"Colonisation ... in top gear": New Zealand architecture in the 1870s
Christine McCarthy

The decade opened with the departure of British imperial troops from our shores, in anticipation of the end of the New Zealand Wars. This coincided with Julius Vogel's bold plans for New Zealand public infrastructure supporting roads, railways and immigration, requiring overseas borrowing of £10 million. Part of Vogel's motivation included the idea that employment for Māori would create peace between Māori and Pākehā. The idea of peace - or "defusing anger from the wars" as Smith puts it - had also underpinned the establishment of the Māori parliamentary seats in the previous decade. She also writes that:

Colonial politicians made the male Māori vote conditional on no "treason felony or infamous offence," so that "rebels" in the wars would be denied political citizenship. Donald McLean suggested the idea of four Māori seats as a temporary measure, effectively until Māori were assimilated and tribal land was converted into individual title, whereupon Māori men could exercise the same property vote as settlers.5

The Māori seats were extended for another five years in 1872, and made permanent in 1876 "amid fears that a flood of Maori voters on the European rolls would affect the chances of Europeans in those seats."6 1872 also saw two Māori members of Parliament being appointed to the Legislative Council or upper house, and the establishment of a Native Affairs Committee. This year is also considered to mark the end of the New Zealand Wars,8 when Te Kooti "took refuge ... in the King Country, becoming the colony's most wanted outlaw."9 Smith attributes this end date to Te Arawa forces firing "the last shots in the New Zealand wars, against a retreating Te Kooti."10 Brown identifies two strands of Māori architecture following the wars: the appropriation of Christian and Western ideas and materials, which she sees in Te Whiti and Tohu's architecture at Parihaka, and Te Kooti's development of the work of East Coast tohunga whakairo such as Raharuhi Rukupō.

She writes that Te Kooti Arikirangi Te Tūruki led the architectural development of the Māori meeting house, during and after the New Zealand Wars, to support his wider struggle for political justice and spiritual salvation. He had been one of Rukupo's carving apprentices, and may have worked on Te Hau-kii-Turanga.11

His "guerrilla-style resistance campaign against the colonial government" is associated with the building of Ringatū meeting houses, "over 40 of which were built between 1869 and 1908."12 An example Brown gives is Te Kooti's arrival in Te Urewera in 1870, which was acknowledged with the building of Te Whai-a-te-motu at Ruatāhuna, opened by Te Kooti in 1891.13 Neich appears to give qualified agreement to these assertions, both

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5 Smith A Concise History of New Zealand p 86.
6 McGuinness & White Nation Dates pp 39, 40.
7 McGuinness & White Nation Dates pp 39, 40.
9 Smith A Concise History of New Zealand p 84-85.
10 Smith A Concise History of New Zealand p 86.
11 Brown Māori Architecture p 59.
12 Brown Māori Architecture p 59.
13 Brown Māori Architecture p 62 [caption].
referring to Mead's suggestion that wharenui emerged during the 1870s and 1880s, as a result of Ringatū inspiration which fused the large church of the missionaries and the indigenous carved house of the Maori into one architectural form.14

His work is focussed on Ngāti Tarāwhai and he states of the 1870s that:

This was the period when the wars were coming to a close, a period of intense political and religious activity and realignment. The new large meeting houses were built to accommodate meetings discussing land and land sales, political meetings, tribal committees of all sorts, religious meetings, and to provide sleeping accommodation for the guests who travelled to these meetings. The carved and decorated house simply known as Whare Manuhiri, built at Te Taheke in the 1860s by Ngati Hinerangi as an accommodation house for visitors, including travelling Europeans, was probably an important development in the evolution of the modern meeting house in the Rotorua area. Thus the new meeting house incorporated the functions of the chief's house, the guest house and the church under one roof. Then the role of the meeting house as a venue for religious meetings, replacing the separate church, became prominent in the 1870s and 1880s.15

Smith notes that "[b]attles then transferred to the Native Land Court which after 1873 demanded even more intense individualisation of land interests."16 This was not straightforward, and government surveying of land in Taranaki in 1878 initiated another land dispute, and local Māori famously responded by ploughing the land in May 1879, after promised reserves for Māori occupation were not created.17 Brown describes the Parihaka community passively resisting "by removing survey pegs, ploughing settler fields, and rebuilding boundary fences torn down by surveyors."18 Ploughmen were arrested in June and July 1879 with some sent to Dunedin gaol.19 The Maori Prisoners' Trials Act 1879 was passed enabling the government to hold protesters without a trial and was extended by the Confiscated Lands Inquiry and Maori Prisoners Act 1880.20 The result was the creation of "the largest Māori community in Aotearoa New Zealand at that time," when "an influx of Māori sympathetic to the protests came from around the central North Island" to Parihaka.21

The extension of the Māori seats was only one of a number of changes to New Zealand's government. The decade began with the introduction of the secret ballot for elections,22 while its end (1879) saw universal suffrage for Pākehā men, Māori men only being able to vote for the Māori seats - unless they held a £25 freehold estate or were a ratepayer.23 In the same year the parliamentary term shortened from five years to three,24 but perhaps the biggest change occurred in 1876, when the provinces were abolished and government authorities were created.25 The architectural consequence of this was that abolition landed most of [the provincial government] buildings in the Central Government's lap. Care and maintenance now became the concern of the Works Department.26

16 Smith A Concise History of New Zealand p 74.
17 Smith A Concise History of New Zealand p 75; Ministry for Culture and Heritage "Parihaka ploughing campaign begins: 26 May 1879" n.p.; "Parihaka" np.
19 "Parihaka" np.
20 "Parihaka" np.
22 Smith A Concise History of New Zealand p 86.
25 Smith A Concise History of New Zealand p 86; Jackson & McRobie Historical Dictionary of New Zealand p 7; McGuinness & White Nation Dates p 41.
26 Stacpoole Colonial Architecture in New Zealand p 134.
The new assertion of central government required buildings to accommodate it. Clayton was the first Colonial Architect (1869-77).\textsuperscript{27} Shortly after his appointment, in 1871, he began preparing plans to extend the Wellington Provincial Buildings, in anticipation of the change to central government.\textsuperscript{28} Stacpoole writes that Clayton's Legislative Council Chamber "took its cue from the old building and adopted a form of Gothic detailing without showing any depth of feeling for the style,"\textsuperscript{29} while Hodgson, clearly more enthused about the building, describes the result as "a wild Gothic storm with plenty of decoration and a singular skyline which endeared it to photographers." It burnt down in 1907.\textsuperscript{30}

There was equally a need to house public servants. The 1876 9,290 sqm wooden Renaissance Revival Government Buildings on reclaimed land was also designed by William Clayton. The choice of building material is usually credited to earthquake safety while criticised on ground of vulnerability to fire.\textsuperscript{31} In contrast to this, Martin states that Clayton:

> strongly favoured concrete, considering that resistance to fire took priority over resistance to earthquakes. The timber tender was only 75 per cent of that for concrete and the government over-ruled his preference on the grounds both of economy and speed of construction.\textsuperscript{32}

Hodgson also notes Clayton's "insistence on using Australian jarrah, which not only meant delays but was also seen as a snub to local timber merchants."\textsuperscript{33} Stacpoole and Beven describe the final building as retaining its dignity, while "the horizontal emphasis suggests a leisureliness and repose which have long since been lost to modern living."\textsuperscript{34} Stewart identifies the design influence of Queen Victoria's Osborne House,\textsuperscript{35} which Stacpoole suggests was dependent on the site's physical isolation when he writes that "[h]ere there were no unfortunate Gothic neighbours and he was able to give full play to his love of neo-Renaissance forms and details."\textsuperscript{36} The building initially housed "600 civil servants and was heated by 160 fireplaces,"\textsuperscript{37} a phenomenon translated by Stacpoole as "a forest of chimneys sprouting from the roof. Their removal was an improvement."\textsuperscript{38} Martin notes that Clayton also built government offices "in Tauranga in 1875, in Invercargill, Gisborne and Wellington in 1876, in Lyttelton in 1877 and in Christchurch in 1879."\textsuperscript{39} Cathedral Square was also treated to new government buildings, with the Central Post Office and Government Buildings (William Clayton and Pierre Burrows, 1876-79) adorning the square in "uncommon" and "restrained" Venetian Gothic.\textsuperscript{40}

Martin also documents the customhouse in Russell (1870), courthouses in Reefton (1872), Naseby (1875), Napier (1875), Rawene (1876), and Akaroa (1878), and an extension to the Coromandel courthouse (1873), post offices in

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\item \textsuperscript{27} Stacpoole & Beaven \textit{New Zealand Art} p 37.
\item \textsuperscript{28} Hodgson \textit{Looking at the Architecture of New Zealand} pp 18, 19 [caption]; Shaw \textit{New Zealand Architecture} pp 35-36, 36 [caption].
\item \textsuperscript{29} Stacpoole & Beaven \textit{New Zealand Art} pp 37; Hodgson \textit{Looking at the Architecture of New Zealand} pp 18, 19 [caption]; Shaw \textit{New Zealand Architecture} pp 18.
\item \textsuperscript{30} Martin \textit{Built for Us} p 22.
\item \textsuperscript{31} Hodgson \textit{Looking at the Architecture of New Zealand} p 18.
\item \textsuperscript{32} Stacpoole & Beaven \textit{New Zealand Art} p 37.
\item \textsuperscript{33} Stacpoole & Beaven \textit{New Zealand Villa} p 13.
\item \textsuperscript{34} Stewart \textit{The New Zealand Villa} p 13.
\item \textsuperscript{35} Stacpoole \textit{Colonial Architecture in New Zealand} p 131.
\item \textsuperscript{36} Martin \textit{Built for Us} p 22.
\item \textsuperscript{37} Stacpoole \textit{Colonial Architecture in New Zealand} p 132.
\item \textsuperscript{38} Martin \textit{Built for Us} p 22.
\item \textsuperscript{39} Hodgson \textit{Looking at the Architecture of New Zealand} pp 20, 20 [caption]; Martin \textit{Built for Us} p 30.
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Havelock, Marlborough (1876), Port Chalmers (1877), and Lyttelton (1877), and the Burnham Industrial School (1873) as among Clayton's work. He claims that over the eight years of Clayton's role as Colonial Architect (he died in 1877), Clayton had designed and saw to completion 180 buildings. This level of productivity might be credited to Clayton's development of "standard plans" for small public buildings, which could better be described as standard approaches to design—timber construction, steep roofs with deeply overhanging gables, standard brackets and standard windows.

Martin states that Clayton's rapidly produced "standard plans" seem wholly original, carry little historical reference, and display no ornament. It was a formidable achievement. The need for such a plan is, in part, explained by the amount of work done by the Colonial Architect, but also by his lack of resources. Stacpoole described Clayton's office as a "meagre establishment," which he embellishes with the image of "long hours spent at night over a drawing board or preparing endless reports." Martin identifies the customhouse in Russell and the post office in Havelock, Marlborough, as two existing examples of Clayton's standard plan work.

The shift from the system of provincial government also required the Public Works Department to ensure social infrastructure throughout the country. New buildings, including post offices, police stations, gaols, courthouses and hospitals, were built to rehouse or upgrade provincial institutes or to create new ones. The Grecian-influenced Supreme Court (Pierre Finch Martineau Burrows, 1878–80) was one of these. Hodgson states that the building is notable for the comprehensive use of plasterwork (rather than stonemasonry), and its deep concrete foundations poured into metal cylinders necessitated by its reclaimed site, though Martin describes the foundations as "hundreds of totara piles [... carrying] an overall concrete slab, four metres below ground level, which, in turn, carries extensive brick footings." Inside, the main courtroom is "an awesomely decorated double-height chamber overlooked by a public gallery." It was "Wellington's first public building constructed in fire-resisting materials." Its construction was "preceded by an elaborate and lengthy Masonic ceremony to lay the foundation stone." Stacpoole provides significant detail regarding this ceremony on 1 December 1879, noting Julius Toxward, as the District Grand Master, and Brother Burrows as architect. It seems, while not uncommon for New Zealand, the event was novel enough for Wellington, with thousands of spectators and "[a] special train [that] brought members of the craft from the Wairarapa."

Vogel's economic efforts would run dry by the end of the decade, and Martin sympathises with Burrows, Clayton's successor, because he took over "at a time when the euphoria generated by Vogel's policies had evaporated,

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41 Martin Built for Us pp 14, 16-21, 26-29.
42 Martin Built for Us p 11.
43 Martin Built for Us p 14.
44 Martin Built for Us p 14.
45 Martin Built for Us p 128.
46 Martin Built for Us pp 14, 26.
47 Hodgson Looking at the Architecture of New Zealand p 18 [caption]; Stacpoole & Beaven New Zealand Art p 12.
48 Hodgson Looking at the Architecture of New Zealand p 18 [caption].
overseas loans had become difficult to obtain, and the Department's budget was cut back."

Burrows oversaw the construction of the cruciform Auckland Gaol (1882-), using plans obtained from England, seeing "its turrets as "relieving the sombre aspect of the structural mass"." The earlier gaol at New Plymouth from Clayton's days was "suitable, simple, and unobtrusive, but it was also, quite obviously, a building of authority."

In Auckland, the 1840 Colonial Hospital was replaced by a design resulting from an architectural competition won by Philip Herepath. The three-storey building (1875, dem. 1964) used "the latest available techniques for ventilation, supplied chutes for linen and rubbish and grouped the bathrooms in the towers at either end." North of Dunedin, Seacliffe Asylum (Robert Lawson, 1878) was built on a 404 hectare farm, its large size presenting "a huge brick building that was visible to passing ships." The land was vulnerable to slips, resulting in "foundation displacement and plaster falls; ceiling timbers groaned and joinery warped," and a Royal Commission of Inquiry criticised the selection of the site and the work of the architect and builder. The design of Seacliffe followed that of the 1860's Avondale asylum (James Wrigley, 1867), and Sunnyside Hospital under the Canterbury Province (Benjamin Mountfort, 1871-91). Stacpoole and Beaven refer to Sunnyside as demonstrating "the emphasis Victorian architects placed upon their buildings' silhouettes, particularly the outline of roofs against the sky." The building took over two decades to complete, and Stacpoole and Beaven speculate on the part it played on the asylum's keeper's 12 year-old nephew (Samuel Hurst Seager) in later pursuing a career in architecture. Regardless both Seacliffe and Sunnyside had their fans, not the least the Resident Engineer, Middle Island, who "commented that Sunnyside and Seacliff were among the handsomest buildings in New Zealand."

The creation of local body government, following the abolition of the provinces, also produced new architecture. The design of Dunedin's Town Hall (Robert Lawson, 1876) was intended to be determined by competition, but the results were "shelved," and the commission given to Lawson instead. Hodgson notes the building's French influence "in the use of mansard domes at the corners," within its dominant Italian "main entrance ... sited above street level and the tall observation tower with its sectional composition and wealth of detailing." It opened in 1880.

The 1870s was a decade of big spending. Vogel's infrastructure plans were key to this. In 1871 he commenced railway construction under the public works programme, and in 1879 the Christchurch to Invercargill railway.

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54 Martin Built for Us p 33.
55 Martin Built for Us p 39.
56 Stacpoole Colonial Architecture in New Zealand p 133.
57 Hodgson Looking at the Architecture of New Zealand p 22.
58 Hodgson Looking at the Architecture of New Zealand p 22.
59 Hodgson Looking at the Architecture of New Zealand p 22.
60 Stacpoole Colonial Architecture in New Zealand p 134.
61 Hodgson Looking at the Architecture of New Zealand p 22.
62 Stacpoole & Beaven New Zealand Art p 46 [caption].
63 Stacpoole & Beaven New Zealand Art p 46 [caption].
64 Stacpoole & Beaven New Zealand Art p 46 [caption].
65 Stacpoole Colonial Architecture in New Zealand p 138.
66 Hodgson Looking at the Architecture of New Zealand pp 26, 27 [caption].
68 Jackson & McRobie Historical Dictionary of New Zealand p 6; Stacpoole & Beaven New Zealand Art p 12; Hodgson Looking at the Architecture of New Zealand p 32.
line was completed. Vogel also established a steamer service between New Zealand and San Francisco and lobbied to increase trade with the US, achieving an increase in the value of exports from £37,000 to £337,915 between 1870 and 1872. In 1871, the first woollen mill was established at Mosgiel, as was the first dairy co-operative - also in Otago, while a paper mill was built in Mataura in Southland in 1875. The first New Zealand shipping line (New Zealand Freight Company) was established the following year. In 1873 provincial companies created the New Zealand Shipping Company, and in 1875 the Dunedin Union Steam Ship Company was formed. A year later, the first trans-Tasman cable was laid, from Cable Bay, north of Nelson, and before the end of the decade, in 1878, the first telephone call, between Dunedin and Milton was made by electrician Charles Henry, who "asks numerous questions and receives instantaneous responses." Stewart summarises these achievements of the decade as:

1800 kilometres of railways, 6400 kilometres of telegraph lines and many roads, public buildings and bridges were constructed. Although this undoubtedly gave New Zealand the catalyst for development it needed, borrowing on this level was high flying for a country with fewer than 250,000 settlers.

She describes Vogel's economic strategy, in language now familiar in relation to the economic boost of the Canterbury rebuild and New Zealand's recent record immigration: "During the 1870s much of Vogel's investment money had been heavily directed toward buildings and other domestic projects like housing, encouraged by increased immigration, rather than toward more export-oriented developments." Salmond points to the 1870s' economic climate as also impacting on the shape of businesses, writing that:

during the 1870s heavy public investment in joint stock companies and the amalgamation of smaller timber businesses led to large mills working in near boom conditions in Auckland, and the city soon became the timber capital of New Zealand.

He refers to new industrial technologies introduced to New Zealand in 1870s, such as Hoffman kilns for brick-making, and the popularity of "flash" glass, which could make "delicate patterns of rosettes, stars, or repeating motifs," in houses. Flash glass was "produced by dipping hot clear glass into molten coloured glass, and then blowing this into a cylinder in the normal way to make sheet glass with a thin layer of colour bonded to it." Salmond also notes the diversity of glass products available by the late 1870s, referring to Stewart and Co. in Wellington offering "stocks of "Plate, Rolled Plate, Ground, Ornamental, and colored [sic]" glass" in 1879, and that, from about 1870, cylinder

69 Jackson & McRobie Historical Dictionary of New Zealand p 7; Smith A Concise History of New Zealand p 85.
70 McGuinness & White Nation Dates p 38.
74 McGuinness & White Nation Dates p 41; Jackson & McRobie Historical Dictionary of New Zealand p 7; Smith A Concise History of New Zealand p 85.
75 McGuinness & White Nation Dates p 42.
76 Stewart The New Zealand Villa p 13.
77 Stewart The New Zealand Villa p 14.
78 Salmond Old New Zealand Houses 1800-1940 p 96.
glass was used for ordinary house windows.84 Similar developments occurred in the range of iron sheet being manufactured in Dunedin by R & T Haworth by the mid-1870s, including iron sheets with ridging and spouting of iron or pure zinc, and while American Finishing Nails, French Wire Nails, and Ewbank’s and Cut Nails were still being imported in 1873, Salmond speculates that “it is probable that nails were being manufactured in local foundries by this time.”85 Selling techniques similarly increased in their sophistication with Findlay and Co. of Dunedin producing catalogues of “plans and elevations for eight simple cottages, as well as windows, mouldings, fences, panelling and turned items” by 1875.86

Smith writes of Vogel’s assisted immigration policies that

[about half of the assisted migrants of the 1870s were English; a fifth came from the west of England, including Cornwall. About a quarter were Scots. The colony also looked to Germany and Scandinavia for workers to develop North Island bush settlements.87

1874 was a stand out year with 38,106 new migrants coming to New Zealand.88 Hodgson refers to the doubling of the Pākehā settler population “from about a quarter to half a million.”89 This influx required temporary accommodation, and immigration barracks were built at Auckland, Lyttelton, Napier, Dunedin, Wellington and even Stewart Island, with quarantine stations at Port Chalmers, Matiu/Somes Island and Auckland.90 Vogel’s immigration policies resulted in a buoyant building trade that shifted emphasis from “the rather grand public buildings of the 1860s to the more mundane need for housing and commercial premises.”91 This included the emergence of a professional class whose houses were architect-designed "gentlemen's residences, as opposed to mere villas, houses, dwellings or cottages,”92 which Stacpoole and Beaven summarise as "large and ostentatious houses as symbols of their success in the world,”93 also observing that:

annisually of them became an embarrassment before they were ten years old. It is a curious fact that they were often designed by men who had entered the profession after working initially as builders. Perhaps they contributed to the submergence of the more scholarly forms of architecture, but the trend was world-wide as the Victorian love of display asserted itself and newly-rich merchants and businessmen prepared to take their places in society.94

Nathaniel Edward’s Nelson house Sunnyside, which included a “large private ballroom, turrets, intricate decoration and conservatory,” is one such house.95 Hodgson describes its "splendid concoction and the tight grouping of decorative devices - towers, gables, oriel windows and bays,” as lending "an air of both frivolity and wealth,” and "revealing quite vividly the architectural gulf between labourer and successful merchant.”96 John Logan Campbell’s Kilbryde (Edward Mahoney and Son),97 and James Williamson’s Italianate The Pah (Auckland, 1877-78) -

85 Salmond Old New Zealand Houses 1800-1940 p 105.
86 Salmond Old New Zealand Houses 1800-1940 p 97.
87 Smith A Concise History of New Zealand p 85.
88 Jackson & McRobie Historical Dictionary of New Zealand p 6; Shaw New Zealand Architecture p 38.
89 Hodgson Looking at the Architecture of New Zealand p 32. Salmond quotes Von Dadelszen’s population numbers of 248,400 for 1870 and 484,864 for 1880. Salmond Old New Zealand Houses 1800-1940 p 90.
90 Stacpoole Colonial Architecture in New Zealand p 130.
91 Stacpoole & Beaven New Zealand Art p 12.
92 Hodgson Looking at the Architecture of New Zealand p 32.
93 Stacpoole & Beaven New Zealand Art p 12.
94 Stacpoole & Beaven New Zealand Art p 12.
95 Hodgson Looking at the Architecture of New Zealand p 32.
96 Hodgson Looking at the Architecture of New Zealand p 32 [caption].
97 Stacpoole & Beaven New Zealand Art p 12.
designed by Thomas Mahoney after returning from Europe and the United States - are others. Hodgson, with reference to The Pah (which was built on Whataroa Pa99), points to the fashion for the Italianate, following Queen Victoria’s Osborne House (Isle of Wight, 1845-51),100 while Shaw identifies Williamson’s wealth as deriving from Waikato land holdings following the land confiscations in the 1860s. A “foundation stone laying ceremony” was held to mark its beginnings, and “contemporary newspaper reports seem almost breathless in their awe.”102 The house’s impressive Ionic columned porte cochère and sweeping carriageway was no doubt in part to blame for the gushing press.103 Shaw also notes the Italianate fashion spawning from Osborne House - but links this to William Fox’s Westoe (nr Marton, Charles Tringham, 1874).104 He describes Westoe’s interior furnishings as having no expense spared: “inlaid floors, Italian marble fireplaces and decorative plasterwork distinguish the principal rooms.”105 Other Italianate residences could be seen in the “substantial ... town houses” along Wellington’s Terrace, which, according to Stewart, ultimately reflected the houses of the rising middle class in New Zealand as they emulated the detailing and architectural features of houses owned by those above them on the social scale. Many of these architectural elements were ultimately to contribute to the richness and variety of the New Zealand villa.106

More modest cottages for gentlemen, include the 165 sqm Carpenter Gothic “Plimmer House” (1870), which was built for Henry Eustace de Bathe Brandon - chief clerk and accountant in the Stamp Department, by Scoular and Archibald, builders of Wellington’s Government Buildings.107 Additions to houses, as well as new buildings, demonstrated a heightened architectural flourish, with Stacpoole and Beaven citing William Williams’ castellated additions to Clifton House (1871) as a concrete instance.108 However, Clifton House was no match for its contemporary Larnach Castle (Otago Peninsula, RA Lawson, 1871), though Larnach Castle’s mismatching Scottish baronial crenellations clashing with colonial, cast-iron and glass verandahs has been a cause for comment.109 Another Lawson-designed Dunedin residence was Wychwood (Anderson Bay, late 1870s), built for CR Howden and called “Pomphrey Court.” The exterior rubble and Oamaru stone houses an interior of “finest kauri, Oregon pine and mahogany.”110 Another well-known addition is the 1870 verandah, which elaborately wraps around the 1862 Alberton in Mt Albert on three sides.111 Architect Matthew Henderson also added agee-topped turrets, credited by John Stacpoole to his client Allan Kerr Taylor’s birthplace in Seringapatam, India.112

The 1860s and 1870s were decades of great expansion and growth ... Major New Zealand towns doubled in size and there was an explosive growth in building: railway stations, banks, post offices, schools, law courts, grand hotels and public building of all kinds. By the early 1870s the character of European New Zealand was fairly well established. ...
and most New Zealand towns had established a basic pattern that was to continue well into [the twentieth-] century.113

Hodgson points to the other side of mass immigration, emphasising the "poverty, unemployment, impossibly high rents, child labour and sweating," resulting in "dense subdivision and rapid construction of houses in inner city suburbs,"114 in a context when "[n]o sewerage systems existed in any of the main cities before the turn of the century."115 The socio-economic topographical divide meant "the wealthy lived on the ridges while the working and lower classes built dwellings on the slopes and in the valleys."116 Lack of cheap public transport also led to high concentrations of poorer people living close to workplaces creating inner-city slums.117

Salmond likewise refers to congested town centres and writes that "the earliest houses had to compete with two- and even three-storeyed wooden commercial buildings which ran right up to their side boundaries,"118 with the need for corrugated iron sides as "both an economy and a protection against fire," while timber front façades bulged "with semi-classical ornamentation."119 Newly expanding cities, and a majority of the housing stock being cottages, set the scene for the emergence of the bay villa to appear.120 As Stewart writes:

Many typical suburban houses of this time projected one room forward under a flat-fronted gable at the front of the house. Some had a faceted bay window under its own roof further projecting from this. A verandah ran across the rest of the facade.121

Other construction details and technologies were new to houses in the 1870s. Salmond notes the replacement of butted boards forming corners with the boxed corner sitting over weatherboards, "their edges masked with scribes," and the "rebated saddle" in the 1870s.122 He also refers to flush eaves giving way to boxed eaves, "where the rafters sat on ceiling joists which extended beyond the wall frame,"123 and the unusual instance of Gordon Coates' family house: Ruatuna (Matakohe, 1877), being built of board and batten walls, a construction technique normally considered appropriate "for outhouses, or very cheap houses in newer areas."124

Anthony Trollope, in his 1870s' visit to New Zealand, "...grudged the grandeur of the banks, being reminded by every fine facade of percentage, commission and charges for exchange."125 This grandeur could be seen in Robert Lawson's Australia and New Zealand Bank (Dunedin, 1874), which was a "scholarly classical design,"126 along with the competing Italian Renaissance-styled Bank of New Zealand (William Armson, 1879).127 Wellington's four-storey Nathan warehouse (Christian Toxward, 1873) though in timber, was likewise an essay in classically-inspired decorative finery, including "decorative orbs and spikes along the parapet,"128 while William Armson drew on Venetian Gothic for

113 Stewart The New Zealand Villa p 11.
114 Hodgson Looking at the Architecture of New Zealand p 32.
115 Stewart The New Zealand Villa p 15.
117 Stewart The New Zealand Villa p 15.
118 Salmond Old New Zealand Houses 1800-1940 p 110.
119 Stacpoole & Beaven New Zealand Art p 12.
120 Stewart The New Zealand Villa p 14.
121 Stewart The New Zealand Villa p 14.
122 Salmond Old New Zealand Houses 1800-1940 p 114.
123 Salmond Old New Zealand Houses 1800-1940 p 115.
124 Salmond Old New Zealand Houses 1800-1940 p 115.
125 Stewart The New Zealand Villa p 13.
126 Stacpoole & Beaven New Zealand Art p 33 [caption].
127 Hodgson Looking at the Architecture of New Zealand pp 24, 24 [caption].
128 Hodgson Looking at the Architecture of New Zealand pp 26, 27 [caption].
a number of his commercial designs, including a now demolished building in Hereford street (1877). Toxward’s Nathan warehouse had installed "one of the first "sprinkler" systems in the country, a series of perforated water pipes in the ceilings installed during construction," though this appears to have been of limited value given the building was destroyed by fire around the turn of the century.

Churches were another source of work for architects, with Hodgson writing that

[r]eligious buildings of permanence and visual authority were also sought and this period saw a substantial amount of church construction, not only to replace earlier buildings which had outlived their purposes and seating capacity, but also for newly formed dioceses to serve the needs of an increasing population.

1870s’ churches built included the French Gothic St Joseph’s cathedral (Dunedin, Francis Petre, 1878-86), the English Renaissance-influenced St Paul’s Christchurch (Samuel Farr, 1876), the Gothic Revival First Church, Dunedin (Robert A Lawson, 1873), with its 175 foot high tower, and Mountfort’s supervision of the Gilbert Scott-designed Christchurch Cathedral (1873-1904). The austere Dominican convent in Dunedin (Frank Petre, 1877) is another important religious building built in the decade. Brown also refers to "kāika" as a southern village model "centred on a church and/or marae," in reference to Otakou Marae, and its wharenui Te Mahi Tamariki, built in 1874.

The 1870s was also an important decade for women. Smith has noted that the prior colonial demographic bulge of men eased from the 1870s. In 1871 the University of Otago opened all of its classes to women, leading English and Australasian universities, and Otago Girls’ High School was established in Dunedin. Consequently the first woman graduated from a New Zealand university (Kate Edger) with a BA from Auckland University College in 1877, the same year that Christchurch Girls’ High School was founded. The decade also saw legal support for female employment in factories with the Employment of Females Act 1873. Canterbury University was also established in 1873 - the fourth Australasian University after Sydney, Melbourne and Otago, where women were admitted from the start on an equal basis with men because John Macmillan Brown, one of the foundation professors, insisted that “true democracy” required that the “best women as well as the best men” take their rightful place in arts and government.

One of Macmillian Brown’s students, Helen Connon, would become both “the first woman in the British Empire to graduate with honours when she received an MA with first-

class honours in Latin and English at Canterbury College in 1881" and Macmillan Brown's wife.144 While the University of Otago had been founded the previous decade in 1869, the 1870s saw it move from what would become the stock exchange building to its current site astride the Leith in a Scottish baronial-inspired ("but vaguely eastern in execution") building.145 A Max Bury design won the 1877 design competition.146 Its "stone construction, limestone detailing, pointed arches, oriel window and soaring tower" are reminiscence of British university buildings, with Shaw pointing out a particular connection to George Scott's Glasgow University (1870), and the building's asymmetrical exterior expressing its interior.147 Lincoln's Ivey Hall (Frederick Strouts, 1878) was also built at this time, but unlike Otago drew on the "symmetry, the large square windows, the ornate porches and the delicious curvilinear gable heads" of a Jacobean country house.148 Shaw associates this selected style with Strouts' 1868 trip to England where he became aware of a number of neo-Elizabethan country houses being built using the architectural vocabulary of Flemish craftsmen: the distinctive curved and stepped gables, bay windows, strapwork and cresting of buildings erected during the reigns of Elizabeth I and James I.149

Shaw stresses the eclecticism of Strouts' design: '[t]he gables are Dutch, the windows of the English mullioned variety, the bell tower and porte cochere French Renaissance."150 In contrast, the clocktower and entrance to Canterbury College (Mountfort, 1877-79) was designed in a free Gothic style.151 Mountfort's Canterbury Museum (1876) stood opposite Canterbury College with its tall pavilion roof and rose window, while inside "architectural excitements have been obscured by unMountfortian ceilings and partitions."152

Wider reform in education also included legislation of free education for seven to 13 year olds, with passing of the Education Act 1877.153 This resulted in 730 public primary schools being established by regional education boards, and the attendance of Māori children at state-schools.154 Hodgson describes the resulting building programme as ranging from "small one-roomed country schoolhouses to pretentiously designed city schools with rolls of many hundreds."155 Prior to this though, historically-important school buildings had been built. The two-storey bluestone Christchurch Normal School on Cranmer Square (Samuel Farr, 1873) was the result of a design competition producing "a building of formidable appearance and intriguing planning," its corner-site "vigorously decorated octagonal room," being "a foil to the monotony of long wings."156 It was extended two years later to provide accommodation for a kindergarten and trainee teachers.157 William Armson's

144 Smith A Concise History of New Zealand p 88.
145 Stacpoole & Beaven New Zealand Art p 38 [caption].
146 Hodgson Looking at the Architecture of New Zealand p 23.
147 Hodgson Looking at the Architecture of New Zealand p 25 [caption]; Shaw New Zealand Architecture pp 33-34.
148 Hodgson Looking at the Architecture of New Zealand p 24 [caption]; Shaw New Zealand Architecture p 36.
149 Shaw New Zealand Architecture p 36.
150 Shaw New Zealand Architecture p 36.
151 Shaw New Zealand Architecture p 31.
152 Shaw New Zealand Architecture p 31; Stacpoole & Beaven New Zealand Art p 31 [caption].
153 Jackson & McRobie Historical Dictionary of New Zealand p 7; McGuinness & White Nation Dates p 42; Smith A Concise History of New Zealand p 87.
154 McGuinness & White Nation Dates p 42.
155 Hodgson Looking at the Architecture of New Zealand p 23.
156 Hodgson Looking at the Architecture of New Zealand p 23; Shaw New Zealand Architecture pp 33, 33 [caption].
157 Hodgson Looking at the Architecture of New Zealand p 23 [caption].
Christchurch Boys' High School (1870), built in the same precinct as Mountfort's Canterbury College, supported the dominance of Gothic Revival as "the most suitable style for educational buildings." Smith notes that [the real winners from free, state primary schooling were working-class girls whose lives changed more than boys' experiences did as girls increasingly attended school and later found employment before marriage. There was also a shift away from the government-run native primary schools system (which required Māori who wanted to establish schools to contribute significantly financially, providing land, and contributions to school buildings and teachers' wages), though native schools were still built in the 1870s, with Stacpoole referring to "two schoolmasters' houses for native schools," being designed by William Clayton. Māori had also provided land for secondary-level church-run Māori boarding schools, such as St Stephen's School (1844), Wesley College (1844), Te Aute College (1854), Waerenga-a-Hika College (1856), St Joseph's Maori Girls' School (1867), and Hukarere Māori Girls' School (1875). Most of these were Anglican schools, but not all of the land was used for schools. One instance relating to Porirua land gifted to the Anglican church resulted in the Wi Parata v Bishop of Wellington decision of 1877 in which Chief Justice Prendergast infamously announced that the Treaty of Waitangi was "a simple nullity" and did not recognise native title.

It is these combined aspects of the 1870s which caused Hodgson to describe this decade as "colonisation under way in top gear." He noted the economic fervour caused by immigration, public works, a central government and an industrial and commercial base to the economy that meant that "major cities were able to support up to eight or 10 different [architectural] practices," and that there appeared a certain specialisation within the architectural fraternity; some architects would have been more likely than others to design, say, churches, banks, warehouses or private homes.

It is perhaps no accident that the idea of the architect appears to have consolidated in New Zealand here, with the foundation of the first architectural association resulting from Ben Mountfort, Fred Strouts, Bill Armson and Alex Lean establishing the Canterbury Association of Architects in 1871. By the end of the decade however things were not so rosy. Stewart is direct in her appraisal of the situation:

In 1879 the bubble burst. Without warning, the banks, hard-pressed for money as overseas funds dried up, cut credit facilities and with this probably long-overdue action, the boom collapsed and New Zealand entered the "long depression." Warning signs of its impending advent had been apparent during the affluent years but they had been largely ignored. Exports had been falling rather than increasing. In 1872 wool prices began to fall and fell sharply in 1874, and in 1873 wheat prices began a downhill slide. Trollope had noticed the signs early in the 1870s. Discussing Vogel and his policies, he remarked that "what at first was taken for dash and good courage, seemed to many after a while to become recklessness and foolhardiness."
REFERENCES


McGuinness, Wendy and Miriam White *Nation Dates: significant events that have shaped the nation of New Zealand* Wellington: McGuinness Institute, 2012.


"Parihaka" *Te Kotahitango o Te Atiawa Taranaki* (no date) https://teatiawa.iwi.nz/history/parihaka/


Thornton, Geoffrey *Cast in Concrete: Concrete construction in New Zealand 1850-1939* Birkenhead, Auckland: Reed Books, 1996.
