

Christchurch's houses in 1900

Katharine Watson, PhD candidate, University of Canterbury

ABSTRACT: What did Christchurch's domestic architecture look like in 1900? And how had it evolved to look like that? The demolition of numerous nineteenth-century houses in the city following the earthquakes of 2010 and 2011 provides a unique opportunity to examine the development of the city's domestic architecture using the techniques of buildings archaeology. This research, which is part of my doctoral thesis, reveals a nuanced picture of how Christchurch's houses evolved and provides a starting point for understanding why these changes took place, what they might have meant and how they might have related to the city's identity.

The houses we build reflect not just who we are and what we believe in, but also the social, cultural and economic context within which we live.¹ When a house is broken down into its individual components, and these components are compared with the predominant trends of the day, more can be learnt about the person who built the house, through the choices they made about what their house was built from, where it was built, its layout and its appearance. But before such interpretations can be made, there needs to be a good baseline of data that establishes what the major trends of any given period were, in the appropriate location. To this end, while my doctoral research is concerned with how Christchurch's nineteenth-century residents constructed their identity through their houses, it is first necessary to understand what the most common elements of houses were in nineteenth-century Christchurch. This



Figure 1: The location of the houses in the sample.

¹ Johnson *English Houses 1300-1800* pp 173-174.

paper presents some of the preliminary results of my research, discussing the trends of nineteenth-century housing in the city and looking at the nature of Christchurch's houses in 1900.

Background

My PhD research draws on a sample of 101 houses, all built between 1850 and 1900, and all demolished as a result of the Christchurch earthquakes. This paper also draws on data from seven houses built between 1900 and 1910. Each of these houses was recorded by an archaeologist as a result of the archaeological provisions of, initially, the Historic Places Act 1993 and, latterly, Heritage New Zealand Pouhere Taonga Act 2014, using the techniques of buildings archaeology.² These techniques involve drawing, photography, measurements and sampling different elements of a building to document not only what the building looked like at the time of recording, but also how it changed over time. Because these buildings were being demolished, it was possible to learn more information during the demolition process –

² The houses built between 1900 and 1910 were also recorded under this legislation as it was believed at the time that they were built prior to 1900. The acts referred to only protect archaeological sites formed prior to 1900.

and to knock holes in walls and floors during the recording process. Not only does buildings archaeology involve drawing and photography, it involves documenting examples of each individual element that makes up the building, from the foundations to the floorboards to the nature of the joinery and everything in between, including all the decorative features that are part of the building. It should be noted, however, that the nature of post-earthquake archaeology meant that it was not always possible to record a building in a high level of detail.³

The focus of this paper is on what the houses looked like at the time of construction, as best this could be established using archaeological (the building themselves) and historical sources (such as photographs, architectural plans and, most commonly, newspaper advertisements). It would be fair to say that there are few houses in the sample for which it was possible to obtain a complete understanding of their appearance when first built. This is one of the problems that affects this research. Another is that it uses a sample, and this is subject to all the problems inherent in using a sample to study the past. Using

³ Watson and Garland "Shaken apart" p 260.

statistics to determine whether or not a relationship is significant is one way to mitigate some of these problems. To this end, all relationships between features that are discussed in this paper (with the exception of those related to measurements) have been determined to be significant using Fisher's exact test (where $p < .050$). The houses that were built prior to 1900 are the focus of this paper, and it concludes with a discussion of what Christchurch houses looked like between 1900 and 1910.

Christchurch houses, 1850-1900

The houses in the sample are all from Christchurch, and while there is a reasonable geographic spread across the city, there are also clear concentrations in the city's eastern suburbs, these being the areas hardest hit by the earthquakes (**Figure 1**). Of the houses, 63 were single storey and 39 two storey; 86 were detached, and the remaining 15 semi-detached. They ranged in size from 4-16 rooms and from 31.5 m² to 344.5m² (although establishing the original size of a building is something that is particularly complicated by later changes to it). Seventy-nine were weatherboard, 15 were brick and three were stone. When classified according to the house types that Jeremy Salmond illustrates, 25 were

cottages, 64 were villas, nine did not fit any of his types and there was not enough information available for about three of the houses to determine what type they were.⁴ All the houses were built by Europeans, none by Māori. Some were built as rental properties, others as private homes and a handful appear to have been speculative builds.

Only 12 of the 101 houses were built before 1875, and over a third of the houses were built in 1880-84 (Figure 2). There was a second peak, of 19 houses, in 1895-99. Clearly, this spread of houses presents a challenge when it comes to understanding change through time, particularly as the houses that survive from the earliest periods of European settlement are not typical of the majority of houses being built by Europeans in that period.⁵ These houses have survived in part because they were not like the majority of the relatively rudimentary houses built then, but were substantial houses, built of permanent materials. The peak in the early 1880s is an intriguing one, given that New Zealand is often considered to have been in a depression

⁴ Salmond *Old New Zealand Houses* pp 73-74, 168-173.

⁵ See, for example, Alfred Barker's photographs of Christchurch in 1860, held by the Canterbury Museum, Accession numbers 1944.78.211, 1944.78.122, 2016.13.7.

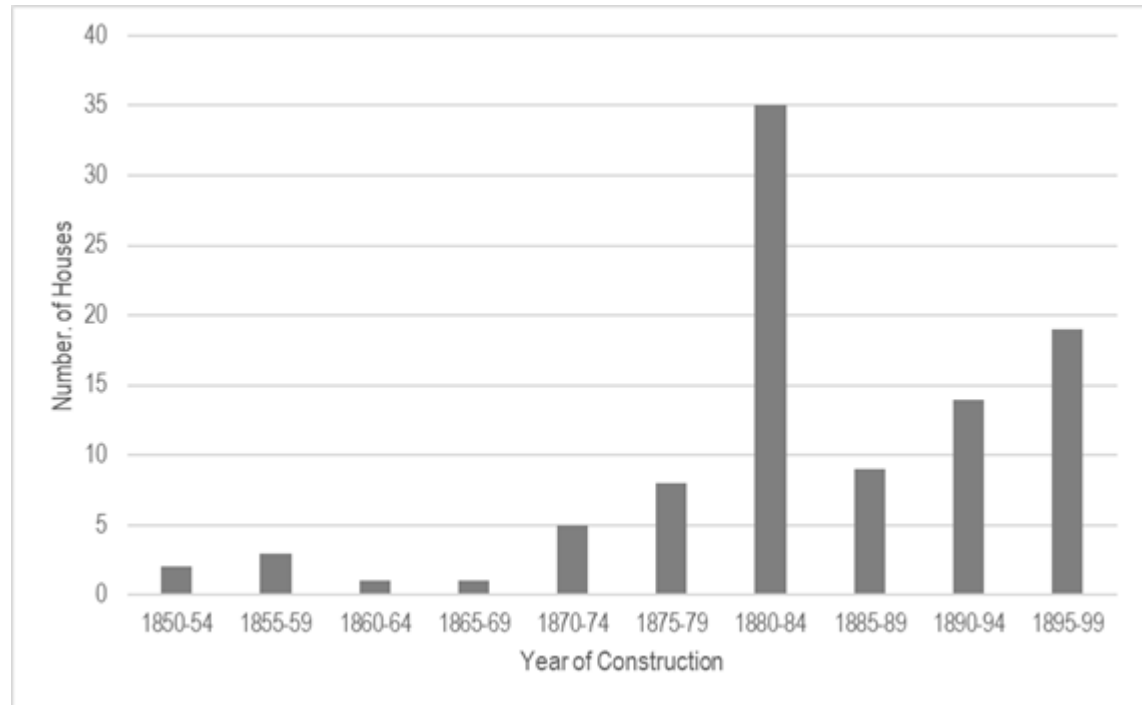


Figure 2: The year of construction of each of the houses.

(or at least a recession) in that period,⁶ and a peak in house building is not typically associated with an economic downturn of any sort. The sudden drop in construction in 1885-89 may suggest that this was when Christchurch's economy began to falter. The pattern of house construction in the sample, however, does not reflect that evident in the census, which, incidentally, does not appear

⁶ See Hunter *Age of Enterprise* pp 46-55.

to falter as the result of an economic downturn. What the census numbers do show, though, is that Christchurch's population rises sharply between 1874 and 1881, and increases at a slower rate after this. This pattern presumably reflects the results of Vogel's immigration policies,⁷ and it is possible the pattern of house construction is related to this. The pattern may also be related

⁷ Phillips and Hearn *Settlers* pp 41-42.

to the nature of the sample: it is possible that those residential areas worst affected by the earthquakes were also subject to intensive development in the early 1880s.

When the temporal pattern is broken down by Salmond's typology, a telling pattern emerges. None of the houses built prior to 1870 were villas. While the number of houses from that period in the sample is small and probably not representative of the period, it is clear from historic photographs of that era that, if any villas were built then, they would have been in the minority. The first villa in the sample dates from 1870-74, but it is not until 1875-79 that they are constructed in any number. They are built in every period following this, until at least the end of the century. In the sample, cottages are built from 1850 until 1884, and then not until the end of the century (1895-99). Also of note is that the first bay villa is not built until 1880. It is perhaps stating the obvious to say that this indicates that there was an architectural transition from cottage to villa, and that in Christchurch, this change took place in the 1870s and early 1880s, meaning that it took more than 20 years from Pākehā settlement. This raises a number of questions, including why did it take place at this time? Why did it take this long? Does this

relate to population, and/or the development of the building trade? Or both? When does this transition happen elsewhere in New Zealand?

Salmond does not have much to say about the when and why of this change. Implicit in his discussion of the two forms is that both were present in New Zealand during much of the later part of the nineteenth century, and his only written definition of the differences between the two is that villas typically had four or five rooms, were usually built in the suburbs and were "later Victorian houses."⁸ Cottages were "any simple smaller house of the same period."⁹ His drawings offer greater insight into the differences between the two, suggesting that size and roof form are the key differences, with cottages being smaller, and typically having a gable roof, although there were some with hipped roofs, but never centre gutter roofs.¹⁰ He does not give a start date for the construction of the villa, although this could be interpreted as implying that it was in the 1870s and he does note the use of the term "villa" in New Zealand newspapers from the 1860s (and that the

single bay villa or bay cottage had become a common type by the 1880s).¹¹ He offers little insight, however, into why the villa might have evolved. At a purely structural level, however, the evolution is likely to have been related to some or all of the following: decreasing costs of building materials, greater availability of building materials, a greater supply of builders, changing woodworking technologies and the introduction of new ideas about houses from overseas.¹² Factors such as general increased economic certainty and security, along with an increased confidence in the colonial venture and changing social and cultural attitudes,¹³ are also likely to have contributed to the change from cottage to villa.

The other temporal pattern of particular interest is that no cottages in the sample were built between 1885 and 1895, which may indicate that cottages had fallen from favour as trends changed and villas became cheaper to build (it is worth noting that it seems likely that cottages were built in Christchurch in this period, just that there none in the sample).

¹¹ Salmond *Old New Zealand Houses* pp 154, 155.

¹² Salmond *Old New Zealand Houses* pp 90-100; Toomath *Built in New Zealand* pp 109-110.

¹³ See Petersen *New Zealanders At Home*.

⁸ Salmond *Old New Zealand Houses* p 154.

⁹ Salmond *Old New Zealand Houses* p 154.

¹⁰ Salmond *Old New Zealand Houses* pp 73, 168-173.

Four cottages were built at the end of the century, three of which were bay cottages and thus could easily have been mistaken for bay villas from the street. While this was by no means the first time that bay cottages were built, could this resurgence of cottages reflect that people were choosing to build what was essentially a cheap imitation of a bay cottage, to give an appearance of a level of wealth/status they did not in fact have?

Salmond describes the bay villa as "a recurring type" by the 1880s "particularly in Auckland."¹⁴ But there were only 13 bay villas in the sample, compared to 51 square or rectangular villas. To what extent this is affected by the socioeconomic nature of the suburbs worst affected by the earthquakes is not yet clear, particularly given that the data suggests the bay villa was typically associated with higher status individuals. At first glance, though, these numbers suggest that the bay villa was not common in nineteenth-century Christchurch. Not only was the bay villa not common, nor was the presence of an exposed gable end on the street-facing façade of any type of house, with only 26 houses having this feature. Cottages were much more likely to

have this feature than villas, which may relate to survival i.e. a cottage that looked more like a bay villa may have been more likely to survive than one that looked like a cottage or square villa. The absence of an exposed gable end on the street-facing façade is significant, because it dramatically reduces the opportunity for decorative features, and therefore for the display of identity. As it happens, only 12 of these had any decorative elements (or evidence thereof) in this gable end, and only one featured anything approaching the ornate gable ends that William Toomath documents.¹⁵

Only six of the villas – all bay villas – had an exposed gable end, while another six had flush bays with a hip over roof. There was just one faceted bay in the sample. All of this hints at the possibility that Christchurch's nineteenth-century villas were relatively plain, and do not necessarily fit the popular image of the highly ornamented Victorian villa. This fits with my own casual observations from visiting other New Zealand cities and the houses I have seen there, where the villas seem to be more decorative than those in Christchurch. While this could to a certain

extent be a product of survival – with more ornately decorated houses perhaps more likely to survive – if this were the case for Dunedin, Wellington and Auckland, it would be reasonable to assume that it was true of Christchurch.

But gable ends were not the only potential site for decoration on the street-facing elevation, if arguably the most prominent.¹⁶ Others were the verandah, the eaves, the front door and the windows. Decoration in these areas could take a range of forms and about 50% of the houses had some form of decoration associated with the front door and/or street-facing windows, such as a moulded surround. About 50% of houses had a verandah. Of the different forms of houses, bay villas were most likely to have a verandah – and most did. Cottages were slightly more likely than square villas to have a verandah, with about 50% of square villas having one. Almost all the verandahs had some form of decoration, most commonly with the verandah posts being shaped in some way. Some of the decorative features seem to appear with the villa (although this interpretation could be skewed by the temporal spread of the

¹⁴ Salmond *Old New Zealand Houses* p 155.

¹⁵ Toomath *Built in New Zealand* Plates 18-21.

¹⁶ Toomath *Built in New Zealand* pp 140-141.

sample), such as window pediments, window brackets, stop-chamfered door surrounds, eaves brackets and protruding roofs and eaves moulding. These features all first appear in the 1870s or early 1880s. Windowsill brackets, moulded door and window surrounds, decorative bargeboards and finials, however, are all present from the 1850s.

Although a number of decorative features appear at the same time as the villa, not all have a statistically-significant relationship with a particular form of the villa (i.e. square or bay) and there is little evidence to suggest any given feature was only associated with one type of villa. In particular, there was no relationship between the decorative features associated with the surround, mullions and transom of windows and doors and a particular villa type. This supports, to a certain extent, the prevailing theory amongst New Zealand's architectural historians, that the homeowner-to-be chose the house form and plan they wanted and then added decorative features seemingly at random, with no reference to a particular style.¹⁷ These choices were not made randomly, however,

but by house builders seeking to express themselves. The adoption and use of these features at a particular time, though, may reflect availability, rather than an association with a particular form of house.

Some features did have a strong association with a particular type of villa. Window brackets, for example, were strongly associated with bay villas, and no cottages and very few square villas had them. Eaves brackets were most closely associated with square villas, with both bay villas and cottages significantly less likely to have them. There was a strong association between bay villas and the presence of windowsill brackets, but square villas and cottages were unlikely to have them. Bay villas were also more likely to have window pediments than cottages or bay villas. Eaves moulding was strongly and equally associated with both square and bay villas, but not with cottages, a pattern indicating that this feature was not associated with a particular form of the villa, but chosen by homeowners as an expression of identity. Another feature that was strongly associated with bay villas was the bay window, which is perhaps not surprising, but it was more surprising to learn that only 14% of square villas had a bay window, and that

cottages were more likely than square villas to have one. This may lend weight to the argument that bay cottages survived – and were more highly valued – because they looked like bay villas.

What all this is pointing towards is that bay villas in Christchurch were both more decorative than square villas and, partly in consequence of this, more money was spent on their construction (the form of the bay villa would, of course, make them inherently more expensive to build). Not only were bay villas generally more decorative than their square equivalent, they were also not as small as square villas. The smallest square villa in the sample was 48.6m², while the smallest bay villa was 96.2m², and over half of the square villas were smaller than this. The difference is not so stark when the relative number of rooms in the two types of villas is compared, and there is no appreciable pattern in terms of the size of the sections that the different types of villas stood on. In light of this, the pattern of the proximity of the front door to the street boundary is a striking one. This dimension was investigated to help understand the setting of the house and how visible it would have been from the street. Square villas ranged from 0-52 metres from the street front,

¹⁷ Salmond *Old New Zealand Houses* pp 177-178; Toomath *Built in New Zealand* pp 143-144.

with most falling in the 0-18 metres range, and the mode being 5-5.9 metres. The minimum distance, however, of a bay villa from the street boundary was 5-5.9 metres, but the majority (85%) were between 13 and 58 metres from the boundary. What this means is yet to be investigated in full, particularly in terms of how it relates to section size and the relative position of the house on the section, but it would certainly have given a significant sense of space, perhaps even to the extent of better capturing the early English ideal of a villa in the country,¹⁸ room for extensive display through gardens in front of the house,¹⁹ a greater possibility of screening the house from the street and possibly even room for a carriage driveway. Another question this raises is, given the likelihood that any fruit and vegetable garden was located at the rear of the house,²⁰ did the distance of these houses from the street front imply that there was no productive garden at the rear, or only a small one, and thus no need for one, thus adding to the sense of wealth already achieved through house form, size and decoration? And given

¹⁸ McKellar "The Villa" p 49.

¹⁹ Leach "The European House and Garden in New Zealand" p 81, Table 2.

²⁰ Leach "The European House and Garden in New Zealand" p 81, Table 2.

the strong association between this feature and the bay villa, what does this tell us about bay villa owners?

In terms of understanding change through time in relation to Christchurch's nineteenth-century housing, the biggest change is that from cottage to villa, a transition that occurs in the mid 1870s, with the subsequent development of the bay villa in the early 1880s. At the same time, and in some cases in a related development, a number of new decorative features began to appear on Christchurch houses. The villa, and particularly the square villa, was the dominant type of house in the city from the early 1880s until at least 1900, and it is possible that a sudden burst of construction of bay cottages at the end of the century reflects the increased status of the bay villa – and the relative cost of building one of these houses. But the results from this sample suggest that the bay villa, or even the highly decorative house, may never have been that popular in the city. This possibility – and the reasons for it – are ideas to explore further as I continue my research into nineteenth-century Christchurch housing and identity.

The Christchurch house, 1900-1910

While only seven houses built between 1900 and 1910 were examined in the course of this research, it is clear that some things stayed the same in this decade, but others were beginning to change. Two of these houses were brick, two were two-storeyed, one was semi-detached, three were square villas, one was a cottage (but not a bay cottage), two were bay villas and one was a Queen Anne style house. The square villas and the cottage could, judging by appearance alone, all have been built in the nineteenth century. Only one had a new feature, in the form of fanlights above the sash windows in a bay window on the side of the house. While this feature was present on one of the houses in the nineteenth-century sample, it was not common in Christchurch until the early twentieth century. The Queen Anne villa, however, was something quite new, in terms of style and appearance, compared to the other houses in the sample. The style was not, however, unknown in Christchurch in the nineteenth century, Samuel Hurst Seager having designed the Christchurch Municipal Council Chambers in this style in 1887 and the England brothers designed the residence

"Fitzroy" in the Queen Anne style in 1890.²¹

The two bay villas were also slightly different from their nineteenth-century equivalents, both having faceted bay windows on their street-facing elevations. There was one house in the nineteenth-century sample with this type of bay window, built in 1896. This particular house was noteworthy for being particularly grand and impressive, built in the Italianate style and built by someone in the building industry. The two early twentieth-century villas were much more ordinary houses. Although there are only three houses in the sample with this feature, the available evidence makes it tempting to suggest that faceted bays were a feature first used by the elite in Christchurch, before becoming more widespread in the early twentieth century. This hypothesis requires much more testing. One of these villas was the only house in the sample where the front door was not on the front of the house, a change associated with the move to the bungalow form and the slowly decreasing formality of social life.²²

²¹ Dunham "The Domestic Architecture of Collins and Harman" pp 36, 37-38.

²² Leach "The European House and Garden in New Zealand" p 81; Salmond *Old New Zealand Houses* p 198.

Comparing Christchurch's nineteenth- and early twentieth-century domestic architecture indicates that, unsurprisingly, the city's architecture continued to evolve from the 1850s through until 1910, at varying rates. The early twentieth century saw the first small signs of the bungalow, but there was in fact little overall change in the nature of the houses built in that decade from what had been built previously. Salmond's work suggests that it was in the next decade - the 1910s - that obvious changes in house style, and thus the appearance of houses, would begin to be seen,²³ and Helen Leach has suggested that these changes were associated with broader changes in society, as Victorian formality was replaced by a somewhat more relaxed approach to life. Unfortunately, studying these particular architectural and societal changes is outside the scope of this research, and the nature of New Zealand's archaeological protections means that the same level of data is simply not available about houses built in twentieth-century Christchurch, compared to what is available about nineteenth-century houses.

²³ Leach "The European House and Garden in New Zealand" p 81; Salmond *Old New Zealand Houses* p 185.

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