Often referred to as Gothic Revival in style, the central Auckland tower blocks designed by the architectural partnership of McDonald, Mullions and Smith dominated Auckland’s downtown during the decade of prosperity that preceded the Wall Street Crash. Gleaming white, the Waitemata and Manukau Councils Chambers (1922), Shortland Flats (1923) and Medical and Dental Chambers (The Lister Building) (1924) and Chancery Chambers (1925) still stand in monumental testimony to Auckland’s growth spurt in the interwar years. Principal designer was the Canadian Sholto Smith (1881-1936), whose adherence to the American Health and Fitness movement became explicit in the open sleeping balconies included as part of the innovative design for Shortland Flats.

Structurally daring, these buildings offer testimony as to the openness of Auckland architects to incorporating new building materials in the early twentieth century. Skyscraper Gothic downunder, albeit on a reduced scale, arrived on the coat-tails of steel. Charles Fleming McDonald (1869-1922) did the structural design for the Councils’ Chambers at the corner of Princes and Shortland Streets. He had considerable experience in ferro-cement construction, as the builder and engineer of the Luttrells’ New Zealand Express Company building (1910) in Dunedin, and the four-storeyed National Bank (1911) also in Dunedin, which hides its concrete and iron construction behind a trachyte stone façade.

C.F. McDonald was clearly a pioneer of construction in New Zealand, and modern in his materials and methods but he had died before Shortland Flats Ltd., founded by Thomas Mullions and the Canadian Sholto Smith, was incorporated in December 1922. For this structure and the two other buildings which are this firm’s legacy in downtown Auckland, the structural sheets are signed

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by Joseph Stanleigh McAven (1877-1960), an independent civil engineer. In England, McAven had worked for Louis Gustave Mouchel (1852-1908), the man who introduced ferro-cement to Britain. McAven came to New Zealand as the engineer for the Ferro-Concrete Company of Australasia Ltd., known for the construction of the Grafton Bridge, Kings Wharf, Queens Wharf and other significant engineering feats.

The innovations apparent in open planning and modern construction methods in Shortland Flats are usually attributed to Sholto Smith joining the architectural practice in March 1920. However, as this paper will show, Sholto Smith’s experience was in designing in wood, and it was his New Zealand colleagues who introduced him to reinforced concrete. Despite the advanced engineering design of Sholto Smith and Thomas Mullions’ city structures, they regarded concrete as aesthetically inferior, and allowed it no marked effect on the style of the building. Ferro-concrete construction nevertheless permitted a greater openness in design and more air circulation than nineteenth century buildings had done, and the greater strength of the buildings over unreinforced masonry has meant that they are all still standing today.

Canadian Sholto Smith is an architect who is little known in New Zealand architectural history.1 Arriving in Auckland from North America in 1920 at the age of 39, he had already accumulated experience in designing modern office buildings and large houses before his immigration.2 Significantly, he had two rustic designs for rural lodges in Vancouver to his credit which established his credentials as a historicist designer in wood. In Auckland, his signature domestic style was a simplified form of the English Arts and Crafts house—a hunting lodge for the suburbs. Like his contemporary J.W. Chapman-Taylor, Smith was of English parentage, and he was familiar with the work of Charles Voysey and Robert Mackay Baillie Scott through his visits home as well as the publication of their designs in the professional English architectural journals which he received. Like all young North American architects of his era, he owned copies of the numerous popular books on the British house (most of which were published in the years 1900-1912), subscribed to The Studio and visited the World’s Columbian Exposition in Chicago in 1893.3 His Auckland architecture is reminiscent of Californian Arts and Crafts architecture, particularly the over-hanging eaves reminiscent of Swiss chalets, mountain architecture and mission buildings but also has a distinctively South Pacific inflection.

1. This is a point made also by Dean Burke who wrote his University of Auckland Research Report in 1993 on this architect. Sholto Smith: Stylistic Stride, Research Report 111.540, School of Architecture, University of Auckland, October 15 1993.


3. Their work was also published in Magazine of Art, Magazine of Fine Arts, and the Journal of Decorative Arts and Country Life.
Sholto Smith’s major contribution to Arts and Crafts Auckland, the house he designed as a gift for Phyllis Hams on the occasion of their marriage on 3 March 1925, was named “Colwyn” to memorialise their Welsh meeting place. On the crest of the hill above fashionable St Heliers beach, “Colwyn” was a well-placed advertisement for his domestic architecture. A little bit of Olde Englande recreated in the eastern suburbs for his homesick new wife, this large house epitomised the romantic archetype of the Cotswold cottage despite being built in reinforced concrete. Designing with Arts and Crafts obeisance to nature, art, handcrafts and the spiritual the traditional aesthetics of Sholto Smith’s houses veil their modern techniques of construction. During a sixteen year career as an architect in practice in Auckland, Sholto Smith was responsible for many of the Tudor Revival house designs built in the region during the building boom of the 1920s. It was a successful career, cut short by his death at the age of 55 years, in 1936.4

Sholto Smith’s family background provides some context to his interest in engineering and architecture. He was born in the Alpes Maritimes in 1881 as his English civil and mining engineer Joseph Burley Smith was living with his wife Isabella Holmes Hurle in Nice in order to supervise the construction of a sea wall in front of the famous Promenade Anglais.5 His parents returned to England and lived there until the late 1880s when they emigrated to Canada, and took up residence in Glen Almond, in Quebec so that Joseph Smith could manage the Anglo-Continental Guano Works at Squaw Hill Mine.6 After a dispute over boundaries, Anglo-Continental abandoned the mine in July 1892 and the Smith family moved to Montreal. The twenty year old Sholto Smith is recorded as having passed his preliminary examination for a license to practise as an architect in the Architectural Association examinations in Montreal in 1901.7 By June 1905, he was joint secretary with R.Charbonneau of the Sketching Club of the Province of Quebec Association of Architects8 and reported on the contrast of styles between two new buildings in Montreal—Percy Nobbs’ McGill Students Union Building and McKim, Mead and White’s Mount Royal Club—in following year’s edition of Canadian Architect and Builder.

In January 1907 Sholto Smith was in partnership with William Alexander Elliott (1866-1957) a successful Ontario-born architect who had already established architectural practices in Anaconda, Montana and Brandon in Manitoba and was looking for opportunities to expand into areas which were undergoing rapid devel-
They tendered successfully for a central fire station building for Moose Jaw in March of 1907 and the building was constructed in brick with a sandstone trimming with Elliott supervising as Smith had already left for Vancouver.\textsuperscript{9} Arriving on the West Coast in mid-summer 1908, he established an office with William Alexander Doctor in the downtown Fairfield Buildings, where many of Vancouver’s Arts and Crafts Architects had offices.\textsuperscript{10} The intention was to reap the benefits of another building boom as Vancouver doubled in size to nearly 80,000 people by 1909. He married Cora Lilley Woodward, who was the youngest daughter of the owner of Woodward Department Stores Ltd., Charles F. Woodward (1842-1937), in the West Vancouver Methodist Church on 7 April 1909.\textsuperscript{12} He was also broadening his professional associations at this time: his name is listed as one of those at the inaugural meeting of the British Columbia Association of Architects held in the Vancouver Board of Trade Rooms on 29 January 1909.\textsuperscript{13} At that meeting, Frances Rattenbury was elected president, with Samuel Maclure, Robert Mackay Fripp and Sholto Smith appointed to an entertainment committee. By 1910 both Maclure and Sholto Smith were operating their practices from offices in the newly completed Winch Building, but this cosy arrangement was shortlived as Sholto Smith soon went into partnership with William Douglas Bamford Goodfellow, the son of an eminent New Westminster architect, William Goodfellow (1847-1915) opening an office in 14\textsuperscript{th} Street in 1910.\textsuperscript{14} Goodfellow and Smith’s most important building was a forty room lodge for two Vancouver entrepreneurs, Benjamin Dickens and Alvo von Alvensleben at Indian Arm at the end of Burrard Inlet. It features many aspects of the Arts and Crafts sensibility that would become evident in his New Zealand buildings: the gabled roof is steep with every fourth course of shingles emphatically doubled, and it reaches out to become an overhanging porch shelter which returns around the gable ends. Like the hotels designed for Yosemite by Californian Arts and Crafts architects, the materials referenced the miners’ shanties of the nineteenth century which were distinguished by walls built of half-board logs chinked with clay and shingle rooves.

Directness achieved by the use of these natural materials was crucial to the success of this building and it immediately brought them another commission for a backwoods retreat, this time a skiing lodge on the top of Grouse Mountain in Vancouver in 1911. But his opportunities seemed limited despite these two commissions, as competition for work in Vancouver was intense,
and Sholto Smith decided to move his family back to Moose Jaw which was still booming.\footnote{The family by now included a daughter, Phyllis Geraldine, born in Vancouver on 6 November 1910. See Fulton, “Sholto Smith,” 76.} Here he completed a building for the Moose Jaw Cold Storage Company in Manitoba Street West in 1912 (demolished 1964), an Industrial Hall for the Board of Trade built on Main Street North at Manitoba Street East, (demolished 1922), St Barnabas Anglican Church 1913 (demolished 1935) and an apartment and business block for Harold Matthews, a confectioner and real estate agent, which was named Victoria Hall and opened in 1913. Of these, the Aquatic Club (opened in 1913), has a marked “Elizabethan” effect with half-timbering in the jerkinhead gables. There was also a commercial commission, the Douglas Building (1914) and a residence for J. Holmstead at Wellesley Park in 1914 (demolished 1981).\footnote{Fulton, “Sholto Smith”}

On 12 April 1913, Sholto Smith and his wife Peg (who was pregnant with their second child, a son) went on holiday to Vancouver where she remained while Sholto returned to Moose Jaw. Building slowed with the withdrawal of British capital investment in the lead up to World War One, and Sholto Smith was keen to join up when war was declared. He enlisted on 23 September with the 11th Battalion of the Canadian Expeditionary Forces, leaving for overseas on 4 October 1914 at the age of 33 years.\footnote{Fulton, “Sholto Smith,” 82.} During his five years overseas service, he met Phyllis Mary Hams while on leave in Colwyn Bay, North Wales, and he corresponded with her after she emigrated with her family to New Zealand in 1921. Sholto Smith returned to Moose Jaw on 28 October 1919 but was unsettled, and soon left for Auckland, New Zealand.\footnote{Sholto Smith manuscript.}

Smith arrived in Auckland on 17 March 1920 and immediately joined the practice of Thomas Coulthard Mullions (1878-1957) and C. Fleming McDonald. The latter had been the architect of the original Masonic Hotel in Napier (1897), and the firm originally specialised in hotels and commercial architecture using modern materials including reinforced concrete, but dressing the modernist structure with historicist references. With the new Canadian arrival on board, the first collaborative design was an entry in the public competition for a new Arts Building for Auckland University College in 1920. Forty four perspectives were submitted for this competition and Mullions, Smith and McDonald was one of the six architectural firms that were invited to submit final architectural designs in 1921. Their architectural perspective shows a design for a building which made reference to Victorian Gothic collegiate architecture with a Californian inflection. Symmetrical, and intended to be built in stone, the building
was to have a Marseilles tile roof with inset dormer windows. Two storeyed, the block was to have large arched windows on the upper storey and rectangular multi-paned windows below, interspersed with buttresses. North-facing bay windows bulge out beneath sharply pointed gables at each end of the building. Alert to the transportation requirements of the modern age, a detached gate was intended to provide vehicle access to the grounds beneath its pointed arch. Dominating the design is the square decorated bell tower topped by four elaborate crockets, with a further four of these vertical elements adorning the ridge line of the north and south wings. Like the central tower of an English cathedral, this counters the horizontal emphasis of the design. Crockets like these would later feature in the designs for Shortland Flats and Chancery Chambers as a kind of shorthand for the skyscraper Gothic style.

Unfortunately McDonald, Smith and Mullions did not win the competition for the design of Auckland University College—that success went to American architect Roy Alston Lippincott (1885-1969)—but both designs are influenced by the “Oxford dreaming spires” approach to university building design.

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Figure 1. C.Fleming McDonald, Sholto Smith and Thomas Mullions, Design for new Arts Building, Auckland University College, c.1921 583 x 785mm, University of Auckland Architecture Archive.

Figure 2. Marion Lucy Mahony Griffin (1871-1961). Perspective View of Arts Building and Student Club from Symonds Street, Auckland College 1920. Pen & wash on silk, 510 x 1100mm. University of Auckland Art Collection.
Lippincott’s move to New Zealand in 1921, just a year after Sholto Smith arrived, had a profound effect on local architecture and architects not least on Sholto Smith himself. While the outbreak of the Second World War subsequently caused Lippincott to quit New Zealand for California, he was not only a prominent designer but also a key writer and theorist during the eighteen years he resided in Auckland from 1921 until 1939. Remembered as an early advocate for professional architectural education in New Zealand, he also argued for the adoption of the new materials of modernism such as concrete into the local architectural vocabulary. In 1928 he published in the New Zealand Institute of Architects’ Journal an often-quoted article entitled “The Development of Concrete as an Artistic Architectural Legacy.” Marrying Genevieve Griffin, a sister of Walter Burley Griffin (1876-1937), in 1914, Lippincott had been based in Australia and was involved in designing the new capital of Canberra at the time when the Auckland University College Arts Building commission brought him to New Zealand.

Both men being North American, Sholto Smith and Lippincott became well acquainted, and friendly rivals. Smith recognised Lippincott’s flair for design, and chose not to compete with Lippincott for subsequent Auckland University College commissions such as the Thomas Building. Lippincott’s design for the Arts Building at Auckland University College has clearly influenced the appearance of the nearby buildings in Shortland Street by Sholto Smith and Thomas Mullions which are within the university’s precinct. But structurally it is the legacy of Charles Fleming McDonald, originally a partner in the firm of McDonald and Mullions, and a pioneer of concrete construction in New Zealand and the expertise of engineer Joseph Stanleigh McAven (1877-1960) which was crucial for the openness of design in Shortland Flats.

Modern in his materials and his methods, in late 1919, McDonald joined Mullions, another Fellow of the New Zealand Institute of Architects, in practice at Smeeton’s Buildings, 75 Queen Street. McDonald may have been responsible for the open balconies on Shortland Flats as these are also a feature of his Masonic Hotel in Napier. The open balconies rate a special mention in an article in the New Zealand Herald from July 1921, but McDonald had died before the Shortland Flats Ltd. Company founded by Thomas Mullions and Sholto Smith was incorporated in December 1922, so his involvement in the design process for this building may have been circumscribed by his poor health. For this structure and the two other buildings which are this firm’s legacy in downtown Auckland University College Arts Building commission brought him to New Zealand.

19. Auckland Star, April 9, 1921, 10.

Auckland, the structural sheets are signed by J.D. McAven, an independent civil engineer. In England, McAven had worked for Louis Gustave Mouchel (1852-1908), the man who introduced ferro-cement to Britain. McAven came to New Zealand as the engineer for the Ferro-Concrete Company of Australasia Ltd., and in that capacity carried out a number of significant engineering feats.

The Ferro-Concrete Company of Australasia specialised in reinforced concrete construction, and was able to operate in New Zealand and Australia under licence to L.G. Mouchel who held the patent in England. McAven arrived early in Auckland around 1905: an advertisement he placed in the Auckland Star in August of that year proclaimed that “the Ferro-Concrete Company of Australasia intended to carry out business in Auckland.”

Almost immediately the company was contracted by the Auckland Harbour Board to rebuild the wharves: “The ferro-concrete system had been deliberately adopted by the Board, and they had the railway wharf as a specimen of what could be done in wharf construction. It had heavily laden trains running on it as evidence of what strain it would stand.” As well as the Railway (later Kings) Wharf extension (1904-8), the Ferry Jetty (1907) they began the initial extension of the Queens Wharf (1907-9), but the firm’s triumph was the design by R.F. Moore and initial construction of Grafton Bridge, Auckland, for its time, the largest single-span reinforced concrete structure in the world at 97.6 metres. However, the company went into liquidation in 1909, and had its final meeting of shareholders in 1911, leaving Joseph Stanleigh McAven to find work independently as an engineer who specialised in concrete construction.

Significantly, McAven’s first major commission was Lippincott’s Auckland University College Arts Building where he designed the structural reinforcing. Newspaper reports on the project’s progress mentioned McAven’s involvement and it may have been this or a personal recommendation from Lippincott that precipitated Sholto Smith engaging McAven to help design multi-storeyed buildings for the city.

After Charles Fleming McDonald’s death in 1921, Sholto Smith became a partner in his firm and encouraged Thomas Mullions to move into residential property development using ferro-concrete construction in central Auckland: Shortland Flats Ltd was a commercial venture where the architects formed a company on 22 December 1922, each owning a number of shares in the building which comprised 24 flats designed to generate rental income.
Shortland Flats, which has been described as Auckland’s smallest example of skyscraper Gothic evidences Sholto Smith’s typical regard for the past but combined with modern construction methods and conveniences. Though it has many neo-Gothic finishes, such as shields emblazoned with a separate numeral making up the date of construction, 1923, it has large north-facing windows and is of reinforced concrete construction, poured onsite by the prominent Auckland construction company Noel Cole Ltd. Yet it emulates stone, and hides its other modernist indicator, a flat roof, behind a parapet with neo-Gothic decoration. Its other modern appurtenances include an electric lift, installed by the Electric Construction Company whose manager George Thorburn was an investor in the building, and open porches for each of the 24 flats. The entrance hall on the interior features luxury finishes such as a diaper patterned marble tiled floor, varnished oak panelling with cornices and a ribbed, arched ceiling and polished brass handrail. Glazing to the exterior initially bore the name of the building in gilt Gothic lettering. The stairway features a Star of David pattern banister, carved oak handrail and square newel posts, each with four shields matching the shields on the exterior of the building.

What the Auckland University College Arts Building and Shortland Flats shared, as well as an engineer, was the aesthetic subordination of the material of concrete itself. In his work for the Ferro-Concrete Company of Australasia, McAven had sold his construction technique as being more economical. Architects wanted to use it as one advantage of reinforced concrete was to thin down the external wall. However both Lippincott and Sholto...
Smith wanted to elaborate their concrete structures with decoration, as undecorated concrete was considered drab, mean, banal and lacking in textural quality.

Several other inner city Auckland buildings designed by Sholto Smith with engineering in ferro-concrete by Joseph Stanleigh McAven include the Waitemata and Manukau Council building on the corner of Shortland and Princes Street, Chancery Chambers in O’Connell Street and the Lister building on the corner of Victoria and Lorne Streets. They evidence that in the 1920s, it was common to disguise reinforced concrete constructions with styling from Classical architecture. However, the influence of the health movements of the 1920s meant that the larger window openings and patterns of air circulation afforded by the reinforced concrete construction were capitalised on, making for lighter, and more open, architectural forms.

The Lister Building, named for the pioneer of antiseptic, is a concrete building dressed in the styling of Beaux-Arts architecture. Sholto Smith was very familiar with the filtering of classical Greek and Roman elements through the Parisian Ecole des Beaux-Arts popularised by the American urban architects McKim, Mead, White in the early twentieth century as part of the City Beautiful movement in New York. Their Manhattan Municipal Building, built 1909-1915 had been the first to incorporate a New York subway station in its basement and features the same rustication on the corners, dentilled cornice and differentiation of the upper floors as the Lister Building.
Chancery Chambers dates from 1923-24\(^{24}\) and it originally was intended to have an elaborate set back Gothic top,\(^{25}\) referencing what was the tallest building in the world from 1913-1930, the 241 metre Woolworth Building designed for 233 Broadway by Cass Gilbert in New York. Chancery Chambers is characterised by large windows, and an elaborate window opening system, as well as a large open-air roof garden and an openwork roof structure for the main council chamber under the copper plated roof.

“Santa Barbara” (built in 1923 and demolished in 1989)\(^{26}\) was a low-rise development at 6 Carlton Gore Road, Grafton which proceeded from the Shortland Flats development and it is unknown whether McAven was involved in the design of the ferro-concrete structure. It shows the influence of the Spanish Mission style, with shallow pitched roof clad in Marseilles tiles, with twin miniature shingled lantern tower motifs at the crest. The exterior walls have a rough-cast finish over concrete. Boosted by the Panama-California Exposition of 1915, Mission Style architecture was available for revival and reinterpretation in the South Pacific context due to the similarity of climate between California and New Zealand. The original Franciscan missions of the eighteenth century had enclosed courtyards with thick arches springing from piers, adobe walls and large unadorned plaster surfaces with wide eaves and clay roof tiles. All the units at Santa

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24. Tender notice for five storey office building in High Street, New Zealand Herald, 18 May 1922, 12.

25. Published in the Builders’ Record in December 1923 and in New Zealand Building Progress in April 1924.


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Figure 6. Sholto Smith and Thomas Mullions, Residence for Mr Hicks, 61 Mt Roskill Road, Mt Roskill, 1925 Fletcher Archives photograph.
Barbara in Grafton faced into a central courtyard and the windows were glazed with leadlights with traditional diamond panes. Santa Barbara is distinguished by having seventeen circular bosses studded around the exterior entrance and an abbreviated wooden portcullis, medievalising details which are rarely found in Mission Revival style architecture in California. Typically eclectic, the design features of these flats show Sholto Smith’s simultaneous interest in both modern and historical architectural traditions but also his concern for open air living and desire to disguise the poor visual properties of concrete with recognisable architectural styling.

He was keen to adapt concrete to small-scale domestic use but always dressed this modern material with a plaster finish. Rather than leaving facades plain, he decorated them with historicist detail. A photograph of an unfinished house from 1925, the residence for Mr Hicks at 61 Mt Roskill Road shows the concrete construction before the stucco is applied. A comparison with a cottage by Gummer and Ford of the same period in Gorrie Avenue in Epsom shows various similarities: lattice windows, ornamental window shutters, an arched entrance and Winstone Marseilles tile roofing, but the Sholto Smith design shows a greater tendency to picturesque asymmetry with the prominent external chimney massed at the front of the house adjacent to the front door as in the Cottage Revival style popular in California at the time. Copper drainpipes are carried down the front façade (just as they were at Santa Barbara, either side of the entranceway) whereas Gummer and Ford tuck theirs behind the built-up surrounding for the door. The Sholto Smith approach to incorporating drain-pipes as vertical linear elements therefore makes a decorative feature out of the functional necessity.

Never rejecting ornament or abandoning complexity, or pursuing structural bravado, Sholto Smith could not be considered a high modernist. Tudor/Elizabethan references in his own house and his Arts and Crafts detailing in many houses in the eastern suburbs show his traditional roots. Yet, his family background in engineering led him to seek out the best ferro-concrete expertise on arrival in Auckland in 1920, and enabled him to design high-rise developments for Auckland at a time when such structures were rare. Shortland Flats was built in the year that Le Corbusier published Vers une architecture (1923) — but like all of Sholto Smith’s architecture, is attuned to popular taste in architectural fashion rather than a machine aesthetic. Nevertheless, by collaborating with the engineering expertise locally available, the firm of Smith and Mullions were able to free their three key Auckland buildings from appearing overwhelmed by masonry solidity and to create an openness and lightness. It is a distinct contribution to the urban landscape of Auckland from a time when all modernisms were possible.