THEME 2: PEOPLING OF DUNEDIN

2.1 KAI TAHU PLACES OF SIGNIFICANCE

The coastline of Te Wai Pounamu is related to the tradition of *Te Waka o Aoraki,* a waka which struck a submerged reef leaving its occupants, Aoraki and his brothers, to become Ka Tiritiri o Te Moana (the Southern Alps). Tu Te Rakiwhanoa was responsible for shaping the coast and making the island inhabitable. Later, the explorer Rakaihautu named key places and resources along the coast. These names record Kai Tahu history and the landscape features remain significant. Rivers that enter the sea around Dunedin include Waikouaiti, Kaikarae (Kaikorai), Tokomairiro and Mata-au (Clutha). Important bays, harbours and estuaries include Waitete (Waitati) and Otakou (Otago). Islands off the Dunedin coast include Moturata (Taieri Island). The coastal area of Otago itself is known as Te Tai o Araiteuru (the coast of Arai Te Uru). The traditions embodied in naming places link the spiritual world with present generations, reinforcing tribal identity, continuity between generations, and give structure to the history of Te Wai Pounamu and Kai Tahu iwi.

Migrations southward of Ngai Tahu, Ngati Ira and Ngati Mamoe were part of a pattern of conflict, tribal alliance and strategic union through marriage that saw Ngai Tahu occupy the Otago coast by the mid-18th century. Local dialect renders these tribal names Kai Tahu, Kati Ira and Kati Mamoe and this spelling will be used throughout this report when referring to the Kai Tahu whanui. A union emerged between Kai Tahu, Kati Mamoe and the previous occupiers, Waitaha. Earlier interpretations of this process dwelt on the aspect of warfare. However, for Kai Tahu this had not been the usual pathway to expanded territory. Marriage into resident tribes such as Waitaha, and learning their particular traditions was equally important. Kai Tahu whakapapa therefore includes Waitaha whose genealogy is imposed on the land.

Otepoti: The early historian Henry Turton described the site of Dunedin when it was known as Otepoti in 1890 and mentions Poho, a chief who lived nearby beside a creek flowing into Pelichet Bay, apparently near the present Logan Park High School in about 1720. Stack, 1877, (1996), p.33 describes the death of Rangi ihia, (alternatively Te Rakiihia) brother (or grandfather) of 'Kohiwai', (alternatively 'Kohuwai') at Otepoti, some time after her marriage to Honegai. At this time 'Rangi ihia's' brothers were camped nearby, another of his sisters was living there, as were two of her former maidservants and their husbands. Rangi ihia's death at what is now Dunedin is likely to have been about 1785. This then is the latest plausible date at which the site can be said to be still in settled Polynesian occupation. (Entwisle 2005)

Uneasy peace was established between Kai Tahu and Kati Mamoe in the late 1700s. Conflicts with European sealing gangs began around 1810, leading to hostilities in the future area of Dunedin. (See page 20) The Kai Huaka (eat relatives) conflict of the early 1820s was set within warring Kai Tahu groups but a period of more intense inter-tribal conflict flared in the late 1820s which embroiled Kai Tahu in battles with Kati Toa from Kawhia in the upper North Island. The conflict with Kati Toa was not settled until 1839, close to the point of official colonisation of New Zealand. In 1840, leading Kai Tahu chiefs signed the Treaty of Waitangi at Akaroa, Ruapuke and Otago. By this time, considerable economic trade had been established with Kai Tahu in and around Dunedin centred on agriculture and whaling.

Archaic Maori settlements: Archaic Maori settlements dating from around 600 years ago were located near clusters of big game with fur seals and moa strongly concentrated in the eastern South Island. Major settlements in the lower South Island were adjacent to large rivers and include the Catlins coast to the south of Dunedin and Shag River Mouth to the north. Horticulture using Polynesian sweet potato was limited in the south to the area north of Banks Peninsula, making southern Maori reliant on hunting and gathering. While travelling considerable distances to do this, recent reassessment of settlement patterns suggest that 'moa hunter' Maori occupied permanent villages (kaika). Inland sites, also for

hunting moa or stone resources such as nephrite (pounamu) and silcrete, were used seasonally.

Within a period of 150 years, the native forest cover in Otago was depleted to around the Dunedin harbour and the Catlins Coast, which combined with hunting pressure led to the extinction of eight species of moa and other smaller birds, while seal colonies around the coast were also reduced. A shift emerged in the 16th and 17th centuries towards fishing , particularly for barracouta, the preservation of water and land birds and the making of kauru from *ti-kouka* (cabbage trees). This period is characterised by smaller transitory villages and a high level of mobility. Between this period and European contact at the end of the 18th century, the regular food gathering and processing patterns saw an expansion in coastal villages with permanent structures.

Otakou: The sounding and spelling of the name 'Otago' is subject to a variety of historical interpretations. 'Otakou' relates to the eastern channel of the Otago harbour close to the Peninsula shoreline. The name of the channel was applied to the land surrounding the harbour by early European voyagers and whalers. This was later altered in pronunciation and spelling to 'Otakou' and adopted briefly as the title of the wider region. The name Otakou is used in this context on Charles Kettle's survey (1846) but was later used more specifically for the Otakou village while the name of the settlement was replaced by 'Otago'.

Pa sites: Fortified pa sites in the Dunedin area include Huriawa [**I43(1)**], Mapoutahi [**I44(17)**], Pukekura [**J44(4)**] and Puketahi. These coexisted with undefended and long standing kaika. A major greenstone working and export site was located at Whareakeake which Jill Hamel has identifies as a 'swamp pa' with identifiable defensive features. A settlement in what is now central Dunedin (Otepoti) is believed to have been used as late as 1785 but was unoccupied in the 1820s when the area was described by Thomas Shepherd. Mahika kai (places of food resources) included the Taieri and South Otago wetlands, coastal Otago from Otago Harbour to Nugget Point, the catchment area of the Clutha River including the Manuherekia Valley and the major inland lakes and

beyond to Poiopiotahi. A number of fortified pa were constructed in the Taieri area including Maitapapa, on the hill overlooking Henley and Motupara on the south side of the Taieri river mouth.

Greenstone working centres: Pounamu (greenstone) became a major resource during the 18th century. Trade routes were developed between coastal Otago and the West Coast. Pounamu was extracted from river beds and conveyed overland to the Otago coast, where it was worked into products and traded with North Island iwi. A number of coastal kaika about Otago Peninsula were Pounamu work sites with family associations running through to the present, such as the Te Wahia family of Puketeraki who were noted workers of pounamu.

Food gathering: In inland areas prehistoric occupation was more sparse and seasonal, but regular trips were made in the warmer months to gather resources. Moa hunter sites have been recorded at Rocklands and Deep Stream near Middlemarch, while further inland large sites have been recorded at Millers Flat, Coal Creek and Hawksburn. Even after the moa became extinct expeditions continued, and James Herries Beattie recorded that annual trips were made from Otago Peninsula and Henley to the Maniototo Plains and Central Otago until about the 1870s (Beattie 1994: 175).

Kaika: A number of kaika in the greater Dunedin area were occupied at the point of initial contact between Kai Tahu and European visitors including at pa at Karitane and kaika at Taieri Mouth and inland at Otokia. Pukekura had been a fortified pa but was occupied as a kaik in the 1840s. Its site on the southern head of the Peninsula is close to where the Crown's representative James Busby obtained the signatures of the chiefs Karetai and Korako to the Treaty of Waitangi in 1840. A string of long established settlements ran down the Peninsula side of Otago Harbour that, prior to the 19th century, sustained a large population. Caution must be exercised over early accounts of 2,000 living in the Maranuku (Clutha) district (John Barnicoat) and 2,000 at Otakou in 1840 (Haberfield). Contemporary estimates also vary widely on the number of people living in the Dunedin area in the early contact period. Atholl Anderson (Australian National University) suggests that

the South Island did not sustain a Kai Tahu population of more than 3000 with this falling to around 1000 by the 1830s (Waitangi Tribunal, Ngai Tahu Land Report). Historian, Harry Evison, estimated the contact period population in the South Island prior to epidemics at between sixteen and twenty thousand. Others give estimates of between six and eight thousand. Whatever the initial figure, the decline in population must be read against other demographic factors including unreliable census methods and intermarriage.

The archaeological record in Dunedin: Because of the long history of archaeological research in Dunedin, prehistoric archaeological sites have been the subject of many surveys and excavations. These sites are concentrated along the coast, particularly in places like the Otago Harbour where sheltered water with good access to food was available. Sites where excavations have been carried out include Huriawa [**I43/1**], Ross' Rocks [**I43/22**], Omimi [**I44/1**], Mapoutahi [**I44/17**], Murdering Beach (Whareakeake) [**I44/20**], Purakaunui [**I44/21**], Long Beach [**I44/23**], Warrington [**I44/177**], Taiaroa Head [**J44/4**], Little Papanui [**J44/1**], Papanui Inlet, Papanui Beach [**J44/117**]. Most recently a site has been excavated at St. Clair [**I44/121**], showing that prehistoric archaeological sites can survive within the built-up urban area (Brookes, E. Jacomb, C. & Walter, R. 2008). While Otago is not known for pa sites like those found in northern areas, by different measures of archaeological interpretation at least five lie within Dunedin City. Of these Huriawa [**I43/1**] at Karitane, and Mapoutahi [**I44/23**] between Purakaunui and Waitati are particularly significant. Both were established on narrow headlands out into the sea, and both are easily accessible to the public today.

Otakou Marae: The Otakou Marae occupies part of the 1877 hectares of Maori Reserve on the Otago Peninsula held back from the 1844 sale of the Otakou Block. Some of this land was sold to farmers, although much is retained under Maori ownership. Maori land incorporations such as Te Reuone and Akapatiki (Taiaroa whanau) are based on multiple ownership while other whanau, including the Russells, Wesleys and Ellisons, manage their land independently.

The Otakou Marae site was selected in 1859 by chiefs Taiaroa, Karetai and Korako and a church constructed in 1864, followed by a school and wharenui, Te Mahi Tamariki, in 1874. Te Mahi Tamariki was superseded by the Tamatea meeting house after the Second World War. Designed by Dunedin architects, Miller and White, the building is constructed from concrete and bears casts of carvings held by the Otago Museum from the Ngati Porou house, Tu Moana Kotere, which came from near Hicks Bay. The church, also designed by Miller and White, was opened in 1941 as a memorial to the signing of the Treaty of Waitangi on 13 June 1840 and the establishment of the mission station at Waikouaiti, also in 1840.

The Araiteuru Marae at Wakari was established by the Araiteuru Marae Council on 28 April 1964 and provided for all Maori people in the district, regardless of tribal origin. The marae was completed in 1980 and was described as the first urban marae in New Zealand. The building was destroyed by fire in August 1997 along with the Maori Law Centre in Forth St, Dunedin, both arsons coinciding with the settling of the Kai Tahu land claim.

Puketeraki Marae (Fig. 4) was re-built in 2001 at Karitane and provided the Kati Huirapa Runaka with the first whare whakairo in the area for more than a century.

Figure 4: Puketeraki Marae, Karitane, 2001. ***Otago Daily Times***

Other Kai Tahu reserves are located at Waikouaiti and Onumia (Taieri Mouth). Tauraka waka (landing places) are located at Koputai (Port Chalmers) and Otepoti (Dunedin) and other lands held at Aramoana, Clarendon (Taieri Mouth). Landing reserves were allocated at Matainaka (Waikouaiti) and the former Lake Tatawai on the Taieri Plains.

Figure 5: An engraving after a sketch by Louis le Breton of the mixed European and Kai Tahu whaling settlement at 'Port Otago' in 1840.

2.2 CONTACT PERIOD

While Captain James Cook had named Cape Saunders – the eastern tip of Otago Peninsula – in 1770, the harbour beyond the heads was not extensively explored by Europeans until after 1800. Historians vary on the earliest likely date, with Peter Entwisle and Ian Church offering dates back to 1805. Captain Daniel Cooper, an English sealer, sailed into the harbour at an unknown date close to the start of 1809 and was followed by further sealing expeditions that landed crews around the southern coast. This was a classic 'boom and bust' cycle with seal numbers depleted to point of the collapse of the trade by 1830. The security of sealing gangs was challenged by conflicts with Kai Tahu and the trade entered a state of flux with sealers avoiding the Otago coast. The future site of Dunedin at the foot of Otago Harbour was of little initial interest at this time.

A frequently noted conflict occurred in 1817 involving the ship *Sophia*. This was sparked by an attack on William Tucker, who had been living at Whareakeake since 1815, and two sailors from the ship. In retaliation, the *Sophia's* captain, James Kelly, ordered the burning of a large village, most likely the settlement at Te Rauone.

2.3 WHALING AND SEALING INDUSTRIES

Sealing camps: Hamel (2001: 103) has suggested that a sealing camp established on Green Island opposite the mouth of the Kaikorai Stream in 1809/10 was probably the first European settlement in the area, and the recorded archaeological occupation sites on the north side of the Green Island estuary may be the first place in the future site of Dunedin where Maori and Europeans lived together, albeit seasonally and temporarily. Peter Entwisle's research on the sealer William Tucker has him established in a permanent house at Whareakeake in 1815, making him potentially the first identified European 'resident' of future Dunedin.

Whaling stations: The construction of permanent shore whaling stations around the coast marked the next phase of European involvement. Six whaling bases were established in the vicinity of contemporary Dunedin, activities that involved land transactions and the employment of Maori crews (Fig. 5). The Weller brothers, Joseph, George and Edward, founded the first permanent European settlement in the Dunedin area at Otago Heads in 183, but the whaling industry had collapsed by the early 1840s. Some whalers stayed on in the area, notably at Karitane where the whaler/merchant John Jones purchased land in 1838 at Matanaka. The whaling station purchased by Jones was called 'Waikouaiti' and a further settlement named Hawkesbury was established on the other side of the river estuary in May 1840. Separate but related to these, via Jones, was the farm on Cornish Head, Matanaka, where his brother Thomas probably lived. Johnny Jones moved there in 1843 following a setback in his Sydney trading ventures. The identities of these places have been conflated over time to the confusion of many.

A mixed European and Kai Tahu community of around 200 carried out whaling, sealing and agriculture in the area. The Jones farm complex contained around 600 acres of land with 100 acres in crop. Horses, cattle and sheep were grazed and structures including stables, granary and store were built using Australian materials between 1840 and 1843. These are described later in this report. (See page 23 and also page 184.)

Whaling and Kai Tahu: The extent of death through introduced disease is a further area of contention among historians. Influenza epidemics certainly cut through the Kai Tahu population in the mid-1830s and left them in a weakened position. Even so, the Kai Tahu economy was being actively transformed by land dealing and the direct employment of Maori whaling crews. Whaling was pursued by Kai Tahu crews operating their own vessels after European involvement was scaled back. A collapse in whale numbers around the Otago coast in 1839 led to a greater reliance on agriculture. These new skills and resources gave local iwi confidence in the future of the relationship between settler and Maori. Kai Tahu were active in seeking more immigrants to the area, having developed strong commercial links which had spread to Australia. In 1840 nine tons of potatoes were shipped from Otakou. Kai Tahu whalers occasionally employed Europeans and there was a secondary trade in flax which thrived until the 1840s. The collapse of both flax and whaling was a major economic blow to Kai Tahu. The negative side of this period is conveyed in the accounts of the French explorer Durmont D'Urville and missionary William Watkin. Both were struck by the extent of drunkenness and the degradation of Kai Tahu women through prostitution.

Archaeology of whaling sites: Several archaeological surveys have been carried out in attempts to identify all of the known early whaling stations around the Otago coast (Campbell 1992; Prickett 2002). The Weller brother's 1831-1848 whaling station tryworks at Weller's Rock in the Otago Harbour (site J44/5) was excavated by Campbell in 1991, and the ash tested for traces of whale blubber (Campbell & Smith 1993). The rock on the shoreline that marks the site of the try-works is marked by a plaque, and is easily accessible to the public as it is beside

the harbour road out to Taiaroa Head. There is less to be seen of the out-station of the Weller brothers' operation at Purakaunui (site I44/216), due to movement of sand and the establishment of a pine plantation, while their Taieri Island station (site I45/62) has suffered considerably from erosion but has been revegetated to prevent ongoing damage (Prickett 2002: 32). The whaling station at Waikouaiti (Karitane), owned by Johnny Jones, and situated on the north side of the Hurirapa Pa was also investigated by Campbell, although little surviving archaeological evidence was found.

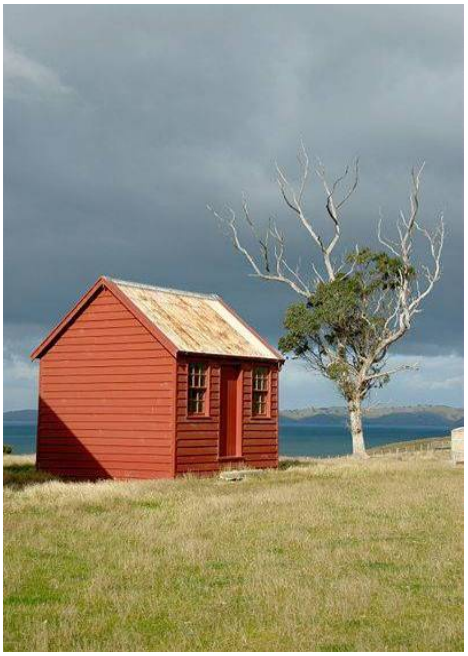


Figure 6: Storehouse at Matanaka. *circa***1843**

Matanaka: Johnny Jones' early farmstead at Matanaka near Waikouaiti (Fig. 6) dates to 1843 (Hamel 2001: 104), and is now partly owned by the New Zealand Historic Places Trust, and the area around the old barn and associated buildings is open to the public. [**25.1 B719-B723**] Although the buildings have been repaired, modified and moved, they still retain high historic values, and the site will have sub-surface archaeological features, despite levelling work carried out by the Ministry of works in the 1970s. Jones' house which is adjacent to the farm buildings is in private ownership and has no statutory protection, although it is one of the ten oldest buildings in New Zealand.

2.4 THE OTAGO SETTLEMENT SCHEME

The New Edinburgh scheme: In 1842 George Rennie proposed a settlement scheme in New Zealand (named "New Edinburgh") for Scottish migrants. Rennie was a sculptor and politician who was Liberal Member of Parliament (MP) for Ipswich between 1841 and 1847. His proposal was taken up by the Free Church of Scotland, a major breakaway from the established Church of Scotland, which was split in 1843 over the issue of patronage and state control (specifically whether the congregation had the right to appoint their choice of minister). The plan to set up a Free Church settlement was then led by Thomas Burns, John McGlashan and William Cargill. Cargill had become interested in emigration as a way of easing the financial hardships faced by many sectors of Scottish society. Rennie had also been convinced by Edward Gibbon Wakefield's proposals for 'systematic colonisation' which were being put into practice in Australia and New Zealand. Cargill was offered the leadership of a Scots settlement in New Zealand and on Wakefield's advice, approached the Free Church leaders. Thomas Burns was appointed minister to the proposed settlement in 1843. The search for a suitable site was led by the New Zealand Company surveyor, Fredrick Tuckett, under instructions from the New Zealand Company representative, Colonel William Wakefield.

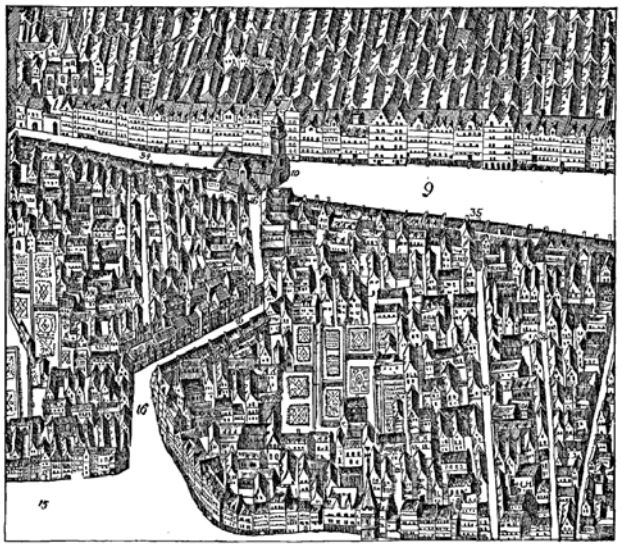
The sale of the Otago Block: Tuckett's investigation of the Otago site began in 1844 at Moeraki, having rejected the Company's choice of Port Cooper (Lyttelton). Satisfied that the area around the harbour was suitable for Scottish small holders, Tuckett organised the purchase of the Otago Block in June 1844. The agreement to sell 161,877 hectares (400,000 acres) was signed at Koputai (Port Chalmers) followed by the signing of a deed at the same place on July 31, 1844. Three blocks of land were retained by the owners- at Otago Heads (6,665 acres), Taieri (2,310 acres) and Te Karoro (640 acres). Kai Tahu willingness to sell was conditional on the price and the amount of land involved. During preliminary negotiations, Kai Tahu favoured retaining the entire peninsula and parting only with the inland side. Two small reserves for hauling up places in the proposed town and one at Port Chalmers were also discussed. The uncertainties surrounding the reserves would have

consequences later. Adding to this contentious issue was the notion of 'tenths' in which the New Zealand Company was to set aside "... a portion of the territory ceded equal to one tenth of the whole, [which] will be reserved by the company, and held in trust by them for the future benefit of the chief families of the tribe...". This policy had been enacted at Port Nicholson, Nelson and Taranaki settlements but was skirted around in the Otakou negotiations. The Crown's undertaking to set aside reserves of 10per cent of the 34.5 million acres sold was never met. Disputes followed over boundaries and the failure to establish a promised hospital and school for Kai Tahu children. Kai Tahu gradually lost mahika kai and access to sacred places such as urupa. The first claim against the Crown was brought in 1849. When the case was brought to court in 1868, laws were enacted to prevent either hearings or rulings on the case. By time of the final Treaty of Waitangi ruling in 1991, around a dozen different commissions, inquiries, courts and tribunals had heard Kai Tahu claims and found them justified. The *Ngai Tahu Claim Settlement Act* was passed on the 29th September 1998.

2.4 DUNEDIN SURVEYED

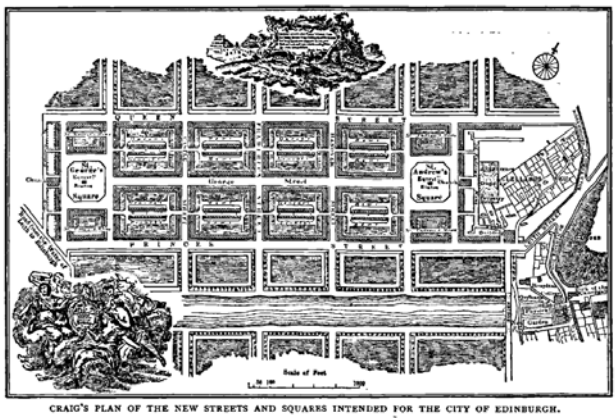
Port Chalmers: The survey of Dunedin began at Koputai in 1845 where William Davidson had been left by Tuckett ahead of the arrival of the main surveying party headed by Charles Kettle. A small group of prospective settlers had also gathered at Koputai including the Anderson and McKay families. Alexander and Janet McKay opened a hotel named the *Surveyor's Arms* on the Beach Street site of the present *Port Chalmers Hotel*. [**B662**] The terrain of Koputai was more rugged than the upper harbour site chosen for the town of Dunedin. Backed by a high ridge dominated by the tall hill, Mihiwaka, the land fell steeply towards the shore and there were few level areas. A wide gully divided the site and provided the main axis of George Street. Diagonal streets followed the natural rise of the land onto the top of Port Chalmers Peninsula on one side and the lower slope of Mihiwaka on the other. There was little latitude for the formalities of grid plans. This work

was complete by May 1846 and attention was transferred to the Dunedin site. (Church)



PLAN OF EDINBURGH, FROM THE CASTLE TO ST. GILES'S. (*From Gordon of Rothiemay's Map.*)
9, The High Street from the Castle; 10, The Weighhouse; 15, Horse Market Street; 16, Straight (or West) Bow; 34, Currer's Close; 35, Liberton's Wynd; 36, Foster's Wynd; 4, The Kirk in the Castle Hill.

Figure 7: 'Old Edinburgh' was centred on the High Street, a vastly elongated public space that ran between the Castle and Holyrood House.



CRAIG'S PLAN OF THE NEW STREETS AND SQUARES INTENDED FOR THE CITY OF EDINBURGH.
(*Reduced Facsimile of the Original Engraving.*)

Figure 8: Charles Kettle was instructed to adapt features of James Craig's plan for the New Town, a speculative development on a regular grid layout.

Dunedin and Edinburgh: The settlement organisers had requested that the plan reflect the features of Edinburgh, a requirement that Kettle strove to meet by laying out a grid that was roughly similar to James Craig's New Town development of 1767 (Fig. 8). Kettle's brief also called for "Fortifications, Public Buildings, Sites for Places for Health

and Recreation", a fairly standard prescription that was also used in Wellington. Craig's Edinburgh plan comprised a simple rectilinear arrangement of three parallel main streets ending in squares, crossed by three streets to complete the grid. A formal hierarchy of mews and stable lanes was provided for servicing the large houses that were intended to be built facing the wider streets. The New Town was developed in different sections over time with its various spaces informally related. Kettle's innovation was to draw down Edinburgh's Moray Place from its isolated position on the edge of Craig's grid and make this the central feature of the Dunedin plan. This centralising figure makes Kettle's plan less formal than the standard 19th century colonial grid and can be related to Felton Mathew's largely unachieved plan for Auckland, which radiated from crescents drawn from Commercial Bay upwards to the Symonds Street ridge. From around this eight-sided figure, other major streets leave the grid at 45 degree angles, sometimes following an easy grade up the ridges and valleys but also falling into deep gullies and climbing up steep inclines. This perceived failure to regard the natural landscape has engendered many misinterpretations of Kettle's scheme and how it was carried out (Ledgerwood).

Figure 9: Charles Kettle's 1847 survey of Dunedin

Town Belt: The main area of the town was bounded by a broad reserve of 184 hectares (550 acres) named the Town Belt that ran along the mid-slope of the ridges overlooking the harbour. This impressive example of 'rus in urbis' was generous relative to the constrained area of the site and now contains the Dunedin Botanic Garden (established in 1863). Within the grid plan, blocks of land were also reserved for public recreation.

The surveying team: While Kettle was the author of the plan (Fig. 9), day-to-day work was carried out by Robert Park and William Davison. The grid is aligned on a long axis stretching from a spur at the southern end now occupied by the Southern Cemetery, north to the edge of the Water of Leith. This was referred to as 'Long Street' in Park's 1846 field-books that also contain the incipient Octagon. Crossing 'Long Street' at a 45º angle was a secondary axis offset slightly from the grid to skirt the base of a tall bluff that divided the site into north and south sectors. This subtle warpage in the geometry show Kettle's practical awareness of the awkwardness of the site and the constrained resources of those who would bring it into reality. In the block now occupied by the ex-Chief Post Office [**B482**] were sited the New Zealand Company survey office and houses occupied by Kettle and Park, making this area the 'official quarter' of Dunedin. Their task was carried out with great efficiency and the main site work was completed in 1846.

Bell Hill: The site was effectively divided in two by the steep volcanic ridge called Bell Hill that ended in a rounded bluff projecting into the harbour. This rose steeply on the Princes Street side and fell less sharply into the salt marsh north of Lower Stuart Street. Some of this topography is evident in the deep basements of buildings in the east quadrant of the Octagon and Moray Place. Following the arrival of settlers in 1848 and the first allocations of building sites, this obstacle confined early development to the south side where early houses, shops and stores were built close to the water's edge.

The Dunedin district: The settlement scheme allowed the opportunity to purchase a quarter acre town site, a ten acre suburban section or a fifty acre rural section. While the site chosen for the town of Dunedin

was visually striking and provided relatively easy access to the Taieri Plains, much of the available land under Kettle's plan was a difficult prospect for its new occupiers. A plan carrying the names of Kettle, Davison, Park and Charlton and dated 1847 shows the broader scheme in context with its surroundings. This shows district roads including the present routes of Highgate along the Roslyn/Maori Hill ridge and Kaikorai Valley Road, as well as indications of the original topography and plant cover of the site. Dark green areas suggest the extent of native cover that was concentrated at the north and south-west edges of the site with patches of bush elsewhere. Kaikorai Stream, the Water of Leith and the network of small streams that entered the harbour near present day Water Street are drawn, as is a shallow tidal arm that marked a low lying marsh north of Bell Hill.

Otago Harbour and streams: The narrowness of the harbour revealed its past history as a river system and it was extensively silted in its upper reaches. A broad area of marshy salt flats finished in low sand dunes at present day St Kilda and St Clair beaches. While Kettle drew a road around the tidal edge, this was not a practicality and travellers to the Peninsula made their way by boat or on a track further inland. This area of wetland extended to the foot of the spur at the south end of Princes Street. While Kettle made some small allowances for the Water of Leith, the hydrology of this mountain stream was probably not well understood. It emerged from a steep walled valley at the northern end of the site and followed the edge of a spur of volcanic rock running parallel to the main street grid. Where this dropped below the softer alluvial cover, the stream cut a sharp turn east and flowed into a broad bay. Kettle drew the line of Castle Street to skirt a fan of boulders at this point but otherwise sections were surveyed to the stream's banks. A block on the east side of the stream was set aside as a reserve and is now occupied by the University. Rewarding Kettle's faith, the stream remained quiet until 1868 when a flood carried away part of the newly created Dunedin Botanic Garden, followed by an even more destructive episode in 1877.

Blocks: Kettle's plan had allowed for the laying out of major roads running north-south along the flood plain of the Water of Leith and on a

narrower shelf of dry land to the south of Bell Hill. The grid contained ten blocks at its widest point which followed the line of present day Albany Street down to a point slightly elevated above the harbour. From the Octagon south, the grid was effectively rotated 45º and aligned to the axis of High Street. What became Princes Street met the harbour edge at Manor Place and only Water, Rattray and High Streets were drawn from its east side. High Street was carried on the raised edge of shore at Bell Hill to meet with Castle Street. This seemingly convenient route past the saddle of the hill looked fine on the plan but was unpassable across the tidal inlet and salt marsh to the north. The 2008 revealing of a 'corduroy track' in the block bounded by George, Filleul, St Andrew and Hanover Streets, is evidence of the state of this area in the 1850s. Although Kettle made some suggestions for future usage, including a 'castle' on the future site of First Church, the naming of streets and allocation of sites for churches, schools and parks took place following the arrival of settlers in 1848. The naming of streets loosely followed the pattern of Edinburgh, as did the naming of later suburban areas.

Arrival of settlers: The *John Wickliffe* with 97 passengers and the *Philip Laing* with 247 sailed to Port Chalmers from Gravesend and Greenock in 1847. Two-thirds of the original Otago settlers were Free Church Presbyterians and over half of Otago's United Kingdom-born population of 403 in August 1848 was Scottish. Many difficulties were evident with the site as little had been done in preparation. The lack of a wharf or roads meant that the harbour was the main communication route and miserable winter conditions added to these problems. Progress was hindered by internecine disputes between the Scots Presbyterians and the English minority- the 'little enemy' who, despite holding much of the capital for the venture, were marginalised by Cargill and Burns.

Although the majority of the first arrivals were Lowland Scots from Free Church congregations, many were not. The typical Scots settler was from Midlothian, the county district around Edinburgh. They were aged in their early thirties and emigrated with young children. Few were Highlanders, although some Highlanders came in later years. Most were seeking opportunity through land ownership and business rather than escaping grinding poverty, as is often the myth.

2.6 FILLING IN THE PLAN

Early public works: Construction of the jetty and the forming of Jetty Street were the first public works undertaken in Dunedin by the New Zealand Company in 1849 (Fig. 10). A timber bridge was placed across

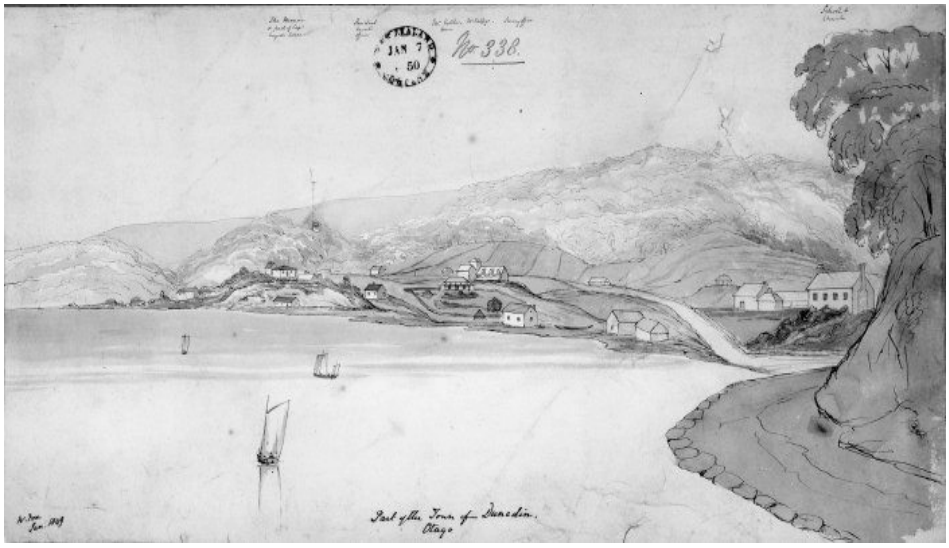


Figure 10: [William Fox] **Part of the town of Dunedin, Otago. January 1849.**

the Toitu Stream where it crossed Princes Street at the Rattray Street intersection. A narrow footpath linked this part of the village to the immigrants' barracks, Presbyterian church and school that were built on a narrow shelf of dry land above the harbour edge. The site is partly under the present DCC car park in Lower High Street. Stone for the Presbyterian First Church was collected from a quarry reserved for the New Zealand Company at Andersons Bay. A large stone house in Scottish fashion was started for the Reverend Thomas Burns in 1849 by the same group of masons who worked on his farm (later *Grants Braes*) on the Peninsula. A full record of its construction is contained in Burns' diary, held as a typed copy at Otago Settlers Museum (McDonald).

Action to lower Princes Street into a cutting made in Bell Hill began in 1858. However, land on top of this feature had already been surveyed and sold. A narrow gap of around 20 feet was made through solid rock, leaving a number of buildings above the street line. Maintenance and development of roads, streets and bridges as well as footpaths and drains was the responsibility of the Town Board, which was established by the Otago Provincial Council in 1855.

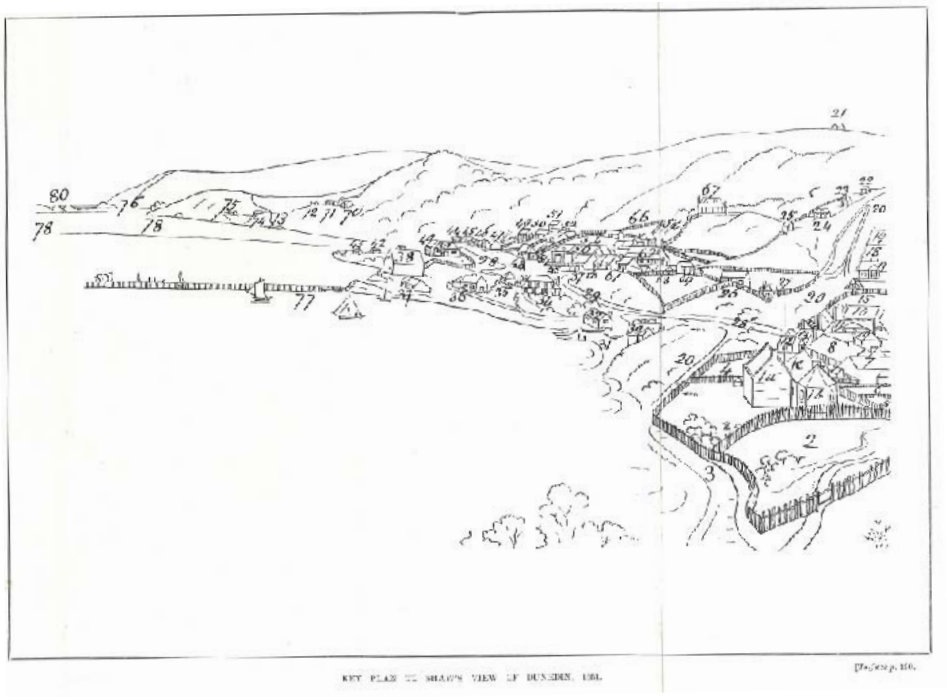


Figure 11: Dr Hocken's annotated sketch of G B Shaw's View of Dunedin 1851.

Early building types: By April 1849 there were 99 buildings in Dunedin. These were clustered closely in the area of Princes and Rattray Streets and grouped tightly in the triangle between High, Manse and Princes Streets. The Otago Witness reported in 1852 that the town was inclined to fill up the back streets rather than expand left or right. This is confirmed by a study of George Baird Shaw's 1851 View of Dunedin from Church Hill, effectively annotated by Thomas Hocken in the 1890s (Fig. 11) when the scene was within living memory. Shaw's view and Hocken's key show a variety of late Regency cottage and house forms with both hip and gable roofs. The larger houses, such Doctor Robert Stewart's house on Stafford Street, were dormered. Stewart's house comprised a dining room, parlour, bedroom and kitchen downstairs and two bedrooms upstairs. More modest houses contained four rooms. The large stone store built by the ex-whaler turned merchant, Johnny Jones, dominated the harbour edge at the foot of Jetty Street. A small number of buildings were constructed along Scottish vernacular lines, including the Presbyterian church and school. These were distinguished by gabled end walls carrying internal

chimneys, as opposed to the central or external bricked chimney more common in early colonial building (Hocken). Timber was the most common style of construction but its limitations in view of the local climate were recognised. By 1858, 291 houses had been constructed in Dunedin. 207 of these were timber, 13 brick, 2 stone, 13 iron and 56 in 'other materials' which were mainly wattle and daub constructions of various types and ponga log.

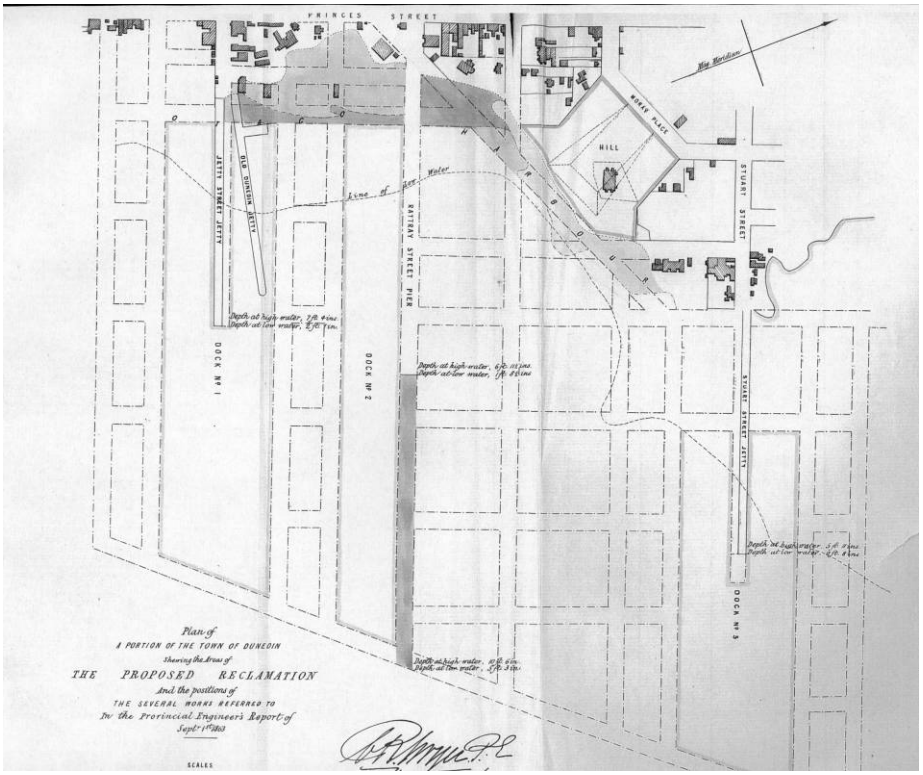


Figure 12: A map of the proposed harbour reclamation, 1863, showing the positions of Dunedin's early public buildings.

Public buildings: Aside from the Church and school, the main public meeting space in early Dunedin was the Mechanics' Institution which opened in 1852. This housed a collection of newspapers, periodicals and books and was the venue for many early Dunedin public and political meetings. A wooden store was built opposite the jetty and a new government building accommodated the courthouse which doubled as the Anglican church. A single storey timber hospital was built in the south-west section of the Octagon in 1851. The function of the Octagon as public space was challenged in 1853 when the Anglican church was prevented from building in its centre. Instead, the Otago Provincial Council decided that it should be given over to garden such as that at

the centre of Edinburgh's Moray Place. *The Dunedin Public Lands Ordinance* (1854) protected the Octagon and Town Belt from similar encroachments but also allowed leases of other reserve land.

Kai Tahu and the Government Reserve: The banks of the Toitu where it met the harbour were important to Kai Tahu and provided a pulling up place for canoes and a temporary market place for goods trading. Although ancient trails (ara tawhito), seasonal settlements (nohoaka) and canoe mooring sites (tauraka waka) were evident at the commencement of Dunedin, most were soon lost or incorporated into settler roadways. As the transition was being made from a barter to a cash economy, the market in the bay of the Toitu became more important. There was a 'camping place' of whare rau and possibly a store house built in 1848. These were lost in an 1848 fire. Kai Tahu were evicted from this space in 1851 and pressure grew to provide a permanent structure where visitors could shelter and sleep. In 1855 the Otago Provincial Council proposed the "erection of a suitable building at or near the beach" for the use of Maori visiting Dunedin. [*Otago Witness* Saturday, May 5, 1855, Page 2]. After long delays, the hostelry was built in 1859 on part of the Government reserve no. 7 on Princes Street on the north bank of the Toitu stream and facing the original survey office. It was a two storey stone building but only stood for seven years, being removed for the raising of Princes Street [The Ngai Tahu Report 1991].

Suburban expansion: Expansion into the suburban sections around Dunedin began early in the history of the settlement. By 1853 the population of Dunedin had grown to around 1700. Of this number, 1178 were located in the town and immediate suburbs, 226 at Port Chalmers and about 300 in the wider area. Aside from Johnny Jones' house at Matanaka, the earliest surviving house standing on its original site in Dunedin was begun at Wakari in 1849 on the route west to the Taieri Plains. The original portion was constructed from upright ponga logs and plastered inside with clay by Robert Murray and John Borton. The use of ponga logs as a building material was widespread in the region although the two storey form and Tudor batten details of *Ferntree Lodge* [**B581**] are more ambitious than the usual temporary settler dwelling. The house was noted by Hocken and enlarged and restored at the turn

of the 19th century by Alexander Thomson. Although isolated from Dunedin itself, Wakari was an important site to both Maori and settler with an active kaika situated there in the late 1840s. While ponga log construction is sometimes described as having Maori precedent, it is more likely a colonial variation of pugged clay and wood building techniques that made use of abundant local resources.

Farms and structures: In the hinterland around Dunedin, early development consisted of small farms, although settlement extended no great distance inland prior to the gold rushes of the 1860s, apart from the few pastoralists who, during the 1850s, explored the interior looking for sheep country. Archaeological evidence of these early farmsteads can be found in many places, sometimes completely abandoned on what are now much larger farm properties, and sometimes incorporated into operational farmstead complexes. These agricultural sites are discussed in more detail in Theme 8: The Dunedin Economy.

Captain William Cargill's (Fig. 21) vision of Otago as a society of small holders developing an agricultural economy based on "concentration and contiguity" meant that the development of agricultural land outside the town site was slow. The Otago Provincial Council stimulated pastoral and agricultural use of the hinterland in 1856 by increasing the size of the rural sections in the old Otago block into eight instead of three hundreds and offering them for sale at ten shillings per acre. Situated on the road south from Dunedin were small farming settlements at Green Island and Kaikorai Valley. Communication to North East Valley was assisted by the building of a bridge across the Leith in 1852. The construction of a dray road to the Taieri through Halfway Bush further encouraged agricultural development during the 1850s. Wheat and cattle farming took place at North and West Taieri with large sheep runs occupying the ranges behind. The southern plain was characterised by extensive swamp land but was used for stock farming. Extensive draining of the wetlands on the Taieri began to reorder the environment, leading to substantial loss of mahika kai. Productive land at Waikouaiti, developed in the early 1840s by Kai Tahu and European whalers turned agriculturalists, supplied many of the needs of early Dunedin.

Commercial buildings: Commercial buildings in Dunedin were mainly mercantile during the 1850s as there was no manufacturing of any scale in the region. Clothing, tools and implements were imported along with consumables such as alcohol, tea and sugar. The staple export of the province in the 1850s was wool, which was shipped to Britain through Melbourne and Sydney. In 1856, 333,314 lbs. of wool was exported to a value of almost £20,000. Wheat, oats and potatoes were also exported to other New Zealand provinces and to Australia. Most of these goods were shipped and received from the Dunedin jetty. The limited ground area of Port Chalmers prevented the construction of large there. Cargo was loaded temporarily into hulks or carried up the harbour on smaller vessels. The first substantial stone commercial building in Dunedin was built close to the corner of Princes and Rattray Streets in 1860 for the merchant, James Kilgour (Fig.13).

Figure 13: Princes St looking south in 1860 from the Cutting.
The **Mechanics' Institution** is in the centre of the view. **James Kilgour's stone store** is the newly constructed building on the right.

Building materials: Despite the abundance of timber in the Dunedin area, most building materials were imported. This was largely due to the absence of a saw mill large enough to supply cut timber for the construction needs of the settlement. Sixty-four wooden houses were shipped in on the *Palmyra* in 1858 and the Provincial Council was hard pressed to find sufficient timber to expand the immigration barracks in the same year. Large amounts of sawn kauri timber was purchased and

shipped from Auckland. Timber shingles were imported from Tasmania. The exposed volcanic rock that sat close to the ground surface in much of Dunedin was not ideal building material although it had been used in a number of earlier buildings. Halfway Bush was the site of a large brick works. A tender in 1852 called for the transport of 200,000 bricks for the construction of a house at Brockville for Frederick Brock-Hollinshead. [*Otago Witness*, issue 76, 30 October 1852, p2]. A quarry at Caversham was opened to supply building stone and a lime kiln was operated in the Kaikorai Valley. A wooden horse-powered railway was constructed to lift the lime from the valley.[*Otago Witness*, Issue 76, 30 October 1852, p2]

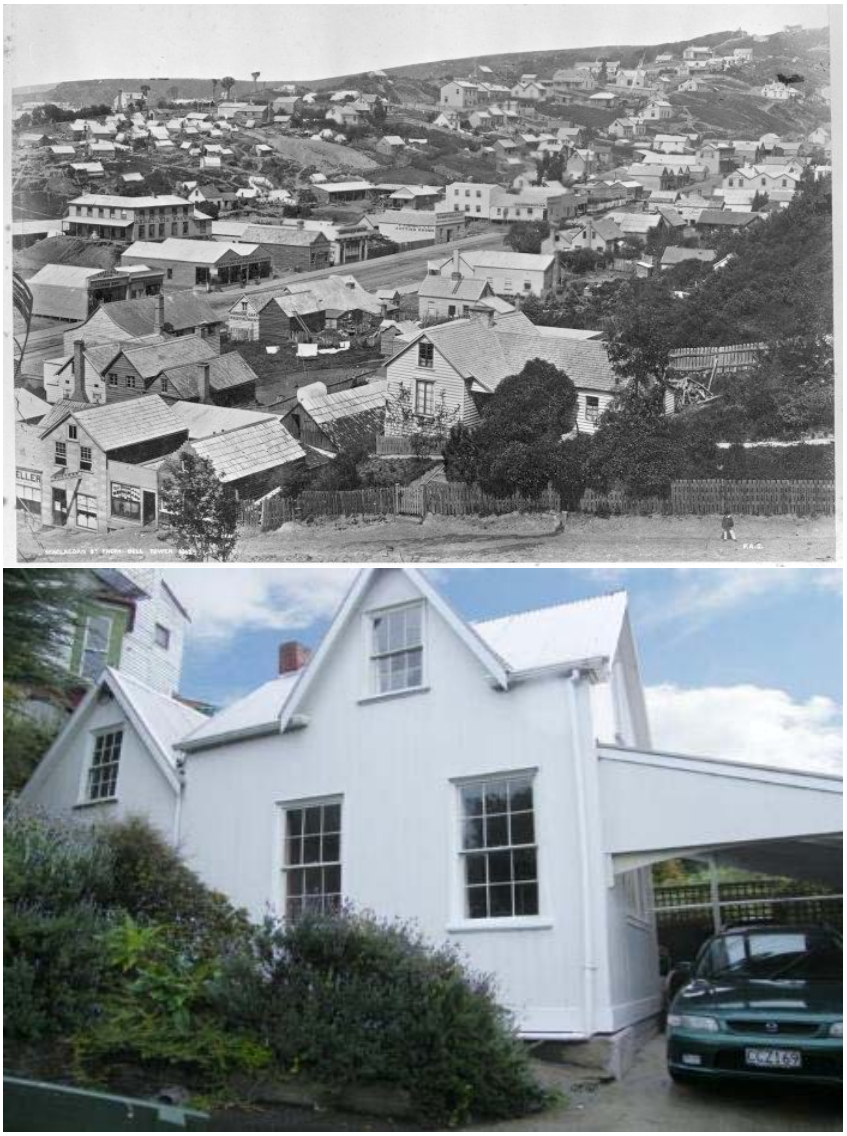


Figure 14: Mclaggan Street and Serpentine Avenue, 1862.

Top: H. F. Hardy's *Clifton* can be seen on the Graham Street ridge underneath the dark flaw at top right in the print.

Bottom: *Clifton* in **2009**

Development in the town: High, Rattray and Maclaggan Streets were metalled and drained in the late 1850s and the town quickly expanded into these attractive areas. In the inner city, buildings from the 1850s are present and often built into later structures.

One such house is *Clifton* in Graham St (Fig. 14), a 'cottage orné' by the builder/architect, Henry Frederick Hardy, which was started in 1858 and expanded in stages through the 1860s. [**B241**] Other pre-1865 houses are periodically revealed when owners find roofs of wooden shingles underneath later materials. Hardy was particularly active in the block of High Street between Graham and Grant Streets where a number of his buildings from the early1860s remain. At 32 High Street a large derelict villa with a two-storey tower was recently demolished with Council consent.

Apart from the example above, there is little surface evidence of building from the first decade of settlement in the commercial part of the city, due to large-scale modification of the site for levelling and reclamation. This process was well underway by the 1860s but Charles Kettle's house and other structures from the 1840s were still in place when the area was cleared for the Otago Provincial Council building in 1865. Other official buildings completed during the 1850s included the Courthouse at the foot of lower Stuart Street.

Archaeological evidence of the organised settlement of Dunedin from 1848 onwards has been found in recent archaeological investigations in the urban area. As already discussed above, a timber causeway that probably dates to the 1850s was found at the Deka/Wall Street site in the central city area. This had been built on the edge of the North Dunedin Flat, which was an undulating and damp area of low flats (the floodplain of the Leith Stream to the north of Bell Hill). The original survey plans of Dunedin by Charles Kettle show the shoreline as it was when the first settlers landed, before reclamation work began in the harbour. Several slightly later maps, such as an 1863 Otago Provincial Council plan of proposed reclamation works [OPC V&P, Session XVII, 1863] show details of the shoreline and even some buildings, and can be used to determine which parts of the city have the potential for very early archaeological sites to be present. Over time, much of the original

shoreline was built up in an attempt to create dry ground, and these built-up areas of original foreshore have very high archaeological potential. Evidence of very early structures and activity can lie buried beneath later fill. Areas that have been cut down, such as the crest of Bell Hill, do not have as much potential for very early sites, although there may still be evidence of later activity. Areas with very high potential include the North Dunedin flat and the Exchange Area. The latter however, while historically very important as the location of the Maori canoe landing and associated Maori hostelry, the Surveyor's Office and the Mechanic's Institute, is deeply buried, and has had several large structures built there over the years, the foundations of which may have affected archaeological features.

2.7 OTAGO'S GOLDRUSH

While the changes that took place in Dunedin following the discovery of gold were profound, it is unwise to characterise pre-gold rush Dunedin as a struggling village with its citizens unwitting of what was about to occur. The European population of Otago had reached around 13,000 by 1861 and the province was growing faster than Auckland. An influential class of run holders emerged which held considerable political and economic swing. Gold had been noted in the rivers surrounding Dunedin over many years and reports were placed before the Otago Provincial Council by the Chief Surveyor, John Turnbull Thomson. Samples of gold-bearing quartz were analysed from Charles Suisted's property at Goodwood in 1851 but there was resistance to throwing open the settlement's future to the uncertainty of gold revenues. Despite these reservations, £500 was offered as a prize for the discovery of a gold field in 1858. Rumours of rich gold finds in Waitahuna and Tuapeka in Central Otago had circulated in Dunedin for some months prior to the rush of 1861. The scale of the resource was systematically underestimated by officials and there was general concern by run holders and other large employers that the settlement would be threatened if labour was diverted to gold digging.

Gold rushes as a social phenomenon: Stevan Eldred-Grigg has pointed out that the gold rushes which spread from Europe to North America and Australia during the mid-19th century were a manifestation of new communication technologies and a speculative economy peculiar to the period. The presence of gold in many of these places was widely known but there was no accompanying 'rush' without the presence of an expanding economy and a system of delivering large numbers of potential diggers, merchants and suppliers to one place. The death of Captain William Cargill in 1860 and the transfer of political power in the Otago region to men of capital including James Macandrew and J. L.C. Richardson led to 'boosterism' (the practice of actively promoting a city or region) in the settlement. By 1861, one in four of the whole colonial workforce was employed at the diggings. The size and extent of the Otago goldfields came as a general surprise to all and the official annual yield in 1863 was almost 18,000 kilograms, surpassing that of contemporary California. Over 85,000 people had passed through the port on their way to Central Otago in the first years of the rush. By 1865, yields had fallen and the influx of diggers moved north to Marlborough.

Figure 15: Maclaggan Street showing Henry Farley's Arcade under construction, mid-right. 1863.

Gold rush buildings in Dunedin: Dunedin's built environment was transformed by the influx of money and population during this half decade of gold discoveries (Fig. 15). Much of the commercial part of Dunedin remained timber, markedly so in the area around the Octagon which was periodically burnt out in a sequence of destructive fires in 1865 and 1867. Amongst the earliest brick commercial buildings still surviving in the city was a row of shops built in 1863 for Henry Farley on the Princes and Dowling Street corner. Farley was also the promoter of the Royal Arcade that ran between High and Maclaggan Streets. This was originally built in timber in 1861 and later reconstructed in brick. The first generation of timber buildings in the Princes Street area south of Bell Hill began to be replaced by brick and stone shops and warehouses in the mid-1860s. At the time that this report was written, a group of buildings on the corner of Stafford and Princes Streets (also dating from the early 1860s) was the subject of resource consent hearings for demolition. The corner of Rattray and Princes Streets formed the commercial hub of the town and was later the chosen site of banks, insurance offices and financial institutions. Hocken follows the history of the quarter acre corner section on the north east side from the kit set frame house built by its original owner, David Garrick, occupation by the Royal Hotel and sale to the Bank of New Zealand (BNZ) in 1863 for £9000. William Mason's impressive banking chambers stood for less than 20 years before being replaced by the current BNZ building. [**B480**]

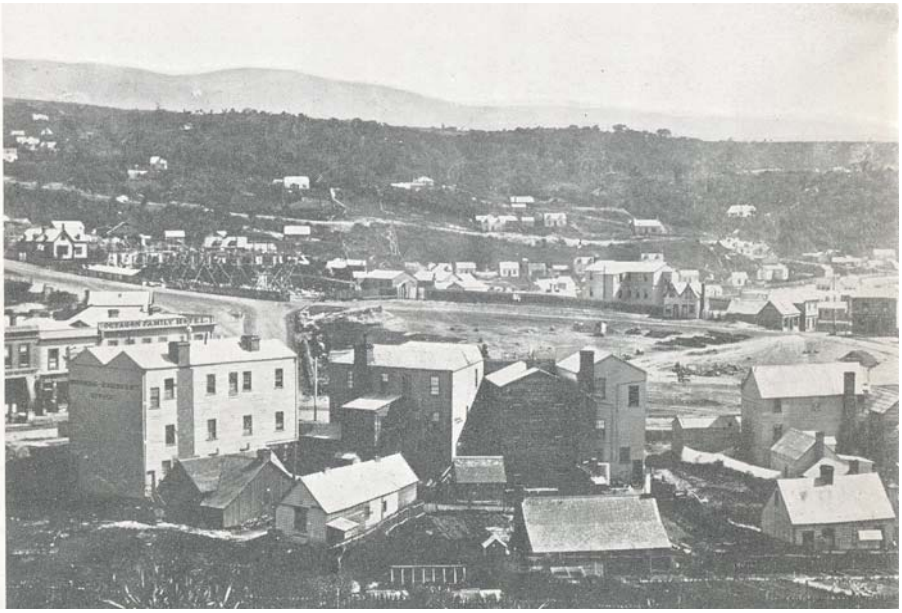


Figure 16: The Octagon in the early 1860s.
The hospital is the group of buildings to the right on the upper George Street quadrant.

Development of the Octagon: Building in the Octagon began with a single storey hospital in 1851 on the site of the present Civic Centre (Fig. 16). It stood in isolation until the early 1860s when the Anglican St Paul's Church was built on the upper north-west side and two and three storey timber buildings began filling the gaps in between. The lower two quadrants were built up to alleviate the sloping site. A monument to Captain Cargill, designed by the Otago Provincial Council engineer, Charles Swyer, was placed in its centre and lower Stuart Street levelled and raised above the boggy ground to meet the Octagon. This was becoming an important axis in the plan, as the Courthouse and Prison were at the foot of Stuart Street, facing the harbour. This area is well described in Norman Ledgerwood's *The Heart of a City: The Story of Dunedin's Octagon* (2008).

Temporary housing: These relatively orderly and planned changes were contrasted by the chaotic scenes on the hillside above the main part of town, where shanties of cheaply built timber dwellings were built. A tent village emerged on the west side of High St and hotels and boarding houses proliferated in the blocks between Rattray, Serpentine and High Streets. The great numbers arriving in the area produced an excess of labour and major projects were undertaken on a day labour system to soak up the readily available unemployed.

Early Dunedin businesses: Many of Dunedin's principal businesses were set up during the first phase of gold wealth, including:

Wright, Robertson & Company (now PGG Wrightsons),
W. Gregg and Company, coffee and spice merchants;
R Hudson and Company, (now Cadbury's);
Briscoe and Company;
New Zealand Express Company.

Large warehouses, bonded stores and workshops were built facing the harbour and available leasehold land on the reclamation was quickly taken up with considerable profits returning to the Otago Harbour Board.

Figure 17: The Chief Post Office, designed by Mason and Clayton and completed in 1867, was the first location of the University, Otago Museum and Art School.

Official buildings: The central government, anxious to have a presence in the newly enriched Dunedin, commissioned a Chief Post Office (Fig. 17) which was designed by William Mason. It was never used for its intended purpose and later housed the University, Museum and School of Arts, a bank and the Dunedin Stock Exchange. This building characterised Dunedin's prestige as the colony's commercial centre. Its demolition in 1969 stirred the first moves of a heritage lobby in the city.

Figure 18: The Provincial Buildings (right) **on the future site of Dunedin's Chief Post Office.** The William Mason designed Post Office beyond was modified with the arcading enclosed to house the Dunedin Stock Exchange and a multitude of small shops. *circa* **1920**

Provincial Buildings: The Provincial Buildings (Fig. 18), headquarters of the Otago Provincial Council, were built on the site of the current Dunedin Chief Post Office. The area around the small triangular reserve at the intersection of High, Rattray and Princes Streets was known as Customhouse Square with the wider area later being called the Exchange. The Customhouse itself was designed by George Greenfield and opened in 1863. It was later joined by the Telegraph Office to form an impressive rank of classical revival facades on the lower portion of High Street. The Dunedin Exhibition of 1865 was a joint project of Central and Otago governments to showcase the wealth and resources of Otago. It was held in a large Italianate plastered brick pavilion in Greatt King Street, North Dunedin. This later became the main ward block of Dunedin Hospital.

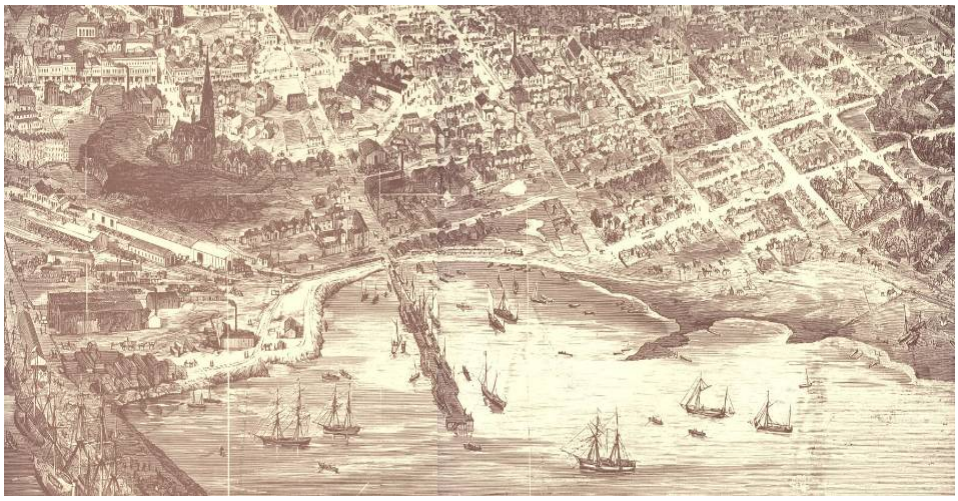


Figure 19: [Albert Charles Cooke] **Dunedin in 1875**.
An engraving showing the extent of industrial development in central Dunedin by the mid-1870s

Industrial development: The area between these key buildings was still somewhat indeterminate and the low lying ground subject to muddiness. These less attractive sites were later occupied by factories and workshops in an enclave now represented by Cadbury's factory and warehouse [**B030**] on Cumberland Street, which is itself an amalgam of earlier industrial buildings. This block is depicted in detail in the engraving *Dunedin in 1875 (*Fig. 19), an aerial perspective showing the development of the city. Other industries in this area included McLeod Brothers soap factory and A & T Burt's large foundry and plumbing

works on the corner of Stuart and Great King Streets, convenient to the wharf at the foot of Stuart Street. The wharf entered the harbour on the line of present day Mason Street while St Andrew Street was continued on a section of dry land ending in a small rocky spur that enclosed the upper section of the bay. This became a busy secondary anchorage for smaller ships and lighters. Recent archaeological investigation of the Farmers department store car park site on Great King Street revealed bricked stable floors laid over cut flax bushes. Other small concentrations of industry collected at the south end of Princes Street and at the foot of Albany Street. The city gasworks [**B021-B022**] was opened on Andersons Bay Road at the head of the harbour in 1863 but only after extensive drainage work had dried the area around the Market Reserve. While marginal in its effectiveness and causing a major conflict between the Town Board and Provincial Council, this work allowed Princes Street to be continued across the marshes and opened up low lying areas south of the town for industrial development. George O'Brien's view of the gasworks buildings shows an adjacent stream bed and there was little else in the immediate vicinity during the 1860s.

Archaeological record: The gold rushes of the 1860s caused a massive influx of people to Dunedin and Otago, and the archaeological record of this period is consequently greater and more detailed than the earlier period. Archaeological sites related to gold mining can be found from Harbour Cone on the Otago Peninsula (Knight 1964), to Saddle Hill at Green Island, and all the way through the interior to the more famous fields like the Dunstan. But the greatest effect on the archaeological record is the sheer boom in everything: population, building sizes and materials, and building density. Within ten years Dunedin changed from a town of mud and wood to one of stone and brick, and this has archaeological implications, as any sites that have a pre-rush component, such as the Deka/Wall Street causeway, will also contain a great deal of post-rush material as well.

Gold mining also led to the immigration of a far more cosmopolitan population than had previously been the case. Although many nationalities came to the goldfields, it is the Chinese who have latterly received the greatest attention, both from historical and archaeological

perspectives. Most Chinese archaeology in Otago has been carried out in the interior, as that is where the Chinese miners were headed, but almost all of these miners would have landed in Dunedin and passed through the city on their journey inland. The most recent archaeological excavations to be focused on the Chinese have been at the Chinese Camp at Lawrence in 2004.

2.8 THE VOGEL ERA

Sir Julius Vogel: While the gold boom pushed Dunedin into first ranking among New Zealand cities, the crash that followed placed strictures on further growth. A political solution to the economic paralysis that hit New Zealand in the 1870s was provided by the newly elected Premier, Julius Vogel, a Jewish newspaper editor and former member of the Otago Provincial Council. Vogel was Premier from 1873 to 1875 and again in 1876. Following this he was agent-general for New Zealand in Britain. Vogel's administration negotiated funding for a major programme of development, backed up by the *Immigration and Public Works Act* (1870). New Zealand in the 1860s had been dominated by provincial interests, leaving the country with a weak infrastructure. Vogel, acting as colonial treasurer, proposed raising 10 million pounds from British lenders and investors to fund the construction of roads, railways and communication to be publicly owned and administered by the central government. This ushered in the end of the Provincial Government system which was disestablished in 1876. Borrowing greatly exceeded the already large figure of £10,000,000, with public debt rising to over £28,000,000 in the 1880s.

Figure 20: ***Josephine,*** part of the rolling stock of the Dunedin-Port Chalmers Railway Company, is New Zealand's oldest surviving locomotive.

Vogel's public works scheme: New Zealand had a population of around 250,000 in 1870 with only 74 kilometres of railway serving the entire country. The *Public Works Act* projected some 2500 kilometres would be constructed at a cost of £7,500,000. The Dunedin-Port Chalmers Railway (Fig. 20) was started by the Otago Provincial Council in 1870. This was constructed to connect the port to the city where reclamation along the harbour edge provided extensive areas for warehousing but where there was no deep water anchorage. The central government took over the project in 1873, purchasing the line, stations, locomotives and rolling stock from the private Dunedin-Port Chalmers Railway Company for £187,106. The line opened in 1872 and its embankment partly underlies the present State Highway 88. The main south trunk railway between Sawyers Bay and Waitati was completed between 1874 and 1875 and Vogel's programme of national railway construction eventually connected Dunedin by land to the rest of the country.

The new railway line which entered Dunedin on a sweeping arc from Black Jack's Point near Ravensbourne created a new axis for future street planning. While Rattray Street was extended following Kettle's grid, later streets on the seaward side of the railway were aligned to the shape of the harbour reclamation and the extensive shunting yards that developed around Dunedin's various railway stations. Crawford Street was widened to accommodate the Clutha railway line as it exited the city to the south. The line was set on reclaimed land running outside and parallel to Crawford Street. There was considerable debate about the siting of a permanent passenger station with a piece of land held in reserve on Crawford Street for that purpose. There was much opposition from businesses on the cross streets who would be cut off from the harbour if this plan eventuated. The line was later moved further out onto the reclamation and the station relocated to Rattray Street. The present railway station site crossing Stuart Street was chosen by a Government-appointed commission in 1900 and the new building opened in 1906. [**B005**]

2.9 SOCIAL DEMOGRAPHICS IN 19TH CENTURY DUNEDIN

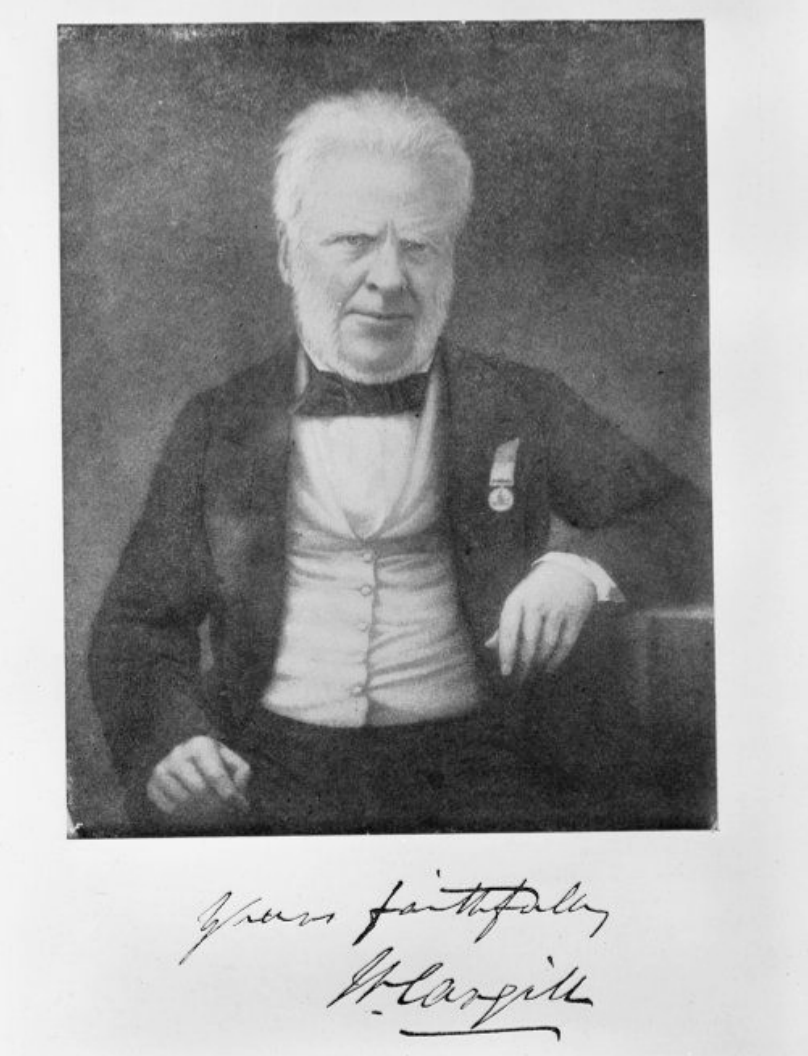


Figure 21: Captain William Cargill. *circa* **1855**

The Scottish settlement: Early census records in Dunedin compiled by the New Zealand Company and the New Zealand Government took note of the religious affiliation of those counted. On 31 March 1850, Otago's European population was 1,149 of which 888 identified themselves as Scottish Presbyterians, although this figure also included Catholics. 703 belonged to the Free Church, 122 from the Established and other branches of the Presbyterian Church of Scotland, 42 from the Church of Otago. 21 Roman Catholics were also counted amongst this group. The English community totalled 261, of whom 206 belonged to the Church of England. Other faiths included 7 Jews, 8 Roman Catholics and "12 Irish (various)". Criticism was levelled at the Government Census, also carried out in 1850, where distinctions were

blurred between Free Church and Church of Scotland Presbyterians, although the population figure of 1,182 remained consistent.

Census interpretation: There is some difficulty in comparing census statistics for Dunedin over time but these proportions remained relatively constant through the 1850s. The December 1858 Census gave a population of 1,712 for the Town of Dunedin and a total of 6,944 for the entire province, which included Southland. The genders were close to equal in Dunedin with 863 men and 849 women. The town was youthful with only 19 persons aged over 60. Of the town population, 384 were English, 31 Irish and 944 from Scotland. There were 2 Germans and 61 from 'other places'. 288 were born in New Zealand. Early censuses excluded Maori but later included 'half-castes'. Chinese migration to Otago began in the mid-1860s with 1,185 Chinese counted in the 1867 census. This had grown to around 3,000 by 1871 and to 3,563 by 1874, only one of whom was a woman, Matilda Lo-Keong, who arrived in Dunedin in 1873.

Post-gold rush expansion: The population balance of the city, suburbs and wider Otago province was radically altered following the influx of settlers which began in 1861. The population of the Province grew from 27,163 in that year to 48,908 in 1864, an increase of 80 per cent. The population of Dunedin and suburbs went from 6,913 in 1861 to 21,836. The gender ratio also changed so that men outnumbered women 2:1 in 1864, although the proportions were closer to 3.5:1 in the first year of the gold rush. Much of the growth in population was felt in Dunedin centre and suburbs where close to 15,000 people were added in the three years as opposed to 6,822 over the rest of the Province. The City lost population between 1864 and 1867, falling to 12,776 but there was considerable growth in the suburban areas and a general evening of the imbalance between the sexes, as men departed the area for the newly opened gold fields on the West Coast. A measure of the well-being of the community was the construction methods used for housing; in 1874 Dunedin had 293 houses of brick and stone while Wellington had seven.

Figure 22: Dunedin in 1874. [J W Allan] *ATL Reference number:* **PA2-0010**

Suburban growth: The population of the suburbs (Fig. 22) climbed steadily through the 1870s with the population of the combined city and suburbs arriving at 42,802 in 1881. Of these, 24,377 lived in the City and 18,431 in suburban areas. Growth in Dunedin was restrained by the economic downturn of the 1880s but did not fall catastrophically as is sometimes thought. Between 1886 and 1891 the city grew by only 58 persons, reaching 50,326. Auckland had overtaken Dunedin as the most populous city by 1886, but recorded a loss of almost 5,000 people between the same dates when its population fell to 52,432. The Maori population of Otago had fallen since the 1850s. The 1891 census recorded 245 Maori and 210 'half-castes' in Otago and Southland.

2.10 DUNEDIN'S POPULATION IN THE 20TH CENTURY

The population of Dunedin and suburbs (now including Green Island) in 1901 stood at 53,294, a rise of just over 5,000 since the previous count in 1896. This growth was largely felt in the City where an extra 2,000 people were accommodated. St Kilda and South Dunedin were the fastest growing suburban areas with North East Valley and Maori Hill showing modest rises and Green Island being virtually static. By 1906 the City held some 36,000 people and the suburbs close to 20,000 for a

total population of 52,390. By this point it was an unavoidable conclusion that the northern cities of Christchurch, Wellington and Auckland were growing at a much faster rate. Auckland had reached over 80,000 and Dunedin had slipped to fourth place. Growth in the Dunedin City area had also slowed as the available land was restricted and already densely built over. The development of terrace housing in the north end of Dunedin between the 1890s and 1900 reflects these trends.

Dunedin experienced its worst decline between 1976 and 1981 as its remaining large businesses relocated out of the city. This was later combined with Government departmental restructuring that emptied out the city's old financial district. The spectre of urban decay led to the city administration supporting a combined Government and multi-national venture to establish an aluminium smelter at Aramoana. The flawed economics of the proposal became clear and the project was cancelled.

Dunedin City experienced the largest numerical decline in 'census usually resident' population count between 1996 and 2001, with a decrease of 3,801 people. In 2009, Dunedin has an approximate population of 122,000 residents of which 23,000 are tertiary students.

2.11 ETHNIC AND CULTURAL DIVERSITY

Irish migration: After the arrival of Lowland Scots and English settlers in the late 1840s, the next wave of immigrants comprised largely Irish people, who settled in substantial numbers from the mid-1850s. Most of the Irish outflow went to North America with a relatively prosperous group choosing Australia and New Zealand. Many were farmers rather than labourers and were largely of Protestant rather than Catholic background. The Anglo-Irish Protestants came from Ulster and Leinster with farming or professional experience, while Catholics were more likely to have come from Munster as labourers. Young Irish women were sought as domestic servants and to correct the population imbalance that developed after the gold rush. Controversy arose after young Irish women from the Cork reformatory were offered paid passage under the Vogel immigration scheme. Social fears about the

Irish already in Otago became more shrill as a consequence. There was no large centre of Irish population in Dunedin as there was in South Canterbury. Most of the Irish single men who arrived in Dunedin during the 1870s went to the West Coast goldfields and later worked in the coal mining industry. The Irish were heavily represented in the police force and fire service so that at the start of the 20th century, 40% of New Zealand police were of Irish descent.

Chinese migration: The loss of male population to the West Coast gold fields in the late 1860s created a major labour shortage on the Otago fields, which many felt had been exhausted for manual digging. The Dunedin Chamber of Commerce promoted a scheme whereby Chinese miners would be brought in from Victoria and 12 miners arrived in Dunedin from Australia in 1866.

Figure 23: Charles Sew Hoy *circa* 1895

Over the following three years over 2,000 Chinese men followed. Most originated from the Pearl River delta area in Guangdong province. The majority were from Panyu county and others from Siyi, Zengcheng, Dongguan and Zhongshan around the city of Canton (Guangzhou). The Otago Chinese population fell considerably in the 1870s as restrictions on the immigration of Chinese women left an ageing male

population. Many moved back into Dunedin following the slow collapse of gold digging in Central Otago, finding work in laundries, fruit shops and market gardens. Some established large and successful businesses including Choie Sew Hoy (Fig. 23) *(circa*1836–1901) whose ventures ranged from provisioning of miners to the development of gold dredges. Various measures to restrict Chinese entry to New Zealand were put in place. The *Chinese Immigrants Act* (1881) imposed a £10 poll tax which was increased to £100 in 1896. It was not until the repeal of these measures in 1944, that Chinese families could establish themselves securely, although some Chinese women and children were accepted as refugees at the start of the Second World War.

The Lebanese community: Two groups of Lebanese immigrants settled in Dunedin during the late 19th century. Catholics (Maronites) from Bsharri lived mainly in the Walker Street (later Caroll Street) area at the southern end of the inner city while families from Tripoli, who were Eastern Orthodox, favoured South Dunedin. Lebanese family names were often anglicised; Yusef became Joseph and Fakhry became Farry. The local Lebanese economy was partly based on trading in fancy goods which were sold by travelling vendors.

The Polish community: While people of Polish descent had made their way to Otago earlier, the first organised groups of immigrant Poles arrived in the early 1870s under the Vogel scheme. They were mainly agricultural labourers from German-speaking areas in Prussian-ruled western Poland. A number of families settled in the Waihola and Allanton area on the Taieri Plain, south of Dunedin city. Some, like Paul Baumgardt, took on contract work with Brodgen and Sons and worked on the construction of the Main Trunk Southern Railway Line on the Taieri Plain. These families were initially settled in wooden-framed tents at Scroggs Creek (Allanton) before shifting to the settlement of Waihola with other Polish labourers as the track progressed southward. Numbers were small until the Second World War. Even with chain migration and family members immigrating to join with those in New Zealand the entire Polish-born population of New Zealand was 97 in 1901.

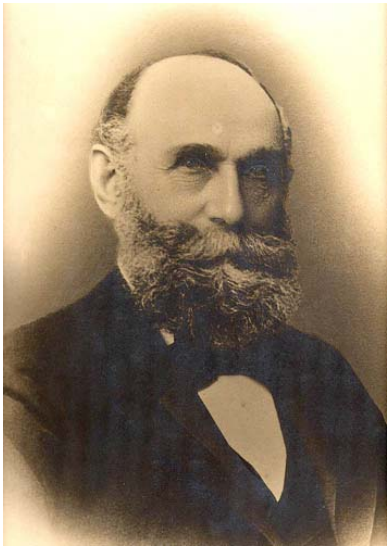


Figure 24: Bendix Hallenstein. *Photograph:* ***Otago Settlers Museum***

The Jewish community: Jewish settlers were present in New Zealand from the earliest colonial period beginning in the 1830s in Northland. Unlike in Britain, there were no restrictions on Jewish participation in New Zealand society. Many Jewish immigrants to New Zealand came via the United Kingdom or Australia where substantial business interests existed in Sydney and Melbourne. These families were largely of German descent. The Fels, de Beer, Hallenstein, Brasch and Theomin families became established in Dunedin and formed part of a tightly intermeshed community with business, cultural and philanthropic pursuits. Dunedin was an attractive destination for Jewish migrants with its close cultural and commercial connections to Melbourne. Dutch-Jewish Julius Vogel's programme of economic expansion was also an incentive. Family businesses such as Moritz and Hallenstein began as suppliers to the Victorian gold rush and set up branch businesses in Melbourne, Sydney, Perth and Dunedin. Many of these families settled in the Royal Terrace-Pitt Street area of Dunedin, below the Town Belt and overlooking the City. The Hart family lived at 8 [**B522**] and 10 [**B523**] Royal Terrace, the Halsted/Hallenstein family at 19 [**B525**] Royal Terrace and the Fels at London Street. This close concentration reflected Jewish enclaves in the United Kingdom and Australia.