"a distressing lack of regularity": New Zealand architecture in the 1850s Christine McCarthy

When Colonel Mould of the Royal Engineers at Auckland reported on behalf of the New Government on Mountfort's Zealand proposed accommodation for Governor Thomas Gore Browne, he queried the design's ability to be ""lastingly pleasing to the eye,"" and identified the building's "distressing lack of regularity."

This conference asks whether this phrase, describing Mould's discomfort with Mountfort's picturesque design, might also describe New Zealand's built environment in the 1850s more broadly as it negotiated architectural cultural exchanges, largely resulting from incoming British "flight from flunkeydom and settlers' formality."² Philippa Mein Smith refers to a William Strutt drawing ("Settler putting out a chimney fire" (1855/1856)) to indicate its cultural hybridity ("the application of indigenous architecture - the whare, built from ponga logs - combined with elements of the English country cottage"3), as well as "the power of the "pioneer legend,""4 unpinned by the religious ideology of western commerce: "Pioneers tamed the land and, they believed, made it productive as God intended."⁵

Provincial Government and a General Assembly were established, following the British Parliament's 1852 New Zealand Constitution Act,6 which also seemingly prompted the originator of New Zealand's systematic colonisation (Edward Gibbon Wakefield), to arrive in New Zealand in 1853. Wakefield, according to Smith, was hopeful of a political career in the colonial government, now made possible by the Act.⁷ describes the New Zealand government as being established "on the cheap and connoted more ideal than reality."8 In the 1850s significant changes to the mechanism of British government in New Zealand occurred: the end of the Crown colony (1841-53), when a Governor, with an executive council, "ruled" the colony, the appointment of a Resident

Magistrate (Archibald Shand) Chathams (1855), and the conclusion of George Grey's first governorship in 1853.9 Grey translated and wrote several texts in the decade including: Ko nga moteatea, me nga hakirara o nga Maori (1853), "Ko nga mahinga a nga tupuna Maori" (1854), Polynesian Mythology & Ancient Traditional History of the New Zealanders as furnished by their priests and chiefs (1854), Ko nga waiata Maori (1857) and Ko nga whakapepeha me nga whakaahuareka a nga tipuna o Aotea-roa (1857), and James Edward Fitzgerald became the first leader of the House of Representatives when the General Assembly first met in Auckland in 1854.¹⁰

The consequent establishments of representative and provincial government in 1853 was supported by new building and New Zealand's first House of Representatives, elected by a male property vote. 11 Because of

¹ Colonel quoted, Stacpoole *Colonial Architecture* p 67.

² Stacpoole Colonial Architecture p 67.

 $^{^{3}}$ Smith A Concise History of New Zealand p 59.

⁴ Smith A Concise History of New Zealand p 60.

⁵ Smith A Concise History of New Zealand p 61.

⁶ Jackson & McRobie *Historical Dictionary of New Zealand* p 3.

⁷ Smith A Concise History of New Zealand p 67.

 $^{^8\,\}mbox{Smith}\,A$ Concise History of New Zealand p 63.

⁹ Smith *A Concise History of New Zealand* p 66; King *Moriori* pp 89, 93; Jackson & McRobie *Historical Dictionary of New Zealand* p 4.

¹⁰ Sinclair "Grey, George" n.p.; Jackson & McRobie Historical Dictionary of New Zealand p 4.

¹¹ Smith A Concise History of New Zealand pp 66-67;

the requirement for individual land title (freehold or leasehold), or occupation of a European-style-dwelling, the franchise was effectively, but not exclusively, racist. Smith, for example, notes that Te Mānihera, who lived in the Wairarapa both voted in the 1853 election, and hosted the local electoral meeting at his house. 12 Despite Te Mānihera's vote providing evidence of Māori participation in the electoral system, most Māori were excluded, and the idea of a separate Māori parliament grew into the kotahitanga movement, and the pan-tribal Kīngitanga, with the selection of Te Wherowhero Pōtatau (Pōtatau I) as the first Māori King in 1858.¹³ Brown also suggests that Māori architecture also represented this shift to pan-tribal thinking. She identifies the rise of pātaka and whare whakairo at this time, locating the pātaka as representing tribal wealth, and the whare whakairo as symbolising tribal unity. She observes that "towards the end of the 1850s [the pātaka's] mana ... started to diminish," in contrast to the whare whakairo, "where political discussions among the members of tribes, and between tribes, took place."¹⁴

The six provinces formed following the Constitution Act were: Auckland, Wellington, Taranaki, Nelson, Canterbury and Otago, and the capital of the country, having moved from Kororāreka (Russell) in 1841,15 was Auckland. Reader Wood designed the General Assembly building in Auckland in 1854, which was timber and apparently commonly known as the "shedifice." ¹⁶ Provincial Council buildings were also built, though Stacpoole notes that the Canterbury Provincial Council used Guise Brittan's Georgian-styled house (cnr Hereford St and Oxford Tce) in 1857,17 prior to being housed in the former office of the Guardian (which was described by Henry Sewell as ""shabby in the extreme - a low, desolate looking wooden tenement, all by itself in a potato garden""18). Likewise, the first home for Wellington's Provincial Council was not

custom-built. Barrett's Hotel, also the first Legislative home for the Council, accommodated the Wellington Provincial Council "until the 1855 earthquake caused the top floor to collapse."19 In 1857 George Single designed the timber Wellington Provincial Council Chambers and offices for the site of the current Parliament, but the façade was designed by CM Igglesden, on the insistence of Isaac Earl Featherston (1813-76), superintendent of Wellington province. Stacpoole describes the resulting building as perhaps "taken for a rather inferior school but not for the seat of government."20 Mountfort (and Isaac Luck) designed the initial wooden section of the Canterbury Provincial Government Buildings in 1859.21 Max Bury's Nelson Provincial Building is of a similar vintage (1859-61), but was Elizabethan in style, said to be influenced by the Jacobean Aston Hall, near Birmingham, which also had an E-shaped plan.²² It was sadly demolished

Jackson & McRobie *Historical Dictionary of New Zealand* p 3.

¹² Smith A Concise History of New Zealand p 67.

 $^{^{13}}$ Smith A Concise History of New Zealand pp 67-68; Jackson & McRobie Historical Dictionary of New Zealand p 4.

¹⁴ Brown *Māori Architecture* p 49.

¹⁵ Hodgson Looking at the Architecture of New Zealand p 4; Jackson & McRobie Historical Dictionary of New Zealand p 3.

¹⁶ Stacpoole *Colonial Architecture* p 62.

 $^{^{\}rm 17}$ Stacpoole Colonial Architecture p 53.

¹⁸ Sewell quoted, Stacpoole *Colonial Architecture* p 53.

¹⁹ Kernohan Wellington's Old Buildings pp 32-33.

²⁰ Stacpoole *Colonial Architecture* p 62; Hamer

[&]quot;Featherston, Isaac Earl" unpaginated.

 ²¹ Shaw New Zealand Architecture p 30; Stacpoole & Beaven New Zealand Art: Architecture pp 11, 23, 24;
 McLean 100 Historic Places in New Zealand pp 65-66;
 Hodgson Looking at the Architecture of New Zealand p 4.
 ²² Stacpoole Colonial Architecture p 71; Shaw New Zealand

²² Stacpoole Colonial Architecture p 71; Shaw New Zealand Architecture p 36; Hodgson Looking at the Architecture of

in 1969.²³ Otago's Provincial Council also had provisional accommodation, the Mechanics Institute (Daniel MacAndrew, 1853)²⁴ was its first home. According to Knight and Wales, the *Otago Daily Times* (7 January 1854) described the interior as

devoid of any ornamentation or decoration and the floor space, except for what was occupied by a plain deal table with a blue blaize cloth and its surrounding hard forms, was devoted to accomodating as many of the public as possible.²⁵

Hobson's house had burnt down in 1848, and so the Auckland Provincial Council initiated the building of a new Government House (now Old Government House in the grounds of Auckland University), which was designed by William Mason, whose 1856 neo-classical design trumped Mountford's gothic one in competition.²⁶ Mason's appointment as

New Zealand p 6; Knight & Wales Buildings of Dunedin p 88; Stacpoole & Beaven New Zealand Art: Architecture p 18

architect was despite Reader Wood officially winning the architectural competition for the building, and Charles Heaphy and James Baber being joint second. Stacpoole speculates that the "shedifice" had tainted Wood's appointment, and that Heaphy and Baber, as surveyors, were probably thought to The building was lack experience.²⁷ "[v]ilified" when built, but is still standing, and built of timber, "[d]espite all the appearances of stone, with coursework, quoins and corbelling."28 Hodgson notes the rapidity of the building's construction and observes that "the difference in quality between its front and its sides is all too visible."29 Regardless of Mason's success in gaining the Government House commission, the incoming Governor (Thomas Gore Browne) "disliked it intensely," and provided Mountfort with a desk in the old Survey office in Auckland so he could design a replacement house for him in the middle-pointed style.30 James R Clendon, the first American Consul

New Zealand pp 6-7; Haarhoff Architecture of Central Auckland p 14.

also had a house built in the 1850s: The Bungalow, Kororāreka (1853).³¹

In 1850 Christchurch was founded by the Wakefieldian off-shoot: the Canterbury Association.³² The chief surveyor, Joseph Thomas, completed "a trigonometrical survey of the Canterbury Block by the end of 1849 and laid out the port of Lyttelton and seaside suburb of Sumner as well as Christchurch in 1850 before the settlers arrived."³³ In 1851 Christ's College, modelled on English public schools, was established,³⁴ matched later in the decade by Te Aute Māori Boys Anglican College, Pukehou, Hawke's Bay (1854),³⁵ and William Beatson's Nelson College (1859, destroyed by fire 1904),³⁶ which Stacpoole suggests was anticipated as a "little Eton."³⁷

²³ Stacpoole *Colonial Architecture* p 71; Stacpoole & Beaven *New Zealand Art: Architecture* p 18; Hodgson *Looking at the Architecture of New Zealand* p 6.

²⁴ Knight & Wales Buildings of Dunedin p 156.

²⁵ Knight & Wales Buildings of Dunedin p 26.

²⁶ Stacpoole *Colonial Architecture* p 65; Shaw *New Zealand Architecture* p 30; McLean 100 Historic Places in New Zealand pp 60-61; Hodgson Looking at the Architecture of

²⁷ Stacpoole Colonial Architecture p 65.

²⁸ Haarhoff *Architecture of Central Auckland* p 14; also Shaw *New Zealand Architecture* p 34, Stacpoole & Beaven *New Zealand Art: Architecture* p 20.

²⁹ Hodgson Looking at the Architecture of New Zealand p 7.

³⁰ Stacpoole *Colonial Architecture* p 66.

³¹ Toomath *Built in New Zealand* p 38; Park "Clendon Cottage" n.p.

³² Jackson & McRobie *Historical Dictionary of New Zealand* p 3; Smith *A Concise History of New Zealand* p 61; Stacpoole *Colonial Architecture* p 42.

³³ Smith A Concise History of New Zealand p 62.

³⁴ Jackson & McRobie *Historical Dictionary of New Zealand* p 3.

 $^{^{35}}$ Jackson & McRobie Historical Dictionary of New Zealand p 4.

³⁶ Stacpoole & Beaven New Zealand Art: Architecture p 18; Stacpoole Colonial Architecture p 74; Hodgson Looking at the Architecture of New Zealand p 9.

³⁷ Stacpoole Colonial Architecture p 74.

Beatson was an old boy of Eton, and Hodgson describes Nelson College as an Eton "in miniature and ... [in] wood."³⁸ Drawings for Nelson College began in 1856, the year before Christ's College was built.³⁹ Ben Mountfort, in his position as Provincial Architect, designed both the wooden school and headmaster's house at Christ's College (1857),⁴⁰ both destroyed 10 years later by fire.⁴¹ The building of Max Bury's Nelson Institute commenced in August 1859.⁴²

Smith describes how the Canterbury Association ignored Kāi Tahu's Crown "guarantee of their land and food supplies." Instead it prioritised establishing Christchurch as "a transplanted England; 44 a city with its own college and cathedral, gaining its name from Oxford's college: Christ Church. 5 Christchurch was not the only town founded in 1850s New Zealand. Napier and

Invercargill were also founded.⁴⁶ Hurworth, was a small 1850s Taranaki settlement, now much diminished. Its only remaining building dates from 1855-56 and was built by Harry Atkinson, four-time Premier of New Zealand.⁴⁷ Other earlier towns, such as Auckland, Wellington, Whanganui and New Plymouth consolidated,⁴⁸ but "good new buildings were few and the flimsy existing buildings quickly became shabby."⁴⁹ An exception was, it seems, Nelson, which "suddenly flourished architecturally in the 1850s," producing "an extraordinary group of houses."⁵⁰

Stacpoole states that, in building terms, "Canterbury soon outstripped Otago,"⁵¹ driven in part by settler aspirations to recreate England. Dunedin had a "delicious" Greek Revival courthouse, which was demolished with the cutting of Bell Hill in the 1850s,⁵² and developed, as did many New Zealand towns,

38 Hodgson Looking at the Architecture of New Zealand p 8.
 39 Hodgson Looking at the Architecture of New Zealand p 8.
 46 Stacpool

⁴⁶ Stacpoole Colonial Architecture p 58.

without living accommodation attached to shops above them. Stacpoole identifies this distinction as resulting in shops being strung:

along the street, like toys on a nursery floor, often single-storied, narrow frontages, gabled or parapeted, and obviously built for a short life. Their scale gives the impression that all men were five feet tall and that even at that height they could not have stood upright in the little attics lit by dormer windows which so many of them possessed.⁵³

In contrast the new shops and hotels in Wellington were

two storeys high in the vernacular Georgian tradition, usually with strongly moulded cornices below flat roof-parapets. Very few yet had street verandas. Because they were relying on a long-established tradition, their proportions, window divisions, and window placings were almost invariably pleasing.⁵⁴

For Charlotte Godley Wellington "surpassed" her expectations:

"It is really uncommonly pretty, and with very good comfortable houses, although certainly no fine buildings, but they are generally built with a gable on to the street, which looks very picturesque, and there is an

⁴⁰ Hodgson Looking at the Architecture of New Zealand p

⁴⁰ Hodgson Looking at the Architecture of New Zealand p 8.

 $^{^{\}rm 41}$ Hodgson Looking at the Architecture of New Zealand p 8.

 $^{^{42}}$ Stacpoole *Colonial Architecture* p 71; Knight and Wales state that the building opened in August 1859. Knight & Wales *Buildings of Dunedin* p 88.

⁴³ Smith A Concise History of New Zealand p 61.

 $^{^{44}}$ Smith A Concise History of New Zealand p 61.

⁴⁵ Smith A Concise History of New Zealand pp 61, 62.

⁴⁷ Wagstaff "Hurworth" unpaginated; Toomath *Built in New Zealand* pp 52-53.

⁴⁸ Stacpoole *Colonial Architecture* p 58.

⁴⁹ Stacpoole Colonial Architecture p 58.

⁵⁰ Stacpoole *Colonial Architecture* p 69; Salmond *Old New Zealand Houses* p 83.

 $^{^{51}}$ Stacpoole Colonial Architecture p 42.

⁵² Stacpoole *Colonial Architecture* p 43.

⁵³ Stacpoole *Colonial Architecture* p 42. In contrast, Knight and Wales speculate that "During the 1850s probably most people who had premises on Princes Street also lived there." Knight & Wales *Buildings of Dunedin* p 32.

⁵⁴ Stacpoole *Colonial Architecture* p 64.

almost continuous row along the beach for about two miles, something like the bit of Hastings which joins the old on to the new town, with a patch at each end of level ground; one is getting very full of houses with barracks, a new church, a meeting house, etc.; and the other, which is at the *west* end, where we live, is used for cricket, flying kites, soldiers exercising, etc.; and has very few houses on its as yet."⁵⁵

Perhaps more famously, in Wellington, was Plimmer's beaching of the barque *Inconstant* in 1850, "opposite Barrett's tavern ... [converting] it to a warehouse and emporium." ⁵⁶ Its rediscovery under the BNZ Bank in 1997 brought a piece of Wellington's 1850s history back to the surface.

Wellington's first reclamation in 1852 produced new land north of Customhouse Quay. Charles Rooking Carter, who gave his name to Carterton and the Carter observatory, carried out this reclamation as well as later reclamations in 1857 and 1861.⁵⁷ Another industrial artefact from the 1850s is the first road to be registered by the Historic Places Trust. The Old Coach Road (1858) was built by migrant labours (1856-58), and a section

between Johnsonville and Ohariu Valley still remains. 58

More significant was the geological events of 1855. At 9.11pm on the 23rd January the 8.2 Wairarapa earthquake shook Wellington,59 landlocking the Inconstant, and causing: 80% of Wellington's chimneys to fall, a tsunami, which inundated shoreline stores with waves 1.4m-2.4m above sea level, and the Government Offices/Wellington Provincial Chambers to be demolished. The earthquake "raised the beach at Turakirae Head and helped form what is now the Hutt Rd,"60 damaged the single-storey classical Union Bank, which was later rebuilt, and reinforced the lessons regarding brick buildings learnt from the 1848 quake, though, as Thornton notes, the fault of this building failure was due to "the lack of a proper mortar [rather than the bricks], as only a clay and sand mix had been used."61 Salmond notes that "humble cob was considered safer than brick."62 The earthquake was not the only disaster to hit 1850s Wellington. following year (1856) the city suffered a large number of fires.63 Auckland also suffered from inner city flagration. There the 1850s was the decade when timber buildings, and many single-storeyed structures, disappeared from its city, culminating in the 1858 bylaw forbidding timber buildings in the area bounded by Customhouse Street, Albert Street, Victoria Street, Lower Princes Street and Emily Place.⁶⁴ Earlier in the decade timber structures on the waterfront provided a picturesque account by the Attorney General (William Swainson), who described Auckland from its harbour in 1852 thus:

"St Paul's Church, with its neat spire, occupying a prominent position on the centre headland, is an ornamental feature. The Barracks, the Scotch Church, the Colonial Hospital, the Wesleyan Institution, the Roman Catholic Church, and the Windmill on the hill, with Mount Eden in the background, are the most prominent objects." ⁶⁵

Commercial Bay had the ""appearance of a large town,"" and Swainson generalised that:

⁵⁵ Godley quoted, Stacpoole *Colonial Architecture* p 58; also Salmond *Old New Zealand Houses* p 61.

⁵⁶ Kernohan Wellington's Old Buildings p 68.

⁵⁷ Kernohan *Wellington's Old Buildings* p 17; also pp 161-162; Stacpoole *Colonial Architecture* p 64.

 $^{^{58}}$ McLean 100 Historic Places in New Zealand p 62.

⁵⁹ Jackson & McRobie *Historical Dictionary of New Zealand* p 4.

⁶⁰ Kernohan Wellington's Old Buildings p 17.

⁶¹ Stacpoole *Colonial Architecture* p 62; Kernohan *Wellington's Old Buildings* p 17; Thornton *New Zealand's Industrial Heritage* p 115; also Salmond *Old New Zealand Houses* p 47.

⁶² Salmond Old New Zealand Houses p 48.

⁶³ Kernohan Wellington's Old Buildings p 17.

⁶⁴ Stacpoole *Colonial Architecture* p 64.

⁶⁵ Swainson quoted, Stacpoole Colonial Architecture p 59.

"No attempt at uniformity has been made; every one has built according to his means, fancy, or the size and shape of his ground. The only approach to uniformity is in the material: with few exceptions, all are of wood."

The 1850s saw the development of both Māori and Pākehā industries. By 1856 Māori, for example, paid "60% of the North Island's customs duties," and "they also invested in major capital items such as trading schooners and flourmills," although McLean and Hargreaves both state that these were primarily status symbols (""showy playthings"") rather than economically productive, but some flourmills were successful on both counts. 67 Thornton notes:

during the 1840s and 1850s, seven mills in Taranaki and one at Mokau were owned by Maoris. Initially they were encouraged by the missionaries but the Maori's zeal for commerce soon outstripped their religious interests.⁶⁸

In 1855-57 a Māori flourmill was being constructed at Port Levy, Banks Peninsula.⁶⁹ In 1857, nine flourmills were operating in the

Wellington Province (two in Napier), and six existed in Taranaki.⁷⁰ In 1856, 29 mills were in operation in the Auckland Province and four more were proposed.⁷¹ Hargreaves refers to the Anglican Ōtaki missionary, and Octavius Hadfield encouraging local Māori to build mills.⁷² He states that unusually Roman Catholic priests in Whanganui likewise promoted Māori mills,⁷³ and he is explicit about government involvement in such initiatives:

The Colonial Government also encouraged such activity ... An Inspector of Native Mills was appointed in the early 1850's[sic] to assist in the drawing up of mill plans, supervise their erection wherever possible, and to give instruction and general assistance in their operation. That the Maoris were appreciative of the actions of the Mill Inspector is shown by the letter they wrote in 1857 appealing to the Government to reconsider their termination of the Inspector's appointment.⁷⁴

The Kawana Flourmill, Matahiwi, Whanganui (1854), named after Governor Grey (Kāwana Kerei) was built by Peter McWilliam, using

large totara logs salvaged by Māori, to supply flour for Ngā Poutama, and it operated until 1913.75 Its waterwheel has been restored and is said to be the "oldest waterwheel in existence in New Zealand."76 Pipiriki (Kaukore stream, 1854) was another flourmill resulting from "[t]he general success of Maoris in growing wheat along the Wanganui River flats."77 The Wairoa flourmill was established c1857 with Ngāti Tarawhai interest "through their Ngāti Hinemihi relatives at Te Wairoa,"78 and Father Jean Lampila (1808-97) established the Kakawai Flourmill (Kaiwhaiki Mission Station, 1858).⁷⁹ Hargreaves though refers to "the burden of debt" on Māori because, particularly in Auckland, "such possessions often fell into a state of disrepair before they were fully paid for."80 Further south many mills were financed by iwi without government funding.81 Towards the end of the 1850s "Maoris were fast becoming large

⁷⁰ Hargreaves "Shorter Communications" p 102.

⁷¹ Hargreaves "Maori Flour Mills of the Auckland Province" p 228.

⁷² Hargreaves "Shorter Communications" p 102.

⁷³ Hargreaves "Shorter Communications" p 102.

⁷⁴ Hargreaves "Maori Flour Mills of the Auckland Province" p 228.

⁶⁶ Swainson quoted, Stacpoole Colonial Architecture p 62.

⁶⁷ McLean 100 Historic Places in New Zealand p 57; Hargreaves "Shorter Communications" p 103; McLean 100 Historic Places in New Zealand p 57.

⁶⁸ Thornton New Zealand's Industrial Heritage p 32.

⁶⁹ Hargreaves "Shorter Communications" p 103.

⁷⁵ McLean 100 Historic Places in New Zealand p 57; Thornton New Zealand's Industrial Heritage Pl. 5, pp 28-29.

⁷⁶ Thornton New Zealand's Industrial Heritage p 61.

⁷⁷ Thornton New Zealand's Industrial Heritage p 30.

⁷⁸ Neich *Carved Histories* p 25.

⁷⁹ Thornton New Zealand's Industrial Heritage p 30.

⁸⁰ Hargreaves "Maori Flour Mills of the Auckland Province" p 231.

⁸¹ Hargreaves "Shorter Communications" p 103.

customers of the local European flour mills."82

The first flourmill on the East Coast was in Napier (c1855), built by TH Fitzgerald, the first Superintendent of Hawkes Bay Province, a Napier councillor, and mayor.83 In the Wairarapa, AW Renall's Masterton flourmill (1859-62) was the first.84 Charles Frederick Partingon's 24.3m high Partington Mill (Symonds Street, 1851, demolished 1950), became the Victoria Flour Mills and Steam Biscuit Factory in 1856.85 Stacpoole argues that this brick building's "marked resemblance to windmills in Suffolk makes it likely that William Mason was ... responsible [for its design];" a speculation supported by the fact that Mason is credited with the design of Auckland's first flourmill (Mason's Mill, Epsom, 1844), which was built of scoria.86 Thornton also refers to the six-storey brick Wharf Flourmill (Queen St, 1856) built for Daniel Bateman Thornton, WB Smith and

Josiah Clifton Firth.⁸⁷ It was the Canterbury Plains, though, that became the most important area for wheat growing, and three flourmills had been built in Christchurch by 1853.⁸⁸ The following year saw the construction of Woodford and Stephens' cornmill: the Avon Mills, and, in 1856, William Derisley Wood's Antigua Street mill was built.⁸⁹ Kaiapoi's flour milling began in 1857, Akaroa's 1852, and Rangiora's 1859.⁹⁰

The 1860s boom in flax processing machinery was also supported by central government, specifically an initiative announced in December 1856 via a rewards system, ""for the discovery of an efficient means of rendering the flax and other fibrous plants of New Zealand as articles of export,"" which totalled £4000.91 Timber was another export industry. The 1850s re-usable kauri dams (an idea imported from North East America) developed with a loose plank gate, more appropriate for New Zealand's narrow gorges. Sawmilling consequently grew across the country. The first sawmills in Otago date

from c1850: William Henry Valpy's sawmill, combined with a flourmill, on the Leith (1849-50), and Hugh McDermid's mill at Sawyers Bay (c1854).92 AS Begg's combined saw and floormill, Romahapa (1858-59), was the earliest in the Catlins.93 In addition to the timber industry, other building products, including bricks, were manufactured in 1850s New Zealand. The first brickyard in West Auckland was at Whau Creek (Waiemata Harbour, 1852).94 Another early North Island brickyard was at Upokongaro (near Whanganui, 1857), and, in Dunedin, S Howell's brickyard on Filleul Street dated from 1855.95 In 1850 Akaroa (Rue Grehan) had a brick kiln erected by Joseph Libeau.⁹⁶

Both copper and coal mining preceded gold mining in New Zealand. The Kawau Island copper mine, for example, was one of the most productive, and by 1850 the value of its ore was estimated to be £60,000.97 The copper mine at Miners' Head, Great Barrier Island,

⁸² Hargreaves "Maori Flour Mills of the Auckland Province" p 231.

⁸³ Thornton New Zealand's Industrial Heritage p 32.

⁸⁴ Thornton New Zealand's Industrial Heritage p 32.

⁸⁵ Thornton New Zealand's Industrial Heritage pp 27, 28, 97.

⁸⁶ Stacpoole Colonial Architecture p 69; Thornton New Zealand's Industrial Heritage pp 26-28.

⁸⁷ Thornton New Zealand's Industrial Heritage p 28.

⁸⁸ Thornton New Zealand's Industrial Heritage p 38.

⁸⁹ Thornton New Zealand's Industrial Heritage p 38.

 $^{^{\}rm 90}$ Thornton New Zealand's Industrial Heritage p 38.

⁹¹ Thornton New Zealand's Industrial Heritage p 15.

⁹² Thornton New Zealand's Industrial Heritage pp 21, 175-176.

⁹³ Thornton *New Zealand's Industrial Heritage* pp 22, 175-176.

⁹⁴ Thornton New Zealand's Industrial Heritage pp 114, 179.

⁹⁵ Thornton New Zealand's Industrial Heritage pp 120, 179.

⁹⁶ Thornton New Zealand's Industrial Heritage p 118.

⁹⁷ Thornton New Zealand's Industrial Heritage p 79.

was actively mined from 1857 to 1867, and Dun Mountain (near Nelson) had sporadic mining from 1859 until 1865. 98 James Burnett opened the Motupipi coalfield in Golden Bay (1854), the first underground mining commenced in 1858 (Kaitangata), and the Waihoihoi Company mined coal in Hunua from 1859. 99

Sporadic gold discoveries in Otago caused the Otago Provincial Council to offer a reward for payable gold, not to be taken up until 1861, 100 and other parts of New Zealand also tantalised their gold potential. An 1857 discovery of gold at Collingwood (Nelson), followed Charles Ring's Coromandel discovery in 1852, 101 and pre-empted the 1860s gold rushes, and was in contrast to the decade's focus on California for gold. California gold took New Zealanders across the Pacific. Captain John Howell, the reputed founder of Riverton through his whaling activities, sailed his boat *Amazon* to the

Californian goldfields in 1850, with 30 (mostly Māori) passengers, who were charged £20 each, but they soon returned. Toomath, in his thesis regarding the influence of west coast America on New Zealand's domestic architecture, observed that: "The finding of common ground between New Zealand and California occurred naturally from our initial trading contacts with San Francisco in the 1850s." He refers to surplus production of wheat by Māori farmers in the 1850s, prompting a search for an overseas market:

Through the 1850s, therefore, local and overseas ships became engaged in carrying New Zealand cargoes of wheat, potatoes, slated butter, pork and beef to the teeming Californian goldfields.¹⁰⁴

Other industrial architecture of the decade included the cast-iron, and English-made, Pencarrow Lighthouse (1858), the first lighthouse in the country, and first operated by widow Mary Jane Bennett, ¹⁰⁵ as well as breweries. The first brewery in Blenheim (Dodson and Ball) was built in 1858, in Christchurch (Ward's) in 1854, and Otago

(William Strachan, Port Chalmers) in 1857.106 Foundries were established in Auckland (1850), Wellington (The Lion Foundry, 1854), Christchurch (The Canterbury Foundry, 1857), and Dunedin (The Otago Foundry, 1859).107 Coachbuilding was another industry established in the 1850s. The earliest South Island factory was likely to have been Henry Balme's Nelson one (1858), and in Christchurch, H Wagstaff's firm began in 1859, as did Wellington's Empire Carriage Factory (established by William Black). 108 Thornton also refers to John Southgate's lime kiln at Warkworth (1853), tanneries for Hirst and Co. at Kaiwharawhara (1857), and J Kingsland and Co. at West Plains (near Invercargill), and a rope factory established by Francis Bale in Whanganui (1856).¹⁰⁹ Leather was made into shoes and George Prictor's North Dunedin Boot Emporium (George St, 1858) both manufactured and imported shoes.110

⁹⁸ Thornton New Zealand's Industrial Heritage p 79.

⁹⁹ Thornton New Zealand's Industrial Heritage pp 99, 102-103.

 $^{^{\}rm 100}\,Hodgson\,\textit{Looking}$ at the Architecture of New Zealand p 8.

¹⁰¹ Jackson & McRobie Historical Dictionary of New Zealand p 4; Thornton New Zealand's Industrial Heritage p 64.

¹⁰² Thornton New Zealand's Industrial Heritage p 8.

¹⁰³ Toomath Built in New Zealand p 88.

¹⁰⁴ Toomath Built in New Zealand p 79.

¹⁰⁵ McLean 100 Historic Places in New Zealand p 63;

Thornton New Zealand's Industrial Heritage p 147.

 $^{^{106}}$ Thornton New Zealand's Industrial Heritage pp 56, 57, 177.

¹⁰⁷ Thornton *New Zealand's Industrial Heritage* pp 88, 94, 95, 178.

 $^{^{108}}$ Thornton *New Zealand's Industrial Heritage* pp 136, 137, 180.

¹⁰⁹ Thornton *New Zealand's Industrial Heritage* pp 124, 127, 128, 132.

¹¹⁰ Thornton New Zealand's Industrial Heritage pp 143,

The 1850s was a period of intense missionary activity. Rev SM Spencer's 1856 Report for Tarawera recorded 1040 "Native Christians" in the Rotorua District and, in 1859, 1700 Native Christians in the same area, 111 and this activity is reflected in increased whare karakia (church) building. Rangiātea, Ōtaki (1848-51) is perhaps the most reknowned church of the 1850s, in part because of the Charles Decimus Barraud drawing of the interior, which was widely reproduced, and dated from 1852.112 The building, a near contemporary with Christchurch's first church, the now demolished St Michael's and All Angels (1851),¹¹³ followed the building of the Waikanae church, and is credited to Te Rauparaha and Octavius Hadfield, with construction supervised by Rev. Samuel Williams.¹¹⁴ Williams, disbelieving that Rangiātea's 29m long tāhuhu (ridgepole) could be lifted into place, reputedly "got up

181.

one night and sawed off ten feet," which Treadwell has speculated deprived Rangiātea of a front porch (mahau) in an "attempt by a Westerner to de-indigenise ... Rangiātea [and] structure it in colonial terms."115 Sundt is not convinced by this proposal, and notes, following archaeologists' analysis of the building's burnt remains c1995, that "by midcentury, traditional techniques and materials for fastening were in the process of being combined with Western ones."116 Brown describes Rangiātea as being "constructed on a scale that had no precedent in Māori architecture," and refers to the construction of Rangiātea and other CMS Gothic Revival churches as "one method used by Anglican, or Anglican-aligned, communities, to enhance their mana."¹¹⁷ Contemporary observer, Charlotte Godlev visited Rangiātea in 1850 and described its interior as: ""very handsome in effect, in the peculiar Maori style; with the one defect, however, of there being only one row of pillars down the middle made of four large "Totara" trees. The ridge pole which they support is also solid Totara, ninety feet long, all painted red, and relieved with arabesques in white over the rest of the

Sundt's documentation of whare karakia, from the 1830s to the early 1860s, demonstrates their increasing size, and development from wharepuni. He identifies poutokomanawa, as an important characteristic of whare karakia, 119 and states that:

Increasingly, Māori found themselves in the novel position of initiating church building. They transformed a brief experiment in adapting wharepuni into whare karakia and thus wrote a new chapter in the history of indigenous architecture, one that would eventually lead to the erection of monumental whare-style churches in the 1840s and 1850s. This particular development is thought by some to have provided the groundwork for the construction of large-scale meeting houses in the latter half of the 19th century. 120

These whare karakia include buildings in Koriniti (1850), Maungatapu (1850), Whāngārā, East Coast (1851), Manawapou (1853), Paihia (1856-64), Pūtiki (1857-58), as well as *pisé* churches (Patiarero and Pipiriki (1849-50)¹²¹). The church at Manutuke was

¹¹¹ Neich Cared Histories p 21.

¹¹² Fearnley *Early Wellington Churches* p 63; Brown *Maori Architecture* p 44; Treadwell "European representations of the architecture of Rangiatea"; Sundt *Whare Karakia* pp 10, 111-121.

¹¹³ Stacpoole *Colonial Architecture* p 51.

¹¹⁴ Shaw New Zealand Architecture p 22; Brown Maori Architecture p 44.

woodwork, in the roof.""118

¹¹⁵ Sundt Whare Karakia p 114.

¹¹⁶ Sundt Whare Karakia p 117.

¹¹⁷ Brown *Maori Architecture* pp 44, 46.

¹¹⁸ Charlotte Godley quoted, Sundt Whare Karakia p 150.

¹¹⁹ Sundt Whare Karakia pp 3, 49.

¹²⁰ Sundt Whare Karakia p 63.

¹²¹ Sundt *Whare Karakia* pp 13, 21, 22, 34, 49, 89, 90, 145, 146, 153, 155, 159, 162, 171.

begun the year following the commencement of Rangiātea, but it took the entire decade through to 1863 to complete. 122 Sundt attributes delays to "the high wages sawyers demanding for producing were weatherboards for the framework erected in 1851."123 In 1851 Thomas Samuel Grace (1815-79) described the church-in-progress as ""if finished according to Māori architecture, [it will bel the greatest monument of national art that New Zealand contains.""124 The church is notorious for missionary William Williams' insistence that the whakairo rākau (which he considered to evidence ancestor worship) be re-carved, with carver Te Waka Kurei developing the pītau-a-manaia compromise, which Williams concluded "no longer represented pre-Christian spirituality."125 Sundt's conclusion regarding this building is that: "[h]owever much Manutuke was the product of "fusion" technology, the stamp on this structure was

indelibly Maori."126

Sundt identifies St John's, Rangitukia (1856) as bringing "to a close the era of monumental whare-style churches."127 He credits a lack of need to accommodate congregations "of 1000 or more," because he argues that many Māori turned from Anglicanism (and other Christian denominations), in the context of land confiscations and the New Zealand wars, to "the new indigenous and Māori-led religious movements, such as Pai Mārire and Ringatū."128 This political context encouraged building of wharenui such as Taiporohenui (Manawapou, South Taranaki, 1853), to "hold meetings concerned with calling an end to the sale and confiscation of tribal lands."129 Neich's study of Ngāti Tarawhai wood carving also documents changes in 1850s carvings, especially that of waka, but also a whare: Raura (1850-), and a pātaka: Maramataeahoaho (c1850).¹³⁰ He refers to the increasing Māori use of metal tools and European paints,131 and significant

changes the use of cash to pay for carving, tracing changes following the Ngāpuhi invasion (after which arms and ammunition were traded), to the introduction of cash by 1852, 132 noting

the long-standing commercial cash nature of carving transactions, dating back to the 1850s in canoe dealings. For all the meeting houses discussed, cash payments were a major, if not the sole, component in the carving transaction. ¹³³

Other churches of the decade include those designed by Fred Thatcher, who was ordained an Anglican priest in 1853, and included St Stephen's Chapel, Judges Bay (1856-57) where the Constitution of the United Church of England and Ireland in New Zealand was signed on 13 June 1857, and anticipated in its Greek Cross plan and "the signatories' table at the crossing." Thatcher also reputedly designed St Mary's, Parnell (1859), which was replaced by Mountfort's Procathedral in 1888. Stacpoole suggests that Mountfort, when visiting Auckland for two months in 1856-57, would have seen Thatcher's buildings

¹²² Brown *Maori Architecture* pp 47-48; Sundt *Whare Karakia* pp 121-131, 146, 147.

¹²³ Sundt Whare Karakia p 155.

¹²⁴ Grace quoted, Sundt "Reconstruction of a Carved Māori Church ... (Part I)" p 129; also Sundt *Whare Karakia* p 121.

¹²⁵ Brown *Maori Architecture* p 47; also p 48; Sundt *Whare Karakia* p 122.

¹²⁶ Sundt Whare Karakia p 131.

¹²⁷ Sundt Whare Karakia p 131.

¹²⁸ Sundt Whare Karakia pp 133-134.

¹²⁹ Sundt Whare Karakia p 162.

¹³⁰ Neich Carved Histories pp 51, 176.

¹³¹ Neich Carved Histories pp 148, 304.

¹³² Neich Carved Histories p 183.

¹³³ Neich Carved Histories p 308.

¹³⁴ Shaw New Zealand Architecture p 27; Stacpoole Colonial Architecture p 84.

¹³⁵ Shaw New Zealand Architecture p 27.

being built, but might not have met Thatcher as he left for England at this time. ¹³⁶ Mountford's 1850s churches had varying success. His Holy Trinity Church, Lyttelton (1852-53) was demolished shortly after (1857) because, according to Shaw, its brick noggings were failing. ¹³⁷ Stacpoole describes this more fully:

What he put up was much truncated so that the walls, made of brick infilling between timber framing, were immensely high for the length of the building. The unseasoned timber shrank and twisted, throwing the brickwork out of alignment, and the congregation was left with no alternative but to move out.¹³⁸

Lovell-Smith notes that Mountford's design of St Bartholomew's, Kaiapoi (1854-55) learnt from his Holy Trinity experience, and that he "continued the roof trusses down to the ground and bolted them onto the bottom plates." Other Mountfort churches of the decade include St John's Church, Waikouaiti

(1857-58), and St John the Baptist, Rangiora (1859).¹⁴⁰ Churches designed by others include: Holy Trinity Church (1850-51), Christ Church at Taitā (1853-54), St John's, Ōtawhao (1853-54), St John's, Te Awamutu (1854), St Paul's, Rangiaowhia (Hairini) (1856), Willis Church (1856),Blackie's W interdenominational chapel, Pāuahatanui (1857), St James', Mangere (1857) designed by Arthur Purchas (1821-1906), Max Bury's enlarging of Thatcher's c1848 Christ Church, Nelson (1858), and St Paul's, Thorndon (c1859).141 The decade's end (1858-59) also saw the decision, by Canterbury's Cathedral Commission, to engage Gilbert Scott to design Christchurch Cathedral, and their rejection of JE Fitzgerald's offer to "ship out "a beautiful building" in parts, which could be put together as the Cathedral Church of Christchurch."142

¹³⁶ Stacpoole Colonial Architecture p 93.

Pākehā domestic architecture from the period appears to be well documented. In Christchurch, V huts settled Hagley Park, and served as "shelter on country allotments," and, by 1850, Mrs Godley noted that "even the portable houses had changed their character and all had "lofts"." Portable usually meant prefabricated houses, a production method encouraged by many colonial handbooks. Mr and Mrs Watts-Russel's Ilam house, imported in c1851, was made from putting together two three-room prefabricated frame wood-houses, while JG Gordon imported his house (Clifton, Hawke's Bay, 1859) from India. 144

Salmond locates the end of the decade (1860) as the point in time when "the small timber house had become established as the New Zealand vernacular dwelling," while Stacpoole asserts, with particular reference to Auckland, that "[s]ingle-storeyed houses still clung to the familiar and obviously suitable formula of a hipped roof covering a squarish plan, the rooms having access through French windows to a veranda on three sides." ¹⁴⁵ He

¹³⁷ Shaw *New Zealand Architecture* p 30; also Stacpoole *Colonial Architecture* pp 49-50; Knight & Wales *Buildings* of *Dunedin* p 194.

¹³⁸ Stacpoole Colonial Architecture p 50.

¹³⁹ Lovell-Smith Melanie "St Bartholomew's Church (Anglican)" n.p.; also Stacpoole *Colonial Architecture* p 55; Knight & Wales *Buildings of Dunedin* p 194; Lochhead *A Dream of Spires* p 76.

¹⁴⁰ Knight & Wales *Buildings of Dunedin* p 194; Stacpoole *Colonial Architecture* pp 43, 55; Shaw *New Zealand Architecture* p 30.

¹⁴¹ Jones "The Retreat" n.p.; Sundt Whare Karakia pp 110,
156; McCracken "St Alban's Church (Anglican)" n.p.;
Shaw New Zealand Architecture p 27; Toomath Built in
New Zealand p 47; Stacpoole Colonial Architecture pp 69,
70; Fearnley Early Wellington Churches pp 2, 10, 140-143,
154-157.

¹⁴² Stacpoole *Colonial Architecture* p 44; Hodgson *Looking* at the Architecture of New Zealand p 13.

¹⁴³ Stacpoole *Colonial Architecture* pp 46, 51, 57; also Petersen *New Zealanders at Home* p 48.

¹⁴⁴ Salmond *Old New Zealand Houses* pp 28, 29; "Clifton Station" n.p.

¹⁴⁵ Stacpoole Colonial Architecture p 68; Salmond Old New

also notes the shift in Christchurch from hipped roof forms to steep gables, and the popularity of double-hung over casement windows. 146 A roof pitch of 45° was normal to shed rain quickly and counter to advice in George Earp's 1853 handbook. 147 Houses were mostly one to two rooms in size (about 50%), with 25% having three or four rooms, 148 Petersen describes them as predominantly:

free-standing, one-storied and small, with one or two rooms, a door in the centre of one long wall with a window on each side. They were often whitewashed inside to look neat and clean. Simple construction methods meant that roofs could only span about five metres and most cottages were only one room wide. Typically, the fireplace joined to the house at one end, with a wall around it, and had its own roof. Chimneys were great fire hazards and many of the first settlers cooked outside in the open. 149

Windows changed in the 1850s from twelvelights to four-lights, and from imported casements to double-sashes, "although casements were kept for service rooms at the back," and bay windows and French casements became more common.¹⁵⁰ The "Chicago window" was introduced into houses, "where an ordinary two-over-two [sash] window was flanked by two narrow windows of the same height."¹⁵¹

In addition to timber, wattle and daub, lath and plaster, fern-tree, brick, stone, concrete, cob, sod, and pisé, were also used. Salmond states that:

In 1858, of the 12,812 houses in New Zealand almost eighty per cent were built of wood, $2^{1}/2$ per cent of brick or stone, and the rest of other materials including earth, raupo, and canvas.¹⁵²

Thornton records an account from the *Lyttelton Times* (17 April 1852) of a cottage being built of concrete, and stated that, in 1996, the earliest evidence of concrete he could find was a retaining wall (c1857) at Fyffe House, Kaikōura, and that one of the earliest concrete bridge piers was in 1859 in New Plymouth. A diary from Puketoi Station, Otago documents the building of a

cob house in February-March 1859 over a five week period, while less conventional cob buildings existed, including an 1855 Lyttelton house

where the framed walls were lined with boards and the joints also covered with boards - rather than battens - and both walls and partitions were filled with a cob mixture between the framing. 154

Salmond refers to a Canterbury cob house (1851) where the timber frame was "supplied by a carpenter," 155 and Sarah Higgins' 1850s Nelson kitchen illustrates female domestic constructions. Her husband ""helped to mix up the mud before he went to work and I put the kitchen up, 20ft. long and 12ft. wide, with a chimney and a mud oven." 156 Elizabeth Caudwell's domestic bliss appears to have been more mundane as she "recalled the great pride she felt while hanging the cups up on little hooks along the dresser in her first house in Golden Bay." 157

Nelson in the 1850s though was not, for all of its British settlers, the ideal home away from

Zealand Houses p 60; also Salmond quoted, Shaw New Zealand Architecture p 16.

¹⁴⁶ Stacpoole Colonial Architecture pp 51-52.

¹⁴⁷ Salmond *Old New Zealand Houses* p 67.

¹⁴⁸ Salmond Old New Zealand Houses pp 60, 74.

¹⁴⁹ Petersen New Zealanders at Home p 35.

¹⁵⁰ Salmond Old New Zealand Houses pp 68, 70.

¹⁵¹ Salmond Old New Zealand Houses p 68.

¹⁵² Salmond *Old New Zealand Houses* pp 37, 39, 40, 43-44, 46, 60; Stacpoole *Colonial Architecture* p 58; Thornton *New Zealand's Industrial Heritage* p 120.

¹⁵³ Thornton Cast in Concrete p 22.

¹⁵⁴ Salmond Old New Zealand Houses pp 40, 60.

¹⁵⁵ Salmond Old New Zealand Houses p 40.

 $^{^{156}}$ Higgins quoted, Salmond *Old New Zealand Houses* p 37.

¹⁵⁷ Petersen New Zealanders at Home p 35.

"Home." TA Bowden documents reactions in May 1855, of those who ""gazed upon the rough woody hill, without sign of habitation, or cultivation" [and] burst into tears."158 Nelson hence did not, on first sight, appear to offer the promises of Robert Pemberton's 1854 The Happy Colony, but William Beatson (1807-70) designed "a number of good [two-storeyed gabled] cob houses in both Nelson and Stoke."159 Stacpoole identifies Woodstock, Stoke (c1852-56) as "a fine example" of a Nelson cob house, while commending the naturalistic fretwork on gables in the area, such as those of Stead house, Stoke and Sunnyside (1854).¹⁶⁰ Salmond describes Beatson's houses as having "common steep elaborately gables with decorated bargeboards, sawn by hand from solid timber in scalloped and sinuous patterns reminiscent of Gothic tracery."161 Salmond explains canvas

as a roofing material which made permanent tents, exemplified by Dr Alfred C Barker's Studdingsail Hall, Christchurch (1851), built using a studdingsail from the *Charlotte Jane*, ¹⁶² and decorated "inside with some green paint that he found amongst their baggage." ¹⁶³ Sadly though, Barker wrote:

"the rain squeezed through the painted sailcloth as if it had been a sieve, wetting and drenching everything in the tent, and this not for an hour but for two or three days at a time, without a moment's cessation." ¹⁶⁴

Hugh Robison (c1853) appears to have a similarly provisional structure built for his first house in Oamaru. Shaw describes him:

assisted by three Māori, put[ting] up a tent-shaped hut with a sod chimney at one end and a calico door at the other. It was constructed with materials at hand - cabbage tree stems, flax, raupo and clay.¹⁶⁵

William Danset's cottage, Otekaieke (1857), also in Oamaru, was built from "roughly hewn limestone." ¹⁶⁶

Interiors are documented primarily through

drawings, such as Alfred Chapman's "Interior of Edenham Cottage" [1855?], Alfred John Cooper's "Interior of settler's house, Mohaka" [1855?], and Joseph J Merrett's "Rakapa Ngawai with her sons Eru Herslett and Williams Edwards" [c1852], all of which Petersen has included in her *New Zealanders at Home*. 167 She also refers to "pale-blue walls and fitted carpet" as appearing "most refined" in 1850s New Zealand, 168 while Salmond points to the chemical horror of recipes for homemade paints which:

contained horrifying amounts of toxic lead, which was used as a drying agent. Typical was Burn's formula for white oil paint which contained four per cent turpentine, nine per cent raw oil, nine per cent boiled oil and seventy-eight per cent white lead ground in oil. Colour was added by incorporating quantities of earth oxides, lamp-black, or verdigris. ¹⁶⁹

Few inner city Dunedin houses of the 1850s have survived, but, writing in 1988, Knight and Wales stated that "in the larger Dunedin, weather-boarded houses of the 1850s can be found." They also comment on the lack of architects involved in house-building,

 $^{^{158}}$ Bowden quoted, Petersen *New Zealanders at Home* p 34.

¹⁵⁹ Petersen *New Zealanders at Home* p 33; Stacpoole *Colonial Architecture* p 74; also Salmond *Old New Zealand Houses* pp 83-84.

¹⁶⁰ NZHPT "Woodstock House" n.p.; Salmond *Old New Zealand Houses* p 84, Shaw *New Zealand Architecture* p 39; Stacpoole *Colonial Architecture* p 75; NZHPT "Warwick House (Formerly Sunnyside)" n.p.; "Heritage Warwick House Nelson heritage accommodation" n.p.

¹⁶¹ Salmond Old New Zealand Houses p 83.

¹⁶² Salmond Old New Zealand Houses p 65.

¹⁶³ Petersen New Zealanders at Home p 42.

 $^{^{\}rm 164}$ Barker quoted, Petersen New Zealanders at Home p 42.

 $^{^{165}}$ Shaw Whitestone Oamaru p 6.

¹⁶⁶ Shaw Whitestone Oamaru p 6.

 $^{^{167}}$ Petersen New Zealanders at Home p 46, Pl 13; p 49; Pl 15; pp 50-51, Pl 16, 17.

¹⁶⁸ Petersen New Zealanders at Home p 54.

¹⁶⁹ Salmond Old New Zealand Houses p 71.

¹⁷⁰ Knight & Wales Buildings of Dunedin pp 18-20.

identifying one registered architect in Dunedin (William Henry Monson), from 1859, when a greater number of carpenters worked in Dunedin. Prior to that (c1855) 16 carpenters, two bricklayers and two stonemasons appeared on the electoral roll for the city. This low number of tradespeople does not appear to have prevented the building of larger houses including: William Henry Valpy's stone house Forbury (1851), and Henry Frederick Hardy's Clifton House, Graham Street (c1855). 173

Richmond Cottage (originally Beach Cottage, New Plymouth, 1853-54) was built by Henry Richmond and Arthur Atkinson and, according to Shaw, "resembles many of the early cottages in that it is built on a simple rectangular box plan, topped with a shingled saddleback roof with a window on either side." A similarly "unpretentious" house is former CMS missionary, Henry Williams', The Retreat, Pakaraka, Bay of Islands (1850-52). 175

Wellington houses of the period include: Spinks Cottage (1854-63), the Sexton's Cottage (1857), and William Wallis' Georgian Nairn Street cottage (1858; now Colonial Cottage Museum).176 Specific houses in the Hutt Valley were commented on, primarily by the prolific Charlotte Godley. She described D Wakefield's house as good-looking, ""with very civilized looking rooms, but quite unfinished.""177 Petre's house was "quite a grand edifice for this part of the world" but ""the [floor] boards of course do not fit, and the light came through the floor of my room, which gave it a very ethereal look.""178 She predominance also noted the of conservatories. 179

Petersen makes a few references to the domestic context of Māori in the 1850s, noting that: "[w]hile in 1850 every Maori spent an estimated 25 shillings on European goods, changes to the main characteristics of whare continued to be only gradual." She also

 171 Knight & Wales Buildings of Dunedin p 25.

¹⁷⁶ NZHPT "Spinks Cottage" n.p.; Kernohan *Wellington's Old Buildings* pp 104, 211; "Colonial Cottage Museum" n.p.; O'Brien "Nairn Street Cottage" n.p.

describes Te Heu Heu's European-style house as an example of how such houses did not necessary change Māori lifestyle:

Even for those Maori chiefs who had been the first to build separate weatherboard houses, as their mana came under threat with the influx of Europeans, the possession of a European- style house and chattels did not necessarily mean radically different behaviours within the home. Te Heu Heu built himself a "very decent" house but was anxious for European guests not to boil water in it.¹⁸¹

Homesteads

Governor George Grey's 1853 Land Proclamation reduced rural land prices to five shillings an acre, further encouraging the expansion of Pākehā landholdings. Thornton states that "[i]n the 1850s there was a large scale development of sheep rearing by new settlers, including those from the New Zealand Company, and Australians." The Rhodes brothers established a sheep station at the Levels, near Timaru, the first in South Canterbury, and their slab and thatch cottage dates from 1856.183 Canterbury pastoralism

¹⁷² Knight & Wales Buildings of Dunedin p 25.

¹⁷³ Knight & Wales Buildings of Dunedin pp 92, 113.

¹⁷⁴ Shaw *New Zealand Architecture* p 21; also NZHPT "Richmond Cottage" n.p.; Salmond *Old New Zealand Houses* p 50.

 $^{^{\}rm 175}$ Stacpoole Colonial Architecture p 69; Jones "The Retreat" n.p.

¹⁷⁷ Godley quoted, Stacpoole Colonial Architecture p 58.

¹⁷⁸ Godley quoted, Stacpoole *Colonial Architecture* pp 58-59; also Salmond *Old New Zealand Houses* p 60.

¹⁷⁹ Stacpoole *Colonial Architecture* p 58.

¹⁸⁰ Petersen New Zealanders at Home p 40.

¹⁸¹ Petersen New Zealanders at Home p 40.

¹⁸² Jackson & McRobie *Historical Dictionary of New Zealand* p 3; Thornton *New Zealand's Industrial Heritage* p 43.

¹⁸³ Shaw *New Zealand Architecture* p 16; Thornton *New Zealand's Industrial Heritage* pp 43, 46; NZHPT "Levels

particularly encouraged by the was Canterbury Association, which began grants leases for land on the plains to its settlers in 1852.184 Station architecture included homesteads, woolsheds and other farm buildings, such as Alexander and Watson Shennan's stone buildings (Galloway Station, 1858).185 Thornton states that "wood was by far the commonest material used in woolshed construction," and lists several woolsheds built in the 1850s, including those at Anama Station (near Mount Somers, 1854), Major Alfred Hornbrook's Arowhenua woolshed (near Temuka, 1854), Te Waimate Station (1856), and Coldstream (near the Rangitata mouth, 1856). 186 The Anama Station woolshed was initially thatched ""with cabbage tree leaves top and sides.""187 Thornton also identifies a shed at Moa Flats Downs (near Ettrick) (1855) as the "first very large woolshed."188 It was a stone shed (97.5m x 21m) reputed to be "the largest in the southern

hemisphere," and "very ugly," when built. 189

Early housing on stations, such as Hillcrest's cob hut (c1851), black birch house, Stonyhurst, Greta Valley (1851), John, Michael and Paul Studholme's Cuddy (Te Waimate, 1854), the Rhodes' slab cottage at the Levels (1856), and Grasmere Lodge's weather board hut (1858), followed tents and preceded homesteads.¹⁹⁰ Larger buildings, including substantial homesteads are also documented. Stacpoole refers to the Terrace Station, Hororata (1853-54), Cracroft, Cashmere (1854-56), Englefield, Avonside (1855-57), and Middleton Grange, Riccarton (1856), and Hodgson discusses Douglas' Broomfield, George North Canterbury (late 1850s) with its "wrap-around verandah."191 Brancepeth Station, Wairarapa (1856-) is home to a number of buildings dating from the 1850s: a whare (1856),

homestead (1858-59) and a woolshed (1859).¹⁹² Mount Thomas Station, Okuoku (1857) is another 1850s homestead.¹⁹³

Robert Heaton Rhodes (1815-84) laid the foundation stone for his house, Purau (on Banks Peninsula), probably designed by Samuel Farr (1827-1918), in December 1853.194 This multi-gabled English Gothic stone house was, by 1858, already being altered, its wooden verandah, for example becoming cast-iron.¹⁹⁵ The French colonial Sans Souci, Whangarei (1856), complete with white shell paths, croquet lawns, and an aviary wellstocked with canaries, finches, peacocks and parakeets, was built for Edouard Eugene Cafler following time at Mauritius. 196 Joseph brick and Linwood. Brittan's stone Christchurch (1857), which Stacpoole identifies as possibly influenced by Mason's Government House in Auckland, was Georgian, as was his brother Guise Brittan's

Cottage" unpaginated; "Levels" unpaginated.

¹⁸⁴ Thornton New Zealand's Industrial Heritage p 43; Smith A Concise History of New Zealand p 62.

¹⁸⁵ Thornton New Zealand's Industrial Heritage p 47.

¹⁸⁶ Thornton *New Zealand's Industrial Heritage* pp 42, 43, 45, 52.

¹⁸⁷ Acland quoted, Thornton *New Zealand's Industrial Heritage* p 52.

¹⁸⁸ Thornton New Zealand's Industrial Heritage p 51.

 $^{^{189}}$ Thornton New Zealand's Industrial Heritage p 51.

¹⁹⁰ Heward *Canterbury Country House II* pp 24, 30, 58; Thornton *New Zealand's Industrial Heritage* p 46; NZHPT "The Cuddy" n.p.

¹⁹¹ Salmond *Old New Zealand Houses* p 82; Thornton *New Zealand's Industrial Heritage* p 45; Wilson "Cracroft House" n.p.; Wilson "Englefield Lodge" n.p.; Stacpoole *Colonial Architecture* p 57; NZHPT "Middleton Grange School (Former Homestead)" n.p.; Hodgson *Looking at the Architecture of New Zealand* p 16.

 ¹⁹² McLean 100 Historic Places in New Zealand p. 59;
 Stirling, O'Brien & Howes "Brancepeth Station" n.p.;
 Thornton New Zealand's Industrial Heritage pp 45, 49.

¹⁹³ Heward Canterbury Country House II p 45.

¹⁹⁴ Shaw New Zealand Architecture p 20; Salmond Old New Zealand Houses p 50; Heward Canterbury Country House II p 51.

¹⁹⁵ Shaw New Zealand Architecture p 20.

¹⁹⁶ Stacpoole Colonial Architecture p 48.

"first house on the corner of Hereford Street and Oxford Terrace ... [which] served in 1857 as a chamber for the Canterbury Provincial Council."197 Charleville, Remuera (1858) was likewise Georgian, until it was "later given a Gothic front by the Isaacs family."198 Both Shaw and Toomath refer to the influence of American Andrew Jackson Downing's Carpenter Gothic on New Zealand domestic architecture in the 1850s.¹⁹⁹ New Zealandbuilt examples include Broadgreen, Stoke (1857), and Rhodes' stone Purau, Banks Peninsula (1853).²⁰⁰ Thatcher designed the two-storeved gothic Kinder House (original the Headmaster's House) in 1856-57, which was built by stonemason Benjamin Strange of basalt lava from Rangitoto, the old Deanery (1857) and Benjamin Strange's cottage (1857).²⁰¹ Later in the decade Reader Wood's Melanesian Mission (St Andrew's College), Mission Bay (1858) was built by Benjamin

Strange.²⁰² Only the dining room and kitchen remain.²⁰³

The 1850s are usually considered to have been peaceful in contrast to the 1840s and 1860s. Military architecture though was built, for example Fencible cottages (e.g. Bell House, Pakuranga (1851-52)), ²⁰⁴ built for the Royal New Zealand Fencible Corps; the retired British soldiers who were brought to Auckland in an immigration programme (1847-52) guaranteeing free passage, and, for most, a cottage and land in return for seven years military service. Settlements for the 721 fencibles and their families were in Howick, Panmure, Onehunga, and Ōtāhuhu. The early 1850s also saw the completion of the Albert Barracks Wall (1846-50) attributed to George Graham and Māori stonemasons, which encircled nine hectacres, and was constructed of scoria, incorporating "flanking angles, loopholes, and attached parapets, following military defensive structures of their time."205 Neich refers to the 1851 Ngāti Paoa invasion

of Auckland, and the Te Ariki battles (1853-54): "Trouble erupted again in 1853 between Tuhorangi and Ngāti Rangitihi over control of Lake Rotomahana and the Pink and White Terraces, which were now becoming a valuable tourist attraction," with specific reference to the prow figurehead and the prow bulkhead figure from Parehaki, relics from the waka given to the Auckland Museum by Gilbert Mair, and rare examples of documented Te Arawa carving from the decade.²⁰⁶

The 1850s was a significant decade for the influx of foreign architects. Samuel Farr arrived in Akaroa in March 1850. Benjamin Mountfort arrived in Canterbury in late 1850. Frederick Strouts (1835-1919) arrived in New Zealand in 1859. William Beatson (1807-70) arrived c1851, and Max Bury (1825-1912) arrived in Nelson in 1854. On the eve of the following decade, in 1859, William Mason became the first person to be a registered architect in New Zealand. Active carvers included: Tara Te Awatapu, and Poroa, Te Amo-a-Tai, Wero Tāroi, Ānaha Kēpa Te Rahui, Te Hareti Te Whanarere

¹⁹⁷ Stacpoole Colonial Architecture pp 52, 53, 67.

¹⁹⁸ Stacpoole Colonial Architecture p 68.

¹⁹⁹ Shaw New Zealand Architecture p 39. Toomath Built in New Zealand pp 62, 65.

²⁰⁰ Salmond *Old New Zealand Houses* p 84; Shaw *New Zealand Architecture* p 39; Stacpoole *Colonial Architecture* p 49.

²⁰¹ Shaw New Zealand Architecture pp 27-28; Stacpoole Colonial Architecture pp 84-85; Salmond Old New Zealand Houses p 50.

²⁰² Shaw *New Zealand Architecture* p 28; Stacpoole *Colonial Architecture* pp 85-86.

²⁰³ Shaw New Zealand Architecture p 28.

²⁰⁴ Salmond *Old New Zealand Houses* p 81; Toomath *Built in New Zealand* p 30.

²⁰⁵ Haarhoff Architecture of Central Auckland p 12.

²⁰⁶ Neich Carved Histories pp 19, 20, 164.

²⁰⁷ Knight & Wales *Buildings of Dunedin* p 194.

²⁰⁸ Stacpoole Colonial Architecture pp 69-70.

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(Ngāti Mākino), and well-known Ngāti Tarawhai carver Tene Waitere was born in 1854, at Managamuka.²⁰⁹

²⁰⁹ Neich *Carved Histories* pp 51, 52, 56, 62, 176, 200.

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