their operation effectiveness in this paper. Rather, in what follows I want to outline the intellectual context in which such claims could arise.

**Environmental Therapy**

The hope that civic virtues could be invoked by tactile and aesthetic encounters in the built environment aligned well with the inter-war idea that visual arts could stimulate children’s creativity and ultimately to make them more social citizens. In Australia, the notion of education through art was widely discussed in educational circles. According to Healy and Darian-Smith, the New Educational Fellowship (NEF) conferences in 1937, hosted in Australia and New Zealand, devoted a special session on “Education Through Art.” In 1958, Bernard Smith edited the book *Education Through Art in Australia* (1958), including essays presented at conferences organised by the NEF and UNESCO during the 1940s and ’50s alongside international perspectives. It must not surprise that Herbert Read (1893-1968), who tried to provide empirical evidence for the need of art in the public school system in his book *Education through Art* (1943), wrote the introduction of Smith’s book. Read’s book was widely picked up by art-education enthusiasts, and he was a welcome guest speaker at the 1963 UNESCO conference *The Fostering of Imaginative Thinking by Art Education*, held in Canberra from May 24 to 31. For Read, who followed in Schiller’s footsteps and relied on psychological theories, art could enable the healthy and cognitive development of the child and would ultimately create a stable and productive society. No archival documents can prove that

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Ritter was aware of the Canberra conference and that he was active in circles of art educators. But in an undated manuscript on student participation in Australian school buildings, Ritter referred to Read as “my old friend,” who advocated the “therapeutic aspects” of art. In the work of Read, Ritter most probably found justification for art in the urban environment as it arguably fostered civic dispositions, such as learning to take responsibility and govern the environment.

One could easily confuse these dispositions with a plea for sustainable design, as was the case in the work of for instance Victor Papanek in the 1960s. Yet, the early Environmental Education movement as defined in the diagram of Jeff Bishop, Eileen Adams and Joan Keen was far from a fullgrown ecological movement. Whereas first steps were taken to understand the environment as being shaped, transformed and deteriorated by human actions such as pollution and overexploitation of natural resources, the notion was foremost used as a broad framework to theorise inter-connectedness and relationships. In the case of Ritter, the spheres of civics, participation and childhood were engaged to respond to psychological challenges in society rather than ecological ones and sculpcrete was seen as a form of environmental therapy. The hope Ritter had invested in art in the built environment was underpinned by the rationale that society suffered from an “emotional illness” because it suppressed all forms of creativity. This thesis of a “sick society” already gained momentum in psychoanalytic circles in the late 1930s. Paul and Jean Ritter were influenced by the Scottish educator A. S. Neill (1883-1973) who rejected all forms of institutional learning or disciplining and his mentor Wilhelm Reich (1897-1957) who was an Austrian psychiatrist advocating the self-regulative potential of children. Reich and Ritter both were émigré intellectuals haunted by the spectre of the Holocaust who saw experimentation from a teleological perspective, striving to cure the ills of society through experimentation and design. In her book Designing the Creative Child, Amy Ogata even speaks of a postwar obsession with creating “healthy personalities.” Ritter's work should thus be situated in this broader field where creativity was seen “as an individual form of thought and action,” in essence “a humanist value and an epitome of a democratic personality.”

32 Undated manuscript written by Paul Ritter, Student Participation in School Architecture with Sculp-crete (State Library of Western Australia, 9289A/237). Apparently, it was Read who proposed the title of Ritter's book The Free Family (1959), which he wrote together with Jean Ritter. See Ritter and Ritter, A Fascinating Record, 28.


37 Ogata, Designing the Creative Child, 135.
Conclusion

Underlying Ritter’s sculptcrete projects was the idea that environmental change could arise from “starting young” and that environmental literacy could raise a new and healthy generation. What we learn from looking at recent scholarship on childhood designs, is that these objects and sites were instrumental in the socio-cultural and material constructions of childhood.38 Amy Ogata argued that childhood was one of the most intensely governed sectors of personal experience in postwar US.39 She interpreted the carefully constructed image of children’s authentic creativity in education and different media as a home-grown weapon of the Cold War. Children were these passive, helpless creatures who needed protection in the secluded domestic sphere, but were also increasingly seen as consumers and active participants to community life. In his book the Architecture of Childhood, Roy Kozlofsky argues that children were also an important trope in postwar planning discourses. Team X members Aldo van Eyck and the Smithsons for instance used images of playing children in their collages.40 The child was a central asset in a conscious project of revitalizing postwar architecture and planning through social and participative processes.41 Whereas the political context in Australia was different from the US and Europe, the notion of childhood creativity almost always indicated flexibility, or the agency to adapt or change the built environment.42 In postwar architecture culture, children had become flag-bearers of optimism and their potential of creative intervention a cherished Romantic construct and antidote to rationalised planning methods.

Our account of the history of architecture education and the question of who is enfranchised to transform the built world might be broadened by also considering how architecture was learned and taught—formally and informally—in non-professional settings. Even today, tool kits for children based on Dewey’s learning-by-doing principle are developed by professional bodies and independently run educational platforms and aim to stimulate environmental thinking from an early age.43 This urges us to ask what kind of visual literacy is necessary to converse about design and the built environment. And, what roles can professionals play in such educational processes, apart from being “arbiters of aesthetic principles”?44

38 Marta Gutman and Ning De Coninck-Smith, Designing Modern Childhoods: History, Space, and the Material Culture of Children (New Brunswick, NJ: Rutgers University Press, 2008); Kate Darian-Smith and Carla Pascoe, Children, Childhood and Cultural Heritage (London: Routledge, 2012); Ogata, Designing the Creative Child. These objects were also displayed in large-scale exhibitions such as the Century of the Child. See Juliet Kinchin and Aidan O’Connor, Century of the Child: Growing by Design, 1900-2000 (New York: The Museum of Modern Art, 2012).

39 Ogata, Designing the Creative Child, x.

40 Kozlofsky, The Architectures of Childhood, 219–49.

41 Kozlofsky, The Architectures of Childhood, 221.


Communities of Faith: Regional Queensland’s Innovative Modern Post-war Church Architecture

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The tyranny of distance delayed the construction of permanent ecclesiastical buildings in most townships in regional Queensland. While Brisbane, the state’s capital, had made significant strides in church construction by the mid-twentieth century, Queensland’s regional areas remained remarkably, even deplorably underserviced. From the 1950s, Queensland’s Christian denominations embarked on church building campaigns and engaged local architects to create some of the most daring and expressive modern churches in the state. These include “maverick architect” Edwin Oribin’s Mareeba Methodist church (1960) and St Andrew’s Presbyterian in Innisfail (1961); Neville Willis’ St Andrew’s Church of England in Longreach (1960); and Lund Hutton Newell Black and Paulsen’s St Alban’s Church of England in Cunnamulla (1963). These buildings are beacons within their regional townships. Today, more post-war ecclesiastical buildings are protected by state heritage listings in Queensland’s remote regional areas, than in Brisbane proper—a staggering ratio of four to one. It appears that despite their remoteness, international architectural ideas penetrated deep into Queensland’s regional townships. What’s more, their remoteness seems to have created freedom to experiment. This paper examines the tyrannies and felicities of geographical distance. Based on interviews, archival research and fieldwork, it traces how international and national ideas regarding modern church architecture circulated in Australia and reached Queensland’s remote regional areas, where they inspired some of Queensland’s most exciting ecclesiastical experiments.

Keywords: Edwin Oribin; Neville Willis; Lund Hutton Newell Black and Paulsen; modern church architecture; regional Queensland
Regional Queensland’s Post-War Churches

In Queensland, as elsewhere in Australia, a church building boom occurred between 1955 and 1965. In these ten years more than 600 new church buildings opened in the state. This boom occurred across Christian denominations and reached nearly every regional centre, with many communities realising new “permanent” brick churches. Realising permanent churches in these remote regions had, however, been a struggle prior to the mid-1950s. The vastness of the state, its challenging terrain, its harsh climatic conditions, and the distance from church leadership in Brisbane, interstate and abroad, all slowed down church development efforts pre-World War Two. These pre-interwar religious hardships are recorded in the early religious histories of the state, in which the authors emphasised their severity by drawing comparisons with the more densely populated, more developed and wealthier dioceses abroad. For each denomination, Queensland’s regional religious districts, presbyteries, dioceses and parishes were large in area, sparsely populated and its people were frequently of limited financial means.

In a bid to catch up, more than 300 churches were built in regional Queensland between 1955 and 1965 (fig. 1). A surprising number of these were highly innovative and experimental when compared to other churches that were constructed in Brisbane in this same period. These regional buildings tested novel forms, materials and geometries, as well

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2 Daunt, “Communities of Faith.”


4 Daunt, “Communities of Faith.”

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Figure 1. Map of Queensland’s 1945-1975 church buildings. (Map courtesy of Google GBRMPA, 2019. Data compiled by author, 2019.)
1945-1954 shown pink—at least 280 built, of these 88 were in Brisbane.
1955-1964 shown yellow—over 600 were built, of these 186 were in Brisbane.
1965-1975 shown blue—over 300 were built, of these 97 were in Brisbane.
as different approaches to structural expression and spatial planning. Importantly, they also readily adopted emergent ideas regarding liturgical renewal (some even ahead of the Catholic Church’s Second Ecumenical Council, Vatican II). Equally surprising is the awareness of national and international trends in architecture that these regional churches demonstrate, particularly given their great distance from the capital, Brisbane. In Europe many experimental Catholic and Protestant churches had been realised in the early twentieth century (particularly in Germany, France and Switzerland). From the 1950s these ideas were explored in America and Great Britain, from where they were subsequently transferred to Australia. In this paper, four exemplar church buildings in regional Queensland will be discussed. These buildings have been selected as representative of the variety and experimentality that characterised church architecture in post-war church regional Queensland following a systematic review of Queensland’s post-war churches and visits to more than eighty of the state’s regional churches and over a hundred in the greater-Brisbane region. Although each of these case study churches were designed (for Protestant congregations) ahead of Vatican II, they all demonstrate an awareness of the need for liturgical renewal, and thus demonstrate how physical distance did not hinder the dissemination of progressive ideas, but rather facilitated experimentation with such ideas.

The first two case studies, Mareeba Methodist church (1960, now Uniting) and (the former) St Andrew’s Presbyterian in Innisfail (1961), are located in regional townships in far north Queensland, with Cairns as the closest (larger) regional centre to both. These churches have both received recognition in Queensland (and Australian) architectural historiography, and in 2003 St Andrew’s Presbyterian was state heritage listed. This paper builds on this earlier scholarship and considers the significance of these churches within the wider context of Australian and international modern church design.

The other two case studies, St Andrew’s Church of England in Longreach (1960) and St Alban’s Church of England in Cunnamulla (1963), are located in remote and drought prone rural townships in central west Queensland. The Longreach church has received little recognition to date, even though it is a very considered example of a Brisbane-based church architect collaborating with a young, up-and-coming Church of England rector, who had himself received architectural and artistic training. St Alban’s Church of England initially received some recognition in Melbourne’s *Cross-Section* and has very recently
been given a Queensland RAIA enduring architecture award (2017). This initial and more recent attention has focused predominantly on the inventiveness of the building’s climatically responsive design features. As with the other case studies, the Cunnamulla church’s religious response to the calls of liturgical renewal and its place within Australian and international church design has hitherto not been considered.

Oribin’s Inspired Organic Geometry and Craft-Based Detailing

The Mareeba Methodist Church (fig. 2) was designed by far north Queensland’s “maverick architect” Edwin (Eddie) Oribin (1927-2016). Designing on the diagonal, it adopted a different approach to the three other churches that he designed, which all had tall volumes and rectilinear plans (modern-basilicas). When Oribin’s Mareeba church opened on August 6, 1960, it was amongst the first modern church buildings in Queensland to arc the seating around the sanctuary. Contemporary construction industry journals praised the church for its closely gathered plan arrangement, its brick and timber detailing, its structural system, and its adaptation to the local climate:

The Methodist Church at Mareeba, on the Atherton Tablelands is designed to seat 200, so that the congregation is grouped round the preacher, the furthest seat being 30 feet [9 metres] from the pulpit. The building is constructed with red brick structural columns and tower, and natural finish timber elsewhere. The roof is supported internally with an inverted tetrahedron tubular steel space frame, sheeted with tongue and grooved natural timber. Two sides of the church have vertical 12” [300mm] by 2” [50mm]

Figure 2. Edwin Oribin, Mareeba Methodist Church (1960). Left. Exterior of entry corner. Right. Interior of church. (Photograph by author, 2018.)


9 All Saints Church of England (1955, Gordonvale) with S.G. Barnes; St Paul’s Church of England (1959, Proserpine); and St Andrew’s Presbyterian (1961, Innisfail).

10 Scorer and Scorer’s Ipswich Congregational (1958) is an earlier Queensland church with an arced plan.
timber louvre blades with glass between, with some movable sections to give sun control and ventilation.¹¹

The Methodist Times celebrated its architectural difference: ‘The building—with walls largely of glass—is of contemporary style and possibly unique.’¹²

The church was positioned on the corner of an intersection, which it addressed through the rising of the roof structure, thus covering its dual front entries, each of which faced one of the two streets. The tightness of the site likely led Oribin towards this unconventional kite-shape plan (fig. 3). The publication of Kevin J. Curtin’s (of Curtin & Cameron) St Dominic’s Catholic Church in Flemington (NSW) in Australian architectural periodicals likely informed this plan shape and building form.¹³ St Dominic’s has a similar plan arrangement, dual entries and is also positioned to face a street corner. However, Oribin’s design is arguably more rational, with the diagonal arrangement neatly contained within a square plan.

Mareeba Methodist’s design also evidences Oribin’s admiration of Frank Lloyd Wright’s organic and geometric designs, and craft-based detailing. The connection between the works of Wright and those of Oribin were noted by Martin Majer in his 1997 undergraduate dissertation and have subsequently been confirmed in more recent architectural historiography.¹⁴ As architectural historian Alice Hampson notes, Oribin’s architecture “is characterised by experimentation with new and unconventional materials and inventive structural systems; his stylistic inspirations are drawn from crafted-based detailing and the work of Frank Lloyd Wright.”¹⁵ Indeed, the influence of

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¹² “New Church at Mareeba,” Methodist Times (September 8, 1960), 16.


Wright’s later churches, particularly his First Unitarian Society Meeting House (1952, Madison WI, USA), can be recognised in the angles of Oribin’s Mareeba Church.

Mareeba Methodist church was built by local tradesmen, a number of whom had also worked on his earlier St Paul’s Church of England in Proserpine (1959) and went on to work on his Mareeba Shire Hall (1961). The church’s foundations were dug by hand, and often required water to be poured onto the hard ground to ease the shovelling. The concrete floor was laid and trowelled by hand. Most components of the building were taken on by as few as two tradesmen, with the brickwork, timberwork and window casement work all taking some time, as complex cuts needed to be made to achieve the angles embedded in both the building’s plan and section. Many of the fixings were also concealed. The design was thus truly craft-based in its construction methods and predominantly made by hand.

Oribin’s St Andrew’s Presbyterian Memorial Church (1961) in Innisfail was likely the second A-frame to be built in Queensland (fig. 4). This now state heritage listed church building is very expressive in both form and materiality. It possesses the grandeur and immanence expected of a church building. Located on the crest of Innisfail’s hilltop topography, the church’s siting added to its landmark form. Also, only a short distance away from the elaborate Catholic church (c.1928), the cross atop St Andrew’s used to just surpass the height of its religious neighbour. This cross has, however, since been removed.

Patrick Bingham-Hall included St Andrew’s in his pictorial compendium, *Austral Eden: 200 years of Australian architecture*, as one of only three post-war church buildings, captioning an image of its interior as “the isoscelean masterpiece of an ever-resourceful maverick architect.” Writing about Oribin’s three

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16 Robert McDougall (worked on the Mareeba Uniting Church building), interview by Patrick Huber, August 7, 2010, private collection.

17 McDougall, interview.

18 This church was designed in 1959, while Oribin was in partnership with Sid Barnes. A 1959 stewardship campaign was run by the congregation in 1959. The project was tendered November 4, 1959 to January 29, 1960 and the building was opened November 4, 1961 (“St Paul’s Anglican Church.” *Queensland Heritage Register*, listing 602332, accessed September 26, 2016, https://apps.des.qld.gov.au/heritage-register/detail/?id=601589).

19 A. Ian Ferrier’s Halifax Catholic Church (1960) was likely the first.

20 Entered December 2003 (“St Paul’s Anglican Church”).

21 “Illuminated cross will be landmark for Innisfail,” *The Evening Advocate*, November 1, 1961, 3.

22 Bingham-Hall, *Austral Eden*, 193. Michael Dysart’s c.1966 Polish War Memorial Chapel, Marayong, Sydney (NSW) and Don Gazzard’s c.1965 Wentworth Chapel, Vaucluse, Sydney (NSW) are the other two.

Figure 4. Edwin Oribin, St Andrew’s Presbyterian Church, (1961). **Left.** Exterior of church. (Photograph by author, 2018.) **Right.** Interior of church. (Photograph courtesy of the 2018 owner, photographer unknown, undated.)
early-1960s churches, Queensland heritage architect, Margaret Lawrence-Drew, in turn, describes St Andrew’s as follows:

Oribin’s organic design process (reminiscent of one of his major influences, Frank Lloyd Wright) is evident. Materials, motifs, and basic ordering principles are repeated throughout as if it were a unified organism. Isosceles triangles proliferate in every element of the building […] Everything is related, reflecting the symbolic systems of nature.23

This preoccupation with angular geometry, was not new in Oribin’s work, but built on his earlier work, including his First House (1958), and Studio (1960). It was possibly Oribin’s early Cairns work that brought him to the Presbyterian Churches’ attention. Andrew Leslie (Les) McKay (1909-1976), who was the minister at St Andrew’s Presbyterian Church in Cairns from 1957-1962, possibly recommended Oribin to the Innisfail congregation having seen and admired some of his earlier work.24 On behalf of the congregation, McKay subsequently submitted Oribin’s plans to the Presbyterian Presbytery for approval.25 Then, as the newly appointed Moderator for the Presbytery of Carpentaria, McKay was invited to open the new church on the November 4, 1961.26

St Andrew’s has a steel A-frame structure.27 This triangle is reinterpreted throughout the varying scales of the design and in various materials. Three triangular dormer windows are embedded in both sides of the steep-ribbed aluminium-sheeted roof, which also has three triangular fibre-glass roof lights along its ridge. The glazing in the front façade is also broken into triangular panels and surrounds a triangle of brickwork, folded down its centre to pleat inwards, and with the brick coursing laid on diagonals perpendicular to the triangular panel’s sides. The interior of the church expresses the A-frame structure. It is clad in timber and has folded diamond-shaped baffles suspended from the ceiling, to diffuse the sunlight streaming in through the triangular skylights. Triangular detailing is also used extensively for the building’s detailing and fit-out, including for glazed details, internal lighting pelmets, fan supports, at the junctions of the timber tongue and groove ceiling and also for elements of the sanctuary furnishings.

In the late-1950s A-frame churches were popular in America, many of which received attention in architectural periodicals. Of these, the most prominent were: Eero Saarinen’s Lutheran Concordia Senior College Chapel (Fort Wayne, IN, 1957); and Walter Netsch’s (of Skidmore, Owings and Merrill, with advice
from Pietro Belluschi) design for the Air Force Cadets Chapel (Colorado Springs, CO, 1963 completed and opened). St Andrew’s shares many similarities with these A-frame church buildings, in particular the exploration of the triangle through the designs. In late-1950s America, the A-frame became a comfortable middle-ground—no longer historical, but also not too overtly modern. The aforementioned two examples did, however, push the envelope well beyond the “comfortable” into the experimental, just like Oribin’s St Andrew’s did in Australia. Harrison & Abramovitz, Sherwood, Mills & Smith’s First Presbyterian Church, in Samford, Connecticut (1958), with its highly experimental triangulated design, might also offer clues to Oribin’s inspirations.

Christian Symbolism Expressed in Numbers, Materials and Form

For the Queensland Anglican Church, Longreach has long been considered both “the hub of western central Queensland and the birthplace of the Bush Brotherhood.” A remote outpost, by road, Longreach is 1,180 kilometres north-west of Brisbane and 685 kilometres west of Rockhampton. The late-1950s saw good wool seasons, and in this time of optimism the church congregation grew from a handful to over one hundred congregants. With a stewardship campaign and war memorial tax concessions for donations, funds for a new permanent church were quickly raised.

The Brisbane-based architect Neville Robert Willis (1928-86) designed the new St Andrew’s Church of England in Longreach (fig. 5), in close collaboration with the young rector, who had himself trained to become an architect. Rector John Bayton (b.1930) studied architecture at the University of Queensland.
and Central Technical College, graduating from the degree course in 1958, and designed the Kenilworth Church of England (1955) while studying architecture. Concurrently pursuing his interests in theology and iconography, he studied for priesthood at St Francis Seminary (Milton, Brisbane), and was ordained as a Church of England priest in 1957. As rector at Longreach from 1958-1963, Bayton prepared the initial design for the new church, and then, at the Bishop’s request, commissioned a registered architect. He commissioned his good friend Willis to complete the design, but continued to follow the project closely through the documentation and construction phases. Together, Bayton and Willis sought to reinvent many of the building features that had become a staple of traditional Anglican ecclesiastic design. They, for instance, eliminated the church chancel and reconsidered the processional sequencing. The foundation stone of St Andrew’s Church of England was laid October 4, 1959, and the building was opened and dedicated on the December 11, 1960. Mid-construction, Bayton wrote in the Rockhampton Church of England diocese monthly:

*It is a great venture and a tremendous thrill to see something which was originally a few lines on a piece of scrap paper take shape in the mass of steel, concrete, brick and aluminium thrusting its way heavenward. To my knowledge it will pioneer something completely new […] in Church architecture in Australia.*

Like Mareeba Methodist, the design of St Andrew’s was an early shift away from the then typical rectilinear basilica-plan churches in Queensland. It was also one of the first church buildings in Queensland to be airconditioned. It shared some similarities with St Faith’s Church of England in Burwood, Victoria (1958), both in terms of design and materiality. This church was designed by Mockridge Stahle and Mitchell a few years earlier and was published in Australian architectural periodicals soon after its completion. It was likely seen as a benchmark for modern church design by Bayton and Willis. Its plan shape, the arrangement of its worship space, its building form, and even its materiality are similar (fig. 6). St Faith’s was state heritage listed in Victoria in 2010. As noted by architectural historian Philip Goad, “The Anglican Diocese [of Melbourne] initially rejected Mockridge’s unusual design, but finally accepted it on the grounds that it was located in a side street and not on a public thoroughfare!” It is likely that in St Andrew’s case also the limited exposure of the church—due to the remoteness of its location (in Longreach)—played a role in its acceptance. It was likely seen as a church designed by Mockridge Stahle and Mitchell a few years earlier and was published in Australian architectural periodicals soon after its completion. It was also one of the first church buildings in Queensland to be airconditioned. It shared some similarities with St Faith’s Church of England in Burwood, Victoria (1958), both in terms of design and materiality. This church was designed by Mockridge Stahle and Mitchell a few years earlier and was published in Australian architectural periodicals soon after its completion. It was likely seen as a benchmark for modern church design by Bayton and Willis. Its plan shape, the arrangement of its worship space, its building form, and even its materiality are similar (fig. 6). St Faith’s was state heritage listed in Victoria in 2010. As noted by architectural historian Philip Goad, “The Anglican Diocese [of Melbourne] initially rejected Mockridge’s unusual design, but finally accepted it on the grounds that it was located in a side street and not on a public thoroughfare!” It is likely that in St Andrew’s case also the limited exposure of the church—due to the remoteness of its location (in Longreach)—played a role in its acceptance.
role in gaining diocesan approval, because, unlike St Faith’s, St Andrew’s unusual design was not challenged during the approval process.  

St Andrew’s worship space has a dodecagon roof, with a 12-bulb bespoke light fitting suspended from the domed ceiling—the twelve apostles purported to be symbolised in the design of both roof shape and light fitting. Similar light fittings are contained along the nave of Mockridge, Stahle and Mitchell’s The Mother of God, East Ivanhoe (Melbourne, Victoria), which was also published in 1958.  

Expressive Pleats and Folds

The Bush brotherhood were also integral to the creation and post-war viability of the Cunnamulla parish of the Church of England. Located over 800 kilometres drive from Brisbane, in south-west Queensland, “this huge parish stretches over 40,000 square miles [103,600 square kilometres] of S.W Queensland from the Nebine River to the South Australian border in the Sturt’s Stony Desert.” All four churches in the parish were built between 1955 and 1965.  

The St Alban’s Church of England Bush Brotherhood Church in Cunnamulla was designed by John Muir Morton (1933-2009) of Lund Hutton Newell Black and Paulsen (fig. 7) in the early-1960s. It is another very expressive (and also quite monumental) exemplar early-1960s regional Queensland church, described by the historian Thom Blake in 1979 as an “unusual
design [...] surely must be one of the most outstanding buildings in western Queensland," and recently (2017) received an enduring architecture award from the RAIA (Queensland Chapter).51 Quoting Cross-Section, the jury commended the design’s “vigorous and carefully conceived design, in structure, finishes and attention to climate control.”52 Climate control was indeed very important for the architects, who in 1963 described themselves as “climate consultants” in relation to the design of this church, making no mention of its liturgical function or its expressive form.53 Born and trained as an architect in Britain, Morton immigrated to Queensland in 1957.54 There, he worked in the Brisbane office of Lund Hutton Newell Black and Paulsen, and from the early-1960s also in their Townsville office, where he became known for his climatically responsive designs.55

St Alban’s roof was conceived as a steel framed “parasol.”56 The ridge outlined a cross, from which the roof was folded into four gables that stretch out over the corners of the in situ-concrete walls below. The plan was created by juxtaposing two squares at forty-five degrees to each other, resulting in four tall corners emphasised by the roofs gables that protect them (fig. 8). The other four corners are sheltered under the steep valley gutters. Completing the strong roof form, the valley gutters are guided to the ground by four concrete drainage plinths, which are very strong design features in their own right. The entry narthex, where the baptismal font is also located, the choir, the vestry and the sanctuary are all positioned under one of these four tall corners. Seating is arranged with a processional centre aisle within a wide, column-free space. A gallery with more seating is located over the entry narthex. Inside, the roof form is expressed through the main steel beam, with timber battens cladding the ceiling between them.
In 2004 former resident of Cunnamulla and heritage consultant, Gail Lipke, prepared a conservation management plan and a short history for St Alban’s.\(^{57}\) For Lipke, St Alban’s has an “almost ‘foreign’ appearance,” not only “in the landscape of Cunnamulla [but in] rural Queensland as a whole.”\(^{58}\) Within her short history, Lipke recorded the struggle “to deliver the Christian faith to the people living in isolated areas of this vast state,” which was particularly evident in Cunnamulla, in spite of the efforts of the Bush Brotherhood.\(^{59}\) Even when, after World War II, transportation and roads improved greatly, enhancing the accessibility to many areas in the state, it remained hard to attract a minister and retain one at Cunnamulla, also because of the state’s declining clergy numbers.\(^{60}\)

The new Cunnamulla church was built on the back of the 1950s wool boom, but after the mid-1950s shearer’s strike, a late-1950s stewardship program (which brought in the first $30,000), added to the area’s cultural and social life with fetes, race days and dinners, and to the funds from collection plate and door knock takings.\(^{61}\) A bank loan was obtained for the remainder (a further $43,000, inclusive of interest paid).\(^{62}\) Brother Barry Russell Hunter (1927-2015) was the minister at Cunnamulla from 1956-61 and was “instrumental in the push for the new church and developed many of the fund raising ventures.”\(^{63}\)

Acceptance of the architect’s modern design by the church committee and congregation was not without hesitation. In the minutes of the Wardens Meeting held on April, 21, 1960, its Chairman, Bob Hobson, is recorded as saying:

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\(^{57}\) Lipke, *St Alban’s Anglican Church Cunnamulla*, 4.

\(^{58}\) Lipke, *St Alban’s Anglican Church Cunnamulla*, 16.

\(^{59}\) Lipke, *St Alban’s Anglican Church Cunnamulla*, 9.

\(^{60}\) As also noted in Blake, *Cunnamulla 1879-1979*, 50.

\(^{61}\) “Brotherhood church to be consecrated after drought years,” page unknown; Blake, *Cunnamulla 1879-1979*, 42; Lipke, *St Alban’s Anglican Church Cunnamulla*, 14.

\(^{62}\) The loan was paid off by 1974 though not without challenge as the community went through one of the worst droughts and also saw a dramatic population decline. The construction cost was £27,122, plus another £3,000 for professional fees (Lipke, *St Alban’s Anglican Church Cunnamulla*, 15, citing the April-May 1963 Brotherhood of St Paul’s Chapter Meeting, Quilpie-Cunnamulla District).

A plan, submitted by our architects for the new Church, has not met with enthusiastic approval, and we are still awaiting a representative of the firm to explain the plan to us in more detail, and also submit alternatives. We have such a wonderful site for the church in Cunnamulla that this matter must be given very careful consideration.

The scheme in question shared a strong resemblance with the final scheme but had only one gable roof on the diagonal across a square plan with garden inserted on either side. This scheme was simpler than the one eventually built. Subsequent to the Church committee’s requests, Morton and the office’s directors visited Cunnamulla. In 2004 for Lipke’s short history, Morton recalled that “a week of meetings and persuasive argument got the Parish Council and Building Committee members to agree on a [sic] extremely contemporary plan and building materials.” Morton described the design as a “meeting place,” rather than a “Church” and also “an experimentation of sorts.” In September 1960 the Parochial Council approved the submitted design, noting in the 1961 Parochial Council meetings minutes that:

The design presented was accepted “although of unusual design” was enthusiastically received and unanimously approved [...] However, due to the weather conditions and with no break in the drought conditions it was agreed that building be deferred until at least March. However, this may be optimistic as of the £30,000 there was only £13,000 in hand, the balance to be borrowed over five years.

Tenders were called in November 1961 and awarded to the Cunnamulla building firm John W Thomson & Co’s. The foundation stone was laid April 1, 1962, and the church was dedicated on May 2, 1963. In July 1963, The Church Chronicle, in a short article titled “Unusual Western Church” announced “still another outstanding Church in a contemporary architectural style, was dedicated.”

We can now only speculate about the design influences of St Alban’s. A number of earlier overseas church buildings exist that were similar in form and architectural expression and were published. These include: St Francis of Assisi Church, Weston, Connecticut by Joseph Salerno; and the Congregation Beth El Synagogue, South Orange, New Jersey, by Davis, Brody and Wisniewski. Like St Alban’s both these designs have steep roofs with four expressive roof gables.
Conclusion

Despite their remoteness from Brisbane, as well as other, more accessible urban centralities interstate, and also from other international locations where ideas regarding progressive (liturgically-rethought) ecclesiastical design originated and were first tested, the four regional churches in post-war Queensland discussed in this paper exhibit a keen awareness of such ideas. Within their small remote communities Oribin’s Mareeba Methodist (1960) and his Innisfail Presbyterian (1961), as well as Willis’ St Andrew’s Church of England in Longreach (1960), and Lund Hutton Newell Black and Paulsen’s St Alban’s Church of England in Cunnamulla (1963) were (and still are) architectural beacons of their post-war congregations’ faith. Youth and an eagerness to emulate modern and inventive church buildings abroad and interstate spurred architects and their clients to bring these new ideas to Queensland’s regional townships. As architectural and religious periodicals from abroad and nationally became more available, between 1955 and 1965 there was a greater transfer of ideas, both nationally and internationally.

While geographical distance may have delayed the realisation of permanent church buildings in regional Queensland prior to the mid-1950s, afterwards it may have become its biggest boon. Amidst the optimism of the post-war church building boom (1955-65) this geographical distance allowed architects and congregations to realise some of the state’s most inventive and experimental works of ecclesiastical architecture; which were likely easier to realise in Queensland’s remote bush than in Brisbane’s suburbs.

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“Icons of compensation”: The Swiss Alps as Intercultural Boundary

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“Distance is as characteristic of Australia as the mountains are of Switzerland.” Geoffrey Blaney’s Tyranny of Distance set up the Swiss Alps as a default cultural datum against which the notion of distance may succinctly be grasped. As is often the case, Switzerland’s recurrent association with the Alps points to a more complex status quo. The mountains hold special significance in Swiss history and culture, as both the physical boundary and site of encounter between two archetypal Europes, Italian and Germanic. Like Switzerland’s strategic military réduit in the 1880s and during the Second World War, the Alps have forged a definitive topos in its social and cultural psyche, interpreted alternatively as an obstacle to political unity and as symbol of national resistance. The distance offered here for consideration is that of a substantial natural barrier, apparently overcome through undeniably daring feats of a modernising transport infrastructure, and built into a narrative of integration, one of Switzerland’s constitutive and perennial myths. This paper discusses the architectural implications of the Alps as “icons of compensation” (Marcel Meili), and reflects upon cultural boundaries, their crossings, and the necessity of distance.

Keywords: Popular culture; national identity; professional transfers; transport infrastructure; Switzerland; nineteenth century; twentieth century
“Distance is as characteristic of Australia as the mountains are of Switzerland.”¹ The comparison with which Australian historian Geoffrey Blainey began his book *The Tyranny of Distance* sought to communicate the centrality of distance for Australian geography, history, and culture. As the more commonplace term of comparison, Switzerland’s relation to the Alps was the default cultural datum against which his notion of distance would be easier to grasp. This implication has a history of some hundred years, over which Switzerland’s national and international identity has inextricably—controversially—been linked to its mountainous topography. This firm connection in the popular imagination between Switzerland and the Alps has been driven by two overlapping functions, symbolic and pragmatic. As an instrument of political propaganda and touristic advertisement, the Alps alternate in the Swiss cultural psyche as natural obstacle to political unity, symbol of national resistance, and coda for personal and national traits of character.

This paper reflects upon the cultural distance defined by the Swiss Alps as the geographic and spatial boundary between Italian and Germanic cultures, between a nominal North and South. Alpine crossings have regularly mediated cultural and professional exchanges between Italian, Italian-Swiss and German-Swiss architectural cultures. Starting from this premise, the paper is organised into a sequence of three historical chapters, each exploring different strategies for bridging this distance. The first examines the Alps’ political instrumentalization in the process of forging a mythical national identity that could support the fledgling Swiss Confederation. The second chapter zooms onto the Gotthard Pass, considering the impact of transit and defence infrastructures upon the alpine territory. Through the device of “crossings,” the third chapter traces a number of significant professional exchanges between Italian, Italian-Swiss and German-Swiss architectural cultures, as mediated in the 1960s and 1970s across the barrier of the Alps. In conclusion, by discussing the architectural implications of the Alps as what Marcel Meili has called “icons of compensation,” this paper asks how the cultural convention of mountains as archetypal wilderness confronts the actuality of their domestication.²

The Alps as Symbolic Distance: 1800–1945

As a small country straddling four linguistic regions and three major European cultures, Switzerland’s political existence has historically hinged upon a fragile intellectual

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construct. The creation of a national mythology was part of a fine balance between the imposition of federalist authority and the prerogative of political autonomy, maintained by each of Switzerland’s 2300 communes as self-governing administrations. Working against the supreme significance attached to the communes’ territorial borders, federal unification demanded an act of supreme political will. The fine network of cultural and administrative borders had to be stitched over, with a federal counter-network of transit connections. The railways were harbingers of modernity: a united Switzerland had to be a modern Switzerland, one that could be crossed by traffics of people and goods, an efficient transit point at the heart of Europe. By this logic, Switzerland’s constitutional survival was conditional upon its accession to modernity.

In this political, cultural and economic project, the physical barrier of the Alps played a crucial part. As the ultimate border between languages and cultures, the mountains had long dictated Switzerland’s development. Their early modernisation took the form of a regionally scaled industrialisation, located close to the natural resources of hydraulic power and timber. It depended on a comprehensive rail network, whose dramatic suspension bridges and underground tunnels became at the same time a source of cultural and symbolic capital. Structures of the utmost rationalism were charged with romantic nationalist overtones, harnessed to a particular genre of representative

Figure 1. Gotthard Railway postcard, 1910. Reprinted image. © ETH-Bibliothek Zürich, Bildarchiv.

infrastructures. The symbolism of viaducts, signifying the mastery of man over nature, projected the image of a modern, dynamic and enterprising country, all the more against its alpine backgrounds. “It is currently remarked in Berne,” The Times quipped in 1907, “that Switzerland must have more mountains in order to make more railways.”

The mountains’ progressive iconography co-existed with a regressive, yet no less dramatic, mythology of national independence. The imagery of the Alps was coupled with that of Swiss chalets and mountain villages as expressions of an authentic nature and culture. The obsession with the chalet suisse that gripped nineteenth-century Europe saw the architectural type as the emanation of an alpine culture as primitive and “authentic.” The exhibit Village Suisse, at the 1900 Universal Exhibition in Paris, featured vernacular houses and sheds, precariously poised on huge stage-prop mountains, shores up Switzerland’s tourist industry.

Consequently, the Alps were put in the service of a mythologizing rhetoric during the so-called Geistige Landesverteidigung (spiritual self-defence)—the peculiar interlude of vivid nationalist propaganda issued, before and during the Second World War, in response to the Nazi threat. Writing in 1938, Christian-Democrat politician Philipp Etter seized upon theGotthard massif as the entity “at the heart of the [Swiss] state,” representing no less than a “European, universal idea … of a spiritual community of peoples and Western civilisations … nothing other than the victory of the spirit over the flesh on the rugged terrain of the state.” These soaring sentiments were given free rein during the 1939 national
exhibition in Zurich. They found graphic expression in artist Hans Erni’s monumental mural *Die Schweiz, das Ferienland der Völker*, which combined modern and traditional, natural and technical elements in a manner influenced by photomontage techniques.8

At the time of the exhibition, the Alps were also subject to an overt programme of militarisation. The Gotthard’s strategic location had, since 1885, caused the development of military defences, creating an alpine réduit of European significance.9 As with the railways, the physical construction of bunkers and such was doubled up as cultural construct, the Swiss “myth of military fortifications” running in parallel to transport modernisation.10 Continuing in the run up to and during World War Two, the construction of a subterranean network of camouflaged bunkers and observation posts was accompanied by colourful visual propaganda. The targeted popular appeal of the Swiss military postcard series “Irgendwo in der Schweiz” (Somewhere in Switzerland, 1939) is apparent—similar to Erni’s mural—in the adoption of graphics recalling tourist advertisement at the time.

The Gotthard Pass: Concealed transformations

Distance is validated by the manner in which it is overcome. The physical distance entailed by the Alps, Switzerland’s symbolic crux, is activated by the possibilities of its bridging. Hence the cultural and technological significance historically attached to the Gotthard Pass. Having evolved from a network of centuries-old mulattiere (donkeys’ paths) to a strategic trade channel by the thirteenth century, the pass became a major European route in the sixteenth century, following the construction of the so-called Devil’s Bridge at the Schöllenen Gorge and Twärrenbrücke over Reuss River (henceforth a topos of Swiss painting). Carriages crossings were documented from the late eighteenth century, and a winding, fully surfaced five-metre-wide road was completed in the 1830s.11 The installation of a regular post coach service acquired the peculiar juxtaposition of symbolic and pragmatic value so readily attached in Swiss cultural history to infrastructural modernising works, as captured by the dramatic dynamism of Rudolf Koller’s painting *The Gotthard Post* (1873).

The heroic completion of the 15-kilometre-long Gotthard Tunnel (1882) at an altitude of 1,500 metres proved particularly prone to mythologizing. The entire Gotthard Bahn, laid out over the 200 kilometres between Immensee in the Schwyz canton and

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9 For the importance accorded to the Gotthard in Swiss military and defense strategy, see Roberto Moccetti, “L’importanza militare del San Gottardo nel centenario delle fortificazioni,” *Rivista militare della Svizzera italiana* 60, no. 4 (1988).


Chiasso at the border with Italy, was celebrated for the proximity it created between Switzerland and the nominal South. It was dug, pickaxed and dynamited mostly by Italian labourers, bringing with them, deeply into Switzerland, a poignant mix of ethnic and social class tensions. The intercultural connection created by the tunnel brought into being new conditions: the seeds of southern plants, lodged in the workers’ pockets and trousers upturns and dropped on the northern side of the tracks, shaped a new and unique flora along the Gotthard railway. Moreover, the new accessibility of the South acquired its own representational genre, from postcards and posters to Carl Spitteler’s tourist guide *Der Gotthard* (1897), documenting the role of the railway in the elimination of distance.  

Architectural Crossings: The Alps as Transit Territory

Aldo Rossi’s *The Architecture of the City* (1966) starts from a nineteenth-century engraving, representing the Ponte del Diavolo on the St. Gotthard pass as the site of confrontation between “nature and man’s construction.” Somewhat

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didactically, Rossi argued for an idea of the city as extending beyond its physical confines, and for a wider understanding of urbanity as the manifestation of civilization in the territory. To that effect, he examined “not only the visible image of the city and the sum of its different architectures, but architecture as construction,” as urban artifacts set into specific relationships with their locality. For Rossi, Dinkelmann’s engraving was therefore not an innocent rendition of a spectacular view, but depicted the natural and the man-made in a tense dialectical interplay. In a similar vein, art historian Albert Kirchengast describes the Gotthard as a “dialectical landscape,” in which the (fictional) image of “pure” nature is permanently confronted with the actuality of human control.

Rossi became familiar with Alpine crossings in the course of his commute between Milan and Zurich, during his now-legendary visiting professorship at ETH Zurich between 1972–74, often in the company of his teaching assistants, the Ticinese architects Bruno Reichlin and Fabio Reinhart. The note in his diary, “anch’io come Gastarbeiter” (“me too as seasonal worker”) demonstrated a communist’s solidarity with the generations of Italians going to Switzerland before him for work. In his 1978 lecture at ETH, entitled “An Analogical Architecture,” Rossi acknowledged that his personal experience of the infrastructural galleries on this route, internalized during years of regular crossings, had re-emerged in design and was reflected in the galleries of the Gallaratese housing block:

> an aspect of this design … made clear to me by Fabio Reinhart driving through the San Bernardino Pass, as we often did, in order to reach Zurich from the


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16 See Adrià Carbonell and Roi Salguiero Barrío, “Notes on Aldo Rossi’s Geography and History; the Human Creation,” in *Cartha* 2, no. 18 (2016), 36–37.
18 Ákos Moravánszky and Judith Hofengärtner (eds.), *Aldo Rossi und die Schweiz: Architektonische Wechselwirkungen* (Zurich: gta Verlag, 2011).
Ticino Valley; Reinhart noticed the repetitive element in the system of open-sided tunnels, and therefore the inherent pattern. I understood … how I must have been conscious of that particular structure – and not only of the forms – of the gallery, of covered passage, without necessarily intending to express it in a work of architecture.20

The mountain crossings mediated a range of personal and cultural experiences that subconsciously took shape in one of Rossi’s most iconic projects. The wider pattern emerging here is a ripple effect of professional exchanges between a nominal North and South, negotiated across the distance of the Alps. This was particularly the case within Italian-Swiss and German-Swiss architectural cultures, but it also involved the outreach of Italian architecture and theory. The impact of Rossi’s fragmented Swiss experiences is apparent in his *Scientific Autobiography* (1981), in which he repeatedly brings up Zurich places and buildings, acquaintances and colleagues from ETH, lectures attended and given there, affinities with Germanic culture and even an early fascination with Swiss railway timetables.21 In the course of his teaching, he oversaw the production of urban studies of architectural traces in the topography: the so-called “Rossi Plan” of Zurich’s historical centre22 was dwarfed by the lesser-known *La costruzione del territorio* (1979), an 800-page opus systematising vernacular settlements and house types across the Ticino.23

The Alps become a significant background in the collage *Città Analoga*, assembled by Rossi with Reinhart, Reichlin and their colleague Eraldo Consolascio for the 1976 Venice Biennale.24 Dario Rodighiero’s reconstruction of the original sources used in the collage assigns the cartographic representation of mountains on the bottom left to the first edition the Dufour Map (1845–65), Switzerland’s first federal survey and itself a setting stone in the construction of the country’s national identity.25 The choice of this map, memorably described by Marc Angélil and Cary Siress as “saturated with ideology,” points to the power relations inscribed within the seemingly objective record of territory.26 The bendy road above it, a coda for mountain crossing similar to the Tremola Pass on the Gotthard, is collated from Rossi’s own project, with Massimo Fortis and Massimo Scolari, for a Town Hall in Scandicci (1968).27 Other superimpositions are the elevations and plans of Ticinese settlements later published in *La costruzione del territorio*. Rossi’s own reluctance to clarify the sources and personal meanings attached to the collage indicate their nature as indicative, analogous and ultimately subjective

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21 Aldo Rossi, *A Scientific Autobiography* (Cambridge, MA: MIT Press, 1981) include references to two of Karl Moser’s public buildings in Zurich, the Lichthof in the University and the Kunsthalle (8–9, ill. 14); Paul Hofer’s lectures at ETH (43–44); a self-confessed “Germanophilia” and significant discussion with Heinrich Helfenstein (46); his own lectures and later teaching with Paul Hofer in 1977–78 (50–51); the Limmat river (69) and childhood fascination with a book of Swiss railways timetables (80).


24 The panel was shown as part of the exhibition *Europa-America: Centro storico-suburbo*. See Léa-Catherine Szacka, “Aldo Rossi, Bruno Reichlin, Fabio Reinhart, Eraldo Consolascio, ETH Zurich, Zurich, Switzerland, 1976,” *Radical Pedagogies*, Princeton University School of Architecture, n.d., http://radical-pedagogies.com/search-cases/e08-eth-zurich/


27 Rodighiero, et al., *The Analogous City*. 
(“autobiographical”) references. For him, “the panel suggests in a fairly plastic way the image of the different meaning which distinct projects produce through a relatively arbitrary editing … while trying to express a dimension of surroundings and of the memory.”

He admits that the Ticinese and Northern Italian references are specific: “Clearly, this panel shows a number of aspects of … a memory circumscribed to a certain territory, or better, to a country—Northern Lombardy, Lake Maggiore and the Canton Ticino—with its signs and emblems.” By giving cultural unity precedence over the administrative and geopolitical redistribution of territory, Rossi disregards the Swiss Italian frontier. The composition signals that the true border is the mountain, the geographical distance between different cultures that allows them to coexist without blending into each other.

For Reichlin and Reinhart, as for other Ticinese architects trained at ETH, the transalpine commute to Zurich during the Rossi years was a familiar routine, despite Ticino’s older historical and cultural connections to Italy. Since the Middle Ages, Ticinese architects and masons, Francesco Borromini included, had naturally gravitated towards the artistic centres of Italy. (Acknowledging this history, Rossi affectionately nicknamed his two assistants the “Borrominis of Tendenza.”)

The cultural connection spilled into the twentieth century as Italian Rationalism penetrated the Ticinese architecture circles. However, a complex mix of historical, political and administrative circumstances, exacerbated by the closure of the Italian border before and during World War Two, turned the Ticinese towards their colleagues to the north, creating the illusion of a Swiss cultural homogeneity. As Reichlin and Reinhart’s colleagues and contemporaries, Paolo Fumagalli and Flora Ruchat-Roncati, would later contend:

the history of Swiss architecture between the two wars is exaggerated ..., because the extremely unified picture it presents is due to the fact that, in that period, the hegemonic culture is the Swiss-German one, and it positively conditions the whole country. It is involved in the international debate, it is open towards the north, it is the active reflection of the ideas and culture of Central Europe. Its cultural superiority finds its institutional symbol in the Polytechnic of Zurich, the school in which all the Swiss who wanted to become architects or engineers had to study, whether they were German-speakers, French-speakers or Italian-speakers.

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The professional dialogue between the two Swiss regions would strengthen after the war, as their connection settled into custom. Critic Paolo Fumagalli, himself an ETH graduate, argued that the Ticinese architecture students (and professors) at ETH Zurich helped import to the South a professional culture based on lasting and good-quality construction, and a new orientation towards the works of Le Corbusier, Wright and Aalto. At the same time, viewed from the South, the modernist culture of 1950s and early 1960s ETH was perceived as too technical and too dry for a well-rounded architectural education. Moreover, the language barrier remained palpable for many Ticinese students in the 1950s, who tended to cluster together close to the Italian Swiss professors, particularly Rino Tami, a strong modernist figure. In turn, the connections made in Zurich continued in practice back in the Ticino, where many of the ETH graduates, buoyed by their polytechnic formation, grouped together in social and professional networks, temporary collaborations and long-term partnerships. This is clearly visible in the landmark exhibition *Tendenzen: Neuere Architektur in Tessin* (1975), curated by the German-Swiss architect and critic Martin Steinmann at ETH in Zurich. Steinmann theoretically packaged the heterogeneous production of mostly emerging Ticinese practices, effectively launching the international coverage of Ticino architecture that continued throughout the late 1970s and 80s. Of the twenty-one Ticinese practitioners featured in this show, two thirds were ETH graduates.

Conversely, the remarkable appeal of this new production for the German Swiss and international audience was down to its exacting synthesis of modernist references, inherited from ETH training, with theoretical principles and design methods formulated by the Italian Tendenza. This combination stood witness to a deep connection to Italian architecture culture. Early on, the Ticinese architects were essentially influenced by the “written architecture” of Ernesto Rogers, editor of *Casabella continuà*, Bruno Zevi’s *Storia dell’architettura moderna* (1950), as well as the writings of Rossi, Vittorio Gregotti and Manfredo Tafuri, prior to their translation into English, French or German. Their design methodology had much in common with the Italian Tendenza, manifesting similar concerns with type, historical reference, urbanity, the relation to site and, essentially, the problem of form. What the Ticinese lacked, unlike their Italian counterparts, was the actual city as a coherent, material, socio-cultural proposition in which to root architecture. Their solution was to extend the physical realm of the city to the scale of urbanization processes, including an intensive critique of the
effects of speculative construction on the landscape. According to this strategy, not only Ticino, but the entirety of Switzerland, could be seen as a city.

**The Recovery of Distance**

Separated by 240 years, Jean-Jacques Rousseau’s description of “Switzerland in its entirety like a large city” and urbanist André Corboz’s comparison of Switzerland to a *Hyperstadt* (hyper-city) are essentially equivalent. The Swiss have repeatedly described their territory as urban in character. In the early 2000s, the research conducted in ETH Studio Basel by Swiss architects Roger Diener, Jacques Herzog, Pierre de Meuron, and Marcel Meili, together with sociologist Christian Schmid, constructed an “urban portrait” of Switzerland as a fully mapped out, controlled environment, its regions connected by an isotopic, non-hierarchical territorial ordering. The alpine regions were incorporated into these investigations as a paradoxical instance of urbanisation by stealth. As Marcel Meili argued in his essay “Is the Matterhorn City?” the Alps’ gradual colonisation had led to an intrinsically urban situation, “in which the various uses of the mountains are today piled on top of and wedged into one another … simultaneously in competition with and allied to one another.” As the mountains have been flattened by the profusion of infrastructures and uses, they no longer represent

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40 Meili, “Is the Matterhorn City?” 921.
untamed nature but just a different aspect of urban life, “icons of compensation” hiding a semantic void. In turn, this condition is brought about by a loss of distance. As “the Swiss Alps can be reached by car or train from large urban centres in considerably less than three hours … this shortening of distances has not shifted the mountains on the map; it has essentially relocated them.”

ETH Studio Basel conceptualised the Alps as a “product.” The geological formation doubled up as cultural artefact, the result of arduous colonisation processes, sustained by political imperatives to define a national construct, to unify and defend. In the context of alpine depopulation and demilitarization, the mountain’s mythologization looks fragile, an anachronism maintained with increasing effort by solitary farmers and substantial subsidies. Studio Basel proposed the alternative concentration of tourist infrastructures in the most circulated and economically viable alpine areas, with the rest being put aside as “fallow lands” for natural replenishment and future usage. The proposal to restore the mountains to an archetypal natural state amounts to a recovery of sorts. It aims to reverse the blanket effects of urban spread and resist the artificial isotopy of Switzerland. Provocative and idealistic, pragmatic and politically unsustainable, this idea points to distance as a philosophical necessity.
Mediating History/Distances with Modern Architecture Since 1900

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Historical distance, though commonly understood to refer to the passage of time, is being reconsidered in relation to a wide range of media, of mediatory purposes, in the writing of history, itself a mediatory practice. In his 2013 book On Historical Distance, Mark Phillips argues that the aim of intelligibility and understanding, among other forms of engagement, gives distance a new complexity that was missing from older formulations. Precisely, issues of method and literary style are raised by the writing of surveys of architectural history, commonly disregarded as lacking sound scholarship. Among the canonical architectural surveys written in the 1980s, there is one for which not only readability, but also first-hand experience is crucial. William Curtis travelled extensively through Europe, Asia, Australia and Africa between 1977 and 1981, experiencing architecture and meeting local architects, in preparation for the first edition of Modern Architecture Since 1900 (1982). Moreover, it was illustrated with at least 50 photographs taken by Curtis himself. He had a privileged, at times dangerous, unmediated experience of architecture at a time when global travelling was yet to become frictionless and photographs ubiquitous. This paper argues that Curtis’s book is exemplary of a reconsideration of certain mediatory means between the writing of history and its audience—deeply grounded in the disciplinary tradition—that reshapes our understanding of dimensions of distance.

Keywords: William Curtis; historiography; architectural survey; experience; history; distance
Rather than detracting from its truthfulness, history’s dialogical character supplies the essential questions that carry the narrative forward in an effort to establish meaningful relationships between past and present. For this reason, history is best seen as a mediatory practice.¹

To reconceive the notion of distance “in relation to the wide range of mediatory purposes that shape historical representation” is the aim of Mark Salber Phillips in his book On Historical Distance (2013).² Among other strategies, the author posits that “the quest for intelligibility and understanding—the push and pull of these fundamental investments gives distance a new complexity that has been missing from older formulations.”³ This paper explores this quest for intelligibility or readability in the surveys of architectural histories of the 1980s in general, and in William Curtis’s Modern Architecture Since 1900 (1982) in particular, as a means to bridge different dimensions of distance between the discipline, its potential audience and its subject matter.⁴

When talking about the conditions of historical understanding, Phillips argues that “a genuine encounter with the past must trace a path from initial recognition of alterity to some form of insight and comprehension.”⁵ Some survey writers favour first-hand experience of the subject matter of their writing, even if in so doing, there is a certain loss of objectivity. What is especially interesting in Phillips’s argument, is that redefining distance, “does not require historians to neglect their traditional concern for questions of evidence and explanation, nor to abandon their more recent interest in narratology and rhetoric,” and this is evident in Curtis’s approach to the writing of history.⁶ This paper aims to shed a different light on a genre—the architectural survey—that has seen a renewed interest sparked in recent years.

The Distance between Architectural History and its Audience

It was in the 1970s that the history of architecture was “professionalised,” as agreed by multiple North American scholars. In 1988, Marvin Trachtenberg noted that there were “far more well-qualified architectural scholars teaching in colleges than ever, and far more architectural surveys and period courses being taught.”⁷ In 1989, Edward W. Soja talked about an “epochal transition in both critical thought and material life,” since the 1970s to the late 1980s.⁸ Looking back at that time, Keith L. Eggener praised the “vigour and range” that the study of architectural history developed during the 1960s and 1970s.⁹

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2 Phillips, On Historical Distance, 1.

3 Phillips, On Historical Distance, 1.


5 Phillips, On Historical Distance, 2.

6 Phillips, On Historical Distance, 5.


According to him, survey courses became a standardised part of the new postgraduate programs that had been established in both fine arts departments and schools of architecture at North American universities. Eggener highlights the “intensified interdisciplinarity” of the development of architectural history in the 1960s and 1970s, and how this is “apparent in both the topics authors choose to work on and the methods they use to study them.”

Recently, Mark Jarzombek argued the importance of remembering that “until the 1970s modern architecture did not have a dedicated scholarly ‘history,’ and how, as a proper historical field, it looked exclusively into the nineteenth and twentieth centuries.”

More survey courses resulted in what Trachtenberg referred to as “the explosion of architectural literature in recent decades,” and a growing interest which extended to not only the architecture profession, but also to the educated public. In this transitional period, one of the “tremendous” changes in the discipline of architectural history, according to Jarzombek, was how publishing houses “defined a rapidly growing readership of art and architecture books.” Interestingly, it is an argument that functions both ways, because an increasing quantity of published books reflects a growth in the readership, and this growth in the readership also results in an increase in the offer made by publishing houses to meet the demand.

*Modern Architecture Since 1900* was the result of the academic environment and of this growing interest of publishing houses—a commission from Phaidon Press to Curtis in 1978. In addition, *Modern Architecture Since 1900* was the object of study of my PhD dissertation, and throughout my investigation we established a communication that is reflected in this paper. Curtis used research material he had collected for his own teaching practice in North America and during his trips throughout the world. Some of the main ideas were first formulated in earlier monographs and articles, and in subsequent broader outlines and essays. His aim was to present a “balanced, readable overall view of the development of modern architecture in other parts of the world from its beginnings until the recent past,” and to do so with a certain dispassionate distance. A textbook is a “strange beast” according to Samuel B. Frank, and problems arise when trying to map comprehensively a field as diverse as modern architecture: “since the first category [modern architecture] is vague, the second [in the twentieth century] an arbitrary matter of choice, and the third [throughout the world] doomed to tokenism.”
Curtis aims at the “textbook gap” that he drew attention to in his own review of Kenneth Frampton and Manfredo Tafuri’s histories, and according to Frank, succeeds in improving on his contemporary competition. For Peter Serenyi, *Modern Architecture Since 1900* is more readable than the early histories of modern architecture written by Nikolaus Pevsner, Sigfried Giedion and Henry-Russell Hitchcock (which were not suitable for the college market) as well as contemporary competitors written by Leonardo Benevolo and Frampton. In Stanislaus Von Moos’ opinion, “Curtis succeeds in translating an overwhelming bulk of knowledge into a fluent and never over-loaded text,” which is one of the main characteristics of the writing of architectural surveys. A study of the inclusiveness of survey books used in universities of the United States evidenced this success and concluded that the text more often used for survey courses on twentieth century architecture was Curtis’s *Modern Architecture Since 1900* (third edition, 1996).

Another survey, Spiro Kostof’s *A History of Architecture: Settings and Rituals* (1985), has been considered a turning point towards this new readership—the students of architectural history. In his review of Kostof’s book, John E. Hancock points out that “textbook writing, because the issues it raises have more to do with method than research, more to do with literary style than footnoted documentation, has seemed both a lost art and a thankless task in today’s academic environment.” However, as Leonard Eaton points out, a textbook, regardless of its readable style, can also be “a synthesis of sound scholarship, up-to-date interpretation, and excellent analysis.”

Eaton highlights Kostof’s argument that “all buildings are worthy of study,” and that historians have too often concentrated on major monuments. Sibel Bozdoğan agrees, considering Kostof’s inclusion of non-monumental and non-Western traditions in his architectural survey to have been “rightly recognised and celebrated as a monumental step.” Kostof’s methodology for creating a successful textbook for students of history in architectural schools is very similar to Curtis’s approach, including the fact that both incorporate first-hand experience of architecture and their own images into their narratives: “whenever possible, Kostof has taken pains to visit the places about which he writes.” In his review, Hancock reflects on Kostof’s methodological approach and on his aim to write a book of unprecedented breadth:

*Although in the preface Kostof writes that “all-inclusiveness” was not one of the book’s aims, there is enough reference elsewhere to “a broader, more*
embracing view,” “the total context of architecture,” “a more inclusive definition,” and the like, to conclude that inclusiveness is nevertheless the primary way in which this work is intended to differ from its predecessors.26

Just the following year, David Watkin published A History of Western Architecture (1986) and Isabelle Hyman and Marvin Trachtenberg published Architecture, from Prehistory to Postmodernism: The Western Tradition (1986), as additional manuals on architectural history, aimed at students, but with an explicit Western bias.27

Even if Curtis’s only deals with the twentieth century, there is a certain parallelism between Kostof’s A History of Architecture and Modern Architecture Since 1900. Apart from being published around the same time—1985 and 1982 respectively—both books prioritise method over research and a readable literary style over scholarly conventions such as footnotes. Both make explicit their intention to distance themselves from predecessors and to visit the places about which they write whenever possible. Because of its readability, the writing undertaken by both Kostof and Curtis may be overlooked, resulting in a certain lack of acknowledgement of both their contributions, less so with the former than the latter.

In “Some Observations on Recent Architectural History” (1988), Trachtenberg noted that architectural historians were at fault for wanting to keep architectural history “at arm’s length,” making their writing “heavy, obscure, or pretentious, and often concerned with technical matters understandably unpalatable or irrelevant to readers devoted to drawings, paintings and sculptures.”28 While he acknowledges that architecture is a subject not without difficulties, he criticises the majority of architectural literature for not attempting to clarify or reduce such distances. If considered a starting point for any study in the field, the survey, as a genre, fights this obscurantism and connects the discipline with its audience, which encompasses not only students of architectural history, but also educated people and scholars from other disciplines.

The Distance between Modern Architecture and its Historians

Modern Architecture Since 1900 is, for Curtis, exemplary of what historians should have been doing at the end of the 1970s, and of what previous historians neglected. When he first started writing, it seemed necessary “to avoid the various determinisms
[historical or social, as well as over-simplistic definitions] of some previous authors, and to elaborate a more complex picture of both the internal order of a modern tradition, and of longer-range debts to the past, by showing how modern masters had learned and transformed lessons from the past. Curtis does not “wish to add some glowing extra chapters” to previous historians’ sagas, nor to add to the growing number of “revisionist” histories trying to demonstrate that “modern architecture was some temporary fall from architectural grace,” but to distance himself from them. Curtis also understands that it is nearly inevitable to fall into some of the previous historians’ weaknesses the closer you get to the present, but, for Curtis, *Modern Architecture Since 1900* is evidence of his attempt to avoid those weaknesses, grounding his narrative on principles of the disciplinary tradition:

> This book was written partly with the idea that a historical bridge might be built across the stream of passing intellectual fashions to a more solid philosophical ground, partly with the hope that this might encourage a return to basic principles. But such aims have been secondary: the first thing a historian ought to do is to explain what happened and why, whatever people may now think of it.

Curtis defines history as a communal activity, bound to draw on past models though reinterpreting them. In addition, by presenting new facts and buildings, it is possible to re-scrutinise and reconsider personalities and events that “once seemed to have some immutable status.” The historian’s task requires a rigorous differentiation between fact and opinion, and a deep understanding of the individual works of architecture, which are historical documents. Despite the importance that Curtis gives to scientific rigour and documentary evidence, in his opinion they are no substitute for insight and interpretive skill, which the historian must use to humbly test their historical hypotheses. In his opinion, the experience of the buildings themselves and the resulting fresh insights have a “liberating effect” against dogmatic and deterministic approaches to the writing of history, arid scholasticism and passing fads. Furthermore, he refers to the experience of buildings as “one of the most direct and enjoyable ways of having one’s prejudices upset.” In his opinion, architecture should be allowed to speak for itself, to not only the historian, but also the reader:

> Maybe too one of the functions of a work of architectural history is to open peoples’ eyes to the richness of architecture, to teach them to see. For
eventually one must go beyond the text and the photograph to the thing itself. Architecture appeals to all of the senses, and touches both mind and body. It is embedded in daily existence, even in private and collective memories. Some realities exist well beyond books. People should go and experience buildings directly, their sites, their spaces, their unfolding sequences, their changing light and moods.36

During the course of our communication, Curtis told me that “first-hand experience of architecture is crucial in [his] way of operating,” and in his approach to the writing of history.37 Curtis’s first-hand experience of buildings, and his relationship with architects as traveller and photographer, is evident in the preparation of the book. Curtis holds the copyright on at least fifty images of the first edition, including the pictures in the chapter on “The Architectural System of Frank Lloyd Wright” leading to the type of the “Prairie House,” Mies van der Rohe’s IIT Crown Hall and Lake Shore Drive apartments in Chicago, and Le Corbusier’s work in Chandigarh, India. The quantity and quality of the images that accompany the text is increased in the third edition, and some of Curtis’s pictures from the first edition are replaced by similar ones in colour.

The way it is illustrated is also one of the aspects praised by some reviewers of Modern Architecture Since 1900. In Martin Pawley’s opinion, the strength of the first edition of the book “lies on its exhaustive selection of examples and the often careful use of contemporary photographs.”38 Jorge Sainz also highlights the improvement in the quality of the reproduction of the graphic material for the third edition, something that distances Curtis’s book from similar surveys. Sainz notes that, in the third edition, “colour appears generously and abundantly not only in the pictures of buildings (increased both in number and quality), but also in drawings and paintings.”39 Andrew Mead considers the third edition to be “much enhanced, with over 800, well-reproduced colour and black-and-white photographs which serve rather than supplant the text (plans are still only occasionally provided.)”40

Recalling his time as an undergraduate student at the Courtauld Institute, Curtis remembers the impact that the buildings he visited had on him. Curtis refers to his trips as “the lifeblood of architectural experience,” and highlights the key visits to “California in late 1970-early 1971 and Chicago in the Spring of 1971 when [he] had the chance to experience first-hand the works of Schindler, Neutra, Wright in California and Wright, Sullivan, Mies, Burnham and Root in Chicago.”41 Curtis

37 William Curtis, email message to author, August 31, 2016.
41 Curtis, email message to author, August 31, 2016.
recollects the significance of visiting Alejandro de la Sota’s Gimnasio Maravillas, in Madrid in 1987; Erich Mendelsohn’s Hadassah Hospital, in Jerusalem in 1990; Rick Lepastrier’s beach house in the northern suburbs of Sydney in 1980; and Jørn Utzon’s church in Bagsvaerd in 1978. The experience of this last building is so profound that Curtis decides to finish the first edition with it. He reflects on the consequences of some of these encounters:

A few months living in the remnants of Schindler’s Pueblo Ribera Courts in Southern California helped me to realise how important ideas of ‘origins’ were to several architects of the 1920s. A visit to Mendelsohn’s Mount Scopus Hospital outside Jerusalem reinforced an existing interest in regional inflections beyond the International Style. A cold morning in Madrid looking at the Maravillas Gymnasium by Alejandro de la Sota set in motion a revised vision of an entire decade and led to a major engagement with Spanish Modern architecture since. Time living in Doshi’s “Sangath” [his own office complex] in Ahmadabad, India, focused attention on a larger range of Asian continuities, and on creative tensions between countryside and city in the Third World.

The writing of Modern Architecture Since 1900 was at points treacherous. In the preface to the first edition, Curtis states that he was writing the chapter on “The Image and Idea of Le Corbusier’s Villa Savoye at Poissy” in Beirut, and only “luckily escaped annihilation,” resulting in the association in his mind of the Villa Savoye with the sound of gunfire. Moreover, the last third of the manuscript was “nearly lost at the bottom of the River Hawkesbury in Australia when a canoe tilted over.” From my communication with Curtis, I can add that it happened during a long weekend on his second visit to Sydney in 1980, and that it was a handwritten manuscript. The final chapter “was written in a single twenty four hour session in a beach house on the Queensland coast in the spring of 1981 [fall in the southern hemisphere] after which I [he] plunged into the surf as the sun was rising over the sea.” This happened during his third visit to Australia, and he still recalls the beach house, “about 70 miles north of Brisbane at a place called Coolum Beach” at the Sunshine Coast: “a beautiful white house on stilts with tin roof.”

In summary, for Curtis, the writing of history, like architecture, is mainly a creative practice involving the innovation and experience of the creator’s mind that needs to understand who
is going to read it. This ambivalence between the practice of historians and of architects is not new, and can be explained by considering an author as a “book constructor.” 49 I argue that Curtis’s choices to build his narrative by synthesising previous scholarship, while avoiding theoretical debates; describing the experience of buildings; and avoiding quotes and an excess of notes, combine to enhance the readability of Modern Architecture Since 1900. Curtis accepts that in emphasising the accessibility of the text there is a risk of ultimately hiding or disguising its potential scholarly value.

Distances Then and Now

Those writing architectural history surveys in the nineteenth century, also made “a frequent comparison between the act of building and the writing of architectural history,” and it confirms Dan Karlholm’s argument that “the importance of the survey texts lays in its making of the field of study.” 50 Petra Brouwer regards James Fergusson, Wilhelm Lübke and Franz Kugler as pioneers of architectural history and inaugurators of the genre of the survey in the nineteenth century. The three authors reflected on the advantages and limitations of the survey text in the introduction to their books, highlighting the merit of synthesising of previous scholarship and making it accessible to a wider audience which included the educated public of that time—the connoisseurs. In her paper for the fourth annual conference of the Architectural Research in Europe Network Association, entitled “A World of Architectural History” (2018), Brouwer discussed their work in terms of readability, their use of photography and their privileged willingness to travel; all tainted with the limitations of its colonial time. I would argue that there are similarities and resonances in the approach to the writing of history between these authors and the work of Curtis, even if he only surveys the twentieth century, and Kostof in the 1980s. In the case of Modern Architecture Since 1900, Curtis does not comment on the fact that, in the late 1970s, his first-hand experience of architecture of the non-West, his claim of constructing an unmediated history, was the result of a rather privileged condition—similar to that of the survey writers of the nineteenth century.

Moreover, surveys and world histories of architecture written in the nineteenth century have been reconsidered recently as precedents of the contemporary scholarship on “global.” One of the key contributions to the field is Kathleen James-Chakraborty’s Architecture Since 1400 (2014), which Frampton

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has referred to as a “mega-academic book.” As was the case with Curtis, she used the material she had prepared for her lectures in Berkeley. In a forthcoming essay that she has generously shared with me, also giving me permission to mention, James-Chakraborty reflects on the process of constructing the book and on the demands of writing an architectural survey. As a writer, she considered herself to be “far more dependent than usual on fellow scholars,” including her former teaching assistants, and the work to be the boiling down of a shelf of monographs into a few pages. Lastly, she recognised that the real audience of a survey is “the curious lay person whether an undergraduate, a tourist, or perhaps a scholar from another field,” what in this paper I have already referred to as educated public. She was prompted to write an account that would distance itself from “three new global surveys” that she had been asked to adopt in her teaching or to be a peer reviewer for the manuscript. I met James-Chakraborty as the chair of the 2016 meeting of the European Architectural History Network in Dublin—since then, she has contributed her insight to my research—and talked to her about the process of constructing the book at the 2019 conference of the Society of Architectural Historians (SAH) in Providence. During the course of our communication, James-Chakraborty shared her reasons for writing the book:

*I wrote* Architecture Since 1400 very consciously in opposition to Kostof, the text I was using for my own survey course, and to the other texts that I was being approached by publishers to use or being asked to review in manuscript. Architecture Since 1400 arose as well out of a very particular class that covered that material, rather than my Modern Architecture survey, which I construct very differently. In particular, I was furious about the coverage (or lack thereof) of work by women in all of these books and manuscripts and by the sense that, even when the so-called Global South was covered that they were still seen as in some way less modern.

I argue that, as a result, James-Chakraborty distanced her account also from precisely the resulting literature of that “epochal transition” period between the 1970s and 1990s, including not only Kostof but also Curtis’s books—just as they distanced themselves from preceding and contemporary authors.

To conclude, in her keynote address “On the Future History of Modern Architecture” at the 2019 SAH conference, Joan Ockman reflected on the different dimensions of distance. She finalised her lecture with a seemingly obvious assertion: that

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52 Kathleen James-Chakraborty, “Daring to Draft a Canon,” draft chapter for a forthcoming publication shared with the author and quoted with her permission.

53 James-Chakraborty, “Daring to Draft a Canon.”

54 Kathleen James-Chakraborty email message to author, July 1, 2019.

55 Kathleen James-Chakraborty email message to author, June 8, 2017.

history is a mediation between the past—its subject matter; the present—its audience; and, the future—which from what has been explored in this paper could be the actual making of the disciplinary field. Under this lens, Curtis’s *Modern Architecture Since 1900* could be the 1982 present. Then, I argue that, in terms of his approach to the writing of history, Curtis’s book can be considered to mediate the distance between the colonial approach of the architectural surveys of the nineteenth century—that is the past; and, the future—at that time—attempts at the writing of a global history of architecture, deeply grounded in the disciplinary tradition.
Distance Eclipsed in the “Big Little Show”: The Australian Pavilion at the 1937 Paris International Exhibition

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If the Australian government’s tardy response to the invitation to exhibit at the 1937 Exposition Internationale des Arts et Techniques dans la Vie Moderne in France, showed “indifference,” the same cannot be said of the lively Advisory Committee that in less than three months devised a thoughtful exhibition in Australia’s first modernist pavilion. On November 23, 1936, the Committee invited Stephenson, Meldrum & Turner’s Sydney office to design a small (233 sqm) Australian pavilion to be “of the simplest character.” Ten days later their circular design was approved and sent to a Paris architectural firm for construction. The firm continued to work with the Advisory Committee, overseeing the design of the interior fit out including lighting and display furniture, and adjacent landscaping. Unlike earlier exhibitions that prioritised primary produce, this Australian pavilion would exemplify artistic merit, simplicity and “the impression of spaciousness.” The visitor was offered “a cycloramic impression of a new nation’s significance in the world of art and industry.” The decision to fuse art and design paid off, with the Visitors’ Book showing numerous testimonials to the intelligence and imagination of the whole. This paper examines how the architectural team and the Advisory Committee worked together to ensure the pavilion would present a coherent and lively sense of contemporary Australian culture to people in distant lands. The paper draws on archival research in France and Australia.

Keywords: Australian pavilion; Paris International exhibition 1937; international exhibitions; Stephenson, Meldrum & Turner; art and architecture
The Australian Pavilion for the 1937 Paris Exposition Internationale des Arts et Techniques dans la Vie Moderne (fig. 1) was probably the first time that Australia presented herself to the world as an independent, modern nation. The streamlined, largely-cylindrical (a-shaped) architectural form dispensed with elaborate architectural trappings of empire that had been seen in the 1908 Franco-British Exhibition in London, England and the 1915 Pan-Pacific International Expo in San Francisco, North America. This was not an opportunity for crowded exhibits of primary produce as seen in the 1924 British Empire Exhibition in Wembley, England, and the 1936 Empire Exhibition in Johannesburg, South Africa. Drawing on archives from Australia and France, this paper tells the story of the genesis of the core ideas for the pavilion and its intimately-integrated exhibition, identifies issues arising from its size and location, and evaluates immediate and more recent critical responses.

**Genesis**

Although Australia must have been advised shortly after December 1934 by the British Ambassador in Paris that France intended to host an International Exhibition in Paris 1937 addressing art and design in modern life, little notice was taken of the opportunity. Even as late as September 1936, Australia
remained reluctant, putting some store on the opinion of the High Commissioner in London, ex-Prime Minister Mr Stanley Bruce, that “little value would result” from participation. In the end, however, the indefatigable efforts of M. Suzor, the French Consul-General in Sydney, prevailed. With just four days to go before the final deadline, Australia advised the French government of its decision to participate. That was October 26, 1936. The exhibition was scheduled to open May 1, 1937.1

The last-minute change of mind appears to have been prompted by Charles Lloyd Jones, the Chair of the official Advisory Committee, who wrote to Earle Page, Minister for Commerce, on September 14, urging Australia’s involvement. He argued that, in addition to wool and wood, “It is very desirable also that a representative collection of Australian landscape art should be shown there to give the French people an idea of our cultural development….”2 He proposed Page establish “a small committee with the outlook, vision and taste to make such an Exhibition worthy of Australia,” recommended the committee be “preferably from outside Government departments,” and added that his views were shared by Prof EG Waterhouse at the University of Sydney, and Mr Sydney Ure Smith, President of the Society of Artists.3 Days before the Government made its decision, Page put a three-page document before Cabinet in which he argued that “a virile and interesting exhibit will stimulate interest in Australia generally.”4 He was aware that there was “an idea that Australians lack ‘culture’,” so “a cultural exhibit would assist in dispelling this fallacy by making contact with the intellectual class.”5 Page imagined Australia could respond to the core themes of the Exhibition by showcasing photography, radio communications, press and propaganda, the layout of towns, public buildings, preservation of buildings, architecture, painting, sculpture, books and magazines, fabrics, transport & touring—yachting, aeronautics and surfing. Sydney Ure Smith had advised Page that the “the exhibit would have to be of a high standard; one capable of comparison with the best artistic work of Europe.”6

The official Advisory Committee was just four people: Charles Lloyd Jones (Chair), Director of David Jones Ltd, a Trustee of the Art Gallery of NSW, and on the board of the Australian National Travel Association; Sydney Ure Smith, President of the Society of Artists and editor and publisher of Art in Australia, The Home, and other journals fostering modern art and design; G.V.F. (Gother Victor Fyers) Mann, chairman of the Commonwealth Art Advisory Board; Ulrich R. Ellis (Secretary), Commercial Intelligence Officer, Department of Commerce.
The first three gentlemen were all amateur or part-time artists and held positions of influence within business and government circles. Ellis must be credited as the steadfast bureaucrat who upheld the committee’s wishes in the storms that lay ahead, a role ably matched by the Australian Trade Commissioner in Paris, Clive H. Voss.

The Advisory Committee first met November 18, and thereafter at least weekly. Their first major decision was to invite to the next meeting someone from the Sydney office of the Melbourne architectural firm Stephen, Meldrum & Turner (SM&T) in order to discuss the pavilion design. Thereafter Mr G.L. Moline, Mr H.J. Tribe or Mr Simpson from SM&T would attend each meeting and assist the committee in integrating the exhibition content and the emerging interior design. Also Mr H.W. (Henry) Bindoff, a designer at David Jones, and Russell Roberts, a leading commercial photographer, were invited to attend. From the very start art and design were integral to the thinking about the pavilion.

The speed with which the Committee worked was astounding. They wanted a building “of the simplest character.” Ellis elaborated: “It is desired to express in as simple a form as possible the development of industry, the arts and culture in Australia; also to demonstrate the community life of our people and to illustrate the natural attractions of this country from a tourist point of view.” Two weeks later, on December 9, draft plans for the 230 sqm circular building were approved, with the final designs sent to Paris just one week later. Australia had extracted an agreement from the French exhibition committee for the hosts to cover most of the construction costs. Moline, from SM&T, and Bindoff, from David Jones, jointly designed the “showcases and display facilities,” also to be fabricated in Paris. As the floor plan shows (fig. 2), the building had no screens interrupting the space. There were a few showcases as well as a “rotunda” in the centre of the space, “equipped with transparencies and surrounded with a table of Australian timbers.”

Key Elements of the Interior

Because the architects were invited to the meeting, they understood the goals of the committee, later summarised as “two main principles—artistic merit and simplicity of presentation”; unlike the more elaborate buildings and crowded displays of earlier exhibitions. At the time the plans were approved decisions had been made about space allocation:


9 NAA: A601, 666/6/10.

10 NAA: A601, 666/6/10, 23.

11 NAA: A601, 666/6/10, 26-27.

half of one side to wool, half to timber and the opposite side to exhibits giving a general impression of Australia to be organised in cooperation with the National Travel Association [ANTA]. … the walls opposite the entrance should be devoted to the Art exhibit; … the rotunda should be equipped with transparencies and surrounded with a table of Australian timbers… [and] a map of Australia in relation to the world should decorate the ceiling, while the walls would be decorated with large photographs depicting Australian industries and scenes.13

It was just three weeks since the Committee first met, and this guiding concept remained intact. Two weeks later the Committee approached Dr Elkin, Professor of Anthropology at the University of Sydney, “with the object of organising an exhibit of Aboriginal and New Guinea Art, special emphasis to be laid on the use of native design for fabrics.”14

By January 20, they could list the key components of the exhibition.15 Three weeks later they reviewed the arrangement of the works at a mock display at David Jones, and agreed on the principles for captions as well as the scope of the catalogue. Packaging, insurance and shipping arrangements were finalised, and the exhibition left Australia’s shore on February 18, 1937, exactly three months after the Committee first met.16

It was at this time that the Committee arranged for Melocco Bros. to make a model of the pavilion, 3’9” x 3’ x 30” (114

Figure 2. Stephenson, Meldrum & Turner, Australian Pavilion for the International Exhibition, Paris, 1937. Floor plan. (Courtesy of Archives nationales (France) 1937, F/12/12337.)
x 91 x 76 cm), to circulate some of the capital cities.\textsuperscript{17} The accompanying press release began as follows:

\begin{quote}
Within the Pavilion, in an atmosphere of simplicity and spaciousness, the story of Australian life and progress has been epitomised. The exhibit has been so arranged that the spectator, standing some distance within the entrance may gain a cycloraphic impression of a new nation’s significance in the world of art and industry.\textsuperscript{18}
\end{quote}

The \textit{Melbourne Herald} (April 1) elaborated, noting the word “Australia” is illuminated at night with orange Neon lights, with interior walls “painted duck-egg green, growing lighter as it reaches the ceiling and across to the edge of the roof light,” and the floor of “varying shades of green, ranging from dark at the centre to light at the walls.”\textsuperscript{19} It continued:

\begin{quote}
A map, 10ft in diameter, indicating the travel routes by air and by sea between France and Australia, will provide the central feature of the ceiling, the details being brought into relief by concealed lighting…. One of the main features of the display will be a selection of Australian works of art, which will occupy the back wall. On the side walls, photographic enlargements of beauty spots and industries will hang, and show cases and platforms will contain exhibits of woollen goods, precious stones, examples of [A]boriginal art, colour printing, Australian literature, and timbers and oils…. All show cases, platforms and internal fittings will be constructed of Australian timbers. Leading Australian newspapers will be on view.\textsuperscript{20}
\end{quote}

Strong though the commitment was to Australian art, there was no doubting that any exhibition sponsored by the Department of Commerce had to foreground primary products, which in this instance included wool, wood and opals. The Committee worked with the newly-formed Australian Wool Board whose job it was to put together a wool display and publish a brochure on the significance of wool to the Australian economy. But because the Paris Exhibition was on art and design, and given that Australia seemed to care little about secondary industries that might have seen wool developed into coveted fashion designs, the committee looked no further than David Jones Ltd to find modern and distinctive woollen products in subdued browns, reds and pale ochres with touches of white and black.\textsuperscript{21} With Australian Wool Board approval, the committee allocated one of the cabinets to exhibit smaller items of Aboriginal art alongside the woollen products in the hope that Europeans would recognise that “[A]
boriginal designs might be copied by textile designers”—an intent that proved stronger in the desire than the reality.22

Linking all the disparate elements was the photo-mural of “Australian scenes and industries” compiled and processed by Russell Roberts.23 These images, each 6’ x 3’4” (183 x 91 cm), were designed to overlap and thus be read as a continuous mural. They elicited much praise from visitors.

The committee’s attention to Aboriginal art and design was reflected in the catalogue, in a letter from the French Consul-General in Sydney to the French Minister for Foreign Affairs, and in an article published by the *Bulletin* of the British Chamber of Commerce in Paris.24 Consequently, it must have been devastating for the Advisory Committee to read a report in the *Journal Industrielle*, one month before the official opening of the display, that the Australian Pavilion had “wool, furs, metals, minerals, pearls, fresh and canned fruits, dried fruits and wines as well as various Australian wood species,” in addition to Australian art objects and paintings, tourist posters books and brochures, exotic fish and a lovely exhibition of opals and sapphires.25 This spin, which could not have come from sources based in Australia, reads as if it was originally drafted for the display for the 1936 Empire Exhibition in Johannesburg, with amendments acknowledging the inclusion of art for the Paris exhibition. Certainly, Australian politicians with affiliations to primary producers, dignitaries including ex-prime minister Stanley Bruce in London, and representatives from the London office of the Australian National Travel Association (ANTA), used their combined power to ensure that more travel and commercial items were included than were envisaged by the Committee. It was Bruce who had actively dissuaded Australia from participating in the exhibition and his distaste did not abate.26 Immediately following the inauguration of the Pavilion, he wrote to Acting Prime Minister Sir Earle Page (Minister for Commerce, the very ministry that took carriage of the Australian pavilion), complaining about the emphasis on art and design over “primary products.”27 A brief article in *The Home* confirmed that the “usual display of primary produce and tinned goods was not given any space in the exhibition, and this fact seemed to cause adverse comment.”28 Ellis, the departmental representative on the Committee held firm when negative impressions hit the press. He was able to reassure his boss that the design of the interior did indeed convey spaciousness and avoid overcrowding, a fact that only disappointed those “persons going to the pavilion with the idea that they would see piles of eggs and dried fruit and butter.”29

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22 NAA: A601, 666/6/11.


26 Australian government ministers attending the May coronation of George VI declined to launch the Paris pavilion. Eventually the Minister of Defence did so on June, 24.

27 NAA: A601, 666/6/11, 86..


This paper elaborates on the exhibition contents because the building and the display it housed were integrally linked. As yet, good photographs of the interior have not been located, although the architectural drawings do reveal the intended design and useful details (figs 2 & 3).\textsuperscript{30} Fortunately, there exist vivid verbal accounts of the interior fit-out.\textsuperscript{31} Along the (straight) back wall was the display of Australian art. On each side was a low, six inch (15 cm), wooden platform supporting a two-shelved vitrine at either end. To the right was the display of Aboriginal art and wool products. To the left were samples of Australian publications including Louise Dyer’s \textit{L’oiseau lyre} music books, the ANTA material, and the opal display.

On either side of the entrance was a wall display of Aboriginal weapons and objects. In the centre was a “rotunda” consisting of a table of Australian woods and a central translucent cylinder with eleven transparencies of Australian life, the illumination from the core of the cylinder coming from a spotlight directed to the Douglas Annand map on the ceiling above. Likewise, a table positioned near the back of the room was admired for its timbers. The carpentry, made in Paris with Australian timbers and specifications, was designed to allow the eye to scan the entire wall at mid-point and get a sense of the whole. Alas, the low platform and shelving system were too low: the lower shelf in the vitrines required visitors to bend over to peer at products; and all the items on the shelves were filthy because relentless rain in Paris in the months before the official opening resulted in all manner of delays including the repaving of access paths.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image}
\caption{Stephenson, Meldrum & Turner, Australian Pavilion for the International Exhibition Paris 1937. Cross sectional drawing. (Courtesy of Archives nationales (France): 1937, F/12/12537.)}
\end{figure}

\textsuperscript{30} The author is still trying to locate photographs taken by Russell Roberts of the mock-up exhibition in Sydney prior to its departure. “The Australian Pavilion at the Paris Exhibition” includes two poor images of the Paris interior.

\textsuperscript{31} The following accounts come from the British Chamber of Commerce’s \textit{Bulletin} article in May, and a report from Voss in June.
Following complaints from London, the Advisory Committee agreed to raise the platform and shelves.

Early Responses to the Building and Location

The interior was generally admired for its restraint and spaciousness. The Visitors’ Book, which captured impressions of visitors from around the world, acknowledges this fact, with many admiring the beauty of the building and the display. Many commented on its small size: “The pavilion is small but attractive” (Czechoslovakia), “Small pavilion but very attractive,” and “The Australian pavilion is one of the most beautiful in the exhibition” (France), “Small but good,” “Little and good,” “one of the most effective displays in view of space,” and “very good display for space” (Australia), “A gem, but small for Australia” (India).32 Although the Australian media ran stories on the inadequacies of the pavilion, especially the display, the Visitors Book shows that people admired the building, the interior display, the quality of the art, the photographs and the opals. Sydney Ure Smith summed it up when he said: “No other Dominion spent such a small sum on its Pavilion as Australia, but in spite of considerable hostile criticism, in all cases from Australians, the Government’s representative in Paris, Mr. C. H. Voss, has received many congratulations on the excellent taste and simplicity of the arrangements and particularly on the quality of the Australian Art Exhibition.”33 It was Australians also who were most embarrassed by the Aboriginal works for fear they gave “the impression to foreigners that Australia was still a black man’s country.”34 Europeans, other Commonwealth countries and of course many Australians as well, were genuinely impressed.

The cylindrical form of the building and its slight protrusion beyond the set-back line meant that, despite its modest size at 233 sqm and its peripheral location, the orange-neon AUSTRALIA sign could be seen from the high terrace at the centre of the new Palais de Chaillot at the Trocadero. With the internal diameter at just 14 metres it was a far cry from the almost six-acre space occupied by Australia at the British Empire Exhibition in Wembley, 1924.35 No one remarked that its form, understood as a surprising commitment to modernity in Australia, included a passing nod to the cylindrical British pavilion at the Johannesburg Empire Exhibition the previous year.36

There were, however, two aspects to the pavilion that attracted universal criticism: the building’s location, and the paltry
budget. As mentioned at the outset, Australia was late in accepting the invitation to participate with the result that its site was on the periphery of the main attractions. These were on two axes, north-south from the Trocadero high on the right bank the across the river past the Eiffel Tower to the Champs de Mars beyond, and east-west along the River Seine. Australia was allocated a space well into the Champs de Mars (behind the Eiffel Tower), opposite Haiti and further from the centre of things than the tiny pavilion dedicated to the French animal welfare organisation, the Association française pour la défense des animaux. Australia struck a bargain with the French that the host government would pay for all basic construction costs, with Australia only having to cover the costs of building embellishments inside and out plus all transport and administration costs associated with the exhibition. For the Empire exhibitions in Wembley (1924) and Glasgow (1938) Australia committed £200,000 on the exhibits.37 For the entire Paris project, including: the chrome Coat of Arms, building name and flag poles; furniture fabrication; lighting fabrication and electricity costs inside and out; the catalogue; shipping and insurance; administration; plus unexpected costs for the glass façade, etc., the Australian government allocated just £3000 (in today's terms, $AU277,160.00).38 As Ellis noted, “even Siam is spending £11,000 with most other countries increasing their votes as a result of a 45% spike in labour costs in France in the six months prior to opening.”39 Eventually Australia allocated an additional £400 after the criticisms and proposed amendments from its representatives in London. These were the realities under which the Advisory Committee had to work, and any fair assessment of the Australian pavilion would have to acknowledge the creativity and ingenuity of Committee and its supporting architects and designers.

Not many visitors to the pavilion identified themselves as architects. Some names are easy to recognise. Walter Bunning (then working for SM&T) thought it “well organised & with care. Quite pleased with interior.” And A.H. Mack added: “A compliment to Stephenson, Meldrum and Turner.”40 A French architect found it “very interesting” and a Swiss saw it as “very original.”41 Bunning later wrote that the building was “quite effective, considering the small amount extended thereon [but] It has an unfortunate position…” and Mack added that “The Australian pavilion is quite a nice little thing. There is a remarkable interest evinced in Australia, and it is to be hoped that, on a future occasion, Australian industries will be represented more adequately.”42


40 Visitors’ Book.

41 Visitors’ Book, author’s translations.

Later Responses

The little scholarship that exists on the Australian Pavilion in France is mostly located within the architectural and design historiography. Surprisingly, much of this has been negative towards the architectural and design endeavours of the Advisory Committee. In 1983 Geoffrey Caban quoted Gordon Andrews as saying the exhibit was “the most disgusting thing I’ve ever seen.” A monograph on the acclaimed designer has Andrews recall an exterior “with letters spelling A U S T R A L I A like a row of birds perched on the top” and an interior with “pyramids of jams and canned fruit, here and there punctuated by moth-eaten stuffed koalas and wallabies, no doubt dredged up from one of our embassies. It was without a doubt the worst exhibit of all; the so-called primitive countries did far better.” The only koala was a photograph of the Australian mascot in the photo mural. There were no pyramids of canned produce, although there were plenty in Johannesburg in 1936 and in Glasgow in 1938. Indeed, when one Australian visitor to the Paris pavilion berated the “very poor display…no canned or dried fruits, wheat, etc,” another quipped: “what does he think the pavilion is: a farm?” If Andrews did indeed visit the Australian pavilion he did not sign the Visitors’ Book. Memory can play cruel tricks. It is possible that Andrews confused aspects of both the Paris and Glasgow pavilions; either way his remarks form a poor premise for an appraisal of the Australian Pavilion at the 1937 Paris International Exhibition.

Nonetheless, Australian architectural historiography has continued the lacklustre appraisal. Philip Goad describes the pavilion as “an unremarkable Moderne cylinder” containing “a travel advice bureau, a collection of paintings that focused on natural and agricultural landscapes, photographs of a koala, an aborigine [sic], a woman surfing, and a house by Leslie Wilkinson amongst other images,” and notes expatriate Australian architect Raymond McGrath’s comment that “the place was awful” and that he was ashamed to think that Arthur Stephenson had attached his name to it. Although generally damning, at least design and architectural historians have acknowledged the existence of the pavilion. Until now it has been ignored in Australia’s art and cultural histories.

The Australian Pavilion for the 1937 Paris International Exhibition deserves a reappraisal. On one level close attention should be paid to the unusual bureaucratic process. Having been persuaded by the French Consul and Sydney Ure Smith in Sydney, the Minister of Commerce was able to sway a
recalcitrant prime minister and cabinet to endorse Australia’s representation in the 1937 exhibition, albeit with a miniscule budget. In turn, the steady resolve of the Minister’s Commercial Intelligence Officer, Ulrich R. Ellis, and the Australian Trade Commissioner in Paris, Clive Voss, to hold true to the Advisory Committee’s goals, meant that the project was able to weather the small, orchestrated storm that greeted its very existence. Although Australia briefly reverted to a display of primary produce for the Glasgow exhibition the following year, it was the experience gained in putting together the pavilion in Paris, one that sought to eclipse the distance between Europe and the Antipodes, that equipped much the same team to present Australia effectively in the New York World Fair of 1939, North America, and the New Zealand Centennial Exhibition in Wellington in 1939-40.48

The small but considered pavilion held its own against the financial and locational odds. Its embrace of European modernism may have lacked the finesse of Aalto’s Finnish pavilion and the raw inventiveness of Le Corbusier and Pierre Jeanneret’s Temps Nouveaux pavilion.49 However, the combined architectural and exhibition program forged a concept of Australia as progressive, with a sense of its own identity beyond being a British dominion and a primary producer, proud of its art, and willing to declare a position in relation to design.


Conceptualising Diplomatic Representation on an Architectural Level: The Purpose-Built Embassy as Architectural Typology?

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In recent years purpose-built embassies have increasingly drawn attention from researchers. Conceived as the architectural flagship of the state abroad, purpose-built embassies have been studied to unravel the building policies and practices of different state actors. While this case study based research has enriched our knowledge of representational strategies, a conceptual discussion approaching purpose-built embassies on a typological level is less pronounced in architectural research. This paper aims to open up this discussion using the example of Belgian purpose-built embassies—a case which involves a wide variety of typological variations and is very much influenced by the use of cultural diplomacy deployed by this middle power state. Appearing on a larger scale in the streetscape of capitals since the twentieth century, purpose-built embassies are the result of a unique building assignment located on foreign soil. They often house a hybrid environment, shaped by bureaucratic, housing and representational requirements relatable to government offices, hôtels particuliers and national pavilions in world’s fairs. So what exactly constitutes the purpose-built embassy and to what extent can we speak of an architectural typology? In order to address these questions, the paper consists of two parts. The first part aims to shed light on the evolutions within Western and in particular Belgian diplomatic patrimony. The second part touches upon the different components of Belgian purpose-built embassies and compares them with established typologies.

Keywords: Architecture; diplomacy; Belgium; national identity; middle power; international politics
On February 9, 1957 the new Belgian chancery in Washington, DC was officially inaugurated by Minister of Foreign Affairs Paul-Henri Spaak (1899-1972). Being one of the first purpose-built embassies commissioned by Belgium, the opening of this diplomatic mission was part of a representational shift in the country’s diplomatic patrimony. Whereas embassies were, and still are, predominantly located in purchased or leased buildings, “sending states” have also opted to construct embassies. Commissioning one of its first purpose-built embassies in the post-war period, Belgium followed the international trend of constructing embassies.

Appearing on a larger scale in the streetscape of capitals since 1945, purpose-built embassies form a challenging building assignment for sending states. Apart from the challenge of building abroad, purpose-built embassies have to meet different requirements depending on the function of the building. In general parlance, an embassy comprises the dual function of a chancery accommodating the offices of the diplomatic staff and a residence meeting the housing and representational needs of the ambassador. In addition, embassy architecture has in some cases been used by sending states to form a materialized representation of the nation abroad combined with an interplay of art and interior design. As such, Jane Loeffler labels purpose-built embassies as “[…] symbolically charged

1 This paper is part of the PhD project “Designing Embassies for Middle Powers: The Architecture of Belgian and Dutch Diplomacy in a Globalizing World” funded by the Department of Architecture of KU Leuven and supervised by Prof. dr. Fredie Floré and Prof. dr. Anne-Françoise Morel.

buildings uniquely defined by domestic politics, foreign affairs, and a complex set of representational requirements. In recent decades, however, embassy buildings have faced political and budgetary challenges. As political symbols on foreign soil, embassies have become prized targets for terrorist groups. As a result, security has become a major concern when designing and constructing embassies. In some cases, the threat of terrorism has led to the relocation of embassies away from the city centre to fortress-like compounds on a city’s outskirts. In addition, the financial burden of constructing embassies has led to profound changes. The pooling of embassy buildings by two or more states, called colocation and primarily used by smaller states, appeared in the 1990s for both budgetary and political reasons. Apart from colocation, purpose-built embassies have been sold as part of real estate operations to balance a government’s budget or purchase new accommodations, sometimes located in generic office buildings, such as the Belgian embassy in Bangkok and Tokyo.

These changes raise questions as to what exactly constitutes a purpose-built embassy. Despite considerable interest in embassies, a grounded conceptual discussion laying bare the typological characteristics of these diplomatic constructions is currently missing in architectural research. Instead, scholars have primarily focused on case study research to unravel building policies and representational practices of state actors. Scholarly attention broadened to include interior design focusing on the representational repercussions of art and furniture displayed in embassies. While this case study research has enriched our knowledge on sending states’ building policies and practices, a more conceptual discussion is lacking. Therefore, this paper sets out to question to what extent purpose-built embassies can be labelled as an architectural typology. For the concept of typology the paper relies on the description by Andrew Leach who labels the study of type as “[…] the correlation between the form, character and organization of a building and the purpose it serves […]”. Since this paper does not aspire to embark on a lengthy discussion of the concept of typology, Leach’s definition gives the advantage of being clear and comprehensible.

To approach purpose-built embassies on a typological level, this paper consists of two parts. In the first part, a historical evolution of diplomatic patrimony will be discussed. By retracing the origins of and evolutions affecting purpose-built embassies, this part aims to improve our understanding.
of the transformations shaping these diplomatic buildings. Building on this foundation, the second part will touch upon recurrent themes in both the chancery and residence and draw comparisons to relatable typologies. With this comparative approach, the second section aims to identify the different layers within purpose-built embassies. As such, this paper aspires to start off a more thorough discussion on how to qualify the purpose-built embassy as an architectural typology. Throughout this paper, emphasis will be placed on Western purpose-built embassies since 1945. Against the backdrop of the development of the Transatlantic Alliance and a growing political and economic interdependency, countries on both sides of the Atlantic have from time to time invested in embassy architecture as a representational instrument. Tasked with streamlining these intensifying bilateral contacts and identified by the UN Vienna Convention in 1961 as the highest-ranked diplomatic mission, embassies have become the cornerstone of the overseas patrimony of sending states such as Belgium.9 Discussing this nation’s efforts at embassy-building forms an interesting case of point. Firstly, Belgium can be labelled as a middle power in international politics. Whereas the lion’s share of literature on embassy architecture has focused on world powers, the building policies and practices of middle powers are less touched upon.10 Many countries—in particular middle powers—have been confronted with the increasingly complex assignment of national representation within a more globalized context after the Second World War.11 The challenge of representing the nation-state in the post-war period coincides with the rising number of purpose-built embassies in the diplomatic patrimony of sending states, as illustrated by the Belgian embassy in Washington, DC. Secondly, Belgium has an extensive network of embassies. Numbering only ten embassies in 1939, the country nowadays operates 82 embassies with approximately thirty of these being purpose-built.12

Retracing the Origins and Evolution of Purpose-Built Embassies

Although today the word embassy as such evokes associations with a fixed environment where an ambassador works and lives, its etymological origin has a far more dynamic nature. Deriving from the Indo-European word ambhi meaning “going around,” the word “embassy” initially referred to envoys instead of buildings.13 Although the use of envoys remained a common diplomatic practice until late in the nineteenth century, the


10 Robin, Enclaves of America, 63-88; Loeffler, The Architecture of Diplomacy; Bertram, Room for Diplomacy.


fourteenth century Italian city-states of Milan and Venice started to send diplomats abroad to reside there for a longer period of time.\textsuperscript{14} It is imperative, however, not to interpret these first residences with our understanding of embassies. In contrast, these diplomatic buildings only served as living quarters. In addition, diplomats were tasked with the search for adequate housing themselves. With these proto-states being undercapitalized, diplomats were paid on an irregular basis. Therefore, many of these embassies closed down due to high costs, unqualified diplomats and lack of issues to discuss on a permanent basis.\textsuperscript{15} Although only serving as living quarters for the ambassador, Milan supported its resident embassies by a chancery, located in the home country, which processed their letters and sent new instructions.\textsuperscript{16} The use of a chancery, a medieval writing office, was copied from the Catholic Church. Originally, chanceries were the work environment of chancellors where charters and treaties were composed and sealed.\textsuperscript{17}

With the rise of the nation-state in the nineteenth century, the sending of resident embassies turned into a more common practice. In addition, the meaning of the word embassy gradually shifted from the envoy to signify the diplomatic mission as an institute and subsequently broadened to also include the building units accommodating the mission. As part of the rising nation-state and its bureaucratization, the newly-formed foreign ministries professionalized diplomatic conduct by training and regular payment. States also focused on organizing the accommodation of their diplomatic personnel abroad.\textsuperscript{18} Great Britain bought a Parisian hôtel particulier in 1814, which became its first state-owned embassy.\textsuperscript{19} These hôtels particuliers, originating in seventeenth-century France, were luxurious urban residences for noblemen. With emphasis on prestige and aristocrats acting as ambassadors, it comes as no surprise that hôtels particuliers were and still are used as ambassadorial residences.\textsuperscript{20} The corps diplomatique of the young Belgian state, gaining its independence in 1830, relied heavily on the aristocracy until the first half of the twentieth century.\textsuperscript{21} Apart from their privileged position in society, these noblemen possessed the financial means to reside abroad. Whereas European states such as France and Prussia bought or rented residences from the 1860s onwards, one of the first Belgian acquisitions was the Parisian Hôtel de la Marck in 1935, which still serves as the ambassadorial residence today.\textsuperscript{22} With the growing administrative state apparatus, the tasks assigned to embassies differed one to the next. Whereas residences primarily centered on housing and representation in the form

\textsuperscript{14} Jeremy Black, \textit{A History of Diplomacy} (London: Reaktion, 2011), 44.

\textsuperscript{15} Black, \textit{A History of Diplomacy}, 47.

\textsuperscript{16} Black, \textit{A History of Diplomacy}, 44.

\textsuperscript{17} E.J. Haslinghuis and H. Janse, \textit{Bouwkundige termen: verklarend woordenboek van de westere architectuur- en bouwhistorie} (Leiden: Primavera, 2005), 250.

\textsuperscript{18} Berridge, \textit{Diplomacy}, 106.

\textsuperscript{19} Black, \textit{A History of Diplomacy}, 175.


\textsuperscript{22} Elisabeth Martin de Clausonne, \textit{Ambassades à Paris} (Lavaur: Nicolas Chaudun, 2009), 150.
of ceremonies and meetings, the embassy had, in the second half of the nineteenth century, become a political institution. The chancery, initially offering administrative support from the homeland, was incorporated into the embassy, turning the latter into a bureaucratic environment as well as living quarters. Jeremy Black describes this merge as “[…] a more general differentiation of function, emphasis on continuity, and [the] need to house larger staffs, that characterized government buildings as a whole.”

Apart from widening the activities taking place in embassy buildings, the representational strategies of sending states profoundly changed throughout the twentieth century. In addition to buying or renting buildings to accommodate embassies, sending states have opted to construct diplomatic buildings themselves. With the exception of a limited number of consulates and embassies constructed by (former) world powers before the Second World War, the process of designing and building diplomatic missions turned from a marginal into a common practice for sending states from 1945 onwards.

Coinciding with a growing international interdependency on political, military and economic matters, sending states started to accommodate an increasing number of embassy staff members, constructing embassies to enhance the state’s visibility abroad and in some cases to act as a carrier of national and ideological aspirations. For instance, the Belgian diplomatic patrimony gradually expanded by constructing purpose-built embassies in Washington, DC (1957), Canberra (1960), Tokyo (1960), Warsaw (1962) and New Delhi (1983). In some cases, Belgium has consciously used the medium of architecture as an instrument of cultural diplomacy. Opting for different building types and architectural features across time and place—ranging from accentuating national identity to a fitting-in strategy—Belgium has used its diplomatic patrimony from time to time as a means to shape its image abroad.

In the context of the early stages of the Cold War, the design of the Belgian chancery in Washington, DC of the 1950s was envisioned to accentuate both Belgian identity and the alliance with the United States. The Belgian architect Hugo Van Kuyck (1902-1975), a lecturer at Yale in the 1930s who served in the US Army during the war, was hired to design the chancery in collaboration with the American office Voorhees, Walker, Smith & Smith. Apart from being shaped by Van Kuyck’s knowledge of the American approach to building, the chancery accentuated clear national references such as the sculpted coat of arms above the entrance and use of materials originating from Belgium.

23 Black, A History of Diplomacy, 175-76.

24 Robin, Enclaves of America, 63-88; Mark Bertram, Room for Diplomacy.

and the Belgian Congo.\textsuperscript{26} By contrast, in the 1960s the Belgian government collaborated with the Polish architect Mieczysław Kuźma (1907-83) in rebuilding a war-torn hôtel particulier in Warsaw to accommodate its embassy. Coinciding with a larger communist urban policy of reconstructing the damaged historical city centre of Warsaw, the Belgian initiative was propagated as a gesture towards the Varsovians.\textsuperscript{27} A more conspicuously Belgian, purpose-built embassy can be found in New Delhi. Hiring the Indian artist Satish Gujral (b. 1925) in the 1980s to design its new diplomatic mission, the Belgian embassy is shaped by such traditional elements of Indian architecture as exposed red bricks and bulb-shaped lingams worshipping Shiva. Apart from serving as an important component of representation to guests and passers-by, the Belgian state has made or cooperated in publications on its diplomatic patrimony as part of its local outreach activities.\textsuperscript{28} This genre of literature is mainly characterised by a promotional, almost hagiographical approach envisioned to promote the presence of Belgian diplomatic representation abroad and simultaneously accentuate the importance of these constructions.

In more recent decades, however, this highly expressive/representative character of purpose-built embassies has in several cases shifted to more anonymous architectural projects. Against the backdrop of discussions on the relevance of embassies in a more interconnected world and shrinking budgets for diplomatic patrimony, sending states have opted for different approaches to deal with these challenges. For instance, Belgium closed down several embassies since the 1970s because of successive budget cuts.\textsuperscript{29} In addition, purpose-built embassies


\textsuperscript{27} Marek Kwiatkowski, The Mniszech Palace in Warsaw (Warsaw: Panstwowy Instytut, 2009), 45.


\textsuperscript{29} Vincent Delcorps, Dans les coulisses de la diplomatie (Louvain-la-Neuve: Presses universitaires de Louvain, 2015), 483-511.

Figure 2. Façade of the Belgian chancery in New Delhi, (2018). (Private Collection.)
have been sold to purchase new accommodations in an effort to balance the budget. Nowadays, the Belgian purpose-built chancery in Washington, DC is up for sale to finance the move to anonymous office buildings. Furthermore, shrinking budgets have instigated sending states to implement new strategies such as colocation (introduced above). Initiated by the Scandinavian countries in the 1990s with the construction of the Pan Nordic Building in Berlin, Belgium and the Netherlands have copied this diplomatic equivalent of co-housing with the construction of a shared embassy in Congo in 2017.30

Besides budgetary concerns, policymakers are confronted with a growing terrorist threat since the turn of the century. As political symbols on foreign soil, embassies have been prized targets for terrorists as illustrated by the devastating Al-Qaeda attacks on American embassies in Kenya and Tanzania in August 1998. As a result, American policymakers implemented the Standard Embassy Design, shaped by a one-hundred-foot setback and the accommodation for US Marines.31 Although less conspicuous than their American counterparts, security has gained importance with smaller state actors, including Belgium. In the case of the Belgian embassy in New Delhi, the architecture is profoundly affected by the presence of security measures. Flanked by fences, CCTV and manned checkpoints, the embassy buildings reflect a tension between their public purpose and fortress-like surroundings. Besides surveillance
techniques visible from the street, the design is affected by these necessities. For obvious reasons, however, this is a difficult topic to discuss. Although being confronted in recent decades with budgetary and security issues, embassy buildings still remain one of the cornerstones of bilateral diplomacy. It remains to be seen, however, what the growing impact of e-diplomacy, the use of the Internet in diplomatic conduct, will be on the future of sending states’ diplomatic patrimony.

The Purpose-Built Embassy as Hybrid Environment

As discussed previously, the embassy serves different purposes including providing a suitable work environment and living quarters for diplomats. On an architectural level, embassies are adapted to these diplomatic needs consisting of a chancery and ambassadorial residence which can be located in the same building, in a compound or in separate buildings. This second section sets out to discuss the nature of both the chancery and residence by drawing comparisons to relatable architectural typologies.

Tasked with collecting, processing and reporting on developments taking place in the receiving state, the chancery forms the bureaucratic heart accommodating offices and meeting rooms. Loeffler has already compared chanceries to office buildings.32 In more general terms, chanceries can be related to the functioning of ministry buildings. Acting as an outpost of the Ministry of Foreign Affairs, chanceries are also shaped by a bureaucratic and hierarchic administrative system with government officials making up the workforce.33 Furthermore, both are tasked with offering public services to citizens.34 As pointed out previously, however, this public character of the chancery has diminished at the turn of the century. Due to the growing importance of e-diplomacy and the outsourcing of visa applications to (online) visa centers, the number of people actually visiting the chancery is declining. With this decline vis-à-vis relations between the diplomatic staff and the general public, the chancery is losing visibility in favour of the ambassadorial residence.

Besides chanceries, embassies consist of residences serving as living quarters of the ambassador and his/her relatives. As discussed previously, the first state-owned residences of Great Britain and Prussia were located in Parisian hôtels particuliers. Originally constructed by aristocrats in the seventeenth and eighteenth century, these highly representative hôtels are shaped by a spatial layout separating the circulations of residents, guests

33 Haslinghuis and Janse, Bouwkundige termen, 327.
34 Hilde Heynen, Jan Schreurs and Liesbet Silverans, Overheidsopdrachten architectuur (Brussels: Politeia, 2001), 31.
and servants into different apartments, known as the distribution à la française. Whereas the appartement de parade was used for hosting events, the appartement de commodité served as living quarters. With hôtels particuliers being one of the first building types in the diplomatic patrimony of sending states, the spatial layout of the hôtel particulier may have (implicitly or not) served as a reference for the division between private, semi-private and servant spheres within modern purpose-built residences. Upon visiting the Belgian purpose-built residence in New Delhi in November 2018, the ambassador’s wife showed two different dining rooms. As depicted in figure 4, the private dining room and VIP dining room are separated into a private (blue) and semi-private (green) wing evoking associations to the appartement de commodité and appartement de parade. In addition, service area (orange) such as the kitchen and laundry are located out of sight of both residents and visitors. As such, it would be too one-sided to simply label the residence as a house. Apart from being only temporary housing linked to the office of ambassador, the residence forms a hybrid environment where both private and professional life of the ambassador are intertwined. Besides accommodating the ambassador’s living quarters, the residence has a highly representative character as it is often used as a venue for a wide variety of activities such as banquets, informal meetings and cultural events.

Besides meeting bureaucratic, housing and representational needs, purpose-built embassies have been utilised in some cases as a prestige project by the sending state to evoke a national image abroad. Apart from the typical display of the national flag and coat of arms, the architecture and interior design of the purpose-built embassy can be used to act as a carrier of national representation. With the embassy being used as a tool of cultural diplomacy, showcasing a way of living to a foreign audience, the purpose-built embassy evokes associations with national pavilions in world’s fairs. Both constructions, commissioned by state actors, are found in a highly politicized and competitive environment surrounded by architectural representations of other countries. In the twentieth century the United States and the Soviet Union exploited both embassies and national pavilions as architectural weapons in the Cold War’s cultural arms race to promote themselves as progressive and democratic countries. Sending states have also, on occasion, sought to create a national image through an interplay of art and furniture in their embassies, as is the case for national pavilions. For instance, the Belgian chancery in Washington, DC was decorated with a tapestry depicting a Flemish missionary who

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35 Gady, Les hôtels particuliers de Paris, 75.
explored the Mississippi in the seventeenth century. This tapestry was previously displayed in the Belgian pavilion during the New York world’s fair of 1939.\textsuperscript{38} There are, however, profound differences between the purpose-built embassy and national pavilions. In comparison to embassies, most pavilions are temporarily constructions intended to be dismantled once the world fair closes its gates. In addition, pavilions aim to draw a different kind of visitor. They are meant to attract and entertain as many fairgoers as possible while accessibility of embassy buildings is limited and to a large extent linked with official visits and bureaucratic procedures.

The limited accessibility of embassies brings us to the last typological comparison. With the rise of global terrorism, security measures have profoundly reshaped embassy buildings. Apart from effecting the design, security measures can shape the relation between passers-by and the purpose-built embassy. In several cases, embassies are located in a compound marking a clear demarcation line between the public streetscape and the premises of the embassy. Flanked by fences, walls, checkpoints, roadblocks and CCTV, the premises of the embassy are shielded off from the streetscape. This exposes a certain tension between the public nature of an embassy and its fortress-like appearance.

as a compound. Setha Low popularises the concept of gated communities to illustrate how residential neighbourhoods in America are fenced off from the outside world by extensive security measures. Low describes how these gated communities “[…] cordon themselves off as a class by building fences, cutting off relationships with neighbours, and moving out in response to problems and conflicts.” As such, the image of the gated community can be applied to embassy compounds where staff members work and live in a shielded off environment.

Conclusion

This paper examined the extent to which it is possible to approach purpose-built embassies from a typological perspective based on the three elements—character, form and organisation—of Leach’s definition. As illustrated throughout this paper, all three elements have witnessed profound changes in the course of the twentieth century. For example, the character of embassy buildings has shifted between public and highly expressive/representative urban building projects and more fenced off or anonymous architectural environments. They include a wide variety of building types and styles (form), and their spatial layout and functional programme also changed over time, not in the least when colocation was applied (organisation). As such, it is difficult to speak of a fixed typology. This illustrates, however, exactly why discussing embassy buildings from a typological perspective can be most revealing as it helps to pinpoint the constantly changing relation of architecture and interior design with the dynamic nature of diplomatic conduct. As such, these buildings still express the etymological origin of the word “embassy” by going around to overcome changing political, cultural and economic challenges. With the rise of e-diplomacy, it remains to be seen what the future has in store for purpose-built embassies.

It is very well known that Italian emigration strongly contributed to an increase in the Argentine population. The high amount of hybridizations provoked by such a transfer in almost every sphere of life, from language to food and music, is likewise well known. Architecture offers an effective perspective on this kind of relationship. Indeed, since the end of the nineteenth century Italian architects found great opportunities on the banks of the Rio de la Plata, making a recognisable contribution to the shaping of Argentine cities. The paper observes the Argentine experiences of a number of Italian designers between 1948 and 1958, a decade in which the post-war wave of architectural migration started and developed. Those were also the years in which Argentine architecture, after CIAM 6 (Bridgwater 1947) started to attract the attention of international observers. At the same time, Italian culture was engaged in redefining itself, overlapping new issues and values on the die inherited from the Fascist years, most of which would have concurred to define the then emerging category of “made in Italy.” Therefore, the paths of those Italian designers who had the opportunity to work in Argentina in this period can offer an effective perspective on the ambiguous outcomes of the interaction of cultural proximity with physical (but also political) distance and professional opportunities.

Keywords: Made in Italy; Argentina; Peronism; post-war; transfer
Distance as a Lens

La ciudad italiana más grande del mundo. Etcétera. Más pizzerias que en Nápoles y Roma juntos.¹

In the novel Sobre heroes y tumbas, published in 1961, Ernesto Sabato, referring to Buenos Aires, offers a somewhat unsettling but effective description of the transatlantic proximity of Argentina and Italy, which, in a handful of words, joins the quantitative consistency of migrations with the qualitative transmission of customs and traditions. Both resulted from a stratified process tracking a period of intense exchange in the years of Fascism and which received a significant boost after World War Two, even if of a short duration: consistent migrations began in 1947, reached their peak in 1949, weakened and finally dwindled with the progress of the second half of the 1950s.

Architectural historians began to take an interest in the exchanges and migrations between Italy and Argentina in the 1990s. Their studies mainly focused on the nineteenth century and the beginning of the twentieth, decades in which many Italian architects played leading roles in shaping many Argentine cities.² Possibly their interest is due to the fact that, even when fragmented in different regional accents, in those years Italian architecture is at least partially recognizable as an expression of a national culture. That some typologies of buildings, like opera houses, were in most cases designed by Italians suggests an additional character of identity.

Studies on the post-war period are rarer and do not yet make it possible to draw more than a tentative general picture.³ Above all, if one compares the framework of these studies with those concerning migration,⁴ a much-needed reflection on the specificity of this historiographical theme and on the most appropriate sources, tools and methods still seems to be lacking.

The history of Italian designers (a term which allows us to group together architects, engineers and other figures involved in the design process) in Argentina after World War Two brings with it other stories and issues. Migrations, circularities, patents and exchanges, like fragments of broken mirrors, can, if combined, give a realistic image of the larger phenomenon and its complexity. The single fragment, if not aligned, will instead produce a distorted and misleading view. This does not mean that individual biographies and personal archives should be disregarded. On the contrary, they represent in many cases the most significant source. Their study, though, should be carried

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¹ “The biggest Italian city in the world … more pizzerias than in Naples and Rome considered together” (trans. author).


out in a systemic rather than self-referential perspective. There is no doubt that at present the framework is still very partial, with many gaps and questions still to be answered. This paper focuses on some of the questions raised by the architectural exchange between these two countries that are so distant, but so culturally close.

The main issue is if distance can be used as a lens to evaluate the grade of congruence of Italian design culture in those years. In a moment in which through important exhibitions—such as Italy at Work: Her Renaissance in Design Today, staged in various American museums between 1950 and 1953, and Olivetti, design in industry held at the Museum of Modern Art in 1952—the concept of “made in Italy” began to take shape and to spread, was the image Italian designers were projecting on the Argentine screen as coherent as the creation of this new national brand would suggest?

Between Opportunities and Nostalgia: The Uncertain Reasons for Displacement

Elisabeth Asbrink famously described 1947 as a year in which everything moves in a vibrant way, without stability and without destination, because every possibility is still open. This can be extended to our case, offering this story an effective starting point for at least two reasons.

On the one hand, 1947 was the year of the first post-war CIAM, held in September in Bridgwater, England. Architects Jorge Vivanco and Jorge Ferrari Hardoy, the Argentine delegates, aroused much interest by illustrating projects for the Campus of the University of Tucumán and the study for the Plan for Buenos Aires (EPBA). These probably were the most promising of a series of public works and projects launched by the government of Juan Domingo Perón that, in official rhetoric, should have led to the construction of the “New Argentina.” CIAM worked as a sort of showcase for the Argentine ferment, to which Eva Perón’s European trip added further visibility that same year. Such foreign magazines as Architectural Forum, Architectural Design and Architectural Review began to take an interest in Argentina. The archive of Ferrari Hardoy, director of the EPBA, preserves correspondence with Monica Pidgeon (who had also been in Bridgwater) and other members of various editorial staffs. Even more intense were the relations with the leadership of CIAM, and with Sert in particular. The same archive, however, shows how this enthusiasm had a short duration: already in 1949 Ferrari Hardoy announced that


7 EPBA was conceived as a sort of development and updating of the plan proposed by Le Corbusier, Jorge Ferrari Hardoy and Juan Kurchan in 1938. Partly published in several publications, this was exhaustively illustrated in La Arquitectura de Hoy 4 (1947). See Anahi Ballent, Las huellas de la política. Vivienda, ciudad, peronismo en Buenos Aires, 1943-1955 (Bernal: Universidad Nacional de Quilmes, 2005), 227-41; Jorge Francisco Liernur, Pablo Pechpiurca, La red austral. Obras y proyectos de Le Corbusier y sus discípulos en la Argentina (1924-1965) (Bernal: Universidad Nacional de Quilmes, 2008), 341-74. The CUT project was widely shown in Nuestra Arquitectura 254 (September 1950).

8 CIAM Files, The Ferrari Hardoy Archives (FHA), folders A002, A005, A008, A013 (Frances Loeb Library Special Collections, Graduate School of Design, Harvard University).
among the architects active in Argentina only Antoni Bonet would participate in the Congress of Bergamo,\(^9\) while in 1955 he advised that the Argentine CIAM group no longer existed. The congress also offered the opportunity for direct contact between delegates and foreign colleagues. Specifically, Ferrari Hardoy and Vivanco invited Ernesto Rogers, the only Italian present, to join the teaching staff of the Instituto de Arquitectura y Urbanismo of the University of Tucumán and to collaborate to the EPBA. Presumably, Vivanco, who visited Rome after the conclusion of the congress, contacted the architects of the Association for Organic Architecture (APAO). Three of them, Luigi Piccinato, Enrico Tedeschi and Cino Calcaprina, left for Argentina in 1948, as did Rogers.

On the other hand, 1947 was a crucial year for the redefinition of post-war geopolitical scenarios. The new international map that was taking shape in accordance with the balances of the Cold War had a strong influence, too, on the Italian national scene. Because of its geographical position alongside the Iron Curtain, but also because it was the Western European country with the most important communist party, Italy was to all intents and purposes a frontier nation, central to the international strategies of both superpowers. Therefore, the events of internal politics can be read as a reflection of the interferences of external powers, and of the United States of America in particular. Specifically, the “decisive turning point”\(^10\) made by the Prime Minister, Christian Democrat Alcide De Gasperi, excluding the Socialist and the Communist parties from government at the end of May 1947, would seem to comply with the conditions set by President Truman for the economic aid that the United States would grant to Italy in the following months. This act inaugurated a violent opposition between the Christian Democrats and the Popular Front that culminated in the campaign for the elections of 1948. These proved decisive for the future of the nation, putting an end to the constituent period and binding for decades the destiny of Italy to that of the Christian Democrats and the Atlantic Alliance.

It is clear that the country’s political conditions, especially after a two-decade-long dictatorship, are closely linked to migratory phenomena.\(^11\) This aspect, however, has so far remained in the background of studies focused on individual architects, receiving, at most, a mention.\(^12\) The political situation was intertwined with economic difficulties that were particularly critical in 1947. That year Argentina donated two ships of food to Italy, consolidating its image as a prosperous country, “the granary of the planet.”

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\(^9\) CIAM files, The Ferrari Hardoy Archives (FHA), folder: A051. In the official documents of the congress, however, Ferrari is in the list of participants as the Argentine delegate, Bonet as the Uruguayan. Archivio Piero Bottoni, Politecnico di Milano, folder 71 (VII CIAM, Bergamo, 1949), document 156 (Membres des CIAM participants au VIIème Congrès). The reports on the activities of the 1st Commission refer that the grid of the EPBA was discussed on July 24 and illustrated by Le Corbusier. Archivio Piero Bottoni, folder 71, document 167.


Due to the disappointing situation in their home country and the promise of a wealthy future rich in opportunities, these architects thus decided to leave even though they were in charge of more or less important positions. Argentina seems to play the role of “America” perfectly. Furthermore, the main assignment for all of them was a teaching contract at the University of Tucumán, which also allowed them to participate in the design of the campus in Cerro San Javier under the direction of Horacio Caminos. However, it is not evident to what extent the Italian contribution influenced the project as a whole. In their general features, therefore, these were the working condition “par excellence” of the migrant architect, who had already allowed many Europeans to move abroad (and especially to the Americas) in the previous decades.

The Presence of the Past or the Ambiguity of the Relationship between Design and Power: The Argentine Experience of Luigi Piccinato

Among the four previously mentioned architects, Luigi Piccinato was the most mature, having been born in 1899 and therefore about a decade before the other three. At the time of his departure, he could already boast a remarkable career and such important works as the Plan for Ivrea commissioned by Adriano Olivetti, and the one for Sabaudia, a new town promoted by Mussolini in the context of the reclamation of the Agro Pontino, a swamp area south of Rome. Despite his direct involvement in the actions of the fascist regime, from the mid-forties he played a key role in the “democratic” rebirth of the Roman environment by participating, alongside Bruno Zevi, in the foundation of the APAO, in the compilation of the Manuale dell’Architetto, a primer for technicians involved in the reconstruction promoted by USIS, and in the magazine Metron. Moreover, he had just published the volume Urbanistica, which would be decisive for obtaining his professorship in Italy in 1949.

He remained in Argentina until the end of 1950 and, in addition to collaborating with the EPBA, he received several other public commissions, succeeding in being more professionally involved than other prominent Italian architects, such as Ernesto Rogers, perhaps because of the prestige deriving from his plans of the 1930s.

When observed from the perspective of continuities and breaks, or, in other words, against the elements of novelty introduced after World War Two, the Argentine experience of Piccinato represents one of the most ambiguous and intriguing cases.
Figure 1. Left. *Metron* 31-32 (May-June 1949). The issue contains a reference to Argentine architecture, showing work by Horacio Caminos and Eduardo Sacriste, two architects who were teaching at the Instituto de Arquitectura y Urbanismo of Tucumán—“Un padiglione anti-T.B.C. a Tucumán, nell’Argentina subtropicale. Architetti: Sacriste & Caminos,” 39-45. (Reprinted from *Metron* 31-32 (May-June 1949), cover. (Courtesy of Leonardo Campus Library, Politecnico di Milano, Italy.)

Figure 2. Bottom. Luigi Piccinato (dir.), Ciudad Evita (1948-1950), Province of Buenos Aires, general plan. (Reprinted from Anahi Ballent, *Las huellas de la política: Vivienda, ciudad, peronismo en Buenos Aires, 1943-1955* (Bernal: Universidad Nacional de Quilmes, 2005), 146)
Because of the analogies between Peronism and Italian Fascism those few years returned Piccinato, in a way, to the Italian pre-war context; at least so far as relationships with political power are concerned. In approximately two and a half years he managed to obtain, sometimes by competition, an impressive number of town planning assignments from both the Ministerio de Obras Públicas and the Banco Hipotecario. A corpus where “very different types and formal models are used, if not of an opposite character,” which deserves to be examined in depth, also in relation to the theme of (dis)continuity. Among these works, the most important was certainly that of Ciudad Evita (fig. 2), the largest housing operation (5,000 units) undertaken by Perón and connected with the construction of the new airport and the transformation of the territory between the latter and the capital. The plan was as much different from the use, still widely adopted, of the orthogonal grid, as from the large linear multi-storey blocks proposed by the EPBA; it consists of a low-density settlement reinterpreting the model of the garden city. Organised into five neighbourhoods and a civic centre, it established a hierarchical system of routes and various types of collective and individual residences. In many ways, the plan can be traced back to the modus operandi that its author had adopted during the 1930s. Similarities with Italian works of the 1950s likewise become visible. The general organisation reveals an in-depth knowledge of the contemporary English New Towns, while the often-curvilinear course of the roads could respond to a will of organicism—a recurrent feature, too, in the plans of the 1930s, particularly for Sabaudia.

Focusing on the relationship between the plan (or the planner) and politics, it should be observed that the organisation of the town into neighbourhood units, with a hierarchical organization of typologies and roads, in which members of different social classes could find their new house, offered a metaphor for one of the main points in the Peronist program: the construction of the “Organized Community” a harmonious society in which there was no segregation and the organization was assigning a location to everyone. What immediately catches the eye, however, is that the profile of the southernmost neighbourhood unit explicitly recalls that of Eva Perón, making the plan for Ciudad Evita a sort of unicum in the history of planning that raises more than one question about its actual authorship. This rare case of symbolic planning, perceivable only from above or by looking at drawings, represents an “enigma” for historians. It is interesting in this respect that, having published some


18 Ballent, Las huellas de la política, 140-50.
Argentine works in the Italian magazine *Urbanistica* (fig. 3) a few months later, Piccinato did not select Ciudad Evita, despite its relevance.\(^{19}\)

**Structures**

A peculiar chapter of the Italian presence in Argentina during these years is represented by structures and structural designers. An in-depth study would reveal different levels of knowledge and exchange that even involved some of the fathers of construction science, like Giuseppe Albenga.\(^{20}\) But in a synthetic perspective (like the present paper), the figure of Pier Luigi Nervi clearly stands out for the relevance that his direct and indirect presence had throughout the decade.\(^{21}\) There are many reasons for this centrality: already internationally known in the 1930s for the Florence Stadium, from 1947 he was building the Palazzo delle Esposizioni in Turin, which quickly became...
an icon of his style (fig. 4). He also contributed, together with Guido Oberti (another Italian engineer) to the project of the Campus in Tucumán, designing the structure of the students' residence and working on the modular elements of the roof of the civic centre, of which a plaster model was subjected to load tests at the Laboratory of Analysis and Models of the Politecnico di Milano (fig. 5).

In 1949 he took part in the competition for new hangars at Ezeiza airport. The project was not considered because it arrived in Argentina after the deadline, but it was nonetheless widely published. Therefore, in September 1950 Nervi was invited to give a series of conferences at the Faculty of Architecture and Planning of Buenos Aires, then collected into the volume *Lenguaje arquitectónico* (Architectural Language). The title reveals how one of the main objectives of the Faculty, which had recently departed from that of Engineering, was to underscore the autonomy of architecture as a discipline. Nervi’s message as a “very distinguished engineer, but an architect in his soul,” was perfectly congruent since, condemning the analytical method for curbing imagination, he proposed to reconcile the science and art of construction. In this process, intuition was attributed a fundamental role. This message combined, on the one hand, that of other Italian engineers present in the country. This was the case of Giulio Pizzetti, who arrived in Argentina in 1948 as technical director of the Italian company Techint and took part in the debate by proposing new approaches to structural design, often based on the examples offered by nature. On the other hand, the first monographs dedicated to Nervi, together with his very successful book *Costruire correttamente*, further strengthened this interpretation. The

Figure 4. Left, *Revista de Arquitectura* 352 (April 1950). The cover picture portrays the Palazzo delle Esposizioni by Nervi. (Courtesy of Library of the Central Society of Architects, Buenos Aires, Argentina.)

Figure 5. Centre and right. Civic centre of the campus of the University of Tucumán: aerial and frontal photographs of the maquette (centre top and bottom) and load test of a plaster model (scale 1:25) of a modular element performed at Politecnico di Milano in 1949 (right). (Reprinted from *Nuestra Arquitectura* (September 1950), 254. Courtesy of the Library of the Central Society of Architects, Buenos Aires, Argentina.)


23 Opening discourse by Dean Francisco Montagna, reported in *Revista de Arquitectura* 358 (October 1950), 262.


most noticeable case is probably the book where the critic and historian Giulio Carlo Argan proposed a substantial coincidence between structural imagination and the creative process of the artist.27 If one considers the centrality that the theme of the synthesis of the arts had previously had in the Argentine debate since the mid 1940s, it is not surprising that the book was almost immediately translated and discussed in local magazines.28

Companies

Companies represent a key actor inside the phenomenon of “made in Italy.” Construction companies were fundamentals vectors for the “export”29 and transfer of Italian design culture abroad. Bridges, viaducts, dams and different kinds of buildings erected by Italian companies in different countries were the expression of the Italian way to manage the construction site as well as of Italian design. Moreover, associated with product designers, companies launched to foreign markets hundreds of objects which played a crucial role in the spread and in the definition of “made in Italy.”

In Argentina, too, the activity of Italian designers developed organically alongside that of Italian companies. The good relations the two countries maintained during the years of Fascism encouraged technical exchanges and the opening of Argentine branches by some Italian companies. Perón, who was very positively impressed by the public works he saw in Italy at the end of the 1930s, facilitated Italian entries by offering favourable conditions to technicians and companies. He was convinced that local resources were not sufficient to carry out the ambitious project of “New Argentina.” On the other hand, the Austral adventure proved very attractive to entrepreneurs who had to deal with the desperate conditions created by the war and a difficult institutional transition. One can have an idea of the extent of the phenomenon if one considers that in 1948 the Italians obtained 59 concessions of the 71 authorised and that the following year 88 companies were transplanted.30 A phenomenon of such magnitude is not only due to economic factors. The climate of purges certainly contributed to push entrepreneurs, technicians and workers to the other side of the Atlantic.

Perón’s removal in 1955 was followed by progressive liberalisation that favoured the rooting out of foreign capital. It should be noted, however, that these measures were not...
the contradiction, but rather the continuation of the economic policies of the later years of the previous government. In fact, two major operations achieved by Italian companies, the Ferreyra industrial complex erected by FIAT near Cordoba (fig. 6) and the Olivetti plant in Merlo, Province of Buenos Aires (fig. 7) were initiated in 1954, when Perón was still in charge. These two examples provide an effective demonstration of how diverse the declinations of “made in Italy” can be, both in their approaches and in their outcomes, even when programmes themselves are similar. In Ferreyra, the buildings show no external influence: the grids of metal pillars, the shed roofs, and the alternation of cladding materials reveal a neutral design and construction code that sedimented in the Italian and foreign construction sites managed by the Construction and Installations Office of FIAT.31 In Merlo, on the contrary, Marco Zanuso conceived the plant in an authorial way and a posteriori around three principles: modularity, flexibility and air conditioning.32 The hollow beams which, in addition to fulfilling their structural function, served as chilled air ducts, were unique pieces. Although prefabricated, they were designed specifically for the Merlo plant and were never used again. In this sense, they were at the antipodes of the incremental logic that was driving the activity of the technical office of the largest national industry.


This comparison, like the majority of cases referred to above, seems to show how, in the same years in which exhibitions and publications such as *Italy at Work* and *Italy Builds*33 were providing a narrative of Italian design culture as a coherent and substantially unitary entity, Argentine experiences instead showed a great plurality and heterogeneity of approaches and orientations. After all, it has already been observed that “like every brand …, also made in Italy finds its legitimacy not so much in the concrete evidence of a product as in a narrative that refers to expectations that are formed in a long process of negotiation between different instances and subjects.”34

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“Moderately Modern”: The Reading of Modern Dutch Architecture by a Queensland Architect

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This paper examines the reception and understanding of the work of Dutch architect Willem Dudok (1884-1974) and modern architecture by Australian architect, Frank Cullen (1909-91). They were separated from each other spatially and temporally. It is argued that Cullen’s understanding of Dudok’s architecture was mediated mostly through the work of other Australian architects, including Queenslanders Robert Cummings (1900-89), Charles Fulton (1905-81), and Frank Costello (1903-87), who all had first-hand knowledge of Dudok’s work.

It is contended that Cullen’s interest in Dudok, and that of his contemporaries, was motivated by a desire to identify an architectural practice that was “moderately modern.” This modernism eschewed ornament and was functional, efficient and ahistorical. It walked, however, a middle path between the hard abstraction and the rigid functionalism associated with European architects such as Le Corbusier and Gropius and the psychological comfort and stability that was linked to a continuing use of traditional materials and forms.

This paper will demonstrate that Cullen accessed the latter via a British reading of Dutch modernism conveyed to Queensland by lectures, writings and architects coming out of the Architecture Association, London, during the 1920s-30s. In this instance, distance (Queensland) looked back (to Dutch modernism), but the image received was tempered and modified by sources that were both geographically and temporally displaced from the original. Ultimately, a “softer modernism” that was compatible with Queensland tastes was produced by successfully blending new materials and technologies with that of the traditional.

Keywords: Frank Cullen; Dudok; functional building; modern architecture in Queensland Australia; moderately modern; middle path
The major building type that sustained the practice of Queensland architect Frank Cullen (1909-91) was schools for the Catholic Church, of which 128 were erected between 1936 and 1980. Cullen registered as an architect in June 1935, in the middle of the Great Depression, and apart from a brief partnership from 1937-41 with Desmond Egan (1906-41), worked mostly as a sole-practitioner. He gradually took on assistant architects from the mid-1950s until he expanded the practice into a multi-partner firm in 1961, working until he retired in 1982.

Cullen’s early schools employed traditional styles common to the Catholic Church in Queensland such as the Romanesque brick schools of St Sebastian’s, Yeronga (1937) and Holy Spirit, New Farm (1937), or plain conventional styling for small timber schools. In the late 1930s, Cullen and Egan introduced new stylistic elements into their school designs that included geometric art deco brickwork motifs on façades, stepped parapets, and vertical rectangular panels of glass bricks on stairwells.1

During 1941-53, Cullen produced a set of fifteen schools that were stylistically distinct from the rest of his work and not characteristic of Catholic Church architecture of the inter-war period.2 These were all ahistorical, functional designs that employed minimal ornament. They were constructed in most instances, with light-to-medium coloured orange or brown-orange brick and displayed asymmetric massing of simple interlocking cubic forms with a strong horizontal expression (fig. 1). This horizontality was accentuated with continuous cantilevered concrete window awnings, horizontal banks of windows and parapet copings.

These school designs were superseded by a preference for more contemporary styling from 1953-80 resulting from Archbishop James Duhig’s dissatisfaction with modern architecture for church school designs in 1953, and the design influences of architects who had gradually joined Cullen’s practice from the mid-1950s.3

Visually, the minimalist aesthetic of these fifteen schools recalls the work of modern Dutch architect, Willem M. Dudok (1884-1974). Dudok was known for his distinctive use “of vertical and horizontal volumes, the masses of walls set against voids and bands of windows ... floating roof planes” and the dramatic juxtaposition “of hollow spaces and volumetric elements” and yellow glazed brick for “the unifying skin.”4 Dudok was a significant inter-war influence on three architects working in

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1 These include three designs by Cullen & Egan for St Patrick’s, Gympie (1938), St Joseph’s, Chinchilla (1938), and St Mary’s, Beaudesert (1939).

2 This encompasses a group of fifteen schools including: Mt St Michael’s College, Ashgrove (1941); Our Lady Help of Christians, Hendra (1946); St Patrick’s, Pomona (1947); St Mary’s, Ipswich (1948); Our Lady of the Assumption, Norman Park (1948); St Joseph’s, Childers (1948/51); St Vincent’s, Surfers Paradise (1949-55, demolished); St Luke’s, Buranda (1949, demolished); Marist Boy’s College, Rosalie (1949); Star of the Sea School, Gladstone (1950); Soubirous College, Scarborough (1951), St Anthony’s, Kedron (1951); St Joseph’s at Kangaroo Point (1951); Guardian Angels, Wynnum (1952, altered); Villanova College, Coorparoo (1953 & 55). These schools represent groups with flat-roofs or hipped-roofs, or both. Villanova College was the only school to be symmetrically massed and to have a strong vertical motif in the form of a centrally placed tower.


Queensland, who had travelled to Europe and gained first-hand experience of his works. This was reflected in the functionalist building designs of Robert Cummings (1900-89), Charles Fulton (1905-87) and Frank Costello (1903-87). Examples include: the 1937 Masel House at Stanthorpe, by Charles Fulton (for J.P. Donoghue & C.W.T. Fulton); the 1938 Second Church Christ Scientist in Clayfield, Brisbane, by Bruce Lucas & Robert Cummings; the 1938 Nudgee Junior College at Indooroopilly, Brisbane, by Donoghue & Fulton; the 1940 First Church Christ Scientist, Brisbane, by Lucas & Cummings; the 1941 Fulton residence, Indooroopilly, Brisbane, by Charles Fulton; and from 1942 to 1951, various electrical substations and pump stations designed by Frank Costello, Brisbane City Architect. As these buildings were erected in Queensland and were well publicised and known, there is little doubt that Cullen would have been familiar with them. However, as Cullen left no records to explain his influences and interests, this paper will instead consider the more general question of what architectural values and ideas Dudok represented for those Queensland architects who had travelled to see the new architecture in inter-war Europe, and how these values were transferred to influence and inform their contemporaries who had stayed in Australia.

Extensive studies documenting Dudok’s influence on Australian architecture have been undertaken including the PhD thesis by Carol Hardwick, (1998), publications by architect historian, Donald Langmead (1996) and the undergraduate thesis of Ivan McDonald (1983). They respectively argue that while Dudok’s influence was widespread in Australia, and expressed across a number of different building typologies (including Town Halls,
airport buildings, defence buildings, power stations, hospitals, public works buildings, hotels, and domestic architecture), it was in schools that his influence dominated.\(^7\)

However, few studies have considered what Dudok’s work, and Dutch modernism in general, represented to these architects. In this paper it is argued that Dudok’s appeal lay in his representation of a practice that was distinctly modern but “moderate,” offering a middle path between the “extremes” of international modernism and the expressionism of the neoplastic Amsterdam school; an architectural practice that was simple, efficient and of its time but also comfortable, both physically and psychologically. This conception of Dudok provides the context for Cullen’s reception and understanding of the Dutch architect and in turn, his engagement with a larger debate on “modern” tendencies in architecture and their introduction to an Australian public.

The Mediation of Dudok in Britain and Australia (1922-36)

The most probable source of information for Queensland architects of Dudok’s work, particularly the large number of schools he designed and built, were the photographic images and texts produced by Architectural Association Secretary, Frank Yerbury (1885-1970), and Howard Robertson (1888-1963), architect and the Principal of the Architectural Association School of Architecture (AA). Individually and collaboratively, they produced over 200 publications during 1922 to 1936 that mediated the transfer of knowledge of the largely unknown “new architecture” of continental Europe to the predominantly conservative and insular British architecture establishment, which initially viewed the new architecture as “extreme,” with first acceptance of modernist work only occurring in 1929.\(^8\) Architectural historian Andrew Higgott describes Robertson and Yerbury as among the most “influential figures in the British architectural culture of the 1920s and 1930s” with their publications later viewed as being canonical.\(^9\) Hardwick also notes the importance of the mediation of Dudok to British architects as “for many Australian architects it was while they were in the United Kingdom that they were first introduced to Dudok.”\(^10\)

From early on in their publications, Robertson and Yerbury positioned Dudok as representing a more moderate or softer modern. In 1922, Robertson published “Modern Dutch Architecture”—an article in the \textit{Architectural Review} that praised


\(^7\) Hardwick, “The Dissemination of Willem M. Dudok,” 251.


the “ultra-modernist” Amsterdam housing works of Michel de Klerk for their “extraordinarily fine brickwork, …perfect craftsmanship and … ingenuity.” While no reference to Dudok was made in this paper, in 1923 he extended his argument to include Dudok’s work, stating that it represented a “moderate school” of modern architectural design. He developed this idea by contrasting images of Dudok’s Rembrandt school (1920) with the more “imaginative” or “extreme” work of Michel de Klerk and Piet Kramer of the Amsterdam school. Identifying Dudok as part of a “rival” school in Dutch architecture, he argued that his work relied on:

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\text{effects gained almost completely by the massing of rectangular shapes and the stressing and contrast of vertical and horizontal lines. … Effective use is made of advancing and receding planes at varied levels, and riotous decorative effects are replaced by concentrated grouping or restrained texture treatment. … Work of this type approaches very nearly what one may term architectural cubism and the almost total absence of sloping roofs adds to the impression of effects obtained by rectangular forms alone.}\]

Turning to Dudok’s Bosdrift Bathhouse (1921) Robertson concluded, “he has been successful in creating a design that is aggressively modern yet reasonable. The forms are powerful and expressive.” Robertson deliberately positioned Dudok’s architecture as demonstrating a middle ground or path—something that sat between the romantic expressionism of the Amsterdam school and the harsher functionalist or extreme styles of the De Stijl group. Langmead, in his 1996 book Willem Dudok, observed that “Robertson recognized his [Dudok’s] genius and welcomed the temperance that distinguished his work from the New Objectivity.” He also suggested that Dudok’s “acceptance by more conservative British architects rested upon that moderation.”

Many images of Dudok’s schools at Hilversum were shown in subsequent publications during the 1920s by Yerbury and Robertson including: Dr Bavinck (1921), Oranje (1922), Jan van der Heijden (1926), Minkeler (1927), Catharina (1927), Juliana (1927), Vondel, (1929), Nelly Bodenheim (1929), Ruysdael (1929), Fabritius (1926), and Multatuli (1932). Yerbury, in his lecture to the Royal Institute of British Architects (RIBA) on Dutch Modernism in 1931, pointed to the architecture of the Netherlands for its negotiation of two ideologies. He argued that Holland was “steering a course in its architecture between two schools of thought, the romantic or


13 Robertson, “Modern Dutch Architecture” (1922), 98, 99, 100a.

14 Robertson, “Modern Dutch Architecture” (1923), 98.

15 Robertson, “Modern Dutch Architecture” (1923), 100a.

16 Langmead, Willem Marinus Dudok, 61.


eccentric on the one hand … and the functionalist on the other, which sought to eliminate everything which made a building human.” Yerbury also criticised Dutch architects copying the international or functionalist styles developing in France and Germany, but singled out the work of those who had managed to avoid such “extremes.” He argued that:

This middle course was especially apparent in the work of such men as Dudok, who was responsible for most of the buildings at Hilversum, … where he had produced some of the most charming schools in Europe, besides an epoch-making Town Hall. Another building illustrating this middle course was the magnificent Van Nelle Factory at Rotterdam [by Brinkman & van der Vlugt].

The reference to Dudok’s “epoch-making Town Hall” was significant as the first known mention of it in the British architectural press.

The publishing efforts of Robertson and Yerbury intensified from 1930 to 1934, resulting in a series of articles in Architect and Building News all showing Yerbury’s photographic images of Dudok’s Vondel school (1929) which, we are told, “contrives to avoid the look of an educational institution: it is not forbidding and municipal looking”; and the Multatuli school (1930), described as “having a delightful composition” with raked horizontal joints in the brickwork to give a “marked horizontal effect.” In a February 1931 article on Dudok’s Fabritus (1926) and Ruysdael (1929) schools, Robertson wrote that “Dudok is animated by a strong desire to create buildings which are in harmony with the spirit of to-day” and that “Dudok invariably manages, even in his more mechanistic facades, to introduce an element of playfulness which gives value to the general severity.”

The various articles describe Dudok’s schools as being charming, gay, colourful and delightful, suggesting the opposite of the harsh, and more austere, functionalist school designs found elsewhere on the continent. Yerbury in his 1931 book Modern Dutch Buildings also noted that “The work of Dudok … is simple and graceful, at times almost severe, but exhibiting always a pleasant sense of phantasy [sic] which finds expression especially in the many schools which he has built.” A year later, travelling Australian architect Sydney Ancher commented that his schools were “certainly a joy to behold. … Clean, efficient and expressive of purpose, they certainly do appeal.” It is Yerbury’s images that are identified by Langmead, Hardwick...
and Higgott as the most important agents in the promotion and dissemination of Dudok’s works outside of the Netherlands, particularly in Britain and America.26

The successful contemporary use of brick by the Dutch was commented on by Yerbury in his book Modern Dutch Buildings, observing that although it was a traditional building material, its use in modern architecture harmonised well with earlier forms of the 19th century, thus enabling retention of “a subtle traditional character.”27 Robertson in his 1934 article “Dudok and his Work” for the Architect & Building News argued that his affinity with English architects was a result of his closeness to “English modern architectural ideals.” He goes on to note that “principles guide him, but they are not hardened into creeds. He is not a “group man.” The work which he does is free and requires no label.”28 Dudok thus avoided being tagged a dogmatic extremist and a perceptible threat to English architectural thought, offering instead an outlook and aesthetic that was seen by English architects, such as Robertson, as sympathetic to it.

At Yerbury’s invitation, Dudok gave a talk entitled “Buildings at Hilversum” to the AA on May 29, 1934 (supplemented by an exhibition of his work), which was published in the Architecture Association Journal.29 In his lecture, Dudok described his town hall at Hilversum, the Beehive [Bijenkorf] store at Rotterdam, the Columbarium at Westerveld cemetery and the Collège Néerlandais, Paris (1938) and showed slides of these amongst other works. Dudok described his use of modern and traditional materials (i.e. concrete with brick), colour, the relationship between form and function in his buildings and the “small value” he placed on “external decoration.”30 Of his town hall, we are told, he employed a simple functional design that blended traditional with modern elements noting “that the interior displays a character remarkably consistent with the exterior” and that “architectural effect” is achieved “out of simple structural masses, and relief and contrast are obtained more by large elements than by small decorations.” Dudok claimed that his aim was to produce a building that was: “not merely comfortable or convenient in working, it is also intended to be a joy to look at and a pleasure to remember. I tried to make it a civic tradition … translated into a modern, though cheerful efficiency.”31

Dudok’s talk was attended and reported on by two Australian travelling scholars, Frank Costello (1903-1987) and Benjamin Stone (c1903-c1963), in the Australian journal Architecture.32 In addition to the London Underground Railway stations designed by Charles Holden, both Stone and Costello cited...


27 Yerbury, Modern Dutch Buildings, vi.


30 Dudok, “A.A. General Meeting,” 27.


“the Town Hall at Hornsey” (1935) by Reginald Uren (a project both Costello and Stone had worked on with Uren), and “Ravenscourt Park Hospital,” Hammersmith (1933) by Burnett, Tait and Lorne as inspired by the work of Dudok.33 Dudok’s appeal and acceptance by the British architectural establishment was affirmed when he received the RIBA Gold medal in 1935, elevating his cachet internationally; although in the Australian press this honour is barely reported, appearing as a single short sentence.34

Robertson and Yerbury’s reading of Dudok’s appeal was taken up by a number of later historians and architecture commentators including Watson Sharp (1938), Reyner Banham (1960), Hans Redeker (1964), Manfredo Tafuri (1980), Hans van Dijk (1981), Alan Powers (2001) and recently by John Stewart (2019).35 All place Dudok on a “middle path” or as practicing in a “third way,” and it is argued that it was this alternate approach, or more moderate path, that formed the basis for his appeal to English and Australian architects. The historians also place Dudok between traditionalist and functionalist ideologies, with Banham describing Dudok as “the hero-figure of middle-of-the-road Modernists,” and Powers stating that he represented “progress rather than revolution.”36

Moderately Modern Queensland

Not all Dudok’s works were readily accepted or praised in Australia. Editorial captions to photos that accompanied some of the travelling architects’ reports expressed mixed and inconsistent sentiments. In 1931 Building magazine conveyed both interest and acceptance of Dudok’s school designs. A photo of the unidentified Catharina kindergarten school (1927) was captioned: “another example of the unorthodox manner in which school buildings are being treated in Holland at the present day.”37 A second image in the article was of the (unidentified) Rembrandt School (1920). Titled “A Modern Dutch School” it received a more favourable description by the editor:

\[
\text{the work of the modern Dutch architects is playing an important part in the development of architecture.} \\
\text{... In massing, fenestration and conception this work definitely breaks away from accepted standards yet there are few who will deny its charms. Cornices, columns, pilasters—the whole gamut of architectural features usually associated with scholastic buildings—are absent, yet even those who sponsor all these}
\]
appendages must admit that there is little wrong with this example.\textsuperscript{38}

A similar sentiment was expressed in 1931 by Melbourne architect, Marcus Martin, in the *Journal of the Royal Victorian Institute of Architects*. He wrote that “Holland is producing a modern Architecture of a decidedly national character” and that that although it failed in completely “breaking away from tradition” it “remained … free from the artificiality and bad taste of the 19th century.”\textsuperscript{39} Architect Benjamin Stone also agreed when he wrote in *Architecture* in 1935 that: “in the truest meaning of the word ‘modern’, Dudok, in his great Town Hall, has achieved a truly efficient and decorative building without the use of any applied ornament.”\textsuperscript{40}

After returning to Queensland at the end of 1930, following study and travel abroad, Queensland architect Robert Cummings became instrumental in teaching architecture.\textsuperscript{41} As a student of Howard Robertson and Frank Yerbury at the AA from 1924-27, and working at the offices of John Murray Easton & Howard Robertson, and Robert Atkinson, during 1925-30, he would have learned of their ideas on Dudok and Dutch modernism. These ideas were echoed in Cummings’ own lectures on International modernism. In a lecture titled “Modern Tendencies in Architecture” (1934), given as part of a series of ABC Radio Talks broadcast nationally, he like Yerbury and Robertson before him, described the work of French architect Le Corbusier as “extremist” and “an architect who infers that buildings are purely functional necessities just as aeroplanes and such other mechanical devices are.”\textsuperscript{42} He went on to describe the work of Dutch modernism as adopting a more moderate path:

*Holland is a small country which has a remarkable architectural character of its own. Brick is the traditional building material of the Dutch people and to-day it is combined most successfully with more modern materials in the carrying out of striking new building forms which are the outcome of present necessity.*\textsuperscript{43}

Parallel themes were also observed by *The Telegraph* (Brisbane) in 1935. An article covering the popularity of bricks in Brisbane, indicated “brickwork is a splendid and mobile material, and one which will lend itself to modern uses. … There still remains much to be done in the exploitation of brickwork to our modern uses.” It also pointed out “under the Influence of M. Dudok … [a]n interesting brick architecture has arisen in Holland, this style being extensively employed in scholastic work.”\textsuperscript{44}

\textsuperscript{38} “An Architect Returns,” 31.


\textsuperscript{43} Cummings, “Modern Tendencies,” 5.

\textsuperscript{44} “Bricks in Fashion,” 15.
Many of these ideas are expressed by Cummings in his built work. His First Church Christ Scientist (1940), at North Quay Brisbane is commonly linked to the influence of Dutch modernism and the work of Dudok showing a style that “is early modern with stripped classical elements.” Built with creamy-yellow face brick, it is a simply-massed, asymmetric grouping of geometric forms with undecorated brickwork, cantilevered reinforced concrete window awnings, and rectilinear parapets concealing low-pitched roofs. A contemporary account of the heritage-listed building describes it as a “careful composition of simple, cubic volumes of one and two storeys, enveloped in buff-coloured brickwork with concrete parapets and continuous window hoods.” It is also said to have a “simplicity and clarify of form, and an emphasis on horizontal lines create particular visual appeal, delight and interest.” Even in 1940, a caption to a photo of the building published in *The Courier-Mail*, suggested that: “the building is notable for the extreme simplicity of the modern architectural design.”

In addition to Cummings’ work, the buildings of Donoghue & Fulton (1937-46) added to the Queensland context and understanding of Dudok. Like the work of Cummings, some of their buildings have been associated with the work of Dudok in representing a mode of practice that was modern but also moderate and inoffensive. Donoghue and Fulton’s award-winning Nudgee Junior College for the Christian brothers at Indooroopilly opened in 1938 (fig. 2). Built in creamy-brown face brick on an elevated site with three cubic volumes linked by interconnecting arms, it displayed an angular geometric horizontality and asymmetric massing with a façade comprising minimal decorative brickwork. It incorporated streamlined cantilevered balconies and curved walls on the rear elevation and utilised cantilevered concrete window awnings. *The Catholic Leader* cited the college as an example of “modern architecture” while retaining an “air of homeliness” while *The Telegraph* added that the “modern architectural style is arresting to the eye.”

At the opening ceremony, the architects were commended by the Principal of the school, Rev. Brother J.K. O’Neill, for their ability to blend old and new architecture by meeting the challenge of “erecting a building that would be in keeping with the best traditions of the past; a building to harmonise with the beauties of the natural surroundings; and a building that would embody the best and latest in [modern] educational ideals.” In informed terms he added that the architects had:
succeeded in combining in this building the modernistic trend of architecture with the classic proportions of a more ancient style. The old and new have been called on to secure externally an artistic outline that harmonises with the surroundings, and internally a wise economy in the use of space, lighting and ventilation, and full consideration for the purpose each section is to serve.  

Of significance in Archbishop Duhig’s opening address was the acknowledgement that “in architectural design and general layout the building shows a welcome departure from old styles … [and] … has given us … one of the most attractive college buildings in Australia” He added: “the modern aspects of the building … are beautifully blended with the older designs.” Duhig (and thereby the Catholic Church) had for the first time, publicly sanctioned modern school design.

Conclusion

In summary, this paper presents a portrayal of the architectural climate in which Cullen worked in conservative Queensland during the inter-war to immediate post-war period. It foregrounds the influence of Dutch architect Willem Dudok on British and subsequently Australian architecture at the time. It shows that transference of his influence to Cullen was mediated by the modern work of architects active in Queensland in the late 1930s and early 1940s, who had seen Dudok’s works first-
hand, and had connections with the AA in London and/or leading British modern architects.

That Cullen had incorporated elements of their work into his school buildings, demonstrates that he was both cognisant and influenced by the “middle of the road” alternative Dudok’s work offered to extreme European modernism or traditional forms of the past. To an architect like Cullen, the idea of a moderate modernism would have been important in the mid-to-late 1930s, as he sought a way to evolve “modern” designs for Catholic schools that were ahistorical and of their time, whilst being acceptable to his client, the Catholic Church.

Cullen succeeded by designing schools with a “restrained modern” look. His new school buildings were deployed as “billboards” that promoted a Catholic Education that was modern, but religious-based and inclusive of traditional/moral values. That the Catholic Church looked in-step with modern times became important when the population boom in post-war Australia underpinned the requirement for new school buildings.

The second-hand reading of Dudok’s architecture by Cullen informed a “moderately modern” practice that can be recognised as of importance for illustrating the transference of modern architectural influence across time and space.
When Distance Matters: Australian Modern Architecture Seen Through European Journals (1945-75)

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If we look at an Antipodes World Map, Europe and Australasia are relatively close, so much so that New Zealand and Spain share a virtual territory. Thinking about antipodes, remoteness implies coincidence and distance brings countries closer together. This paper aims to track the spread that modern Australian architecture reached in some of the main European nodes of reception and emission of news: France, Great Britain, Italy, Switzerland and Spain. Based on articles published in the architectural periodicals of the moment, it will establish which aspects of Australian architecture mattered in these countries. More importantly, these cases can be compared with each other and, as a whole, with the interest that other closer continents aroused in Europe. Did distance play the same role in all cases? Or had any other circumstances, such as politics or economics, more weight in the rapprochement between countries? Is the presence of Australian architecture in modern canonical historiography the direct result of these exchanges of information? In short, does historiography have a debt to distance?

Keywords: Diffusion of modern architecture; European architecture periodicals; Australian modern architecture; Harry Seidler; Sydney Opera House
In the conclusion to her book *Australian Architecture since 1960*, Jennifer Taylor expressed the ambiguity that the concept of distance acquires when talking about Australia, “Geographically it is a part of Asia and the South Pacific, culturally it is a part of Europe.” She also notes the boom in the publication of books on Australian architecture in the mid-1980s and the interest it awoke in “journals published elsewhere,” which in a way indicates that, until then, ignorance of Australian architecture had been significant.

This is something that Macarena de la Vega de León has also recently pointed out about the presence of Australian architecture in the histories of modern architecture. Until the 1980s and 90s, except for mentions of the Sydney Opera House and successive editions of *Modern Architecture since 1900* by William Curtis, Australia was not included in the main histories of modern architecture. De la Vega also points out some of the sources used by historians and is surprised by the absence of references in later publications to important articles on modern Australian architecture that were already common in well-known European and North American publications. According to De la Vega, “the fact that these historians have focused mainly on the Sydney Opera House and the work of Murcutt explains the preference for monographic research on these themes.”

Regardless of the exact moment to which these statements refer, reading the comments by Jennifer Taylor and Macarena de la Vega leads us to ask what exactly was published in European journals about Australian architecture in the second half of the twentieth century. It is particularly interesting to understand what was being published during the years of the design and construction of the only project in Australia that seems to have captured the attention of the world, or at least of historians, the Sydney Opera House.

With this aim we have tracked articles on Australian architecture published in major European journals from the end of World War Two until the mid-1970s, when the above-mentioned building had been inaugurated. We gathered references by consulting two important catalogues of periodicals: the Avery Index to Architectural Periodicals and the RIBA Catalogue. It is important to note that both catalogues only include references to articles, so short news items or mentions that appear in other sections or outside the main body of the journal are not recorded. This paper does not intend to present an exhaustive list of everything published about Australia in European architectural journals from the 1940s to 1970s,
but rather to track the topics that they were interested in and published.

Thus the search has been restricted to a series of important hubs of reception and dissemination of architectural news in Europe during the decades studied. The importance of the British and French magazines at that time is particularly notable. *The Architectural Review (AR)* and *L’Architecture d’Aujourd’hui (LAA)* exemplify the publications that maintained the pulse of the global diffusion of architecture and that were consulted by architects from across the continent. Switzerland is a special case in Central Europe. Removed from the destruction that World War Two brought elsewhere, Swiss architecture experienced a few years of an authentic boom in regionalism that was contested by a generation of young architects who made their voice heard in publications such as *Werk or Bauen + Wohnen (B+W)*. The Mediterranean basin is represented by Italy and Spain, two countries with very different political situations and publications, but which, together, provide a fairly accurate portrait of the south of the continent.

**Australia in Europe: A General Overview**

Unsurprisingly, 90 percent of the articles covered themes that focused on modernity. Of those remaining, the concurrence of articles dedicated to an Australian vernacular—especially colonial—architecture is striking, most of which were published at the end of the 1940s. That was clearly related to the special issue on Australia that *AR* published in July 1948, but it is also worth noting that in the previous year, three articles were published in three different journals, which suggests that the interest in the Australian tradition in the late 1940s went beyond just monographic publications. It was an interest that was not generalized across Europe but was specifically British, as were all the articles on vernacular architecture at that moment, as well as those that were published in the following decades.

If we limit ourselves to the vast majority of articles devoted to modern Australian architecture, the trend between the mid-1940s and the 1970s draws a vertical parabola with maximum values around the end of the 1950s, with peaks in 1952 and 1956 (fig. 1). The number of articles in 1952 is due to several reasons, firstly, to the awarding of the Sir John Sulman Medal 1951 to Harry Seidler for the Rose Seidler House. The dissemination of the two neighbouring houses by Harry Seidler in North Turramurra began in the 1951 November issue of the English

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AR,\(^7\) which LAA reproduced the following month.\(^8\) The French magazine would publish the house again a year later, on the occasion of the prize, but before that the Swiss B+W had included it in its pages without any mention of the award.\(^9\) In any case, the English magazine Architects’ Journal (AJ) was the one that announced the award, while questioning whether this type of architecture had a national character.\(^10\) Spain was a few months behind, but also joined the trend thanks to the magazine Informes de la Construcción (IC), where Fernando Casinello summarized the article that had appeared the previous year in B+W.\(^11\) The only country, of those analysed here, that did not reflect either the construction of the house or the award to its architect was Italy.

The other reason for the many articles published in European journals in 1952 was the competition for the 1956 Olympic Games Stadium in Melbourne, the first large-scale competition for an Australian public building. Although the stadium later moved to the existing Melbourne Cricket Ground and Frank Heath’s winning project ended up not being built, British magazines enthusiastically publicised the original result of the contest, which led to the appearance of several articles in 1952.\(^12\) The exchange of news among British publications was common in these years, where the constant repetition of information can be easily traced.\(^13\)

The Olympic Games kept Melbourne in British, French and Spanish magazines from 1952 until 1958, but focused only on two buildings—the aforementioned Olympic Games stadium by Harry Seidler and the Olympic swimming pools by John and Phyllis Murphy, Kevin Borland and Peter McIntyre.\(^14\) Interestingly, in 1956, the year of the celebration of the Olympic Games.
Games and the year that accumulates the second highest number of articles, only two were published about the Olympic facilities, and they focused on the swimming pools.

The number of texts and news published in 1956 therefore must be due to other reasons, such as the exhibition celebrating the architecture of Australia hosted by the Royal Institute of British Architects (RIBA). The images displayed demonstrated the important role that modern architecture played in the post-war development of the continent. Understandably, the RIBA Journal covered the exhibition in two articles published in the months of February and March and, as was usual in British magazines, Builder replicated them a couple of months later. Another significant portion of the articles from 1956 on modern Australian architecture featured work by Harry Seidler. Although it had been designed years earlier, the Julian Rose House was completed in 1954 and B+W covered it in its March 1956 issue. In August, AR included the house again in an important dossier that it published on the architect’s recent work, which also included the Horwitz Building in Sydney and the Amenities and Workshop Building in Banksmeadow, precisely the two works that would appear months later in LAA and, again, in B+W.

Reviewing these two years alone, patterns arise that are confirmed when observing the distribution of articles by country throughout the period studied. In the first place, the logical supremacy of the English magazines over European in terms of the dissemination of Australian architecture. In fact, a significant proportion of the articles that we reviewed in 1952 and 1956 are in British publications. Evidently, the historical ties between the countries and Australia’s membership of the Commonwealth explains this attraction. However, it is striking that the interest was not sustained over time, given that in the 1960s coverage in English magazines only just outnumbers the articles dedicated to Australia by other nationalities.

In fact, the French magazines clearly overtake the British in two specific years—1959 and 1963. LAA is mainly responsible for the rise in 1959, when it published examples of Australian architecture in three of its issues: February-March dedicated to offices; June-July on public health; and the miscellany of October-November that, among other things, included single-family houses and hotels. Aujourd’hui Art et Architecture (AAA) also contributed to the number of French articles that year by publishing two articles in one of its issues. It was precisely this latter magazine that caused French magazines


to exceed English ones in 1963, when they published several articles about recent works by Seidler in one issue. In the same year, LAA contributed with two articles on Pier Luigi Nervi’s project for the New Norcia cathedral and the IBM Centre in Sydney. In short, if you look at the total number of articles in those years, French magazines published half the number of articles of the British journals, but they amount to more than double that of the Swiss and Spanish and four times as many as the Italians.

Sydney Opera House and Spanish Interest in the Building

As in the history of architecture books, the most published building in magazines was the Sydney Opera House. Once again, English publications were the first to broadcast the news. AJ and Architect and Building News (A+BN) published information about Jørn Utzon’s winning project, but the latter also included another review about the second and third prize winners. A month later the magazine returned to the competition and offered more details about the other proposals, as AJ would also do a little later. In September of that same year, the Spanish Revista Nacional de Arquitectura (RNA) also published an extensive six-page review of the competition and the winning proposal. It is quite striking that LAA, usually one of the first publications to publish news and buildings, did not cover the news until its issue later that year dedicated to “Young Architects of the World.” In fact, a model of the Sydney Opera House illustrates the cover of that number, but as the issue is dedicated to architects and not to buildings, Utzon’s proposal was linked to Denmark and not to Australia, which appears near the end of the issue and is illustrated with the works of another young architect who, in reality, was not Australian either: Harry Seidler.

However, LAA would be responsible for picking up the baton of the publication of the work in 1961, with an article included in the monograph on “Architects and Engineers.” The images that were included show the plinth of the building in full construction. And that is how it was reproduced in other British magazines in the same year in each “Progress Report” articles. From that moment on, the news and polemics about the Sydney Opera House would be shared between the British and Spanish magazines. Interestingly, it is in the latter where a greater interest in the project is detected due to a series of circumstances in which it is worthwhile to pause a few moments.

27 “Jeunes architectes dans le monde,” LAA 28, no. 73 (1957).
The first text published in Spanish journals announced the expected construction of the roofs of the Opera House. Mariano Bayón, his author, defended the result of the competition and supported the fact that the Jury’s choice had been based on an idea, which had no need to be completely resolved, given that the technology of the moment would help solve the difficulties that would arise. A year later, he would dedicate one of the issues to reviewing the work of Utzon, especially the Opera House, which he described in detail, mainly in its more technological aspects.

But, the most critical point of the Spanish debate was marked by Félix Candela and Rafael Moneo through the magazine Arquitectura. Candela had achieved worldwide fame for the structures he had built in Mexico, but he was originally from Spain. When Candela published “The Scandal of the Sydney Opera House” in the Mexican magazine Arquitectura, he immediately sent it to Carlos de Miguel, director of its Spanish namesake, who reproduced it in the Madrid magazine. Candela’s text was a harsh criticism of the development of the competition and of the construction of the building and detailed the various circumstances that hindered the execution of the project. The only person who was saved from his criticism was Ove Arup, whom his friend Candela relieved of all responsibility in the process.

But Candela could not know that the article would be read by Rafael Moneo, then a young architect who was probably unknown to Candela but, thanks to his analytical capabilities, had earned an unquestionable reputation in Spain as a learned critic of architecture. And what Candela could not know either was that Moneo had been a great admirer of the work and the figure of Utzon since his student days. He liked Utzon so much that when he was granted ministerial support to work abroad, he wrote to the architect asking to work in his studio—but the Dane did not respond to his letter. Moreover, the arrival of Moneo at the studio of Utzon coincided with the moment in which the design team had just found the solution to building the vaults. Moneo’s response was immediate. A month later he published a text in the same magazine in a fierce defence of Utzon.

As early as 1971, IC would return to the Sydney Opera House to deal, once and for all, with explaining its construction technique. The magazine presented its structure as “original and advanced” and as a technological and architectural showcase. In short, except for Candela, all the opinions on the Opera House...
that were expressed through the main Spanish architecture periodicals were positive and defended the work and its architect against its detractors.

Returning to the other countries, with what has been presented until now we would expect the English magazines to have published extensive articles about the building but, in reality, they only did so after the end of the 1960s, after the resignation and return to Denmark of Utzon.\textsuperscript{36} During the most critical stage—the construction of the vaults—they emphasized the engineering work that would materialize Utzon’s idea. Finally, in the September 1973 issue, the Australian architect Tom Heath wrote an article in \textit{AR} in which, under the stirring title “Cathedral of Culture,” he analysed the building itself, beyond the controversial history of its construction. The review is clearly positive and focusses on the evolution that the building represented, not only for Australian architecture, but for society in general.\textsuperscript{37}

France, it seems, completely distanced itself from the controversy that surrounded the construction of the building. In Switzerland, it was only covered in brief news pieces in the magazines until it was published once it had been inaugurated and the controversy that surrounded its construction was over.\textsuperscript{38} It is particularly striking that of all the countries that we have analysed, it was precisely Spain, the most culturally backward and politically oppressed, that was the one that was really fascinated by this great architectural work and that defended it from the beginning, despite all its difficulties.

\section*{The Resounding Success of Harry Seidler}

Harry Seidler arrived in Sydney in July 1948, precisely when European magazines began publishing news about Australian architecture. Within three years he had been awarded the Sulman Medal for the first house he built in Australia. However, the house reflected very little of the country in which it was built. As William Curtis said in his \textit{Modern Architecture since 1900}, using a quotation by Paul Rudolph, the Rose Seidler House is “the Harvard house incarnate transferred to Sydney without any modification whatsoever.”\textsuperscript{39} Indeed, Seidler had attended Harvard Graduate School of Design under Walter Gropius and Marcel Breuer in 1945-46, he had studied at Black Mountain College under Josef Albers in mid-1946, he had worked more than a year in Breuer’s New York office and collaborated for a few months with Alvar Aalto in Boston and

\begin{thebibliography}
\item \textsuperscript{36} “Opera house, Sydney,” \textit{A+BN} (January 4, 1967): 17-24.
\item \textsuperscript{39} Curtis, \textit{Modern Architecture since 1900}, 336.
\end{thebibliography}
Oscar Niemeyer in Rio de Janeiro. In this regard, following the granting of the Sulman Award, the British went on to ask—is this “National architecture?” But as they were probably accustomed to Seidler’s style, European publications surrendered to his architecture and he is by far the most published architect in their journals. Moreover, in contrast to the way the Sydney Opera House was treated in the monograph of LAA dedicated to the “Young Architects in the World,” where the building was integrated into the Danish output because of the nationality of its author, in Seidler’s case, although it was mentioned that his origin was not Australian, his work always appeared catalogued under that country.

The success of the “Australian” architecture of Harry Seidler in Europe was such that it accounted for more than 35 percent of the articles about the continent, compared to the 10 percent that was devoted to the Sydney Opera House. European magazines covered much of his work in those years, at least the most significant buildings. In comparison with the vertical parabola that all the articles on Australia over the years formed, Harry Seidler’s is a much more constant distribution, with the natural rises or falls at some points (fig. 2). However, a greater trend is notable in earlier decades, with a very significant peak in 1963, which then drops to hold a level of two or three articles published each year. The steep rise in 1963 is due directly to the aforementioned dossier on Seidler published by the French magazine AAA, which was joined by another article on Australian domestic architecture that appeared in the English AR.

One of the most published buildings was, logically, the Rose Seidler House, which made him famous in Australia and abroad, and which we have already referred to above. However, there were other buildings that were published as much or more and

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40 “National Architecture?” 274.

41 LAA 28, no. 73 (1957).


Figure 2. Articles devoted to Harry Seidler and his work in European Journals (Graph by author).
stayed longer in the media. That is the case of the Australia Square complex in Sydney, which had already appeared in the AAA dossier as a project, and continued to appear in Swiss, Spanish and even Italian magazines on the occasions of the successive openings of the Plaza Building and Australia Square Tower.43 Interestingly, in this case, no articles were found published in English magazines, which is probably due to that British “disinclination” that we have detected in the late 1960s and early 1970s.

As stated by Macarena de la Vega, although the seminal histories of modern architecture reflect the unquestionable work of Harry Seidler, the architect who embodies the true essence of Australia in them is Glenn Murcutt.44 This is not true in architectural magazines, where Seidler “reigned” throughout the period studied. Obviously, at that time Murcutt was not yet in the architectural panorama, but there were others who could have shared the stage with Seidler. His affinity with a more international style, as well as the fact that he was not born in Australia, surely contributed to the fact that historians did not give him as much weight in their texts.

Conclusion

Articles about Australia and its architecture were published in Europe, but not comprehensively and not in every country. The Sydney Opera House monopolized the headlines, which varied from initial surprise at Jørn Utzon’s risky proposal; worry—even annoyance—at the difficulties that arose in its materialization; to admiration, once the building was inaugurated. It is, however, logical that it was one of the Australian buildings most covered in magazines not only because of the effort involved in its construction, but because of the number of years the construction lasted. Nonetheless there were other buildings, especially by Seidler, that were continuously covered in European publications. We have already commented that one possibility for the predilection of Seidler’s architecture is that his architecture reminded Europe of its own architecture, but the strong self-diffusion that Seidler himself made of his work cannot be ignored. Australian architects—as well known in their own environment as Grounds Romberg and Boyd—and their emblematic buildings—such as the Academy of Science in Canberra—barely toted up a couple of mentions in the entire period. It is true that Bates Smart and McCutcheon, Peter Muller, John and Phyllis Murphy, Borland and McIntyre

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44 De la Vega de León, “A Tale of Inconsistency.”
and Yuncken Freeman appeared on some occasions, but their presence is diluted by the great “European”—International—themes that dominated the interest of the Old Continent: the Sydney Opera House and Harry Seidler.

Most of the articles on Australia during our timeframe were published in Britain. Only the historical ties between the two nations can justify that. We might think that the common language was another factor that boosted that interest. However, another English-speaking country (the USA) did concentrate the greatest interest on several European countries, including Spain, a country traditionally focused on Latin languages. So, discarding the common language, we must think of more traditional ties. Moreover, the interest dropped radically from 1952—when Australian modern architecture began to be published—to end up with just one or two articles per year in the early 1970s, a rate similar to that of countries as little related to Australia as Switzerland or Spain. France maintained a low profile throughout the period, except in 1959 and 1963, when two peaks of interest were observed, caused by unconnected examples in several thematic issues of LAA and the preparation of a dossier dedicated to Seidler in AAA. If we eliminate both peak years, France would have published hardly more than Switzerland and Spain, an anomalous situation for the country that, with LAA at the head, was one of the main hubs of architectural dissemination in Europe. Spain is a very curious case as a country with notable political and economic differences from the others in this study which, nevertheless, maintained the same level of coverage and even sometimes exceeded it. In fact, it doubled the number of articles that were published in Italy, which, once again, shows itself as a country quite absorbed in its own reality.

Modern Australian architecture interested Europe, although not as much as that of other distant latitudes. Understandably, more was published about the European continent itself and about North America but, if we look at what happened with other regions in the southern hemisphere that were not included in the histories of modern architecture, we see that, for example, Latin American architecture was much more popular than that of Australia. 45 When compared, Australian architecture barely exceeds twenty percent of what was published on South America. We could think that the Latin American supremacy was because of the greater size of the continent and the number of different countries. However, if we compare only Brazil with Australia, we see that there were still double the number of articles published on the former than on the latter. And the same

is true even with a much smaller country like Mexico, on which there were almost double the number of articles published than on Australia during the period of study. Latin America was not part of the “strong nucleus” of modernity, but it received much more recognition than Australia. There is no doubt that Brazil and Mexico developed a very powerful and personal modern architecture that immediately caught everyone’s attention. But, despite the fact that, according to Jennifer Taylor “the introduction of modern architecture [in Australia] was but one more phase in a sequence of events” and “the main thrust of modern architecture in Australia belongs in the second half of the century,” the output at the time certainly deserved more attention than it was given. We, therefore, have no choice but to blame the European lack of coverage of Australian architecture on something else: distance. We could also discuss the difference, but ultimately, what is the cause of the difference? Why were some countries less influenced than others by the European Modern Movement? Because they had less contact with that “strong nucleus” of modernity. Apart from political, social and cultural differences—which even occurred within the European continent—when distance comes into play, the difference is accentuated.

Indeed, in terms of diffusion, distance matters. In today’s world, where documents travel in seconds and we take less than a day to cross the planet, distance may not be that important. But at the time it was, and that caused both the editors of the magazines and architectural historians to maintain little contact with certainly more distant countries that were, nevertheless, developing their own quality, modern architecture, something different from what the Europeans were used to, but that was equally interesting. Distance and the consequent ignorance resulted in Australian architecture’s absence from the media in general.

46 Understanding as such the only two poles that considered the canonical architecture histories: Europe and the United States of America.

47 Taylor, Australian Architecture, 9.
Bridging Death’s Distance via the Victorian Spiritualist Home

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In Victorian Britain and America, spiritualists privileged domestic architecture as a medium for the diminution of distance between two worlds: one material the other immaterial. These formerly divided worlds were populated, respectively, by living inhabitants and the “spirits of the dead.” This paper explains how—domestic architecture—specifically the home interior, its furniture, and contents—brought family members and the spirits of their deceased loved ones into intimate communication and contact in séance. The spiritualist home bridged the distance between heavenly and earthly life as disembodied souls inhabited and animated the domestic interior to bring solace and comfort to the bereaved.

Keywords: Spiritualism; interior; séance; animation; domestic architecture; consolation
Believers of Victorian spiritualism conceived that domestic architecture—namely, the home interior, its furniture, and contents—was not solely accommodation for living inhabitants. It was also a province for the “spirits of the dead.” Vibrating floors, illumined walls, and tipping, rapping, levitating furniture were thought to be communications from disembodied souls that had separated from the body after death. Thrill seekers and experimentalists from all walks of life coveted experiences of such “spirited interiors,” as I have termed rooms affected by spiritualist animations.¹ For some participants, spiritualist practices provided a novel form of entertainment. For others—particularly individuals who sought to temper the pain experienced in grief and mourning—spiritualism provided an effective way to connect with deceased loved ones in a way that was emotionally satisfying.

This paper’s relevance to the conference themes of distance, architecture, and historiography lies in interdisciplinary studies of architecture. In particular, I like to foreground studies of the interior in architectural histories. The refocus encourages novel insights regarding the home. In this paper I combine the study of the interior with a quasi-religious movement that historians of the built environment have largely overlooked: spiritualism. Spiritualist ideals privileged the drawing room and its furniture as vehicles for supernatural contact. Consequently, the drawing room took on a new significance as a place where families and the spirits of their deceased loved ones could reunite.

My doctoral research—of which this paper is component—provides a broader study of spiritualism at home that includes more detailed study of gender and domestic space. In the dissertation, I examine the practice of spiritualism at home as one of three inhabitational modes that highlight a shift towards the Victorian home’s more secular understanding and appearance. In addition, my research on the spiritualist subject shows how individuals with specific emotional needs formed meaningful relationships to their home environments. In the dissertation, the outcome helps to explain how and why we conceive of the home as a place of “spiritual” or emotional comfort today. As a subset of my broader study, this paper describes some of the ways that practicing spiritualists curated their domestic environments as a means to self-care, namely consolation in bereavement.

Importantly, the private expression of grief in the Victorian period, particularly as concerned women who were thought less likely to contain their anguish, made the home a prime locale for otherworldly contact. Some forms of contact occurred

spontaneously and were “unsought” by the home’s living occupants. These kinds of interaction “mingled naturally” in daily life. For example, British spiritualist, Morrel Theobald, describes how the spirits of his deceased children engaged in cheerful play, and carried out common household chores like lighting fires, boiling kettles and making tea. Alternate forms of communication with the “other” world—like séances—were deliberate attempts to conjure spirits and required the home’s careful curation. This paper focuses on the latter form of spirit communication by describing how spiritualists manipulated their homes in séance. I will explain how spiritualists deployed their drawing rooms to lessen death’s distance by reuniting family members through meaningful contact. The paper begins with a brief overview of the spiritualist movement and its consolatory beliefs. This is followed by a description of the séance room and the conventional practices therein.

What is Spiritualism?

The modern spiritualist movement began in America in 1848 with the “Hydesville Rappings.” These were table rappings, interpreted by two young sisters, Kate and Maggie Fox, as the communications of a peddler who was rumoured to have been murdered in their home five years earlier. This was a significant occurrence for two reasons. Firstly, it required an altered conception of the soul’s fate after death which obliged the bible’s reinterpretation. Heaven and hell were no longer the first and final destinations for disembodied souls as conventional Christians believed. Secondly, ordinary household furniture items, the common table in particular, had taken on a fascinating new role as a conduit to an immaterial world of spirit life.

For spiritualists, the home was a credible realm for the soul that continued to live on after one’s death. The thought was comforting to those who were concerned for a deceased relative’s welfare, or to quell one’s own fear of death. British spiritualist Florence Marryat explained that,

Death should not be a “horror” to any one; and if we knew more about it, it would cease to be so. It is the mystery that appals us. We see our friends die, and no word or sign comes back to tell us that there is no death, so we picture them to ourselves mouldering in the damp earth till we nearly go mad with grief and dismay. Some people think me heartless because I never go near the graves of those whom I love best. Why should I?
might with more reason go and sit beside a pile of their cast-off garments. I could see them, and they would actually retain more of their identity and influence than the corpse which I could not see. I mourn their loss just the same, but I mourn it as I should do if they had settled for life in a far distant land, from which I could only enjoy occasional glimpses of their happiness."  

Spiritualist beliefs diminished death’s distance and finality. The Spiritualist home was the prime locale for otherworldly contact, a capacity which developed out of Christian norms. Daily routines, gendered identities, and relationships were revised and adapted to satisfy spiritualist ideals. For example, connections between the home as a place of family worship took on new meaning in the dimmed, silenced atmosphere of séance rooms. In this setting, personal and spatial synergies of the family and gender were appropriated for different ends. The family circle became the spiritualist circle and emotional bonds between kinsfolk were thought to attract the spirits of the deceased and bring them into common unity. In addition, traits that characterised the weaker sex like frailty, intuition, emotional responsiveness and empathy, were attributes that fostered women’s availability as prime mediums. The drawing room’s feminine aspects intensified the interior’s openess to spirit life. The following section describes the requirements for a successful séance room, and its associated practices.

The Séance Room

*Sit, positive and negative alternately, secure against disturbance, in subdued light, and in comfortable and unconstrained positions, round an uncovered table of convenient size. Lay the palms of the hands flat upon its upper surface. The hands of each sitter need not touch those of his neighbour, though the practice is frequently adopted…If the table moves, let your pressure on its surface be so gentle that you are sure you are not aiding its motions. After some time you will probably find that the movement will continue if your hands are held over, but not in contact with it.*

Spiritualist séance involved the gathering of like-minded individuals who sought to communicate with the “spirits of the dead.” Usually, the type of animation experienced in séance was subtle and typified by “a sensation of throbbing in the table. These indications at first so slight as to cause doubt to


their reality, will usually develop with more or less rapidity,” as medium Georgina Houghton explained.10

Cultivating an interior that might encourage similar events was a measured and considered undertaking. A successful séance required that the drawing room be manipulated or “harmonised” in a way that could amplify its mediumistic quality.11 Harmonising extended to both the room and its occupants since particular spatial but also personal states were considered to be more conducive to summoning the spirits. For example, Henry Vizetelly’s advice book Table Turning and Table Talking (1853) advised that “the temperature of the room should be moderate and dry … perfect silence should be maintained … [and] that thoughts should be concentrated upon some result.”12 The room’s complete enclosure was also critical to the arrangement, as was a reduced light level. Darkening the drawing room was a “usual preliminary” as spiritualist Florence Marryat advised.13 Likewise Houghton ensured that “Doors and windows were all carefully closed to exclude every particle of light.”14

Of equivalent value to darkness was the quality of relations between those persons in attendance; familiarity was a key trait. Victorian Spiritualist Catherine Berry wrote in her book, Experiences in Spiritualism (1876), that “by carefully selecting my sitters I have ensured the best manifestations. Sometimes when the conditions were particularly favourable, the spirits were able to do almost everything desired of them, and the power exercised by them has astounded all who witnessed it.”15 Berry’s vigilant choice of attendees was determined by the interpersonal connections and social dynamics between them. Emotional bonds between members were known to produce spiritually heightened conditions in séance. An article in the Medium and Daybreak reads:

> Spiritualism is essentially a domestic institution … Spiritual manifestations have been most successfully evolved in select companies, more particularly in the family circle, or where there is a kinship of spiritual development similar to true family affinity. Mediums have the greatest degree of power, the phenomena are of the most unmistakable description, and communications are purest, when presented in select and harmonious gatherings of which a well ordered family is the type.16

The passage suggests that the addition of non-family members expanded the family. Advice from German spiritualists contained in Vizetelly’s book recommended that “it is advantageous so to place the experimentalists, that persons connected together by

12 Vizetelly, Table Turning and Table Talking, 133, 107.
13 Marryat, There Is No Death, 19.
14 Houghton, Evenings at Home 126.
15 Catherine Berry, Experiences in Spiritualism: A Record of Extraordinary Phenomena, Witnessed through the Most Powerful Mediums (London: James Burns, Spiritual Institution, 1876), 39-40.
relationship or friendship be placed together. Thus, husband and wife, and friends of the two sexes, should be next to one another in the magnetic chain.\footnote{Vizetelly, \textit{Table Turning and Table Talking}, 132, 133.}

The spiritualist circle’s extension of the family to include friendships held disadvantages. By not sharing an attachment to all circle members, new acquaintances to an established séance group often compromised the room’s conductivity. Familiarity between sitters was crucial to harmonisation. Houghton writes, “the first séance we had after her [Mrs Nicholl’s] return … was composed of rather a changed circle, so that we could not, of course, expect equal results; but when I received permission to invite three fresh guests, I was warned that such would be the case, although ‘they’ concurred with me that the invitations must be given.”\footnote{Houghton, \textit{Evenings at Home}, 148.}

Or, in Theobald, “we found that sufficient physical power does not exist in our present reduced home circle, for recently we have lost one or two pro.tem. [temporarily] from our family circle: this, where all are contributive [sic], involves weakened conditions.”\footnote{Theobald, \textit{Spirit Workers in the Home Circle}, 295-96.}

As a mirroring of the Christian family circle, the recital of litanies often featured in séance, although the reason for communal gathering was no longer to ensure individual salvation through common prayer. Rather, the purpose was to improve the interior’s mediumistic quality and thereby encourage “communication between the spirits of the departed and the souls of the living.”\footnote{“Spiritualism and Its Recent Converts,” 303.}

Morell Theobald’s sister Florence wrote in her book \textit{Homes and Work in the Future Life}, “the reliability of spirit-teaching, as coming through any medium, must depend on the state of the passivity of the circle … the circle is harmonised by a spirit of prayer.”\footnote{J. Theobald, \textit{Homes and Work in the Future Life} (London: E.W. Allen, 1887), 9.} Thus the “supernaturalist” orientation of attendees, or their belief in the unknown, was considered vital. Houghton explained of an acquaintance that “gradually doubts crept in, placing a cloud between him and the invisibles.”\footnote{Houghton, \textit{Evenings at Home}, 146.}

The necessary qualities of morality, familiarity, and faith were paired with a need for spatial intimacy in the séance room. The proper arrangement of furniture accompanied darkness and silence to create synergies. Relations between individuals were made hierarchical through seating arrangements. Those individuals possessing superior mediumistic abilities were seated closest to the table. Houghton recalls that “Miss Nicholl sat at the table, with her grandfather on her right, while I was on her left — there was then a space — Mr. Champernowne and little Turketine — again a space — and Mrs. Varley; thus making six at the table. The others were seated behind, forming as it were scallops to those at the table.”\footnote{Houghton, \textit{Evenings at Home}, 150-51.}
arrangement maximised the room’s sensitivity. Additionally, Vizetelly’s guide suggested that “an uneven number of persons, which should seldom be above five, may better produce the movement than an even number … The number, however, may be augmented according to the size of the table” (fig. 1).24

The most effective kind of table was also a matter for consideration. Vizetelly advised that:

The tables which have hitherto produced the best effects are those called drawing room tables, of moderate size, and an oval form … . Tables having only one leg are also so much the better … . The table should be wooden, no matter of what wood or what form, for experiments on mahogany, deal, oak, or fir tables, round or oval,

24 Vizetelly, Table Turning and Table Talking, 132.

Figure 1. Henry Vizetelly, The Turning Table. Reprinted from Henry Vizetelly, Table Turning and Table Talking, 2nd ed. (London: Clarke, Beeton and Co. 1853), 99.
have all equally succeeded. It is indifferent whether it be a folding one or not. Its weight is also a matter of no consequence ...\textsuperscript{25}

Vizetelly also provided practical instructions from France for operations with objects other than tables. Successful interactions with spirit life had been attained through pendulums, hats, rings, puppets, and music stools (fig. 2).\textsuperscript{26}

There is a link between enclosure and a room’s spiritual conductivity which possibly informed the rationalising of the space and furnishings within “spirit cabinets.” Cabinets were introduced in the 1850s. For a time, cabinets were used by public mediums exclusively, but were soon a common domestic apparatus. They consisted of an area which was large enough for occupation. In these small, often portable spaces, public mediums emulated the intimate conditions of a séance room. Cabinets replicated the home’s enclosure and, accordingly, its mediumistic capacity.

In the home, spirit cabinets increased the prospect of spirit interactions. Spiritualist Catherine Berry refers to cabinets extensively in her book which was published in 1876, and in which she claims that she was “the first person to introduce cabinet séances [at home] into this country [England].”\textsuperscript{27} She

\textsuperscript{25} Vizetelly, Table Turning and Table Talking, 133.

\textsuperscript{26} Vizetelly, Table Turning and Table Talking, 138-47.

\textsuperscript{27} Berry, Experiences in Spiritualism, 85.

Figure 2. Left, Henry Vizetelly, The Oscillating Puppet. Reprinted from Vizetelly, Table Turning and Table Talking, 140. Right, Henry Vizetelly, The Music Stool. Reprinted from Vizetelly, Table Turning and Table Talking, 147.
provides a description of the cabinet, which was contained in a letter to the editor of the *Medium and Daybreak*, reporting an experiment undertaken in it by a Dr Dixon. It read:

*The recess is eight feet from front to back, and just wide enough for the two mediums. to pack themselves in a seat at the back; a small hinged wicket, as deep as from the chest to the lower part of the trunk, and furnished with a padlock, shuts them in closely, when seated, against the wall. On taking their seat, we (as “John King” wished the experiment to be under test conditions) locked the padlock and I kept the key. Then we closed the outer door of the cabinet. The mediums we knew could not move, and their hands could not reach the apertures in the outer door by three feet. The two apertures are about six inches square, and covered with small curtains of dark cloth. On our side, the room, about five paces square, was lighted by an ordinary taper, and we sat on chairs immediately in front of the door, a few feet from it. Presently through these openings emerged the coats, waistcoats, neckties, rings, and even boots of the mediums.*

Likewise, Theobald describes that “on Sunday evening [in 1883] we all sat in our usual manner round the dining table, having extemporized a cabinet in one corner of the room, by means of a large clotheshorse covered with railway rugs and a pair of curtains opening in front.” This hyper-conductive effect produced “remarkable phenomena. As I recorded in *Light* at the time, sitting with our own family, with the addition only of two visitors, we had materializations of seven different spirits.”

Conclusion

This paper has highlighted the spiritualist drawing room’s new role as portal to the spirit world. The séance room was a place of heightened emotion, spirituality, and sensitivity to past life. It was highly co-ordinated in terms of the interior setting. It required complete enclosure, dimmed lighting, and a particular arrangement and type of furniture. Spiritualists also carefully considered the individuals in attendance. Synergies between family and friends, as well a belief in spirit life ensured a greater prospect of communication in séance. The possibility of otherworldly communication produced a hyperawareness of domestic surroundings as inhabitants looked for signs of their loved one’s presence and wellbeing after death. Spiritualism’s consolatory effect in séance, when intimate contact might be
summoned at will, offered a compelling antidote to the sentiment of irreplaceable loss. The Spiritualist home bridged the distance between heavenly and earthly life and offered consolation to the bereaved. These conclusions would not have been possible without extending the study of architectural history to “grey,” “interdisciplinary areas” like the interior and spiritualism.
Trajectories of Axonometry through Distances and Disciplines

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Unique in its power to interrelate multiple planes with minimal distortion, the axonometric negotiates, as Alan Colquhoun notes, between the archaic and the modern. In this paper, we evidence this notion, as well as positing other spectra that the drawing type spans: from the strategic to the poetic, the primitive to the acutely detailed, from urban to conceptual space, from the bird’s eye to the mind’s eye. There are numerous trajectories possible in a reading of history through the lens of the axonomic, but the path herein collects instances from the medieval, via Massimo Scolari, to Le Corbusier, Kazimir Malevich, and Ivan Leonidov. Each drawer is situated in a vastly different context, but their divergence is key: they are bound by the drawing type, and its ability to transcend and translate is testament to its versatility as a drawn language. By studying different types of axonometrics and the motives for their employment, as well as their nature as operative, we uncover connections that are driven by warfare, politics, and theoretical shifts. We observe how qualities such as points of view, orientation, and promiscuity of the rules of projection can be inextricably bound to the author’s conceptual and critical locale. We explore Le Corbusier’s oeuvre, uncovering how a launch into the aerial vantage through a roof-centric axonometric view may have been instrumental to the development of his “five points” of architecture. We pursue a connection that sees the axonomic extend from figural to cognitive space in the hands of Leonidov. Where others identify the post-modern era as the critical locus for the axonomic, these explorations indicate an earlier genesis. Lastly, we suggest that inheritances from Le Corbusier and Leonidov can be traced into the last pre-digital moment of architectural drawing in the 1970s and 80s.

Keywords: axonometry; axonometric drawing; parallel projection; Le Corbusier; Massimo Scolari; Ivan Leonidov
Robin Evans notes how the conventions of parallel projection provide a basis for experiment, rather than constraint, of architectural conception through systematisation and legibility. Arguably, the axonometric drawing epitomises these qualities of reading, writing, and transferring information because of the directness of correspondence between its planes. Unlike other forms of projection that entail planar reconstruction, the plan remains embedded in the drawing. In this way, through a constant relaying of information through and between undistorted plans, the axonometric becomes a simulacrum of a construction site:1 whereby a “ground” is directly drawn out of and into. It becomes a “viable medium, allowing the architect to spill his imagination onto it, sure in the knowledge that much of the effect would travel.”2 Such a scaffold offers up both a philosophical and literal framework: an operative space.

Indeed, the earliest forms of parallel projection—many of which Massimo Scolari excavates in his treatise on oblique drawing—are axonometrics. Even where the conventions are being hinted at but remain confused and fledgling, his survey of paintings, illustrations, and in particular military drawings, are largely obliques and axonometrics. What is common to these is the remainder within them of something “square”—something with perpendicular corners—for the axonometric, the plan, and for the oblique, the elevation. One is effectively a rotated version of the other. Thus, in this paper, we establish the axonometric as a basis, both in a chronological and figurative sense. Its legibility, however, should not be confused with rigidity. It is a profoundly operative type—its construction lines “act as guide rails into the blindness of an as yet unrealised dimension.”3 A change in vantage—privileging either front, roof, side, or base; casting vertically or obliquely—expands not just pictorial scope, but creates space for architectural thinking.

Sonit Bafna and Hoyoung Kim have noted the rhetorical capacity of axonometry, and the association between a post-modern revival of the format with a deepening in conceptual thought among its exponents, from the Neo-Rationalists to the New York Five.4 While they investigated the critical writing that emerged alongside and influenced the drawings, we are interested in the drawings themselves, and what can be garnered through their reading as visual texts. Here we make two novel points regarding axonometry’s subjectivity. Firstly, where some authors believe the projection’s measurability makes these drawings objective,5 we demonstrate that modernist axonometry became capable of acquiring a spectrum of personal ideologies.6 Alan Colquhoun’s critical examination 1 Peter Cook, Drawing: The Motive Force of Architecture (West Sussex: Wiley & Sons, 2008), 20.


3 Evans, “Translations,” 11.


of axonometry’s simultaneous possession of both primitive and modern qualities, parallels our study of Ivan Leonidov’s drawings, which exploit archaic techniques to create ambiguous and subjective representations. Secondly, where some consider axonometry to be the clearest formal depiction of architecture, and the most communicative drawing for non-architects, our case studies support Bafna’s and Kim’s study of projections which “deliberately favour abstract compositional qualities over interpretive clarity.” Where other authors locate the post-modern as axonometry first conducting a disciplinary critique, we posit this moment occurred much earlier, after 1918.

From here, with successive steps taken in distance and time, we find its capacity to absorb rhetoric and meaning to be commensurate with shifts into more combinatory and distortive forms of parallel projection. Resonances exist between the post-modern and the medieval via the axonometric, between architecture and art, as a projection capable of absorbing and translating theoretical polemics across nations and eras.

Axonometry from the Archaic to the Modern

Scolari’s discourse on parallel projection points to the emergence of the code of the axonometric as the “military perspective:” a parallel cast giving scalar relationships between defensive structures and their environs. But if the laws of axonometry were firmed in this context, they had been intuited and hinted at beforehand. Scolari collects together a number of drawings from as early as the first century BC that, while commingled with perspectival elements, clearly contain oblique structures.

We would posit that the principles of axonometry are also latent in medieval mappa mundi and town cartography, as these drawings tend to lay out the plan, un-tilted, and elevate recognisable visible features (building frontages, topographic elements) in situ. There is an innate logic in this system, as the plan deals with the master-view and navigation, and the elevation provides landmarks and points of recognition within that field. It is a synthetic drawing, as the plan is for the body, and the elevations for the eyes. Medieval town maps and early ocean cartography position both the world, and the subjects within it—buildings and ships—as a kind of evidence. If the axonometric is a plan-form with vertical extrusions, such images constitute an intriguing conceptual basis for the type. Not only do these maps foreshadow the emergence of axonometry, but they come to resonate later on—as perhaps the locus of the “archaic” referred to by Colquhoun, and as lending a quality

7 “... axonometry has assumed a largely symbolic role: an ambiguous symbol of an aestheticized science, but also of a sort of metaphysical archaism. Which raises a new question: what rapport can exist between these two divergent aspirations, between a discourse that deliberately adopts archaic forms and metaphysical references, and the love of moderns for mechanization, technology and science?” Alan Colquhoun, “Assonometria: Primitivi e Moderni,” in Alberto Sartoris, ed. JG and AA (Turin: Mazotta, 1992), 13.

8 Thomas, Drawing, 241; Cook, Drawing, 99.

9 Cook, Drawing, 21.


12 Isometric projections, among others, are one of these more complex formats of drawing as they entail planimetric reconstruction.


14 Scolari, Oblique Drawing, 2.

15 This is perhaps implicit in Scolari’s survey, but not explicit. It can be intuited from other connections he makes (Egypt, the military perspective), but his discursive arc does not include medieval charts or mappa mundi.
of shrewd primitivism to the upright projections of Leonidov. Archaism in architectural representation is not to be seen as a defect.\textsuperscript{16}

The origins of sixteenth-century military axonometry shed light on its post-war re-emergence as the projection of choice for representing critical and theoretical “forms of attack.”\textsuperscript{17} Where etymologically, \textit{cavalière perspective} translated to “perspective of a horse rider, that is: seen from above,”\textsuperscript{18} the twentieth-century bird’s-eye axonometric was the view from a military plane. Although the original defensive projections were not urban, they were required to be site-specific, and in these drawings “site and building interacted as never before.”\textsuperscript{19} These qualities of military projection—site-specificity, and their generative power of “allowing the infinite to be thought”\textsuperscript{20}—led axonometry to acquire an urban status in the twentieth-century.

In modern axonometry’s relation to the political and the urban, Pier Aureli’s scholarship on the emergence of nineteenth-century urbanism and the possibility of an absolute architecture is of relevance.\textsuperscript{21} It is no coincidence that the architects Aureli examines—Ludwig Hilberseimer; Aldo Rossi; Giorgio Grassi; Oswald Mathias Ungers; and Rem Koolhaas—consistently utilise axonometry in their political and urban proposals. Axonometry’s ability to depict a measured “composition of built and void space,”\textsuperscript{22} and its infinite extendibility, re-established the city as “a political confrontation and recomposition of parts” via “the idea of the archipelago as a form for the city.”\textsuperscript{23}

Le Corbusier and Urban Axonometry

The launching of human vantage into the air influenced the re-emergence of bird’s-eye axonometry among many proponents of the European avant-garde. Aviation is to be understood as more than a technological development, having a profound philosophical impact on architecture, perception, and representation.\textsuperscript{24} In \textit{Aircraft: The New Vision} (1935), Le Corbusier noted that “war was the hellish laboratory in which aviation became adult … \textit{when peace came the airplane was abandoned.”}\textsuperscript{25} Le Corbusier’s utilisation of bird’s-eye projection, where flying is the only view that could be compared with the axonometric lens,\textsuperscript{26} represents a critical disruption to the status quo of modernism.

Critics have observed Le Corbusier’s skilful utilisation of modern media,\textsuperscript{27} however his use of bird’s-eye axonometry has been largely overlooked. It is intriguing to track Le Corbusier’s

\begin{footnotes}
\item[16] Scolari, \textit{Oblique Drawing}, 65.
\item[19] Scolari, \textit{Oblique Drawing}, 266.
\item[22] Aureli, \textit{The Possibility of an Absolute Architecture}, 184.
\item[23] Aureli, \textit{The Possibility of an Absolute Architecture}, xi.
\end{footnotes}
axonometric methods against his position, where the aerial view makes consistent appearances after 1922, and seems to increasingly plot urban and contextual connections, and eventually home in on the roof as a new ground. The technique applied is a 60/30 plan rotation, which can be considered a standard or modern mode. Figures 1 to 3 are Le Corbusier’s first bird’s-eye axonometrics, drawn in 1917, 1922, and between 1922 and 1925 respectively.

Figure 1 describes a solitaire type, positioned within a context but largely objective, and lacking in his characteristic roof gardens. Figure 2 shows an expanded field—an urban project—with suggestions that the focal form is repeated. This shift in scope suggests Le Corbusier discovering that axonometry’s ability to extend infinitely while maintaining scalar relations, is commensurate with the proliferation of the architecture into a system, and as an instrument of urban theory. Between 1922 and 1925 his first roof gardens appear as shown in Figure 3. Further, the couching of the architecture within its urban context bears out numerous relationships to his “Five Points for a New Architecture.”

The Ideologies of Axonometry in Le Corbusier’s Five Points

Le Corbusier’s Five Points—pilotis; roof garden; free plan; horizontal window; and free façade—are interchangeable with the qualities of his exterior axonometry. Inherent in his Five Points is the Dom-ino system developed in 1914, which—like axonometry—represents “both a project for the domestic sphere and the city at large” which “could be extended ad infinitum.”

Yet axonometry also influenced Le Corbusier’s decisions at the formal scale: although his Five Points were not published until 1929, they are evident in his projects from the early 1920s onward. The pilotis and roof garden serve the same ideology, both “freeing” the ground, and “recovering” the roof. Pilotis also enable the free plan and façade, releasing construction from a traditional “optical relation to the ground,” and suppressing “all notions of ‘front’ or ‘back’ or ‘side’.” This apparent weightlessness, and loss of frontality, are both consequences of axonometric representation.

We speculate that axonometry was not selected only to convey predetermined architectures, but rather, by virtue of its capacity as scaffold or operative design space, that it may have been instrumental in the generation of these speculations and theories themselves. As Evans says, “the subject matter will exist after...
Figure 1. Unrealised proposal for an Abattoir, Challuy, France (1917). Reprinted with permission. © Foundation Le Corbusier/ADAGP. Copyright Agency, 2019.

Figure 2. Ville Contemporaine pour trois millions d’habitants (1922). Reprinted with permission. © Foundation Le Corbusier/ADAGP. Copyright Agency, 2019.

Figure 3. Immeuble-villas (1922-25). Reprinted with permission. © Foundation Le Corbusier/ADAGP. Copyright Agency, 2019.
the drawing, not before it.” Had Le Corbusier not taken to the sky and privileged the roof plane in his axonometry, would he have come to lavish design attention upon it? The manner in which such a vantage exposed the roof as an area of concern and grounded the architecture within an urban and civic milieu, while revealing roof, façade, and ground plane in concert, offers if not a causal relationship to the Five Points, then certainly a synthetic one. Intriguingly, in their critiques of the infamous Dom-ino (which Le Corbusier represents in perspective), Peter Eisenman, Eleanor Gregh, and Aureli all redraw it in axonometric.

Le Corbusier and the Constructivists

The physical distance between Western Europe and the Soviet Union was diminished via the rich intellectual exchanges between Le Corbusier and the Constructivists. While Le Corbusier was expanding his architectural polemic via both art theory and axonometry, his contemporaries at the Vkhutemas School—where Malevich taught and Leonidov studied—were also exploring the projection type, and collapsing disciplinary boundaries between art, architecture, and urbanism in a search for non-objectivity. In fact, Le Corbusier praised Leonidov as “the hope of Russian Architectural Constructivism.”

Where Le Corbusier’s axonometric concepts were inspired by aviation’s physical flight, Malevich focused on a cultural flight “from the earth as a land of reference,” referring to Suprematism as “aeronautical” with the aim to “destroy the ring of the horizon.” While he himself did not draw in axonometric, his eradication of the horizon is a conceptual invitation, and anti-perspectival in nature. Like Le Corbusier, Malevich’s polemic was reactionary and critical; he considered himself a member of “the creative army.” Looking to the writings of Malevich, whom Koolhaas cites as “Leonidov’s distant but ever present master,” we examine how Leonidov encapsulates urban, political, and personal ideologies via his deviation from Le Corbusier’s modern axonometry.

Leonidov’s ‘Four-dimensional’ Axonometry

Malevich’s artistic desire to ‘give fullest possible expression to feeling’ is translated to Leonidov’s archaic axonometric methods, which privilege the subjective over the objective. Both individuals believed in a fourth dimension, which Malevich termed an “inner movement,” and Leonidov as the architectural
experience of “sensory perception.” Other contemporary artists and architects believed the fourth dimension represented time through a literal, pictorial movement, such as in the canonical axonometrics of Theo van Doesburg and El Lissitzky. Under Lissitzky, devices such as symmetry are used to systematically enhance ambiguity and enable a flip-flop between top and bottom views. The confusion doesn’t belong to the objects—only to the particular instance of the chosen composition: Evans states that the concept of movement is thereby “locked into the drawings,” and the qualities of the axonometric are not cogent with phenomenal space, or “exportable into the three-dimensional world.”

In contrast, Leonidov’s novel modern-archaic techniques creates an inner spatial alternation, which is not locked into the surface of the drawing but occurs within the mind: one must put the pieces together in mental space. Following Malevich’s “abhorrence for the third dimension,” Leonidov’s axonometry favours the second and fourth. The result is a tectonic and poetic representation of architecture that possesses qualities of both constructability and subjectivity. In light of this, we locate three novel techniques in Leonidov’s drawings: figure-ground reversal; the incorporation of primitive techniques; and deliberate inconsistencies between parallel projections of the same project.

Leonidov and the Confounding of Convention

The relationship between solid and void held conceptual importance for both Malevich and Leonidov. Leonidov’s tendency to invert drawings to black fields with white line-work presents a small but significant shift away from Le Corbusier and Malevich, as with his new town for ‘Magnitogorsk’. While this mode of drawing resurfaced in the 1950s, the rarity of inverted projections in the early twentieth-century must be noted. This shift represents “a complete reversal of the canonic tradition,” whereby the space of urbanism became visible for the first time, or, to use Aureli’s terminology, the urban “archipelago” is foregrounded over architectural “islands.” Akiko Honda suggests Leonidov’s figure-ground reversal depicts a “non-gravitational space” but this is too literal an interpretation. If traditionally the white field represents an empty space awaiting design, Leonidov’s black field establishes the drawing as a critical and complete “counter-project,” where void is as important as solid. The absence of lineweights furthers this figure-ground ambiguity, removing traditional hierarchies,
and reinforcing the primacy of the urban field and “tense and meaningful voids.”

Rather than pictorially, Leonidov’s four-dimensional axonometry represents depth through an intellectual process. Leonidov reflects on this visual-cognitive relationship:

\[\text{... organizing emotions and feelings is essentially the organization of one’s consciousness. \ldots The problem is not to organize visual stimuli, but one’s consciousness. The eye is a precise mechanism which transmits impressions to the brain.}\]

Through the incorporation of archaic techniques, Leonidov creates a Malevichian “contradiction on the surface of his picture.” If Le Corbusier’s 30/60 mode of axonometry constitutes a typical employment, Leonidov’s is less doctrinal. His plan remains un-tilted, and his vertices are sometimes slanted, and sometimes plumb, as an elevation without implied depth—in the manner of a medieval map. Trees and built forms adhere to non-compliant vertices: we are positioned at once above, and at ground. This cognitive depiction of depth reflects Leonidov’s desire for “spatial and volumetric” elevations. In contrast, Le Corbusier’s technique depicts “the actual space of the object rather than the object in space,” evidencing a comparably detached vantage point, representing only the formal, and none of the poetics of his architecture.

Similar archaic techniques of simultaneous plan-elevation are explored in Scolari’s aforementioned historical overview. For example, Egyptian hieroglyphs represent partial aspects of both the front and side elevations of figures, yet “the impression of the whole is more powerful,” which “strike the mind more than the eye.” This foreshadowed Plotinus’ (203-270 AD) renunciation of pictorial depth, and his assertion of interpretation not through the “eye of the body,” but rather the “inner eye” which represented “the Intellect.”

Leonidov’s echoing of primitive technique, and his overlap of multiple vantage points, represent metaphysical concepts of a humanist, perceptual, and four-dimensional architecture. Another instance where Leonidov distorts modern conventions of axonometry to highlight four-dimensionality is through deliberate inconsistencies between parallel projections of plan and isometric (fig. 4).

The shift here from axonometric to isometric casting has the effect of flattening the ground plane and emphasising the tower. What confounds convention here is the circle, which remains in plan-form as it would in an axonometric projection.
Also, the isometric components are leaning backwards in a disturbing way—the z axis is not vertical. This slanted casting of the z axis is usually reserved for an axonometric whose plan is left orthogonal, or un-tilted. But in this drawing, everything is reconstructed—nothing remains on orthogonal crosshairs, giving the entire composition the effect of leaning backward. Nothing, that is, except the circle, which is therefore abstract and notational. The mixed conventions and backward pitching of the composition produce a precarious sense of gravity, or even imply a sense of centrifuge or orbit. This non-uniform instance of axonometric projection reflects “non-uniform spaces of perception,” and a trick that implies a four-dimensional understanding of his work. It also mimics the tendency of medieval representations to “resist substitution.”

Approaching our conclusion, it is important to reflect on the misinterpretations of Leonidov’s oeuvre. The term “leoni dovshchina” which translates to “Leonidovism,” was a somewhat pejorative term circulated within the Soviet architectural press, referring to architecture that appeared “unrealisable and visionary.” We hope to have demonstrated that although Leonidov’s projects are unrealised, they are not to be interpreted as fantasies, but rather as perceptual “supra-tectonic” works. We believe this misleading notion of “Leonidovism” originated for the same reason that his...
Axonometry is to be seen as a critical project: his defamiliarising of a modern technique via the archaic.

**Toward Post-modern Axonometry**

Both Leonidov’s primitivism and Le Corbusier’s strategic use of axonometry were central to the post-modern discourse of the Institute of Architecture and Urban Studies New York (IAUS). The Institute’s selective curation of content makes this connection plain. Included in their Series 1 and 2 exhibitions and catalogues (1976-81), is an entire monograph on Leonidov, and their journal *Oppositions* (1973-84), features two double issues on Le Corbusier. In an exploration only touched upon here, the IAUS extend the lineage of axonometric discourse established by the modernists, most notably Rem Koolhaas and John Hejduk. Both characters continue to dissolve distinctions between architecture and urbanism, and between architectural and art theories, through the medium.

Hejduk makes frequent use of the Leonidovian un-tilted axonometric, giving his drawings an anthropomorphic and soldierly appearance that resonates with medieval and military techniques, thus representing a humanist framework. Further, both Leonidov and Hejduk employ a symmetrical, 45 degree cast, which “leads to an ambiguity as to both the nature of the drawing as well as the architecture.” Yet, unlike Leonidov’s urbanism, Hejduk internalises his inter-disciplinary critique, concentrating on the autonomy of architectural form. Koolhaas was granted an IAUS fellowship in 1973, where he completed *Delirious New York* (1978), and with Madelon Vriesendorp, Elia and Zoe Zenghelis, established the firm Office of Metropolitan Architecture (OMA) in 1975. The illustrations for this text include some of the most infamous axonometric drawings of the twentieth-century. OMA clearly employ Leonidovian methods such as figure-ground reversal, the use of pure geometries to represent abstract concepts, and deliberate inconsistencies within the axonometric method via the inclusion of perspectival imagery. Where Hejduk utilises the axonometric to conduct a formalist critique, OMA combine the modern and the archaic, creating ‘speculative drawings’ that reflect on the postmodern urban condition.

**Conclusion**

Uniquely legible and synthetic, the axonometric projection is an operative type that we have observed to be capable of absorbing...
content from the objective to the highly subjective. The manner of axonometric construction—the privileging of different faces, its tilt, and its level of distortion—contributes to the reading of a visual text through theory and time. We locate a modern use of the axonometric under Le Corbusier commensurate with air travel and speculate that the interplay of ground and roof that follow may have been crucial to his Five Points and his conception of the roof plane as a site of design. Such a critical locus for the drawing would substantially predate its widely held entry into theoretical discourse in the post-modern era. We have traced a connection from Le Corbusier to the Constructivists and observed how Leonidov’s inflections and distortions of the type see it take on a humanist guise. Through connections back to medieval town maps, which we posit as a specific prototype for the axonometric code, Leonidov’s drawings take on a rich archaism, and these in turn find lineage in Hejduk’s subjective and anthropomorphic works. Amid the IAUS, inheritances from both Le Corbusier and Leonidov find direct discursion and exhibition through the medium of axonometry. Produced in the last pre-digital moment of speculative drawing, their constructions contain an element of labour and deliberation that is distinct from their digital sequelae.

If axonometry, which preserves the plan, can be understood as an elementary form of paraline drawing, and a hybrid of the archaic and the modern, then the laborious reconstruction of “ground” in isometry and obliques can be seen to add a complexity that is both conventional and conceptual. While perhaps initially developed in the pragmatic service of navigation and warfare, the axonometric has since taken on considerable theoretical capacity, but its legibility endures and allows it to carry meaning in a trajectory through time only partly exposed by this paper.
Architects on the Verge: Distance in Proximity at “The Pleasures of Architecture”

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Between May 23 and 26, 1980, then New South Wales chapter of the Royal Australian Institute of Architects held a conference in Sydney, entitled “The Pleasures of Architecture.” International guests invited to speak at this conference were Michael Graves, George Baird and Rem Koolhaas. To feed the discussion, the conference organisers invited twenty prominent Australian architects to submit a design to fictionally complete Engehurst, an 1830s villa in Paddington (Sydney) originally designed by architect John Verge, which was never completed and of which only a fragment still existed. All schemes were presented in an exhibition that took place in parallel with the conference. The proposed projects were published in full in the April/May 1980 issue of Architecture Australia and were remarkably diverse in their conceptual approach to the completion of Verge’s villa. Recent scholarship pinpoints “The Pleasures of Architecture” conference as a watershed moment in Australian architectural history—although, sadly, not a very “pleasurable” one.¹ The considerable conceptual distance that manifested itself between Australia’s modern masters and proponents of post-modernism resulted in an acrimonious atmosphere, which was felt both at the conference and in the discourse that erupted in its wake.² Examining the entries that were submitted for the Engehurst exhibition, this paper argues that the all too black-and-white discourse that emerged in the aftermath of “The Pleasures of Architecture” failed to appreciate the alternative (non-modernist, non-postmodernist), critical approaches that appeared in response to the task of completing Verge’s design; approaches that sought to transcend the crisis of modernity.

Keywords: “The Pleasures of Architecture”; John Verge; Engehurst; anxious modernisms; Australian post-modernism
Verge’s Engehurst

Between 23 and 26 May 1980, the New South Wales chapter of the Royal Australian Institute of Architects (RAIA) held a conference in Sydney, entitled “The Pleasures of Architecture.” To feed the discussion, conference chair Andrew Metcalf invited twenty prominent Australian architects and architecture firms to submit a proposal to fictionally complete Engehurst, an 1830s villa in Paddington (Sydney) originally designed by architect John Verge (1782-1861), which was never fully completed, and of which only a fragment still existed. All schemes were presented in an exhibition that took place in parallel with the conference, and the submitted design panels were published in full in the April/May 1980 issue of Architecture Australia (AA). In his foreword to this issue, Metcalf wrote: “this exhibition will show an architecture relieved of its missionary social role and looking more interesting for it.”

The theme of the conference, as well as the brief for the exhibition were ostensibly inspired by Bernard Tschumi’s “The Pleasure of Architecture” article, which was published in a 1977 (eponymously titled) issue of Architectural Design (AD). In his text, Tschumi lamented that “[d]iscourse within architecture has been limited to how architects may manage resources,” and that “this view of architecture … ignores its function as an instrument of socio-cultural change.” One of the architects whose work was discussed in this issue of the journal was Leon Krier. Three years later, he was (perhaps not coincidentally) invited to speak at “The Pleasures of Architecture” conference. Krier, however, declined and was replaced by Rem Koolhaas, who joined Michael Graves and George Baird in Sydney in May 1980, as one of the principal guests.

The design brief for the “Completion of Engehurst” was quite ambitious. Beyond specifying that the house was to be freestanding and responsive to place and climate, it also urged contributors to comment on urban and suburban typologies in relation to the genealogy of the Australian house; explore issues of public and private space in its functions; and comment on ways of living and human habitation, both in social and political terms.

The choice for Engehurst as a site for intervention was revealing on several fronts. It openly tapped into the renewed interest in historical precedents paramount in 1970s architectural culture on the one hand and appositely expressed Australia’s (then) social and political climate on the other. John Verge, who designed Engehurst, was born in Hampshire (England) in


2 Hogben, “The Aftermath of ‘Pleasures’.”


1782, and migrated to Australia in 1828 to become a farmer.\(^6\) When this plan failed, he instead established himself as a builder and architect in Sydney. There, he had a brief but brilliant career, which covered little more than seven years, and which fortuitously coincided with the golden era of colonial settlement. During this time, Verge produced an impressive complement of (mainly domestic) designs, which was reportedly “unequalled by any of his colonial contemporaries.”\(^7\) In 1978, after having been largely forgotten for 150 years,\(^8\) a book was published on his works. In it, historian Ian Evans noted that Verge’s efforts had “… contributed a great deal to the transformation of Sydney from the crudely-built convict town of the late 1820s to the smarter, more sophisticated and business-like centre of the late 1830s.”\(^9\) In the lead-up to Australia’s bicentenary, which was taking place in 1988, celebrating early colonial architects such as Verge, whose work was said to be “comparable to English work of the period,”\(^10\) emphatically highlighted the progress that the British settlers had made in 200 years on the continent, and thus recast architecture as “an instrument of socio-cultural change”—as Tschumi had plead for in his 1977 \textit{AD} article. Introducing the designs in AA, Metcalfe and Alexander Tzannes (a member of the conference committee) accordingly noted: “The existence of the Verge fragment [of Engehurst] enforces an evaluation of the genealogy of the Australian house, at least since European settlement to the present.”\(^11\)

Engehurst was originally commissioned by Frederick Augustus Hely, the Principal Superintendent of Convicts. The original design is thought to date back to October 1833 and consisted of a grand two-storied house in Regency style faced by a service wing across a court, and connected to it by an underground passage.\(^12\) Hely took up residence in Engehurst in 1835, after the service wing was built, but soon expressed doubts about the magnitude of the scheme. Not much later, in September 1836, he died of a stroke before Engehurst was completed.\(^13\) What’s more, in the decades (century even) that followed, as Sydney progressively urbanised and Paddington—an area that was once described as a “paddock full of houses”\(^14\)—became part of the inner city, large parts of the service wing that was built were demolished, and Engehurst’s remnants became increasingly encapsulated in the city’s dense urban fabric.

Oppositions

In the conference booklet, Metcalf introduced “The Pleasures of Architecture” theme as follows:


\(^8\) In 1962 a book, entitled \textit{John Verge, Early Australian Architect: His Ledger and his Clients} had been published on a limited print-run of 250, but it was not until 1978 that the first complete monograph on Verge was published on a larger print run of 1500.

\(^9\) Evans, “John Verge (1782-1861),” 11.


\(^12\) Broadbent, Evans & Lucas, \textit{The Golden Decade of Australian Architecture}, 57.


\(^14\) Kelly, \textit{Paddock Full of Houses}. 
Because a real crisis of modernity is upon us we have a decisive and important role to play at this conference. If it is some form of renewal we seek, and one is permitted momentarily to posit alternatives in black and white: do we find it in a re-enervated modernism seeking to preserve its abstract aesthetic and formal content in the face of intellectual, historical and social challenges to the contrary; or, is regeneration to be found in an allusionistically safe, but cliche-prone post modernism?15

Many entrants to the Engehurst exhibition rapidly cast aside any reservations about architectural clichés and resolutely opted for post-modernist aesthetics, seeking inspiration in the latest designs from across the Pacific. Drawing on Frank Gehry’s interventions in his own house in Santa Monica (1978), Ken Woolley, for instance, left the Verge fragment in its encapsulated condition, merely adding bits of lattice screen, porch and verandah elements, and pergola structures here and there, as well as a new studio building at the rear (fig. 1).


Philip Cox’s design visibly referenced Charles Moore’s *Piazza d’Italia* (1978). In an act of (what Metcalf called) “historical fetishism,” he excavated the servants’ wing from the built fabric that had come to surround it, fully restored the building, and placed it centre-stage on a raised platform, flanked on both sides by faux ruined fragments of the original Georgian front and rear facades of the main house (which was never built). Two minarets overlooking the site and a bust of Verge, prominently placed on the main (diagonal) axis of the complex, were designed to pay homage to the great colonial architect (fig. 2).

Daryl Jackson, in turn, conjured the postmodern aesthetics of Michael Graves, and used the Verge fragment as a base for a faux grand neo-classical mansion. Noticeably delighted by the recommendation to forsake architecture’s “missionary social role,” Jackson also worked several humorous references to the conference’s international guests into his design. On the first floor, he included a Georgian-fronted “George’s Bairdroom” antechamber, and on the ground level, he planned an irregularly shaped “Rem’s poolhaas” swimming pool and a “Graves’ end” terrace at the rear, adjoining the garden (fig. 3).

Set against these American-inspired post-modernist schemes were a few entries that attempted to salvage what could
be salvaged of modernism by aligning themselves with the postulates of (what would soon be labelled) “critical regionalism.”17 Glen Murcutt, for instance, opted for clean lines and neutral facades in a classical layout, to (in his own words) “reveal and reinforce the apparent intent of Verge’s original scheme.”18 The proposal revealed Murcutt’s desire to formulate a new regional, place-sensitive style within the modernist idiom, and—perhaps even more so than Cox’s entry—proposed a shrine dedicated to Verge.

Murcutt’s abstract lines and honed back aesthetic made painfully plain the absence of Harry Seidler. Then Sydney’s preeminent architect and one of the fathers of modernism in Australia, Seidler was invited to participate in the Engehurst exhibition but declined, his name on the list of invitees tellingly accompanied by the words “not interested.”19 Seidler was, however, not entirely disinterested either. He attended the conference quietly from the peanut gallery,20 and shortly after gave a lecture squarely directed at his “Post-modernist friends.” Scolding “the young and uninitiated” conference organisers and goers for “ignoring [and] defying all constructional, let alone structural logic,” he labelled their appeals for a new architectural

Figure 3. Entry by Daryl Jackson for the “Completion of Engehurst” exhibition, 1980. Reprinted from “The Completion of Engehurst, Daryl Jackson: Melbourne,” Architecture Australia (April/May 1980), 46.

17 The term “critical regionalism” was first coined by Alexander Tzonis and Liane Lefaivre in 1981, and was later adopted (and adjusted) by Kenneth Frampton in his 1983 essay “Towards a Critical Regionalism.”

18 Glenn Murcutt in Architecture Australia (April/May 1980), 69.


20 Andrew Metcalf, interviewed by Janina Gosseye and Don Watson in Sydney (BVN Offices), September 27, 2017.
language as nothing more than “the tantrums of a rich spoilt child, delighting in being contrary—shocking us with rather corny stylistic idioms [and] ludicrous bad taste.” 21

The way in which “The Pleasures of Architecture” posited “alternatives in black and white” and the considerable conceptual distance that manifested itself between Australia’s modern masters and proponents of post-modernism resulted in an acrimonious atmosphere, which was felt both at the conference and in the discourse that erupted in its wake. 22 In all their ideological self-righteous zeal, the opposing camps failed to appreciate the alternative (non-modernist, non-postmodernist), critical approaches that appeared in response to the task of completing Verge’s design.

Odd Ones Out

Not all exhibition entries were as black-and-white as suggested by the conference convenors. The approaches that were adopted to fictionally complete Verge’s Engehurst in fact varied widely, as exhibition participants selected which elements of the brief to respond to. This was already pointed out in an interview that George Baird gave to Cathy Peake, Grant Marani, Ian McDougall and Richard Munday for the journal Transition, in which he stated: “I must confess that I didn’t see any clear pattern amongst them. They seem to be very heterogenous in orientation.” 23 Indeed, apart from the ones that allowed for “simple” (if there is such a thing) categorisation—modernist, post-modernist, critical regionalist—there were those who seized the design brief as an opportunity to test new concepts and tools to outline a new path; a way out of the acrimonious atmosphere created by the all-too-stark opposition between modernism and post-modernism. Two designs in particular stood out: the entry by Edmond and Corrigan, and OWA’s submission.

The entry by Maggie Edmond and Peter Corrigan, a husband-and-wife duo, sharply examined architecture’s agency as an instrument of socio-cultural change, and (more than any of the other submissions) responded to the charge to evaluate the genealogy of the Australian house since European settlement. Through a series of colourful semi-sketch, semi-collage pop-art inspired visuals, their first panel interrogated how Australian society had evolved since European settlement. 24 Proposing to move the Verge fragment to Windsor, a town to the north-west of Sydney, and the third-oldest place of British settlement on the Australian continent, they rhetorically inserted (a model of) the Sydney Opera House on the (now) vacant plot.

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21 Andrew Metcalf, “Graves, Koolhaas and Baird in Australia,” International Architect 1, no. 4 (1980): 4-5. For more detail regarding Seidler’s reaction to the conference, please see Hogben, “The Aftermath of ‘Pleasures’.”

22 Hogben, “The Aftermath of ‘Pleasures’.”


the wake of the “culture war” that made Utzon’s project an “Antipodean Tower of Babel,” the centre of a debate on the essence of Australian culture, this move ostensibly questioned the ascendance of Australia’s capital cities—locales of “high culture”—and pointed to the profession’s disregard for the popular cricket, beer and “dingo” culture that was to be found in the vast salmon-brick suburban deserts that surrounded them (fig. 4).

This cultural polarity, which Edmond & Corrigan saw expressed in geographical terms, was poignantly captured in the opening sequence of the 1968 cult documentary Autopsy on a Dream, which dissected the controversy surrounding the Opera House:

In a land where there is always a king tide running and a summer forever to spend on the beach, in a Pepsi-Cola culture, a gentler Texas of the South Seas; where the rough idealism of the Bush anthem of the fathers is a far cry from the virile materialism of the sons; where history is regarded as a European luxury, and culture a distraction from the serious business of pleasure; where noble headlands submerge under seas of red bungalows, it seems a bit odd that the people should perform a cultural act of faith and build an Opera House, when they had nothing to put in it.

Edmond & Corrigan’s second panel, an opulent “Home for Mr & Mrs Graeme Blundell—and all their friends,” derided the devolution apparent in the genealogy of the Australian house. Replete with a Federation entry hall, cricket rehearsal studio, swimming pool, protruding observation deck, grand (rear) stairs with built-in barbeque, and an assortment of aerials on the roof, it parodied Australia’s contemporary culture of fatuous opulence and ridiculed the eagerness with which architects, such as Daryl Jackson, responded to it—heedlessly rejoicing in the “pleasures” (or excesses) that the new language of architecture afforded.

Beseeking a more inclusive representation of Australian society, Edmond & Corrigan’s entry demonstrated the potential of architecture as a polemical device. In the lead-up to the country’s bicentenary, their design cuttlingly questioned what Australian culture might be—urban or suburban, high or low, British or American, …—and impelled the profession to give greater thought to such questions; to pave a path out of the crisis of modernity. However, Edmond & Corrigan’s critical piece of “architectural ockerism”26 or, as Transition called it, “a mini-manifesto” based on a “national uneasiness with the prospect of larrikin energy”27 overreached the design brief and was largely ignored. Paul Jackson commented in the July 1980 RAIA Bulletin: “Blundell was star? But few heard.”28

Jackson’s comment could, apparently, be taken quite literally. The presentations of the Engehurst exhibits took place in three separate groups, with one of the international guests assigned to each of the groups. What’s more, all presentations took place concurrently, and within the same space, making it very difficult to hear any of the presentations properly. Transition commented: “It [the presentation of the Engehurst entries] could have been the focal point of the conference. Instead, it was like a peculiar supermarket where people and ideas jostled for expression, and the visitors’ comments were inaudible to all but their immediate neighbours.”29

Conference attendants were also tone-deaf to OWA’s exhibition entry which, like Edmond & Corrigan’s entry was equally out of left field, albeit of a completely different ilk. The result of a temporary alliance between Peter O’Gorman, Donald Watson and Brit Andresen, all academics at the University of Queensland’s School of Architecture, OWA’s design—while conceptually drawing on Engehurst’s palimpsestuous history—uncompromisingly relied on the new tools (or “commands”) afforded by computer-aided drafting (CAD). Its inclusion in AA represented one of the earliest published examples of the use of computer-aided-architectural design in the country.

26 Edmond & Corrigan’s entry was described as such by Peter Corrigan himself: “Finishing Touch—17 Times,” Sydney Morning Herald, May 7, 1980, 8.


In the late 1970s, Mike McLean, a lecturer in computer science at the University of Queensland (UQ), had developed “a computerized drafting system for use on low-cost computers in small drawing offices.” Around the same time, Peter Ritson, an undergraduate student at the UQ Department of Architecture became closely involved with software design. He authored his bachelor thesis on “Foundations to Computercentrics in Architectural Draughting” and in 1977-78, working with McLean, devised a computer programme to generate perspectives of 3D computer-generated models. It was this system that OWA used to “complete” Engehurst.

Departing from the as-built footprint of the servant’s wing of Engehurst, OWA, in a first move folded every element surpassing the perimeter of the 1980-building-plot back onto the site. Using the site’s boundaries as mirror lines, and then extruding every fold into a new level, the trio created a villa of comparable volume to the building that had been. The geometry derived from the folding lines was subsequently intensified to “reconcile the relationship of the walls to the street” and relate the new design to “the Victorian tile patterns common in adjacent porches.” Finally, the array created by the party walls in the street was continued on site—an “echo of the Victorian...
subdivision”—and each “party wall” translated into a scaled up trellis screen, derived from Verge’s original design for Engehurst’s verandah trellises. These magnified screens were to “act as a layering device to set up contrived views from the villa.” Presented in a checkerboard pattern layout, consisting of both text and images, each of these actions were carefully detailed on panel one, and interspersed with a meticulously researched history of Verge’s design. The resulting design was presented on panel two through floorplans and a series of three computer-generated, wireframe elevations and perspective drawings.

OWA’s design departed from the binary opposition between modernism and post-modernism and relied on the new tools afforded by—or the logic inherent in—CAD to develop a place-related, historically-informed design, which surpassed the contemporary conundrum of style. However, like Edmond & Corrigan’s entry, the novelty of OWA’s scheme was ill understood, as were its graphics, leading Michael Graves to comment that it was simply “too much” and labelling it “a bit diagrammatic and academic” in his subsequent Transition interview.

From Anxious Modernisms to Aberrant Architectures

One of the final chapters of Australian Architecture since 1960, a book by renowned Australian architectural historian Jennifer Taylor, was—partially in reference to the conference—entitled “Pleasures of Architecture.” In it, Taylor described Australian architectural culture from the late 1970s as follows:

Towards the end of the 1970s there were several disparate directions in Australian architecture. Mainstream modernism was represented in the work of Seidler and [Robin] Gibson, and with a lesser degree of excellence, in that of the large firms essentially designing commercial buildings in the cities. Also there were the regional affinities of architects such as [John] Andrews and Murcutt. A third group consisted of those who came under the influence of contemporary overseas movements, particularly from America but also from Europe. The work of the last two groups in differing ways involved a critique of the content of orthodox modern architecture.

Featuring entries by both Murcutt and Jackson, and with the noted absence of Seidler, the Engehurst exhibition presented...
a perfect microcosm of contemporary Australian architecture, and revealed the considerable conceptual distance that existed between Australia’s modern masters and proponents of post-modernism. It resulted in an acrimonious atmosphere, which was felt both at the conference and in the discourse that erupted in its wake, that was played out by and large in the pages of *AA* and *Transition*.\(^{38}\) This all too black-and-white discourse, however, failed to appreciate the alternative (non-modernist, non-postmodernist), critical approaches that emerged in response to the task of completing Verge’s design.

Edmond & Corrigan proposed a regionalism that was distinct from the prevailing “nuts and berries” type pursued by many of their peers. Theirs was a cultural regionalism, which implored a more inclusive representation of Australian society. OWA’s submission then stubbornly referenced the history of the place but in a very dissimilar manner from many of their contemporary (post-modern) peers. Rather than relying on pastiche, they explored the possibilities offered by newly developed CAD technologies to express their deep-seated belief in the necessity to relate architecture to place. While these designs clearly departed from a time of anxious modernisms,\(^{39}\) they did not blindly commit to post-modernism either. Their entries speak of a search for something else after modernism and demonstrate a willingness to engage with novel concepts and tools to find it.

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\(^{38}\) Paul Hogben, “The Aftermath of ‘Pleasures’.”

\(^{39}\) This term was coined by Sarah Williams Goldhagen and Réjean Legault in their edited book *Anxious Modernism: Experimentation in Postwar Architectural Culture* (Montréal: Canadian Centre for Architecture; Cambridge, MA: MIT Press, 2000).
Exporting Australian Architectural “Expertise” as a Matter of Policy

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As highlighted by Jennifer Taylor and James Connor in Architecture in the South Pacific: The Ocean of Islands (2014) and subsequently discussed by Philip Goad in “Importing Expertise: Australian-US Architects and the Large Scale 1945-1990,” the exportation of Australian architectural “expertise” across the second half of the twentieth century was primarily driven by individual practices gaining private and institutional commissions in the Asia-Pacific region. Devised under the Gorton administration the “Australian Policy” however, would, for the first time, prioritise the appointment of Australian architects for overseas work at a government level, opening the doors for Australian architects to design diplomatic buildings for the government’s extensive construction programme announced by Gough Whitlam in 1973.

The employment of Australian architects to design government buildings abroad came to the fore in 1965 when the Royal Australian Institute of Architects and Robin Boyd lobbied for an Australian architect to replace the Brazilian architect, Henrique Mindlin, to design the new Australian Embassy in Brasilia. This paper will examine this episode of institutional exchange and its significance for the local architectural profession and its future involvement in the foreign building program of the Federal Government. It will link this activity to the formation of the “Australian Policy” and posit that while this internal government policy was significant in encouraging the exportation of Australian design it was also wielded as a political weapon by the Department of External Affairs to diminish the role of the Commonwealth Department of Works which also had the skills to successfully “export” Australian expertise to the world.

Keywords: Australian embassy buildings; embassy architecture; architectural expertise; policy
Ten years after the conclusion of the Second World War the Asia Pacific region had altered politically beyond recognition due to rapid decolonisation and the onset of the Cold War. As former colonies became sovereign states and the influence of the European empires dwindled, Australia embarked on a propaganda campaign to encourage the newly independent nations to look towards the West and away from the communist bloc. After initially opting to open diplomatic missions in leased buildings to support these endeavours the Department of External Affairs (DEA) began to advocate for the construction of new embassy premises to better achieve its representational needs. This paper will present a brief outline of the Australian government’s changing attitude towards the construction of diplomatic buildings overseas. This will be followed by an examination of the discourse generated as a reaction to the commissioning of Henrique Mindlin for the Brasília embassy project. This project was a catalyst for what became known as the “Australian Policy” which replaced the existing practices for commissioning architectural services for the design of new diplomatic buildings. The paper will conclude by presenting the effect institutional lobbying had on the Gorton administration and on the future role of both Australian architects and the Commonwealth Department of Works (CDW).

A Treasury Rethink

The Federal Minister for External Affairs, Richard Casey, undertook a tour of Southeast Asia in 1951 believing that “it was in the battle for the minds of the new nations of Asia” that the defence of Australia could be achieved.1 In support of this view the DEA launched a number of new cultural, information and exchange programmes in conjunction with an ambitious expansion of Australia’s diplomatic presence to assist in the promotion of Australia as a free democratic society.2 As historian Joan Beaumont concluded, the projection of such a presence internationally and regionally during the 1950s was only possible because of the network of posts that the DEA opened.3 In order to quickly establish this presence in an environment that was undergoing immense change the DEA opted to lease premises in existing buildings. However it soon became evident that these properties were well below the standard required to represent Australian interests in the region.4 This led Casey to state that he was “anxious that Australian representation, especially in our own region, be housed in a way that is reasonably comparable to other missions.” While the Treasury

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2 In addition to the Colombo Plan these programmes included the release of the magazine *Hemisphere*, the launch of the Asian visits scheme and an increase in funding for Radio Australia. In a clear attempt to control content, all programmes in the campaign projected an idealistic image of life in Australia and noticeably avoided any discussion of the White Australia policy or Australian military involvement in Asia. See Waters, “A Failure of the Imagination,” 347-61.

3 During Casey’s nine year term as Minister for External Affairs fourteen new missions were opened; fifty percent were opened in Asia with the other fifty percent of missions being divided between Europe (five missions) and the Middle East (two missions). See Joan Beaumont, “The Champagne Trail? Australian Diplomats and the Overseas Mission,” in *Ministers, Mandarin and Diplomats: Australian Foreign Policy Making 1941-1969*, ed. Joan Beaumont, Christopher Waters, David Lowe and Garry Woodard (Carlton: Melbourne University Publishing, 2003), 154-56.

4 One of the earliest discussions dates from 1946 between the High Commissioner of India, Iven Mackay and the then Acting Minister for External Affairs Ben Chifley. See Iven Mackay High Commissioner Australian High Commission New Delhi to J. Chifley acting Minister of State Department of External Affairs, August 23, 1946, Premises New Delhi-Building Project, 1945-53, A1838, 1428/19/4 Part 1, National Archives of Australia (NAA)

5 R.G Casey Minister Department of External Affairs to A. Fadden Treasurer Department of the Treasury, September 6, 1951, Premises New Delhi-Building Project, 1945-53, A1838, 1428/19/4 Part 1, NAA
would endorse a programme of construction to reduce escalating residential rents in New Delhi and Tokyo it denied funding to build new chancery buildings.

With the First Secretary in Djakarta, Neil Truscott, writing in May 1955 that “one of the reasons why the Australian Embassy is so often regarded as the poor relation is the building which houses our chancery,” the Public Service Board (PSB) sent Chairman William Dunk to investigate. On his return, Dunk recommended to the Prime Minister that an improvement was needed in both the management and standards of Australia’s overseas property. This forced the Treasury to alter its position and to announce that it would be receptive to building or buying when accommodation was scarce, living conditions were difficult or rent was excessive. With this change in policy direction the DEA released a five year construction programme to build premises in Djakarta, Tokyo, New Delhi, Washington, D.C. and Rio de Janeiro.

The Case of the Brasília Embassy

Although the Commonwealth Department of Works was the primary department concerned with the design and supervision of all architectural and engineering works for the government it had limited experience administering projects overseas. As such, the CDW recommended to the Treasury and DEA that it act in the capacity of technical advisor for the new building programme. This was supported by Casey who believed that local architects should be associated either in partnership with, or in lieu, of an Australian architect, as knowledge of local conditions would be crucial to the successful planning of these new projects. Under this arrangement the DEA contracted an American architect, Joseph Allen Stein, who had resided in India since 1952 to design the Head of Mission (HOM) residence in New Delhi (1962) and approached an Adelaide-based architect Gavin Walkley to investigate and make recommendations on the possibility of building in Brasília. 

In a report presented to the DEA Walkley sided with Casey concluding that the best course of action was to commission a Brazilian architect to complete the design and supervision of the embassy compound as the procedures, building methods and materials were unlike anything in Australia. In supporting this Walkley provided a shortlist of three suitable architects - Henrique Mindlin, Affonso Reidy and Lucio Costa— noting his preference for Mindlin. The DEA referred Walkley’s report...
to the CDW who as technical advisor undertook a review of Mindlin’s work by referring to the publication authored by Mindlin, *Modern Architecture in Brazil*.\(^{16}\) In its recommendation the CDW wrote that Mindlin was an architect of “outstanding professional ability and international reputation.”\(^{17}\) Based on this the DEA commissioned Mindlin on August 16, 1961 and he submitted sketch plans to the CDW for review in June 1962. While it was acknowledged by the DEA that the sketch plans were “original and striking” the CDW would recommend a revision of the plans as the scale of the proposal exceeded the permitted space requirements as agreed to in the office standards set by the PSB.\(^{18}\)

The ongoing planning of the Brazilian embassy drew attention from the architectural community because of its inclusion within a new capital that was internationally recognised for its architectural modernity.\(^{19}\) Roger Greig, the Secretary of the Royal Australian Institute of Architects (RAIA), began writing to the DEA after the RAIA Council had moved in 1963 that the President of the RAIA should write an appropriate letter to the Minister of External Affairs to seek his assistance in encouraging the government to employ Australian architects.\(^ {20}\) Having written an earlier letter to the DEA expressing hope that the design of the Brasilia project would be a “credit to Australia and its architecture,” Greig’s second letter in November 1964 was written shortly after it had been announced in Parliament that Bates, Smart & McCutcheon (BSM) was to provide full architectural services for the development of the Washington, D.C Chancery.\(^ {21}\) Greig’s letter argued that Australia’s diplomatic buildings overseas would only achieve “a true Australian design flavour if carried out by Australian architects.”\(^ {22}\) To add weight to this statement Greig hinted that Peter and Alison Smithson, the architects designing the UK embassy in Brasilia, had expressed concern that the Australian government had chosen a Brazilian and not an Australian architect.\(^ {23}\) In response, the secretary of the DEA outlined the working relationship it had with the CDW in the planning and design of projects overseas remarking that “the approach adopted in each case as far as architectural services, material and the like, are concerned, is determined by a great many factors.”\(^ {24}\) In a separate memorandum to the Australian ambassador in Brazil the DEA requested that inquiries be made into the authenticity and substance of the alleged criticism made by the Smithsons.\(^ {25}\)

After reading the letters George Maunder, the new Director General of Works, wrote to the DEA advocating for the

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\(^{16}\) For a detailed description of Mindlin’s work and the work of other noted Brazilian architects of the time see Henrique E. Mindlin, *Modern Architecture in Brazil* (New York: Reinhold Publishing, 1956).


\(^{19}\) This was not lost on the DEA who kept a file of press clippings on Brasilia. See K. Brennan Senior Assistant Secretary Management and Services Branch Department of External Affairs to the Minister Department of External Affairs, “Brasilia: Embassy Building Project,” March 3, 1965, Property Brasilia-Building Project, 1964-65, A1838, 1428/23/4 Part 2, NAA.


\(^{21}\) R. Greig Secretary RAIA to the Secretary Department of External Affairs, October 29, 1964, Property Brasilia-Building Project, 1964-65, A1838, 1428/23/4 Part 2, NAA.

\(^{22}\) Greig, November 13, 1964, NAA.

\(^{23}\) Secretary Department of External Affairs to R. Greig Secretary RAIA, December 18, 1964, Property Brasilia-Building Project, 1964-65, A1838, 1428/23/4 Part 2, NAA.

formation of a review committee to be attended by the President of the RAIA and senior members of the CDW. The DEA were unaccepting of the proposal commenting that the RAIA as an organisation outside the Commonwealth service should not be involved, citing Arthur Stephenson’s earlier requests to review the Brasília plans had been rejected based on this premise. Maunder would retreat from his suggestion and acknowledge that consultation with the RAIA on future projects could be of benefit.

The RAIA lobbying was supported by *Cross-Section*, the newsletter of the Melbourne University Architecture Department as well as Robin Boyd and Jean Pierre de Monchaux, former student of the University of Sydney and principal planner of Milton Keynes in England. *Cross-Section* wrote that although recognised internationally Australian architects were apparently not good enough to design either the Qantas Wentworth Hotel in Sydney or the Australian Embassy in Brasília. The publication chose to cite a letter from the Smithsons which declared “there must be some good architects in Australia who are used to the climate, they can do some very nice houses.” Robin Boyd also questioned the government in *The Australian* commenting: “even if we had commissioned Oscar Niemeyer himself we would still have been missing the point and the opportunity of making an original Australian contribution to this design mecca of the world.”

Boyd agreed that Brasília was not the most important post politically however he argued that Australia had made a mistake by economising when it was clear that prestige was a factor that needed to be recognised when “design is part of politics.” Boyd continued by analysing the Australian government’s “non-policy in diplomatic design” suggesting that while there was nothing inferior in the representational qualities of Australia’s CDW-designed diplomatic buildings (possibly the recently completed Tokyo Chancery), which he quipped gave “no hint of the average taste in plastic flowers back home,” there was a need to create an advisory committee to both guide the DEA building programme and to “protect and develop our visual character abroad.”

The growing media publicity reignited discussion in Parliament and prompted Senator Adrian Gibson to ask the Minister for External Affairs, Paul Hasluck, to both confirm the nationality of the architect designing the Australian Embassy in Brasília and whether the project could be reviewed. Hasluck responded.
with the following statement: “in general, it is my personal view that as far as possible we should use Australian architects, and I will have a look at this particular project to see whether an Australian architect could suitably be used.”

Hasluck’s comment was referred to the CDW who responded by stating that Mindlin’s design reflected the required “Brasilia Idiom” and that an Australian architect would be unaware of Niemeyer’s philosophy for the new capital. Hasluck however elected to terminate Mindlin’s architectural services in May 1967 on the basis that there was “a desire to see an Australian architectural approach introduced into the development of the project.” The Treasury requested advice as to the reasons why this decision had been made when the CDW had considered it essential that a Brazilian architect be engaged. The Secretary of the DEA, James Plimsoll, responded stating that other “important countries” such as the US, UK, Japan, and Canada had all commissioned architectural practices of note from their own countries and that it was the minority of nations that were engaging Brazilian architects. In an internal memorandum that could be read as a swipe at the CDW the DEA commented: “the smoothness in which the Chancery project in Washington has moved forward contrasts sharply with the slow progress of almost all our other projects.”

The “Australian Policy”

Although the RAIA’s lobbying had been successful in removing Mindlin from the project it continued to pressure the government to make the use of Australian architects a matter of policy. In 1968, RAIA President, Acheson Overend, wrote directly to Prime Minister Gorton to reiterate the stance of the Australian Professional Consultants Council on the promotion of Australian expertise overseas. The letter suggested that the use of Australian consultants should be mandatory where “Australian funds are to be spent on Australian building projects abroad.” The letter was forwarded to the CDW for comment and advice. The CDW response clearly shows a department that was trying to stay relevant in a discussion which was leaning more towards awarding overseas projects to Australian architectural practices:

Although it would cost less for the Commonwealth to design all the overseas projects with its own staff, and work of this nature is important for the morale of the staff, it is considered desirable for Australia to


39 Brennan, April 14, 1967, NAA.

40 The Australian Professional Consultants Council was formed after a survey tour was instigated by the Department of Trade with the aim of exporting consultant services overseas. The tour was led by Mervyn Parry the RAIA president at the time. The mission visited Singapore, Malaysia, the Philippines, Libya, Lebanon and Iran. See “Minutes of the 30th Annual General Meeting, Hobart, April 3, 1968,” Architecture in Australia 57, no 3 (June 1968): 456. The Mission was also reported in Cross Section 173 (March 1967): 1.

41 A. Reiher Director General Department of Works to the Secretary Department of Foreign Affairs, “Australian Embassy Paris,” May 23, 1973, Premises General-Joint Chancery Construction Project Bangkok, Kuala Lumpur and Singapore, 1972-73, A1838, 1428/1/51 Part 2, NAA.
develop a national character in its overseas buildings and this can best be done by sharing the work with selected consultants. Whether the work is done by the Commonwealth or consultants, the Department of Works can provide continuity in briefing and in interpretation of Client’s requirements.

Gorton would take the CDW evaluation and respond to a request from the Association of Consulting Engineers of Australia to use Australian engineers overseas:

*I am advised that in the majority of cases, the employment of consultants by Commonwealth Departments is determined by assessment of which firm, in the opinion of the client, is considered most likely to be the most efficient in undertaking a particular engineering or other consultant requirement. I am further advised that it is the usual practice, where this procedure is followed, for Departments to engage Australian Consultants wherever possible and that overseas engineering consultants are only engaged on rare occasions when it is deemed that special skills which may be required for a project are not available at the time from amongst the Australian engineering profession.*

While the engineering profession is emphasised in this particular instance it was understood by the new Director General of Works, Alan Reiher, that the procedures outlined by Gorton also applied to the architectural profession. The Department of Foreign Affairs (DFA) termed this internal government policy as the “Australian Policy” and used the letter to argue for the exclusive use of Australian architectural practices in future overseas projects. While the Treasury accepted this financially in an effort to stay relevant the CDW requested that it oversee any future projects and be involved in the redesign of the Chancery and HOM residence in Tokyo. This frustrated the DFA who commented that perhaps the CDW had realised that the involvement of leading Australian architects had led to “a further diminution of their involvement in the projects.”

The introduction of the “Australian Policy” opened the doors for Australian architects and architectural practices to be involved in the construction drive initiated by Whitlam’s expanding foreign policy objectives. A press release on September 19, 1973 announced the government’s plan to build six new embassies and high commissions that “should not only be functional
and efficient but demonstrate overseas the qualities and skills of some of Australia’s leading architects. The press release publicised that Daryl Jackson Evan Walker had been selected to design the Suva HOM residence and that Leighton Contractors had been commissioned to develop the Saigon Chancery. Joyce Nankivell Associates and Godfrey & Spowers were to plan the Kuala Lumpur and Singapore Chanceries respectively while Ancher, Mortlock, Murray & Woolley had been commissioned for the Chancery and HOM residence in Bangkok. It was also announced that Harry Seidler & Associates were awarded the contract for the Paris Chancery and HOM residence and that Peddle, Thorpe & Walker were to undertake the planning of substantial extensions to the Jakarta Chancery. Although it was not announced in the Press release, Perth based architectural practice, Cameron, Chisholm and Nicol were commissioned in lieu of Mindlin to design the embassy and HOM residence in Brasilia. Even though the design they presented was described by Whitlam as “an exciting concept,” it was never built due to cost concerns (fig. 1).

The only project that was allocated to the CDW was the redesign of the Chancery and HOM residence in Tokyo which would become a point of contention and highlight continued tensions and political manoeuvring between the CDW and DFA. Because of its location and significance to Australian


49 For a discussion of Cameron, Chisholm and Nicol’s design see G. Whitlam Acting Minister Department of Foreign Affairs to Cabinet, “Chancery and Official Residence-Brasilia,” submission, September 1975, Proposed New Chancery and Official Residence-Brasilia, 1975-75, A5931, CL1642, NAA.

Figure 1. 1975 model of the proposed embassy and HOM residence in Brasilia. Courtesy of the National Archives of Australia, NAA: A5931, CL1642.
trade relations the DFA argued that the Tokyo project was perhaps more prestigious than Washington, D.C. and Paris and therefore it was an opportunity to demonstrate the design skills and achievements of Australian architects by implementing the “Australian Policy.”50 In an internal memorandum that clearly highlights the strained relationship between the DFA and CDW it was stated that “Works designs are just not good enough.”51 In its defence the CDW reassured the DFA that it would assign staff of the highest calibre to the project stressing that the Department was recognised for its outstanding skills in architecture and had at its disposal some of Australia’s leading architects including Richard Ure and Richard Johnson.52 To reinforce the point Reiher commented that he had no doubt that the Department’s design and management of the Tokyo project “would be at least as efficient and effective as the services that could be provided by private consultants.”53 In order to deescalate the situation the DFA would “bow to the inevitable” and accept the CDW as the architects for the project.54

**Conclusion**

Projects undertaken in the 1950s and 1960s demonstrated a lack of experience by the DEA and CDW in the management and administration of an overseas building programme. This experience however led to an adjustment in policy and economic considerations which brought to the fore the importance of constructing new diplomatic buildings as a way of meeting representational needs. As part of this rethink the merits of commissioning Australian architects as a means of imbuing these buildings with an “Australian design flavour” became a point of contention. With the local architectural community arguing for its importance and keen to contribute, the Brasília project became the turning point that persuaded the Gorton government to introduce the “Australian Policy” and commission Australian architects for future building projects.

While Australian design had permeated the region through the works of individual architects and independent practices this policy expedited its “exportation” through government commissions. Although these commissions benefited these practices their nature as testing grounds often highlighted the changing attitude of the government towards design. This can be seen in the political manoeuvring that the DFA undertook to ensure that CDW involvement was kept to a minimum even though as a department it was staffed with locally-trained and reputable architects.

50 A. Fogg Acting First Assistant Secretary Management Services Division Department of Foreign Affairs to the Acting Secretary Department of Foreign Affairs, “Tokyo Compound Redevelopment,” August 9, 1973, Tokyo-Chancery Project, 1973-74, A1838, 1428/32/4 Part 19, NAA.
52 The CDW in 1972 employed 6,472 staff of which 437 were classified as professional architects and 192 were cadets in training. Richard Ure started his career as an Architect Grade 3 with the CDWH in 1946. He designed the Australian-American Memorial (1949), Allawah, Bega Courts and Currong Apartments (1956), Royal Australian Mint (1965). He also worked on the design of the Reserve Bank of Australia building in Sydney (1964). At the time of the Tokyo redevelopment he was Senior Assistant Director General of the CDW. Richard Johnson was a principal architect with the CDW from 1969-85 and had placed fourth in the Houses of Parliament competition, Westminster with Peter Page in 1970-71. He was later responsible for designing the Australian Pavilion at Expo 1974, Spokane with James McCormick and for designing the Australian pavilion at the 1975 Okinawa Expo. It was also noted that Albert Ross had specifically been recruited for the project having previously won the Haddon Architectural Travelling Scholarship (1960) and placing second in the competition to design the Reserve Bank in Canberra (1962). See A. Reiher Director General Department of Works to the Secretary Department of Foreign Affairs, “Tokyo Compound Development,” July 26, 1973, Tokyo-Chancery Project, 1973-74, A1838, 1428/32/4 Part 19, NAA.
53 Reiher, July 26, 1973, NAA.
54 An extension to the existing chancery was completed in February 1973 however further development of the site would cease due to cut backs introduced under the Fraser Government. See Fogg, August 9, 1973, NAA.
Back to Earth: Earth Building in Aotearoa New Zealand 1945-65

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Earth, like timber, radically transformed the built landscape of Aotearoa New Zealand in the nineteenth century. Settlers from Europe brought earthen technologies which they adapted to suit the local environment, and earth buildings became an integral part of vernacular architecture. Although earth had fallen out of favour by 1925, it re-emerged after World War Two. In the housing crisis of post-war New Zealand, new developments in earth building offered a plausible solution for affordable housing, attracting commercial activity and government backing. By the late 1960s, however, the promise of a new vernacular tradition in earth had crumbled away.

This paper uses the concept of distance to discuss the story of earth in Aotearoa during the period 1945-65. Far from its origins in Europe, New Zealand earth building nevertheless had a shared heritage manifested in an international community of practice. Research and technological information circulated between Europe, North America and Australasia, contributing to the development of earth construction as a modern technology. While the distance of time might cast the once-common practice in an old-fashioned light, earth building remained a contemporary practice in Central Otago, and elsewhere in Aotearoa its post-war re-emergence was not a romantic revival, but an engagement with the modern technique of soil cement. Government support for earth construction in the national house-building programme offered potential for Aotearoa’s mid-century movement to become a mainstream practice; however, this support was not sustained, and the distance between earth and mainstream construction opened up once more.

Keywords: Earth building; soil cement; rammed earth; pisé de terre; sun-dried bricks
Earth is one of the oldest building materials and earth techniques have historically migrated from one country to another with the peoples who use them. In the early days of European settlement in the Americas and Australasia, earth construction became an integral part of vernacular architecture as settlers adapted European technologies to suit local environments. Information and ideas from Europe also informed local practice through texts such as those from Cointereaux’s *École d’Architecture Rurale en pisé de terre*, widely disseminated from 1795 to 1840,¹ and Williams-Ellis’s “Cottage building in cob, pisé, chalk and clay,” published in London in 1919² and revised in 1947.³

Thus it was earth, as much as timber, that radically transformed the built landscape of Aotearoa New Zealand in the nineteenth century, and until sawn timber became widely available, earth buildings were an integral part of the vernacular architecture. Although earth construction fell out of favour—by 1925 it was all but non-existent, except in the southern province of Central Otago—it re-emerged after World War Two, when significant research on soil cement had been taking place in North America, Australia and Aotearoa. New Zealand faced a chronic housing shortage, and these developments in earth construction offered a plausible solution for affordable housing, attracting commercial activity and government backing. By the late 1960s, however, the promise of a new vernacular tradition in earth had crumbled away.

This paper uses the concept of distance as a way of thinking about the story of earth building in Aotearoa between 1945-1965. Far from its origins in Europe, New Zealand earth building nevertheless had a shared heritage that manifested itself in an international community of practice. Research and technological information circulated between Europe, North America and Australasia, contributing to the development of earth construction as a modern technology. While the distance of time might cast the once-common practice of earth building in an old-fashioned light, earth builders in Aotearoa were rarely backward-looking. In Central Otago it remained a contemporary practice; elsewhere, the post-war re-emergence of earth was not a romantic revival of earlier traditions, but an engagement with the modern technique of soil cement. For a time, the government was prepared to support earth building, through cheap loans and construction of state houses, and it seemed that the distance between earth and mainstream construction was closing. By 1960, however, this support was withdrawn and the distance opened up once more.

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This paper builds on the author’s prior research into the historical incidence and location of New Zealand’s earth buildings, combining primary research with Heritage New Zealand’s register of historic buildings, and a national survey of earth buildings conducted by Miles Allen. To this data has been added information from international, national and regional archives, libraries and museums, university collections, local body records, and private collections. The author visited many of the houses discussed in this paper, and held informal interviews with current house owners and some of the original owners and builders.

North America and Australasia pre-1945

Sun-dried bricks, cob and pisé were all used by European settlers in North America and Australasia from the early nineteenth century. In the United States, where adobe (sun-dried) bricks had been used in the southern states for centuries, pisé was rare, despite Cointereaux’s influential texts. The first Williams-Ellis book had little effect on this, even though its publication was reported in newspapers all over the English-speaking world, including New Zealand, with pisé arousing the most interest from as far afield as Canada and Scandinavia. During the Great Depression, however, engineers at the United States Department of Agriculture and the South Dakota Agricultural Experiment Station began to test and analyse rammed earth walls (pisé), with and without the addition of cement. This research continued during World War Two, and in 1941 the United States Bureau of Statistics published a report which, together with the previous publications, provided a solid platform for the research that would follow in England and Australasia after the war.

Australian expertise in pisé, by contrast, was known internationally from early on. In the 1919 introduction to the first Williams-Ellis book, John St. Loe Strachey recalls being “lent the Farmer’s Handbook of New South Wales, in which the State Government provides settlers with an elaborate description of how to build in Pisé.” In *Mud and Man*, Ted Howard outlines the evolution of all types of earth building in Australia, state by state, leading to the important work carried out by George Middleton at the Commonwealth Experimental Building Station in New South Wales, Australia, after World War Two. Middleton’s first bulletin on earth construction includes references to research papers and articles on pisé and other techniques written between 1920 and 1943 from Britain,

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6 Both sun-dried bricks and cob involved mixing wet clay with straw or native grasses. The mix was then placed in timber moulds to form bricks, or applied directly in layers to form cob walls. Pisé, involved ramming a damp earthen mix between timber boxing.

7 Williams-Ellis, *Building in Cob*, xi.


9 R. L. Patty, *Rammed Earth Walls for Farm Buildings* (South Dakota: South Dakota Agricultural Experimental Station, 1938).


11 Williams-Ellis, *Cottage Building*, 3.


13 George Middleton, *Earth Wall Construction*,
the United States, Rhodesia and Australia.\textsuperscript{13} Distance was clearly no impediment to the continuing dissemination of earth-building knowledge.

Earth Building in Aotearoa pre-1945

Prior to European settlement in Aotearoa, Māori used earth in various ways, but not as a structural element in house building.\textsuperscript{14} The European settlers who began arriving in the nineteenth century brought earth-building techniques including cob, sod, pisé and sun-dried brick.\textsuperscript{15} These technologies were easily translated, and until sawn timber became widely available, earth buildings were an integral part of New Zealand’s vernacular architecture.

Earth building was more prevalent in the South Island than the North, particularly in less forested regions like Central Otago and Canterbury. Regional differences developed as a consequence of soil type, climate and the prior experience of builders. In the dry climate of Central Otago, sun-dried bricks were used for all manner of buildings, from houses to hotels. The technique may have come with the first British settlers, or from America or Australia during the 1860s gold rush.\textsuperscript{16} Further north, in Canterbury, Marlborough and Nelson, cob was the predominant method. Pisé was less common overall; Pompallier House, built by French missionaries in 1842 (fig. 1), is one of the few surviving pisé buildings of the pre-1945 era, and also one of the oldest buildings in the country.\textsuperscript{17}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Pompallier_House.jpg}
\caption{Pompallier House, Russell, New Zealand, 1842, designed by the architect Louis Perret. (Photograph by author, 2009.)}
\end{figure}

1. *Pisé or Rammed Earth* (Sydney: Commonwealth Experimental Building Station, 1947), 22-23.


16 Salmond, *Old New Zealand*, 45.

17 Salmond, *Old New Zealand*, 43.
As the twentieth century progressed, building in earth steadily declined, and by 1925 it was almost non-existent, except in Central Otago. In a 1921 newspaper article, local engineer J.R. Marks discussed the suitability of earth construction to the dry climate and went on to provide brief instructions on how to build with “dry cob” (pisé), wet cob and sun-dried brick.\textsuperscript{18} Nearly twenty years later, the Otago Daily Times (ODT) reported that Mr Jack Haig of Lauder had been “making [sun-dried] bricks and building houses for 40 years.”\textsuperscript{19} But although earth building appears to have ceased in other parts of Aotearoa, it was not forgotten. When Williams-Ellis’ \textit{Building in Cob} was published in 1947, more than a dozen local newspapers published extracts. Significantly, the book included a section on soil cement, a technology that would play an important part in the next chapter of New Zealand’s earth-building story.

\textbf{Earth Building in Aotearoa 1945-65}

After World War Two, the New Zealand Government set about reinstating the pre-war housing programme, set up in 1936 in response to a chronic housing shortage, which had worsened during the war years. Thousands of houses were built all over Aotearoa in the following two decades, some of them out of earth. Initially, many were financed by cheap loans from the State Advances Corporation (SAC), or built as state rental houses under the auspices of the Housing Division of the Ministry of Works, but a change of government in late 1949 saw the increasing involvement of the private sector.\textsuperscript{20} This would impact the incidence of earth building.

The government expressed openness to “new materials and systems of construction that may be useful in speeding up the supply of houses, or in reducing costs.”\textsuperscript{21} To that end, several earth-building techniques were investigated. From 1947-49, newspapers reported on the progress of sun-dried brick houses being built for the Housing Division in Central Otago, and plans to experiment with rammed earth and soil cement blocks in Wellington, Napier and Nelson. In early 1948 the \textit{Gisborne Herald} reported that “Drawings and specifications are ready for the [Housing Division] Department’s first experimental rammed earth dwellings.”\textsuperscript{22} Later that year the \textit{Bay of Plenty Times} reported on progress: “it is easy enough to plan the building of a rammed earth house. The difficulty lies in persuading a contractor to do the job.”\textsuperscript{23} Officials expected that rammed earth houses would cost more than ordinary houses, but if the ramming process were automated, costs would be reduced.\textsuperscript{24}

\textsuperscript{18} J.R. Marks, “Cob or Earth Building,” \textit{Alexandra Herald and Central Otago Gazette}, June 22, 1921, https://paperspast.natlib.govt.nz/newspapers/AHCOG19210622.2.16.


\textsuperscript{20} Ben Schrader, \textit{We Call It Home} (Auckland: Reed, 2005), 34-44.

\textsuperscript{21} Cedric Firth, \textit{State Housing in New Zealand} (Wellington: Ministry of Works, 1948), 44.


\textsuperscript{24} Bay of Plenty Times, “Experimental House.”
Presumably the procurement problems were not resolved, as no evidence has been found that any of these “experimental” houses were built.

Whatever the outcome, the government’s investigations in 1947–49 reflected a new and growing interest in earth, in both public and private sectors. Independent research was already underway, and this would contribute to the development of a mid-century earth-building movement based on soil cement, rammed earth, and sun-dried brick.

Aotearoa’s modern era of earth building began, almost simultaneously, in two locations in the South Island — Christchurch, and Riverside Community, near Nelson—followed by other locations in the North Island, notably at Wainuiomata, near Wellington. A lecturer in soil mechanics at Canterbury University College, Christchurch, P.J. (Pip) Alley, began testing the Canterbury loess for soil cement wall construction in 1948, publishing the results the same year.25 He was familiar with the existing overseas research, and his own closely paralleled that of Middleton in New South Wales. Middleton’s bulletins and Alley’s papers and articles informed the design and construction of soil cement houses built in Aotearoa between 1947 and 1965. Williams-Ellis’ Building in Cob, with its section on soil cement, was also available.

No evidence has been found to suggest that Alley was involved in the early government projects, although the Bay of Plenty Times article mentions the government having access to the research being carried out in Australia.26 By the early 1950s, however, Alley’s expertise was well known and sought out by those who wanted to build in soil cement.

In Christchurch, Alley’s 1948 test results attracted the interest of local architect E.C.R. Anderson. In Alley’s words, “a real life architect stepped out of the blue and asked for information which would enable him to construct, at his own expense, a house in soil cement.”27 The Anderson house in Makora Street, Christchurch, was constructed in 1948 to a simple L-shaped plan with generous eaves. The 200mm-thick walls, tied together with a reinforced concrete bond beam, performed remarkably well in the Canterbury earthquakes of 2010 and 2011.28

Alley worked hard to promote and advance the use of soil cement construction. He disseminated his knowledge via professional journals and newspapers, attended trade fairs, and assisted prospective house builders by assessing the suitability of their soils and advising them how to proceed. Alley objected to “our native forests being turned into making weatherboards...
and studs for thousands of ‘boxes’,” and argued for soil cement as a viable and longer-lasting alternative. 29 As a result interest in soil cement grew, and during the 1950s and 1960s eleven soil cement houses were built in and around Christchurch. Most were built by their owners, proving Alley’s point: “In these times of high costs, many people are desperate for a house, and there is no reason why a young married couple should not be able to build a house in their spare time, provided occasional help is forthcoming from friends and relatives.”30

It was not only young married couples who were attracted by the do-it-yourself aspect of earth construction. Riverside Community was founded in 1941 by Christian Pacifists.31 During World War Two most of the Riverside men were imprisoned as conscientious objectors, and on their release they returned to their rural homes, which consisted of sheds, huts and tents. Unlike returned servicemen, they did not have access to cheap loans, and this lack of money made earth particularly attractive when it came to building the community’s first permanent house in 1947. The labour-intensive nature of earth building was not an obstacle; the lack of finance was more than made up for by a strong work ethic, fuelled by a vision of a new community-based way of life.32

Alley’s influence is not evident in the first two Riverside houses, neither of which included cement in the mix, but the builders were probably informed by Middleton’s 1947 bulletin. In her history of Riverside, Lynn Rain writes that one of the builders “read up” about rammed earth in “an Australian book.”33 A copy of the bulletin remained in the community’s possession in 2010, and its detailed drawings and specification would have been invaluable.34 Alley did eventually test the Riverside material, concluding that more than 10 percent cement was required.35 Three further rammed earth houses, a large workshop and a substantial hall, all built between 1952 and 1965, used cement in the mix.

By contrast, it was first-hand experience of earth buildings while on active service during the war that influenced David Jones’ decision to build in earth on his return to Whanganui, in the North Island. He saw the advantages of earth houses as “their low costs, low maintenance, excellent thermal properties, low insurance rates, almost totally fire proof, borer and termite proof and resistant to small arms fire and fragments from shells and mortars.”36 Safely distant from the latter, and confronted by the building material shortages of post-war Aotearoa, Jones constructed a number of earth buildings between 1948


32 Rain, Community, 31.

33 Rain, Community, 30.

34 Middleton, Earth Wall.


and 1960. In Gisborne, Philip Fischbach also cited wartime experiences of earth buildings as the reason for building his own home in earth in 1949.37

The most ambitious earth-building venture of the mid-century era took place in Wainuiomata, which was experiencing a period of sustained growth driven by new affordable housing.38 John Anker, also a returned serviceman, read of Alley’s research and saw a commercial opportunity in soil cement technology. He and brothers Peter and Chris began by building houses for their own families, which allowed them to develop a construction method suitable for building soil cement houses on a commercial scale.39 They formed a company, Terracrete Constructions Limited, designed and patented machinery for wall placement, and devised a method that they believed could compete with the prevailing timber framed construction.40

The overall Terracrete system comprised reinforced concrete columns, 200mm infill walls of soil cement on concrete foundations, and a reinforced concrete bond beam. Unlike other soil cement systems, where window and door frames were built in as the wall building progressed, Terracrete walls were rammed to their full height, with openings cut out by chainsaw once the bond beam had cured and before the walls set too hard (fig. 2). This innovation sped up construction time. Like all soil cement houses of the era, the exterior finish was painted cement plaster, which meant that the houses merged seamlessly into their neighbourhood.41

The Ankers built fifteen soil cement houses in Wainuiomata between 1952 and 1960, the most significant of which are the six


41 Hall, Mid-century, 138.

42 Hall, Mid-century, 138.

Figure 2. Photographs of the Terracrete system. Photos from “Clay-Cement Revives Ancient Building Styles,” Evening Post (Wellington), February 2, 1958.
state rental houses built in a row on the main street in 1958.\textsuperscript{42} In their advertising, they emphasised the financial advantages of building in soil cement—low building and heating costs, investment security—as well as its longevity, fire-resistant properties, and thermal qualities (fig. 3). What seemed a promising venture was, however, short-lived. According to Allen, “Although Terracrete successfully built houses slightly cheaper than their competitors, their contract [with SAC] was not renewed.”\textsuperscript{43} He suggests that the government was more interested in promoting the use of timber from its own forests than supporting the commercialisation of soil cement. In any case, demand fell away, and after 1960 the Ankers resumed conventional building practices.\textsuperscript{44}

Meanwhile, in Central Otago, building in earth continued. There was interest in expanding the use of sun-dried brick,

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\textsuperscript{44} Hall, \textit{Mid-century}, 139.
which coincided with the government’s commitment to trialling alternative construction methods for its housing programme. A 1947 ODT article included photographs of a recently completed house, and outlined a proposal from Jack Haig to pre-manufacture sun-dried bricks for sale, avoiding the time-consuming process of making them on site before construction could begin.\textsuperscript{45} Two years later, the same newspaper reported that: “quite a number of houses have been built of local sun-dried brick in the past few years, and at present there are three of this type under construction in Alexandra, two for the State Housing Department and the third for a retired farmer.”\textsuperscript{46} Haig worked with his sons, and nephew Tom Haig, who carried on making and building in sun-dried brick in and around Alexandra over the next decade. As in Wainuiomata, the painted cement plaster finish makes it difficult to identify houses of this period as earth; their style is very much typical of the day, and cement plaster was also used on timber framed houses as a stucco.

Discussion

The idea of distance highlights the key factors at play in the rise and fall of earth building in Aotearoa between 1945 and 1965. Despite New Zealand’s distant geographic location, the circulation of international research and information played an important part, especially after World War Two, when the government became interested in experimenting with earth, and Alley began investigating soil cement. Alley’s work coincided with that of Middleton in neighbouring Australia, but it is unclear if there was any collaboration. Middleton continued his research into the 1970s, and became acknowledged as an international authority on earth construction,\textsuperscript{47} while Alley appears to have been largely unrecognised outside Aotearoa. Although he continued to advise people interested in earth building into the 1970s, his research stopped in the late 1950s,\textsuperscript{48} at the same time as the government stopped supporting earth construction.

The desperate need for housing, coupled with material shortages after World War Two, motivated both building professionals and individuals to turn to earth. This reflects a common tendency to look back to earth in times of need. In \textit{Building in Cob}, Williams-Ellis noted that the international demand for his book was “clearly attributable to history repeating itself,” and went on to compare the similar conditions in 1919 and 1947, namely a severe shortage of building materials.\textsuperscript{49}

\textsuperscript{45} Otago Daily Times, “Bright Future.”


\textsuperscript{47} Howard, \textit{Mud and Man}, 32.


\textsuperscript{49} Williams-Ellis, \textit{Build in Cob}, xi.
Gramlich similarly identifies “the Jefferson Era” following the American War of Independence, and “the Great Depression,” as periods where interest in pisé and soil cement occurred in the United States. However, just as in the United States, when financial circumstances and material supply chains improved, New Zealanders reverted to mainstream practice and building in earth declined again.

The reason that the government’s 1948 proposal to build experimental houses in rammed earth got no further than the drawing board was reportedly the difficulty in “persuading a contractor to do the job.”

Williams-Ellis, who was visiting Aotearoa while the project was being mooted, used the opportunity to promote the use of pisé in an address to the New Zealand Institute of Architects. In response, the assistant director of housing, Mr R. Hammond, said that “if we adopted [Williams-Ellis’s] recommendations we would have but a quarter of the houses we have built,” and that the department had prepared plans for pisé houses but it was very expensive.

This reflects something that had played a part in the earlier decline of earth building in Aotearoa: its slow, labour-intensive process, comparing unfavourably to timber house-building. Within a decade, the Ankers’ Terracrete system solved these issues of time and cost, and gained them a chance in the affordable housing market; but by the time they had perfected their technology, the post-war house-building machine had geared up and thousands of timber-framed houses were being built all over Aotearoa. It was in the government’s interest, as owner of the forests, to promote homegrown timber over other materials, and it was also influenced by a powerful construction industry lobby led by Fletcher Construction, New Zealand’s largest building firm. Fletchers not only built with timber, they were also involved in timber processing, using logs purchased from the state-owned forests. Timber’s dominance was further strengthened by the successful development of treatment processes during the 1950s.

When the government withdrew its support for Terracrete by not renewing the SAC contract, there was insufficient interest from the private sector to sustain the business. The public could not get past seeing earth building as old-fashioned, despite the Ankers having solved the issues of time and cost, and no matter how hard they tried to present soil cement as a modern material with equivalent or superior attributes to mainstream timber construction.
Conclusion

The mid-century “looking back” to earth did not mean returning to some distant past. Building in sun-dried bricks had remained part of the Central Otago vernacular; when the Haigs began building on a bigger scale, they were simply continuing with a well-known material and method, entirely suitable to the region’s climate. Other proponents of earth construction were using soil cement, developed through new scientific research. Yet too many people still perceived building with earth—in any way—as a retrograde step. Perhaps it was too soon, or perhaps it did take a kind of distance to appreciate anew what earth had to offer. For returning soldiers such as Jones and Fischbach, leaving New Zealand and seeing earth building in a different environment allowed them to see earth with fresh eyes, and embrace its contemporary potential. However, it was the lengths the government would go to solve the housing crisis that offered the greatest potential for Aotearoa’s mid-century movement to grow. When support for earth building in the national house-building programme was withdrawn, the distance between earth and mainstream construction expanded once more.
Roots in the most unlikely of places: Reconsidering the Queensland Art Gallery

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In 1973, Queensland architect Robin Gibson was awarded the commission for the Queensland Art Gallery (QAG), after winning a limited design competition. Shortly after, Gibson travelled overseas on a government funded tour of key international art galleries including, the North Jutland Art Museum, Aalborg (Alvar & Elissa Aalto with Jean-Jacques Baruël, 1972) and the Oakland Museum, California (Roche-Dinkeloo, 1969). The purpose of the tour was to more accurately define the requirements of a modern art gallery. The resulting QAG, developed in response to Gibson’s findings, is a highly considered gallery building, incorporating generous natural light and a suite of exhibition spaces of varying dimensions and architectural qualities. When opened in 1982, it received considerable national acclaim and was later awarded the RAIA Zelman Cowen Award for Public Architecture. However, despite this national recognition, the project received little exposure internationally.

In the only known critique of the QAG published internationally, critic Boris Kazanski, suggests that the “international” design language of the gallery failed to communicate with the surrounding context. This paper proposes that Kazanski’s response was prejudiced by global discussions of post-modern concepts, such as Frampton’s “Critical Regionalism” which were being enthusiastically discussed in local and international publications during the period the QAG opened. Kazanski, like other international critics, appeared to favour Australian projects that engaged with these debates often through architectural responses to climate and comfort. Consequently, the QAG’s response to place through careful layering of light, surrounding environments and historical precedent has not yet been considered.

Keywords: modernism; regionalism; Queensland architecture; twentieth-century architecture; Robin Gibson
The Queensland Art Gallery was established in 1895 but from 1931 the collection was stored and exhibited in the Queensland Exhibition Building (GHM Addison, 1891). The gallery shared this building with the State Museum but it was considered improperly equipped to display or store art. Plans for the construction of “fine, adequate, permanent premises befitting the State’s Art Gallery” were frequently discussed by parliament and in public media, but did not eventuate. On December 23 1968, the trustees of the Queensland Art Gallery presented a submission to the State Government which outlined the inadequacies of their facilities. In response, the State Government approved the establishment of a Queensland Art Gallery Site Committee in January 1969 to examine potential locations for a new gallery. After examining three key sites in and around the city centre, they decided on a site in South Brisbane, overlooking the Brisbane river and city beyond. This was then largely an industrial area populated by warehouses, disused wharfs, dusty vacant lots and railway infrastructure.

In 1972, a competition was announced for the design of the new Queensland Art Gallery (QAG). Ten local architectural practices with expertise in large projects were invited to submit a design proposal. The ten were shortlisted to three and, in April 1973, the firm, Robin Gibson & Partners were announced as winners. Principal of the practice was Brisbane-born architect, Robin Gibson (1930-2014) who had opened his office circa 1957. In early practice, Gibson became known for small retail fit-outs, which were among the first in Brisbane to recognise the commercial benefits of a well-designed shop, combining architecture with purpose-built lighting, displays and graphics, to create a comprehensive package attractive to customers. By the early 1970s he was responsible for more substantial projects, notably at the University of Queensland where his firm designed Mayne Hall (1973), a graduation and performance space awarded the 1973 RAIA (Qld) Bronze Medal (fig. 1). In the transition to the public scale, Gibson’s confidence grew in using materials such as pre-cast and in situ concrete, steel and extensive glazing. This combined with a reputation for “getting things done” made his firm a measured choice as architects of the new gallery.

In 1975, the gallery brief substantially expanded to include not only the QAG (1982) but a restaurant (1981), the Queensland Performing Arts Complex (1985 & 1998), Queensland Museum (1986) and the Queensland State Library (1988). These buildings were all designed by Gibson’s office on adjacent sites, using the same materials, monolithic form and cubic geometries.
to form a unified complex known as the Queensland Cultural Centre (QCC). Gibson’s office was responsible for the design of the complex in its entirety. As the QAG was the foundation building and the later projects used the forms and materials established in this initial design, this paper will focus on the gallery building alone.

Shortly after receiving the QAG commission, Gibson conducted a tour funded by the Queensland State Government of significant art galleries abroad. The purpose of the tour was to “more accurately define the needs and specific requirements together with the future demands which the gallery building will require during its lifetime.”11 This paper argues that this study of key galleries abroad gave Gibson an intimate sense of the functional requirements and experiential qualities of a modern art gallery. However, he was critical of how these buildings functioned as public buildings and exhibition spaces. Considered responses to these issues informed the design process of the QAG, resulting in a skilfully designed building with exhibition spaces that rival many better-known galleries abroad. Its architectural merit was recognised by a number of significant local awards shortly after opening including the RAIA Zelman Cowen Award for Public Architecture (1982).

While the QAG received acclaim nationally, it did not receive similar attention abroad. This was despite an increase in the

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11 Robin Gibson & Partners, Queensland Art Gallery Report on Overseas Trip, 1973, Box 1, Robin Gibson Collection, Fryer Library, St. Lucia, University of Queensland.
number of Australian projects published in international journals during the period the gallery opened. These publications appeared to favour Australian projects responsive to prevailing architectural polemics of the late twentieth century, including critical regionalism and postmodernism. Projects such as the QAG, designed in a strong international language, are conspicuously absent from discussions of Queensland architecture by international journals from the early 1980s. Furthermore, the only known international criticism of the QAG, which appeared in German journal *Architektur + Wettewerbe*, is disparaging of the new building’s response to its surrounding context. This paper will examine how Queensland architecture was represented nationally and internationally during the period the QAG opened, arguing the gallery is more sensitive to regional context than its exclusion in discussions of regionalism in Australia during the 1980s would suggest. Informing this discussion are the notes Gibson compiled during the 1973 tour abroad and various speeches Gibson gave during the subsequent decades which discuss the design intent for the QAG. The construction of the QAG was a significant event for Queensland culturally and remains a key example of a modern art gallery in Australia.

The Tour

Fundamentally, the planning brief assembled by the Queensland Art Gallery Steering Committee in 1972 envisioned the new QAG building as a permanent home for the institution's growing art collection. They desired “a building of its time, incorporating the best techniques and materials available” that should be neither “monumental or pretentious in character.” This reflected the ideologies of post-war gallery buildings nationally and abroad. In gallery buildings constructed during this period, architects and governments sought to dissolve the barriers between art and the general public by creating projects at the human scale which made an architectural statement without overshadowing the art within. These galleries also incorporated modern developments in lighting, storage and gallery layout. As few gallery or museum buildings then constructed in Australia demonstrated these contemporary innovations, Gibson instead visited galleries and museum spaces abroad.

Although it is unknown how Gibson planned his itinerary, many of the projects he visited are located in the traditional cultural centres of the world. He visited galleries in London,
Amsterdam, Berlin, Copenhagen, Aalborg, New York City, Chicago, Minneapolis, San Francisco and Mexico City. Many were considered successful, modern gallery designs, for example, the Walker Art Centre (Edward Larrabee Barnes, 1971) in Minneapolis was touted as the “best museum space that we have in the United States” by art dealer Leo Castelli. To assist with critiquing each building, Gibson developed a series of standardised criteria; planning, organisation/administration, environment, lighting, space planning and “miscellaneous”—principles that rated the building’s ability to display, store and administer a large collection of art. Gibson also spent time with curators, directors and architects to further his understanding of developments in the administration and curatorial aspects of gallery design.

From the notes Gibson compiled during the tour, it appears he found many of the galleries failed to address all his criteria adequately. Two recurring criticisms were a lack of acknowledgment of surrounding context impacting their success as a public building, and poorly planned and/or lit exhibitions spaces impacting their success as a functional art gallery. An example of this critique is expressed in Gibson’s notes for the Oakland Museum of California (Roche-Dinkeloo, 1968). The Oakland Museum sits as an oasis of cultural facilities and vegetation arranged on a series of landscaped terraces within a dense urban context. While aesthetic similarities between the Oakland Museum and the realised QAG have been made in publications elsewhere, Gibson’s comments are largely critical.

While he found the exterior terraces of Oakland “a delight” he was concerned that a lack of recognition of the surrounding urban and natural context made the building uninviting to pedestrians at street level who had no visual or physical connection to the landscapes within. He was also concerned by the disconnect between the interior spaces and the terraces. He writes, “one feels completely divorced from the exterior because of the heaviness and severity of the structural system imposed by the design.” A recent visit to the Oakland Museum by the author confirmed Gibson’s accounts. The exhibition spaces feel detached from the external landscapes and the internal finishes and lack of natural lighting make the galleries uninspiring environments for viewing art (fig. 2).

A response to issues of site were already one of the strengths of Gibson’s 1973 competition entry. In this design he had hinted at an opportunity for creating new public recreation spaces along the edge of the Brisbane River. In the report Gibson assembled post-travel he proposed to take this several steps further and
bury the existing road (Stanley Street) between the gallery and the river. Ultimately this was what was constructed. In front of the gallery is a landscaped forecourt from which the river and city beyond could be observed. This slopes down to a pedestrian footpath along the water's edge intentionally leaving the river bank intact. Unlike the landscaped terraces at Oakland, this space allows pedestrians to experience the public landscape which includes large scale sculpture and panoramic views of the city without having to set foot into the gallery itself. In a further acknowledgment of local context, the buildings were kept low, as a predominantly horizontal silhouette, so when viewed from afar the geometric forms reinforce and draw the eye to the distant views of the mountain ranges beyond.

Gibson observed that in many of the galleries he visited abroad there was a desire to deliver consistent light to the interior of the gallery. However, very few galleries were able to successfully introduce significant amounts of natural lighting into the exhibition spaces—instead relying almost exclusively on the stability of artificial lighting. However, Gibson found the eye demanded variations in light levels to combat visual fatigue. In response, Gibson prioritized the introduction of natural light into the QAG writing in his notes prior to designing the building that, “the great thing is to realise the presence of light.” Key to the success of this in the gallery is a space known as the Watermall, a series of pools running from the exterior into a tall internal volume separating the galleries from the administration areas of the building (fig. 3). Conceptually, the pools run parallel with the Brisbane river giving a sense of this significant natural feature from inside the building while functionally the Watermall works as a device for...
visitors to orient themselves as they move around the building. The Watermall is lit from above using baffled sky lights which introduce light into the space. These are present but not well resolved in the 1973 competition scheme and some credit may be owed to similar devices successfully used at the North Jutland Art Museum, Aalborg (Alvar & Elissa Aalto with Jean-Jacques Baruël, 1972) a gallery Gibson visited. Light is reflected off the pools and the lightly coloured concrete walls and floor to introduce natural lighting into the galleries beyond which combined with concealed artificial lighting achieved the lighting conditions Gibson sought. When opened, the views of Australian critics were favourable to the project. In 1983 the national journal, Architecture Australia described the gallery as, “a masterly articulation of space, which generously serves the multifunctional activities of a major art gallery.”

Queensland Architecture Nationally

Although the QAG was reviewed favourably in Architecture Australia (AA) none of the subsequent Queensland Cultural Centre buildings were featured in the national institute’s journal. Nor were they featured in the journal Transition—founded in 1979 to counter the mostly pragmatic agenda of AA. However, even AA had begun regular “discourse” issues dedicated to

26 “Evoking Memorable Images,” Architecture Australia 71 no. 6 (December 1982): 122.
contemporary architectural theories and debates. Central to this discussion were contemporary architectural polemics such as postmodernism and critical regionalism which were applied to the search for an Australian architectural identity. Paul Walker and Karen Burns observe that although postmodernism struggled to gain a foothold in Australia, Kenneth Frampton’s concept of “critical regionalism” appeared to align with the views of a generation of young architects in Australia. This is discussed at length in the essays in the catalogue for the travelling exhibition of Australian architecture which toured Europe and North America in the early 1980s, Old Continent New Building. Here, architect Phillip Cox writes in his essay, “An Architecture in an Australian Landscape,” that Australian architects from the 1960s were working towards “an architecture more Australian than the pastiche of the international school.” Although the QAG was included in the exhibition alongside several other large modernist works, the “hero project” chosen for the cover image of the catalogue was the John Andrews designed homestead, Eugowra (1981), a building which borrowed heavily from the colonial building traditions of rural Australia.

Conversations about region and identity were also occurring in Queensland but represented more by built works than active critical discussion. Central to this was the ubiquitous Queensland house described by JM Freeland in his 1968 book Architecture in Australia as the “closest that Australia has ever come to producing an indigenous style.” During the post-war period, Queensland architects critiqued this building type by blending modernist forms and materials with climatic elements derived from the local context, such as verandahs and courtyards. The Mocatta Residence designed by Gibson and built on the bank of the Brisbane River circa 1966 was a representative example of this critique. Although the Mocatta Residence bears little resemblance to a pre-war “Queenslander” issues of light, ventilation and a semi-outdoors lifestyle are no less considered in its design. However, from the 1970s, young Queensland architects such as Rex Addison and Lindsay Clare began returning to the forms and materials more closely associated with the pre-war housing traditions such as exposed timber structure, corrugated iron and pitched roofs. During the 1980s these houses were often depicted as the representative examples of Queensland architecture in national publications and were described as being constructed in the “Queensland Idiom” associating these projects with the climate and building traditions of the region.


29 Walker and Burns, “Constructing Australian Architecture for International Audiences,” 27.


31 “In the Queensland Idiom,” Architecture Australia 71 no. 6 (December 1982): 118
Queensland Architecture Abroad

During the 1980s, English journal *Architectural Review (AR)* by their own admission became a “strongly regionalist magazine” and the Queensland projects featured during this time supported this agenda. These were almost all houses and the articles on them were often penned by recent Australian immigrant Rory Spence. The subjects included a Noel Robinson house in Spring Hill; a house in Chapel Hill by Brit Andresen & Michael Keniger within a larger feature on Australian Houses; and a major piece written on Queensland architect Rex Addison that included several of his residential projects alongside domestic scale public buildings. These projects were realised in an idiom of lightweight materials, thresholds, shading and screens identified in the texts as fundamental in mitigating the effects of the Queensland climate. As with the national publications, parallels were also made in the AR articles between these climatic devices and similar elements on traditional Queensland houses, which was reinforced by images of traditional Queensland houses and wide-angle shots of Brisbane suburbs.

Curiously, in several texts the relationship between Queensland building traditions and climatically responsive design was also identified in projects at the public scale. The solar shading on the Harry Seidler designed Riverside Centre is described by *AR* in 1988 as “a version of traditional Queensland awning overhangs.” This was also observed by British critic, Kenneth Frampton who in the introductory text for a photographic book on this building argues that the solar shading on Riverside Centre “points to the regional inflection of what is otherwise an international hermetically sealed airconditioned work.” He upholds that the building despite being a massive commercial tower serves as an act of defiance against the “juggernaut of consumerism and the admass of kitsch.” It is worth observing that the tenuousness of this connection is demonstrated by the use of similar awnings on Seidler buildings in Sydney, Melbourne, Perth and Paris.

As did the building reviews in AR, the Italian journal *Domus* assumes a link between Queensland architecture, climate, tradition and the house in its 1985 issue on Australian Design, titled “Ciao Australia.” Queensland architecture was represented in this issue only by a series of residences designed by local architect, Noel Robinson. *Domus* also aligns Robinson’s work with Frampton’s understanding of regionalism as an “architecture of resistance” by describing these small structures as a “challenge to local prejudice” and depicts his use...
of traditional forms and materials as a means of protecting the “local cultural heritage.”38 Houses appear to remain the definitive expression of this regionalism in the *Domus* issue. This becomes problematic when presented as the only valid means of expressing regional identity. More so when coupled with an assumption that architects working outside of these traditions, on projects at a scale beyond the domestic, are not able to create alternative yet equally valid expressions of place.

It is this representation of Queensland and Queensland architectural practice which is framed in the only known review of the Queensland Art Gallery by an international journal. The author Boris Kazanski (who was actually based in South Australia) begins his piece for a 1983 issue of German journal *Architektur + Wettewerbe* by writing:

> Walter Gropius would be delighted on his centenary birthday. The spirit and architectural values rejected steadfastly in his native German by the advent of Post Modern principles in design, have found roots and expression in the most unlikely of places; Brisbane [sic].39

Although Kazanski praises the simplicity of the Queensland Art Gallery’s design and the attention to detail, overshadowing his critique is a discussion of the relevance of the international style within a sub-tropical context. He appears surprised that Brisbane with its “indigenous residential architecture full of ornamentation, originality and playfulness,” could foster a building in such a cool, international, idiom.40 Throughout the piece, Kazanski argues that the QAG was representative of an “established architectural community” who shunned the historicism and eclecticism of the region embraced by younger members of the profession.41 To Kazanski, the gallery sits on the bank of the Brisbane River as an “island of dignified architecture,” but ultimately declares it an “introspective building” that lacks recognition of its neighbouring suburban context.42

### The QAG as a Response to Place

Although climatic sensibilities played their role in the design of the QAG through the use of deeply recessed windows, covered walkways and thermal mass, Gibson’s sensitivity to place is not defined by their expression. Instead it is a carefully considered response to the architectural history of the city, the natural characteristics of a riverside site in inner city Brisbane and the

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38 “Brisbane: Tra Tradizione e Innovazione,” *Domus*, 663 (July/August 1985): 32


41 Kazanski, “Queensland Art Gallery,” 110.

42 Kazanski, “Queensland Art Gallery,” 111.
lifestyles of the people who inhabit it. Gibson declares in his speech “Life Styles & the Built Environment” that “Brisbane, even though it is only just over one hundred and fifty years old has already demonstrated interesting and varied patterns of life styles and has created appropriate buildings to house those styles.” He argues that buildings such as the Treasury Building (1886-1928) designed by Colonial Architect JJ Clarke and the Parliament Building designed by Charles Tiffin (1867) used a style and detailing more typical of an international idiom to express “the aesthetic ideals of the people but also their confidence in the future.” It was this sense of permanency in the buildings, catering to specific needs of the society who built them, which Gibson aimed to capture in the design of the gallery.

The gallery was a means of representing the needs of present-day Brisbane for high-quality cultural facilities and an aspiration for art to play a greater role in the lifestyle of Brisbane society then and into the future. The functional success of the gallery facilities made the region attractive to international exhibitions, creating a cultural link with Queensland and the rest of the world at an unprecedented scale. Over 400,000 people visited the gallery in the first 6 months it was opened, demonstrating how quickly it was embraced by the people it was intended to serve. Later Gibson described this success, “I get a great deal

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Figure 4. Queensland Art Gallery. (Unknown Photographer. Courtesy of Robin Gibson Collection, Fryer Library, University of Queensland.)
of joy of coming here on a Sunday and seeing not the type of official person that you normally expect to see in art galleries, but families of people, the ‘thong brigade’ coming and enjoying themselves on a Sunday.”

To Gibson, the gallery was also an opportunity to celebrate and preserve the natural assets of the city, particularly the Brisbane River (fig. 4). The relationship between the city and the river is a recurring theme in many of the speeches Gibson gave during the 1980s. In the speech titled, Brisbane Banal or Beautiful he declares the river is the “major physical and visual element of Brisbane” with historical significance as the reason for Brisbane’s establishment. Despite this significance the “birth right of all people of this city” was rarely acknowledged by historic or contemporary public buildings constructed in the city. He lamented the river’s diminished role in present Brisbane society, the result of developments such as the Riverside Expressway which divorced the river from the fabric of the city and the people. The placement of very large commercial buildings blocking vistas from the city to the river was another concern Gibson had with the contemporary development of the city. In contrast the placement of the gallery on the river but stepped back from the water’s edge while providing generous external public landscapes that acknowledge context, presents as a compelling act of resistance.

Conclusion

Had the QAG opened during the mid-1970s as had originally been intended, in a critical landscape more sympathetic to modernist “international” architecture, or, if it had been built in Sydney or Melbourne where the international perception of the relationship between the environmental context and the architectural traditions of the region were less rigidly tied to a regionalist narrative it is possible it would have met with a more enthusiastic reception from critics abroad. Instead, its significance as the nucleus of a cohesive collection of cultural buildings designed by a single architect on a key urban site has rarely been acknowledged internationally. Its role as a catalyst for a process of urban renewal along the south bank of the Brisbane river which, via a World Expo held in 1988, has become one of the defining public spaces in Brisbane is also often overlooked.

While Gibson consciously avoided the use of a domestic language for his public buildings this has not been the case in recent public buildings constructed in Brisbane. In fact, the
Gallery of Modern Art (2006) designed by Architectus, which forms a bookend to Gibson's existing Cultural Centre along the Brisbane River, aspires to the opposite. In the architects' statement published in English journal *UME*, they claim, “broadly, our model for the Gallery of Modern Art has been the traditional Queensland house.”\(^49\) The adaptable timber screening on the western elevation thus becomes a gesture shaped by “local circumstances.”\(^50\) As noted by Naomi Stead, this building was framed as “a genuinely regionalist building which responds to local architectural traditions and the local climate.”\(^51\) Other developments such as the expansion of Gibson’s Queensland State Library by Donovan Hill and Peddle Thorp in 2006, which almost completely obscures Gibson’s original building under an introduced vocabulary of green concrete and lightweight, timber steel and glass, could be considered an erasure of Queensland’s modernist heritage in favour of a more traditional expression of a Queensland building. A more extensive redevelopment schedule proposed by the State Government in 2014 was curtailed by a successful campaign to add the Queensland Cultural Centre to the State Heritage Register, confirming the cultural significance of the project. This has led to a wider appreciation of Gibson’s work and its relationship to region.

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50 Architectus, “Brisbane, Queensland, Australia: Gallery of Modern Art,” 2.

Around the World in Eight Kilometres: Tracking Sydney’s “City Circle” International Railway Ties

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While many factors shape the urban experience of Sydney today, few projects have had wholesale impact like the City Circle railway. To this day, movement to and through the city is fundamentally shaped by design decisions orchestrated by the project’s chief engineer—J.J.C. Bradfield—a century ago. Much has been written about Bradfield, but little has examined the global influences on Sydney’s City Circle and, in turn, its impact on the urban form of Sydney. Bradfield understood the railway not merely as infrastructure, but as a catalyst for city-making, with both architectural and urban impacts. As such, he looked to distant transport systems to help shape Sydney’s urban railway, and ultimately the city.

A journey on the City Circle traverses six stations and eight kilometres, but easily overlooked on the trip are those global antecedents Bradfield leveraged: models that brought international planning principles and aspirations to Sydney in the inter-war era as post-Federation Australia turned toward eclectic global precedents. As Australia’s first urban rail system, the City Railway laid its tracks upon European and American influences—influences that, in turn, came to shape Australian urban transport planning, policy, and design more generally.

This paper explores unexamined concepts imported across physical and temporal distance, drawing upon archival research of the papers and manuscripts produced by Bradfield following international research trips in 1914 and 1922. As such, the paper provides context and new insights into the influence of global technologies, planning principles, and aesthetic ideas which are still discernible in Sydney’s city-serving railway.

Keywords: JJC Bradfield; Sydney City Railway; public transport; Sydney trains
Every day more than one million journeys are made by train in Sydney, with passengers riding the rails of a network that has its origins more than a century-and-a-half ago. And while many passengers are vexed by the system for a range of reasons—overcrowding, delays, cleanliness—it is not an overstatement to say that the railway keeps Sydney moving. Sydney’s transport network is inseparable from the urban fabric itself; transport has facilitated urban growth, which has in turn fed the expansions of the railway network.

In December 1926, Sydney heralded the opening of the first section of the “City Railway”—a spur running from the former terminus of suburban service at Central to Museum and St. James stations on the eastern side of the CBD. While the distance traversed was unremarkable, its status as the first underground railway in Australia represented embodied global aspirations of a city battling traffic for international relevancy. The system also represented a triumph over the city’s only viable rival on the continent—it would be sixty years before Melbourne opened a similar system.

The City Railway—today’s “City Circle”—is an eight-kilometre-long line serving four underground and two elevated stations. The realised railway is a small component of grand plans devised to link Sydney’s then isolated “Central” Station in the city’s south and the former train terminal at Milsons Point on the North Shore with the urban core of the city, negating the need to transfer to ferry or tram to reach the CBD on a journey from the suburbs (fig. 1). The vision of government engineer John Jacob “Job” Crew (J.J.C.) Bradfield (1867-1943)—realised thanks to consolidated power and access to vast economic resources which allowed Bradfield to wield substantial influence—the railway and Harbour Bridge were key to Sydney’s economic success. With the completion of the bridge in 1932, facilitating the opening of the western portion of the circle, including Town Hall and Wynyard stations, the vision began to take shape. A world war and shifting transport priorities meant it would be another quarter century before the circle was closed at Circular Quay, but even still, Bradfield’s indelible mark on the city would shape much of Sydney’s urban development.

Dr. Bradfield—he earned his PhD from the University of Sydney in 1924 for a thesis on the design and construction of the railway and bridge—worked from 1914-1932 on the development of the City Railway and the coordinated effort of electrification of the suburban lines extending into the hinterlands of Sydney. Simultaneously, Bradfield was a prolific guest speaker on the...
Figure 1. An early drawing of Bradfield's planned lines, with the City Circle and additional circles running to the eastern and western suburbs, reproduced from Bradfield "The City and Suburban Electric Railways and The Sydney Harbour Bridge," 37. Courtesy of Rare Books and Special Collections, University of Sydney Library.

 Brahfield placed high value on aesthetics and the impact of infrastructure on the visual appeal and liveability of the city, the quality of the customer experience, and the long-term success of the stations. As much as a railway to cater to the needs of Sydney and her citizens, Bradfield had ambitions to leave his mark with “an architectural feature in the sky line of the city.”

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7 The National Library of Australia holds many of his paper and lectures in its Special Collections, with no fewer than 76 lectures he delivered between 1914 and 1930.

8 “List of New Year Honours,” The Brisbane Courier, January 2, 1933, 11.

9 “Sydney of the Future – An Illuminating Chapter on the City Railway,” Sydney Mail, May 14, 1924, 16.

10 “Dr. J.J.C. Bradfield – New Degree Awarded,” Sydney Morning Herald, May 6, 1924, 8.

11 The opening of the London Underground in 1863 enjoyed extensive media coverage in Australia, despite the physical distance. Detailed accounts of the Underground were conveyed to readers with prominently featured articles in newspapers across the country painting compelling images, allowing Australians to visualise, and envy, the advances being made abroad. See also note 26.

12 Stated in one of his earliest lectures, Bradfield indicated his vision for transport development around Circular Quay would leave a lasting urban impression, though his proposal was never realised. J.J.C. Bradfield, “The City and Suburban Electric Railways” (lecture, Institution of Civil Engineers, Royal Society’s Rooms, Sydney, October 29, 1915), 9.
Ultimately, the urban fabric of Sydney today, and of course the train stations, owe much to Bradfield. And the network, while not necessarily contributing any skyline-altering architecture (save for the bridge) nevertheless shaped the skyline of Sydney today, if only by providing the infrastructure necessary to allow Sydney’s continued growth.

The Engineer and the Planner

While civil engineers are rarely known for architectural proclivities, Bradfield possessed a defining interest in design aesthetics and town planning theory which greatly shaped his work on the City Railway. His interests were stoked, if not fully shaped, by the curriculum at the University of Sydney, where he undertook his bachelor’s, master’s, and doctoral studies. In an address to the Sydney University Undergraduates Association in 1924, Bradfield credited his works—including the design of the City Railway—to professors who had influenced him, among them Sir John Sulman—a lecturer of architecture and noted town planner in Australia.

For decades, Sulman was a proponent of town planning in Australia, offering the first university lecture on the topic in 1921. Sulman’s interest was piqued while visiting Paris in the 1870s, where he was impressed by Haussmann’s civic gestures. Sulman would go on to be a proponent for the creation of similarly civic-scaled streets in Sydney, advocating for widened avenues and public green spaces. His desire for openness in the city didn’t cease at restructuring the urban heart of Sydney—often at the expense of buildings which would be viewed in hindsight as historic, which he didn’t look upon favourably—as he also underscored the need for people to have easy access to open fields and fresh air, invoking Ebenezer Howard’s Garden City. Bradfield would have been familiar with Sulman’s European-inspired planning principles and his lack of affinity for Sydney’s extant form, as the men remained friends following Bradfield’s studies. In fact, both men served as executives on the New South Wales state board for the Association of Town Planning and gave papers at the First Australian Town Planning and Housing Conference held in Adelaide in 1917.

Prior to Bradfield’s involvement in railway design, Sulman had devised schemes for improving transportation in Sydney. In the late 1800s, the State Parliament granted Sulman permission to design a tube railway to link the city with Milsons Point. Sulman also devised a grandiose classical design for Belmore

13 Bradfield completed his post-secondary education in Sydney, twice earning the University Gold Medal for his outstanding work.

14 J.J.C. Bradfield, “Sydney’s Underground Railway and Harbour Bridge” (lecture, Sydney University Undergraduates Association, Union Hall, May 21, 1924), 1.


16 His inspirations were more varied than merely European, referencing design in Buenos Aires in a proposal to widen Williams and Elizabeth streets, Richard Raxworthy, The Unreasonable Man: The Life and Works of J.J.C. Bradfield (Sydney: Hale & Iremonger, 1989), 59.


18 Worth noting, the two men did have a brief falling out stemming from the design of the City Railway. When Parliament adopted Bradfield’s plan, the relationship between the two men seemed to heal. Raxworthy, Unreasonable Man, 68.

19 Official Volume of Proceedings of the First Australian Town Planning and Housing Conference and Exhibition (Adelaide, October 1917).

20 Apperly and Reynolds, “Sulman.”
Park in front of Central Station, involving circular stacked roadways masked by classical colonnades and surrounded by four-storey stone edifices ornamented heavily in styling befitting his “civic aesthetic,” all fronting a well landscaped park boasting an equine statue at its centre in the finest Beaux Arts tradition (fig. 2). Neither of these proposals came to fruition, but Bradfield’s work in the subsequent decades would build off his mentor’s unrealised plans.

Such ingrained interest in aesthetics and planning, while unusual for an engineer tasked with a massive infrastructural undertaking of an underground railway and soaring bridge, no doubt was manifest in the realised form of the City Railway. Bradfield, intrigued by the classical aesthetics of the Beaux Arts and a proponent of planning in the City Beautiful pedagogy—which can be traced to Sulman’s influence—would go on to apply the concepts in practice in the subsequent years.

**Urban Aesthetics Abroad**

Filled with the aesthetic and planning sensibilities of Sulman, Bradfield spent much of his first decade of work with the State in the railway and tramway division, where he was responsible for the design of two dozen never-realised tramway extensions. While the tedious experience left him with little chance to expend his aesthetic creativity, his diligence paid off with appointment as Chief Engineer for the Metropolitan Railway Construction in 1912. Tasked by the Minister of Railways to seek out information related to the construction of rail transport in major urban areas, Bradfield was sent abroad in 1914. His six-month itinerary included Chicago, New York, Boston, Philadelphia, London, Paris, and Hamburg. The following year,

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his findings were presented in a report in the State Parliament, with the railway proposal accepted in mid-1915.24

Before Bradfield, proposals had been put forward for deep tube lines like those being constructed in London (Sulman was a proponent of this), sub-surface lines which utilised an invasive “cut-and-cover” method of construction to locate stations immediately below grade, and even at-grade and elevated schemes to traverse the city. Sydneysiders were familiar with the ongoing debate surrounding the technology to be used for the Sydney railway, with articles on the matter being a constant feature in the city’s publications.25 However, the final form of the system was to be based upon Bradfield’s recommendations after visiting many of the systems featured in the newspaper coverage.

The aesthetic impact of the system on the urban realm was of major concern for Bradfield, with this idea manifesting in his recommendations for the City Railway. In Chicago and New York, Bradfield observed elevated rail networks, characterising these purely infrastructural interventions as a “disappointment” and an “eyesore,” rendering the streets below “gloomy” (fig. 3).26 This experience, coupled with his understanding of technological requirements for deep tube excavation which he observed in London, resulted in his recommendation for Sydney’s City Railway: four sub-surface stations, along with two elevated stations at Circular Quay and Central.27

Based upon his findings, Bradfield vowed “there will be no unsightly overhead steel structures as in New York and Chicago. Where above ground, the railway will be constructed of concrete arches masonry faced … [and] will be a beautification, not an uglification of the city.”28 Thus, the grand sandstone viaduct fronting Elizabeth Street and Belmore Park came to be—at no small cost. Even with the stone veneer, Bradfield endeavoured

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25 National Library records indicate there were more than 100,000 articles relating to the keywords “Sydney underground railway” published in Australia between the opening of the London Underground (noted as “a most complete success” in the Sydney Morning Herald’s General Summary from London on March 18, 1863) and Bradfield’s proposal in 1915, highlighting how immersed the people of Australia were in the development of urban rail, the advancement of technologies adopted around the world, and the potential options available for Sydney.

26 J.J.C. Bradfield, “Notes on Existing Lines, Stations, and Passenger Movement in Some of the Principal American Cities” (lecture, Railway Institute, Sydney, May 1, 1917), 7.

27 The decision was not purely aesthetic; topographical conditions, cost considerations, technological limitations, and the selection of a bridge crossing, made the mix of viaducts and sub-surface lines the most appropriate.

28 J.J.C. Bradfield, “The City and Suburban Railways as Outlined for Sydney” (lecture, Sea, Land & Air, December 1, 1921), 13.

Figure 3. The elevated network of Chicago’s “Loop,” still present today. (Photograph by author, 2013.)
to soften the aesthetic impact of the infrastructure, imploring members of the Institute of Architects to look favourably upon his efforts to beautify the design with a range of native plantings “as a judicious use of Nature’s foliage can be made to screen an Engineer’s shortcomings as well as to enhance any merit there may be in his work.”

Bradfield’s enchantment with sandstone, however, did not extend to Sydney’s oldest structures. Construction by cut-and-cover was an invasive process, requiring wide-scale resumption, necessitating demolition of some of Sydney’s oldest structures. Bradfield had no qualms about the destruction wrought on the city, sharing the opinion with Sulman that the city’s form was detrimental to long-term potential and “almost as bad as it can be.” Further justification framed the project as an opportunity for grand civic expression, with construction of numerous imposing structures, being of course Bradfield’s creations. One, the Commissioners Offices, was to be located above the portals where the railway dives underground (fig. 4). The design was influenced by the City Beautiful movement, with the main entry fronting Goulburn Street set back to provide a great lawn. The move was heralded by the papers as “a refreshing feature of this part of the city.”

Similarly-grand civic gestures were envisioned along viaducts leading to the Harbour Bridge in North Sydney and at Circular Quay—none of which were actually realised. The only surface-level structures to be built in conjunction with the City Railway beyond Central Station were small entry kiosks for Museum and St. James stations. Designed by Charles Coulter, a state government architect, though under Bradfield’s supervision, the structures displayed restrained classicism in deference to their surroundings, as Bradfield had observed in New York and Boston.

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31 J.J.C. Bradfield, “The Metropolitan Railways and the Sydney Harbour Bridge” (lecture, Real Estate Institute of N.S.Wales, April 24, 1923), 12.

32 “Sydney of the Future,” 16.


34 NSW Government Architect George McRae also contributed to St. James Station, though the extent of his influence on the formal appearance of the station is unclear. The restrained classicism lacks the exuberance of his noteworthy Queen Victoria Building.


Figure 4. Bradfield’s classical proposal for the Commissioners Offices, reproduced from Bradfield “The City and Suburban Electric Railways and The Sydney Harbour Bridge,” 42. Courtesy of Rare Books and Special Collections, University of Sydney Library.
Beyond improving the aesthetics of the city, Bradfield saw the demolition of swaths of some of the oldest residential neighbourhoods in Sydney and North Sydney for the Harbour Bridge approaches as socially beneficial. Coupled with his sense of civic duty to enhance the city’s appearance, Bradfield justified the clearance of the “slums” with the benefit of the railway as a social boon for the impoverished who lived in the heart of Sydney. Drawing on models of the garden suburb, displaced urban dwellers would be moved out of the city, allowing the city to take on a more modern appearance and affording citizens access to nature and fresh air, aligning with the models of urban planning Bradfield saw emerging on his trips abroad.

His dedication to the creation of new, beautiful buildings and public spaces led him to declare “the aesthetic treatment of all above-ground portions of the City Railway has been carefully considered... [and] the various structures will be in architectural harmony with their surroundings, and all surplus lands will be made into street gardens, or miniature parks.” Clearly, greenspace had a place in both the garden suburbs and the city. Bradfield’s vision stopped at nothing short of solidifying Sydney’s role as “the Pearl of the Pacific – the City which appears destined to be the Queen of the Empire”—and his legacy as the mastermind behind solving Sydney’s transport woes.

Functionality, Amenity, and Nostalgia

While the emphasis of Bradfield’s journeys was to examine technical aspects of railways, he noted that despite modern trappings of power, signalling, and equipment, the systems he encountered were only as successful as their means to handle patronage by design. He wrote, “the railway may not be working to its maximum capacity on account of inadequate access for passengers from streets to platforms, and *vice versá*, and inadequate provision for loading and unloading the trains.” This observation resonated in Sydney, with the two terminals—Central in the south and Milsons Point in the north—representing pinch-points in peak hour as passengers transferred between modes or continued their journeys on foot. Easing access between the city and the growing suburbs, with open fields and fresh air played into his Garden City ideals—Bradfield lamented the plight of the urban youth, “forced unfortunately to exist in the closely packed slum areas of the city ... cut off from most of these joys [gardening, fresh air, and sunlight]."
With a population of just over 800,000 in 1916, the metropolitan area was dwarfed by many of the cities Bradfield visited. However, the difference of scale did not stop him from comparing the formal urban arrangement, and natural restrictions on development, with the likes of New York and Chicago. Bradfield also understood that while the population of Sydney was limited, future growth was inevitable—he estimated that the population of Sydney in 1950 would be nearly three million people—and he designed the rail network with the growth in mind. With an aim of future-proofing the system, and using his knowledge of how cities like New York and Chicago designed their stations to cope with high volumes, Bradfield took cues from what he observed. At Central, St. James, and Museum stations, Bradfield employed sloped corridors rather than stairs where possible to expedite the movement of people, thus giving shape to the stations under Hyde Park.

Another major element of vertical transport in stations—directly impacting the interface of stations with the public domain—which would become a defining characteristic at Wynyard and Town Hall stations was the incorporation of escalators. Bradfield had marveled at escalators on his journey and in more than two dozen of his lectures following his trip abroad, he espoused the efficiency of “moving stairs,” which he had to explain to his audiences unfamiliar with the technology. The use of escalators was unprecedented in Australia and was inspired by examples he saw in New York and at Oxford Circus Station in London. Bradfield noted patrons much preferred the modern escalators over the “old time” stairs.

To accommodate passenger volumes at the largest—and deepest—stations, Bradfield specified escalators for Wynyard and Town Hall stations. Finished in dark varnished Queensland maple casements with kauri pine treads, the “architectural machines” contributed to the warm aesthetic of the stations. When the escalators were replaced in the 1950s, the Department of Railways New South Wales (the agency administering the state’s railway network at the time) eschewed modern aluminium models (simultaneously being installed at the Inter-War Functionalist Circular Quay Station), instead maintaining wooden treded escalators—a translation through time of Bradfield’s initial design response which would cement their importance in the eyes of the commuting public. While the 1980s saw removal of wooden escalators in transport systems around the world, Sydneysiders continued to enjoy this link to the past, even as renovations radically reconfigured and restyled.
the station itself. 50 The technology, manifest in the aesthetics of the engineered object, was so entrenched in the identity of Wynyard, that when the wooden escalators were finally replaced with modern aluminium models in 2017, the old escalators were transformed into art, translating the functional heritage of 85 years, bridging not only culture, but time (fig. 5). 51

Another aspect of circulation that Bradfield noted from London—and emulated in Sydney—was the use of segregated corridors for station ingress and egress, expediting passage for patrons by minimising collision points. 52 While the segregated portals are no longer used as intended, signage in Museum Station hints at the former arrangement which moved passengers from platform to public domain for years after opening.

To ease the passenger journey further, Bradfield devised that the interior of stations would be utilitarian in aesthetic, in deference to their purpose, but still present classical flourishes and materials aimed at passenger convenience and comfort. Station walls were uniformly finished with cream tiles which were durable and easy to clean, capped in distinctive coloured tiles, with each station bearing a different colour to permit instant identification of a destination while onboard an arriving train. 53 The colours were also applied to roundel signage—co-opted from the London Underground—which visually united the underground network with its big brother in the motherland and created a tangible parallel to a system Sydneysiders had grown to admire, and aspired to emulate, through the years of media coverage (fig. 6). 54

50 Precipitated by a deadly fire at Kings Cross in London.


53 Removed during unsympathetic renovations throughout the years, these motifs have been reinstalled in the stations with recent renovations—red at Museum, green at St. James, blue at Wynyard, and yellow at Town Hall.

54 Sydney’s system was far from the only, or first, system to utilise the roundel (without permission, no less). The iconic symbol adopted by the amalgamated transport companies in London around the turn of the 20th century can be found around the world. See Christian Wolmar, The Subterranean Railway (London: Atlantic Books, 2005) and David Lawrence, A logo for London: The London Transport Bar and Circle (London: Laurence King Publishing, 2013).
Bradfield’s City Railway is a tangible manifestation of a period in Sydney’s designed history defined by importation of international understanding about urban form and transportation’s role in shaping the city. Ideas of style and functionality from Europe and the United States, coupled with ideas on aesthetics gleaned from Sulman’s teachings on the Beaux Arts and town planning, shaped the system and in turn the city, giving Sydney greenspace and classical edifices scattered through the CBD. Bradfield’s borrowing of technological innovation, especially from London and New York, yielded station configurations which have served ever-expanding patronage for nine decades and are ingrained in the movement of countless commuters daily.

The confluence of extensive media coverage of transport solutions globally and the growing aspirations of Sydney as a contender among the cities of the world, led to the unprecedented investment and acceptance of large-scale city interruption for more than a decade in order to create Australia’s first urban underground railway. While the construction of the system was a burden on the city, the ultimate result of its development was the solidified supremacy of Sydney on the continent for nearly a century. The lessons of vision and tenacity, driven by the desire to interweave transport into the urban realm, are telling of the impact of distant precedents and the timelessness of Bradfield’s solutions.

The City Railway introduced Sydneysiders to a form of transport they had read about for decades in newspaper accounts from abroad, the physical realisation of ideas transmitted to
Australians across distance through media accounts both before and during Bradfield’s exploratory sojourns. The stations, a fusion of utility and restrained aesthetic classicism, captivated Sydneysiders upon their opening, and today allow Sydneysiders to look back across time and distance with a journey of just eight kilometres.
Transformations in New Caledonian Architecture, 1853-1980: An Overview

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The French penal colony of New Caledonia was founded in 1853 on the Australian model. This unique situation within the Pacific islands, coupled with a thriving nickel-mining industry, led to the emergence of a contemporary multicultural society. In New Caledonia, one can still witness the testimonies of an architecture based on French colonial military standards, with the use of a French version of the colonial bungalow, as seen in other areas of influence, such as the Indian ocean and the Caribbean. Also, the proximity of Australia, as well as its similar colonial history, played an important role in New Caledonia’s architectural heritage. Later, from the 1920s on, the advent of regionalist and modernist trends in French architecture led to local upgrading of houses and buildings, which account for a rich, mainly Art Deco, architectural legacy. Finally, the emergence of a first generation of local architects in the early 1960s, as well as a mining boom, triggered both the first large-scale development and urban planning, along with the construction of an array of modernist “international style” buildings. This article will focus on the antipodean influence of French architecture throughout the nineteenth and twentieth centuries, but also on how the colonial Francosphere, albeit distant, influenced local innovations and architectural transplants.

Keywords: New Caledonia, Oceania, colonial architecture, bungalow, Art Deco, postwar modernism
Architecture in New Caledonia is not only linked to its recent colonial history. The Kanak, the legitimate owners of the archipelago at the time of European contact, had slowly perfected the art of house building during a process spanning three millennia, from the first Austronesian sightings of the islands to the great round huts which inspired architect Renzo Piano in the construction of the Tjibaou Cultural Centre in the capital city of Noumea in 1997.

The second millennium AD witnessed the emergence of the Kanak Cultural Complex, and thus of a vernacular architectural language evidencing great richness. While the round hut is better known, different types of rectangular huts also exist, and one must acknowledge the Kanaks’ deep understanding of the relation between habitat, location and customary social structure.1

European contact in 1774, followed by further incursions by whalers and sandalwood traders, had a significant impact on the archipelago’s population, with the introduction of unknown diseases causing a general demographic collapse within the Kanak community. While these first Europeans did not leave many architectural traces behind, the first remnants of the European influence on New Caledonian architecture are, as for most of Oceania, the religious constructions erected by missionaries, from the 1840s on. Again, as most of these first buildings were made out of perishable materials, they were gradually replaced by lime, stone and brick masonry equivalents in the latter half of the nineteenth century.

This article, which will focus on the architectural legacy of French colonial rule since its installation in 1853, will unfold in two main parts, the first presenting what New Caledonians presently refer to as “colonial architecture” or “colonial style,” with strong influences from French military and penal architectures; the second addressing the modernization of New Caledonia’s constructions, mainly in the urban context of Noumea, initially between 1925 and 1960, and then since the 1960s, with the emergence of post-war modernism.

1 Colonial Architectures, 1853-1925

Mainland New Caledonia was indeed not the first tropical island where France decided to implement a colony. Martinique and Guadeloupe, in the Caribbean, were colonized by the French in 1635, as were, in the Indian Ocean, the islands of Réunion (in 1642) and Mauritius (between 1715 and 1814).
Therefore, constraints linking architecture to warm climate were already well known before the installation of the colony on September 24, 1853. This explains the stylistic links between local construction, and the architecture of other French overseas territories or former colonies.

1.1 A Military Heritage

During the first decades of French colonial rule, governors were members of the military (until 1884), and civil servants active in Noumea were employed by the Ministère de la Marine et des Colonies (Ministry of Navy and the Colonies). Members and officers of the Penal Administration were also part of the military. Therefore, the oldest remaining masonry structures of the archipelago bear the marks of defence engineering. General dimensions of the buildings demonstrate the use of the metric system, with founding walls sixty centimetres thick, supporting ones of forty centimetres, interior partitions of ten. The military engineering overseers not only directed housing formats but also general urban planning, as the city centre of Noumea bears a Hippodamian grid, while the capes and lookouts were requisitioned for the construction of military barracks (fig. 1).

While the prevalence of the military tends, usually, to disappear with the arrival of free settlers and the development of an agropastoral economy, in New Caledonia it was greatly reinforced by the implementation of the extremely powerful
Penal Administration in 1864.² The consequential arrival of more than 21,000 transported convicts (until 1897) made the need for military surveillance of the archipelago important, and the construction undertaken by penal convicts perpetuated an aesthetic based on authority, rigour, simplicity and standardisation. These constructions (military barracks, prisons, hospitals, administration buildings, official residences) are scattered throughout the city centre of Noumea and also across the mainland, where secondary penal facilities were gradually founded. These constructions, built on similar lines, made the city’s public architecture coherent; because they were visible to free settlers, they also impacted, with their sobriety, the design of private dwellings (fig. 2).

More specifically, official residences feature characteristics typical of the nineteenth-century colonial bungalow, with elevated flooring, louvered shutters, surrounding verandas and corrugated iron roofs (fig. 3). They also bear classical French features, such as French doors, adjoining en enfilade rooms, especially for the more formal elements. This tendency to a classical aesthetic lurking behind the technical adaptation to the tropics is a well-known aspect of colonial architecture, which materialises the political ambition of the state: in the New Caledonian case, the goal was to create a little France Australe through the “rehabilitation” of convicts, the “civilisation” of the native population, and by means of agricultural and

mine “production.” In many ways, this replicated the colonialist idea of “transforming a newly created society into its republican ideal.”

For these reasons, New Caledonian colonial architecture, whether public or private, may seem less ornate than its other island counterparts; houses in the Caribbean or the Indian Ocean are indeed much more heavily decorated. Nevertheless, borrowings are evident, given the global formal similarities—a factor that can be linked to the existence of a colonial Francosphere, with free settlers coming from Réunion to boost the sugar cane economy from the 1870s, or penal administrators who had previously worked in French Guyana retiring to New Caledonia. Thus, the presence of Australian free settlers since the late 1850s and important economic links with Australia also explain similarities in private colonial architecture with, for instance, the rural houses of Queensland.

1.2 The New Caledonian House: Case créole or maison coloniale?

In New Caledonian French, private houses of colonial style are usually referred to as maisons coloniales, or “colonial houses.”
However, in the rest of the French-speaking colonial or post-colonial world, the generic term designating the colonial bungalow is *case créole*, meaning “Creole hut.” The word *maison* (similar to the English “mansion”) is usually restricted to the large two-storey plantation houses (along with their ornamental garden and water basin, dependencies, access road, large domain, etc.). *Case créole*, on the other hand, refers to the smaller single-storey houses built in the colonial cities, with floorplans of 100 square metres or less, and made of clapboard walls. In many ways, this category corresponds to the classic New Caledonian *maison coloniale*, while the larger plantation homes are virtually absent from the archipelago. Why, then, was the term *case créole* never used to describe these houses locally?

Firstly, in French the world *créole* describes someone of European origin (fully or partly) and born in the islands. Therefore, New Caledonia-born descendants of settlers could have used the term to describe themselves, which is something the French military staff did during World War One, when New Caledonian soldiers were placed in colonial battalions along with other Creoles, from Réunion, Martinique or Guadeloupe. Whether their New Caledonian origin carried the burden of penal transportation, causing New Caledonian soldiers to be spurned by their peers, or whether they chose to refuse the term because they did not want to be assimilated with descendants of enslavers, one might never know.

Second, the word *case*, or “hut” is also problematic for it was used in the nineteenth century to describe three types of accommodation: the large buildings that were used as dormitories on the main penitentiary on Nou island, known as *cases communes*; the provisory houses, mostly of earth walls and thatch roofs, built by the liberated convicts, known as *cases de libérés*; and the traditional Kanak hut.

Obviously, given the complex relations between the settler population and the Kanaks, the use of the word to describe a European’s house became impossible, even more so within the penal context. However, *case créole* is to be preferred to *maison coloniale* to describe these houses, despite the common linguistic use. Typologically, they are archetypal colonial bungalows and take part in a vast shared heritage with the rest of the colonial/postcolonial world. Sociologically, New Caledonian descendants of settlers (whether penal or free) are Creoles, even if the term can cause (or has caused) controversy. Furthermore, clearing away the *coloniale* element transforms the perception of these archaeological remains. They change from being the traces of an era bearing atrocities and which should be forgotten, to being

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testimonies of creolisation, and therefore of entrenchment and racial or cultural mixing, this a reality in contemporary New Caledonia.

1.3 Houses in the Bush

Rural examples of the New Caledonian case créole are a scarce and fragile heritage. The harsh living conditions and the lower durability of the coarse materials (like cob) have resulted in a drastic decrease in their numbers over the past decades. The examples still present display similar characteristics to the urban bungalows, yet some particularities can be put forth: while the general roof woodwork follows the height of Noumea houses, the verandas tend to be wider, which gives these houses a flatter appearance; and they often lack the ornaments of city houses. We have already stated that New Caledonian colonial houses are less ornate than their tropical counterparts, yet bush houses are even more devoid of ornamentation (i.e. lacking coloured glass panels, metal roof finials, decorative timber, delicate metal awnings, etc.). Finally, they are integrated in their natural landscape. Borrowings from traditional Kanak knowledge and landscaping traditions can be found in these works. Knowledge of construction materials, especially tree species suitable for certain types of woodwork were passed on to the first settlers.

Figure 4. La Résidence, near Moindou village, central New Caledonia, constructed in 1875. (Photographs by Fabienne Videault.) Louis Lagarde and Fabienne Videault, Architectures Calédoniennes, 1853-1960 (2018). Reproduced with permission by Fabienne Videault.
More importantly, houses are placed in accordance with their
topography, similarly to the main hut of a Kanak hamlet, at
the end of an ally of sacred trees like endemic pines (*Araucaria
columnaris*, fig. 4).

Following this train of thought, it is notable that after the land
redistribution of the 1990s, the colonial properties of the east
coast of mainland New Caledonia were given back to Kanak
tribes, the traditional and rightful owners of the land. While
some bungalows have been burnt down, in a way closing the
colonial parentheses, most of them are now reoccupied by
Kanak chiefs. This further testifies for the aesthetic/technical
links between the large bush houses and the vernacular hut.
Such borrowings within colonial architecture are already well
documented. Therefore, if colonial architecture is in many
ways a transplant of a European standard (or of an already
tropicalised European standard, in this case), one must not
forget that as with any human technical creation, a piece of
architecture falls into its timeframe (because it resembles what is
made elsewhere at the same time), location (by the environment
to which it adapts), and social context (thus using knowledge
from different protagonists, settlers from all parts of France, in
this case, and Kanaks).

2 Architectures of Modernity, 1925-1980

The first half of the twentieth century witnessed an important
demographic growth for the New Caledonian colony. Concurring
factors of economic prosperity (an excendantary agricultural
production, thriving nickel mining and a positive world economy
in the 1920s) allowed for a modernisation of the archipelago,
and of course of its main beneficiary, the city of Noumea.
Furthermore, the arrival of American military forces and Anzacs
in 1942 extended this phase of prosperity and modernisation.
Thus the period from the early 1920s to the late 1940s created a
most favourable context for the emergence of new architectural
styles, obviously borrowed from the then rapidly-changing
Western World. In New Caledonia, these influences come down
to three main categories, the regionalist trend, the Art Deco
aesthetic, and post-war modernism.

2.1 Regionalist Architectures

From the dawn of the modernist trend in 1925 at the *Exposition
des Arts Décoratifs et Industriels Modernes* in Paris, the Art Deco
aesthetic took the world by storm. Yet, within France, some

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architects were not in favour of such a dehumanised style. It was thought as lacking identity, devoid of meaning and rootedness. Therefore, in opposition to Art Deco emerged a tradition in favour of the modernisation of the regional particularities found in French provincial architectural traditions, hence the néo-normand, néo-alsacien, néo-provençal, néo-basque styles which can be grouped under the term architecture régionaliste. The dissemination of these styles throughout the entire French colonial empire can be witnessed in the large mansions of Dalat city, Vietnam, or within the French concession of Shanghai, for instance. In New Caledonia, French contractors Pierre Gaüzère, Georges Derquennes and, especially, Jules Mary were important in their popularisation. Mary became popular, designing and constructing large two and three-storey mansions for the local bourgeoisie, with stone masonry substructures, moulded concrete imitating the half-timbering of Normand and Basque traditional architectures. An eclectic personality, Mary also created buildings of radical Art Deco style, or of seemingly contradictory influences, sharing both regionalist and Art Deco characteristics (fig. 5).

Arguably, anywhere in the world, any regional creation of a new housing design, if popular and accepted, eventually becomes a new regionalist trend. Thus, in the first half of the twentieth century New Caledonia, France was not the only source of formal transfers. Through nearby Australia, the California bungalow, inherited from across the Pacific, was also introduced, with very minor transformations. During the previous period,
strong links existed between rural Queensland houses and Noumean cases croles; in the twentieth century, aesthetic links between New Caledonia and Australia were clearly maintained.

2.2 The Art Deco Trend

Paradoxically, it is the modulable aspect of the colonial bungalow that allowed the dawn of the Art Deco aesthetic. These basic and small scale constructions were intrinsically evolutive. They could have their façade replaced, sometimes with concrete masonry masking the house, making it look like a completely different construction. These Art deco façades-écran, applied to clapboard houses from the turn of the twentieth century, are an interesting take on architectural modernisation, and their examples in New Caledonia form an independent family. These renovations or embellishments paved the way for houses made entirely of concrete masonry, constructed by a new generation of architect-contractors.

Loosening its links with the classical language of architecture, the Art Deco movement was aimed at translating modernity, futurism and progress. Thus, and ever since, architecture is no more exclusively a perpetuation of tradition but rather

Figure 6. Examples of Art Deco façades, Noumea, including works by Jules Mary (top row, centre) and Martin Böttcher (top row, left and right, bottom row, centre), 1945-50. (Photographs by Fabienne Videault.) Louis Lagarde and Fabienne Videault, Architectures Calédoniennes, 1853-1960 (2018). Reproduced with permission by Fabienne Videault.
the creation of a new form, the shape of which must follow function. Architects and designers are therefore no longer solely “ornamental creators” but rather “inventors of structures.”

The dawn of Art Deco architecture in New Caledonia (fig. 6) was reduced to the private sphere. At a time when the colonial administration was still using the vast constructions built half a century earlier by convicts, the private housing market was on the rise thanks to a demographic increase, an economic boom, and the introduction of the automobile, which allowed Noumea’s hilly surroundings (Orphelinat, Mont Coffyn and parts of the Vallée des Colons) to be urbanised.

In this context, the arrival in the late 1920s of several contractors (amongst whom the Czechoslovakians Martin Böttcher and Henri Reita) prompted an era of Art Deco construction influenced by the then-booming European markets. Although not formally trained as architects, they were the major contributors to New Caledonia’s Art Deco heritage, along with Australian Alexander Jamieson and Frenchman Pierre Raighasse. Böttcher (1904-84) alone, constructed no less than 34 private houses or buildings in Noumea over a 30-year career, 29 of which are still standing today (fig. 7). Born in Spišská Nová Ves (present-day Slovakia), he deserves to be considered as the equivalent of Paul Veysseyre in the architecture of Shanghai’s French Concession, or Ali Tur in the architecture of Guadeloupe.

Typologically, the new houses produced are more complex than their older Creole equivalents. Of course, the sole use of concrete replaces the older mixed-means Creole bungalows.


12 Christiane Terrier and Véronique Defrance (eds.), Nouméa de 1854 à nos jours (Nouméa: Ville de Nouméa éditions, 2012), 194.

13 Ali Tur (1889-1977) was commissioned to reconstruct Guadeloupe after the island was devastated by a hurricane in September 1928. Between 1929 and 1937, he supervised the construction of over 100 buildings of modernist style. See Robin-Clerc, Guadeloupe.
The advantages of reinforced concrete allow the construction of bow-windows, porches, cantilevered structures, and the greater minerality of the façades can be counterbalanced by the application of decorative motifs in moulded concrete (fig. 8).

Inside, comfort and practicality are key elements; outdoor food preparation areas are abandoned in favour of indoor kitchens. We also see the architects taking advantage of Noumea’s hilly suburbs to create built-in garages and basement laundries, while the main reception and living quarters are located on the first floor. This allows for better views, and the creation of interesting moulded concrete exterior stairways leading to the house’s main entry. Modern roofing is made invisible by the use of single sloping and the creation of decorative parapets, which give more importance to the façade and its elements. The tendency to indulge into the modernity of a globalised world is very clear.

Notably, the rare elements of colonial architecture to survive in this phase are the louvered shutters, still in use on some
windows, and some verandas supported by concrete columns and pillars, showing great diversity.

Lastly, the major difference between the New Caledonian house of the Art Deco period and the colonial bungalow is the creation of clearer frontiers between inner and outer space. In Creole houses, French doors and verandas created intermediate spaces and constant airflow, but temperature regulation in concrete houses was dealt with in a different way. Not only do the lower roofs of concrete houses allow less ventilation, but the insulation qualities of concrete are poorer than timber. In these new houses, the veranda or porch is limited, windows are diminished in both number and size. If the colonial houses were insulated through open spaces and airflow, insulation is here provided by isolating the house from the warm exterior, and by providing new technical means: concrete dual walls separated by air, isolating the inner wall from the exterior, high ceilings, and flooring made of new materials such as granite or cement tiles, with minimal incursion of exterior air during the warm hours of the day, creating an entirely different way of life.

2.3 A Particular Element of the Art Deco Trend: Art Deco Furniture

If the first settlers coming to New Caledonia brought their own furniture with them, it is quite obvious that they rapidly needed its replacement. Due to the local weather conditions, veneered pieces, for instance, very common in nineteenth-century French furniture, do not resist the humidity of the tropics—a fact well documented for the whole colonial world.14

Figure 9: Art Deco style interior, with club armchairs and corresponding “cosy-corner” type sofa, Noumea. (Photographs by Fabienne Videault.) Louis Lagarde and Fabienne Videault, Architectures Calédoniennes, 1853-1990 (2018). Reproduced with permission by Fabienne Videault.

At first, the penal population was once again put to work to provide new nineteenth-century French-style furniture from locally-harvested, climate resistant timbers.\textsuperscript{15} After the convict period, the modernisation of houses caused a renewal of the local furniture market. The new interiors required adjusted furnishings, and Noumean architect-contractors would soon team up with cabinetmakers to provide new, fully furnished houses to the city’s bourgeoisie clientele (fig. 9).

High and narrow pieces such as single-door *armoires*, two-storey dressers, and poster beds disappear in favour of larger, flatter pieces, such as sideboards and chests of drawers. New types of furniture also appear, thus mixing functions: innovative dressing tables, club armchairs, duchesses, cosy-corners, liquor/book cabinets, beds with integrated bedside tables, etc.

The exuberance of ornamentation which was the decorative characteristic of both late nineteenth-century furniture and the Art Nouveau style is here replaced by formal simplicity and functionality. As the façades of Creole houses were replaced by solemn and mineral constructions, house furnishings followed the same path, a modernising trend where function gradually takes precedence over decoration.

### 2.4 Post-war Modernism

Taking a different path from Europe, New Caledonia not only allowed the Art Deco aesthetic to survive but to thrive, well into the 1950s. The streamline aesthetics of the early post-war era are clearly visible in some of Noumea’s then tallest buildings.

\textsuperscript{15} Jean Carol, *Le Bagne* (Paris: Ollendorf, 1903), 66-68.
Therefore, it is only when an important modernisation of Noumea’s infrastructure was needed that new architectural styles were introduced into an otherwise slow-paced colony. This time finally arrived in the early 1960s, when it was decided that Noumea would host the 1966 Pacific Games. Thus, the construction of the Anse Vata multisport complex and Olympic pool, and the Noumea stadium, allowed the first generation of New Caledonia-born (and French-trained) architects to display their talent and love of modernity. Jacques Rampal, who had accomplished his final training in Le Corbusier’s company, and Gabriel Cayrol, an admirer of Richard Neutra and Frank Lloyd Wright, were the main contributors to the development of these works.16

Quickly following the Pacific Games, a very important nickel boom generated previously unthought of income for the territory, which paved the way for massive immigration from France and from the French-speaking Pacific. With an artificially elevated population and sudden economic prosperity, New Caledonia was primed to enter a radically renewed architectural paradigm.

Buildings like the Jacques Iekawé building (Gabriel Cayrol and Jules Mary, 1964, fig. 11), the New Caledonia Museum (Pierre Raighasse, 1967), the Noumea Post Office (René Lecourt and Gilbert Allègre, 1973), the Noumea Town Hall (Georges Buzzi and Jacques Rampal, 1979), all display evident characteristics of the “international style,” with their prismatic forms and the


Figure 11. “Jacques Iekawé” building, by Gabriel Cayrol and Jules Mary, here under construction in 1963, Noumea. Courtesy of Noumea City Museum collection.
display of selected features of their structural elements. These key buildings, still preserved today, act as a chronological marker of an era.

Conclusion

These latter constructions were finalised in the late 1970s in a decolonisation context within Melanesia, with Fiji gaining independence in 1970, Papua New Guinea in 1975 and Vanuatu in 1980.

Because of its status as a settlement colony and the demographic imbalance not favouring the indigenous Kanak population, independence by referendum was not possible in New Caledonia. The 1980s thus witnessed a period of political instability and near-civil war. It was only after many deaths, including that of charismatic pro-independence leader Jean-Marie Tjibaou (1989) that the situation began to stabilise, with a progressive decolonisation following more and more autonomy being granted by the French State.

All the architectural productions I have put forward were created by or for settlers or settlers’ descendants. While their architectural qualities are certainly present, their heritage status, because of New Caledonia’s difficult colonial history, remains a debatable question. Heritage is, by nature, a matter of choice, for no one can force onto someone else the acceptance of any architectural piece as their patrimony. Yet education and contextualisation can contribute to recognition, which, in turn, can lead to appropriation by communities a priori unconcerned with this part of New Caledonia’s recent history. At a time where New Caledonia, as a future country, is searching the means of its “shared destiny,” this is, partially at least, the aim of this paper. 17

17 Communauté de destin, or “shared destiny,” is the idealised future at the basis of the Noumea Agreement, signed in May 1998 between pro-independence and anti-independence political representatives, settling for a progressive decolonisation of the archipelago through extended autonomy within the French Republic, a process resuming in 2022 at the latest.
“You Can’t Say that at SAHANZ”: Critical Nearness and the Role of Autoethnography in Architectural History

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If distance (or objectivity) is the scholarly discipline of architectural history, then what is the role of nearness; does it suggest an undisciplined or less rigorous standpoint? Kim Roberts challenges this artificial division by focusing not just on the reception of architecture by audiences, but also on her own subjective responses as a researcher. In this paper, we too consider the proclivities of accepted historiographic cultures. We reflect critically on the relationship between architectural history and its historians through the methodological frame of autoethnography which foregrounds personal experience as an explicit component of the sense-making process of research. Autoethnography navigates distance and nearness to critically connect the personal to the cultural, in the process unlocking conversations normally excluded from academic literature.

Our reflection is informed by critical analysis and our own autoethnographies of articles on the periphery of the field by respected scholars including: Naomi Stead (2009 and 2010), Karen Burns (2010), Christine Phillips (2011), Arijit Sen (2013), Roy Brockington and Nela Cicmil (2016), and most recently by Kim Roberts (2019) and Maria Tumarkin (2019). Our paper respects the genres we traverse; it is structured by SAHANZ’s stylistic convention of distance; and intercepted by the first-person closeness of autoethnography, through the correspondence generated by writing this paper together. Our paper is also a dialogical response to the scholars we focus on. While autoethnography may appear to be less rigorous than analytical criticism, we argue it offers new and significant dimensions for architectural histories and historians, and their audiences.

Keywords: autoethnography; subjectivity; situated practice; disciplinary convention; research culture
As a recent guest editor of Fabrications, I found myself negotiating the obstacles thrown-up by the submission of articles that embraced autoethnography. How could we possibly uphold blind peer review when an author openly discusses her neighbourhood, the place she conducted her doctoral research and her existing body of work? But to dismiss an article because it is difficult to review, when the work was both compelling and rigorous, did not seem like a choice available to us—at least not an ethical one. Yet messing with the integrity of the very practices that ground our discipline is no trifling concern. In employing alternative forms of writing architecture, Stead has observed that “transgression is not an end in itself” and that “when the only rule is to bend the rules, it’s a treacherous and boggy ground.” For me, this paper seemed like a chance to pull together what has already been done, to analyse it critically and understand the unique affordances of autoethnography for architectural history. Cristina is interested in the idea of acculturation within our discipline and the practice of so carefully hiding this culture away; the mess disguised, the trailing thoughts ordered and made concrete by the framed authority of the archive. Rebecca.

All autoethnography, according to Walter Goldschmidt, is focused around the self and reveals “personal investments, interpretations and analyses.” What is our investment? We believe there is unrealised value in autoethnography for the practice, culture, and reception of architectural history. Autoethnography challenges the conventions of traditional research by critically analysing personal experiences in order to understand cultural experiences. Our investment in autoethnography is both personal and disciplinary, arising from several personal experiences that have been integral to our academic endeavours. Yet to make these explicit, would be a scholarly faux pas. The goal of autoethnography is not an exercise in navel-gazing but aspires “to write meaningfully and evocatively about topics that matter and may make a difference, to include sensory and emotional experience, and to write from an ethic of care and concern.”

Rebecca, I find myself turning over our position, what is our argument? It’s as if experience is discounted within the discipline. But how else can we understand the practice within which we are situated? This makes me think about the distinct rules within writing on

4 Adam, Jones and Ellis are referencing Walter Goldschmidt and his seminal article “Anthropology and the Coming Crisis: An Autoethnographic Appraisal,” Anthropologist 79, no. 2 (1977). Adams, Jones and Ellis, Autoethnography, 16.
5 Adam, Jones and Ellis, Autoethnography, 1.
6 Ellis and Bochner, “Autoethnography, Personal Narrative, Reflexivity: Researcher as Subject,” 742.
architecture. Who gets to claim “voice” and who doesn’t? The architect, (more so if they are renowned) is given the stage to proclaim the narratives on their work. The opponent to the architect is the critic, who also gets a speaking part. Then there is the architectural historian, whose conventions of the third voice position them off-stage, at a distance where anonymity produces authority and rigour for conventions of the universal voice and blind peer-review. Unlike the architect and the critic, the academic is not allowed to voice the intimate, the personal or the process of research and writing. And yet, if the angst and concern in writing this paper is anything to go by, writing is a difficult and fraught practice, one that asks us to put ourselves on paper, to make an original contribution and to endure necessary scrutiny by our peers. C.

The increasing demand for “research impact” anticipates our research will engage with new audiences, not just those beyond the discipline but also beyond the institutions that sustain us. In a context where the value of architecture and the architect is being constantly marginalised, architectural history is also, and arguably more so, at risk. This seems to be evidenced in the anecdotal reductions to the history and theory content of architectural qualifications in Australasia. At this time and in this discipline, we wonder if examining architectural history through its engagement with autoethnography might prove useful. Fellow members of SAHANZ, do we have your attention now?

Methodology

Architectural history does not simply live in the publications produced by historians, but also in the performances and practices that engage with its production and reception. Our paper consciously glides between the detached and the intimate by weaving the argument through our own voices and those of others. Our paper is both process and product; “the medium is the message.”

Cris, our reviewer observed that autoethnography can seem “self-indulgent, unrigorous and of marginal interest to anyone but the author.” We are acutely aware. Yet they also acknowledged it can be useful “when other avenues of scholarly investigation seem exhausted, insurmountable or unsuited to the subject matter.” What are the qualifications relative to each


8 Personal correspondence with academics at the University of Melbourne, University of Auckland and University of Newcastle.

condition? Three years post-PhD I wrote a paper to excise the emotional pull the hospital sites I'd studied continued to hold over me.  

This presents an example of the exhaustion of traditional, archival architectural history methods—to solve this final, nagging problem, something else needed to be brought to it. Subject matters that are too personal, where participant groups may be considered too vulnerable, or an experience too particular—perhaps these provide examples of the insurmountable, where traditional methods could simply not be applied? Unsuitability we relate to the reception of architecture. As William Whyte so poetically phrased it, there is “a history of the gaze as well as of the brush stroke … the production of space owes as much to those who consume it as it does to those who create it.”

Archival material seldom reveals the subjective responses of inhabitants to an architectural space and yet, so much architecture is designed with precisely this in mind: designers shape experience, they manipulate the material environment in order “to affect people’s moods and guide their behaviour.”

In defining the characteristics of autoethnography, Adams, Jones and Ellis suggest it aspires to bring personal experience to fore; placing value on subjectivity and the reflective practice of the researcher, embracing storytelling and first-person narrative in the process. Personal experience enables a critique of existing cultural practice to be made by unlocking conversations that might not otherwise occur in academic literature (is this the “insurmountable”?). The critique is enabled because the genre seeks to form an explicit connection between the personal and the cultural, achieved by providing an honest account of the sense-making processes that underpin cultural practices. This includes those processes that relate to disciplinary research cultures—autoethnography requires an honest account of the road taken to reach a conclusion.

We began by identifying eight papers from within the discipline of architectural history and theory that employed autoethnography or an aligned writing practice. Our criteria for inclusion was critical nearness—autoethnography was employed to draw on the experiences of the authors in a rigorous way. For this reason, two papers were quickly excluded: Arijit Sen’s “Staged Disappointment: Interpreting the Architectural Facade of the Vedanta Temple, San Francisco” (Winterthur Portfolio, 2013) uses autoethnography as a metaphor, rather than a methodology; and Roy Brockington and Nela Cicionil’s “Brutalist
Architecture: An Autoethnographic Examination of Structure and Corporeality” (*M/C Journal*, 2016) used autoethnography as a method but failed to critically analyse the author’s experiences in ways that unpacked their acculturation within the discipline or any other cultural context. Autoethnography is not just experience writ large; it is the systematic interrogation of this experience.


We first met in person to agree on lines of inquiry and decided to read the selected papers in isolation. Author one made reading notes as a series of letters to author two, while author two kept notes in the form of a diary to be shared. Amounting to seventeen pages, these notes documented our respective sense-making processes as we grappled with the issues illuminated within and across these six papers. Autoethnography recognises this sense-making process as an explicit type of data. 15

Cris, the reviewer suggested our analysis was observational as opposed to analytical—the latter seeming to carry the underlying promise of objectivity. Yet so much architectural history is constructed via personal readings of an archive, within the broader context of that archive’s existence. If we apply an expanded definition of an “archive” (with thanks to Cvetkovich and Steedman16), then how is our reading of these six papers, within the broader context of our discipline, any different? The historian first observes then assembles the most likely explanation, as objectively as possible, from a so-often incomplete archive and the buildings that survive around it. Are we to pretend this is a definition of objectivity? As


you’ve previously observed, the historian is always present in the histories they write—but this presence is covert. R.

Sense-making is not simply observation and description but requires a critical approach to the combined data of artefact (the papers) and the experience (reading and writing this paper). It asks us to question why we think the way we do, not just drawing on our own individual cultural histories, but also on those of the artefacts being examined. Notes and drafts were traded, back and forth via email, and annotated by sms exchanges until this article reached a form sufficient for peer-review. As Burns has observed, writing is a practice which shapes thought.\(^\text{17}\) By extension, the peer-review process is a disciplinary conversation framed by culture and politics as much as any discourse. We need to acknowledge that the process of writing together, and within the discipline, is a negotiation. What one academic puts forward can be accepted, rejected or reshaped by others. So, to be true to the genre, this paper cites from our initial notes throughout, without treating these as revered archival substitutes—they have been revised, rephrased, rewritten, rewoven and embroidered with our peer-reviewers’ comments.

Navigating Distance: Autoethnography and its Use in Architectural History

The six papers can be loosely grouped into two; where the autoethnography focuses on the experience of a physical site; or a collection of scholarly work. Stead’s two papers fall into the first group. Her 2009 paper is framed by the concept of sensory urbanism and the 2010 paper by the phenomenological turn to experience in critical tourism. Both of Stead’s articles employ experimental writing forms to challenge the conventions of architectural and urban history to interrogate the experience of two cities. Burns’ paper falls into the second group. She interrogates her collection of architectural books as an archive, drawing on her autobiographical marks and scribbles (marginalia) to reframe canonical figures within her ongoing feminist intellectual inquiry. Both Stead and Burn’s work the use of autoethnography as instrumental. It is aimed at challenging conventions and speaking for the gaps in the discipline, the things we all know and do, but are too afraid to put forward.

The final two papers, by Tumarkin and Roberts are longer autoethnographic engagements. Tumarkin, reflects on her own body of work over the past two decades and the way it

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has emerged from, and is interwoven with her personal life. Tumarkin, like Burns, uses autoethnography to critically appraise how her scholarly trajectory has been shaped by the culture she belongs to. Roberts’ paper is more like Stead’s. She focuses on her relationship with the Hiroshima Peace Memorial Cenotaph to explore the memorial’s affective pull as a site of ‘unfinished business.’

Hey Cris,

Christine Phillips asks how do we integrate personal experience with architectural history? She argues that a critic’s own experience should be used to convey sensorial qualities of space; its use; and the relationships that occur between spaces and people. Phillips conception of autoethnography, however, is similar to that of Brockington and Cicmil, in that it assumes subjective experience—or attentiveness to the everyday experience—fused with the knowledge of the architectural historian is somehow enough. As architects, we value the phenomenological, but this is a trap; autoethnography is not simply about subjective experience, it’s about taking that experience, reflecting critically on it and using that to say something more.

R.

Rebecca, I agree. Phillips raises the right questions; the first half of her paper is excellent, but this critical approach is not applied to her datasets. Like psychoanalysis, autoethnography compels you to excavate below the surface to reveal how your experience is a reflection of your acculturation. The significance of Stead’s and Burns’ papers is situated as much within their argument, as how it is said—it is the instrumentality of autoethnography that embodies its transformative potential.

Stead’s papers use autoethnography to narrativize the urban experience of walking in two cities, the first in Stockholm (2009), and the second in Sydney (2010). But while she is the first to traverse into this territory in our analysis, she is not alone. She is responding to a seminal paper in critical tourism studies by Soile Veijola and Eva Jokinen, titled “The Body in Tourism.”¹⁸ This paper is provocatively written in the first person and addresses the reader, or co-author directly, collapsing the distance of the universal voice to introduce us to key tourism theorists—Dean McCannell, John Urry—as if on a tropical holiday.

R. It is probably necessary to disclose to the reader aspects of lineage here, having been Naomi’s PhD student and come upon Veijola and Jokinen’s article, which I shared with her. Her response was gleeful. Off-course, I had no idea why it was so significant, I was naïve and unacculturated. Now, some ten years later, with trepidation, I read her caution in the 2010 paper on the risks of this approach. I wonder what the consequences of our own foray will be? Cheers Cris

Stead’s paper really belongs to the genre of ficto-criticism, where the “emphasis is always on the work done by the criticism—this is the privileged term, with less honour and credence given to the contributions of fiction.”19 While the walk is “imagined” rather than “real,” the narrative is based on her lived experience. She was undertaking a Post-Doctoral Fellowship in Stockholm, while living in Sydney and knew these places intimately. What distinguishes this paper from those we’ve discarded is her inclusion of the academic process in the published paper. She writes:

I wanted a paper that subverted the customary placeless and universal scholarly voice through a subjective embodied sensuality and recounting of a specific locale, specifying dates, times, exact street locations, recounted in the urgency of the first-person present tense. But I still wanted something which “worked” in the sense of having an argument and conclusions, adding something to the store of human knowledge, taking account of a broader scholarly literature and placing itself within that, being engaging on a scholarly level as well as a literary one.20

Because of this, “Writing the City” makes the autoethnography instrumental. While the paper begins with a narrated walk in Sydney, it calls upon the process of writing, its iterations—drafts—and notes, plus peer reviews (both blind and collegiate), to help the reader understand the discipline’s disregard, while acknowledging the cultural mores and conventions. Stead positions this as a form of resistance and quite deliberately gathers up, unpacks and makes sense of this resistance as she lived it. This lead to stead presenting at subsequent conferences, hosting two symposiums and guest editing an issue of Architectural Theory Review.

R, Burns’ 2010 paper was published in the issue of Architectural Theory Review edited by Stead. C.
It is not surprising then, that Burns’ paper also uses this
disciplinary resistance to locate her argument. Like Stead she
is walking though known territory, not just her own library/archive, but also the cultural territory of the field of architectural
history. Her paper then specifically draws on the way
particular texts become memorialised as “instruments of canon
formation.”21 Burns is making reference to the work of Derrida,
Eisenmann, Tschumi, Wigley, and Bloomer.

R, suddenly the footnotes become critical, to not
consider them would be to ignore the trajectory of the
conversation, like not checking who is telling the tale
at a swanky cocktail party. Burns sets the scene for
deconstruction—first in a neutral way and reconstructs
this through the convention of romance as a way of
demonstrating how histories are stories: “Writing never
arrives as a useful, neutral instrument but comes coded
with prior histories.”22 Burns’ reframing of Pete and
Jack’s relationship as a romance, (a “bromance?”) is a
way of slowly revealing the intimacy we seek in reading
the work of others. By presenting their interlocution
as if a Shakespearian play, staged by a well-regarded
theatre company, she has directed our attention away
from our own processes of reading and writing. Not
for long though. She deftly captures our attention by
revealing her own fan-girl relationship with Meaghan
Morris, and causing me to think about my own
intense academic encounter with this cultural studies
authority, drawing me in closer to Burn’s world—I am
not so distant, perhaps I can relate, consider myself a
participant not-quite-so-far from the centre? Or at least
with company at the margins?

Burns’ subversion of canonical figures—as Pete and Jack—
cleverly withdraws the reverence and distance we give
architectural historians and theorists through their publications.
In a sense the universal voice and the published work serve
to create a separation, one which can feel impenetrable to an
outsider even when they are present, like here at SAHANZ.
The field is as much a society and culture as it is a body of
knowledge. Stead and Burns’ engagement with this personal
knowledge is risky precisely because it opens up the discipline’s
culture and conventions to scrutiny.

Tumarkins’ paper is a long reflection on her career and the
way in which autoethnography was critical for giving meaning
to her work on traumascapes. She convincingly argues that
such a subject matter, which demands empathy, can only be

fully addressed by understanding *prima facie* of the affect such landscapes and places blanket us with. Similarly, Roberts’ article does not simply reflect on a single subjective experience as a tourist but reflects across the duration of her doctoral research process, one where she has grappled with her responses to this site, turned them over in her mind, across years and subsequent visits; comparing the close range with the distant experience of the site she studies.

We note that Tumarkin and Roberts’ papers lack the sense of risk and anxiety of Stead and Burns—one produced by an anticipated resistance in their work. While Tumarkin and Roberts both engage with physical places, with architecture, with memorialisation and haunting (sense of place), neither are proponents in the field of architectural history *proper*. Both identify themselves within the fields of culture and communication, and communication and creative arts, respectively. 23 Foregrounding this fact is by no means an attempt to discount their contribution, but it does explain the ease with which they are free to position themselves within their text without the need to instrumentalise their voices in the way that Stead and Burns’ (and even Phillips to some extent) have had to. This bias, within the discipline of architectural history, is confirmed by the points raised within our peer reviewer reports. Our act of writing this paper was linked to the “selfie generation” and the “need to insert oneself [in] the frame.” 24 Yet personal and subjective experience in scholarship is not really a new phenomenon, instead, as Kitrina Douglas and David Carless argue, it has been devalued “and systematically removed from human and social science research over the course of the past century in response to calls for methods that more closely parallel research in the natural sciences.” 25 Yet, as Tumarkin has observed, “the autoethnographic framework both enables and supports [a] continuous interrogation of one’s positionality, history, privileges, biases, blind spots, agendas, and motivations.” 26 In this paper here, we too, hope to have made a contribution.

**Risk, Resistance … Opportunity?**

Stead and Burns have both openly discussed the resistance they encountered in using autoethnography and how easily the value of this type of work is dismissed. Stead recalled that the audience to whom she presented an early conference paper, was not able (or perhaps unwilling) to engage with the work as “part of a systematic critical endeavour”:

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23 Kim Roberts is currently employed as a heritage planner and architect for Context, a Melbourne based firm that has led the field in social value over the past three decades.

24 From the peer-review reports for this paper.


the overwhelming sentiment was amusement: at my audacity in attempting such a thing, and at the thing itself as a novelty or curiosity or perhaps a gimmick .... Some discussion focused on the literary aspects of the text ... if I would just rewrite some of the dialogue less "stagily," I could publish it in a literary magazine [as a short story]. 27

Burns too was aware that her autoethnographic act “[ran] the risk of having one’s work ruled out as irrelevant to the discipline.”28 While this specific comment referred to her deliberate “unbalancing of the architecture/writing couple” through her focus on writing instead of buildings, it was nonetheless situated in a broader set of concerns that cropped up throughout the text:

For those of us working in the academy, we swim in the currents of an institutionalised writing practice ... we write in part according to what we know. We are written on by social and cultural conventions .... The question of how to speak remains sharp for me ... [how to] find a way of saying something different. How to run the risk of being ruled out of order.29

This resistance within architectural history is not just evident internally within the discipline. In their recent articles published in Fabrications, Roberts and Tumarkin both spoke openly of the value of authoethnography for their research. For them, autoethnography is productive. Roberts, although working on the margins of the discipline is nonetheless acculturated within it, and acutely aware of the opposition she would encounter. Her opening paragraph is a stake in the ground, challenging the accepted practice within architectural history of failing to admit, or discuss, the impact of our affective encounters with the sites we study. She accuses the discipline of “blindness” in the way that we:

turn our heads from the experiential outcomes of architectural objects and landscapes .... When it comes to the subjective experience (that of others, but especially our own) we are eager to anchor, bury or bed it down firmly amidst solid and aggregated evidences: hard—irrefutably (and preferably officially) documented—fact.30

In contrast, Tumarkin had no reason to anticipate this resistance and provided a reactionary response following reviewer feedback. In defence of autoethnography she wrote:

27 Stead, “Writing the City, or, the Story of a Sydney Walk,” 234.
28 Burns, “Ex Libris,” 244.
it is a way of not replicating the damaging dichotomy between the researcher’s work and their being in the world—the dichotomy that strikes me as foreign and dangerous … it is also a way of asserting … unapologetically, that my research is always personal … registered bodily and physically, often approached intuitively, its precise shape and areas of urgency determined by something I can only call my moral core.\textsuperscript{31}

Roberts’ research recognises there is always a disparity between design intent and the lived reality of spatial use—the authority of the architect at odds with a site’s public meaning. She describes this as a kind of “discomfort” that “make[s] new demands” both on methodologies and the language we use to report our findings.\textsuperscript{32} Her argument is that subjective experience provides the key to unlocking this knowledge. However, this is only part of the potential autoethnography can bring, it can also make explicit the conditions of research and therefore contextualise results, as well as the culture and conventions of a discipline as Burns and Stead have done.

\textit{Rebecca, there is here, like in all scholarship, a question of lineage, one which we are also subscribing to here, in this paper. C.}

The articles by Stead and Burns were sophisticated, scholarly and appropriately self-critical, they were also self-conscious; aware of their own risk and experimentality. They employed autoethnography instrumentally to reveal constraints within the cultures of architectural history. The more recent papers, by Roberts and Tumarkin, are almost bombastic by comparison, self-possessed and entirely unapologetic. Tumarkin has the advantage of time depth. As an established scholar who has inhabited autoethnography for two decades, but saliently outside the boundary of architectural history. This leaves us with Roberts then, as the most recent scholar to speak autoethnographically from within the discipline. Roberts wrote with full knowledge of Stead and Burns’ work—to be more precise, she wrote this piece initially for a colloquium of ficto-criticism led by Stead. The impact of these prior works is evident in the absence of Roberts’ need to tread carefully.

\textsuperscript{31} Tumarkin, “Twenty Years of Thinking About Traumascapes,” 6.

Autoethnography and Disciplinary Culture: Towards a Conclusion

*R, perhaps autoethnography does not contribute to the content, to the history itself, but reveals the culture from which the historiographic structures emerged? Cris*

If autoethnography reveals the culture of a discipline, then we learn more from the moments of resistance; of what is not permitted and the resulting silences than from what is readily accepted. Phillips' paper, alongside the one we submit here, are conference papers; a greater degree of tolerance and experimentation is allowed in this context. Only one of Stead's papers was published in an architectural journal. Burns' paper was published, and Roberts' written, because Stead set in place the conditions to allow them via various symposiums she hosted.33 Tumarkin and Roberts' were published because we spent three days negotiating the obstacles that stood between the author's submission of these papers and the exacting rules of peer review. We have handed this year's conference editors the same problem. What sits behind this resistance? Is it fear—that of eroding the disciplinary boundaries that keep us in-check? Stead has observed this, in drawing parallels between the delivery of an academic conference paper and a performance:

*the academic conventions are exactly what allows us to think of a conference paper as not being a performance—of gender, class, culture, academic identify, all of it. Of course, it is, was, and always has been a performance of all these things.*34

Lineage is at work here again. Stead is borrowing the idea of performativity from Judith Butler (just as we are borrowing from Stead), a philosopher and gender theorist whose work has centred on the third wave of feminism and queer theory. Butler asserts that “performativity must be understood not as a singular or deliberate ‘act’, but, rather, as the reiterative and citational practice by which discourse produces the effects that it names.”35 Butler takes into account the agency of performance and by extension practice, and its impact on culture. And here the paths between Tumarkin and Stead cross. Tumarkin is also borrowing from Butler, within her concept of “grievable lives” as “an attempt to reckon with people and experiences seemingly forgotten or unnoticed in the most influential trauma theorisations in Western humanities.36 Tumarkin uses Butler to speak about the unspoken lives of place. Stead uses Butler to disclose the performances that speak for place. Here we

33 “A Colloquium on Ficto-critical Approaches to a Writing Architecture,” convened by Naomi Stead, University of Queensland, August 4-5, 2016.

34 Stead, “Writing the City, or, the Story of a Sydney Walk,” 230.


36 Tumarkin, “Twenty Years of Thinking About Traumascapes,” 14.
use Stead and Tumarkin to talk about the unspoken lives and performances of our discipline.

R. There is an elephant in the room. It’s pink and it is gender. Stead, Burns, Phillips, Roberts, Tumarkin, and well you and I all share in this, and in working to use autoethnography instrumentally to have our voices and experiences heard. I can’t get past it. But perhaps I’ll grow out of this perspective. C.

Autoethnography exposes the incidental nature of research and questions the rights we have to discuss the things we do as we practice it. Does revealing this struggle, exposing the dead ends and uncertainties, instead of tidying them carefully away for publication, somehow undermine our position? The illusion of the educated, capable researcher in control of a clean, linear process is shattered. So too is the illusion of objectivity; of critical distance.

Hey Cris,

At our first meeting you observed that autoethnography might have a pedagogical affordance. That if we only see the finished product, we can’t appreciate the journey, unpack the steps that led to the argument being formed. That autoethnography opens up the research process of architectural historians in a more explicit and examinable way; revealing biases and obsessions that remain otherwise obscured. R.

So, what then, are the affordances of eroding the distance of objectivity in architectural history? We want to return here to our reviewers’ concern with our desire to “insert ourselves in the frame.”37 Their hesitancy towards such a shift in practice draws on the widespread antagonism to public participation and popular culture. In an era of internet communication that has disrupted the traditional boundaries between authority and audience it is perhaps not surprising that there is a resistance to revealing the practice of architectural history. Rigour within our discipline is seldom expressed as an explicit set of rules, rather, it is known—and easily identified—by those who practise it. This embedded knowledge remains somehow secreted within the discipline itself. But here lies the opportunity. By opening up these processes to others, we may enable their participation. The embrace of citizen scientists can make science more relevant to us all. Similarly, citizen architectural history has the potential of opening up the discipline. Otherwise, we run the risk of remaining relevant to few. Autoethnography, used instrumentally can enable us to understand the culture of architectural history,

37 From the peer-review reports for this paper.
and in doing so open up the discipline and make it meaningful to new audiences. Autoethnography rather than diminishing the value of the historian as creator of knowledge, celebrates it and allows it to evolve.
This paper explores the contingent nature of the visual language developed in the eighteenth century by “outsider” mapmaker John Rocque—a Huguenot working in London and Dublin—in his representations of cities and architecture, and how his compromised views are echoed by the representational limitations of the map image in general. Best known for his seminal 1746 map of London, its 24-sheet plan remains a somewhat suspect example of Rocque’s representational style, the control of which having been wrested from him before publication. His Dublin map, made a decade later, is his under-celebrated master work. Its depth and range of observed detail came about as an opportunistic rebuttal to competition from the resident city surveyor, but was also compromised by errors of recording and a brazen fudging of vital topographical information. Yet, there remains an anarchic authenticity to the Dublin map, missing in its more constrained and official London sibling, an objectivity founded on the distance of Rocque’s point of view. His position as outsider in each city profoundly affected the nature of his representation of them. Comparisons of both the London and the Dublin maps and Nolli’s contemporary map of Rome, show an ever versatile willingness by Rocque to adapt to the circumstances of entrepreneurial image making as a social outsider: a Frenchman in London; a Londoner in Dublin; a Huguenot in the realm of the dominant Church of England and Church of Ireland establishment; and as an engraver with no architectural training turned to making maps of capital cities and the grand urban domain. His practice as engraver, mapmaker, topographical and architectural image maker is typical of the contingent versatility of the refugee. Such considerations open the question of the limitations and the hidden surplus of map representation, explored briefly in the conclusion.

Keywords: Rocque; Nolli; Huguenot; maps; London; Dublin
In this paper I approach the theme of “distance” in two ways: by investigating the representational consequences of being a cultural “outsider,” and by looking at the nature of the distance between image and its subject, printed map and constructed city. For the first, I will look at John Rocque, one of the most prolific city mapmakers of the eighteenth century, a Huguenot craftsman of uncertain origins, whose family passed from France through Geneva to London. In the English capital from the 1730s to the early 1760s, Rocque also lived in Dublin from 1754 to 1760. Although best known for his great 24-sheet plan of London of 1747 (fig. 1), Rocque produced a smaller, but more detailed, four-sheet map of Dublin in 1756 (fig. 2). Both of these maps are seminal source documents for the urban matrix of their cities at crucial times in their development. They are the equivalent for the English and Irish cities of Giambattista Nolli’s 1748 map of Rome. Despite Rocque’s association with them, the maps of London and Dublin are entirely different in their idiomatic expression (figs 3 & 4). That Rocque’s changing idiom and the variable quality of his city records were a function of his circumstances as outsider, is my first contention. Secondly, any graphical consequences of being decoupled from your cultural milieu are echoed by the distancing that takes place in mapmaking itself. The map figure is on the one hand a relatively impoverished mode of translating the three-dimensional architectural complexity of a city into a two-dimensional engraved cipher. Yet, it also hides within itself what Paul Ricoeur calls “a semantic surplus,” an additional untapped realm of meaning.
Rocque was an étranger, more than the “twice” (deux fois) implied by the title to this paper. He was a Frenchman in London; a Londoner in Dublin; a Huguenot in the realm of the Church of England establishment; a commoner making maps of royal estates without invitation; and an engraver with no architectural training turned to making maps of capital cities and the grand urban domain. His professional and cultural estrangement may be picked up in the nature of the map expression Rocque used in various projects.

Long associated with the 24-sheet London map, it is assumed that Rocque was a trained cartographer. In fact, the great French state-supported map-making endeavours of the early modern period had no equivalent in England, where he spent most of his professional life. There is no evidence that Rocque was trained in such scientific cartography, in either country. Neither should we compare him to Nolli, an architect and experienced

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The architecture depicted in inset boxes that framed the earliest of Rocque’s estate surveys suggests a stilted awkwardness that disappeared in later works where others were employed to create such illustrations. His record of some buildings in Dublin, as we shall see, demonstrate incontestably that he had no formal training in architectural drawing. Indeed, the accomplishment of his engraving technique, best seen in his own map cartouches, and in decorative designs he engraved for book illustrations, suggests that he was an engraver rather than a cartographer. He came to mapmaking through estate surveying, a much more primitive adjunct profession, the acquisition of the skills for which was easily picked up from widely available surveyors’ manuals.

Nevertheless, without experience as a surveyor of cities, and suggesting a degree of rash naivety on the part of those who asked him, Rocque was invited in March 1738 to survey a new map of London. The map was completed nine years later in 1747. The project was supported by the London Corporation and the Royal Society, and errors in matching the city-wide trigonometrical survey to on-street measurements were captured early enough for the map to be reconfigured at least once. The save was made by Peter Davall, Secretary to the Royal Society, based on the methodology of French mapmaker Guillaume Delisle. While he may have been initially out of his depth, Rocque was a quick learner, and long before this London map was completed he had published his own triangulated city map of Bristol, and surveyed and published an entirely independent 16-sheet map of London and its Environs.

Despite Rocque’s engraving credentials, and although he was likely to have made the fair copy upon which the published map was based, he was superseded as engraver of the 24-sheet London map by the more established local, John Pine. Nevertheless, Rocque would employ Pine to engrave Rocque’s own map of Bristol. Yet the Bristol and London maps are entirely different in their appearance, despite Pine being the engraver for both. The Bristol map, as we will see, was a typical Rocque creation. The 24-sheet London map was not, even though this is the map for which he is best known. Somewhere towards the end of its preparation Rocque’s standing in the project was reduced to surveyor only, and Pine and his fellow engraver John Tinney became the publishers.

Rocque’s idiomatic style needs to be briefly considered to understand this better (fig. 5). Although he received his ad-hoc training in map surveying in England, his engraving style was deeply indebted to contemporary French cartographic


7 Compare the awkwardly depicted mansion houses in Rocque’s estate map of Richmond (1734) to the sophisticated storied images in his Chiswick map (1736).


10 Noting that his experience hitherto had been confined to estate surveys, Ralph Hyde points out that “None of these garden plans really posed the problems, nor anything like the challenge, that would be involved in surveying what was after all the largest city in the world.” Ralph Hyde, “The Making of John Rocque’s Map,” in The A to Z of Georgian London. Facsimile of John Rocque’s 1746 map of London (Lymnpe Castle: Harry Margary, 1982), v.

11 The antiquarian and diarist William Oldys recorded that he met George Vertue in Leicester Square in March 1738 [New Style], where they “had some discourse about his grand design of an Ichnographical Survey, or Map of London and all the suburbs; but Mr. Rocque and he are not yet come to an agreement.” James Yeowell, ed., A Literary Antiquary: Memoir of William Oldys, Esq. Norroy King-at-Arms, Together with his Diary (London: Spottiswoode & Co, 1862), 19; Hyde “The Making of Rocque’s Map,” v. Although Vertue seemed to have initiated the project, in so far as the 24-sheet London map was concerned, he was superseded by the well-known London engraver, and friend of Hogarth’s, John Pine.

12 Although the 24-sheet map is always referred to as having been published in 1746, as indeed was recorded in the title, the publication date had been forced in order that the incumbent Mayor of London, Sir Richard Hoare, could be its dedicatee. In fact, the map did not appear in its entirety until June 1747, Hyde, “The Making of John Rocque’s Map,” vii.


14 Peter Davall, “Some reflections on Mr. De Lisle’s Comparison of the Magnitude of Paris with London and Several Other Cities, Printed in the Memoirs of the Royal Academy of Sciences at Paris for the year 1725, Communicated in a Letter to Dr. Rutty, Secretary to the Royal Society, by Peter Davall, of the Middle Temple, Esq.” Philosophical Transactions (1663-1775) 53 (1727-28): 432-36.
expression. Map historian Catherine Delano-Smith distinguishes between the use of macro- and micro-lines in maps, the former recording the outlines of a map’s main components, such as street and property divisions, while the latter, includes the symbols, text or linear shading which expand our understanding and the meaning of what’s recorded. Rocque’s particular brand of French map was planimetric, rejecting the bird’s-eye-view of maps such as Turgot’s Paris map. Building outlines are enlivened by a dense layer of meaningful micro-lines, that suggest the nature of the terrain, and are “carpeted” across the picture plane. Rocque’s version of this idiom is easily recognisable, particularly in his naturalistic symbols for landscape features and land use. In the Dublin map, Rocque used micro-lines to distinguish between building types, public, private or purely utilitarian outhouses, warehouses, workshops and manufactories (fig. 6). There is a profuseness here that charms us into the illusion of a lived authenticity, a “world of its own,” if not the real world. Rocque used workshop employees for some of the engraving, but always retained control of an in-house mode of expression.

We see this expressive control when we compare Rocque’s Bristol and Kilkenny maps, one engraved by John Pine (fig. 7), the other by the Irish engraver George Byrne (fig. 8).
Figure 6. Rocque, *Dublin* 1756, detail.  
(Courtesy of Trinity College Dublin Library. Reproduced by permission of the Board of Trinity College.)

Figure 7. Rocque, *Bristol*, 1743, detail.  
(Courtesy of The MacLean Collection, Chicago.)

Figure 8. Rocque, *Kilkenny*, 1758, detail.  
(Courtesy of Trinity College Dublin Library. Reproduced by permission of the Board of Trinity College.)
The appearance of those two maps is radically different to the London map (fig. 3), also engraved by Pine, as already noted. There, in the built-up areas, instead of the abundance of Rocquian detail, we get a rationalised city, whose teeming complexity is straightened under an artificial order. Having been pushed out of the final production of the London map, an implausible regularity replaced the usual Rocquian vitality.

For all Rocque’s subsequent fame, he hardly exists in what survives of the contemporary record. Pine, in contrast, was part of a clique associated with Slaughter’s Coffee-House in London, a group of sculptors, architects and artists, including Hogarth, who established the St Martin’s Lane Academy, a precursor to the Royal Academy. Patronised by Frederick Prince of Wales, and associated with opposition politics, their artistic bias was rococo rather than the establishment Palladianism of the Burlington set. Despite being in the advanced guard of those who imported rococo to England, and styling himself “Topographer” to the Prince of Wales, Rocque is not listed among surviving records of this group. Neither an architect, nor indeed a trained cartographer, Rocque’s status as craftsman may partly explain this exclusion, and why he was pushed out of the final authorship of the London plan. In this way, his being an outsider, profoundly affected the idiom of the London map. The style, and sense of authenticity is distinctly different to anything else he ever made, despite his later fame in relation to this map in particular.

Seven years after the London maps were completed, after making a number of county surveys and other city maps in England, Rocque moved to Ireland. Here too, as a Londoner, and as a Huguenot in the Church of Ireland dominated Dublin, he was an outsider again. Rocque received no direct support from Dublin Corporation or from local bodies equivalent to the London Royal Society, until after he had completed his map. Instead he faced competition from the incumbent city Surveyor, Roger Kendrick, who countermanded in the local press all of Rocque’s announcements for a proposed new map of Dublin. This protectionist reprisal from a native holder of perceived prior rights was prolonged by a series of tit-for-tat claims by both rival mapmakers. When Kendrick was eventually embarrassed by the more experienced outsider into abandoning his wholly unrealistic project—expanded to eight sheets, covering a much larger area of the city than Rocque’s map, and using a local “Citizen” as an engraver—Rocque’s proposal was also ramped-up in the level of its detail. He promised to include every single building, garden, outhouse and backyard. Such


22 For an almost complete list of Rocque’s maps, see Ashley Baynton-Williams, “John Rocque: Catalogue of his Engraved Works,” http://www.mapforum.com/05/rocqlis.htm and http://www.mapforum.com/05/rocqlis2.htm.

23 Dublin Corporation granted twenty guineas to Rocque in 1757, R.M. Gilbert (ed.) Calendar of the ancient records of Dublin, vol. 10 (Dublin: Joseph Dollard, Wellington Quay, 1891), 252, January 21, 1757. The Dublin Society, the equivalent of London’s Royal Society of Arts, merely purchased a copy of Rocque’s Dublin map, and had this coloured for a guinea by him afterwards, see Royal Dublin Society “Minute Book,” February 24, 1757.


a map represented a precipitous and foolhardy career-first for Rocque. The result, produced within two years, is the most detailed map in his oeuvre, and of any map of Dublin to that date.

One of the most convincing qualities of Rocque’s Dublin map, and one shared with Nolli’s Rome, is the character of his depiction of negative space. There is a sense in the Nolli map that it was the streetscape, the demotic open ground available to all, that was best accounted for (fig. 9). The shaded city blocks appear almost secondary, supporting the more shapely white void-figures. It is this spatial expression that excited Colin Rowe at Cornell in the 1970s and subsequent generations of

Figure 9. Giambattista Nolli, *Nuova Pianta di Roma*, 1748, detail. (Courtesy of the David Rumsey Collection.)

Figure 10. Rocque, *Dublin*, detail. (Courtesy of Trinity College Dublin Library. Reproduced by permission of the Board of Trinity College.)
architects and urban designers.27 If anything, the quality of the representation of the public ground is even more accomplished in Rocque’s Dublin (fig. 10). This map is alive with spatial variety and incident, giving the impression of a convincing contemporaneous documentation of Dublin’s early-modern street-space. In Rocque’s London, in contrast, the representation of streetspace is wholly unconvincing (fig. 11). It is as if a web of vectors for the complex of the city’s streets was computed, and onto this some optimal rectilinear geometry was overlaid. Its regularised appearance is partly to do with Pine’s choice of repetitive graphic idiom—including its relentless unmodulated brick-pattern—but also the limitations of Rocque’s London survey, resulting from the expediencies of the professional freelance surveyor at work on such a vast city.


Figure 11. Rocque, *London*, 1746, detail. (Courtesy of the David Rumsey Collection.)

Figure 12. Rocque, *Dublin*, 1756, detail. (Courtesy of Trinity College Dublin Library. Reproduced by permission of the Board of Trinity College.)
Rocque’s record of Dublin buildings—as opposed to its streetspaces—is another thing entirely (fig. 12). The results from archaeological digs in Dublin made with Rocque’s map in hand are usually fairly favourable.\(^{28}\) Under the pressure of an impossible deadline, however, Rocque cheated the building count whenever he felt he could.\(^{29}\) Moreover, his representations of key public buildings demonstrate a limited understanding of the principles of classical design. At the Parliament House on College Green, he miscounted the depth of its grand colonnaded breakfront, counting four columns where in reality there are only two (fig. 13).\(^{30}\)

His grasp of medieval architecture was worse. At Christ Church Cathedral, Dublin’s most important ecclesiastical building, Rocque, misconceiving the cruciform plan of all such buildings, staggered the transepts at intervals on either side of the nave.

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(fig. 14). But, at St Patrick’s Cathedral, which incorporated a chapel for the local French community, Rocque’s record of the building is naïve but substantially accurate (fig. 15). Rocque’s record is modified as a function of his social position—botched as an outsider to the official church of the state, naïve but accurate where he felt welcomed in the city’s second cathedral.31 There is another case in the Dublin map that suggests a doubling of the outsider perspective, this time related to Rocque’s depiction of two local parish churches of St Mary’s, one Catholic and the other Protestant (Church of Ireland) (fig. 16). In mid-eighteenth-century Dublin, although the Penal Laws had been partially relaxed, Catholic and Dissenter churches were set-back from principal thoroughfares. In this instance, the Catholic parish church was buried inside a city block, in the back yards of buildings on the west side of Liffey Street. The church isn’t labelled, our only hint of its function being the inscribed black cross inside its hatched L-shaped footprint. The Protestant building, in contrast, extended to the full depth of its city block, and stands in open space. Rocque’s representation raises this to the status of a public building by his cross-hatched code, and by adding the label “St Marys Church.” Moreover, in a rare break from planimetric discipline, four bollards at the church entrance are represented axonometrically. In this example, both the Catholic parish church as “outsider” and Rocque’s outsider deference are notable. Rocque was neither a Catholic nor a member of the episcopal Church of Ireland, but his most likely patrons were of the latter, and so this miniature rupture of three-dimensionality in the representation of their church, among other signs, establishes its distinguished nature. In contrast, the enforced modesty of the architectural setting of

the Catholic building, is matched by the modesty of its depiction by the visiting mapmaker.\textsuperscript{32}

Rocque was a freelance hand-to-mouth businessman, who remained outside political and professional hierarchies. In Dublin, with no official support, he was forced to peer over garden walls to complete his measured map. All of his changes in genre—rococo ornament, estate surveys, books of landscapes, grand city and county maps—and the changes in the nature of his idiomatic representation, appear as the agile expediencies of the entrepreneurial immigrant.

However, the planimetric town map is itself a circumscribed manner of conjuring a likeness of the bustling, corporeal and substantive materiality of cities. It is a truism, that maps are as much about what they exclude, as what they include. A plan map is a desiccated linear slice through a city. No suggestion of the materiality of the built environment is given. Is a tiny rectangle enclosed by an engraved line a four-storey-over-basement building faced with red brick, a half-timber house with gable to the street, or an urban stone cottage with a thatched roof (fig. 17)? Without supplementary evidence, little in a map will tell us. Even Nolli’s seminal code of solid and void needs the support of other images. To understand the denuded Nolli, we depend on the lush motley of Piranesi.

In architectural practice, the limitations of the plan are overcome by combining visual codes: the plan is supplemented by the elevation, section and perspective. Nevertheless, the paucity of expression in the city plan suggests its own reductionist polemic. The architectural commentator Jeremy Till compares a view by Piranesi to a drawing by the urbanist Edmund Bacon of the same junction in Rome. The Spartan reduction of information

\textsuperscript{32} Lennon and Montague, John Rocque's Dublin, 18–19.
in Bacon’s drawing serves the purpose of clarifying a particular point of view. But it is also consistent, Till argues, with the implied will-to-order of the whole modernist, and by extension backwards, enlightenment, project. 33

There are alternatives to this view of the map as denuded code. Svetlana Alpers’ insight that Dutch seventeenth-century artists were also mapping the landscape, 34 is easily reversed if we remind ourselves that map-makers are image makers too. Louis Marin’s *Utopics* also ponders the dual nature of the map as substitute for something that isn’t here, as well as being a figure or image in itself. 35 J.B. Harley noted that “[M]aps are value-laden images,” and that the mapping process involves artifice, elisions and hidden motivations, stemming from broader artistic and polemical traditions. 36 In a parallel case to the orthographic map, Panofsky has shown us that single-point perspective was not only one of a range of ways to “view the world,” but that it had its own discursive position, suggesting empirical objectivity, the appearance of truth, or even truth itself. 37 The philosopher Paul Ricoeur distinguishes between the image-as-representation and the image-as-sign, the former a “static … ‘portrait’,” the latter “dynamic … ‘expression’.” 38 Therefore, we might conclude that the mimetic substitutional qualities of the map’s image-as-representation retains, even within the mapping apparatus itself, potentially endless untapped residues of symbolic surplus.

To choose the sparsest example, Nolli’s binary on-off, black-white code of poché’d built fabric is ying to the yang of his untempered white space: the first impenetrable, dense, private, the rest liberated to the public, spaces we’re invited to enter (fig. 9). This void-as-figure, became its own model for spatial planning, the city no longer a collection of buildings, but a solid mass from which space is carved out. In contrast to Nolli’s two-tone sound, Rocque sings in polyphony (fig. 10). Significance is suggested by layers of decorative landscape pictogram fuzz shimmering amongst the plane of macro-lines telling us where buildings begin and stop. Mixed in with this layer of symbolic pictorial wealth is Rocque’s expediency, his licence arising sometimes from his dubious skills sometimes his alien status. His images are nevertheless redolent with what late-night American talk-show host Stephen Colbert calls ‘truthiness’. Their accidental qualities are what convince us—perhaps fraudulently—of their authenticity, their facticity, their tumultuous life-likeness. The Dublin map with all its chaos appears more “true to life” than the more frigid sanitised image of London. The density of incident arises from the intensity of the Frenchman’s encounter with the smaller city, his freedom from officialdom, and any


imposed putative scientific knowhow. Rocque artfully disguised the shortcomings of his survey and of his representational ability. He was no Nolli. His likenesses are more art than science; more artful—as in the Artful Dodger—than they are artistic.

The town plan is an abstracted code standing in for the abundant three-dimensional complexity of a city. Compared to a drawing, the city plan is an encrypted cypher of some unknown foreign text. For many of us, its Cartesian abstraction, its distance from the original, is its attraction, even if in theory, such abstraction may be associated with enlightenment control and exclusion. For Rocque the disguise was an opportunity. His visual grammar was contingent, that is to say responsive to the moment, and to the rich cultural topography he sought to represent. We may see the flaws in his idiomatic expression as Freudian slips exposing the weakness of his position. In this way, they offer a dropping of the mask, that help us cut through and better understand its social code.
Travels of Neoclassical Artists and “Imitation” of the Antique: Robert Wood (1717-71) and Approaches to the Ruins of Palmyra and Baalbek as Journeys through Space and Time

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Neoclassical pictorial representations created new and original images of the ancient world, providing at once access to antiquity and a shared continuity with the past with travel to remote sites as a major achievement of the eighteenth century. This paper focuses on artists who spanned great distances in space and time and the bold range of images produced of ruins which captured the imagination, since early expeditions were published. The reception and stylistic impact of these pictorial creations is measured by simultaneous translations of publications into French and German, as knowledge of the ruins of Roman cities of Palmyra and Baalbek gained a reputation architecturally as jewels in the Mediterranean constellation.

The Palmyrene colonnades were lost until seventeenth century when travelling artist Cornelius De Bruin (1652-1726), revealed their glory to the western world in a large scale panorama, recalling Zenobia’s legendary city. Eighteenth century depictions of the “Bride of the Desert,” were portrayed in Johann Bernhard Fischer Von Erlach’s (1656-1723) renowned fish-eye view and Denis Diderot’s (1713-84) reconstructions of the Temple of Bel. Travelling artists noticeably featured sweeping perspectives of the colonnades in Palmyra and Baalbek and varied elements of architectural sculpture and ornament. Unpublished notes by Robert Wood (1717-71) are presented here as this first scientific expedition journeyed to the Levant, resulting in Ruins of Palmyra Otherwise Tedmor, in the desert (1753). This paper questions Neoclassical representations and impact, creating new art historical and theoretical models for modernity from Levantine imagery, opening up vistas of visible remains. Horace Walpole proclaimed “the pomp of the buildings has not a nobler air than the simplicity of the narration.” Gavin Hamilton (1758) captured the moment of discovery of Palmyra, fore-fronting the colonnaded street, revealed as a great capriccio as the crescendo of such wondrous discoveries became a window onto the ancient world.

Keywords: Neoclassicism; architectural drawings; Palmyra and Baalbek; space and time; antiquarian travellers; Robert Wood
This paper has a three strand approach: the first explores the legacy of the architectural drawings and the impact of the rediscovery of ancient classical sites of Palmyra and Baalbek on Neoclassicism. This is measured from the wider acclaim of the publications by Robert Wood of Ruins of Palmyra, Otherwise Tedmor, in the desert (London: 1753) and Ruins of Balbec, Otherwise Heliopolis in Coelosyria (London: 1757). The approach to the archaeological sites is analysed here in terms of responses, as the unpublished extracts from diaries of Robert Wood are presented as his first impressions, as the sites were discovered. From the outset Wood’s primary goal was to inform the reader about the discoveries and attract public interest with illustrations of great accuracy and of quality and enough visual architectural detail to enable the drawings to be copied for use in architectural design, serving Neoclassical architecture.

The second strand looks to networks of architectural modernity beginning through the agency of architects and antiquarians in the eighteenth and nineteenth century with Rome as the centre. Their findings published in architectural publications, were disseminated to European capitals, instilling Neoclassical design in architecture and ornament. The reception of ideas and the stylistic impact of these illustrated volumes is measured by the simultaneous translation of publications into French and German. For example, in 1757 Ruins of Balbec was translated into French and reviewed by Abbé Barthélemy in the Journal des Savants, while Louis Francois Cassas, in Voyage pittoresque de la Syrie (1799), complimented Wood’s Palmyra volume. Horace Walpole referred to the work on Ruins of Palmyra as a noble book, with prints finely engraved “as an admirable dissertation.” The impact of Wood’s Ruins of Palmyra and Ruins of Balbec are seen as a part of innate plans where the politics of ornament created a constant dialogue, as elements of trans-European mobility. Neoclassical style provided models for architecture design, disseminated through public works and private patronage, combined new scientific methods. European cities therefore became building sites for works by some of the most significant architects of the day constructing the built heritage in a Neoclassical paradigm.

The third strand explores the varied records of the antique cities of Palmyra and Baalbek by several European explorers from the seventeenth and eighteenth centuries culminating in the expeditions by Robert Wood and his team of researchers. Wood’s expedition is notable as is this sequence of images of discovery of the sites, with new material presented as unpublished notes from Wood’s Donation, adding to a growing

1 See Elisabeth A. Fraser, Mediterranean Encounters: Artists between Europe and the Ottoman Empire, 1774-1839 (College Park, PA: Pennsylvania State University Press, 2017), esp. chap 2 focus on Cassas.

body of knowledge detailing the approach to the ancient cities. His unpublished notes provide insights into the expeditions’ working methodology and first impressions of Palmyra and Baalbek, as the rediscovery of these cities. Wood’s notes provide a personal account of an undisturbed setting of continuously occupied settlement, during the first moments of this unique discovery, coupled with impressions on seeing the elaborate Orders of Architecture: his opinions on ornament deserves to be integrated into the growing discourse on Taste and the Antique. When taken together with topography of these sites and local peoples, this new material demonstrates Wood’s intention of presenting classical antiquity imperpetuity. Moreover, this material evidence, when added to the range of scientific images produced by this excursion, and to the other travelling antiquarians and artists, demonstrates the prescience of these travellers, from the first expeditions, published in the seventeenth century to the approaching Age of Enlightenment in the eighteenth and early nineteenth century. The expedition in the Levant and the idea for the voyage of James Dawkins, John Bouverie and Robert Wood grew out of knowledge of pending Athenian expeditions, with the “advantage to the publick” as the incentive for these expeditions. These publications would advance Neoclassical studies well into the nineteenth century, as they evolved from the myth of Palmyra and Baalbek, and the approach to the ruins captured the neoclassical imagination. These mythical sites became a trope for the classical scholar, as revealed in drawings, engravings, and paintings from

Figure 1. Palmyra Colonnaded Street. (Photograph by author.)

3 Extant diaries of Robert Wood, James Dawkins, John Bouverie and Giovanni Battista Borras’s sketchbooks were deposited in the Institute of Archaeology, Society of Hellenic and Roman Studies, London; transcribed and catalogued by late Professor Michael McCarthy, UCD School of Art History in 1975 and made available by his family after his untimely death. His notes are in the Irish Architectural Archive. Grateful thanks also owing to the Librarian of the Joint Libraries of the Hellenic and Roman Societies who facilitated this research.

seventeenth century onwards: Cornelius De Bruijn (1652-1726), Fischer von Erlach (1656-1723), Giovanni Battista Borra (1713-70), and Denis Diderot (1713-83) would illustrate the experience of visiting these ruins, meticulously detailed as part of the human experience and these responses then made available to the growing network of Grand tourists. Neoclassical pictorial representations created new and original images of the ancient world, providing at once access to antiquity and a shared continuity with the past. Such art images propagated the Neoclassical concept of imitation of the past, through reproduction of accurate observations and representations of the antique building tradition in published monographs.

2 Ruins of Palmyra

Since antiquity, Palmyra was depicted from the perspective of the colonnaded streetscape. A thriving city from its establishment, with the Hellenistic settlement clustered along the Wadi-al-Suraysir from north-west to south-east stopping at the oasis. The city expanded to include the construction of the Temple of Bel on one side and a colonnade towards the Agora by the end of the first century AD. The colonnade was cut by a transverse street, the main open space an oval forum inside the Damascus gate and a third and fourth intersecting street, with a tetrapsylon adjusted for the orientation of the temple site. A necropolis lay outside the walls. During the third century AD, this was a flourishing cosmopolitan centre at an oasis crossroads, in which the Persian and Greco-Roman world merged in complex ways with Zenobia, Queen of Palmyra, the leader who challenged the might of Rome and Emperor Aurelian, an idea that later fired Romantic sensibilities (fig. 1 & 2).

2.1 Seventeenth Century Expeditions to Palmyra

Tedmor (Tadmor) grew up around the ruins of Palmyra, as the Roman city was abandoned overtime to be occupied overt time by Arabs settlers. The ruins would become a destination for European travellers in the seventeenth century, evoking the
glorious past of the grandeur of the Roman Empire. Combined efforts to establish the archaeological legacy of Palmyra, in an excursion of British merchants in 1678 and 1691 led by William Halifax (1655-1718), Chaplain of Aleppo (1688-95), were reported to the Royal Society and published in *Philosophical Transactions* (1695). The account detailed landscape and environment of natural surroundings, including landmarks such as castles, aqueducts and ancient inscriptions, and references to local inhabitants. Halifax’s narrative was divided into ten parts from “Tadmor Castle,” “The Valley of Salt,” “Tadmor,” “The Temple,” “A Mosque,” “An Obelisk,” “The Banqueting-House,” “The Palace,” “The little Temple” and “The Sepulchres” written into the margins. These points of interest would become a visual narrative of the city. The panoramic engraving “A view of the Ruines of Palmyra alias Tadmor, taken on the Southern Side” (fig. 3) resulted from this expedition.

A coinciding tour involving Dutch explorer Cornelis de Bruijn (1652-1727) with artist Gisbert Cuper (1644-1716), combined with information from a diplomatic travelogue of Consul Coenraad Kalkbrenner (1687-89), resulting in an image copied by de Bruijn (1652-1727). Political manoeuvres by British and Dutch East India companies, vied for information for trade along the silk roads (fig. 4).

The painting viewpoint has a wide vantagepoint as the city was revealed in glorious panorama, recalling the Halifax expedition and in all likelihood drawing on this earlier image. Another early eighteenth century depiction, Johann Bernhard Fischer Von Erlach’s renowned fish-eye view, was also based on this panoramic sweep over the site with a focal point of the triumphal arch in the background along the colonnaded street (fig. 5).
Figure 5. Fischer Von Erlach, Interior View Palmyra 1700. (Private Collection.)

Figure 6. Denis Diderot, Palmyra Temple of Bel, engraving by J.A. Defehrt, *The Encyclopedie ou Dictionnaire raisonne des sciences, des arts et des metiers, par une Societe de Gens de lettres* (1767). (Private Collection.)
Erlach spent years as court architect to Charles IV, gathering information on the most notable buildings in the known world for his *A Plan of Civil and Historical Architecture* (1721), featured Palmyra and this image also learned from the Dutch/English panorama as a precedent.\textsuperscript{10}

Equally, Denis Diderot (1713-84) in *Encyclopedie ou Dictionnaire raisonne des sciences, des arts et des metiers, par une Societe de Gens de lettres* (1767), produced a reference work for the arts and sciences focused on specific reconstructions of the Temple of Bel, Palmyra, engraved by J.A. Defehrt. These images paved the way for politicisation of ruins. As Diderot said “The ideas ruins evoke in me are grand. Everything comes to nothing, everything perishes, everything passes, only the world remains, only time endures . . .”\textsuperscript{11} His engravings featured plans, sections and perspectives of the colonnades in Palmyra and Baalbek (fig. 6).

\subsection*{2.2 An Expanding Network of Scholars from Rome Outwards}

A major archaeological expedition to the Levant in 1750-51, was led by Irish Classical scholar Robert Wood (1717-71). Wood developed a keen interest in classical antiquity at Oxford, and together with James Dawkins (1722-57) and John Bouverie (1723-50) and Giovanni Battista Borra (1713-70), explored the remote regions including “most of the islands of the Archipelago, part of Greece in Europe; the Asiatick and European coasts of the Hellespont, Propontis, Bosphorus, as far as the Black-sea, most of the inland parts of Asia Minor, Syria, Phoenicia, Palestine and Egypt.”\textsuperscript{12} Wood’s tour to the Levant was a joint enterprise and one that turned “antiquarian tradition of individual voyages into a collaborative enterprise of a team of experts with a clear distribution of assignments.”\textsuperscript{13} Wood had interest in translating inscriptions and capturing topography, Dawkins was the patron who funded the expedition and the ensuing publications, Bouverie was the antiquarian and Borra the draughtsman.\textsuperscript{14} These publications combined architectural and topographical elements (fig. 7).\textsuperscript{15}

Borra was receptive of this attitude and his ability to draw architecture and render detail accurately is indicative in his 103 rendered plates, for both publications, now held in Royal Institute of British Architects London.\textsuperscript{16} Wood was elected to the Society of the Dilettanti, in 1763 and recommended that Richard Chandler with Nicolas Revett and William Pars be sent on mission in 1764 to record *Antiquities of Athens* (1764)
and publish *Ionian Antiquities* (1769). The combined effect of the Stuart-Revett proposal was already being made felt.\textsuperscript{17} The social circles that they moved in in Rome encouraged intellectual debate with the discovery of antique at the forefront of the cultural conversations.\textsuperscript{18} The written English language narratives would make their way into contemporary learned libraries, a copy of *Ruins of Palmyra* was collected in Library of Archbishop Marsh of Dublin established in 1707, where accounts of first hand travelling experiences and volumes dealing with inscriptions and epigraphic findings.\textsuperscript{19}

The corresponding set of unpublished notes by Robert Wood (1717-71) presented here, demonstrate the expansive nature of this undertaking as this first scientific expedition journeyed to the Levant. Wood expressed in the introduction to *Ruins of Balbec*, the empirical attitude combining information to cater for the meticulous copying of classical orders with a view to informing modern design. The notes below are descriptive with a level of detail which does not find its way into the published volume.

### 2.3 Wood 18A Unpaginated in the hand of Wood’s Daughter

*We entered the plain extending itself northward and a little to the east a perte de vue and having on our right and left a chain of hills which might be about ten miles or more distant from each other. This lain is like the desert that I passed in going to the Euphrates, being gravelly, though not equally so, some parts being hard,*


\textsuperscript{18} Later the network would be expanded in Rome to include the Circle of Caledonians, which included Allan Ramsay and Robert Adam. Adam would design a mausoleum for Wood. The portrait of Wood painted by Ramsay 1755 depicts a fresh young man writing with a map of Greece *ILLESPTO/EVROPA*. Brendan Cassidy, “The Reception of Gavin Hamilton’s Paintings” in *The Fusion of Neoclassical Principles*, ed. Lynda Mulvin (Dublin: Wordwell, 2012), 41-53.

others soft and sandy with tufts of wild thyme here and there of a fine smell, also great quantities of Kele, particularly towards Palmyra. …

We had at the same time the prospect of a most extensive desert plane to the south but advancing a little further we discovered the Ruins of the city, which the hill had covered.

I was vastly struck with so surprising a number of stately columns without any other sort of building all within, but of a stone which when it has lost its polish discovers a course vein though it looks extremely well.

We were led to what they call the Castle which is a most magnificent temple with a vast colonnade which has been built up in some parts to make a place of strength by the Turks. With in are about 20 or 30 mud houses which contain all the recent inhabitants of Palmyra making the wall round the temple serve as a defence against the wandering Arabs. …

Upon the first survey that we made of these ruins, I observed in general, a most immoderate profusion of expense in the buildings that remain, No Order appears but the Corinthian, except a few Ionic pilasters mixed with the former in the great temple. The Windows, doors and all the pieces of frieze and cornice are loaded with ornament most of it extremely well finished; in short everything look like the work of Power and Riches and surprises no doubt greatly with its magnificence but seemed I think to show how the decline of good Taste. …

There is no such thing as an elegant simple piece of architecture. Ornament and expense supply the place of Proportion …; but that there are some things which might please even in Athens or Ionia. There is a particularity which I have never before saw which is that most of the columns have about the middle of the shaft a sort of modillon Sticking out, sometimes of the same stone with the shaft, and sometimes fixed in a hole cut in the column. It is I think they served as pedestals for statues. For most of the honorary inscriptions are either upon the face of those modillions or immediately under them on the column, and on top of the modillions are two marks for iron cramps with the places cut for feet, one foot a little before the other in the usual position of statues.
Wood had strong views on the topic of design and taste versus the ornamentation of architecture. The published description was less copious and restrained, these notes demonstrate his first response expressing wonder at the discovery of the ruins in their historic setting. It is a significant view which will become part of the mainstream discourse on the decline of Taste in the Neoclassical discourse.  

Those buildings which I have seen in Greece of the best architecture are almost all of the more simple plain Doric and Ionic, rarely the Corinthian. Which came later in vogue upon the decline of Taste. I observe that Order is most esteemed and still more ornamented than before, and I believe if we examine a little it into the rise and progress of all the fine arts. Architecture painting music and we may add poetry etc. in countries where they have flourished we shall in that after their happiest period the first set to decay is always by too much never by too little ornament.  

The Valley of the Tombs was a revered part of the site, and the expedition recorded the site making enduring observations (fig 8). Wood expressed his interest in these in his notes also. 

In the sepulchres at Palmyra are several mummies. Perhaps Zenobia, who was proud of being descended from Cleopatra, might affect to imitate Egyptian customs. . . .

Such were the ruins of Palmyra, the most considerable remains of ancient expence and magnificences perhaps in the world; though both Rome and Athens no doubt show piece of architecture much more worth seeing for Taste and Proportion.  

Joshua Reynolds (1723-92) in his Discourses wrote on the distinction between imitation and copying as a creative exercise and an artistic progression which reflected the many concerns of the new style of Neoclassicism explored principally through the work of Robert Wood. Fuelled by these discoveries the Society of the Dilettante in London would fund artistic drawings of the compilation and publication of Antiquities of Athens (1762) and Ionian Antiquities (1769) as the artist James Athelstan Stuart (1713-88) and Nicola Revett (1720-1804) together with William Pars (1742-82) and Richard Chandler (1738-1810) would hence to Rome, Athens and Asia Minor. The expedition that led to the two volumes of Ionian Antiquities being published in 1769 and 1797 by order of the Society of the Dilettanti, London, has been well documented. R. Chandler was the “classical part of the plan and director of the whole operation,” N. Revett, the “province of architecture,” and W. Pars was the “painter taking in views and copying Bas reliefs.” Robert Wood was a guiding hand in the expedition, and his death in 1771 overshadowed the production of the latter volumes. They departed for the expedition from England in 1764 and went to Athens, Aegina, Epidaurus, Argos, Mycenae, and Delos. In 1766, they left for Ionia where they visited the Temple of Apollo Didymaeus, the Temple of Minerva in Priene, and the Temple at Teos, among other sites. These voyages are recorded in Lionel Cust, History of the Society of the Dilettanti, ed. Sidney Colvin (London and New York: Macmillan, 1914). For further analysis, see Jason M. Kelly, The Society of Dilettanti: Archaeology and Identity in the British Enlightenment (New Haven CT: Yale University Press, 2009). 

Two stone capitals from Baalbek were presented to the National Museum of Ireland, now untraced.
3 Ruins of Balbec

Wood’s expedition continued north to Baalbek, resulting in *Ruins of Baalbek, otherwise Heliopolis in Coelosyria* (1757), with attention given to the temple of Bel engraved by G B. Borra (1713-77) who captured the temple with scientific accuracy (fig. 9).

The situation and site of Heliopolis was noted for its scenic beauty, in the Beka valley between Lebanon and the Anti-Lebanon ranges, Roman Syria. The religious sanctuary began in the first century BC and completed by c. 250 AD. Roman Baalbek had featured in Pococke’s *A Description of the East* (1745), yet the publications of the drawings by Wood, were landmark by the addition of their measurements. From his diary entries which present further intimate knowledge about the site at Baalbek and his views on ornament are outlined more particularly here.

3.1 Unpublished Diary Extract “Wood 18A” Temple at Balbec

*The inside of the temple where the statues etc. were standing must have been the richest imaginable. Near this are the remains of a larger temple of which only nine pillars are standing with their entablature. They have the grandest air of anything I ever saw in architecture, It appears on the bases of four other parts*
of columns standing on the opposite side that the whole peristyle consisted of 10 in front and 19 on each side. …

If we consider the architrave of the grand door (which is I think the most beautiful piece of rich work I ever saw), Consisting of one stone, and what is still more surprising the cornice of the Great temple at Balbec with several other immense stones raised to vast height. It will much lessen our surprise as to the raising of such stones as we have an account of in the temple of Diana at Ephesus See Pliny’s description … the ore I reflect upon these surprising works of Balbec and Tadmor, the more I am surprised there should be no satisfactory account handed down to us of them, Had they existed in Pliny’s time the architrave of the temple of Diana would not have wanted the assistance of a goddess.

Subsequently, three of nine columns of the Temple of Jupiter drawn by GB. Borra fell in the earthquake in 1759, also recorded by James Bruce after 1759. Wood described the grandeur of Baalbek before the destructive earthquake of 1759 and in these reflections appears to literally put the site on the map.

4 Reception and Responses in the Eighteenth and Nineteenth Centuries

The reception and stylistic impact of these pictorial creations is measured by simultaneous translations of publications into French and German, as knowledge of the ruins of Roman cities of Palmyra and Baalbek gained a reputation architecturally as lost cities of the Mediterranean. Neoclassical painter Gavin Hamilton (1723-98) captured the moment of discovery of Palmyra by Wood, Dawkins and Bouverie in 1758, witnessing the event in Roman dress, in this viewpainting which fronted the colonnaded street revealed through a theatrical frame, as a great capriccio, and window on to the ancient world. This genre was reflected in explorer paintings such as the depiction of Benjamin West (1738-1820), by Joseph Banks (1743-1820) in 1773 (a botanist on the HMS Endeavour expedition to Australia and New Zealand, 1768-71) and David Roberts (1796-1864) would later create such historistic scenes of the Baalbek keystone in his Travels in the Holy Land (1855).

For many, the colonnaded city of Palmyra and the temple at Baalbek became a sublime trope in the Age of Enlightenment and the defining image circumscribing Neoclassical art values. As foremost radical thinkers of the eighteenth century Diderot’s


26 The publication A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful (1757) by fellow Irishman Edmund Burke linked Baalbek and the picturesque movement and implemented a change in the history of architecture and landscape in Europe, as intrinsic elements of Neoclassicism.

focus on presenting the monuments in the city in these drawings, was a further measure of the impact of Robert Wood’s study. The encyclopaedia served as a treasury of Enlightenment ideas with knowledge coming from all corners of the globe. 28

5 Conclusion

Robert Wood brought to bear a scholarly difference in his interest in combining the topography with the landscape vistas, completing the narrative with the details written down in his unpublished notes, and supplying information for a comprehensive land survey as well as images of the architectural detailing, plans, elevations and sections. The visualization of a building in this fragmented manner was a first, to become part of the canon of building studies utilized by James Stuart and Nicolas Revett in *Antiquities of Athens* (1762). The published accounts were well-rounded as the implied sequences of topographical maps and prospects of landscapes became central to the Neoclassical debate. The accurate identification of geographical features, followed by measured surveys of the architectural elements as well as recording the setting or geographical location of the sites, which would help to greatly improve understanding of the many isolated architectural members of plans, elevations and sections and decorative motifs in their context as was published.

Neoclassical artistic representations created impact in new art historical and theoretical models from Levantine imagery, attracted by the accuracy of the drawings and fascinated by picturesque sceneries. In translating monographs, notions of imitation from antiquity to present day, were disseminated through publication in several languages and for example were brought to Germany by Heinrich Gentz (1766-1811) who recommended Wood’s Palmyra publication to his students at the Bauakademie (1806). 29 The widespread awareness of Wood’s drawings of Palmyra and Baalbek was clear as these volumes were acquired by King George III for his library at Cumberland Lodge and acted as a source for details executed by Robert Adam (1728-92) for designs at Osterley and Syon House, and Adam would later design Robert Wood’s mausoleum. 30 The nexus of this developing network was Rome where Wood and Borra would meet Adam, Chandler and Par. Wood acknowledges this network in his introduction to *Ruins of Palmyra*.

The impact of the rediscovery of the two most prominent ancient sites of Palmyra and Baalbek, on Neoclassicism was measured


in their wide acclaim. As more complete knowledge of the ruins filtered through, these cities gained a reputation architecturally by the eighteenth century as the jewels in the Mediterranean constellation. This was due in part to the perspectives of the colonnades in Palmyra and the temples at Baalbek by artists. The void left by such recent acts of iconoclasm is a empty strike in the face of international community and global patrimony once established so forcefully by the expeditions from Halifax to De Bruijn to Wood and his colleagues, during seventeenth and eighteenth centuries by those most scientific explorers who captured the essence of taste and the antique though space and time.
The Distance between Myth and Reality: Constructing a Modern Architectural Identity in Rural Queensland

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From the 1960s, the projection of an Australian architectural identity, nationally and internationally, drew from myths surrounding white settlement and centred on the settler homestead in its rural setting—notwithstanding the facts of a highly urbanised population and an increasingly pluralist architectural setting. This paper will reflect on the distance that opens up for the architect between architectural intentions linked to faithfully reconstructing images of identity and the facts of the individual architecture project. It will address these issues by introducing one project, “Morocco” (1963), a house for Stan and Noela Wippell, located on the floodplain of the Balonne River in the western Darling Downs, Queensland. The paper will then compare “Morocco” with contemporaneous and subsequent architecturally design homesteads by the architect, John Dalton, as well as other Australian architects.

By 1963, Dalton had built a series of homestead “style” houses in the dry, sclerophyll forested suburbs of west Brisbane. However, “Morocco” required the homestead “style” be negotiated with the reality of the “outback.” The gap between romantic myth and the reality of station-life manifested itself in very prosaic matters. The proposed paper will address literal and figurative distance; the distance between the ideal image and particular circumstance; and between myth and fact: the glamorisation of the bush myth and the problems brought about by remoteness. It reveals that mythologies of settlement provided a wealth of material for grounding paradigms in a specific place.

Keywords: Queensland mid-century modern architecture; myths of settlement; Australian interior landscapes; national identity; Australian homesteads
The “homestead” is intrinsic to myths of white settlement in Australia. If the image of a settlers “hut” in a rural landscape setting embodies the struggle by white settlers to subjugate nature through physical effort and by solving challenges with whatever was to hand, the homestead indicates tenure. Images of “hut” and “homestead” have persisted, sustained in art, literature and architecture, as the source of an Australian identity, notwithstanding the facts of a highly urbanised population and a pluralist architectural setting.¹

This paper reflects on the distance that opens up from the 1960s between images of the homestead arising from the settler myth as the model for an appropriate “indigenous architecture,”² and the particularities of that myth already redundant, in order to demonstrate the limits of the myth itself as a motivating idea and means of validation. The discussion will focus primarily on one project, “Morocco” (1963), by John Dalton Architect and Associates, that was designed as a station homestead for Stan and Noela Wippell located on the floodplain of the Balonne River, between Roma and St George, Darling Downs, Queensland. The paper will then compare “Morocco” with other architect-designed homesteads from the 1960s and later, including by Guildford Bell, John Andrews and Daryl Jackson, as well as another rural project by John Dalton twenty years later. The comparison reveals the persistence of settlement mythologies, and the role of the homestead idea as a vehicle for validating and translating discourses into an Australian context.

Incongruity in the Search for Identity and Modernism

It is widely accepted that the Australian self-identity is entwined with its interior landscapes.³ The circumstances surrounding the emergence of this sense of a “national interiority” is critical; it has become the lens through which modernism in Australia became normalised.⁴

The work of artists such as Russell Drysdale and Sidney Nolan during the 1940s and 1950s, and Patrick White’s character, Voss,⁵ corroborated in the “return to the frontier paradigm.”⁶ Art historian Elizabeth McMahon describes this as constituting the arts’ “territorial annexing of Central Australia,” with such work possessing a “spatial imaginary” that “shaped the modern ‘man’ [sic].”⁷ Such views are contested in recent times by the incontrovertible evidence of a nascent modernism in the much earlier work of artists such as Grace Cossington-Smith and Margaret Preston. The reluctance to accept these works as the earliest instances of Modern art has been attributed to the fact

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⁵ Andrew McCann, “The Obstinacy of the Sacred,” Antipodes 19 no. 2 (December 2005): 152-57; Shirley J. Paolini, “Desert Metaphors and Self-Enlightenment in Patrick White’s ‘Voss,'” Antipodes 4 no. 2 (Winter 1990): 87-91. Voss is frequently cited as embodying this frontier character. Ironically, Voss, who is based on the doomed explorer Ludwig Leichhardt, is tasked by White with discovering and interpreting for the people of Australia, the meaning of the interior of the continent, and ultimately fails in his quest.

⁶ Elizabeth McMahon, Islands, Identity and the Literary Imagination (London: Anthem Press, 2016).

⁷ Elizabeth McMahon, Islands, Identity and the Literary Imagination.
they depict the local and domestic. The collective consciousness of a nation could not consolidate around images of women’s work. 8

For in fact and myth the settler role is an entirely gendered one; where “white” women were excluded from the early stages of settlement; and “no encumbrances” was the first rule for employment in the bush9—an edict that lead to the abuse of Aboriginal women by (white) men.10 Further, as the “civilising” influence, “white” women arrived after a settlement was established, but were then left, often for extended periods, to fashion a “home” whilst the menfolk pushed flocks of sheep further into the interior in the quest for more and better pastures.11 The voracious accumulation of land by squatters was particularly rapid and bloody12 in Queensland before its separation from New South Wales13 and this led to the consolidation of wealth and power in the hands of a few, the squattocracy, who enjoyed an expansive lifestyle.14 The land selector who came after the squatters, seemed to occupy the smaller and less viable tracts of land, while truly embodying the settler myth.15

Even this brief overview reveals how settlement myths hide serious omissions and incongruities. The murder and dispossession of first peoples was overlooked in the 1960s when the architecture discipline was searching for a normative from which to derive an Australian modernism and its identity. The notion of the homestead as the outcome of settlers responding practically to the rigours of local circumstance with whatever materials were ready to hand, and then made it an ideal model.

The Colonial Past and the Search for Identity in Australian Architecture

In a pictorial essay titled “Post War Domestic Architecture” published in Architecture and Art, June 1961, the editorial reads: “If modern architecture has a link with our colonial beginnings than these houses reveal this link.”16 It is illustrated with a range of projects including John Dalton’s Head House (1956). The text focuses on identifying the shared characteristics of modernity underpinning a “national” style by attributing “unmistakable similarities between the architecture of north and south Australia” to “wide and sweeping eaves” and a “common regard and sympathy for the use of natural materials.”17 The editorial also notes a generic “reliance by almost all on some form of modular planning and expression and provision for some form of indoor-outdoor living facilities.”18

8 Plant, “The Lost Art of Federation.” Plant locates the “genuinely modern revolution” in the 1930s with work by Grace Crowley, Margaret Preston, Ethel Spowers, Dorrit Black and Evelyn Syme, as well as the more widely acknowledged work of oi de Mestre, Sam Atyeo, Russell Drysdale, Eric Wilson, Frank Hinder, James Cant.


10 Arthur Boyd began his “Bride” series (more correctly “Love, Marriage and Death of a Half-caste”) after a trip to Central Australia in 1951, which followed is immortalised by Arthur Boyd in his 1951 “Bride” series depicting half-caste and indigenous brides.

11 Freeman, The Homestead, 60: “women were responsible for ‘beautifying’ the head station by decorating, gardening and entertaining; women set the tone of the colonial dwelling.” Also: “the presence of a wife and family … throws a halo of domestic felicity around the bushman’s dwelling.” And: “women started vegetable and flower gardens and the establishment of gardens meant the building of an enclosing fence around the home station.”


13 Fitzgerald, A History of Queensland, 145. Fitzgerald observes, “(white) women were outnumbered by men four to one.” Also: “Queensland remained a male-oriented and male-dominated frontier society … well into the twentieth century” (149).


15 Land selection introduced through legislation in Queensland from 1860 resulted in smaller parcels of land closer to settlements being made available, initially through leases, for more intensive cropping.


17 “Post War Domestic Architecture,” 39.

18 “Post War Domestic Architecture,” 39.
The Head House was one of a number of homestead “style” houses, that Dalton had built in the dry, sclerophyll-forested suburbs to the west of Brisbane by 1963; others included the Young (1956), Spink (1956), Leverington (1961), Crozier (1962), Whitehead (1963) and Stirling (1963) Houses. Photographed in black and white before their manicured gardens were established, they are characterised by natural colours and finishes, treated timber, and the low spreading roof forms of the traditional homestead. Many of these houses also featured in the popular press. The Head House featured in “Simple Dignity in Ranch: New Ideas Enhance the Ranch,” in Australian Home Beautiful, in which the “ranch house” is promoted as a “favourite form of home with every Australian generation since the foundation of this country.”19 The Stoneham House (1964) was described by John Hay in the Sunday Mail as: “making the best of two worlds” as a “ranch-style” house with a flat roof section and a pitched roof section.20 The Leitch House (1967), for a retired couple who had spent a great part of their life in the pastoral industry in western Queensland, is described by Dalton:

*The long low expression of the Leitch house embodies design characteristics of the region: 8ft wide verandahs, galvanised steel hoods over the windows, batten screens to verandah ends, roof cripples to accommodate high internal ceilings and low verandahs, all naturally evolved out the client’s needs. The older furniture, and the interesting collection of a Queensland family’s lifetime have been enclosed in a form that succeeded in relating to the personal and private lives of the occupants.*21

In conventional accounts of Queensland architecture, Dalton’s work is more frequently associated with the development of a climate responsive modern house for the sub-tropics. It is strange then, that Dalton, who regularly derided style driven design responses, preferring to promote the search for an appropriate and “indigenous” architecture,22 allowed his work to be associated with the homestead “style” or its American equivalent, the ranch “style.”

Architect designed homesteads west of the Great Dividing Range are not common in Queensland. The Wippell Homestead, “Morocco” (1963), by John Dalton Architect and Associates for Stan and Noela Wippell, is one little known example. “Morocco” was a working station, located on the Balonne River, a braided river flowing into the Darling, on the western Darling Downs.


“Morocco” shares the formal characteristics of Dalton’s climate-responsive through his ranch-like Brisbane projects. The design is one level with wings of single banked rooms to maximise cross-ventilation and roof overhangs to limit sun penetration. In the new temperate setting of Darling Downs, these same characteristics delivered an outcome that was romantic in idea, and a practical, first principles approach to design for the harsh, inland climate, constructed from local labour and materials.

Case Study One: Probing the Distance between Settler Myths and Fact: The Wippell Homestead, “Morocco”

“Morocco” was commissioned by Noela Wippell, who far from echoing the lonely figure on the edge of a Russell Drysdale landscape, took matters in hand by commissioning John Dalton Architect and Associates, a fashionable Queen Street, Brisbane practice, to design a modern home for her family.23 Through her reading of the popular press, Noela Wippell knew of the importance of good climate responsive design and it was on this basis she approached Dalton’s practice. After marriage to Stan Wippell, Noela moved onto her husband’s family property and assumed responsibility for the domestic arrangements and the children’s education, whilst Stan managed the property and livestock. However, she was not prepared to accept the existing elevated timber farmhouse. Built during the depression using green timber24 and neglected during the post-war period, the existing house was in need of significant repair. The Wippell’s
decision to engage a fashionable Queen Street architect attracted local interest. In settler mythology, the housing of humans rarely had precedence over station operations and livestock welfare.

Remoteness brought complexities. The project was commissioned before construction of the Roma-Surat Development Road and access to the property was over black soil roads through paddocks that were dry and dusty or heavy after rain dirt roads. Dalton insisted on supervising and made six one-day site visits during the course of construction, flying into Roma. Noela Wippell would collect Dalton from “town,” two hours away by car.25

The new house was located in the homestead compound, not far from the original elevated timber farmhouse and adjacent a number of other timber outbuildings.26 The new homestead took no clues from the original house or its relationship to site and setting (fig. 1). Its final design accommodated, in addition to space for a family with small children, a separate entry for shearsers from the yard to the farm office and enough storage space to enable the self-sufficiency of a small community for extended periods, especially during the summer wet when access roads were impassable. It included cold rooms large enough for a slaughtered beast. Dalton’s solution involved separating functions into wings divided by courtyards. Each wing was oriented east-west with long elevations facing north and courtyards between (fig. 2). This solution enabled the separation of farm operations from the family living spaces. A string of services and storage extended the length of the south elevation. The living space was large enough for a dining table


25 Jill Hammond recalls her mother, Noela Wippell on the drive to “town,” opening and closing gates behind her with white gloved hands. Gloves were an essential item of dress in conservative society during the early 1960s. Interview with Jill Hammond and Noela Wippell at 48 Curzon Street, Toowoomba on 18 February 2016.

26 The original elevated house was repurposed for hay storage.
and a billiard table and occasionally, for church services. Twelve-foot deep, flyscreened, north facing verandas ran the length of the living space on the north. Here children played and were home schooled safe from insects, poisonous reptiles and roving marsupials.

The Western Downs has a greater diurnal and seasonal temperature range than Brisbane. Concessions to the temperate climate included the use of concrete slab floors and mass walls as a heat sink for winter months. The fireplace, chimney and mass walls on east and west elevations extend beyond the eaves line on an angle that recalls Frank Lloyd Wright’s Taliesin West. Photographs of the house under construction indicate double-skin brickwork ready to be faced with fieldstones sourced from Wayamba 15 kilometres way. The low-pitched gable roof extends well beyond these walls protecting them from solar heat gain in all but the coldest months. Stan Wippell and station hands built the house using structural timbers sourced from trees felled and milled on site, using machinery deployed in building the original farm buildings. Whilst entirely romantic in its idea and built using local labour and materials in line with settler ‘myths’ of make-do, “Morocco” was a modern house. Building expression was the result of design decisions addressing prosaic matters such as the maximisation of cross-ventilation, the application of sun path data for summer and winter and the control of insects and wildlife rather than the imposition of any pre-determined form. The result is a long, low house nestled into its site, a sheltering roof casting dark shadows on stonewalls, with timber beams and eaves picked out in white paint and deep verandas promising cool. It demonstrates what Robin Boyd in 1951 described as an “Australian” response, in that it referenced “vernacular and anonymous architecture” through the expression of shelter and layered spaces, often involving a pergola or veranda.  

Noela Wippell and John Dalton consulted on interiors, which involved a modern palette of materials and colours. Differences of opinion arose only in relation to the reception of the house in its rural setting; leading to an argument about fencing for the house compound. Noela insisted on the need to keep children safe, and stock and native animals at bay, whereas Dalton wished to maintain the illusion of the modern settler’s house embedded in an extended rural landscape. The low chain wire fence seen in images of the house taken by the family soon after it was completed was the compromise solution, but otherwise the relationship between the house and its rural setting remained uninterrupted. 


28 “Morocco” ceased to be the Wippell family home and was sold in 2006.
Comparisons: Guilford Bell’s 1960s Homesteads

There are few contemporaneous architect-designed homesteads in Queensland besides the two designed by Guildford Bell for Australian Estates pastoral holdings. Both “Burleigh Station” Homestead at Richmond (1965), and “Kalamia” Sugar Mill Manager’s Residence (1964) near Ayr, are elevated above their surroundings and topped by a pyramid roof,29 which, as Norman Day notes, becomes in Bell’s hands, a “platonic architectural element.”30 A rhythm of vertical framing, flyscreen and mullions elements under a pyramid roof delivers forms strongly redolent of the vernacular Queensland House, rather than the horizontal lines of mid-century modernism. “Coochin–Coochin,” he Bell family’s historic homestead near Mt Alford where Guildford Bell spent time playing as a boy, exhibits the deep verandahed spaces and hipped roof forms characteristic of a Queensland homestead.31 Philip Goad identifies in Bell’s work a “refinement of forms,” and “an obsession with the visual aesthetic of the whole.”32 Day attributes this to “a deeper level of architectural scholarship and exploration.”33 Bell’s rural Queensland projects are self-consciously mannerist, not “simple, ‘natural,’ unornamented response(s).”34 This differs from those design features demonstrated at “Morocco,” which by comparison, is an exegesis of Dalton’s principle preoccupation with “ways of living life” as “the mainspring” for an appropriate and “indigenous” architectural form.35 For both architects, a commission for a remote rural dwelling provided an opportunity to explore the relationship between built form and the vast interior landscapes, where the settler homestead became the touchstone for exploring these ideas.

Case Study Two: Mt Manning Station: A post-Modernist Reading of the Homestead.

Explorations of farm typology as an idea, persisted through the 1970s in rural work of architects including Glenn Murcutt, Philip Cox, and Chris Kringas in Queensland.36 It resurfaced in the 1980s when the question of an identity for Australian architecture again preoccupied the profession. Glossy publications such as Rude Timber Buildings in Australia (1969), by Philip Cox, John Freeland and Wesley Stacey; The Australian Homestead (1972) by Philip Cox and Wesley Stacey; Australian Woolsheds (1972) by Harry Sowden; and Peter Freeman’s The Homestead (1982), all documented and/or romanticised extant historical fabric making it accessible to the general public. Old


Interestingly, Bell’s other rural projects are also distinguished by geometric ordering; “Birkenburn Station” (1964), Bungendore, outside Canberra in the Australian Capital Territory, by series of concentric circles and “Boudiki Farm,” Kilcare Heights (1966) outside Sydney, by a linear arrangement of solid and void organised symmetrically about an axis.


34 Hamann, “The Return to the City,” 33.


36 Ian McKay, Robin Boyd, Hugh Stretton and John Mant, Living and Partly Living (Melbourne: Thomas Nelson (Aust.), 1971)

See architect-designed “homestead” by Graeme Gunn’s House for Mr and Mrs D. G. Yencken at Tathra, NSW completed in 1969 (72-75), and Chris Kringas’ House for Mr and Mrs Stevens at Doncaster, Richmond, Qld., completed 1969 (84-89).
continent, new building (1983), edited by Leon Paroissien and Michael Griggs, and Australian Built, edited by Michael Griggs and Craig McGregor, both initiatives of the newly formed Design Arts Committee of the Australia Council, promoted Australian architecture nationally and internationally. Although intended to reflect the pluralist nature of Australian architecture at the time, Paul Walker and Karen Burns note a privileging “conceptually” of “regionalist” architecture. Both publications are illustrated with anonymous farm buildings and celebrated ones including John Andrew’s House at Eugowa, NSW (1981); House at Mt Irvine, NSW, by Glenn Murcutt (1979); and Jackson House, Shoreham, Vic., by Daryl Jackson (1980).

Similarly, the cover of Detailing, National Identity, and a sense of Place in Australian Architecture (1984) features a delicate aerial perspective in coloured pencil, by Noela Hills, of Richard Allom’s Birdsville Shire Hall (1982)—a vast sheltering roof pressed low against the arc of the earth’s horizon. The language of farm buildings in steel or timber and corrugated iron, masks a range of intentions: referencing various Postmodern paradigms; Critical Regionalism’s recovery of history and the vernacular; and an interest in the aesthetics of new technologies, and environmental consciousness. The homestead provided one model by which a number of new paradigms were translated, rather than transplanted, into Australian contexts.

It is interesting then, that twenty years after the completion of “Morocco,” and challenged ideologically by the very idea of Postmodernism, John Dalton accepted a commission in 1980. The client, another exceptional modern woman, Mary-Newton...
Lou O’Dwyer, engaged Dalton to assist with extensions and renovations of an existing homestead for a pastoral holding, in Mt Manning Station overlooking the Condamine River, Queensland. On accepting the commission, Dalton, who thought he had retired from practice to a quiet life in rural Allora, apparently quipped “once more then … this time with love.”

Dalton’s solution for the O’Dwyer family involved relocating a contemporaneous four-roomed cottage adjacent to the existing farmhouse to create a north-facing courtyard, and stitching together the existing house, the relocated house and the new additions, with a twelve-foot veranda. In doing so, he maintained existing spaces with social rather than merely functional significance, such as the original entrance hall, an important ceremonial node in station life (fig. 3).

The practice of extension through the accumulation of sheds and small structures was, and still is, common in rural areas. The appearance of a collection of small structures, the hallmark of the traditional homestead, had ironically provided the justification for a number of Dalton’s suburban houses from the 1970s including the Peden (1972), Vice Chancellor’s (1972) and Louis Residences (1974) in Brisbane. The unity in the composition of this collection of buildings, with their different gable and pyramid roofs, bullnose and skillion veranda lines, and a variety of plate and ridge heights, was achieved through the introduction of a consistent datum for veranda plates and pergola beams. Dalton further assisted in knitting the existing home and contents with the new, through a collection of building artefacts built into the homestead in a collagist manner reminiscent of practices by Charles Moore. Mt Manning Station is Dalton’s post-modern take on the model provided by “Coochin-Coochin” homestead. Literally and figuratively, far from the gaze of his critics, the homestead provided Dalton with a mechanism for his translation of Postmodernism into the local context. Mt Manning Station can be described in the same manner Dalton described the earlier Leitch House (1967): “The older furniture and the interesting collection of a Queensland family’s lifetime have been enclosed in a form that succeeded in relating to the personal and private lives of the occupants.”

Conclusion

The interrogation of several rural projects by John Dalton and others, provides an opportunity to reflect on the settler homestead as an abstract idea and its role in architectural discourse in Australia from the 1960s onward. The paper
confirms the homestead as a reference point and device for mapping Australian architectural responses in sub-urban, rural and remote location designed well into the twenty-first century.

The homestead operated as a compound to gather all the functions of human life together and to provide a sheltered centre symbolic in the face of a vast and hostile landscape. Through symbolisation—a process of transformation that separates subjects from their reality—and through mythification it is possible to engage with the positive aspects of these stories whilst suppressing the negative connotations inclusive of the domination of indigenous peoples and environment through force, and the marginalisation of women by omission. A distance has opened between the ideal image and its less palatable associations, and the result is the glamorisation of rural and remote settlement for use in promoting Australian identity in art and architecture. In light of the de-colonisation project, an awareness of the distance between the myth and historical fact should now open new questions about identity.
If the first histories of architecture did not address space by naming it as such, the concept operated under cover—suggested by terms like order, rationality, proportion, rhythm, harmony—and was turned into a powerful epistemological tool. Not only did it distinguish the “good” from the “bad,” but it came to differentiate between architecture and non-architecture. From Seroux d’Agincourt (1783/1823) to the 1901 edition of Banister Fletcher’s A History of Architecture, its referentiality had been progressively refined, associated with the norms and principles of architecture. Meanwhile, its misconception, deriving by a defective use of its substitutive terms and by an excess of decoration, came to be associated with non-canonical architecture. For describing the wide categories of “Gothic” and “Arab” architecture, previously unconsidered, Seroux referred to their “particularités bizarres et monstrueuses,” while Fletcher defined the non-Western styles by stressing their appeal for decoration. For Fletcher, these were “non-historic” architectures, an exclusion that designated them as incapable of dealing with Reason (as remarked by Gülsüm Baydar in 1998) and, thus, unclassifiable as architecture. This paper examines how architectural historiography cast its peripheral territories even further away by assessing their production in terms of space. In doing so, it tackles the notion of “distance” both as the gap between two points (where one is perceived as central) and connected to the idea of measure. By deriving marginality from the conceptualization of space, my aim is to question the notions of order and rationalization (used to define space) as conveyors of (implicit) violence, expressed by the very act of exclusion (following Rousseau’s Discourse on Inequality, 1754).

Keywords: historiography; normativity; peripheries; remoteness; spatiality; non-canonical
If “peripheral” cultures were left aside by the historiographical discourse of architectural surveys, this happened not only because of their geographical marginality, but mainly because they failed to fit into the shared canon. Such an elision was clearly a matter of physical distance, which induced intellectual myopia. But was distance, differently pondered, responsible as well for deciding what was non-canonical?

I argue in this paper that the discipline of architectural history forged its discourse by assessing its objects—most often understood as “monuments,” a rising notion at that time—in terms of space, succeeding thus to cast even further away its peripheral territories. I then reformulate the question posed above: is the canon a matter of orders? Or is it primarily a matter of order? By deriving marginality from the conceptualization of space, I interrogate the notions of order and rationalization (employed to define space) as conveyors of (implicit) violence, expressed by the very act of exclusion.

Seen through this lens, the history of architecture, founded as a discipline at the beginning of the nineteenth century, appears as the history of staging space. In this fundamental equation, the concept of space plays a double role, defining the very essence of architecture and, on its basis, sketching a geographical taxonomy of its legitimacy.

In my analysis, I use the notion of “distance” as both a methodological tool and an epistemological element. I will explore the discourse of architectural historiography without any pretention to deliver an exhaustive picture of the different tides and drifts stirring its dynamics through more than the two last centuries. Moreover, I will take recourse to shortcuts, assuming that the backdrop is already known.

Preamble: On Space and its Meanings

Space was not addressed as such in the first histories of architecture, just as it had not been discussed in the architectural treatises. However, the idea of space was already present, prefiguring the concept allusively referred to through terms like order, rationality, proportion, rhythm, harmony. Its shaping took place progressively and was closely related to the forging of yet another key-concept for the era of modernity, that is, historicity—as if the entry in the swirl of this latter concept, as framed by the Hegelian philosophy of history, required a specific spatial framing for its development. Both space and historicity embraced an exclusive logic, leaving outside their boundaries
those cultures and territories that did not comply with or did not rise to their principles. That was a paradox, given the fact that both concepts emerged as powerful epistemological tools for assessing the expanding horizons of modernity.

The conceptualization of the history of architecture thus paralleled the switch in theorization of the discipline’s principles, pursuing intertwined paths. But before looking into that, I would like to briefly consider two well-known discourses—the Abbé Laugier on the primitive hut and Rousseau on the origin of inequalities among mankind—whose input on space was fundamental for the further development of the discipline.

Marc-Antoine Laugier’s revisiting the notion of primitive hut in his Essay on Architecture (1753) represented one of the most important steps in conceptualizing space. Though apparently adhering to the Vitruvian trope of the origins, Laugier brought a new insight, looking at the “rustic hut,” as he called it, as the very model of architecture “upon which all the magnificences […] have been imagined.” He praised its capacity to create typologies as a model—“Never was a principle more fruitful in its consequences”—but also its essential nature, revealing the logic of architecture: “it is in the essential parts that all the beauties consist […], all the licenses […] in the parts introduced by need […], all the defects […] in the parts adjoined by caprice.” If Laugier’s interpretation presented the hut as a norm of procedure, then it meanwhile induced a clear hierarchy in apprehending what architecture is in terms of normative space, referring indirectly to the importance of the canon. Laugier’s reflections on the evolution of the discipline, in the beginning of the book, implicitly state that the normativised space/procedure was materialized at its best by the perfect forms invented by the Greeks, which degenerated afterwards due to “the barbarity of succeeding ages, [that] created a new system of Architecture, wherein unskillful proportions, ornaments ridiculously connected and heaped together, presented stones as paper work, unformed, ridiculous and superfluous.”

Two years after Laugier’s Essay was first printed, another text tackled space as an essential matter, but in a completely different manner. Its author, the philosopher Jean-Jacques Rousseau, employed a similar Vitruvian description—albeit much more elaborate—of the origins of architectural artifacts as a key argument for understanding (social) inequality. Rousseau was not interested in architectural typologies, but in the consequences triggered by the discipline delimitating spaces: “The first man who, having enclosed off a piece of land, got the idea of saying ‘This is mine’ and found people simple


2 I used here the French original text, 14, as the English version omitted part of the phrase. The translation is mine.


enough to believe him was the true founder of civil society.”
But this society, as further explained the philosopher, was
far from embodying a community, being originally based on
discrimination: “What crimes, what wars, what murders, what
miseries and horrors would someone have spared the human
race who, pulling out the stakes or filling in the ditch, had cried
out to his fellows, ‘Stop listening to this imposter. You are lost
if you forget that the fruits belong to everyone and the earth
belongs to no one’.5

At a first glance, there is no correspondence between the two
texts, the Vitruvian myth of architectural origins left aside. And,
undoubtedly, Laugier and Rousseau addressed different issues
and with different aims. Nevertheless, both made their point by
conceptualizing space, designating it as a fundamental element
for thinking architecture and, in the same time, for existing
in the world. In both discourses, spatial conceptualization
and the affirmation of its primacy induced automatically a
form of exclusion—from a declared canon/from a supposed
community—engendering thus an act of violence, acknowledged
or not.

Shaping Distance

The hut turned out to be a central concept for thinking
architecture in the century to come, and even more so in the first
half of the one to follow.

In Quatremère de Quincy’s Encyclopedia of Architecture (first
published in 1788), the hut was bestowed an important place,
a whole article being dedicated to it.6 Certainly, Quatremère
considered the hut, in the entry on “Architecture,” as the
paradigm of the Greek temple, but his interest in the object
had been most probably motivated (also) by a belief in a history
of architecture embracing two spheres: the art of building,
“common to all the nations and the peoples,” and the very
art of architecture, specific to the Old Greeks and furtherly
adopted “by the entire modern Europe.”7 If, on the one hand,
this approach expanded the field of architecture, on the other
it created an unmistakable hierarchy within it. This hierarchy
was reinforced by the contextualization of the architectural act,
subjected, according to Quatremère, to a series of influences
(climatic, social, political, moral…), a modelization which
furthermore broadened the understanding of the architectural
field. But while enlarging the latter by acknowledging its
complex mechanics, Quatremère operated a clear-cut separation

5 Jean-Jacques Rousseau, Discourse on the
Origins and the Foundations of Inequality
Among Men, trans. Ian Johnston, The
University of Adelaide, online at https://
ebooks.adelaide.edu.au/r/rousseau/jean-
jacques/inequality completes.html.

6 Quatremère de Quincy, “Architecture,”
Encyclopédie méthodique, vol. 1 (Paris/Liège:
Panckoucke/Plomteux, 1788), 382-86.

7 Quatremère, Encyclopédie méthodique, vol.
1, iii.
between canonic architecture (derived from an ideatic archetype) and all other (alternative) forms of building, influenced by more or less controllable factors.

If the hut could have been a common denominator, undeniably related to “the earliest dwellings resulted from necessity,” it could not actually pretend to be a universal model. As Quatremère explained, its shape, materials and, above all, building principles corresponded only to agriculture civilization, the most advanced of all and whose apex was the Greek culture. Unable to build such a hut, which was to become the very paradigm of the art of architecture, hunter-gatherer civilizations were a priori excluded from the canon. What appeared in his discourse as mere categorization, formed, meanwhile, the nucleus of an exclusive historiography.

Quatremère described the hut in terms of “type” and “inflexible rule,” the sole form able to “straighten all the depraved uses, all the vicious deviations” induced by a blind imitation. He employed the word écart to designate the “vicious deviations,” a term whose primary meaning indicates a distancing (implying also an emotional distanciation). As a matter of fact, the notion of distance was present in the Encyclopedia through several implicit and explicit occurrences. On the one hand, distance was expressed temporally, as in the different ages of the studied societies, some being still in their childhood, some other having already attained maturity. Temporality situated these far-away territories even further away, like in the case of Indian and Chinese architectures, both being considered close to origins—Chinese architecture, with its roofs reminding one of the Nomads tents, being the closest to “the primary traces and the primitive ways of inhabiting,” and Indian architecture being the “production of an ignorant instinct” related to the “primitive manner” of conceiving underground dwellings. On the other hand, distance was expressed spatially, the different entries in the Encyclopedia striving to depict a large architectural oikumene and to describe the specific character of each of its lands. For Quatremère, “character” was in close connection to “type,” as both notions implied—etymologically, but also metaphorically (especially for the second)—the idea of imprint, of an active matrix. By using this subtle correspondence, Quatremère suggested his belief in the importance of causality and predispositions.

From this perspective, distance appeared as the degree of separation between “good” characters and “bad” characters. The article on “Barbarity” perfectly demonstrated this distinction:

8 Quatremère, Encyclopédie méthodique, vol. 1, 382.

9 Quatremère, Encyclopédie méthodique, vol. 1, 386.

10 Quatremère de Quincy, Dictionnaire historique d’architecture (Paris: Adrien Le Clère et Cie, 1832), vol. 1, 376-82; vol. 2, 10-17.

11 This architectural oikumene was merely sketched in the Encyclopédie, to be extensively developed in the Dictionnaire historique.

12 There are specific entries dedicated to these two notions in the Encyclopédie (“character,” vol. 1, 477-521; “type,” vol. 3, 543-45) and the Dictionnaire historique (“character,” vol. 1, 302-308; “type,” vol. 2, 629-30). In these entries, Quatremère uses both notions in relation to each other.
the ferocity attributed by the Greeks, and afterwards by the Romans, to the manners of certain populations, is equaled in art by a “rudeness of invention” or “an outrageous arrogance of style”, often beyond force and grace, which “attempts more to astonish than to please.” As for architectural occurrences, the word “barbarous,” as Quatremère pointed out, was “given to edifices composed of an utterly gigantesque style whose outrageous forms repel the eye by the shocking affectation of an immoderate force or by the bizarre composition of discordant details.” Terms like “outrageous,” “gigantesque,” “immoderate,” and “discordant” implicitly referred to (and transgressed) an accepted canon, revealing the distancing suggested by the “vicious deviations”—the distance between the (original) model and its various conversions. It was this distancing that was responsible for the alteration of character—the “bad” character—or for its total absence. Quatremère illustrated distancing from the “good” character by two architectural examples, both developed under extreme conditions: while in Asia, the heated head of its populations imagine a frenzy of “bizarre productions” and “monstrous creations”; in Northern Europe, architecture is able to copy different styles, but is deprived of particular character.

What is to be understood is that for Quatremère, character was not only a means for analyzing architecture but (also) a matter of morals. Paralleled to the human character, architectural character might have suffered from unfavorable conditions, but the deviations that it engendered revealed, nevertheless, deeper dysfunctions.

Theorizing and Historicizing Distance

Seroux d’Agincourt, who shared a number of convictions with Quatremère, articulated them in a historical approach, shaping the architectural oikumene. While his History of Art through Monuments reduced the epistemological field enlarged by Quatremère, by taking out the “art of building,” it certainly nuanced the understanding of architectural production through the ages: Ancient Greece still embodied an unmovable canon, but other territories were scrutinized—with more or less acuity, given the absence (as Seroux explained) of any preexisting discourse—in order to suggest how art evolved. Inspired by the biological taxonomy of the time, Seroux historicized the evolution of architecture by delivering a complex picture of typologies, an illustration of the monuments articulating his history. By doing so, he implicitly enforced the role of space as


15 Quatremère, Encyclopédie méthodique, vol. 1, 495, 496. Certain aspects discussed by Quatremère in relation to the notion of character anticipated Alois Riegl’s future theory of values of the works of art, in his Modern Cult of Monuments (1903).

16 L’histoire de l’art par les monuments depuis sa décadence au IVe siècle jusqu’à son renouvellement au XVIe (Paris: Treuttel et Würtz, 1810-23).
a central epistemological element for defining architecture, as his history both mapped the geography of the discipline and exemplified its production through types.

Seroux thus opened a path for a different understanding of architecture, one emphasizing tectonics (already tackled by Quatremère). Tectonics provided a criterion for categorizing the enlarged field of the discipline by distinguishing between a production of volumetric and solid typologies (comparable to what Quatremère designated as the “art of architecture”) and a production of decorative patterns (as in the Nomads tents, thus closer to the textile realm). This differentiation was to lead to an unambiguous hierarchy in terms of perceiving both architectural creation and its territories.

Within this discourse, Gottfried Semper’s theory on the fundaments of architecture shed a different light on the matter, nuancing the historical perception while reframing the theoretical background of the discipline. The way he analyzed the Caribbean hut, exhibited at the London 1851 Universal Exhibition, brought a shift in pondering the origins of architecture as well as its aims. By stating that “until the Romans, architecture [wa]s subjected to a clothing principle,” Semper dethroned Laugier’s hut, which was the theoretical model of the canonic Greek temple, thus establishing a common denominator for all architectures, disregarding their geography. Moreover, by displacing the focus from the notion of model to the importance of the (symbolic) conceptualization of architecture, he dismissed the hierarchy between (built) space and decoration. Nevertheless, in spite of this anthropological approach, Semper did not unsettle the existing taxonomy of architecture, as he discussed its different geographical artefacts in terms of their proximity to the origins of the discipline.

This complexified taxonomy found its fulfilment in Fletcher and Fletcher’s *A History of Architecture*, a survey which became a model of spatialization and typologization of historiographical information. Its fourth edition (1901) formalized in a clearer manner this complex modelization, integrating the “tree of architecture,” which illustrated the parallel evolution of what Fletcher called “historical” and “non-historical styles.” The graphic scheme of the “tree of architecture” resumed the few previous taxonomic attempts and improved them by representing the causality at stake in producing architecture. The conditions invoked by Quatremère—geography, geology, climate, religion, social and political, history—became the roots of the tree whose branches imagined the architectural

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styles discussed in the survey. All the short, non-productive branches represented the “non-historical styles”—Indian, Chinese, Japanese, Central American, and Saracenic—that is, the architectures that “developed mainly on their own account and exercised little direct influence on other styles.” Considering that their study “need not interrupt the story of the evolution of European Historical Architecture,” Fletcher placed them in a separate small section “for greater clearness to the student.” This separation was a solution by default, as Fletcher believed that the very “position [non-historical styles] should occupy in a History of Architecture [was], however, a matter of doubt.”

But there was another reason why “non-historical” styles were cast out of history and this had to do with their non-relevance for the conceptual thinking of architecture. “From an architect’s point of view, these non-historical styles can scarcely be so interesting as those which have progressed on the solution of constructive problems, resolutely met and overcome, as was the case in Europe,” wrote Fletcher, adding: “in India and the East, decorative schemes seemed to have outweighed any such problems.” A dichotomy of structure-ornament was thus installed, implicitly dictating the boundaries between the inner and outer worlds of architecture and thus controlling access to the first.

This dichotomy was not a matter of centers and peripheries, as indirectly proved by Charles Thompson Mathews’ The Story of Architecture: An Outline Of The Styles In All The Countries. Writing on “The Mahometan or Saracenic Style,” two examples left aside in Fletcher’s first edition (published the same year), Mathews concluded: “in a word, constructively the Arabs were little more than copyists; as decorators, they were almost second to none. For nothing can be less inspiring than an Arab house shorn of its ornament; few sights more moving than a mosque or alcazar tricked out in all the exuberance and splendor of Saracenic carving and colour.” As a good American, Mathews included also in his survey the architecture of his country-home, attempting to change its perception as being “new and inartistic.” His insistence on “vertical architecture’ or high building,” belonging “more properly to the province of engineering,” would lead Fletcher to situate American architecture on the very top of his evolutionary tree, thus turning a periphery into a leading model thanks to its abilities with structure.

Alois Riegl provided a theoretical interpretation of the structure-ornament dichotomy. In his Historical Grammatic of the Visual Arts, published posthumously, he considered form and surface
as fundamental elements of the work of art. He distinguished between form and its integrant part, the “objective surface,” as being “essential,” and the “subjective surface,” as being “but an illusion produced by the sight.” 26 Riegl believed that Islamic art was not only the sole case where form was not essential, but that it resorted to artistic rules for eliminating it. Muffled under organic decoration, form was reduced to the subjective surface, thus going back to the beginnings of art: the absolute surface. He echoed Semper, stating that, in spite of its undeniable esthetic qualities, Oriental applied art was deprived of “intellectual beauty.” 27

A new vision of alterity emerged from these intertwined historiographical discourses. Difference (distancing) was no longer assessed in terms of “civilization”—peoples too far away from central models and, often, also trapped in a temporal backwardness—but as a doctrinal matter: structure over decoration, form over surface, intellectuality and rationality over a disorderly thinking. Architecture versus non-architecture.

A Brief Epilogue: Coping with Distance

From the theoretical ground, this dichotomy would pervade the common conception of (geo)cultural facts. This affected the writing of architectural histories of/in the peripheries, notions like decorativeness and barbarity being accepted and conveyed as distinctive marks.

The visual taxonomies of universal exhibitions contributed to such a discourse. In 1867, in Paris, the prolific ornamentation of the Romanian pavilion on the Champ de Mars prevailed over the architectural features of the building that inspired it. The reason was twofold: the Romanian committee proposed as their model two highly decorated churches, and the French architect Ambroise Baudry, in charge of the design, reinforced their decorativeness when interpreting them. When copying the torsaded towers of the main model (the Episcopal church in Curtea de Argeș, 1512-1526), Baudry changed the orientation of their twist, seeing them as a mere ornament and thus ignoring their role in the ensemble composition. 28

The same logic of decorativeness legitimated the discourse of the Bulgarian delegation at the CIHA congress in 1933 in Stockholm. Striving to define national art, the theme of the congress, the Bulgarian scholars saw the specificity of their ancient architecture in its decorativeness: this latter differentiating it from the founding Byzantine models, while


“freeing” it from the constraints of space.\textsuperscript{29} The statement might seem surprising, as it situated the Bulgarian art on the side of “non-architectures,” but the positioning was entirely assumed by the local scholars who, moreover, described their ancient art as being part of the “barbarian architectures after the great migrations.” In the same congress, barbarians were invoked as well by the Hungarian representative in relation to Romanian art. The Hungarian historian presented his country as a sentinel between the Occident and the Orient, where lay “the sterile steppe of the Christian Orthodox art.”\textsuperscript{30} The metaphor of the steppe, reminding one the biological categorizations developed in the nineteenth century to compare art territories with fertile or arid lands, represented an indirect way for denouncing—through its flatness—the lack of structure of the neighboring Romanian architecture. As a matter of fact, the thorough efforts of typologization deployed by Romanian architectural historiography might be seen as a reaction against such attacks.\textsuperscript{31}

To return to the distinction between centers and peripheries, space and flatness, typology and decorativeness had thus become commonplace for addressing, explicitly or not, a geo-cultural position and a sign of artistic quality.

No (More) Distance? Instead of Conclusions

When invoking “barbarians” at the CIHA congress in Stockholm, the Bulgarian delegation emphasized their vitality and their capacity to create new forms of art.

Though expressed in a very different milieu, far from the daring scene of the artistic avant-gardes, this idea echoed the formal and intellectual interest in primitive cultures. Such a positioning, embraced by all the forms of art, praised irrationality and its various derivatives, the strange versus the straight, the surreal versus the real. Questioning the very essence of space and time, this had prepared the path for reassessing historiographical distance.

In architecture, in less than three decades, from the 1920s to the 1950s, different steps were undertaken which led to a flattening of space and to reducing distances. They all reassessed the “art of building” through various approaches—an interest in irrationality and in meta-reality, a trade of history with memory—thus proclaiming the vernacular not as a sub-category of architecture but as its valuable counterpart. Several collaborated in undertaking this historiographical mutation: artists—like Asger Jorn, who militated against the tyranny


of space imposed by Western visuality, and advocated for bidimensionality and irrationality; philosophers—like Martin Heidegger, who famously argued in favor of a meaningful architecture; architects—like Bernard Rudofsky, who helped to “officialize” vernacular; art historians—like Sybil Moholy-Nagy, who defended it in terms of materiality and transmitted tradition, or like Sigfried Giedion, who rehabilitated regionalism and thus preparing an unprecedented extension of the architectural geography.

Further on, the relativism propelled by the postmodern turn would bring a radicalization of the anti-space attitude by embracing a simultaneity of contrasting temporalities and by considering ordinariness and junk space in the architectural discourse.

Historiographically speaking, all these approaches, superimposed on a progressive globalization, led to a reassessment of the centre-periphery questions. Addressed from different perspectives, related to an anthropological understanding—the architect becoming an ethnographer—32 and to the rise of postcolonial studies, this reconfiguration played out mainly in the reduction of historiographical and epistemological distance. This was precisely the attempt of all writing that flourished around the concept of critical regionalism, coined by Alexander Tzonis and Liane Lefaivre and theorized by Kenneth Frampton. In turn, architectural surveys paralleled this constriction of distance by a geographical complexification, mirrored in different attempts, from Kostof’s A History of Architecture (1985), 33 introducing the notion of “built environment,” to Ching, Jarzombek and Pakrash’s Global History of Architecture (2007), 34 explicitly attempting to wipe out the boundaries between “historical” and “non-historical” architectures.

But does such a complexification actually reduce distance? Or does it simply disguise it with new perspectival tactics? The authors of A Global History of Architecture defended their position by affirming that their approach builds on the notion/process of globalization, considering it as “an unexpected opportunity to rethink the production of knowledge.” 35 But how different, mutatis mutandis, is their chronological and geographical slicing of history exemplified by major buildings from Seroux’s History of Art through its Monuments, which was ground-breaking at its time?

In the world of globalized histories of architecture, 36 space appears to have lost its hierarchical pretensions, being turned


into an inclusive, federating entity. But on closer inspection, this inclusiveness, which more closely resembles an unqualified space (to paraphrase Giorgio Agamben’s distinction between \textit{zoe} and \textit{bios}), is still articulated by the insidious tool of distance.
“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
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

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

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


4 Rembert, Report, 8.

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. 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.” 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.

6 Webber, “E. H. Rembert,” 51.


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. 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.” 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.”

In 1947, Rembert was appointed Senior Designing Architect in the GAB by Cobden Parkes, NSW Government Architect. 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. 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.” He also hand-picked and mentored a succession of trainee-architecture students chosen for their innate design skills and passion for Modernist architecture. 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.” 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.”


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
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.\(^{19}\)

<table>
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<tr>
<th>Building types</th>
<th>Laboratories</th>
<th>Schools</th>
<th>Hospitals</th>
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<td>UK</td>
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<tr>
<td>Germany</td>
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<tr>
<td>Total visited</td>
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<td>37</td>
<td>5</td>
<td>11</td>
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\(^{18}\) Rembert, Report, 2.

\(^{19}\) Rembert, Report.

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

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>
<thead>
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<tr>
<td>L'Unite d'Habitation, Marseilles</td>
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<tr>
<td>Master Builders' Federation, Paris</td>
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<tr>
<td>Salvation Army Hospice, Paris</td>
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<td>Swiss Pavilion, Paris University</td>
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<td>Town planning scheme, Abbeville</td>
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<tr>
<td>Central Railway Station, Rome</td>
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<tr>
<td>Power station, Civitavecchia</td>
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<tr>
<td>Yacht Club, St Margherita</td>
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<tr>
<td>Administration building, University of Padua</td>
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<tr>
<td>Apartment buildings, Finale Ligure and Rapallo</td>
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<tr>
<td>Agip service stations throughout Italy</td>
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<tr>
<td>Congress House, Zurich</td>
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<tr>
<td>University Hospital, Zurich</td>
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<tr>
<td>Kappeli School, Zurich</td>
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<tr>
<td>Federal Institute of Technology, Zurich</td>
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<tr>
<td>Science and Administration/Lecture Hall buildings, Basel University</td>
</tr>
<tr>
<td>Service stations, Basel</td>
</tr>
<tr>
<td>Pharmacy Building, Freiburg University</td>
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<tr>
<td>Organic Chemistry Building, Heidelberg University</td>
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<tr>
<td>Van Nelle Works, Rotterdam</td>
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<td>Provincial Parliament House, Arnhem</td>
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Table 2. Major additional buildings and sites visited in Europe (Rembert, Report).
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 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

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,”
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

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

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

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

²⁹ Rembert, Report.
³⁰ Rembert, Report, 7-8.
³¹ Rembert, Report, 7.
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.
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.
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, enameled 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

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

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


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. The butterfly-shaped roofline corresponds to the raked interiors of the four paired, opposed and stacked lecture theatres in a “very sculptural” manner. 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. 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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.”\textsuperscript{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.\textsuperscript{51}

\textsuperscript{44} Giedion, \textit{Space, Time and Architecture}, 428.

\textsuperscript{45} Andersons, interview, 2019; Saunders and Burke, \textit{Ancher, Mortlock, Murray, Woolley}, 38.


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

\textsuperscript{49} Parkes to Prof. J. P. Baxter, January 10, 1956.

\textsuperscript{50} Parkes to Prof. J. P. Baxter, January 10, 1956.

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

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

**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. It also came hard on the heels of Jorn Utzon’s success in the Sydney Opera House design competition. 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.” As Dysart explained, although slightly “taken aback,” they were generally “very interested” in the Scandinavian Modernism that was now circulating.

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. Conceived by Woolley in collaboration with Tom O’Mahoney, the original design was extensively revised and is now attributed primarily to Woolley. 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. As with the earlier...
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

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


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.

71 Rembert, Report, 7.
bring about a comparable “living and vital” architecture tailored to the Australian context. Consequently, the recommendations that emerged from his investigations overseas were put into practice on a scale that was unimaginable only a few years earlier.

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. 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.

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The Influence of City-Village Distance on the Transformation of Remote Villages in Tehran Region, Iran

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University of Queensland

In urban scholarship, the “centre-periphery” model has frequently been employed to interpret the explosive growth of cities and their contiguous satellites. However, most such studies illuminate the impact of centre-periphery distances merely in bland physical terms, leaving little room for cultural interpretation. Within this framework, this paper revisits the centre-periphery model to interpret the impact of distance on tangible and intangible structures peculiar to the remote villages surrounding Tehran. City and village in the Tehran region are historically outlined as spatially confined entities, separated by physical distances that pose barriers to their connectivity. Paradoxically, the two have become entirely connected in recent decades, catalysed through modernisation, infrastructural development and policy changes. In fact, distance no longer remains a barrier to physical accessibility. Rather, this distance represents a desire that highlights their cultural and environmental differences realised on the salubrious village periphery, leading to temporary migrations from the city towards peripheral villages with their healthier and more relaxed lifestyle. Meanwhile, the Tehran metropolis itself has been profoundly influenced by Western culture, as well as by ethnic-based cultural patterns brought by rural migrants arriving since the 1950s. Therefore, through the reverse migration of Tehran’s residents to the agrarian periphery, the city’s lifestyle, expertise and culture are gradually supplanting what had once constituted village life. This paper argues that such a process has transformed these villages into hybrid entities whereby cumulative economic, architectural and cultural structures are emitted by the centre, imposing tangible and intangible implications on these peripheral communities. Informed by direct observation of remote villages in the Tehran region, this paper also elaborates on the architectural and socio-cultural consequences of this process in one of these villages, discussing the impacts of distance beyond its physical meaning.

Keywords: city-village distance; remote village; rural transformation; architectural change; cultural shift
City-Village Distance in the Iranian Context

The distance between city and village is frequently designated by physical length. However, from the early twentieth century, it seems the word distance no longer just indicates physical length, but accessibility, given the technological advancement, communication revolution, infrastructure development and vehicle affordability which impacted connectivity between villages and cities. 1 The accessibility by itself can be interpreted in several ways such as “nearness to places,” “nearness to activities,” and “ease of participating in activities.” 2 It also refers to acceptable travel time and safety on the road beside the physical proximity.

The distance between city and village is a decisive criterion that affects the population and commodity flow among them as well as their architectural and socio-cultural structures. Although city and village traditionally are perceived as two separate and opposing precincts, these two entities are entirely dependent on each other, exchanging commodities, knowledge, expertise, techniques and way of life. 3

The centre-periphery model, framed by John Friedmann in 1963, is one of the most popular models to interpret these city-village interrelations, and more importantly, the rapid growth of cities and their associated satellites such as surrounding villages. 4 In effect, if the city represents the centre, these fast-transforming villages express the unstable periphery. This model argues that the multifaceted interaction between the core and the periphery stems from the spatial distance between the two, influencing their respective processes of spatial development. 5

Translating this understanding into the Iranian context, physical distance was historically a critical barrier between village and city due to harsh climatic conditions and vast geographical territory, which made it challenging to establish and connect settlements. City and village in Iran, were historically outlined as spatially confined entities, separated by physical distances that pose barriers to their connectivity. Yet, the city was entirely dependent on the village, while crafts, expertise and products travelled from village to city, principally via traders. To discuss this consumer-producer interaction within the Middle-Eastern, especially Iranian context, Austrian geographer Hans Bobek developed the “Rent-Capitalism” theory. As he posits:

Rent Capitalism arose through commercialization and the transformation, undertaken in a plain profit-seeking spirit, of the original lordly (or feudal) claims

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on income from the peasant and artisan under-strata. Its elaboration was definitively promoted by the keeping of accounts and other forms of rationalization of rent drawing that were developed early in the large temple estates.6

This system as Ehlers interprets Bobek’s discourse, “differed from the more recent ‘capitalism’ … in that it was not linked with production, but rather was satisfied with skimming off its proceeds.”7 According to this system, Persian cities traditionally exploited their rural landscape without offering much back in return. Merely a fractional share of the profits acquired from rural lands was returned to the village, while the rest was invested in the city, where the landowners lived.8 Therefore, the vast physical distance between city centres and village peripheries led to self-sufficiency in terms of the economic and social structures of the isolated villages since they had to meet all their needs within their borders.

The village was dominated by the city, given the traditional land ownership, agricultural management and ruling system.9 Analysing Kirman Basin in the centre of Iran, for instance, Paul Ward English concluded that “rural settlements of this region are dominated by the city; that village morphology, economic structure and territorial organization are products of centralized urban control of rural resources.”10 However, in the twentieth century, specifically from the 1960s onward, the perception of distance as “a barrier to connectivity” between city and village faded.

More specifically from the 1960s onward, a series of policies and new development plans shifted city-village relations. During the 1950s-to-1970s, the revenue from oil-industry-fuelled modernisation and industrialisation activities conducted by the government, remarkably within the Tehran region, pushed some rural villagers to migrate to Tehran’s urban spaces.11 Yet, it was the government’s 1962 Land Reform act that most impacted village-city relations within the Tehran region. It was a redistribution of rural lands, which changed the land ownership system and caused severe alterations within the rural and urban structure of Iran.12 Due to the way land reform was implemented, however, many villagers missed the opportunity of working on agricultural lands and, consequently, migrated to urban centres, particularly to Tehran.13 Concomitantly, the government established more factories and industrial zones in Tehran’s vicinity, intensifying rural to urban migration and fostering urban growth in the Tehran region.14 This great wave of rural to urban migration continued after the Islamic


7 Ehlers, “Rent-capitalism and Unequal Development in the Middle East,” 33.

8 Ehlers, “Rent-capitalism and Unequal Development in the Middle East,” 34

9 Discussion of this management system is not within the scope of this paper. For detailed explanation see Ehlers, “Rent-capitalism and Unequal Development in the Middle East.”

10 Paul Ward English, City and Village in Iran: Settlement and Economy in the Kirman Basin (Madison: University of Wisconsin Press, 1966), xviii

11 Rapid industrialisation in different sectors, such as housing construction, provided a great employment market and attracted rural labourers into Tehran. See Kamran Diba, “The Recent Housing Boom in Iran- Lessons to Remember,” in Housing: Process and Physical Form, ed. Linda Safran (Philadelphia, PA: Aga Khan Award for Architecture, 1980), 38-40.


revolution in 1979, with populations moving to find jobs or better living conditions. To accommodate these migrants, Tehran grew dramatically towards the west through which the border of the city became closer to the remote villages in the region. At the same time, Karaj, a small town in the 1960s, received the surplus population of Tehran during its growth; it grew noticeably and became the fourth-largest city in Iran by population. Through Karaj’s growth, the urban borders in the western part of the Tehran region extended considerably and became closer to the remote villages. Moreover, the infrastructural development and construction of new highways decreased the travel time and the distance between Tehran city and remote villages in this zone (fig. 1).

Through this process, Tehran’s population increased dramatically from 1.5 million in 1956 to 8.4 million in 2014. Eventually, Tehran became a platform for the coexistence of several ethnic groups, with distinct and sometimes contrasting social and cultural backgrounds that had been brought by the migrants.

Distance as a Medium to Interpret Cultural Shifts

These multiple cultural patterns did not encounter a unified cultural environment in Tehran as it was already a bipolar society engaged in negotiating traditional and religious-based trends and values with those of Western culture. The initial Westernisation of the lifestyle in Iran began during the sixteenth

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Figure 1. As the red dot lines shows, the expansion of Tehran and then Karaj decreased the physical distance between remote villages and big urban centres. (Map by author.)
and seventeenth centuries and strengthened during the Qajar era (1789-1925), gradually finding its way into the everyday lives of ordinary people in the twentieth century.  

Some of Reza Shah’s acts, such as *Kashf-e-hijab* (unveiling), in the 1930s, made a substantial contribution to this cultural Westernisation and uniformization.Young notes: “In the first decade of [Reza Shah] reign, Western dress for men became universal in the cities; in 1936 the veil for women was abolished and the equality of the sexes in society and before the law was promulgated.” Shah aimed to distance Iran from elements which were understood as signs of backwardness and inferiority. This act, although conducted by force, changed Iranian clothing to resemble European fashions. In addition, Reza Shah trusted Western-educated professionals to implement his development plans, ultimately facilitating a negotiation between Iranian and Western techniques and cultures.

During Mohammadreza Shah’s reign (1941-79), Iran engaged with not just Europe but also the global environment, especially in order to implement Shah’s industrialisation and development plans fuelled by profits from the oil industry. With the increased power of the Iranian passport at that time, the ease of travel paved the way for cultural exchange between Iran and Western countries. Although some influential elites of Iran such as Jalal-Al-Ahmad resisted Western penetration, Western culture was distinctly prevalent in the Tehran region and carved its influence in the lifestyle of urban residents. Gradually, traditional social practices in Tehran, such as religious gatherings in *Tekye* and socialising in traditional coffeehouses, were wiped out, and traditional social spaces were replaced with western-like cinemas, cafés and restaurants.

Hence, when the above-mentioned mixed-ethnicity rural migrants entered Tehran, they encountered an atmosphere in which the Tehrani middle class relied heavily upon Western culture. In contrast, these new migrants washed their carpets in the lanes, dried fruits on their balconies and in their yards, kept small animals such as hens and ducks in their tiny urban houses and spent long hours socialising with their neighbours in the alleys. All these activities were part of the lifestyle they had brought with them from their villages. Officially urban but culturally rural, these migrants gradually ruralised culture in parts of the city.

Several decades of hard work in the urban centres transformed these migrants and their descendants into an urban middle class that gradually absorbed Tehran’s urban culture. It has

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17 For more information in this regard see Houchang E. Chehabi, “Staging the Emperor’s New Clothes: Dress Codes and Nation-Building under Reza Shah,” *Iranian Studies* 26 no. 3-4 (1993): 209-33. The contradictory notion here is that the cultural renewal was conducted by Reza Shah who is well-known as an uncultured dictator in the available scholarship.

18 Young, “The Problem of Westernization in Modern Iran,” 53.


to be noted that although most of the migrants into Tehran were initially poor and lived in the suburbs or poorer parts of the city, in more recent years, the migrants were mostly of the urban middle class from other towns of Iran. Upon arrival in Tehran, they settled in the same region and neighbourhood of Tehrani middle-class and shared the same lifestyle. However, “[t]his modest identity does not mean they have forgotten their original culture and ethnic identity. They remain proud of their provincial origin, and are very active in many cultural associations.” 21 Thus, the urban culture of Tehran emerged by itself from this “muddied pool,” not as a multicultural society but as a hotchpotch of Western lifestyle, rural culture, and various Iranian ethnic-based traditions. This culture is now leaking from Tehran back into the remote villages despite the considerable physical distance, mostly through this emergent urban middle class.

Tehran currently experiences tremendous urban problems such as weather and water pollution, noise, and lack of urban open space and greenery, accompanied by infrastructural development, which encourages its residents to flee the city for villages during their vacations or retirement. 22 While Tehran’s upper class take their vacations overseas or in their coastal villas beside the Caspian Sea, the middle class, with a primarily rural background, take their vacations in their ancestral villages or the pleasant rural landscape in the vicinity of Tehran. Simultaneously, Tehran’s growth towards the north and west has shortened the physical distance between the core and the isolated peripheries in this region. In fact, distance is no longer a barrier to the physical accessibility of the core and periphery. Rather, it expresses a desire that highlights their cultural and environmental differences, leading to a reverse migration of the urban middle class from the city towards peripheral villages, which have a healthier and more relaxed lifestyle.

These urban migrants renovates their ancestral rural houses or constructs new vacation houses in remote villages. 23 The modification of host settlements by migrants is not a new phenomenon globally and locally. “Since the late nineteen century, immigrants have been known to modify and reconfigure the housing in their new places of settlement as a way to accommodate their family structures, economic situation and cultural traditions.” 24 Following massive population displacement and transnational migration after World War II, there has been a fair amount of literature on migrant housing. However, fewer studies addressed the impacts of migration on the transformation of the rural landscape from the architectural point of view. 25 In

21 Bernard Hourcade, “Migrations and Social Mobility in Greater Tehran: From Ethnic Coexistence to Political Divisions?” in Human Mobility and Multi-Ethnic Coexistence in Middle Eastern Urban Societies 1, ed. Hidemitsu Kuroki (Tehran: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Languages, 2015), 27-40.

22 For detailed information in this regard see Naser Barakpou and Ramin M. Keivani, “The Relationship Between Urban Governance and Sustainable Urban Development in Iran,” in Urban Change in Iran, ed. Arefian and Moeini, 153-69.


24 Mirjana Lozanovska, Migrant Housing (London: Routledge, 2019), 104.

the most recent book in this field *Migrant Housing*, Mirjana Lozanovska brings together critical theories and literature on migrant housing and discusses these houses both “in homelands of departure” and “in the places and cities of arrival.” These studies, however, are rare within the Iranian context.

Very few studies mention the spatial and cultural changes resulting from the temporary migration of the urban middle class into the countryside of Iran. Given the historical background of Iran and the embodied heritage within its rural landscape, this temporary migration of the urban middle-class into the rural landscape may not be as harmless as it sounds. This reverse migration within the Tehran region crudely carved its path within both the tangible and intangible structures of these resort villages and, consequently, these communities are in danger of losing their cultural and architectural heritage, which has survived for centuries. These villages have been transformed into hybrid entities towards which cumulative economic, architectural and cultural structures are emitted from the city centre as the following case study shows.

**Distance: A Barrier or a Desire? The Case of Jazan Village**

Jazan Village is located at the foothills of the Alborz Mountains, in the vicinity of Taleqan Dam (fig. 2) and situated amongst expansive green farmland. Similarly to most other peripheral villages in this area, Jazan experienced drastic rural to urban migration from the 1950s to the 1970s, when its population decreased from 725 to 160. However, this beautiful, pleasant agrarian environment started to expand substantially following the reverse migration of urban residents, a phenomenon which is evidently at odds with the decline of the village’s permanent population. Interestingly, more than half of the houses in the village have been built by urban newcomers. Both top-down processes, such as policy changes and reverse migration, as well as bottom-up approaches like land speculation, contribute to the changes of these rural landscapes.

Decades ago, the houses were located in the southern part of the village, each containing a couple of families with strong social ties who lived together (fig. 3). Isolated from the organically distributed farmlands, these one-storey, front-yard mud-structure houses were connected via narrow lanes, according to the gentle slope of the ground. Given the high housing demands of the urban residents since 2000, the organic divisions of farmlands, which corresponded to the original irrigation system,
have been replaced by semi-grid patterns. This is because of the re-distribution into smaller parts according to inheritance rules or in order to sell to newcomers to build their holiday houses.

The built-up fabric sprawls within these plots of green lands (fig. 3) with no public open spaces to bind them together. In contrast to traditional Iranian villages—but in line with the typical situation at the urban edges—the roads and lanes are the main open spaces where the social life of the village occurs, although these mostly serve as parking lots for tourists and temporary residents. With such a lack of open public spaces where traditional ceremonies can take place, and residents’ collective memories emerge, the village has witnessed dramatic cultural degradation.

The spatial, formal and technical changes in village houses also vividly demonstrate the impact of the urban middle class. Spatially, the new houses accommodate elements such as barbeques and large balconies, things that are not readily accessible for the urban middle class in their small townhouses.

The village buildings comprise a mixture of surviving vernacular houses with urban-like structures and newly developed two- to-three-storey houses that resemble cheap urban structures. This juxtaposition of newly added buildings with vernacular constructions reveals an awkward hybrid of the old and the new. This small and remote village even has a hotel for tourists who do not own a house there, and its façade clearly showcases how urban taste is bleeding into the built environment of the village (fig. 4).

Figure 2. The location of Jazan Village within the Tehran region. (Map by author.)
Figure 3. Top. The approximate location of the built area and agrarian lands of Jazan Village in 1955. (Map edited and reproduced by author from 2013 map data courtesy of Google.)

Figure 4. Bottom. The façade of the hotel in Jazan. Elements such as the pitched roof, marble stone façade, and blue-reflex windows clearly show the urban influence over rural buildings. (Photograph by author.)
Gradually, the historic buildings and vernacular archetypes of the village are being replaced by low-cost vacation houses (fig. 5) that lack architectural value, partly due to tight construction budgets and partly because of a lack of consideration paid to the context. The loss of the vernacular archetype and technique is not a phenomenon unique to this region, but its singular importance lies in the fact that the fate of such villages is written by strangers from far beyond their borders, who consider the village a mere commodity or temporary resort.

Meanwhile, these tangible shifts, although noticeable, pale in comparison to the cultural shifts occurring within the village. Since 2000, the Western culture that first spread through Tehran and then among migrants, mixing with their diverse ethnic-based cultural behaviours, is now leaking into the village through the reverse migration of the urban middle class. Over the weekends and vacations, the resident villagers are the minority in the village, while the village houses host urban residents. Several cultural anomalies can also be readily observed, such as dressing according to urban fashion, which has sparked a furor over “cultural appropriation” among permanent residents, who are often more religious than urban residents. An addition to this situation is playing loud rap music in the early afternoon, which is precisely when the original villagers take a short nap. For the majority of these newcomers, the village is a place to experience things they cannot in their small urban apartments.

This process has coincided with the rejection of rural life by villagers and their misplaced preference for the urban lifestyle,

Figure 5. Left, an example of a historic house. Right, a newly constructed house in Jazan. (Photograph by author.)
which is considered as “high culture” compared to a rural culture seen as backward. The influence of media, especially movies and television shows, and the ubiquity of social media, have promoted this perception. As Woods argues “rural people are now consumers via television, radio and the Internet, of the same cultural commodities and experience as urban residents, and the attraction of localized rural traditions, events and cultural practices has declined, even in spite of recent grassroots efforts to revitalize such activities. As such, the practice—or better, the imitation—of urban culture has given birth to massive socio-cultural shifts and a loss of local languages, clothes and foods. Hereby, the emergent culture in the studied village is not a blurred version of so-called urban culture; instead, it is a hybrid culture comprising rural and Western elements as well as the mixed behaviours of various ethnic groups from around Iran. In this situation, it is next to impossible to say whether the original rural culture in such isolated villages will survive this process.

What is Next?

As the case study presented in this paper disclosed, during the last six decades physical and cultural patterns bled from Tehran into a remote village of the region. Whereas the physical distance between this remote village and Tehran is fading due to easier accessibility, there is now very little cultural distance between them. Moreover, the village occupants are likely to be themselves distant from an understanding of the architectural and cultural heritage of these communities.

While change is inherent to human habitation, these changes have today expanded to new extremes. The city’s lifestyle and culture are gradually supplanting what had once constituted village life. What might await this quasi-rural village and many other similar cases in the region is even more critical. The region is on the verge of losing a noticeable part of its architectural and cultural heritage in the wake of this reverse migration. For a long time, the cultural heritage and embodied memories in such historical landscapes were taken for granted, with the assumption that nothing can erase these memories of the past. However, without the expert society of Iran even deeply realising and acknowledging it, a significant proportion of these memories and cultural heritage has already been destroyed.


From Austria to Australia: Three Lutheran Churches by Karl Langer

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In 1939, the young architect Karl Langer fled his native Vienna and installed himself in Brisbane, soon to become a central figure in the local architectural scene. Amongst his many architectural accomplishments are several church buildings he designed for the Lutheran Church: St John’s in Bundaberg (1960), St John’s in Ipswich (1961) and St Peter’s College Chapel (1968) in Brisbane. These strikingly modern buildings supported the post-war “reinvention” of the Lutheran Church in Queensland, where architecture played an instrumental role in fostering its self-image as a progressive and outward looking faith.

This paper argues that a double interpretation of the notion of “distance” gives insight into how Langer overcame the straightforwardness of most church architecture in post-war Queensland. In a chronological sense, he relied on personal experiences from the past, developing further the stripped classicism he inherited from working in Peter Behrens’ Viennese studio during the 1930s. Closely related to this, the expression of civic culture he admired in ancient Greek architecture and town planning lived on in the urban qualities of his church designs. In geographical terms, Langer was acutely aware of what was happening overseas, collecting (predominantly American) journals and tearing out pages which he classified for later reference. Relying on this extensive repertoire and adapting it to the particular climate of his adoptive homeland, Langer developed a highly personal architectural idiom. Thus, the modernity of the three churches discussed here derives from a transfer of ideas and forms, and their transformation across time and continents.

Keywords: Karl Langer; modern church architecture; Lutheranism; Queensland
The Lutheran Church in Australia and its Post-War “Reinvention”

In the late nineteenth century, south-east Queensland became home to one of Australia’s largest German communities and German-speaking Lutherans.1 Quite simplistically, “Lutheran” was generally taken as synonymous with “German,” then, which explains why during World War One, members of the Lutheran Church were treated as enemies and government censorship stopped the importation of German texts (including bibles). During World War Two, history repeated itself and anti-German sentiment and censorship again affected Queensland’s Lutheran Churches. In the post-war era, and the 1960s in particular, Australia’s Lutherans embarked on modernising their church yet without disregarding its roots in German culture. As part of a wider, international movement within the Lutheran Church, the two remaining Lutheran Synods, the United Evangelical Lutheran Church of Australia (UELCA) and Evangelical Lutheran Church of Australia (ELCA), formally merged in October 1966 into the Lutheran Church of Australia (LCA), alleviating most of the pre-World War Two divisions and factions that had restrained the denomination’s expansion.

As a result, Queensland’s Lutherans experienced a time of growth, concurrent with the post-war church building boom occurring for each of the state’s Christian denominations. From 1945 to 1975 well over a thousand new church buildings were built in Queensland, at least 120 of which were Lutheran and of these sixty were dedicated during the 1960s.2 Queensland Lutheran churches also seemed to become less German, with more Anglophone members (reflected in their surnames). Nonetheless, the enduring attachment to their original roots becomes apparent in the fact that these congregations frequently called on émigré architects from the Germanophone part of Europe, such as Fredrick Romberg (1913-92) and Eric von Schramek (1921-2010). In Queensland, one of the most prominent émigré architects to design Lutheran churches was Karl Langer (1903-69).

Karl Langer: From Austria to Australia

In 1939, Karl Langer fled to Australia from Vienna, where he had trained and worked under Peter Behrens as a project architect on a wide range of significant projects such as the Tobacco Factory, the Friedenskirche and the master plan for the new Urfahr neighbourhood (all in Linz).3 He soon became a

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2 Lisa Marie Daunt’s current doctoral research, compiled with the assistance of Robin Kleinschmidt (a former teacher, deputy-headmaster and acting-headmaster at St Peter’s College Indooroopilly, and Friend of the Lutheran Archive), Grant Douglas Uebergang and Bernard Muller.

3 Langer studied at the Vienna Academy of Fine Arts and the Technische Hochschule, and obtained a doctorate in art history. He began his own practice in 1934. On Behrens’s Viennese office (headed by Alexander Popp), see Georg Stein, “Peter Behrens und seine Wiener Meisterschüler,” Der Neubau 8, no. 7 (April 10, 1926): 73-81.
central figure in the architectural scene in Brisbane, teaching at the University of Queensland, master-planning many regional cities, and designing a wide range of mostly public buildings. In 1944 his influential booklet *Sub-Tropical Housing* was published, which illustrates the thoroughness with which he developed an understanding of his adopted homeland. In his designs, he subsequently combined this knowledge with his European training and travel experiences.

Although Langer’s work has been subject to much scholarly investigations lately, revealing for example how he dwelled upon his Viennese background, his appreciation of ancient Greek architecture and German modernist ideals in overcoming the geographical and intellectual distance of his adoptive situation, his contributions to post-war church architecture in Queensland have not yet been assessed. An important clue here is Langer’s files, which were found to contain a vast number of clippings from European and American magazines, often by leading voices of the day such as: Harvard GSD dean Joseph Hudnut; the Liturgical Arts Society member (and past president) and Catholic modern art advocate Otto Spaeth; writer and Lutheran clergyman Martin E. Marty; the American modernist architect Victor A. Lundy and so forth. As this collection reveals, Langer was well aware of the international developments in the field, and the widespread concern for a renewed symbolism in modern church architecture in particular. Moreover, a considerable proportion of these clippings discuss Lutheran churches. This preponderance might derive from the fact that most of Langer’s church commissions were for this particular faith, but it may also correlate with the important role American Lutherans played in the adoption of modern architectural principles in church design.

Innovation in terms of architectural form and liturgical arrangement had not been the principal concern of most Lutheran congregations however; their churches were mostly simple and unpretentious gable-roofed timber structures, built by volunteers. Nonetheless, in the interwar years, some congregations “strove to render more beautiful their houses of worship,” and in 1936 an Advisory Committee on Church Architecture was created with the “desire for correct Lutheran principles in Church architecture.” However, with the outbreak of World War Two and the building material restrictions in place until the early-1950s, built outcomes of this committee were limited. From the late-1950s on, the growing confidence of the Lutherans can be measured against the growing importance attached to their church buildings. The centennial presence of
their faith in a particular town often provided the occasion for the construction of often quite ambitious new infrastructures for worshipping. This was for example the case in Maryborough, where the congregation launched a limited architectural competition in 1965 and proudly had the entries displayed at the Royal Australian Institute of Architects’ Brisbane office. In Queensland, Langer designed at least fourteen churches and chapels, the majority for the Lutheran church. As to the reasons for this, we can only speculate: one motive could be his alleged cultural affiliation through his Germanophone background (although as an Austrian he was raised as a Catholic); another reason was perhaps that the Lutheran congregations saw in Langer’s progressive and modernist take on architecture a way to foster their self-image as a progressive, outward looking faith. For his part, such commissions allowed Langer to experiment with a different formal and symbolic architectural register than the functionalism of most of his other work. The remainder of this paper assesses this reciprocal agency based on three buildings that best capture both parties’ aspirations for contemporary Lutheran worship: St John’s in Bundaberg (1960), St John’s in Ipswich (1961) and St Peter’s College Chapel (1968) in Indooroopilly (Brisbane).

St John’s in Bundaberg

Positioned outside the township’s centre, St John’s Lutheran sits without any competing neighbours; the church’s tall copper spire can be seen from a distance, over Bundaberg’s sugar cane fields (fig. 1). The church is a processional basilica, with a tall volume and a gallery above the entry foyer. The concrete structure is expressed internally, with the bays between containing side doors and stained-glass windows. The ceiling’s timber truss framing is hidden above a two-tiered flat ceiling. Whereas much of its design (planning, furnishings and windows) kept to the traditional, St John’s is a remarkable building nonetheless for its attention to detail and its architectural symbolism.

Lutheran symbolism is also prominently integrated in the design. For example, the front end of the east façade features a Christogram composed of the letters “IHS” (the first three Greek letters of “Jesus”), while to the front end of the west façade, within the brickwork detailing, the superimposed letters “x” and “p” are embedded (referring to the Greek letters “χ” and “π” which form the first two letters in the word “Christ”). Similarly, the first and last letters of the Greek alphabet, “Α”
and “Ω,” are mounted on the sanctuary wall, representing the beginning and the end, and on the rear façade of the building projects the outline of a large crucifix in brickwork. As stated before, Langer also used his church commissions to develop ideas of his own. The most prominent feature of this building, namely the large bible verses (John 3:16 and John 4:11-12) displayed in concrete on the façade, offer a salient example of this. They impart a bold and permanent Christian message in the public realm, and form an overt architectural expression that for Lutherans, the bible is the first focus of faith.15 The idea to use the façade of a church for displaying messages had been in Langer’s mind already long before: he used the same idea while working at Peter Behrens’ Vienna studio on his winning entry for the (Catholic) Friedenskirche competition in Linz in 1931 where the rear façade also featured two Bible verses in large lettering (fig. 2).16

The Friedenskirche scheme resembles the Bundaberg church on at least three levels: the basilica typology, the use of simple geometrical forms and the ambition to create a clearly defined urban space around the church. For cost reasons, the Linz church was to have no tower or spire; instead, Langer proposed a windowless, box-like volume that rose above the apse, slightly offset from the main axis. On its outer wall—in fact the church’s rear façade—two quotes from Isaiah about the theme of peace were displayed in large lettering. Considered as a milestone in its genre in the historiography of Austrian architecture for its then unusual rationalist approach to religious architecture, the Friedenskirche was only partly realised in a much-altered form—a frustration that might have incited Langer to recycle its most salient feature in Bundaberg where the bas-relief gained an even stronger expression in Queensland’s strong sunlight.

15 The idea for this feature is attributed to Langer in Edwin Tesch, 50th Anniversary Commemorative Booklet, St John’s Lutheran Church Bundaberg, April 1960 - April 2010 (Bundaberg, QLD.: St John’s Lutheran Church, 2010), 14.

16 The text on the façade is from Isaiah 9:6-7 and Isaiah 2:4. For a detailed account of the project, see Petra Weiss, “In Linz war der Auftakt verheißungsvoll... Die Architektur der Christkönig-Friedenskirche in Linz-Urfahr, 1929–1951,” in Spiegel der Zeitgeschichte, Jahrbuch des Oberösterreichischen Museumsvereines Gesellschaft für Landeskunde 152 (2007), 101-204.
In terms of resonance, St John’s striking and imposing modernist features seem to have obtained the effect the congregation had hoped for: when it opened in mid-1960, at a cost of over £61,000, it was not only hailed by the local press as “ultra-modern” and “of beautiful design, of superb architecture”; its echo reached as far as Melbourne where it was published in the journal *Cross-Section* two months after its opening. Today, it is widely recognised for these same striking modernist features and has been state heritage listed since 2012.

St John’s in Ipswich

St John’s Lutheran church at Ipswich opened only one year after St John’s in Bundaberg to commemorate 100 years of Lutheranism in Ipswich. Here Langer also chose a material palette of brickwork, copper and galvanised iron roofing, concrete trims, coloured-glass steel framed windows and a timber roof structure (fig. 3). Similar to St John’s in Bundaberg, this church also creates a bold landmark that, initially, was clearly visible from Ipswich’s town centre. Smaller than its northern sibling and sited on the slope of a hill, its presence is somewhat diminished nonetheless and the extent of symbolism is also more restrained. It centres around the theme of the cross, repeatedly incorporated in the design at various scales: in the pronounced gable street façade by means of projected bricks; on top of the tall copper spire (illuminated at night); and in the spire’s square-planned brickwork base which features a dense patternation of many small crosses. Greek lettering is also present, but less prominently than in Bundaberg.

Most striking perhaps in the light of our investigation, is the expressed timber structure in the interior, highly reminiscent of Otto Bartning’s *Notkirchen* (Emergency Churches), realised
across Germany during 1947-50. Using two prefabricated types of frames (a vaulted one [Type A] and an A-frame [Type B]) and a set of standardised architectural elements (windows, doors, etc.), the non-load bearing walls of these structures were realised with rubble from the ruins of the previous war-damaged church, providing for an economical and easily expandable, yet dignified solution. Langer most probably knew about this widely published program, but it was perhaps the ubiquitous “A-frame church” which was popularised in America during the 1950s that provided him with the inspiration for St John’s Ipswich. Of this type there are many examples in Langer’s research files, including numerous timber manufacturer’s whole-page periodical adverts.

As always, however, Langer adjusted his design to the Queensland climate, incorporating a vent along the ridge of the roof and providing operable windows along both sides of the nave. This aspect reveals his idea that in the first place, a church, like any other building, “must be safe and strong, protect the congregation from rain, wind, heat, cold and to a certain degree, noise.” Nonetheless, a church was to be more than just a building, “where only at closer inspection the sign of the cross or another symbol revealed it as a place of worship.” Therefore, a church must have “solemnitas”: dignity, sublimity, proportions and purity. These keywords indeed seemed to have guided the design of both Langer’s churches in Bundaberg and Ipswich. The congregation, for its part, seemed very happy, emphasising in the dedication brochure how “the subdued atmosphere produced by the mellow tonings of the furnishings,Figure 3. Karl Langer, St John’s Lutheran (1961), Ipswich (Photographs by Lisa Daunt, 2016).


22 For example, advert “Designed in Timber, For Beauty and Low Cost” (UQFL158, box 75, folder 201).


walls and ceiling and the various shades of amber in the leadlight panelled windows,” all assisted “to give a feeling of warmth and reverence.”

St Peter’s College Chapel

St Peter’s Lutheran College chapel in Indooroopilly (1968) was designed by Langer as part of his master plan for the school campus (fig. 4).26 St Peter’s shows Langer at his best, and illustrates his ability to refer across classical principles and modern architectural form, with a view to producing a dignified yet functional building imbued with religious symbolism.

The influence of Greek temple complexes and their setting on the design for St. Peter’s has been stressed by Langer himself, and has since been elaborated on by several Queensland architectural historians.27 In earlier projects, including the Kingaroy Town Hall (1960-65) and Ipswich Girls Grammar School Auditorium (1961-62), Langer had designed bold modern colonnaded fronts and used wide entry stairs across the width of the façades to elevate the foyer to the building above their large forecourts.28 Yet, it was only at St Peter’s that Langer’s vision of the Greek acropolis was fully realised. The site’s hilly topography indeed afforded him the opportunity “to command his acropolis,” with the chapel sited “on the edge of a hill at one end of a small plateau.”29 This plateau Langer used as a wide circulation spine, and the height and the position of the tall bell tower on the top of the ridge further enhances the complex’s landmark qualities and, together with the reflective pond in front of it (now demolished), makes the chapel the heart of the whole complex.30

The classical inspiration also pertains to the architecture itself. In terms of form, it has been argued that St Peter’s Chapel “shows … the quality of [Langer’s] understanding of Greek architecture. In form it recalls (but does not try to replicate) the unequivocal presence and classic calm of a Greek temple.”31 This comes to the fore in particular design elements such as the use of a curved plane of the Chapel’s front façade (rather than just straight lines) and the resulting optical effect, the interior curves of the gallery soffit, and the curve of the ceiling into the sanctuary wall.32 Yet, St Peter’s arced colonnade and finished white marble slab veneers—quite an expensive material for an Australian Lutheran church—also bring to mind the stripped classicism of Gunnar Asplund’s widely published Woodland Crematorium (1935-40; Stockholm, Sweden) that very likely also inspired Langer’s St Peter’s Colonnade front (fig. 5).33
In a similar way, Langer’s departure from the rectilinear plan of his previous designs offers an illustration of how he absorbed a wide variety of influences into a highly original synthesis. Design principles such as the fan-shaped worship space, saw-toothed side walls and a sloped floor can also be found in a number of Queensland examples and various international cases such as the Church of the Resurrection in St. Louis by the renowned American architects Murphy and Mackey. In his own design entry for the 1965 competition for St Matthew’s in Maryborough, he himself also abandoned the strong, box-shaped plans of the Bundaberg and Ipswich churches, proposing a more open interior space instead, delineated by saw-toothed side walls.

These deviations were more than merely formal changes however, but architectural responses to a new understanding of the Christian liturgy in the aftermath of the Catholic Church’s Second Vatican Council (1962-65), which also affected the Lutheran Church. The renewed emphasis on the spoken word and the gathering of the faithful led to a greater attention to visibility and acoustics. This explains why the typology of the auditorium, where the audience is seated in ascending and curved rows in order to gear the attention towards the
proscenium, became a very popular blueprint for church designs. In fact, given the importance of the spoken word and bible reading for the Lutherans, visual focus and good acoustics had always been a primary concern in their churches—and often formed a point of departure for their designs. Alvar Aalto’s widely published Vuoksenniska Church in Imatra (Finland, 1958) immediately comes to mind here: its multi-vaulted ceiling rises towards the narrow north wall, supporting the sound conduction of both voices and organ. 36 Similarly, in St Peter’s, the curved sanctuary wall and the sloped ceiling create an acoustic effect that greatly enhances the intimacy of the liturgical experience (fig. 6). Whether Aalto’s design inspired Langer remains food for speculation, but the fact remains that in his early career, he also worked as an acoustic design specialist for some of Europe’s famous auditoria. 37

Interestingly, in an explanatory note written for his clients ahead of the chapel’s opening, Langer made no mention of his “Greek” inspiration, nor of the architectural and liturgical


modernity of his scheme. Instead, he deliberately focused instead on its symbolism and “performance” in terms of worshipping—allegedly of more interest to the congregation than the church’s design influences or architectural novelties. As Langer explained, the fan shape of the chapel and the arrangement of the pews underscore the importance of the altar as the central focus of attention. The same concern to eliminate any distraction also explains why the lights were hidden from the nave and why the curved wall behind the altar was absolutely plain. Also the use of symbols was restrained to the utmost, but, as Langer noted, “each symbol has been brought out to the fullest.”38 Here, he referred to the contrast between the large and heavy Helidon sandstone altar with, once more, the Greek letters “Α” and “Ω” carved into it and the sanctuary cross. Finished as an honest matt finish, and empty, the latter represents both Lutheran piety and its belief in the resurrection of Christ. Therefore, Langer noted, it is “floating in the strong light symbolising the rising sun.”39 Further, the three fins of the tower which enclose the meditation chapel, symbolise the Holy Trinity, a theme which is repeated in the meditation chapel with its three windows.
Summarising, we can say that in St Peter’s, Langer’s three main sources of inspiration create an intricate interplay: informing him about the latest ideas for modern church design overseas, the journal clippings inspired a new type of liturgical plan; his intimate knowledge of ancient Greek architecture as an expression of civic ideals informed the siting of the church; the stripped classicism he inherited from Behrens became apparent in the famed colonnade façade. As disparate as they may seem, all these influences, combined, created one of the finest examples of modern religious architecture in Queensland and beyond.

Conclusion

The three cases discussed here demonstrate how Langer seized church commissions to explore—and also fully exploit—the urban, architectural and symbolic potential of ecclesiastical architecture in the public realm. To this effect, he relied on his European training and sensibilities, continuing to explore ideas he experimented in his pre-World War Two career and constantly revisiting the first principles of ancient Greek architecture with regards to site planning, landscaping and the presence of built form. He was not only looking to the past however; his active seeking out of ideas from abroad provided him with a ready knowledge about the advances made in international modern church design. Whereas an architect relying on such disparate influences may easily pass for a dilettante, this is not the case for Langer. Quite the contrary: it provided him with a firm intellectual basis that allowed him to—seemingly effortlessly—adapt these multifarious influences for the economic and climatic constraints of post-war Queensland. Thus, Langer’s ecclesiastical designs evidence the transfer of ideas and their transformation across time and continents. “Distance” as a notion, both in the chronological and geographical sense, is therefore central to assessing Langer’s contribution to the renewal of church architecture in post-war Queensland.

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Putting down “Roots” en route: Lewis Mumford’s Distanced View of American Design

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In Roots of Contemporary American Architecture (1952) Lewis Mumford conceived of a functional design aesthetic by imagining a uniquely American way of making things like colonial era farmhouses, sailing ships, clocks and axes. Mumford’s particular admiration for New England-built clipper ships calls to mind Le Corbusier’s absorption with the “rational assemblies” of transatlantic ocean liners, one of which, the RMS Aquitania, appeared on the cover of his book Vers une Architecture (1923). Both texts responded to a century of rapid technological change that introduced their authors to industrialised travel among other uniquely “modern” experiences. Both texts contributed variants on functionalist design theory to the architectural canon, the received internationalism of Le Corbusier’s text contrasting the explicit nationalism of Mumford’s. Le Corbusier let his preference for mass-produced automobiles, electric dynamos, and ocean liners speak for itself though he was inspired by his own voyaging on the liners. Mumford garnered support for his theory by co-opting two nineteenth century compatriots who also led peripatetic lives, the nineteenth century American art critics Horatio Greenough and James Jackson Jarves.

This paper explores representations of a functional design style by Mumford, Greenough and Jarves by means of their idealisation of American sailing ships. It contextualises their thinking by reference to biographical circumstances and particularities of ocean-going travel in their respective lifetimes, specifically, their voyages abroad and periods spent abroad that background their writing. It shows how all three critics and their essay contributions to Roots respond to new modes of industrialised transportation and experiences of long distance travel. They all invoke a uniquely American innovation culture positioned unevenly between parochial and cosmopolitan worldviews.

Keywords: Lewis Mumford; Horatio Greenough; James Jackson Jarves; American design; functionalism; ships and seafaring
The arguments and legacy of Lewis Mumford’s collection of edited essays, the *Roots of Contemporary American Architecture* (1952), have become obscure, overshadowed by more sustained critical attention given to his earlier writing on architecture and his expertise in urban history and planning.1 However, as a compilation of foundational literature directed to architectural practitioners and students as well as the broader public, the *Roots of Contemporary American Architecture* helped shape a way of thinking about the cultural dimensions of building aesthetics and technology in the decades following the Second World War. Mumford’s editorial vision imposed a near common voice and project onto a collection of authors who were made to speak for an American approach to architecture portrayed as unique, progressive and alive. The authors spoke from great distances and dispersed quarters at times, a starting point for this paper.

The paper is primarily concerned with two of the earliest essayists to be enlisted in Mumford’s project. The first is Horatio Greenough (1805-52), the American sculptor and art critic who crossed the Atlantic multiple times, having spent most of his life in Italy. The second is James Jackson Jarves (1818-88), who prepared for his career as an art critic while working as a journalist in Hawaii before migrating to Europe as well. In several excerpted passages Greenough and Jarves praise what they perceived to be the organic evolution and functionalism of sailing ships, appropriating the category of material artefacts—the “architecture” of ships in no uncertain terms—to ground their criticisms of terrestrial building. By means of editorial gloss and commentary extolling the salutary lessons of the American clipper ship, Mumford incorporates Greenough’s and Jarves’ views into his own in order to background and legitimate Louis Sullivan’s and Frank Lloyd Wright’s contributions to the American architectural canon and promote their achievements before an international audience.

By tapping these distinctly American wellsprings of aesthetic criticism, Mumford diverges from Le Corbusier’s European view of modernist architecture and its cosmopolitan reach. As a vessel captained to convey American colonial and nationalistic creative impulses, Mumford’s clipper ship leaves Le Corbusier’s transatlantic liner in its wake. Broadly speaking, as a category of artefacts the “ship” is thus obliged to travel far and wide, in “conceptual and actual terms” (as the conference CFP calls them) to make such a journey.

Stephen Kern writes about the collapse of distance owing to new modes of industrialized transport and communication, part

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1 This paper includes excerpts from Lewis Mumford, *Roots of Contemporary American Architecture* (New York: Dover, 1972), unabridged republication of the second (Grove, 1959) edition of the work originally published (Reinhold) in 1952.
of the modern “culture of space and time.” Taking its cue from Kern’s reasoning, this paper aims to show how history-writing—specifically the historiography of functionalism demonstrated by Mumford’s book and his editorial control over its contributing essayists—manipulated geographical understanding, thereby obscuring historical and experiential circumstances of long distance travel for the purposes of contemporary architectural criticism. The paper describes some of these changing circumstances, highlighting the voyages experienced (and endured, it seems reasonable to conclude) by Greenough, Jarves, and Mumford. It aims to complement historiographical analysis with historical details of relevant voyages, highlighting the contribution of industrialized transportation to modernity and its evolving character—the increasing frequency, the tedium as well as the inspiration of voyaging—along with the contribution of maritime technology to novel creative and intellectual networks.

“Observe the ship at sea!”

For his book Mumford collected and edited the views of twenty-nine architects, aesthetes and art critics (including excerpts of his own work). One of the earliest contributors, the sculptor Horatio Greenough, spent most of his life in Italy. He embarked on the first of many voyages to Europe at the age of twenty, retreating time and again to the marbled reserves of the Continent’s neo-classical art establishment, and to the company of internationally-renown sculptors who were also his teachers: the Dane Bertel Thorvaldsen, the Welsh John Gibson and Florentine Lorenzo Bartolini (a favorite of Napoleon).

Returning to America first in 1826, due to illness, and repeatedly thereafter, Greenough completed commissions for American interests while reflecting on the state of the country’s art from afar. He is particularly well-known, indeed infamous, for his government commissioned statue of George Washington for the US Capitol rotunda. He returned again to America in 1843 specifically to supervise placement there of the ten and one-half foot high marble-draped, seated and Roman toga-wearing colossus.

Demands of work and political troubles in Florence obliged Greenough to give up his studio in Italy and return to the United States permanently, establishing his new home in Newport, Rhode Island, where he wrote his lectures and essays on art, architecture and aesthetics. Greenough’s lifelong experience as an expatriate sculptor, modelling American historical figures and themes from the distant redoubt of

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4 Dow, “Horatio Greenough and the Jacksonian Mood,” 2-3
cosmopolitan Italy, makes for a complex biography and character. He was in part an aesthete in the “Jacksonian” mold, celebrating America’s history and wide-reaching political aspirations through his sculpture, though not necessarily recognizing his country’s homespun democratic traditions and multicultural heritage. Hence, in Greenough’s hands, his statue of George Washington arrived in the US Capitol rotunda like Caesar crossing the Rubicon.

Greenough’s writing on art became known to scholars primarily by means of a memorial volume of some written lectures and notes compiled by Henry T. Tuckerman, edited and published in 1853 shortly after Greenough’s death. In 1947, after a long period of relative obscurity, the essays were subject to a further selection by Harold A. Small and Greenough’s ideas re-packaged for a broader audience of architects, artists, critics and art students. The result was an attractively bound and jacketed volume, published by the University of California Press. The book was given the title *Form and Function: Remarks on Art by Horatio Greenough*. It established Greenough’s reputation as America’s original theorist and advocate of functional architecture, all the while reinterpreting architecture’s status as a distinctive art whereby beauty was defined as “the promise of Function.” For *Roots of Contemporary American Architecture*, Mumford narrowed the selection and focus even further, choosing only three of the essays from Tuckerman’s volume (which were also the ones included in Small’s collection) and combining them into one chapter under the heading “Form and Function” which was the title borrowed from one of the three essays.

So what does Greenough say, or what is he left to say following repeated editorial operations? Greenough may have clothed his monument to George Washington in a Roman senator’s garb; however, like many aesthetes of his era, he was enamored with ancient Greek civilization so that the Greek ideal was both an inspiration and measure of artistic excellence and beauty. He was likewise suspicious of Victorian taste for the Gothic style that he believed was anachronistic, formally derivative and fundamentally alien to the American experience. The trick to valuing classicism over Gothic vaults, arches and buttresses was to see the former as something other and more than simply a style to be copied at whim like any other (the Egyptian, Roman, Gothic, etc.), but, rather, as a source of timeless certainties or lessons to be emulated in the present.

Among the objects and sources of exemplification for his principles, “the ship” was an imaginative trope that persisted

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5 The phrase refers to the political thinking, particularly the mix of nationalistic pride and internationalist ambitions associated with the two terms of Andrew Jackson’s US presidency (1829 to 1837).


8 Greenough, cited in Taylor, review of *Form and Function*, 265.

through the vicissitudes of editorship. It sailed through (with prevarication) the multiple essay selections and the sequence of written passages accompanying publication of the Tuckerman, Small and Mumford compilations of Greenough’s writing. In the one-hundred years of a discourse to which all three editions contributed, the ship comes across as an analogue of terrestrial architecture, complemented (though followed in priority and evocative appeal) by two additional analogies made between building’s organic form and the bodies of animals and machines. Greenough urged his reader to:

> Observe the ship at sea! Mark the majestic form of her hull as she rushes through the water, observe the graceful bend of her body, the gentle transition from round to flat, the grasp of her keel, the leap of her bows, the symmetry and rich tracery of her spars and rigging, and those grand wind muscles, her sails. Behold an organization second only to that of an animal, obedient as the horse, swift as the stag, and bearing the burden of a thousand camels from pole to pole! What academy of design, what research of connoisseurship, what imitation of the Greeks produced this marvel of construction? Here is the result of the study of man upon the great deep, where Nature spake [sic] of the laws of building, not in the feather and in the flower, but in the winds and waves, and he bent all his mind to hear and to obey. Could we carry into our civil architecture the responsibilities that weigh upon our shipbuilding, we should ere long have edifices as superior to the Parthenon, for the purposes that we require, as the Constitution or the Pennsylvania [famous American war ships] is to the galley of the Argonauts.  

Like Ruskin, Greenough believed the progressive evolution of shipbuilding provided far reaching lessons. He was similarly impressed by warships, hence he renders historic vessels made famous by the American Revolutionary War analogous to Homer’s ancient ship, the Argo. Mythological abstraction thus precedes additional performative and moral assessments. Mumford quotes Greenough in the *Roots of Contemporary American Architecture*:

> If you will trace the ship through its various stages of improvement, from the dugout canoe and the old galley to the latest type of the sloop-of-war, you will remark that every advance in performance has been an advance in expression, in grace, in beauty, or grandeur,

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according to the functions of the craft. This artistic gain, effected by pure science in some respects, in others by mere empirical watching of functions where elements of the structure were put to severe tests, calls loudly upon the artist to watch keenly traditional dogmas and to see how far analogous rules may guide his own operations.\textsuperscript{12}

There was a rhetorical ethic involved in Greenough’s and Ruskin’s appropriations as well as a positivist empiric so that the language of “function” played multiple roles. Objects like ships and machines were made to serve a didactic purpose, for instance, an evocative source of analogical reasoning for a century rapidly transformed by developments in transportation and nautical technologies.

“Americans … a remarkable people”

James Jackson Jarves came to ridicule the same aesthetic “blunders on terra firma” that Greenough did when he made the counterfactual case for ships. He pointed out the same mistakes of disingenuous, impractical and ostentatious architecture that could be remedied if only architects were to look to the sea for inspiration. Unlike Greenough, though, Jarves viewed the scene from even further abroad and from multiple ocean shores. As a young man Jarves lived for much of the 1840s among the native and international populations of the Hawaiian Islands, working as an entrepreneur, government agent, and editor of the Polynesian newspaper. He then also took up residence in Italy where he lived for most of his life, collecting so-called “primitive art” of the early Renaissance period. In Honolulu he wrote editorials extolling the virtues of Christian piety and American liberty while anticipating the Islands’ entry into the community of civilized nations, largely thanks to the patronage of the Hawaiian monarchy by the United States government and US merchant community. From Florence, he wrote weighty books on art criticism with which he sought to sell cultural enlightenment to his compatriots across the Atlantic, while advertising his collections of Renaissance illustrative art, fabrics and glassware for sale to museum authorities in America thinking to enlarge their respective holdings of Italian art.

Like many nineteenth-century philosophers and critics, Jarves was well-versed with the language of “primitives”—a term that could both describe early forms of artistic genres and caricature certain types of people. He was alert to the “progress” of civilizations in which “the primitive” and their material culture

\textsuperscript{12} Cited in Mumford, Roots of contemporary American architecture, 53. See also Horatio Greenough, Form and function, 121-22.
had roles to play. More so than Greenough, Jarves brought this language and a progressivist ideology to his art criticism, including his criticism of historicist architecture. He believed his writing and collecting played an important role to enrich the “aesthetic life and character” of Americans as a “distinctive race.”

Jarves argued in one chapter in *The Art-Idea*, being a review of “American Architecture, Past and Present,” that ships exhibited a unique combination of love of work and inventiveness marking out the potential for genius in American design. These qualities were not evident in the fashion-conscious architecture of his day that he believed was an “incongruous medley as a whole, developing no system or harmonious principle of adaptation, but chaotic, incomplete, and arbitrary, declaring plagiarism and superficiality, and proving beyond all question the absolute poverty of our imaginative faculties, and general absence of right feeling and correct taste.” To the contrary, Jarves imagined:

> If the mechanical features of our civilization were left to tell the story, our ocean-clippers, river-steamers, and industrial machines would show a different aspect. They bespeak an enterprise, invention and development of the practical arts that proclaim the Americans to be a remarkable people.

Mumford extracted only a minor portion (about thirty percent) of Jarves’ chapter for his collection of essays in *Roots of Contemporary American Architecture*, thus sparing his readers the larger, remaining share of its author’s sanctimoniousness but also depriving them of a more nuanced and possibly disturbing reading of Jarves’ ideas. Mumford titled the segment “Love of Work” with which he sought to identify and share its author’s preoccupation with American enterprise, inventiveness and practicality. Several of the redacted passages are noteworthy for what they illustrate of Jarves’ religiosity and the racialist ideas expressed by the critic.

**Mumford’s *Roots of American Architecture***

Mumford aligns the views of Greenough and Jarves with his own moralizing perspective on colonial era and nationalist sources for contemporary American design. He was sympathetic with Jarves, writing approvingly that the clipper ship—along with early American clocks and axes that Mumford adds to the collection—were sources for a distinctive American way of
making things, one that aimed for practical functionality and simple elegance. These outwardly unself-conscious objects:

…made the sensitive see that the new was not necessarily the ugly, nor were the products of the machine less beautiful in their own fashion than the more intricate forms of handicraft. Here the new style, shapely, naked, clean, was actually in process of formation.\(^\text{17}\)

Mumford fails to elaborate on the exact variety of ship he admires, a source of omission that adds to the generalizing thrust of his theory, writing obliquely how: “From the eighteen-forties to the eighteen-eighties, the new practices that were to invigorate American architecture were confined mainly to the shipyards and the factory.”\(^\text{18}\) It is likely Mumford imagined an amalgam of two craft. The first was the fast sailing ships built in the 1840s and commonly known as “Baltimore” clippers. These were modeled on earlier vessels first built at Chesapeake Bay and subsequently launched from shipyards along the entire US eastern seaboard. Baltimore clippers were known for their practicality, speed, and maneuverability; they distinguished themselves while working the China tea and opium routes, along with providing other, equally profitable and sometimes dubious services.\(^\text{19}\) The second craft Mumford may have had in mind was the larger, faster, and narrower vessels commonly called “extreme clippers” by maritime historians. These were first launched to convey passengers and goods in the Californian (1849) and Australian (Victoria, 1851) gold rushes, and famously reduced sailing times to these and other distant destinations.\(^\text{20}\)

Though he may have described them as distinctively American like Greenough and Jarves, Mumford’s views on the practical and aesthetic value of sailing ships, clocks and axes was grounded in a broader sociology of material culture than theirs. It was reasoning that manifests a different source of critical distance than Greenough’s neo-classicism and Jarves’ primitivism(s) and so aligns the architecture of ships with terrestrial building in a different manner. This comes across clearly in \textit{Technics and Civilization} (1934) where Mumford identifies three eras defined by the succession of socio-technological complexes: eotechnic (wood and water), paleotechnic (coal and iron), and neotechnic (electricity and alloys). Part of his philosophical scheme for describing the progress of civilization, Mumford’s analysis sets technology apart from mainstream history in order to trace—to invent, one could say—three trajectories for innovation. Consequently, as


\(^{19}\) See Benjamin W. Labaree, et al., \textit{America and the Sea: A Maritime History} (Mystic, CT: Mystic Seaport Museum, 1998), 223–24.

\(^{20}\) Honolulu, where Jarves was resident during both gold rushes was the most regular and important port of transit on both the China and California to Australia routes.
Ed Kranakis observes: “what linked clipper ships and medieval water mills together [diachronically, in the eotechnic phase] was more important than what linked them [synchronously] to the societies in which they were created and used.” In short, Mumford establishes and distinguishes between the timeless aesthetic value of a manufactured object—including the clipper ship and village farmhouse—and their respective contributions to different socio-economic systems and times.

Mumford’s manipulation of chronologies, resulting, in effect, in the collapse of historical context, is paralleled by a broader pattern of compression—of distance, both “conceptual and actual” (CFP). There’s little understanding the historical or geographical circumstances of Mumford’s socio-technological complexes. It’s clear, particularly after reading his earlier and thoroughly moralizing book Sticks and Stones: a Study of American Architecture and Civilization (1924), Mumford simply preferred what he believed to be the social basis for wholesome communitarianism and pragmatism of early colonial America’s building practices. As his biographer, Donald Miller, observes, Mumford had been holidaying in the Cotswolds, in England, in the autumn of 1920, prior to writing the book—far from former colonial shipbuilding and seafaring centers like Boston and New Bedford. It was in the Cotswolds where the “splendid stone villages worked their subtle influence, bringing him closer to the [intellectual] tasks to which he would give most of the middle part of his life.”

Sea Voyages and Distanced Views

Miller’s advice alerts us to how biographical circumstance, specifically Mumford’s travels and the voyages of his nineteenth century predecessors, background their views, so that the history of industrialized transportation, first by sail, then by steam and diesel engine, provides us with an additional context for their aesthetic criticism. Greenough had ample opportunity to experience transport by wind, sail and steam first hand. To understand what this meant in terms of voyaging distances and times, consider the experience of another American patriot and traveler, one who narrowly escaped Greenough’s modelling and Greek love. Richard Saltonstall Greenough, Horatio’s younger brother who was also an artist (and spent most of his life in Rome), beat his elder sibling in the race to win the commission to sculpt Benjamin Franklin’s head. During his lifetime the statesman, diplomat and scientist made three return trips across the Atlantic. Franklin’s last return voyage was in 1775,
following an eleven year residency in London representing the Pennsylvania colony and just prior to the onset of the American Revolutionary War. He left his adopted home on March 1775 and arrived in Philadelphia on May 5, a journey of 47 days.\textsuperscript{24}

By 1825, just before Horatio Greenough’s first return to America, the average crossing time from Liverpool to New York City was 23 days on ships operated by the Black Ball Lines. By 1845, twenty years later, “Atlantic ships had doubled in size and were not credited as a success unless they had made at least a single east-bound dash of 14 days or less.”\textsuperscript{25} In the year of Greenough’s death and the Great Expedition of 1851, the Cunard Line introduced into service its first iron-hulled steam paddle-wheeler, \textit{the Persia}, that set a new record with a 9-day, 16-hour Liverpool to New York voyage, travelling at just over an average speed of 13 knots or 24 km per hour. Biographical research has yet to reveal how Greenough spent his time on his voyages. (Franklin famously conducted oceanographic experiments though it’s doubtful they sustained him for the entire 47 days of his final return voyage.) Regardless, the reduction in crossing times and falling passenger fares, certainly made many art commissions possible as well as the mobility of expertise essential to an international career and reputation.

The circumstances of Jarves’ life and career were intertwined with mid-nineteenth-century growth in long-distance ocean travel and increasingly globalized channels of communication. Like Greenough he witnessed extraordinary developments in both arena in the 1840s and 50s. However, even with the introduction of fast-sailing clipper ships during this period, travel between the Hawaiian Islands and North American and European ports seems unimagnably distant and grindingly slow to contemporary sensibilities. Whereas biographical research so far has identified no less than six of Greenough’s transatlantic crossings and the circumstances accounting for them, it’s not yet known whether Jarves travelled more than the once from New England to Hawaii and back again. The distance, time and expense entailed would have been considerable. A feature in Jarves’ newspaper \textit{The Polynesian} (July 6, 1844), for instance, calling for establishment of a more regular, monthly packet ship service to eastward ports, estimated it would take the vessel, departing from Honolulu, 65 days to travel to New York City and 84 days for passengers to reach Southampton.\textsuperscript{26} Another shipping notice (May 18, 1844) records a sailing time of 34 days between Tahiti to Oahu, the route of the pioneering Hawaiians.

From neither Honolulu nor Florence where his interests and career next brought him, did Jarves demonstrate much expertise


\textsuperscript{26} The routes would include overland journeying by horseback or stage across Mexico and voyage by steamer from Vera Cruz to Southampton. One way fares were estimated by the newspaper as US$416 and $614 respectively. According to the CPI Inflation Calculator provided by the US Bureau of Labor Statistics, this would amount to US$13,962 and US$20,607 respectively, in 2019 dollars. https://www.officialdata.org/us/inflation/1844?, accessed February 21, 2019.
or sustained interest in naval architecture (perhaps he was sick of having been on ships for so long) so his references to
the functionalism of ships read more like cautionary tales than
statements of much facticity and technological expertise. In his
first book, the lengthy History of the Hawaiian Islands (1843)
written while he was resident on the Islands, Jarves praised
the legendary vessels of the first Hawaiians, possibly of Malay
origins he believed, compared to the “frail canoes of modern
times” that were “ill-adapted” to voyages of two or three
thousand miles.27 The language and ready-made formula of
forms and functions allowed for such distanced assessments.

Lewis and Sophie Mumford left New York harbor for England
on their first transatlantic voyage—the one that took them to the
Cotswolds in 1920—on board the RMS Adriatic, an ocean liner
of the White Star Line (the company that had also owned the
Titanic). Among the Adriatic’s recorded voyages and times, the
ship made the crossing from Liverpool to New York in 1912 in
9 days, shaving only 16 hours of the record set by The Persia,
sixty-one years before. Many additional trips to Europe followed,
including one in 1957 before he began writing the first draft
of The City in History, and yet another in the summer of 1960
before finishing the book’s chapters on ancient Greece and Rome
with his first visit to ancient Greek sites at Paestum, Pompeii,
Athens, and Delphi. For the serious intellectual of the period,
travel could be an essential part of research. Mumford returned
to the US from his 1960 trip onboard the SS Mauretania, a
journey of “seven boring, rainy days” he wrote in his diary.28
Owing to developments in the commercial passenger aviation
industry, it would soon become possible to fly, far more readily,
quickly and cheaply.

By an interesting turn of history, or perhaps simply the mundane
fate one owes to travel agents, available berths and preferred
itineraries, Mumford made his second transatlantic voyage
in 1925 on board the RMS Aquitania, Le Corbusier’s much-
admired ship—although the French modernist himself preferred
to glamorize the vessel rather than travel on it. Mumford was
heading to lecture in Geneva at the time of his 1925 passage.
The voyage was one of 29 crossings (14½ roundtrips) that year,
in which 28,215 passengers traveled on the vessel, an industrial
workhorse.29 Ten years after Mumford headed east across the
Atlantic, Le Corbusier journeyed west, in 1935, on his first
visit to America for a book tour to spruik Vers une architecture,
a trip patronised by the Metropolitan Museum of Art. He
travelled onboard the SS Normandie. Both Mumford and Le
Corbusier relied on the regular service, speed and comfort of

27 James Jackson Jarves, History of the
Hawaiian Islands, 4th ed. (Honolulu: Henry
M. Whitney Publisher, 1872), 12.

28 Miller, Lewis Mumford, A Life, 459, 461,
463.

29 Mark Chirnside, RMS Aquitania. The
Ship Beautiful (Stroud, Gloucestershire: The
History Press, 2008), 91.
the ocean liners, like many of their contemporaries, intellectuals and polemicists with professional networks across the Atlantic. However, only Mumford praised the Yankee clipper ship, co-opting the antiquated vessel as a uniquely American innovation and cultural symbol.

The distinction invites further comparison between the two classes of vessels and their unsteady performance as architectural metaphors. There are at least two sources of ambiguity—two irregularities—that accompany Mumford’s appropriation of the clipper ship. Firstly, regarding the availability of synchronic versus diachronic contexts for mobilizing ship-as-architecture metaphors, the anachronistic disjuncture of a 19th century vessel’s representation as a post-war American icon in Mumford’s 1952 book is concealed behind rhetoric promoting the exceptionalism of American creative enterprise, much like mid-twentieth century American advertising co-opted the clipper ship to sell all kinds of things: Scotch whisky, automobiles and life insurance to name some of the products branded in this way. Secondly, regarding universalist versus regionalist settings for modernist architecture, Le Corbusier’s faith in the cosmopolitan appeal of modernism is evident in his admiration for the ocean liner, planes and automobiles. By comparison, Mumford’s recovery of the clipper ship as forerunner of American modernism was part of a different agenda entailing his advocacy of regionalism and his American nationalistic emphasis in architectural historiography—hence his parallel retrieval (and extensive editing) of Greenough’s and Jarves’ writing.

Conclusion

Bringing Greenough and Jarves on board, Mumford (as editor and author) clearly aestheticized American sailing ships. A condition of purposeful adaptation—of an object’s form to its function, and specifically ships to changing circumstance—is conveyed in Roots of Contemporary American Architecture. Working to establish the meaning of such terms as “function” and “functionalism” as a design process, the book served demonstrative and polemical roles. Its narrative “made the sensitive see” (Mumford) something of the material conditions underlying astute perceptions of the novelty, dynamism, and beauty of constructed forms. In philosophical terms, the book contributed to an observation language and an empiricist conception of knowledge. These worked to establish as fact a fundamental opposition between form and function, between an audience’s perceptions of an artifact and the circumstances

30 The author is grateful to the anonymous reader for their perceptions and provocation regarding the critical prospects of such a comparison, specifically the ambiguities of Mumford’s appropriation of the ship metaphor.
that give it purpose or made it work a certain way. This required critical distance, a generalizing perspective on the past—including parochial shipbuilding industries—that came with forgetfulness and contributed to Mumford's standing as a philosopher, sociologist, and internationally-renown cultural critic.

By means of analogous reasoning and their references to ships, Mumford and the redacted essays construe relations between “the ship” and marine environment as fundamentally synchronous, the ship realizable in a succession of ideal forms and the ocean the source of timeless requisites for buoyancy, stability and movement. In other words the sea comes across in the essays as a provocative, but ultimately static domain for a series of innovative acts, the source of hydro-dynamic variables in shipbuilding and seafaring operations. Moreover, while the marine environment comes across as a domain that is clearly geographical in physical or territorial extent, the domain is indistinct and featureless, lacking geographical extension or distance in either a meaningfully determining or phenomenological way.
Vernacular Prefabrication in the Colonial Context: The 1862 Bintulu Type Fort in Sarawak

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The design, procurement and implementation of the Sarawak government’s 1862 fort in Bintulu (on the northwest coast of Borneo) represented modern approaches. It was a standard design that appeared to contrast with vernacular and indigenous typologies. Its primary structure was prefabricated in the capital, Kuching, before being shipped out for erection. While defensive, it also introduced modern institutions to newly acquired areas. The Bintulu Type fort was also implemented at Sibu (1862), Mukah (1863), and Baling (1875, moved to Kapit in 1880). Unlike most colonial jurisdictions, Sarawak’s government explicitly relied on the dynamic maintenance of political relationships with locals, and negotiations and collaborations with indigenous, regional migrant and colonial groups to maintain authority. Its governance was a hybrid of vernacular and modern systems, and its European leaders indigenised their rule. This hybridity and indigenisation extended to fort architecture. Second-generation British colonial buildings in Southeast Asia emulated metropolitan designs while masking local involvement. However, the vernacular materials and construction of the Bintulu Type fort clearly show the involvement of regional migrant and indigenous actors. While prefabrication and remote manufacture can be considered modern, the vernacular carpentry traditions adopted for the forts were demountable and therefore appropriate for remote reconstruction. Using historical ethnography methods and fieldwork at the last extant Bintulu Type fort at Kapit, this paper explores how vernacular and modern approaches were brought together in the procurement and implementation of the Bintulu Type forts.

Keywords: vernacular architecture; colonial architecture; Sarawak; fort; prefabrication; carpentry
In a 9th April 1862 letter from John Brooke Brooke to Rajah James Brooke, he reported that he had “been to Bintulu [,] chosen the site of the new fort at the mouth of the river. We brought the frame of it with us”.¹ Bintulu, on the northwest coast of Borneo, was part of a new territory acquired by Sarawak after laying siege to the area, and establishing a fort imposed authority through a physical presence. From the Bintulu Type fort at Kapit, Sarawak,² we know that its construction allows prefabrication: Brooke Brooke’s ‘frame’ was the building’s disassembled primary structure. In the context of nineteenth century colonialism, this might suggest the adoption of a modern system to overcome local labour and skills issues in order to implement colonial governance. However, Brooke Brooke goes on to say “… and the local people have cut plenty of wood” for the fort, implying that local collaborators helped source and supply building materials. This timber was used as cladding, suggesting significant indigenous involvement in fabricating building materials. The Bintulu fort can be considered a result of flexible and adaptive modern processes, but also a vernacular building. This is problematic as vernacular architecture has often been considered in opposition to modern (and colonial) architecture. Vernacular architecture is thought of as ‘frozen in time’ and unable to adapt to contemporary issues,³ whereas modern architecture is seen as dynamic, progressive and adaptable. This binary opposition limits how modern and vernacular architecture are considered, but recent historiographical approaches have questioned and problematised this schema, including expanding its conceptualisation.⁴ This includes the intertwining of modern and vernacular, where vernacular approaches form modern buildings.⁵ This paper seeks to extend this line of investigation by exploring modernity’s encounter with the vernacular in nineteenth century Sarawak.

Context

The state of Sarawak began in 1841 when Indian-born Briton James Brooke became governor (with the title of Rajah) of a district of the Brunei Sultanate in Northwest Borneo from Cape Datu to the Sadong River,⁶ later becoming its autonomous ruler within Brunei’s ruling structure.⁷ With his successor Charles Brooke, Sarawak was expanded five times to its area today as a state of Malaysia. Like Francis Light and Stamford Raffles did in Penang and Singapore respectively, James adopted indigenous practices to acquire new colonial territory for Britain, to modernise it for colonial trade, agriculture and industry.

⁵ Chrysler, Times Arrows, 296.
However, Britain chose not to acquire Sarawak and James decided to fulfil his aims without formal colonial support. This was an unusual situation—James ruled as a Malay regent, and his *kerajaan* (Malay government) lasted until WW2. While it introduced modern systems, it also governed as an independent Malay state whose Rajah happened to be ethnically British. It was undeniably under the shadow of British colonialism, but careful and deliberate negotiations and collaborations with colonial agents and indigenous and migrant groups were necessary for governance and expansion. This resulted in the government employing processes which hybridised modern and vernacular approaches to rule and produce its architecture, although period historiographies privilege the James Brooke’s more conventional modernising and civilising mission over his ability to indigenise his approach. Despite local collaborations, the government modelled the late nineteenth century architecture of the capital on metropolitan examples. Like neighbouring colonial jurisdictions, it aimed for the maintenance of hygienic uniformity in its architecture’s appearance.

The government’s fort network in its expansion areas can be seen in the same light. The forts built in Sarawak’s first expansion area from 1849 contrasted with local Malay and Iban examples, with modern elements such as strip windows, protective lattices and lookout towers. While conceived as

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*Figure 1. Photo of the Bintulu Fort, Bintulu, Sarawak, 1862. Reproduced by permission from Anthony Richards, “Photographs,” *A.J.N. Richards Collection*.* (Kuching: Tun Jugah Foundation, 1964).*

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9 For example, see Baring-Gould and Bampfylde, *History of Sarawak.*


12 Ting, *Precarious Power, Forts and Outstations,* 199.
defensive architecture they also housed modern institutions such as legal courts, dispensaries and agricultural stations. They were later whitewashed, further reinforcing their modernity. The forts established during the state’s 1861 expansion introduced further modern approaches. A standardised design, they were whitewashed, two-storey buildings with continuous strip windows and lattices along the first floor perimeters and the ground floors were walled in. They housed modern governance of vernacular (indigenous and regional migrant) groups. These characteristics contrasted with indigenous architecture, suggesting modern approaches to design, function and implementation. The primary structural timber frames of the Bintulu, Mukah (fig. 1) and Sibu forts (fig. 2) were prefabricated and transported to site for erection. A fourth Bintulu Type fort was prefabricated and established at Baleh in 1875, which was later disassembled, transported downriver to Kapit (fig. 3) and re-erected there, where it still stands. These prefabricated forts were preceded by temporary forts erected by the government’s collaborators, for example in Bintulu and Mukah in 1861, or by a government boat providing security during the fort’s construction, in the case of Baleh.

Prefabrication

In terms of early Australasian colonialism, prefabrication was a modern idea to address contemporary problems. Arthur Philip brought a prefabricated and disassembled house of British manufacture with him on the first fleet to settle New
South Wales, Australia, in 1788 to address the lack of familiar labour, materials and dwellings. Prefabrication allowed for quick establishment in new locations. In the early nineteenth century, prefabricated disassembled houses of standard designs manufactured by British companies such as H. Manning were being imported into the early colonial settlements of Sydney, Perth and Adelaide. In the 1830s, the colonial manufacture of prefabricated buildings began, to reduce labour and material costs and shipping distances. For example, ‘Singapore Cottages’ were prefabricated in Singapore for sale in Hong Kong and Australia. Prefabrication is often conflated with modernity as it was the triumph of modern technology and commerce over the tyranny of distance and perceived lack of skilled local labour.

However, prefabrication could rely heavily on vernacular approaches. While Manning’s prefabricated cottages were specifically designed to be quickly and easily erected on arrival at remote locations by untrained people, many of the early prefabricated buildings manufactured in Britain were heavily based on established vernacular traditions. As Miles Lewis has noted, “Traditional [British] timber framing … was well adapted to prefabrication” as they relied on mortise and tenon joinery that could be erected at the place of manufacture to test the connections and dismantled without damaging the primary carpentry joints. The businesses that manufactured Singapore


Figure 3. Photo of the Kapit fort. (Photograph by Ho, Ah Chon. “Black and White Negatives,” The Ho Ah Chon Collection (Kuching: Pustaka Negeri Sarawak, 2010.))
Cottages were established by Europeans with access to pan-colonial commercial networks. However, the vernacular joinery and carpentry employed for these buildings is evidence of the involvement of Malay and Chinese carpenters.\textsuperscript{20} At that time, Singapore was a hub for regional labour flows, sojourners from China and insular Southeast Asia gathered there for employment or to learn of other areas where labour was required.

The main difference between industrial manufacture and vernacular or traditional systems is the hand-made nature of connections. To achieve tight fitting joinery in vernacular carpentry, connections at each location were considered individually, were unique and specific to that location and members of the same type could not be interchanged to other locations.\textsuperscript{21} H. Manning’s products were modular and mechanically mass-produced to consistent and exacting tolerances and dimensions so that standardised components such as the posts and wall panels did not rely on specific joinery locations to maintain a consistent and reliable fit.\textsuperscript{22}

**The Bintulu Type**

The prefabrication of the Bintulu fort relied on vernacular carpentry traditions. It was part of Sarawak’s second expansion, when the government acquired by treaty the area between the lower Rejang River and Kidurong point from the Brunei Sultanate in 1861 after a short siege and occupation.\textsuperscript{23} Official acquisition saw local collaborators in Bintulu, Mukah and Sibu keen to support the establishment of government infrastructure but those settlements lacked construction approaches familiar to the government. Because resources such as Sarawak ironwood, *belian* (*eusideroxylon zwageri*), and skilled carpenters familiar to the government were both available in Kuching, the Bintulu fort’s primary structural frame was fabricated in Sarawak, before being transported to Bintulu for erection.\textsuperscript{24} Migrant Chinese carpenters were active in Kuching from 1845, where they were responsible for fabricating the *belian* weatherboards to replace thatch walls in the settlement.\textsuperscript{25} At that time, Malay carpenters were mainly involved in boat-building,\textsuperscript{26} but were also involved as construction labour. Although the 1849 Anglican Mission House’s carpentry in Kuching was European, Chinese carpenters and Malay labourers constructed the building.\textsuperscript{27} The British missionaries Francis and Harriette McDougall brought carpentry tools with them, intending to teach local carpenters to make arches and mouldings for the mission’s buildings under their German carpenter, Stahl.\textsuperscript{28} European carpentry approaches


\textsuperscript{21} Ting, Precarious Power, Forts and Outstations, 202.

\textsuperscript{22} Lewis, “Diagnosis of Prefabricated Buildings,” 59.

\textsuperscript{23} Runciman, *White Rajahs*, 146.

\textsuperscript{24} Brooke, John Brooke Brooke Letters, ff 435-43.


\textsuperscript{26} Low, *Sarawak*, 154.


were not widely adopted, however, with the government choosing to instead employ the Chinese and Malay carpenters and labourers to construct its buildings.

The construction of the Bintulu fort’s structural frame in Kuching began with the procuring of belian timber for fabricating the frame’s components. Due to the complexity of the structure’s construction system, it was fabricated in Kuching where, as outlined above, there was available skilled and unskilled labour in addition to materials. At that time, belian was sourced from upriver groups close by and brought down to Kuching, as it did not grow in the lowlands geography of the capital. The hard-wearing nature of this timber and its resistance to rotting and termites had established its desirability with indigenous groups for building their upriver longhouses, and it became popular with Kuching’s officials and vernacular groups. Rough timber sections were split with steel wedges where trees were felled and shipped to Kuching where they were, with adzes, hewn into smooth and square members of nominally consistent dimensions, from which the forts’ primary vertical and horizontal members were fabricated. The connections of these elements followed standard rules but were bespoke and not modular. As with other pre-modern prefabricated systems, the frame was likely test-erected in Kuching’s government timber yard, when the connections of the various components could be verified for fit and strength as a system. This was done to minimise any on-site adjustments that might be required, as familiar tradesmen were unavailable in the state’s new territories. Each connection’s components were uniquely coded in-situ before disassembly, transport to Bintulu and re-erected in the same arrangement at the remote site. This process contrasted with industrially produced prefabricated buildings, which did not require test-erection before being transported to the colonies.

The consistency of industrial manufacture and considered design allowed standard instructions to be given to easily erect Manning houses, so the manufacturer did not need to send trained people to supervise the assembly of those buildings. This is not the case with the Singapore Cottages. When six Cottages were imported into Melbourne in 1851, they were accompanied by Louis Ah Mouy, a Chinese carpenter from Singapore familiar with the construction and marked components for assembly. This suggests that the system was more complex than the Manning houses, probably due to each connection being unique to specific members, and the coding of members being in an unfamiliar language. It also suggests that there were no

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available tradesmen in Melbourne familiar with the carpentry traditions that produced the Cottages. In the case of the Bintulu fort, Francis MacDougall reported that two Chinese carpenters accompanied the disassembled frame on a government steamer “Rainbow” to Bintulu to “build the fort.” This suggests that, despite the coded members, the construction of the frame was of a level of complexity that required skilled tradesmen involved in its original fabrication to erect it, and that Chinese carpenters outside of Kuching were rare at that time. The spoken *lingua franca* for Kuching’s Malay, Chinese and European inhabitants in the late 1840s was Sarawak Malay. There was, however, no common written form when the Bintulu fort’s frame was fabricated, with Malays using jawi (Arabic script), Chinese using Chinese characters and Europeans using Romanised English. The fort’s components’ were coded in Chinese, the language of the installing carpenters.


Evidence from the last extant Bintulu Type fort at Kapit show that the design of this type was similar to most permanent government forts. In addition to the common characteristics outlined above, the forts were two-storey structures with the main inhabited level being the first floor. Except for the first outstation fort at Skrang (later moved to Simmanggang) which originally had an open undercroft, ground floors were walled in for defence and storage but not used for habitable purposes (fig. 4). Like contemporaneous longhouses, early forts had retractable, external access ladders to access the first floor, but the Bintulu Type had a European style internal stair connecting the two floors. Forts had a large, rectangular floor plate, often with extended elements such as lookouts at some corners and occasionally entry elements in the middle of the front of the building, which addressed the river. The Lingga and Skrang forts of the first expansion had attached wings to the rear of the main fort building. With a main floor plate of 329m², the Bintulu Type was the second largest fort type ever built (fig. 5), with only the unique design of the second Marudi fort being larger with a main floor plate of 359m². In the context of nineteenth century Sarawak, the bigger forts were large, singular buildings, much larger than detached Malay buildings. Longhouses were considerably longer, but they were also constructed as a collection of independently owned and implemented connected sections, rather than the forts’ singular structure of robust construction. While indigenous detached houses and longhouses were generally elevated off the ground to a defensible height, the heights between the first floors and roof structure were modest, perhaps 2m. In contrast, the forts had generous clearances between their first floors and the underside of the roof structure, measuring 3.6m in the Bintulu Type.

Most buildings in Northwest Borneo at that time were constructed of timber and other plant-based materials, with cladding only to the exterior of the structure. Unlike rendered masonry construction, the lack of internal wall lining allows structural elements to be visible. While they did not originally have ceilings, one was later installed at the Kapit fort. However, the wall and floor structure remain visible internally, which has facilitated the investigation of the building’s structure. At Kapit, the primary structure’s geometry is driven by the double-pitched hip roof, with a central roof at about 45°, surrounded by a 30° lower roof that skirts around the base of the central roof. The steep pitches help shed high volumes of tropical rain and to allow a space for hot air to rise into, but a shallower pitch was required for headroom at the perimeter of the building.
The central roof was supported by two rows of large main posts, connected longitudinally by beams (fig. 4). One beam spanned between two posts in the same row and was connected to the next by a lightning scarf at the top of a post. Scarf connections were commonly used in Europe and elsewhere in Asia, but in Southeast Asia lightning scarfs are associated with Chinese joinery methods. For Chinese carpenters in Sarawak, the name of this scarf translates as a “hand-in-hand connection”. The scarf joint was mortised onto a tenon at the top of each post. Laterally, cross-beams were placed over the longitudinal beams, mortised into the same post tenons that extended up past the beams. At the first and last main posts, the beams and cross-beams crossed and were rebated into each other, with the post’s tenon going through both. In the Kapit fort, the longitudinal and first and last cross beams are visible as the ceiling was installed between these members, under the other cross beams. The ceiling was likely installed after WW2 and now obscures the roof structure. In the Bintulu Type forts, king posts with tenons were mortised into the second to penultimate cross-beams. The king posts had mortises about two thirds along their height for intermediate beams and at the top for ridge beams. The use of an intermediate roof beam (known in Malay as an *alang muda*).
tunjuk langit) is a Malay carpentry practice regionally, and indicates the involvement of Malay carpenters in fabricating the primary structure. At that time, there was an influx of Malays who were coming to Sarawak from elsewhere in Southeast Asia. In Sarawak, the intermediate roof beam was used to support collar ties that braced each pair of opposing rafters that met at the ridge. The significance of the visibility and recognisability of these construction details is that, in the context of nineteenth century colonial Southeast Asia, the government remarkably chose not to obscure the contribution of vernacular carpenters in the architecture of a permanent institutional building.

Vernacular approaches are also visible around the perimeter of the building. The skirting roof was supported on smaller perimeter posts at the edge of the building, connected by top plates, each spanning one bay and connected at the tops of posts with lightning scarfs which were mortised onto tenons at the tops of perimeter posts. At the corners, top plates crossed and extended past the joint, and were rebated into each other, and mortised onto a tenon at the top of the corner post. Crossed top plates are another joinery detail associated with Chinese carpenters. Below the top plates were a row of sills for the strip window that ran around the building. The sills had tenons at each end, mortised into the perimeter posts with timber pegs locked the two in place. There were three horizontal rails between the sill and the ground, for structural rigidity and fixing points for the cladding. Bearers running across the building were mortised into the perimeter and main posts, as well as stumps located between main post rows. Following indigenous practices in Northwest Borneo, posts and stumps were piles, visibly set in post holes in the ground, rather than sitting on separate footings above the ground.

While the Bintulu Type forts’ primary structure was fabricated in Kuching and erected by carpenters from the capital, the secondary structure and cladding required less precision and was locally sourced locally. The secondary structure included timber rafters, collar ties, battens and floor joists, all visible from inside the building (fig. 4). With no carpenters familiar to the government in Bintulu, local collaborators provided not only construction labour, but also fabricated the secondary structure and cladding. The roof was clad in thatch before timber shingles and battens could be fabricated, the external walls with 50mm thick vertical timber panelling nailed to the sill and rails, a timber lattice was attached to the eaves fascia and the sill, along the strip window, and the first floor had nominally 25mm timber floorboards laid across the joists. The 10mm timber shingles

were cut from belian blocks, likely to have been imported from other areas in the state where this was used by indigenous groups, such as by Ibans on the Undup tributary of the Lupar River. These shingles were widely adopted by the government for its buildings across the state, perhaps as a symbol of its collaboration with certain Iban groups. Government buildings in Kuching also used these belian shingles despite the availability of imported terra cotta roof tiles.

The government also leveraged their relationship with their local collaborators to provide construction labour to build the fort. The dimensions and weight of the largest framing components meant that the carpenters from Kuching were unable to do it alone. They acted as the foremen under the direction of European and Malay government officers, who procured local labourers. Once the Rajah of Sarawak gained jurisdiction over Bintulu, his position allowed him (and his agents) to acquire labour as tribute. In exchange, the workers were offered the protection of their new rulers and paid in rice or Sarawak dollars. The largest framing members in the fort were the cross-beams and the main posts. The cross beams were approximately 250 x 250mm sections, and 7.5m long, and the main posts were of similar dimensions, with the length depending on how deep the post holes were. As belian has a specific density of 1050kg/m³, the cross beams and main posts could weigh some 500kg. If each worker could consistently carry 40kg each, a gang of at least thirteen people would be required to manoeuvre each of those members off the steamer and carry them up to the site, get posts upright with the help of ropes and hoist the beams to the top of the posts. If two gangs of workers were active on site, there may have been some 30 people working on the project. Local architectural traditions helped this process – the tall houses built by the local indigenous Melanau government collaborators were said to be taller than the forts and were quite large structures.

Conclusion

This paper has sought to complicate the traditional differences between vernacular and modern architecture. The example of eighteenth and nineteenth century prefabricated buildings transported to the colonies has demonstrated that this process, while it began to engage industrialised manufacturing processes, was intertwined with European vernacular construction. Through the Bintulu Type fort, it has shown that the trope of vernacular architecture as an unchanging and unresponsive


37 Handbook of Some Sarawak Timbers. (Kuching: Sarawak Forests Department, 1999), 9.
to modernity is problematic. While able to be considered as products of modernity, the forts of the Sarawak government can also be seen as the result of the dynamic interaction between vernacular and modern approaches, where vernacular approaches and labour have produced significant parts of the architecture. The Kapit fort, as the only extant example of the Bintulu Type, is a significant building as it is a constructed result of the Sarawak government’s hybrid processes, from which the involvement of vernacular traditions can be read.
Representing Colonial Estrangement: Depictions of Unreal Architecture in the Painting A Direct North General View of Sydney Cove, 1794

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This essay examines depictions of unreal architecture in the painting A Direct North General View of Sydney Cove 1794 (1793-5) (or Sydney Cove 1794), contestably authored by the convict artist Thomas Watling. By comparing this painting to three of Watling’s topographic drawings of the same period, this essay demonstrates the repeated use of familiar architectural objects in the work. It suggests that, as an assemblage of discontinuous architectural objects in the landscape, this painting fulfils picturesque aesthetic principles by fragmenting accurate representations of place. By considering various claims of the accuracy of topographic drawings—widely accepted as the authentic other to the picturesque—this essay challenges their assumed compositional neutrality. Instead, it argues that the same mechanism of addition/omission of visual information is apparent in both picturesque and topographic depictions of architecture at Sydney Cove. Both methods of image production depart from how buildings appear in order to satisfy familiar, although unreal, illusions of the civility of architectural space. Underlining this argument is the suggestion that space itself was not a neutral concept during the early colonial occupation of Sydney Cove, and that this painting demonstrates the manipulation of the image in order to culturally assimilate a completely unknown reality. By linking these practices of image production to the emergent eighteenth-century culture of imitation, this painting is described as the consequence of an attempt to meaningfully represent unfamiliar land, using ideas of space and methods of depiction at a distance from their context. The result is a collapse of distance between metropole and antipode depictions of place, accompanied by an equivalent collapse between the mediums of image production and concepts of space. Sydney Cove 1794 portrays the experience of colonial estrangement by representing a space neither familiar nor foreign but dispelled from its centre through the endeavour of colonisation.

Keywords: architectural image production; topographic drawing; picturesque; Sydney Cove; Thomas Watling
Viewing Sydney Cove 1794

The question of how to draw something we don’t know how to see is a complicated one, particularly when it comes to depictions of the first buildings constructed by British settlers in an unknown land after 1788. The complication arises, not from conflicts in the depiction of form, but from conflicts in the arrangement of these forms in space. A useful example to demonstrate this conflict is the oil painting, *A Direct North General View of Sydney Cove 1794* (1793-5) (or *Sydney Cove 1794*), attributed to the convict artist Thomas Watling.† In this depiction, the buildings of the settlement sit uncomfortably in a landscape scene of Sydney Cove. Groups of built objects are drawn independently from others, with inconsistencies in scale and perspectival diminishment. The result is architectural objects drawn with no universal visual field to order their depiction in space (fig. 1).

The dissonance in this depiction extends to how this painting has been categorised in the history of Australian art. In the revised edition of his first major book on visual depictions of Australian identity in art, the prolific art historian Bernard Smith describes this painting as a “transitional form between the topographic style and the romantic approach” to painting.‡ Topographic art is introduced by Smith as a type of drafting based on precise depictions of urban objects using measured, detailed line drawings.³ He juxtaposes this with the emerging “romantic” fascination in visual media with “[t]he curious, the strange, the odd, the mysterious.”⁴ Positioning this depiction of architecture in the landscape between these two extremes, we establish what Smith describes as an oddness of place, which he defines as the picturesque.⁵

Early picturesque depictions of Sydney Cove use techniques of composition developed from eighteenth-century landscape architecture and painting; they blend the irregular features of nature with classical arrangements of formal elements.⁶ In Jeffrey Auerbach’s essay on picturesque image composition in the visual depictions of British colonies, he outlines the genre’s typical characteristics as:

*divid*[ing] the landscape into three distances: a *darkened and detailed foreground, a strongly lit and deep-toned middle-ground, and a hazy background. Features such as trees and ruins were to be positioned so as to create a balanced composition that provided a sense of both harmony and variety, and to push the

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3 Smith, *Place, Taste and Tradition*, 40-46.

4 Smith, *Place, Taste and Tradition*, 37.

5 Smith, *Place, Taste and Tradition*, 37.

viewer’s eye to the middle distance, as in a stage set. In a typical picturesque scene there would be a winding river; two coulisses, or side screens, which are the opposite banks of the river and which, in conjunction with some hills, mark the perspective; a front screen which points out the winding of the river; and a hazy, rugged, mountainous background. There was also an identifiable picturesque tint, the soft golden light of the Roman Campagna, which, as a number of scholars have suggested, artists transposed first onto the English landscape, and then carried to the furthest reaches of the British Empire.\textsuperscript{7}

Other than the omission of the “mountainous background”—which the painting’s attributed artist, Watling, describes as a conspicuously absent feature from Sydney Cove—this painting fits this description.\textsuperscript{8} Smith agrees that \textit{Sydney Cove 1794} belongs to this genre by comparing it to William Gilpin’s founding principles of picturesque composition.\textsuperscript{9}

Ian McLean suggests that in spite of the range within the picturesque aesthetic between the “clear neo-classical spatial arrangements” in the landscape architecture of Capability Brown and Humphrey Repton and the “freer more romantic scenery” of Payne Knight and Uvedale Price, the central narrative of these scenes, in the colony, was a description of civilisation—in the form of ordered built objects—framed by “wilder nature.”\textsuperscript{10} The ambition of these competing principles was to seamlessly blend wildness and order, and create an agitated visual dialectic to emotionally move the viewer.\textsuperscript{11} Although in \textit{Sydney Cove 1794}, the perspectival irregularities of the architectural objects interrupt the seamless blending of built form and wild nature, creating oddness in the depiction of civic order.

This oddness may lie in the painting’s inaccurate reflection of the experience of the Australian environment. In a letter to his aunt in December 1791, Watling describes his experience of the colony as entirely unfamiliar to the romantic scenes of British landscape painting—the genre in which he was trained prior to his transportation to Australia in 1792 after being convicted of forgery in 1788.\textsuperscript{12} Watling suggests that were he to “select and combine” views of Sydney Cove, he might “avoid that sameness, and find engaging employment” as a picturesque artist.\textsuperscript{13} As Smith suggests, “[t]he ‘sameness’ that dismayed him was what he felt to be the unpicturesque nature of Australian landscape.”\textsuperscript{14} Smith goes on to affirm that Watling did indeed combine compositional elements of his two topographic drawings: \textit{Taken from the West side of Sydney Cove behind the Hospital} (1793-5)
and *A Direct North View of Sydney Cove and Port Jackson, the Chief British Settlement in New South Wales, Taken from the North Shore, about one Mile distant, for John White Esq. (1793-5)*, in order to fulfil the major aesthetic requirements for a picturesque depiction of the colony, in spite of its false reflection of the actual site (fig. 2).\(^{15}\)

The telling feature that demonstrates the fabrication of the scene is the depiction of British signifiers; architecture and ships have been mimicked from the topographic drawings. Other features that have been mimicked include vegetation in the foreground to establish the picturesque framing of the architecture. In addition to the two drawings discussed by Smith, an architectural feature of two sets of row houses has been included from *North View of Sydney Cove; Taken from the Flag-staff, Opposite the Observatory* (1793-4).\(^{16}\) This composite process of image production suggests that the inconsistent perspectival diminishment and scale of the painting are the result of juxtaposing features from separate drawings.

In his essay on the evocation of a sense of place through image production in the early colony, McLean suggests that

\(^{15}\) Smith, “The Oil Painting,” 57. Smith’s reference to “wash drawings” is understood to be a reference to topographical drawings, based on the acceptance that Watling’s drawings are topographic drawings; see Gordon Bull, “The Artistic Background: The Development Of Topographic Painting,” in *First Views of Australia 1788-1825*, ed. McCormick, 26-28.

\(^{16}\) Partially attributed to Watling. Shared attribution does not affect this essay’s argument, see McCormick, *First Views*, 271, 274.
inaccuracy is a key attribute of the picturesque genre. He too situates this genre between romantic and classical aesthetic ideas, though he describes the picturesque, not as a dichotomy, but as the “cultivation or colonisation” of sublime depictions of “pristine wilderness” suffused with classical ideals of beauty.  

The compositional arrangements of the picturesque construct a “synthetic space” in the image by depicting unknown environments via “ideal arrangements” of elements. This control of compositional freedom by aesthetic ideals parallels the architectural subject matter; ordering wildness into a new synthetic space of the built environment. The result is an idea of an “ideological place,” both in the architecture of the colony and its depiction, which replaces direct experience of the unknown with safe imitations of how the unknown is imagined to appear.

Returning to *Sydney Cove 1794*, the inaccuracy of this picturesque depiction extends beyond the painting itself to the provenance of the work. Smith’s attribution of Watling’s authorship is highly contested, and discourse on its authorship remains a great debate in the history of Australian image production. In addition to Smith, experts including Hugh Gladstone, Paula Dredge and Steward Laidler, Elizabeth Ellis, Jane Lennon, and Ian McLean, and many others, have attempted to answer the questions of who painted *Sydney Cove 1794*, and where it was painted. The unknown origin of this work, prior to its emergence in the Oldham Fine Arts and Industrial Exhibition of 1883, has created what Smith described as a “gap in its provenance” which significant research has continuously tried to fill.

Recognising the synthetic nature of this inaccurate aesthetic genre, it is important to consider why this climate of misrepresentation would have existed at the historical moment of discovery of the unknown antipodes. In order to address this, rather than continue in the footsteps of giants in search of the provenance of *Sydney Cove 1794*, it is more useful to consider the reasons for the uncertainty of authorship in the first place. In addition, rather than continue the dangerous game of talking about architecture inside paintings, it is more apposite to consider the wider field of image production and its relationship to addressing the unknown. The aim of the rest of this essay, then, is to demonstrate how the inaccurate depiction of architecture in images was indicative of a wider culture of misrepresentation at the time, and to consider its consequences.
The Picturesque

In a thoughtful reflection on the experience of producing images in the difficult early days of the colony, Smith considers the human motivations for making drawings of the settlement. He suggests the primary “scientific” methods of topographic drawing were based on “a desire to find out all they could about the new land.” Importantly, he recognises that this sense of curiosity must have been accompanied by a palpable sense of homesickness in response to the difficulties endured in this “harsh and uncongenial environment.” Smith describes how “the homesick artist, who painted for homesick patrons, probably neither desired, nor was asked to provide, a landscape depicting the brutal realities of the new environment.” The result was that Australia’s unknown environment would be seen with “English eyes” through the reconstruction of unfamiliar observations into familiar aesthetic qualifiers from England, reflecting a nostalgia for a distant homeland.

Smith’s insight humanises the misrepresentation of the picturesque, suggesting it is the result of distance from a familiar sense of place. He infers that the sameness in the depiction of architectural objects in unknown sites is based on an emotional desire for familiar signifiers from home. Auerbach recognises a similar condition of homogenisation at the macro-scale. In his survey of picturesque images across the British colonial empire, he demonstrates the development of compositional “sameness” of “strangeness and difference.” Auerbach suggests the picturesque strips away the inhospitable “otherness” of unknown places via the application of familiar compositional techniques. The result is a collapse of difference between “metropole-periphery, home-abroad” depictions of vastly different places.

Importantly, Auerbach suggests that this colonial homogenisation of depictions was in opposition to the ambitions of the domestic production of images in the same genre. Picturesque works produced inside the United Kingdom aimed to display “variety, novelty, ruggedness, and wild, unkempt beauty.” In spite of this opposition of purpose, the domestic and foreign incantations of this genre were compositionally indistinguishable from each other, leading Auerbach to conclude that the motivation for picturesque image production, as a whole, was the domestication of the exotic—be it through the addition of mild wilderness to the passive English landscapes, or the omission of otherness from unknown colonial environments. The purpose was to create a new type of visual
media to support the eighteenth-century appetite for the new social phenomenon of tourism, followed by immigration and investment.\textsuperscript{31}

Smith describes how this domestication of the exotic arose from the movement of topographic drawings from antipode to metropole. The result of which “played havoc with the enclosed classical system of eighteenth-century aesthetics,” and shifted the purpose of image production from accurate depictions of unknown places, to the fabrication of odd scenes for domestic novelty.\textsuperscript{32} Evidence of this process leads Smith to conclude that the later emergence of Romanticism was in part “fed at its source by commercial imperialism,” based on the production and consumption of colonial images of misrepresented unknown places.\textsuperscript{33}

This cultivation of image production developed in parallel to the exploration of the antipodes. Lynette McLoughlin describes how “improved engraving processes and printmaking” during the mid-eighteenth century resulted in a massive increase in the magnitude of image manufacturing.\textsuperscript{34} This accompanied an increase in the availability of content from discoveries and settlements, which matched the increase in domestic demand for images. In his first voyage James Cook was the first in the British Admiralty to include a professional artist to document findings, and by his third voyage, approximately 3000 drawings had been produced.\textsuperscript{35} Topographic drawings had become a valuable resource to translate into engravings, and were widely distributed in journals, official records and private publications.\textsuperscript{36}

Further, this demand for depictions of distant places was accompanied by increased consumption of landscape painting produced in the picturesque aesthetic, in part due to their availability as reproductions via engraving.\textsuperscript{37}

Returning to Watling’s inaccurate picturesque depiction of the colony’s architecture, we can now situate the contestation of the painting’s authorship within the emerging eighteenth-century context of image production, reproduction and consumption. McLean describes the circumstances of Watling’s employment as an artist at the beginning of this supply chain of image manufacturing. He describes how Watling’s topographic depictions were sent to England to become the basis for the “most widely disseminated images of Sydney Cove” via engravings in several major publications.\textsuperscript{38} Importantly, Watling’s drawings were used without him being credited or receiving payment for his services.\textsuperscript{39} The relationship of image production between Watling and the English picturesque artist, Edward Dayes—who prepared Watling’s work for engraving.
though never travelled to Australia—was a hierarchical one.\footnote{McLean, “Sense of Place,” 22.} Topographic drawings, drawn directly from observing the unknown environment, where seen as a lesser art of draftsmen. The origin of authorship and the accuracy of their depictions were of secondary concern to the strength of the engraver’s translation of these depictions into reproducible picturesque images.\footnote{Bull, “The Artistic Background,” 27; McCormick, First Views, 269, 274; McLean, “Sense of Place,” 18.} Referring to Sydney Cove 1794, Smith describes how Watling’s employer—the naval surgeon John White—was “unhappy about mere convicts signing pictures” and discouraged Watling from signing his own work—a point that Smith used to defend his position on Watling’s authorship.\footnote{Smith, “The Oil Painting,” 55-26; McCormick, First Views, 271.}

Further, the combination of topographic drawings to invent composite picturesque scenes had become a common practice in English oil painting.\footnote{Bull, “The Artistic Background,” 27.} If we consider the contestation of the painting’s authorship within this context, the great debate to determine if Watling painted Sydney Cove 1794 attests to a time when the emergence of imitative practices through the mass reproduction of images made originality inadmissible. This death of authorship accompanied the collapse of distance between depictions, from metropole and antipode, through the mimicry of the familiar in foreign places.

Smith situates the beginning of the British engagement with Australia within a paradigm shift in European art. He insightfully recognises that Cook’s initial recordings of Australia occurred only ten years after the Rococo movement—which he cites as the “last manifestation in Europe of an original art style”—had given way to Neo-Classicism.\footnote{Smith, Place, Taste and Tradition, 25.} This shift from originality to imitation in art was seismic, and signalled the beginning of the first of the revivalist moments, with Classicism followed by Gothicism and Primitivism. An equivalent shift is recognised in architecture, from Neo-Classicism to the Victorian revivals and the Arts and Crafts movement. In this sense, the colonisation of Australia is unique, as it coincided with this emergence of a culture of imitation and reproduction, which would “dominate the art of the eighteenth, nineteenth and early twentieth centuries.”\footnote{Smith, Place, Taste and Tradition, 25.}

Understanding the oddness of Sydney Cove 1794 as indicative of this era of imitation and reproduction, the colonisation of Australia can be described as denying a direct experience of the unknown by reflecting synthetic images of reality back and forth around the globe.

The denial of the unknown via the fabrication of images is not a new reading of the picturesque. According to McLean, due to the fact that this genre was “based on art and not place,” it has been criticised and discredited since the 1820s.\footnote{McLean, “Sense of Place,” 14.} Smith himself describes visual prejudices in the portrayals of unknown scenes
as “a normal process in the development of scientific thought.”

Due to a reliance on known, familiar representation techniques to qualify our visual experience, the falsification of depictions is a part of seeing things for the first time. Smith suggests that this condition subsided during the early nineteenth century through the calibration of image production with new experiences of the colony.

Although picturesque falsification did subside, this line of enquiry demonstrates that for a period in the early British occupation of Australia, the unquestioned relationship between spatial experience and spatial representation was deeply disputed. The inconsistent depictions of architecture in *Sydney Cove 1794* are indicative of a much larger gap between the visual and experiential knowledge of the colony. Like the gap in provenance of the painting, this gap between these two types of spatial knowledge appears to have been difficult for later generations of art theorists to tolerate, perhaps due to Smith’s suggestion that knowing how to depict a place is instrumental to recognising that place’s unique identity. As to what makes Australian image production *Australian*, Smith suggests that only through directly addressing the unknown, and enduring its presence long enough to define a unique method of depiction can a people make a place meaningful and render its identity in images.

This inability to address the unknown in picturesque images raises questions as to how a national identity can be constructed, at the outset of the colony or in successive generations, in an era that institutionalises images via imitation, mass reproduction and consumption. Recent criticisms of colonial Australian picturesque images speak to latent concerns for an identifiable understanding of place to situate a unique depiction of Australian identity. It is perhaps not surprising that topographic drawing has been framed antithetically, as the authentic other to the picturesque. As the site-specific method of image production associated with the beginning of the supply chain of engraving, topographic drawing has been given a particular status in the hope of grounding identity in the waves of imitative depictions of place. Thus the question arises: is it deserving of such status?

**Topographic Drawing**

Turning our attention to the three topographic drawings on which *Sydney Cove 1794* was based, the question of their accurate representation of architectural objects in the landscape is extremely significant. These works infer an embryonic

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understanding of how the colonial Australian identity appears via the visual mitigation of the unknown in images. Perhaps the expectation of equivalence between these drawings and the actual site—in order to fulfil claims to knowledge about this period—explains why significant questions about accuracy have not been addressed. Recently, assumptions about the accuracy of topographic drawings have included: describing the provenance of this genre in cartography, drafting and “naval intelligence”;\(^{50}\) stepping over the issue with such terms as, “fairly faithful,”\(^{51}\) or “sufficient detail”;\(^{52}\) infantilising topographic drawings as unclear proto-picturesque images;\(^{53}\) or suggesting the imposition of picturesque principles on topographic accuracy.\(^{54}\) Only Tim McCormick, in a short note near the end of his book, acknowledges the existence of an “information gap” that would interrupt any determination of accuracy.\(^{55}\) He gives several reasons for this gap, though beneath them is the unacknowledged and unanswerable question: how can the properties of space ever be translated into drawings?

To address this question, we must consider how the three topographic depictions—that Watling combined in his picturesque depiction—represent Sydney Cove. Rather than compete with the comprehensive study undertaken by McCormick, this comparison will focus on the single architectural object of Government House.\(^{56}\) In each of the three depictions, the house is drawn orthographically to the plane of the page, in spite of the orientation of each view. Further, the side walls used to imply depth in each depiction appear to have been drawn obliquely rather than perspectivally (fig. 3). These orthographic and oblique characteristics bear a significant resemblance to an earlier, highly detailed depiction of Government House, *A View of Governor Philip’s House Sydney Cove Port Jackson taken from the NNW* (ca. 1792) (fig. 4). The impossible vantage of this image suggests that its orthographic and oblique characteristics resulted from the

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\(^{55}\) McCormick, *First Views*, 287.


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Figure 3. (a) Detail of Government House from: *Taken from the West side of Sydney Cove behind the Hospital (1793-5)*, Thomas Watling (Courtesy of the trustees of the Natural History Museum London / Alamy); (b) Detail of Government House from: *A Direct North View of Sydney Cove and Port Jackson, the Chief British Settlement in New South Wales, Taken from the North Shore, about one Mile distant, for John White Esq. (1793-5)*, Thomas Watling (Courtesy of the trustees of the Natural History Museum London / Alamy); (c) Detail of Government House from: *North View of Sydney Cove; Taken from the Flag-staff, Opposite the Observatory (1793-4)*, Thomas Watling (Courtesy of the trustees of the Natural History Museum London / Alamy).
fabrication of this depiction, and was not drawn from direct observation. These characteristics appear to have carried through to the later topographic drawings, repeating the representation of Government House as a symbolic trope of British civility by maintaining its frontality in each depiction. “Copying and swapping” elements of drawings was a common practice amongst the topographic artists to maintain “clarity” through uniform depictions, though ultimately this practice obscured an engagement with the unknown. The process of emulation across these drawings mimics the composite process of picturesque painting and seriously questions the accuracy of architectural objects depicted in topographic drawings.

The picturesque was a known ideological device; topographic drawing was thought to be directly drawn from site. The inaccuracy of the picturesque is characteristic of the genre and as such, is not a fault, though it may be considered a limitation. Topographic drawing, on the other hand, has an implied purpose of depicting the properties of real spaces, whatever the level of accuracy achieved. Importantly, like the findings above, Bull and McCormick suggest that topographic drawings of Sydney Cove were not simply documentations of the colony’s architectural progress. Structures were added that were “not yet built,” and others were “omitted” in order to validate “favourable or even celebratory reports” of the colony’s progress. Unlike the inclusion and omission of objects within picturesque depictions in pursuit of aesthetic purposes, the same process was used in topographic drawings, in part, to visualise an imaginary idealisation of the colony’s future. In this respect, these topographic drawings must be considered to some extent as documents of spatial design, as they fulfil Robin Evans’s
assertion that in architectural drawings, “[t]he logic of classical realism is stood on its head.”

By altering, and in some cases preceding, the architectural objects they depict the speculative characteristics of these topographic drawings contradict their dependence on empiricism. Thus these drawings struggle to depict buildings accurately because—to continue Evans’s assertion—they open up unknown architectural opportunities that do not necessarily exist without the aid of the drawing.

Addressing the inaccuracy of topographic drawings is not to suggest an equivalence to picturesque aesthetics. Rather, it is to address issues with the use of accuracy as a means to qualify depictions of architecture. With the onset of image reproduction, in addition to an appetite for the imaginary in the picturesque, we see the emergence of an equivalent imaginary in empiricism. As the instrument of observation, topographic drawing established a type of mimicry by embodying the idea that the best way to address an unknown space was to draw it. The result was an unquestioned coupling of image and space, and a necessary subjugation of images to the illusion of accuracy in order to carry meaning across the world; a process “which would have art be a form of haulage”; “pushing ideas from place to place.”

The picturesque was a medium of imitation that denied a direct experience of the unknown by reflecting an imaginary reality in images. The result was a collapse of distance between metropole and antipode depictions of place. Faith in the accuracy of topographic drawing, a device seconded to record and observe the unknown, resulted in an equivalent collapse in distance between the mediums of image production and concepts of space. Seen in this light, the oddness of the architecture in Sydney Cove 1794 is the oddness of an emergent culture that insisted an image could speak on behalf of the complex experience of reality.

Postscript

Smith’s proposal that knowing how to depict a place is instrumental to recognising its unique identity in images is interesting when considered in the discourse of accuracy. A premise to this discourse is the existence of an unfalsifiable Australian identity, against which all imitation and reproductions may be measured. If such a difficult hypothesis were to be true, it does not address the key issue concerning the fate of meaning as it is translated between the mediums of image and space. Smith, probably aware of the limits of accuracy as a qualifier in a discourse on meaning, argues that the depiction of
site-specific signifiers in images does not qualify such images as indicative of that place. Regardless of the level of resolution and detail of drawings, he states, “[a] national art requires more than the photographic rendering of certain national symbols.”62 How something appears and what it means are very different things, and Smith explains that drawing something accurately is not necessary to determine its value. Topographic drawing and the picturesque are both inaccurate mediums for depicting identity, though in different ways; the picturesque inaccurately depicts place to satisfy a cultural aesthetic, whereas topographic drawing inaccurately reflects a cultural aesthetic to depict a cultural bias. For Smith, what saves colonial images from this endless internal reflection of falsification is their empathetic description of a people, which in turn defines a place and time. He measures the accuracy of art in its ability to qualify human endurance, without which he suggests the history of image production is nothing more than a “history of surface effects.”63

62 His emphasis. Smith, Place, Taste and Tradition, 30.

63 Smith, Place, Taste and Tradition, 31; McLean shares this point to establish meaning in picturesque images, see McLean, “Sense of Place,” 14.
Approaches to the Bungalow Beyond Time and Distance: Notes of Comparison Between India, the United Kingdom, and Australia

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The origins of the typology of the bungalow is often understood as the importation and fusing of British houses to the Bengali peasant dwelling to adapt to the distinctive climate conditions of India. Later, the idea and image of a single-storey house with a verandah, the bungalow, was taken up in various countries, such as Britain and Australia. The bungalow sustained its own development, integrated with local construction methods, architectural culture, and trends particular to each country. This paper identifies commonalities and differences that were a consequence of temporal and spatial distance in the uptake of the bungalow typology through the measurement of an early extant example. Through its emergence either as houses for expatriates in hill stations or the tea garden in colonial India, the common form of the bungalow type—a detached house with a verandah in a compound—was exported as an abstracted image, and introduced as holiday houses for the British suburban middle class. Within its original context, the importance of the verandah to the type is most explicit: as a tool to mediate environmental factors, and as a spatial setting in which to enjoy the natural landscape. The locality of type that had appeared through materiality and construction in India was converted into an expressive locality. These two localities—one intrinsic, the other imaginative—acquired by bungalows in the process of its development, appeared in a mixed form in Australia, where it was developed as a dominant housing model. This paper clarifies the commonalities that are evident in the development of room layouts in the bungalow in its different settings, and the differences in the significance and function of the verandah in each case, as well as in the general representation of its locality.

Keywords: bungalow; colonial house type; detached house; verandah; locality
The British colonial “bungalow” house type is a global phenomenon. The term “bungalow” means “of, or belonging to Bengal,” and is said to have developed through a process whereby the features of local peasant dwelling were incorporated into British colonial housing in India as an adaptation to local climatic conditions. Typically, the bungalow is a single-storey building with a central hall and surrounding verandah. It was subsequently adapted to suit local circumstances in each new location in which it arose and often integrated local construction methods to elicit specific outcomes in each country.

Anthony D. King’s comprehensive study, *The Bungalow: The Production of a Global Culture* outlined the dynamic history of bungalow type as it has emerged around the world. According to King, the British colony of India became suddenly involved in the European capitalist economic competition, and consequently, the bungalow was made to meet European’s cultural expectations while also becoming a sign of adjustment to the tropical climate.  

Above all, it was the bungalow’s verandah that illustrated the manifestation of social, spatial, economic and political symbols.  

King has regarded the bungalow as a symbol of the consumption of the city-state that was suburbanized by the accumulation of capital due to the expansion of industrialization and overseas trade in the new colonies.

The historical development of early bungalows illustrates how colonial powers adapted their own housing styles to the colonial climate. While the bungalow can be considered a global type, it is, however, often localized through the integration of local materials, construction method, and its adaptability to many given topographical situations. This global and regional duality of the bungalow is at the root of the discussion on the standardization and local identity of housing, which continues today. The main purpose of this study is to clarify how these global/regional dualities took spatial form in the process of establishing bungalow types within a specific area. Hence, using a series of case studies, this paper examines the examples in three countries—India, United Kingdom, and Australia—focusing on a survey of room layouts, construction methods and materials. Discussions of the bungalow tend to focus on its dualistic history based on the conflict among metropole-colony relations. These discourses make the bungalow a distinctive housing type of the colonial period. Here, we will discuss the commonality and differences of this housing type, inherited beyond time and distance.


2 King, *The Bungalow*, 265.
Anglo-Indian Bungalow as Prototype

According to Anthony D. King, by the late eighteenth century, a new form of dwelling for European occupation based on the Bengali peasant dwelling had emerged: the Anglo-Indian bungalow defined by “its free-standing and single-storey structure, the plinth, the pitched thatched roof and the verandah.” Subsequently, the Anglo-Indian bungalow was built in many places within India as housing for the officials of the East India Company and, after 1858, for government officials. The study of Madhavi Desai, Miki Desai and John Land, *The Bungalow in Twentieth-Century India*, outlines how the Anglo-Indian bungalow evolved from its original form into a number of new house types that are still referred to as “bungalows” in post-colonial society. With its absorption into the life of the Indian middle class in the twentieth century, the term “bungalow” came to have a meaning quite different from its Bengali origins. Among such bungalows, this paper features existing bungalows built for Britons in the mid-nineteenth century, during which the transformations from the Bengali peasant dwelling can be found. The first is Shimla, a “hill station” that was established to avoid the severe climatic conditions of the coastal colonies. The remaining examples are the “tea gardens” located in Darjeeling and Assam.

The hill station Shimla is located on the south-western ranges of the Himalayas. Discovered by the East India Company in 1819, Shimla was initially used as a restoration area for civil and military personnel. After 1864, Shimla functioned as the “summer capital” of Calcutta until 1911, when the capital of the British Raj was transferred from Calcutta to Delhi. In Shimla, the colonial government built a number of bungalows as summer residences for their officers. In contrast, Darjeeling, a town in West Bengal, and Assam, a region spread over the bank of Brahmaputra River in north-eastern India, are where a number of tea-gardens were established around 1830, during the popularization and expansion of the tea industry. Here, the tea company supplied furnished bungalows to staff, close to the plantation fields and factories in accordance to their employment status—director, manager, and general staff.

These examples have different topographic and climatic conditions (fig. 1). In Shimla, the city centre is located on a mountain ridge with the bungalows typically occupying the south-facing slopes that would invite warm winter sunlight from south. In contrast, Darjeeling’s tea gardens are spread over a steep mountain slope. Accordingly, factories and bungalows...
were built by cutting into the mountainous topography. In Assam, tea gardens were located on the river plain with a scattering of factories and bungalows. The construction of bungalows in each area were based on the concept of a “bungalow-in-its-compound” and “one site, one house.” All the examples presented in this study were surrounded by hedges or walls, and separated from the local Indian population. The living environments were made to suit a lifestyle that was comparable to the expectations of British culture at that time. The creation of a secured and independent environment that set comfortable long-term living conditions was a priority within what was perceived to be an uncultivated context.

According to King, the room layout of the Bengali peasant dwelling was based around a single room that allowed for multiple functions. This room layout was ultimately subdivided into convenient compartments by the European settlers according to their lifestyle. In the examples presented in this paper, clear regional differences in the treatment of the room layout and verandah were identified. The bungalows in Shimla are currently used as housing for government officers. Due to security reasons, it was not possible to confirm the planning of the interior room layout. However, according to local historian Raaja Bhasin, the standard bungalow in Shimla is a one-and-a-half-storey residence with a central hall, a fireplace set between two rooms, a garret and accompanying stair, and dormer window (fig. 2). Most of these bungalows have a verandah—generally arranged towards the front of the bungalow—and are covered in glazing. Like those in Shimla, the bungalows in Darjeeling are located at high altitudes and are planned around a central hallway. Rooms are symmetrically arranged around the central hall, and a fireplace is installed in the center of the house for thermal efficiency. In contrast to Shimla and Darjeeling, Assam has a relatively mild climate. Although the bungalows

<table>
<thead>
<tr>
<th>Location</th>
<th>Average Altitude</th>
<th>Annual Rainfall</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shimla, Himachal Pradesh</td>
<td>2,206 m</td>
<td>1,480 mm</td>
<td>average temperature: 14.2 °C, warmest month: June 20.9°C, coldest month: January 5.6°C</td>
</tr>
<tr>
<td>Daejeeling, West Bengal</td>
<td>2,042 m</td>
<td>2,547 mm</td>
<td>average temperature: 17.8 °C, warmest month: July 17.3°C, coldest month: January 6.6°C</td>
</tr>
<tr>
<td>Guwahati, Assam</td>
<td>50-680 m</td>
<td>1,698 mm</td>
<td>average temperature: 24.6 °C, warmest month: August 29.0°C, coldest month: January 17.5°C</td>
</tr>
</tbody>
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Figure 1. The location of the bungalows in different condition. (Photograph by author.)

in Assam have varied room layouts, mostly are accessed from the verandah into the living room. This well-ventilated room layout extends the interior living areas to the semi-outdoor spaces through mosquito-netted verandahs with fitted furniture. In this way, the examples of this study show that the division of rooms by Europeans are common to each case. However, there are distinct regional differences in the composition of each room and the climatic role of verandah. These regional differences are more explicit in the materiality and construction method. Shimla
is surrounded by natural forests. Bungalows in this region are thus built in the local dhajji system of timber-framing, utilizing Himalayan cedar, brick nogging, lath and plaster. In contrast, the bungalows of Darjeeling are predominantly made of stone. One such example is a bungalow named “Steinthal,” which translates into “stone valley,” which is made out of 18-inch local stone. In Assam, bungalows consist of two predominant types, “the ‘mati’ bungalow at the ground level, usually on a high piece of ground in a clearing with good natural drainage all around, or the more common ‘chang’ type built of posts about ten to fourteen feet above the ground” (fig. 3).10 Due to the lack of soil types suitable for brick-making,11 the walls were often made from either ikra reed daubed with earth, or timber planking.12 The reason behind the predominance of the chang bungalow was the protection it offered from wildlife, leeches, insects, and the threat of malaria fever.13 Moreover, some of the steel columns of Chowkidinghee Chang Bungalow feature the mark of the British steel company “Cargo Fleet ENGLAND.” When rebuilding a bungalow damaged by a large earthquake of 1897, steel frames—which had been standardized as a construction material at the time—were introduced and used as structural materials for the elevated bungalow.14

From these examples in India, three trends can be ascertained. The first is the concept of “one site, one home”: a way to secure an independent environment from surrounding areas and create a comfortable living environment in an as yet undeveloped area. The second is that the room layout of the bungalow highlights the common functional division made by European; however, there are clear regional differences in the relationship between these rooms and the function of the verandah. Thirdly, bungalows reflecting British expectations were created by using local materials and construction methods, as a way of responding to the diverse climate and architectural culture of India. As Bhasin notes: “The composition is essentially European while the structural elements are indigenous.”15

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12 Kapur, Burra Bungalows and All That, 19. “Ikra” was used because Assam is susceptible to earthquakes.
13 Kapur, Burra Bungalows and All That, 19; Barker, Tea Planter’s Life in Assam, 96. A similar story was confirmed in the interview.
14 According to an interview with the manager of Chowkidinghee Chang Bungalow.
15 Bhasin, Every House Tells a Story, 6.
Adaptation of Bungalows as Leisure Houses for the Middle Class in the United Kingdom

The first bungalows in England were introduced in 1859 by British veteran from India, Captain Bamford. Following this introduction, the demand for bungalows spread in line with the development of resort areas for middle-class Britons in the suburbs of London through the expansion of the railway network from the 1840s onwards. Within these resort areas and far away from the foul environments of the city, a new housing image for the middle-class family was sought while offering a distinct break from traditional models of the countryside cottage. Therefore, the architect invented a “new form,” referring to the images of Indian hill station bungalows in newspapers such as *The India Gazette*, *Calcutta Gazette*, *Bombay Courier*, and books published by East India Company artists. This “new form” increased public perception of the bungalow as a hygienic housing type imbued with an abundance of much-desired fresh air. In what follows, this paper examines the existing bungalows from 1850s onward, built in Birchington-on-Sea, a coastal resort in the south-east of England, and Bellagio Estate, an inland resort in southern London.

With the rapid expansion of the bourgeois society and following the opening of a railway station in the 1840s, Margate and Ramsgate in Kent developed into a middle-class social leisure area complete with theatres and multiple dwelling houses. Westgate-on-Sea and Birchington-on-Sea, where the railway opened in the 1860s, were called “The Village of Hygeia”: a therapeutic location with fresh air from the sea as a private recreation area. In the 1870s, John Taylor (an architect from London), together with his friend and fellow architect, John Pollard Seddon, developed a private recreation resort for families in Birchington-on-Sea, which was separated by a gated boundary from the surrounding environment. In this survey, twenty six bungalows were confirmed in this location. In contrast, the Bellagio Estate, in West Sussex, was developed following the opening of a railway station in 1884. The inland resort marketed itself as a weekend destination for London’s population of middle-class bachelors. Promoted as a “New Bungalow Town and Club” in the directories of the period, the resort was comprised of a number of bungalows and a central clubhouse providing meals, services and exercise facilities. A 1914 map of the resort depicts the estate surrounded by lakes, ponds, and rivers, with each independent bungalow situated in its own lush and gentle landscape. It was in this context that...
the architect R. A. Briggs (nicknamed “Bungalow Briggs”) became involved in bungalow design with introduction of London investor Arthur Burr. These bungalows were planned as a compact, economical, and efficient leisure house in compounds as found in India.

What should be noted in comparison with the Anglo-Indian bungalow is the relationship between the house and the unique siting of the resorts. The first point is the arrangement of bungalows on their sites (fig. 4). The most significant bungalow in Birchington-on-Sea is the Tower Bungalow along the coast. Here, four Tower Bungalows are separated from their surrounds by an entry gate and a shared private path. At the time, families and servants would reside at the resort for a certain period. The accompanying coach house, in which a servant stayed on the first floor and stored carriages and food on the ground floor, was built behind the Tower Bungalow across from the private road. The Tower Bungalow is situated on an elongated site with sea frontage and a depth of approximately eighty metres. There is a spacious lawn garden for cricket and a private path from the cliff to the sea called a “subway.” In contrast, the Pleasaunce Bungalow in the Bellagio Estate is situated on a slope located at the edge of Dormans Park. Here, the slope descends toward the northern side of the site and is surrounded by a hedge. On the southern side, the entrance of the bungalow is positioned on the ground level and faces the road. On the northern side, the bungalow has been designed as a double-height volume with a sloping garden so that the south-facing main verandah might obtain a view towards the lake.

The room layout of the Tower Bungalow is based on the central hall layout that is typical of the Anglo-Indian bungalow, but adds a large drawing and dining room that faces toward the sea, and a billiard room facing towards the adjoining private avenue. In India, the bungalow was accessed from garden facing verandah; however, in the case of Tower Bungalow, the entry and sitting area with its deep verandah are separated, with the latter privileging views towards the sea. Moreover, the bedroom in the tower, as examined in Westgate-on-Sea, was adapted to other bungalows, ultimately illustrating a strong focus towards sea frontage which is not present in the bungalows of other areas. In contrast, the Pleasaunce Bungalow is surrounded by a verandah on three sides of the house (currently enclosed). The hall-sitting room has a double-height ceiling and deep verandah. (R. A. Briggs regarded this as very important in his book.) In common with the Tower Bungalow, the entrance is separated from the deep verandah. In this respect, it is clear that the

26 The bungalows which have a tower are: at Westgate-on-Sea, The Bungalow, Sea Tower, Sea Lawn, Cliff Lodge; at Birchington-on-Sea, Birce Bungalow, Corby Tower, The Hut, Orion, Carmel Court, Basketts, and Wingwam.

function of the room layout and verandah, as a device to adapt to the harsh climate of India, was transformed here into a device for leisure and the enjoyment of the natural surrounds.

The two architects behind these two variations had differing rationales in their approach. It is likely that John Taylor endeavored to design a more pragmatic bungalow by inventing his own original construction system from roof to building base that aimed to prevent the problems of damp, thus improving health. Additionally, Taylor also attempted the use of prefabricated timber components in the Rosetti Bungalow and Bungalow Hotel. In contrast, R. A. Briggs’s bungalow projects adopted a traditional half-timber structure with a heavy roof that evoked the form of the Anglo-Indian bungalow. In

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28 Mayhew, Birchington-on-Sea and its Bungalows, 39.
his pattern book, *Bungalows and Country Residence*, Briggs focused on the differences in climatic, economic and sanitation/environmental concerns between the England and India, and illustrated a number of points for consideration in the planning of the bungalow. Thus, it is clear that the early British bungalow model was orientated towards two different considerations: “cheap and effective” functional planning, and “picturesque” imagery.29

The Bungalow in Australia as a Family Home for New Settlers

In Australia, and in line with the development of the Anglo-Indian and British bungalow, the Queensland House type was a “bungalow-in-form-if-not-name,”30 bearing remarkably similar features to the Anglo-Indian bungalow. The Queensland house, described as “some of the most ‘bungalow-looking’ dwellings in Australia,”31 became widespread from the 1860s onwards. The relative affordability of land and house pricing was the background to the predominance of the typologies with colonial

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29 Briggs, *Bungalows and Country Residences*, 8


Figure 5. Development of construction method and room layout of the Queensland House. (Photograph by author.)

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*Boondooma Homestead (1852), Boondooma Homestead Museum & Heritage Complex, South Burnett*

Low set house in the original site  Slab wall of hand-sawn iron bark  Living room as entrance for each room

*Barmundo Homestead (1871), Calliope River Historical Village, Gladstone*

Low set house, relocated from the original site  Single-skin construction with stud frames and horizontal lining  Central hall, relatively narrow compare to other rooms of both side

*Carrajong (1888), Townsville Heritage Centre, Townsville*

Low set house on brick piers in the original site  Single-skin construction with stud frames and horizontal lining  Central hall separates large living room and other rooms
emigrants and working class families. Here, the “bungalow-in-compound,” as seen in India and England, was transformed into a “single-family detached house-on-purchased land.” In a short period, the initial typological floor plan of a one-room building with verandah evolved into the central hall layout in which rooms were functionally divided. This rapid evolution of the Queensland house can be identified from extant examples that are accessible to the public via historical villages and heritage houses.

Timber slab huts hewn from hand-sawn timber were the predominant housing type prior to 1850. The slab houses surveyed in this study (fig. 5) were planned with direct access from the verandah into the living room, as represented by Boondooma Homestead (1852). However, the later Carrajong house (1888) was constructed using single-skin construction with hardwood stud frames and softwood lining sawn mechanically, with a plan composed around a central hallway that organized many rooms in an efficient planning layout. Barmundoo Homestead (1871), built between these two examples, can be recognized as transitioning from the direct access from verandah to living room to a centred hallway room layout. One typical feature of the Queensland house common to all these examples is the elevated floor plate—a characteristic shared with the chang bungalow of Assam. While the chang bungalow utilized large uprights sunk deep into the earth to form a continuous connection between ground and roof, the structural stump and upper portion of the house are typically separated in Queensland (fig. 6). The continuous uprights in Assam evolved due to the risk of earthquake events. Within the Queensland context, this risk was minimal, allowing for structural separation that enabled the typology to adapt to various topographical conditions whilst also minimizing the risk
of severe termite damage.\textsuperscript{37} This technological development of efficient construction methods and the flexibility brought about through the separation of house and ground made the typology’s widespread dissemination possible throughout the region.\textsuperscript{38}

In addition to the functional aspects outlined above, the influence of the bungalow as an “image” can also be confirmed. This can be illustrated in the Fairymead House (1890), which was built on a sugar plantation in the town of Bundaberg. Sydney architect John Shedden Adam designed an Indian bungalow-style house for the original owners, migrants from New Zealand. In response to the hot and humid climate of Bundaberg, the design incorporates air passages between the eaves and the wall whilst offering larger floor-to-ceiling heights than most Queensland houses.\textsuperscript{39} While the construction and materiality are much the same as a typical Queensland house, the form of Fairymead’s roof is particularly emphasized (fig. 7). This formal emphasis on the roof as an important part of the aesthetic image of the bungalow type is also evident in the fact that within the broader catalogue of the Queensland house type is a sub-type called “bungalow style.”\textsuperscript{40} Here the principal roof form is emphasized by continuing from its peak to the very edge of the verandah. Thus, the Queensland house can be understood as a bungalow—itself an entity generated between regionality

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fairymead_house.jpg}
\caption{Fairymead House. (Photograph by author.)}
\end{figure}

\begin{thebibliography}{99}
\bibitem{37} Watson, \textit{The Queensland House}, 6.1-12.
\bibitem{38} Watson, \textit{The Queensland House}, 5.11.
\bibitem{39} According to staff of Fairymead House Sugar History Museum, the ceiling height of typical house around here is 12 feet, but at Fairymead House it is 16 feet.
\end{thebibliography}
Conclusion

Through its emergence in colonial India, the form that was common to all bungalows—a detached house with verandah set within a large plot of land—was exported as an abstracted and idealized image by the British. The bungalow in Britain can be seen as a product of various overlapping factors: health-oriented attitudes towards deterioration of urban environment, ongoing interest of architects from the RIBA, and technological developments that stemmed from the industrial revolution. Within this context, the importance of the verandah to the type is most explicit—as a tool to mediate environmental factors, and as a spatial setting in which to enjoy the natural landscape. The locality of type that had appeared through materiality and construction in India were converted into an expressive locality. These two localities—intrinsic locality and imaginative locality—acquired by bungalows in the process of its development, appeared in a mixed form in Australia, where its development as a principal housing model was rapidly accelerated through the development of the steam sawmill. Spatially, the commonalities are evident in the development of room layouts, and differences in the significance and function of the verandah and in the general representation of a locale. In this way, bungalows have locality in ideas, technologies, construction methods, and materials. However, the balance of where regionality was emphasized is dependent on the time and place of construction. The bungalow can be recognized as a housing type that has survived beyond time and distance by changing its balance.
Learning to Fly: Distance and the Wartime Experience of Australian Architect Stanley George Garrett

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This paper explores the influence of distance on the work of the Australian architect Stanley George Garrett. Garrett was part of a generation of young architects whose horizons were broadened by their experience of service during the First World War. But Garrett’s own experience of distance was twofold: as a pilot in the Australian Flying Corps, he was not only geographically distant from home, but also aerially distant from the earth. His was a rare and privileged view of the urban environment and the wider landscape.

For Garrett, this paper speculates, aerial and geographical distance provided freedom from constraint: from his role within a family building business, from the suburbs of Melbourne, and—most strikingly—from a conventional view, allowing him to see the world in a different way. The physical nature of flying, the witnessing of the destruction of war, and his immediate post-war architectural training in London, all facilitated a conceptual and visual distance from the status quo. This paper explores how these experiences influenced Garrett’s design for the Australian Flying Corps Memorial at Point Cook, which was dedicated in 1938. His own letters home from the front form the basis for interrogating the influence of this experience on his architectural practice.

Keywords: Australian architects; Australian architecture; aerial view; war, pilot; memorial; aeroplane; education
During the First World War, Australian Flying Corps observer Jack Buckland was armed with a camera. After his death in France in 1918, only his personal effects returned home. His photographs, donated to the State Library of Victoria, convey a range of views, from aerial reconnaissance prints to informal snaps of airmen. Of all these images, however, one stands out: a literal snapshot, taken mid-air, of a pilot turning to the photographer, momentarily distracted from the task at hand (fig. 1). A second copy of this photograph found its way into a letter from pilot Stanley Garrett to his own sisters, far distant in Melbourne. Describing how it came to be taken, Garrett wrote, “At 2000ft [Jack] asked me to look around & he then snapped me.”

Stanley Garrett (1894-1958) (fig. 2) was one of several hundred Australian architects whose horizons were broadened by war. As a pilot, his experience was one of both geographic and aerial distance. This distance provided freedom from the constraints of home and the status quo, and—most strikingly—from a conventional view, allowing him to see the world in a different way. This paper is speculative in nature, exploring how these experiences of distance might have affected Garrett’s architectural outlook, and focusing on his design for the Flying Corps Memorial at Point Cook of 1937. Garrett’s own letters home from the war years and immediately after—also held by the State Library of Victoria—form the basis for interrogating the influence of these experiences of distance.

Garrett was born in Victoria, Australia, into a family of successful builders. On leaving school, he worked for five years with his father’s business in Box Hill, and attended night classes “for Builders and Artisans” at Swinbourne Technical College.
In March 1914, he joined the 48th Kooyong Infantry as part of the recently introduced scheme of compulsory service, then enlisted for formal war service in 1916, giving his occupation as “architect.” While this amplification was a legitimate claim at a time of unregulated training, it more probably reflects the tendency of hopeful Australian Flying Corps (AFC) applicants to inflate their qualifications in keeping with the AFC’s higher standards of education. Yet the time Garrett returned home from the war, his professional prospects were significantly brighter. While this global conflict was a tragic career interruption for many, for Garrett, it would open new vistas.

Architects and the Aerial View

In their book Seeing Above, Mark Dorrian and Frederic Pousin write that the human experience of flight “generated profound transformations in the cultural imagination,” allowing the eye to see a visually comprehensive global space, previously only imagined or translated through mapping and panoramic views. From the mid-nineteenth century, photographic technology allowed aerial views to be captured by camera from kites, balloons, and even pigeons, while balloon flight became more accessible to the public.

At the turn of the twentieth century, aviation gathered momentum, further spurred by the exigencies of war. The
newly created Flying Corps of the opposing armies played an increasingly important role in reconnaissance, enabling artillery coordination, facilitating aerial bombardment, and participating in dogfights. In peacetime, aviation focused on long-distance flight and the creation of multi-passenger craft. As flight became more readily accessible, the aesthetic and theoretical potential of the aerial views it afforded were recognised. In 1927, Hungarian artist and Bauhaus professor László Moholy-Nagy theorised on the perception and conception of space in *The New Vision*, writing that “Aviation has a special part to play. … The essential is the bird’s eye view, which is a more complete space experience. It alters the previous conception of architectural relations.” Space could thus be perceived beyond the normative scales of human experience. In 1928 and 1929, architect Le Corbusier flew over Paris and Brazil: journeys that would prove profoundly influential for his own conception of utopian planning. He stated that the aeroplane “is an indictment. It indictsthe city. It indictsthe those who control the city.” By revealing the wider truth, the aeroplane became a useful theoretical tool for architects, and the experience of flight a masterclass in spatial experience and awareness. After all, we can suggest, the aerial view is a plan writ large.

As a passenger, Le Corbusier could immerse himself in the view, his perception mediated by his accumulated knowledge and experience as a fully-fledged architect. Garrett’s experience, a decade earlier, was very different. It was mediated by war, the aeroplane being the machine with which he performed his tasks. Furthermore, in 1916, both his architectural and aeronautical careers were in their infancy. Garrett had to actually learn to fly.

**Learning to Fly**

Embarking for England in October 1916, Garrett had amassed just three hours of flying at the Central Flying School at Point Cook, most probably on the rudimentary Bristol Biplane (Boxkite) (fig. 3). On arrival, he commenced a lengthy course of theoretical and practical instruction, describing the experience in letters home to his parents, and siblings Walter, Mabel, and Edie. As he took to the air, his familiarity with aerial views increased; the flat landscape of Lincolnshire, divided by extensive hedges, looked like “a huge draftboard [sic], when viewed … from above,” he wrote. In April 1917 he proudly informed his family that he had completed his first “solo on a real flying machine,” an Avro 504 (fig. 4): “it is such a peculiar sensation, the propeller is roaring and the ground just tears

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13 SLV, MS 10762, folio 2a, Garrett to Mabel and Edie, February 4, 1917.

14 SLV, MS 10762, folio 1a, Garrett to Mabel and Edie, February 20, 1917.
away from you.” Of flying at three thousand feet, he initially wrote that “it feels awfully strange to be up so high all by yourself,” but he soon became accustomed to the experience, graduated night flying in a BE2e, “with just the electric torch inside to show you the instruments.” He progressed to RE8s (fig. 5), and the nature of flying became reflexive: during practice shoots, he explained,

very little time is devoted to the machine, we just have to fly by feel. ... If the nose gets down you here [sic] the wires begin to play all kinds of tunes. ... If you start side slipping you feel a frightful draught across your face, and with your eyes watching your gun and target, you correct the machine automatically.

Garrett also had to learn the skill of reconnaissance photography. “The camera is a very large one pointing downwards,” he wrote; “All the pilot has to do is change each plate & pull a string & the photo is taken ... Very often it means flying hands off for about 2 or 3 minutes.” When repeated, the process covered a wider view than that contained by the camera’s lens, and the resulting prints were pasted together in a mosaic (fig. 6). Kim Sichel
describes such aerial views as “transgressive,” being divorced from normal human scale, but for the pilot and observer, these were but a contracture of their view, and not representational of the whole experience of flying, which included the machine’s movement, the passage of the earth underneath, and the oblique nature of views gained lower to the ground (fig. 7).  

These lower views are quite distinct, more akin to seeing an architectural structure in the round, and less transgressive than transformative.

Returning to England in mid-1918 to serve as an instructor, travel by air became a normal mode of transport, and even an enabler of social interaction. Having befriended the daughter of a local family, he and a fellow pilot playfully followed her regular train to London in separate machines, on one occasion flying “down very low, and of course going much faster than the...
train. As we came to a hedge we would hop over, do a climbing turn and come back again on to the train whenever possible." 20 Playfulness sometimes gave way to reflection: “when I am thousands of feet in the air I often wonder what you are doing,” he told his family. 21 What became second nature to Garrett after months of intense training, through war’s dreadful stress and leisure’s joy, would be taken for granted by passengers like Le Corbusier.

**Distance and Proximity, Construction and Destruction**

Distance from home meant proximity to different scenery. Travel has always been vital to an architect’s intellectual and visual training; for colonials, war service enabled travel through Britain and Europe. 22 Garrett saw many different forms of ancient and modern architecture, from Stonehenge to medieval cathedrals and grand houses, and wrote home to share his views with descriptions and postcards. 23 Active service in France brought different experiences again. Initially stationed near the northern town of Bethune, the squadron was billeted in Nissen-style huts “just like a tunnel about 20ft long… [with] a rounded corrugated iron top.” 24 A sketch on a later letter showed the canvas screening arrangement he devised to maximise the use of the shared living space (fig. 8). An unfortunate French dwelling nearby was described as having “a square quadrangle but a rectangular smell,” while the numerous brick shrines to the Virgin Mary appeared “something like those electric power stations of ours.” 25

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20 SLV, MS 10762, folio 3b, Garrett to Mabel and Edie, 21 June 1918.

21 SLV, MS 10762, folio 4a, Garrett to Thomas and Elizabeth, 8 July 1918.


23 SLV, MS 10762, folio 4a, Garrett to Mabel and Edie, July 14, 1918.

24 SLV, MS 10762, folio 2a, Garrett to Mabel and Edie, July 24, 1917.

25 SLV, MS 10762, folio 2a, Garrett to Mabel and Edie, July 24, 1917.
The towns and villages near the aerodromes were damaged and re-damaged by bombardment as the front line moved back and forth. These views of destruction made a significant impression, and the aerial view did not always miniaturise the impact of war. In March 1918, flying above a bombardment, Garrett and his observer watched the destruction of history play out beneath them. “[We] were above the tower of the town hall when it received its knockout blow, and we saw it topple over and crash into a neighbouring church. I suppose the tower has been up for hundreds of years, and now it is no more,” Garrett mused.\textsuperscript{26} Examining a part of the line in September 1918, he found that:

\begin{quote}
In dozens of cases there was not even a brick to show that a village had ever been there. The vegetation had absolutely gone ... just the tracks and road and in between shell holes, craters, trenches and the unburied dead.\textsuperscript{27}
\end{quote}

Countless photographs in museum collections provide visual witness to such scenes of destruction: wood, tiles, bricks, and plaster mingle haphazardly as rubble; sliced open, buildings are viewed as if in section (fig. 9 & 10). From the air, the widespread damage was more fully revealed. The observation photographs taken by Garrett’s friend Jack Buckland reveal swathes of country pitted with craters like a moon scape, while ruined buildings and splintered trees cast pitiful shadows (fig. 11).

Orderly, rational construction—such as Garrett had experienced with his father in Melbourne—was constantly displaced by the irrational, chaotic destruction of war. Witnessing such deviation from the architectural norm took a toll. After the armistice, he sought visual and emotional relief in travel to Italy: “living as we were in ruined villages & devastated country,” he confided in his parents, “it effects [sic] the nerves.”\textsuperscript{28} Perhaps pursuing architecture, denying the ravages of destruction, would provide him with even greater solace.
From Pilot to Polymath

Unlike Le Corbusier, Garrett was not a fully-fledged architect when he took to the skies. After a year or so, he pondered his future, filling in the periods of enforced idleness characteristic of Flying Corps service with a self-set course of study.29 This determination could have been inspired by a close association with the many engineers and architects who made up the flying ranks, or as an effect of gaining a distance from home, and from the status quo. But it is also probable that the exercise of viewing the earth from the air, in actively seeing and perceiving these spatial relationships, spurred Garrett to think more in terms of architecture than merely building—that is, it prompted him to think in a more spatial construct.

On leave in England in January 1918, he had purchased a slide rule and some books on geometry.30 In August, he reported
studying “trig, algebra, etc.” with a friend.\textsuperscript{31} In Belgium, after his post-armistice tour of Italy, he increased his efforts.\textsuperscript{32} Finally, in March 1919, he wrote to his father to convey his future plans. Of flying, he wrote,

\begin{quote}
I like it more and more, but not as a living, \& not for good. It reminds me too much of a glorified chauffer \[sic\] ... Well the next thing is the old game, and this I would like to avoid if possible, so as to make the most use of my five years outdoors with you, I intend going in for architecture.\textsuperscript{33}
\end{quote}

By “the old game,” he meant building, and by “architecture,” he meant formal, prestigious training. He continued: “The AIF sent around applications for those who wished to make use of their educational scheme … and now I am to do six months at an architectural school in London… [it] is a fairly advanced one, so I will have to work overtime to catch up.”\textsuperscript{34}

The AIF’s scheme of non-military employment aimed to occupy the troops after the armistice, and to assist their return to civilian life. The course Garrett attended, taught at the Architectural Association (AA) in London, was profoundly influential not only for the attendees, but also for the Australian architectural fraternity as a whole.\textsuperscript{35} Garrett attended for fifteen months, gaining professional experience in the office of Herbert Baker, and passing the special examination for associateship of the Royal Institute of British Architects (RIBA).

His letters home describe long hours, a rigorous program, and a growing appreciation for the AA’s method. By October 1919, responding to anxious queries about his return, he explained that “at present I feel how very little I know, that to return knowing such a little would be very unwise for me.”\textsuperscript{36} His decision was justified; “week by week I find that I am learning the subtleties of design,” he informed his father in March 1920, “and instead of looking upon architecture as a wonderful puzzle, I now find that it is but the expression of the solution of one’s client’s requirements.”\textsuperscript{37} After his return home to Australia, in June 1920, he spent four months in the office of fellow AA attendee Arthur Stephenson, and later occupied an office at 258 Swanston Street, Melbourne.\textsuperscript{38} But his time overseas—that fertile distance from home and the status quo—had left Garrett with a taste for travel and education, and possibly for more compelling schemes than domestic projects.\textsuperscript{39} In June 1925, he left on an eight-year overseas interlude, attending the Liverpool School of Architecture, and working in major architectural offices on either side of the Atlantic, before studying painting
and drawing in Paris. On his return to Australia in 1933, he entered into partnership with fellow returned Anzac and AA attendee William Craig, and another returned serviceman, Bennet Reynolds.

By now, Garrett was presumably something of an architectural polymath, but documentation of his later projects is frustratingly limited. For this reason, as well as to come full circle on his aerial journey, this paper now turns to the AFC Memorial at Point Cook, dedicated in 1938 and attributed to the firm of Craig and Garrett, with Garrett as principal designer.

Suggesting Flight

The memorial remembers the Corps as the progenitor of the Royal Australian Air Force, and honours the Corps’ First World War dead. It comprises a Stawell freestone shaft nearly ten feet high and eleven feet wide on a concrete podium (fig. 12 & 13). Its visual strength and simplicity exemplify the contemporaneous commemorative architectural mode, yet its mass and solidity are offset with deliberate visual allusions to flight. An official brochure described it as “suggestive of a streamline section, terminating in the fluted curves of a wing’s trailing edge,” while two vertical lines, on its front face, “designed in the form of a leading edge of a strut, give a further suggestion of flight.”

Streamlining refers to an aircraft’s characteristic curved lines, and the sides of the monument itself thus gracefully curve away. This curvature also recalls the architecture of the aerodromes, such as the curved hangar roofs (fig. 14), and the Nissen huts in which the Corps were often quartered. The “fluted curves

Figure 12. AFC Memorial, RAAF Base, Point Cook, S. G. Garrett & W. H. Craig, c. 1937. Unknown photographer. Reprinted from Journal of the Royal Victorian Institute of Architects 38, no. 5 (1940), 130.
of a wing’s trailing edge,” visible at the top of the monument’s front face, are strongly reminiscent of the Boxkite flown by the Central Flying School (CFS) students, and as such, recall the AFC’s early days on that site (fig. 15). But this fluting of the memorial also recalls the architectural nature of the machines themselves: from the scaffold-like Boxkite, to the BE2e’s gentle wing curvature, its complex armature—seen in section—is reminiscent of hangar roofing trusses (fig. 16). And the fluted wing edge, placed at the top of the monument, is in turn reminiscent of the fluting of a column, adding a sombre classical note.

The struts were the vertical supports rising from the fuselage and between the wings of the First World War biplanes (fig. 4 & 5). Looking back at Buckland’s snapshot of Garrett flying, the struts are clearly seen in the pilot’s visual foreground against a tranquil sky (fig. 1). Depicted on the front of the monument, the vertical lines which echo them specifically recall the physical experience of flight for the viewer, enabling a former pilot or observer to reflect powerfully on their own memories.
Yet Garrett had a further personal investment in the memorial: it commemorated much loved AFC colleagues whose overseas war graves were themselves distant. One was his sister Edie’s fiancé, Fred Reeve, who crashed in France in May 1917, dying of his injuries. Another was Owen Lewis, with whom he had played football most days. The deaths of Buckland and his pilot Henry Ralfe were also keenly felt. Friends pre-war, Buckland and Garrett would often “have a chat over old times;” they flew together in Lincolnshire in 1917, at which time the snapshot was taken. On the morning Buckland was killed, Garrett had been orderly officer: “at 5.45 [am] I called Ralfe and Jack, and after having a cup of tea with them I saw them off,” he wrote, but their machine never returned.

These deaths bring another particularly poignant visual reference. During the war, the graves of Flying Corps airmen...
were frequently marked with four-bladed propellers with three blades cut short to form a cross.\textsuperscript{48} Thus truncated, the flat ends reveal a precisely engineered curvature (fig. 17). Buckland and Ralfe’s graves were marked in this same way (fig. 18). The German air ace, Manfred von Richthofen, was given a similar cross by the Australians, transcending any barriers of national allegiance. Walking around the workshops, Garrett saw it being prepared, and included a sketch in a letter to his brother Walter (fig. 19); later, he visited the cemetery and saw it in situ.\textsuperscript{49} With its flattened top and curved sides, the Corps memorial evokes these truncated propeller-crosses, and thus becomes a specific reminder of the graves of the fallen.

But perhaps the most significant point is that the AFC Memorial, positioned on the ground of the RAAF base, would also be viewed from the air. The simple elliptical plan would become its most prominent aspect. This dovetails with the AA’s teaching, which Garrett described to his father in 1920: “the basis of the instruction given at the school is ‘truth,’ let your

\textsuperscript{48} This practice was not unique to the AFC.

\textsuperscript{49} SLV, MS 10762, folio 3b, Garrett to Walter, April 26, 1918. Garrett and Barrow were initially—erroneously—credited with his death.
elevation express your plan, and the nature of the building,” he wrote, adding later that “they teach us to plan first, and then let your elevation grow from the plan, and not try and force a plan to an elevation.” Plan is indeed the memorial’s governing essence: its edges curved, cupped by a bordering hedge, the structure is visually differentiated from other buildings when viewed from the air, its curved ends lending it the character of a biplane’s wings as seen from above. It would thus act as a point of geographic reference, like the landmarks pilots habitually sought. Whenever seen from the air, the memorial would become an instant visual reminder of the history of the Corps, and the place of the dead within that history.

In its mass and integrity, the AFC memorial is a visual counter to memories of destruction. It encapsulates the quality of flight that Garrett and his fellow flyers knew. It is testimony to his awareness of both plan as the guiding basis of design, and the transformative nature of the aerial view, as gained during his war service and immediately after at the AA. Intrinsic to this was his physical, intellectual, and emotional experience of learning to fly, both as pilot and architect.
The Tecton Group and Architects’ Group: Residues of Collective Practice

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University of Queensland

The Architect’s Group was a “collective” practice formed in Brisbane in 1946, contemporaneous with the establishment of the Architectural Group, the student initiative announced in Auckland that year, and precursor to Group Architects. The Brisbane collective took cues from the Tecton Group established in the United Kingdom in 1932, described as an “opportunistic collaboration,” initially between Berthold Lubetkin, and six recent graduates of the Architectural Association (AA). Tecton Group was a precursor to other collective endeavours in the inter-war period in the United Kingdom, and The Architects’ Collaborative (TAC) set up in 1945 in the United States.1

This paper will examine the transferal of ideas and ethos, as well as other equivalences, the close relationships with educational institutions, modes of practice, and the projects produced by the Architects’ Group. This will allow a consideration of the consequences of this approach read in the context of Australasian architectural culture, and how it was a rehearsal for later approaches to corporate practice, that consolidated the decisive shift in architectural culture from public to private practice.

Keywords: collective practice; twentieth century modernism; post-war architecture; Modern architecture; Queensland architectural culture
In 1950 an unidentified house project completed by the Architects’ Group in Brisbane, was selected to illustrate an article written by Robin Boyd and Peter Newell for Architect, the journal of the Royal Australian Institute of Architects. This house was one of sixteen examples of the housing revolution they reported was taking place in the suburb of St Lucia, “seeking answers to Brisbane’s special housing problems without reference to stylistic precedent.” Other houses illustrated were by local architects Hayes and Scott, Frank Salmon, John Butler, Vitale Gzell, Karl Langer, Peter Newell, Gordon Banfield, Chambers and Ford, and David Bell (fig. 1).

The published photograph reveals the house to have been a timber construction, with an L-figure plan comprised of a tall asymmetric extruded-gable-roof form with built-in garage—unusual for the time—and a mono roof addition set back from the street (fig. 2). The front door addressed, what appears from the photograph to be, an unsealed road. The photo represents the only known published project by the Architects’ Group.

An announcement heralding their formation as a collective of “architects and town-planning consultants” with the objective of “pooling knowledge and experience in one office,” appeared in Brisbane’s Sunday Mail in March 1946. Despite this auspicious start, and unlike their more famous counterparts in New Zealand, the Architectural Group, which were a student-led initiative based in Auckland that prefigured the practice Group Architects, the activities of the Architects’ Group have gone unreported. In the Sunday Mail, the founders were listed as Bruce Lucas, Heinz Jacobsohn, Rod Voller, Colin Trapp, and Ron Voller. It noted that Robert Cummings, then Lecturer


3 “Architects’ Group Established Here,” Sunday Mail (Brisbane), March 10, 1946, 6.

Figure 1. Photographs of the 16 Houses published. (Reprinted from Robin Boyd and Peter Newell, “St Lucia. A Housing Revolution,” Architecture 38, no. 3 (July 1950): 109.)
in Architecture at the University of Queensland, would also be associated and that Lucas, Trapp and Ron Voller would not initially be active full-time members due to their employment in “public departments.”4 Karl Langer, the Austrian architect who arrived in Brisbane in 1939, had been invited to join, and his short account in a letter to Sydney-based architect John Moore, six months prior, provides some insight into the formation of the group. Langer was concerned about the collective ethos and economic viability of such a venture given the number of people involved.5

As Langer wrote:

_A group of architects on the lines of Tecton is about to be formed here and they take it for granted that I will be a member. It consists of Mr Lucas, Cummings as consulting member, because he is frightened he may lose [sic] his university job if he becomes full member, Mr Voller, and a former student of mine, and a German refugee architect. I don’t quite know what to do as it has advantages and also disadvantages. Considering that you “marry” your partners including their wives, I think it will be a pretty big family and as I know only two of them well, I am a bit scared. The basis is communistic if you call it so, the bringing of jobs is not considered as gainful activity, only the work done. The legal basis is association of the members and profits and expenses are to be shared equally. If it was only three of them it would be ideal._6

Tecton Group, or Tecton, formed by Berthold Lubetkin and recent graduates of the Architectural Association (AA) in London in 1932, are revealed to be the initial impetus behind

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4 “Architects’ Group Established Here,” 6.

5 Karl Langer Collection, UQFL158 Box 36, Fryer Library, University of Queensland, Box 36. Letter dated 17 September 1945, to Sydney architect John D Moore.

6 Langer Collection.
the idea of the collective. It brought together recent graduate Colin Trapp; Voller and Voller, a partnership between cousins Roderic and Ronald Voller formed months prior; Bruce Lucas and Robert Cummings, who had attended the AA in the 1920s, established a partnership in 1936 and were colleagues at the University of Queensland; and finally the Polish-born Heinz Jacobsohn, a former student of Paul Bonatz in Stuttgart, and who worked for Ernst Freud, son of Sigmund and Martha Freud, in Berlin before the war.7

Jacobsohn initially settled in Perth, and established a partnership with Margaret Pitt Morison from 1938 until 1942, before relocating to Brisbane, where he secured a temporary position with the drawing office in the Brisbane City Council’s Planning and Building Department alongside Roderic Voller.8 Later he moved to Greece to work with architect, town planner and urban theorist Constantinos Doxiadis (1914–1975), who had briefly relocated to Wacol, outside of Ipswich, near Brisbane, in 1952, before returning to Greece in 1953.9 Roderic Voller was a graduate of the Brisbane Central Technical College (CTC) in 1931. He articled his cousin Ronald for one year in 1932, prior to his graduation in 1936, and employment with the Queensland Department of Public Works (1933-1937). Ronald then took a position with the Commonwealth Department of Works in Perth in 1938, before returning to Brisbane in 1946.

Although no evidence of any interaction has come to light, it would seem probable that the younger Voller met Jacobsohn during his relocation to Perth during the war.10 Trapp was the student Langer made reference to in his letter to Moore. He graduated from the Diploma course of the University of Queensland in 1944, where Langer had taught since 1940.11

The profiles of the members of the Architects’ Group make it clear that the collective was comprised of local and established figures: an inter-connected cohort of lecturers and architects with substantial experience gained between the wars, and during World War Two. This circumstance would have been further compounded had Langer decided to accept the invitation to join. Cummings, Lucas, and Jacobsohn were all of similar age, Rod Voller a decade younger, with Ron Voller and Trapp the only recent graduates and the youngest members. As Langer recounted, the ambition of the collective was to establish a profitable venture, with profits shared equally amongst members.

In New Zealand, the formation of the Architectural Group coincided with “post-war austerity, and the associated paucity of


9 Peter Trundle, “Greek Engineer Turns Model Farmer. His Tomatoes Proved the Theory Worked,” Courier-Mail (Brisbane), March 11, 1953, 2.

10 Donald Watson, and Judith McKay, A Directory of Queensland Architects to 1940, (St Lucia, Qld.: University of Queensland, Fryer Memorial Library Occasional Publication no. 5, 1984), 196.

11 Faculty of Architecture, University of Queensland. Register of Students, 1937–1966.
materials,” and a “call for a New Zealand architecture,” followed by a campaign in support of the idea of “The Small House,” led by key protagonist William Wilson. This was alongside a general interest in the potential of vernacular architecture, the “early New Zealand wooden house,” in particular “the important social space of the veranda,” and the simplicity of early homes—themes that had parallels in Australia. In Queensland—as in other parts of Australasia—the period immediately after the war marked a decisive shift in architectural culture from public to private practice. However, most architects in Queensland at this time were employed by the Queensland Department of Public Works, the Queensland Branch of the Commonwealth Works Department, the newly formed Queensland Housing Commission, or the Brisbane City Council’s Planning and Building Department.

In 1946, twenty-six architects and partnerships in private practice were listed in the Queensland Post Office Commercial Directory. The profile of private practice was not precisely mapped by these listings so soon after the war, and this was further complicated by private architects not listing at all or those operating between private practice and public service not noted. The majority of those listed, however, had been trained interstate or overseas, or had some involvement with the Queensland Department of Public Works.

Tecton Group, London

Tecton was formed roughly one year after Robert Cummings returned to Australia from the United Kingdom in December 1930. Berthold Lubetkin, who arrived in London from the Soviet Union in 1931, faced the prospect of being unable to practise in the United Kingdom, due to Royal Institute of British Architects (RIBA) restrictions related to registration. He then formed Tecton in London in 1932, after an invitation to speak at the Architectural Association (AA), with Godfrey Samuel, Val Harding, Michael Dugdale, Anthony Chitty, Francis Skinner, and Lindsay Drake. As recent architectural graduates, they had little practice-experience, but were eligible for registration.

Tecton was the first group practice in England, and became a model for other English collective practices, and in the United States somewhat later, groups such as The Architects’ Collaborative (TAC), formed “to develop a new ‘technique of collaboration’ in teams,” by Benjamin Thompson, Jean Bodman


13 Gatley and McKay, “‘Overseas Solutions Will Not Do,’” 25.


15 Five architects listed: J.N. Arundel, George Hutton, John Millar, W.J. Moulds, and C.E. Plant were all employed by the Queensland Government. See Donald Watson and Judith McKay, A Directory of Queensland Architects to 1940, (Brisbane: Fryer Memorial Library Occasional Publication no. 5, 1984).


Fletcher, Norman C Fletcher, Sarah Pillsbury Harkness and John Harkness, with Walter Gropius in 1945.  

Tecton rejected the identification of individual architects as author, and conducted their work through collaborative research and analysis. At this time, architects in the United Kingdom entered the profession after a period articulated as a salaried assistant. Typically, they found themselves in public practice, working in the engineering or surveying departments of public authorities. The RIBA also actively campaigned to convince local officials to commission architects in private practice as the preferred alternative.

In 1921, a decade prior, the RIBA had established a committee to deal with what they saw as “the increasingly problematic relationship between public and private practice.” That same year two other organisations were formed to represent the public sector architect, the Official Architects’ Association (OAA), and the Architects’ and Surveyors’ Assistants’ Professional Union (ASAPU). The latter organisation advocated against architecture as an art and argued for a conception of the architect as builder to raise the general standard of design, construction and craft detail of building. They also sought to increase in the standard of living of the (architect) worker. This coincided with an active campaign by the journal, *Architect*, in the United Kingdom, who were against architects in public service, arguing that the acceptance of a wage impinged upon the architect’s freedom, and as a consequence, the quality of work produced.

RIBA attempted to protect the title of Architect through the establishment of the Registration Act, which came into force in 1931, which also happened to be the year of Lubetkin’s arrival. The ASAPU reconstituted as the Association of Architects, Surveyors, and Technical Assistants (AASTA) and fought the act on the grounds that it did not address a minimum salary scale, overcrowding of the academy and the profession, and the representation of salaried state architects within the RIBA. AASTA leveraged support for the Act in exchange for representation on the RIBA Council. As a consequence, state employed “architectural workers” were disadvantaged by the creation of the Registered Architect category that privileged individuals in practice who met certain technical qualifications, and were therefore deemed expert enough to render architectural services.

AASTA promoted the idea of group practice as a way of giving greater responsibility and experience to assistants. It withdrew

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19 Tripp, “Lubetkin and the Tecton Group,” 34.


from the RIBA Council in 1934, and in 1935 was joined by
the Architects and Technicians Organisation (ATO), with
members of Tecton holding key positions.26 Lubetkin saw group
practice as offering “an arrangement to sponsor continuous self
education.”27

The Architects’ Group, Brisbane

The Architects’ Group in Brisbane was active between 1946
and 1951, and drew on experiences in public service and private
practice to position themselves as an “annex” of the newly
formed Queensland Housing Commission. They were dependent
on a steady stream of town-planning work, specifically the
coordination of block subdivision, site planning, and elaboration
of plan and roof variations of clusters of houses to enliven the
street, in Brisbane, and for regional centres across the state (fig.
3).28

Off the back of these town planning commissions, they
attempted to secure commissions for houses and larger projects,
but very few were realised. If projects by Tecton such as the
Gorilla House (1933) and Penguin Pond (1934) for London
Zoo in Regents Park, or Finsbury Health Centre (1938), were
also part of the inspiration behind the collective, this did not
translate into the work produced. Although the ambition of
the Architects’ Group was to operate as a collective, evidence
suggests that they practised in the manner of a traditional
partnership, with Jacobsohn and Ron Voller acting as principals.

26 S Parsons, “Communism in the
Professions,” (PhD Diss., Coventry: University
of Warwick, 1990), 425.

27 Bertold Lubetkin, “Interview,” American
Architect and Architecture, New York,
December 1956, 26.

28 Ronald James Voller Collection, Fryer
Library, University of Queensland, UQFL622,
Folder 6.

Figure 3. Architectural drawing, “Group of
Thirteen Houses, Samford Road, Mitchelton.”
The Queensland Housing Commission.
Ronald James Voller Collection, Fryer Library
UQFL622, Folder 6. Courtesy Fryer Library,
University of Queensland.
However, drawings produced by the Architects’ Group did not start to reveal individual architectural authorship until the end of 1949.

In 1946 they were commissioned to develop at least five proposals for modest houses, including the timber Chandler House in Beaudesert, Queensland, that featured two fireplaces and a front porch. The Burke House in Greenslopes, Brisbane, was a proposal for a house with a simple rectilinear plan and a hipped roof rendered in perspective by Ronald Voller. The Bradley House in St Lucia, also in Brisbane, was a house with a flat roof and a central breezeway entry that was reminiscent of the work of American architect Hugh Stubbins (1912-2006). In particular this house was suggestive of his entries into the Realistic House Competition, run by the American journal, *Progressive Architecture*, in 1945.²⁹ The Bradley House was the only house to be documented in the first year of the Architect’s Group collective. The year ended with a refurbishment of their office in the Permanent Building, Queen Street, in Brisbane’s central business district, where most architectural partnerships were located at this time.

In 1947 the Architects’ Group was commissioned to produce at least eight house proposals, and oversaw the construction of Ronald Voller’s own house in St Lucia, Brisbane.³⁰ In February they documented the Bettridge House in Margate, Brisbane, a two-bedroom timber house raised slightly off the ground, with a gently sloping skillion roof and clerestory pop-up box over the main bedroom. Also that month they called tenders for “houses in concrete” in Wellers Hill and a brick house in Corinda, both in Brisbane. In September they tendered a timber residence in Chelmer, Brisbane.³¹

In addition sketch designs for a range of other building types were commissioned by the Queensland government departments and private clients including a new train station for the town of Hughenden, offices for Queensland Druggists in South Brisbane, plans for a Memorial Hall at Stanthorpe, for the Returned Sailors’ Soldiers’ Airmens’ Imperial League of Australia (RSSAILA), Shops and Flats for the Pacific Highway, Surfers Paradise, and an Automobile Centre in Brisbane (1947).³² None of these were realised.

In 1948, they were commissioned to coordinate a private estate development by prominent businessman Leon Trout, at Everton Park, Brisbane.³³ They also designed his house on a prime location within the estate, in collaboration with established architect Mervyn Rylance (1906-1983) the following year. Other


³⁰ Voller Collection, Folder 4.


³² Voller Collection, Folder 4.

³³ Voller Collection, Folder 5.
projects in 1948 included at least six house designs, although only one of these, the Kirby House, West End Brisbane, proceeded to construction. The Architects’ Group again developed sketch design proposals for more substantial projects that year, including a holiday camp at Broadbeach for the Royal Automobile Club of Queensland (RACQ), and the South Coast Cooperative Dairy.34

A design for the Queensland Smelting Works at Everton Park, a controversial facility located in Brisbane’s suburban Ashgrove, that had drawn protests from local residents before the war, and was conceived around the relocation of an “igloo hut” attributed to the First Australian Combat Engineers (Works). The igloo was designed from a template provided by United States Army Forces in Australia (USAFA) and constructed during the war on the site behind a ribbon of residential subdivision as a buffer to the street.35 A separate steel structure to house the smelter was positioned to the rear of the expansive site behind the igloo (fig. 4).

Figure 4. Architectural drawing, “Queensland Battery Smelting Works Pty Ltd.” Drawing by The Architects’ Group, Ronald James Voller Collection, Fryer Library UQFL622, Folder 5. Courtesy of the Fryer Library, University of Queensland.

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34 Voller Collection, Folder 5.
35 Voller Collection, Folder 5; “Smelting Works at Ashgrove,” Courier-Mail (Brisbane), September 10, 1937, 21.
Apart from the collaboration on the New Residence for Leon Trout only one other house proposal was commissioned in 1949, and this was for G. Erzetich in Greenslopes. The Architects’ Group also produced site plans for Proposed Offices in Wharf Street, Brisbane, and working drawings for the Returned Services League (RSL) Building and Bowling Club in Maryborough, Queensland. This project led to a commission for the Music Shell and War Memorial Olympic Swimming Pool, also in Maryborough, which was the last Architects’ Group projects (fig. 5).36

Voller and Jacobsohn were both acknowledged as the architects on drawings produced for these projects, but the scheme did not proceed with these architects due to a change of mayor and a reported lack of funding. Ronald Voller took the projects on in a private capacity, and later submitted a revised proposal that reduced the scope and included renovations to the existing buildings. After protracted negotiations, the council definitively announced that three projects for Maryborough: the Olympic Pool, Music Shell, and War Memorial Park would not proceed.37

The Architects’ Group sustained a practice for five years, but remained largely out of the public eye. If Tecton was the impetus for Architects’ Group, there is no evidence to suggest that—
like Tecton—they were committed to research and analysis as the basis for practice. Rather, the collective was an attempt by university lecturers Cummings and Lucas to maintain a practice profile, and draw on established networks across all levels of government. Given the context of post-war austerity, and paucity of materials and labour that provided the backdrop to their formation, it was a clever strategy to undertake town-planning work for the recently formed Queensland Housing Commission. This gave them a steady income to leverage collaborations with public departments and other architects, and to negotiate architectural commissions with private clients. There is little evidence of the involvement of Lucas, or Trapp, and with Cummings increasingly preoccupied with his University duties, the collective quickly reverted to the partnership model of practice typical of the time. The Architectural Group in Auckland, by contrast, generated significant momentum for cultural change within New Zealand’s architectural culture over time. The group sought to reform agenda, texts, practice innovations, and “call for a New Zealand architecture.”

With the disappointment of Maryborough, the Architects’ Group disbanded late in 1951. Ronald Voller practised for a short period by himself before joining the practice, Bligh Jessup and Partners, in the mid-nineteen fifties. In this new practice setting Ronald Voller made important contributions, perhaps due to the broad range of experiences he had accrued, as a rehearsal for later corporate practice platforms, consolidating the general shift in architectural culture from public to private practice. And finally, as noted earlier, Jacobsohn went to work for Doxiadis in Athens, before later returning to live in Brisbane.

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38 “Mostly from the Diaries of RP Cummings,” Fryer Manuscript F2350, University of Queensland, 162.

39 Gatley and McKay, “‘Overseas Solutions Will Not Do.’” 21.

40 “Architectural Draughtsman Required in the Office of Ronald J Voller,” Courier-Mail (Brisbane), February 27, 1954, 12.
Negotiation Across Cultural Distance: The Creation and Interpretation of a “Chinese-Style” Christian Campus

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For Europeans, China has long been in the imagination of remote fantasies. The seventeenth century and the following eras of colonialism witnessed a lasting interest among Western architects in designing Chinese-style buildings. These either represented historical and geographical “distance” or – if built for Chinese audiences – a putative “familiarity.”

The campus of West China Union University (Chengdu, China) was among the Chinese-style projects designed by Western architects in the early twentieth century. To facilitate local acceptance of this institution, British architect Fred Rowntree took great pains in combining Chinese architectural elements with Western principles and technology, with meanings encoded in the buildings. The meaning of the buildings was then interpreted in various ways by people from different socio-cultural backgrounds. Some enthusiastic Western donors claimed the buildings as beautiful monuments of the “remote” Chinese culture, while interpretations by Chinese people varied from elegant hybrids of the two architectures to crystallised symbols of cultural imperialism. The discordant interpretations not only challenged the original purposes and intentions of the architect, but also raised the question as to how architectural meanings are perceived in cross-cultural contexts.

This paper discusses the architecture of West China Union University and the cultural distance reflected through its design and interpretation. Informed by semiotic theories, this paper proposes the construction of architectural meaning as a negotiation where the diverse interpretations competed with each other (and with the architect’s intention) before reaching a balance. A dynamic framework is thus adopted to unfold the complexity and contradiction in architectural meaning across cultural distance.

Keywords: cultural difference; Chinese architecture; semiotics; post-colonialism
During the early twentieth century, China went through turbulent times. The political environment of China changed greatly with the collapse of Qing Dynasty and the foundation of the Republic of China in 1912. In this period, thirteen Christian universities were established in China by Western missionaries serving two purposes: to provide Chinese people with modern education as part of their philanthropic project, and to promote Christianity discretely in a way overcoming the tension between Western missionaries and Chinese people caused by overt proselytising.¹

West China Union University (WCUU), founded in 1910 by Western missionaries, was among the earliest Christian universities. Located in Chengdu, the capital of Sichuan province in the interior of China, it faced the strongest hostility toward Western missionaries. When constructing the campus, the cautious university authorities decided to adopt an architectural style combining Chinese and Western elements. These buildings suffered less destruction than other Christian buildings in Sichuan, and as a result of a perception that this was a possible outcome of the adopted hybrid style, this architectural strategy was followed by later Christian universities. Soon after the foundation of the People’s Republic of China in 1949, WCUU was converted to a national university operated by the government while nevertheless keeping much of its existing institutional character. After ninety years of success, the university was forced to merge with Sichuan University in 2000, and its campus taken over by the latter. Today, although most of the buildings are still used for the same purposes as previously, the meaning of these buildings is not the same as a century ago.

WCUU exemplified Western architects’ effort to adapt and represent Oriental architecture for Oriental audiences, which was observed not only in China, but also in other parts of colonial Asia. Parallel cases include works in the Dutch East Indies such as the Institute of Technology at Bandung, designed by Dutch architect Henri Maclaine Pont with indigenous Javanese architectural features, and so-called “Indo-Saracenic” architecture in India such as Robert Chisholm’s Madras University Senate. In these buildings, architecture was used as a means of communication between a university client and a group of target audiences.

When studying the buildings at WCUU, two levels of questions are raised. Firstly, how did the architect manipulate architectural symbols to design meaning into architecture? Besides, in a cross-cultural context different groups of people with different cultural

¹ Dong Li, Zhongguo Jindai Jiaohui Daxue Jianzhushi Yanjiu [Architectural History of Christian Universities in Modern China] (Beijing: Kexue Chubanshe, 2010), 24-25.
backgrounds—the Western missionaries, Chinese students, faculty members from both backgrounds, and local villagers—derived diverse meanings from the buildings. Therefore, the second level of questions are: were the architectural meanings interpreted in the way envisioned by the designers? How effective was this architectural communication?

To answer these questions, this paper adopts a framework drawing on semiotics—the theory of signs and meaning. It was first introduced to the discipline of architecture in the 1960s and received wide discussion, among which Umberto Eco’s theoretical contribution is now recalled again by architectural historians and critics when discussing the contexts of architecture’s interpretation. Eco not only acknowledges the contribution of the “audience”—in addition to the author (which may refer to the architect)—in the production of meaning, but also attributes the meaning of a sign or a text (which may include building) to social and cultural conventions manifest in a cultural work. In this regard, Eco refers to the “intention of the work” as well as the “intention of the author” and the “intention of the reader.” In Eco’s semiotic theory, as the formation of meaning is attributed to social and cultural conventions, changes in meaning may be explained by the cultural difference and the change of social context. For analytical purposes the construction of meaning can be divided into two stages: the preliminary production of meaning by the architect, and the revision of meaning by the interpreters after the building’s erection. These are both culturally constrained; their fidelity to the “intention of the work” is a reflection of this constraint. His observation suggests an inclusive and dynamic framework for analysing the buildings in WCUU. Also drawing on the work of architectural historians examining similarly cross-cultural topics, this paper proposes the construction of architectural meaning as a negotiation which involves the architect and also the audiences of the architect’s work.

West China Union University: Building Meaning into a Christian Campus

When the protestant missionaries manoeuvred their way to Sichuan Province in the late nineteenth century, they saw both great opportunities and unprecedented risks in the then largest province of southwest China. They were faced with a population of more than ten million people that could be Christianised, but this population was engaged in incessant anti-Christian riots which damaged or destroyed church property. To extend

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their power discreetly in this land, missionaries therefore built not only churches, but also schools and hospitals providing philanthropic medical and educational services. The necessity of higher educational institutions emerged when the missionaries realised their influence on the upper classes of China was limited. In 1908, the proposal to establish a university in Sichuan was approved by four collaborating mission groups: the Friends’ Foreign Mission Association (Britain), the American Baptist Foreign Mission Society (U.S.A.), the Methodist Episcopal Mission (U.S.A.), and the Canadian Methodist Mission (Canada). To be located in Chengdu—the capital of Sichuan Province—the university aimed at the “advancement of the Kingdom of God, by means of higher education in West China.”

Probably because of wariness of previous experiences of local riots, adaptation was made to the special conditions of West China. The missionaries declared their institution to be a “Chinese university.” While English was used in other Christian universities in the coastal cities of China, all teaching at WCUU was in Chinese language (more precisely the Chengdu dialect). When constructing the campus, instead of pure Chinese or

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6 Constitution of the West China Union University, January 1910, Archives of the United Board for Christian Higher Education in Asia, Research Group 11, Box 272, Folder 4316, Special Collections, Yale Divinity School Library, New Haven.


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Figure 1. Proposed Master Plan of West China Union University, 1921. (Courtesy of the Archives of the United Board for Christian Higher Education in Asia.)
Western architecture, a combination of the two was preferred by the WCUU authorities as a balance of function, cost, and beauty. While the missionaries considered Western construction would be preferable to local building practices, a Chinese exterior to the university buildings would not only “make the Chinese feel at home,” but also be a conciliatory gesture to the local people, reducing the risk of the buildings being destroyed in riots as had previously occurred to Christian premises.

As the result of a competition, British architect Fred Rowntree was commissioned the University Architect. Rowntree had never visited China before and was influenced in his works by the Arts and Crafts Movement during his career. His design for WCUU featured a combination of two distant cultures. This combination was initially reflected through the accommodation of “Chinese style buildings” in a campus planned in a completely Western scheme.

The original plan of West China Union University reflects Western planning and design conventions of the period (fig. 1). According to the University authorities, each mission group was to construct its own college with both residential and educational functions, while a group of teaching and administration buildings were shared. This scheme formed the basic structure of Rowntree’s plan: all the shared buildings were set along two perpendicular axes at the centre of the site, surrounded by college groups of each mission beyond. What appear to be Beaux-Arts campus planning strategies,

8 Report of Drawings Submitted in Competition Design for West China Union University, Chengtu, Szechuan, October 9, 1912, Box 296, Folder 4617, Archives of the United Board for Christian Higher Education in Asia, Research Group 11, Special Collections, Yale Divinity School Library, New Haven.

9 Young People’s Forward Movement, Our West China Mission, 361.

10 Fred Rowntree and Sons, “West China Union University,” Builder 126, no. 11 (June 1924): 1024.
interestingly, were applied in the British architect’s plan. Firstly, Rowntree adopted the Beaux-Arts concept of grand monumental planning employing *axiality*: a University Gateway, an Assembly Hall and a University Chapel (later replaced by a Clock Tower) were aligned on the main north/south axis, with ten significant buildings disposed symmetrically along its sides. Secondly, free-standing individual buildings, rather than quadrangles which were common in traditional British collegiate planning, formed the basic unit of the campus. According to American architect Richard Dober, this approach has been a fashion of American campus planning since the 1890s, when “buildings enclosing space” were replaced by “buildings sitting in space.” No Chinese spatial strategies were referred to in Rowntree’s explanation of his campus planning.

However, the original plan was subject to major changes during the construction. In the 1937 campus map, barely any symmetrical disposition of buildings can be identified (fig. 2). Funding, of course, was one of the problems, but the key reason was in the difficulty of purchasing the lands envisaged in the original plan. In particular, purchasing grave lands was the most challenging, as the missionaries were not only required to secure new sites for reburying the remains from the old graves, but were also blamed by local villagers for disturbing the spirits of their ancestors. Despite all the efforts, unfortunately, the missionaries failed to secure all the intended lands, especially a wedge-shaped area of land east of the campus which compromised the whole symmetrical layout. The fence of the university was also demolished by local people in a riot in 1930, and the campus has been left open ever since. Nevertheless, not all changes were negative. Probably with the purpose to promote Chinese taste on campus, a semicircular pond of lotus was added to the south of the Clock Tower during the 1930s, while a long rectangular pond was built to its north, with two Chinese stone bridges over it. The ponds created a classical scene characteristic of Chinese poems, and soon became popular among students.

As Rowntree died in 1927, these might be the work of Walter G. Small, the University Builder from 1925, who was familiar with Chinese culture. As a result, the final plan of the campus turned out to be a negotiation of Western planning principles, the site conditions of Chengdu, and later attempts to re-introduce Chinese-ness into the campus.

Unlike the campus planning, the architecture of WCUU was supposed to combine the finest elements of Chinese and Western architecture. According to Rowntree, the architectural design for WCUU aimed at maintaining “the forms, texture and colouring...”

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14 Walmsley, *West China Union University*, 34.

handed down from the past history” of China and adapting these to modern requirements. Rowntree visited China in 1913, during which he studied the indigenous architecture of west China while completing the detailed drawings for WCUU buildings. Three design strategies could be identified from the buildings of WCUU:

(1) Applying Chinese roofs to all of the buildings;
(2) Adopting and appropriating Chinese building prototypes, especially the pagoda and the gateway;
(3) Manipulating a variety of Chinese decorative details, sometimes combined with Western ones.

Firstly, the widely applied Chinese roof was the dominant feature of the campus. All of the buildings were topped by a hip-and-gable roof with characteristic curves at the corners. This represented the common view of Chinese architecture among Western architects at the beginning of twentieth century. Moreover, all of the roofs were covered with Chinese clay tiles inscribed with the Chinese name of the university, and

16 Rowntree, “West China Union University,” 1026.

decorated with a variety of sculptures symbolising the animals sacred in Chinese culture, coloured red, yellow, and green—all typical “Chinese” colours. However, in order to satisfy modern functions, the Chinese roofs were combined with elements from Western architecture. In the Administration Building, for example, two dormers were introduced to allow natural light for the first floor. Rowntree’s design also indicated influence from the Arts and Crafts Movement. He introduced the Japanese “Karahafu” eaves, which featured a wave-shaped curve in the middle of the eaves, to most of the Chinese roofs. The “Karahafu” form—intimating the Arts and Crafts interest in Japanese art—appeared at the main façade of all the buildings alongside the proposed axis of the campus (fig. 3).

Rowntree’s second strategy was to appropriate prototypes from Chinese architecture—especially the pagoda and the gateway. In Chinese architecture, a pagoda was always a free-standing building, but in Rowntree’s design for WCUU this rule was broken, with the prototype of Chinese pagoda appearing in two ways. In the first, the pagoda was replicated as a whole, then combined with other parts of the building, for instance in Ackerman Memorial College, where a five-storey pagoda was erected at the corner of the building to connect two wings. Secondly, simplified pagoda elements appeared as attachments to the roofs. In Vandeman Memorial College, a two storey-pagoda rose from the roof as a roof lantern, while a huge octagonal “pagoda-lantern” was put on the top of the Dental Clinic. Similarities were identified between the “pagodas” in WCUU and the potential prototypes in the local city of Chengdu, such as Wang Jiang Lou (River Overseeing Pavilion) and Wan Fo Lou (Ten Thousand Buddha Pavilion). Another prototype, the Chinese gateway, was also widely imitated. The University Gate itself was a brick gateway; more creatively, in Vandeman Memorial College, a gateway was attached to the façade, emphasising the main entrance of the building. The gateways featured triple gates—a main gate accompanied by two smaller ones. It represented an architectural sign existing in both Western and Chinese architecture, usually symbolic of solemnity and dignity. It was also noteworthy that these gateways all had round arches which was uncommon in traditional Chinese gateways. This was perceived as referring to the Western triumphal arch in some local interpretation.

Rowntree used not only Chinese building forms but also ornamental details. To decorate the ridges and the Dougong brackets of the Chinese roof as was often done in Chinese architecture, a great range of mythological creatures and animals

18 Dong, Zhongguo Jindai Jiaohui Duxue Jianzushi Yanjiu, 88.
20 Luo, Dongfang De Xifang, 128-29.
21 Jin, Huaxiba Wenhua, 67.
were selected, even if some were imported from the Western world. For example, the roof of Vandeman Memorial Hall was decorated with not only fishes, dragons and phoenixes which were common in Chinese architecture, but also bats, lions, crocodiles, peacocks, and even elephants which were alien, if not ridiculous in the eyes of Chinese people (fig. 4). The Administration Building and Lamont Memorial Library feature similar hybrid decorative elements.

Some claimed that Rowntree was only making fun of these signs, playing a semiotic game without following the rules, while the others praised the creativity reflected by these juxtapositions and combinations, as well as the vitality they brought to the campus.

For the university authorities, the buildings of WCUU met their purpose to please both the Westerners and the Chinese,
with messages to be delivered to different audiences. For the Western audiences, the combinational style was supposed to symbolise the localisation of Christian faith, while for the local Chinese people, the Chinese appearance of the buildings was expected to demonstrate that “the university would be a Chinese university.”

In a semiotic point of view, these buildings not only contained a variety of “signs,” but themselves became “texts” in which the meanings of signs were interwoven to convey more complicated messages. This was achieved by the efforts of the architect, through the manipulation of his reading of conventionalised codes from certain cultures. However, the appropriateness of these readings may vary according to the degree of the architect’s cultural submersion and may also change through time. Considering the culture differences lying between different groups of people, the “interpreted” architectural meaning of the WCUU buildings should also be explored from the interpreters’ side.

The Interpretation of West China Union University

As part of the process of meaning negotiation, the interpretation of the WCUU campus involves groups of audiences with various social and cultural backgrounds. These audiences include the university authorities, the Western donors, scholars and upper classes from both China and the West, and most importantly, local students and residents. Interpretation varies from one to another, and together, these interpretations in turn have influenced the meanings the buildings bear, revising the original meaning through a long process of negotiation.

The unique Oriental-Western style of West China Union University seems to have been satisfying for the Western clients, which also extends to current descendants of the missionaries today. In the official historical sketch of the university published in the US in 1974, it was said the new architectural style of WCUU’s buildings combined the best features of Western and Chinese architecture with a sense of unity and harmony. This view was also expressed in some English language newspapers in China, including the China Press (1926) and the North-China Herald (1934). In 1934, the University President, Joseph Beech, proudly announced in an article that visitors called the university the “Garden of Eden” or the “Western Heaven,” compared to the city of Chengdu which was termed the “Eastern Hell.” Today, the campus and its buildings still have meaning for the descendants of the missionaries. The article by Beech mentioned above is available on a website established by the
Beech family along with photographs including one of Beech family members visiting the WCUU campus in 2010 for its 100th anniversary.28 Similarly, a website on the architect, Fred Rowntree, established by family members, suggests West China Union University was the most important project during his career.29 Andrew George, great-great-grandson of Fred Rowntree, visited the old WCUU campus in 2018 to retrace the steps of his ancestor and gifted Rowntree's original drawings to Sichuan University.30

Unlike the nearly consistent attitudes of the Western clients toward the buildings of WCUU, scholars from both China and the West developed interpretations very different from each other. No direct comment on the architecture of WCUU has been found among Western professionals or scholars, but their wider interest in this unique architectural style might be observed from the fact that Rowntree’s architectural drawings of WCUU were exhibited in the Royal Academy in 1924, and three articles on this project were published in two of the key architectural journals in Britain (The Builder in 1915 and 1924; The Architect in 1920 and 1922).31 These offer no negative comments. No comment from Chinese scholars was found before the 1940s, but serious criticism occurs since 1944, when Liang Sicheng, a leading scholar in traditional Chinese architecture, argued that the architecture of Christian campuses in China, especially that of West China Union University, did no more than simply impose Chinese roofs on Western buildings.32 This commentary was followed by contemporary scholars Yang Bingde and Dong Li, with the former claiming the design skill of these Western architects as far behind their Chinese contemporaries, while the latter argues that Rowntree played a random architectural “game” with Chinese and Western symbols.33 Nevertheless, they all acknowledge the pioneering contribution of the architecture of China’s Christian universities, including West China Union University, in expressing Chinese-ness with modern building techniques.

As the main target audience, the interpretation by Chinese students and local people is a major indicator of the effectiveness of architectural communication at WCUU. But more than this, students and local residents have assigned new meanings to the buildings based on their cultural backgrounds and everyday experiences on campus, interwoven with and sometimes overwriting the original meaning of the buildings. Among all the buildings on campus, the interpretation of the Clock Tower is the clearest instance of this. Though it was covered with Chinese roofs, the somewhat strange shape and proportions
made it “Gothic” to the students from its erection in 1926.\textsuperscript{34} In Rowntree’s earlier design, there was no free-standing clock tower: a pagoda-like clock tower was put on top of the southern gate of the University which resembled a Chinese city gate. Although the building plan for the southern gate was abandoned later, this composition was maintained and revised for the design of an independent clock tower. The slenderness of the whole structure compared to traditional Chinese city gates, as well as the clock appearing on its elevation which reminded Chinese people of a Gothic church, might explain the strangeness of this building felt by Chinese students. However, after two lotus ponds were built near the tower in 1932, this place started to become a popular site for dating, especially on nights when the tower was bathed in moonlight. Also in the 1930s, the students of WCUU named “Eight Famous Scenes” of the campus, among which “\textit{Zhonglou Yingyue} (The Clock Tower in the Moonlight)” was ranked the most famous one.\textsuperscript{35} The once “Gothic” tower, thus, began to be interpreted as a symbol of romance in the eyes of students. In 1954, a Chinese architect was commissioned to renovate the tower, altering the design of the roof, making it less “Gothic” and more harmonious with other buildings on campus.


\textsuperscript{35} Chengdu Deng Changchun, interview, June 12, 2018.
Fortunately, the Clock Tower survived the Cultural Revolution in the following decade, and gradually became an icon of WCUU with poems and articles dedicated to it by students and staffs praising its beauty.36 Today, the iconic tower has even become a symbol of the city of Chengdu where the campus is located. China Central Television’s National Weather Forecast Program, an influential TV program among Chinese people, once used a photograph of the Clock Tower to represent Chengdu (fig. 5). Other campus buildings feature in stories and recollections shared on the website of Friends of WCUU, established by a group of alumni and local people voluntarily. After one hundred years of incessant interpretation by the students and local residents, for the campus and buildings of WCUU, their original meanings are now mingled with various new ones.

The meaning transition at WCUU shows that interpretation is more than the reception of architecture meaning—sometimes it revises the preliminary meaning. The audiences, especially the students of WCUU, managed to revise and extend the meaning embedded in the buildings such as the Clock Tower, contributing to the localisation of the campus. Moreover, according to Eco, when a code that correlates the expression and the content planes of a sign is socially constructed, a layer of meaning is formed.37 Thus certain layers of meaning may also change when the social context changes. Interestingly, the campus and buildings of WCUU experienced a stable accumulation of meaning over the past century, without obvious meaning loss. In other words, the preliminary meanings intended by the architect and clients are still well acknowledged by interpreters after one hundred years, despite the vicissitudes of social environments. It was probably due to the continuous existence of the WCUU as an independent institution until the year 2000, and the alumni’s incessant effort to record and publicise the history of the campus.

Conclusion

Buildings bear and demonstrate meaning. At West China Union University, the buildings were expected to perform as a medium to communicate messages through architectural signs. This process is explored within three key contexts. Firstly, the role of the interpreter of meaning is acknowledged. More precisely, the reaction of audiences is regarded as a factor to test the effectiveness of architectural communication. The second context lies in the cultural difference between the participants in the architectural communication. In short, the situation in WCUU

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was that a Western-trained architect without much knowledge of Chinese architecture was commissioned to design a campus in Chinese style, whose target audience—interestingly—was also Chinese. What would happen to its meaning when an architectural sign was introduced into a new cultural context, and then re-introduced back to the original culture? Last but not least is the issue of time. Buildings change through time, together with the people who apprehend their meaning and the social context in which interpretation takes place. How could this be reflected in the analysis of architectural meaning?

Based on Eco’s semiotic theory, this research developed a framework of meaning formation comprising two stages. In the preliminary stage, the architect, Rowntree, used conventions extant in the Western world, by which the curved roof, the pagoda and the gateway were coded as “representatives” for Chinese architecture. These codes were understandable for people from both Western and Chinese culture, but when combined with other codes, such as those from Western architecture or Christianity, the sense of Rowntree’s design evaded local audiences. The “intention of the work” was, we could say, not strong. When the audiences try to decode the meaning of an unfamiliar sign imported from another culture, the formation of new codes begins.

In the second stage—the revision of meaning, the meaning of the buildings in WCUU has been influenced and revised by the diverse interpretations from a variety of audiences since erection. In this stage, the audiences of the buildings take over the role from the architect in the long-term process of meaning construction. In different historical eras, various audiences derived diverse meanings for the campus. In the early years it was a symbol of the educational ideals of the university for the missionaries, a place both familiar and alien for the local students, and a great educational centre in the eyes of the local government; then it became a remnant of the Cultural Imperialism for the new government, while indigenised by the efforts of the students and local people to be a campus more Chinese in taste; today, it is regarded as a monument of their ancestry and a symbol of the long-lasting friendship between China and the West for the descendants of the missionaries, a group of historical buildings of great value by the current government, and even a cultural symbol of the city of Chengdu. All of the interpreted meanings contribute to the revision of the original meaning of the buildings, resulting in a complex hybrid where multiple layers of meaning from various audiences and historical stages are merged together.