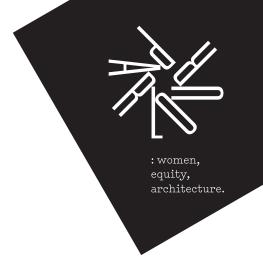


prepared by **Dr Gill Matthewson** 



# Parlour Census Report 2001–2016: Women in Architecture in Australia

Parlour Census Report 2001–2016 produced with the support of









# Parlour Census Report 2001-2016: Women in Architecture in Australia

# Introduction

Numbers matter! They
help us understand the
macro picture of women
in architecture. Analysing
data allows us to identify
patterns, both pleasing
and worrying; it provides
evidence of the structural
impediments faced by
women as a group, and
gives important context
for the stories of women in
Australian architecture.

The knowledge gained through data analysis is vital for developing strategies for change. This report analyses data from four Australian Censuses to explore the participation of women in Australian architecture from 2001–2016. This analysis shows us that the numbers of women are clearly increasing at all levels. Although welcome news, this overall trend is not surprising. Women have been part of the Australian architecture profession for more than a century, and their presence has accelerated since the 1980s when many more women entered architecture schools.<sup>1</sup>

Since the mid-1990s, women have comprised over 40% of all architectural graduates and there are many successful women working in architecture and appearing in the architectural media. Women are present in every medium to large practice in the country (and many small ones) and make up a significant proportion of architecture students. In fact, women now account for almost all of the growth in Australia's architectural population.

And yet, as this report reveals, the story of women's participation in Australian architecture is complex. Simple stories of the growth of gross numbers, along with the successes of increasing numbers of individual women, can obscure other patterns. This report takes a close look at the data of the four Censuses of the twentyfirst century. This detailed analysis shows that growth is more muted than might be expected, that women's representation at senior levels of the profession is still disappointingly low, that the gender pay gap widens as an age cohort grows older, and that many women are still disappearing from the profession altogether. But there are some positive findings in the analysis - the number of women in architecture who own businesses has increased, while the long hours that dog the profession are decreasing, and there are more women and men working part-time.

Understanding these patterns is vital if we are to continue working to address gender



inequity in architecture. Census data is particularly important, as it is more inclusive than any other count of professional participation. Data does not get more 'macro' than the Census as it includes people who may not be registered, or may not be members of professional associations.<sup>2</sup> Even better, Census data can be obtained historically, which allows us to analyse and track the progression of women (and the profession) over time.

The report also augments the Census data with information drawn from other institutional sources to produce a detailed picture of women's participation in the architecture profession.

We have also obtained Census data relating to cultural diversity. We hope that the initial analysis of this new dataset will help open up further discussion of intersectionality and cultural difference within Australian architecture.

#### **Background**

This report is based on the analysis of customised data of those who identified themselves as architects (occupation code Architect, ANZSCO 232111) in Australia in the 2001, 2006, 2011 and 2016 Australian Bureau of Statistics (ABS) Censuses of Population and Housing. To protect confidentiality, the ABS may randomly adjust data when the sub-sample is small, which can introduce some approximation.

The report builds on earlier work by Dr Gill Matthewson, mapping the participation of women in the Australian architecture profession.<sup>3</sup> It also owes a debt to reports by others of similar data from the 2006 and 2011 Censuses.<sup>4</sup>

The Parlour Census Report 2001–2016: Women in Architecture in Australia is part of the ongoing commitment by Parlour to improve equity and diversity in the architecture profession. It is intended as a reference document to be broadly available to architects and others with an interest in

the participation of women in the architecture profession in Australia.

Please use the following reference when citing from the report:

Gill Matthewson, *Parlour Census Report* 2001–2016: Women in Architecture in Australia (Melbourne: Parlour, 2018).

## **Acknowledgments**

Data for the 2001 and 2006 Censuses was originally obtained for the ACA 'State of the Profession' research project, led by John Held and Sue Phillips of ACA-SA and funded through a grant from the Architectural Practice Board of South Australia.

A more detailed range of data from the 2011 Census was purchased for the Australian Research Council funded Linkage Project "Equity and Diversity in the Australian Architecture Profession: Women, Work, and Leadership (2011–2014)" (Australian Research Council Linkage Project LP100200107, 2010) led by Dr Naomi Stead. Parlour is an offspring of this project.

The 2016 data was obtained through a collaboration between Parlour and the Architects Accreditation Council of Australia (AACA). The data analysis and writing of this report was supported by the National Committee for Gender Equity of the Australian Institute of Architects and the XYX research lab of Monash University.

Thanks also to Justine Clark and Susie Ashworth of Parlour for fantastic editing and advice, Jessica Riley for the design of the charts, and Catherine Griffiths for the design of the document.

## A note about the term 'Architect'

In Australia the word architect is legally protected by Architects Acts in each state and territory. The Census relies on self-identification, and therefore does not distinguish registered architects from others working in the profession. In this report, the term 'architect' refers to this wider group of Census-identified architects.

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- 1. Julie Willis and Bronwyn Hanna, Women Architects in Australia 1900–1950 (Red Hill, ACT: Royal Australian Institute of Architects, 2001); Julie Willis, "Aptitude and Capacity: Published Views of the Australian Woman Architect," Architectural Theory Review 17, no. 2–3 (2012).
- 2. Internationally, researchers in architecture consider national censuses to be reasonably accurate for the architecture workforce. Robert Gutman, Architectural Practice: A Critical View (Princeton, NJ: Princeton Architectural Press, 1988), 23; Annmarie Adams and Peta Tancred, Designing Women: Gender and the Architectural Profession (Toronto: University of Toronto Press, 2000), 3.
- 3. Gill Matthewson,
  "The Gendered Attrition of
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- 4. RAIA, "Architects in Australia: A snapshot from the 2006 Census," (Canberra: Royal Institute of Australian Architects, 2007); Julie Connolly, "Architects in Australia: A Snapshot from the 2011 Census," ARC Linkage Project: Equity and Diversity in the Australian Architecture Profession: Women, Work and Leadership (2011–2014). September 2013, http:// archiparlour.org/wpcontent/ uploads/2014/08/ Appendix\_C\_Census\_ Report\_sml.pdf.



# Key Findings

Women are increasing their proportion of the Census identified architectural workforce, and are increasingly owners of architectural practices.

- Women are now 31% of the total architecture population of Australia, up from 28% in 2011 and 20% in 2001.
- Women have increased their share in most metrics measured by the Census.
- The proportion of women becoming registered is now much closer to their graduation rate.
- Increased numbers of women account for all the recent growth of architects in the community.
- In the largest states (Victoria and NSW), women now comprise one-third of the architecture population.
- From 2011 to 2016 there was equitable attrition of men and women from architecture for those aged over forty. This means senior women are staying in the profession.
- The median age of women has increased since 2001, and the median age for men has decreased.
- There has been a significant decrease in the number of men aged in their fifties since 2006.
- Architects identified through the Census are increasingly employees rather than employers; this applies for men as well as women.
- Women who stay in architecture are increasing their share of ownership positions.
- While long hours are still a strong feature of the architecture profession, particularly for men, there has been an easing off in recorded working hours since the 2001 Census.

Despite increasing numbers, there are many indications that discrimination still dogs women as a group.

- There is a distinct fall-off of younger women from the profession relative to their graduation rates and to the attrition of men of the same age. This unequal attrition suggests that gender biases are a contributing factor in women 'leaving', and that these intersect with other factors in complex ways.
- More than three-quarters of women are employees rather than owners.
- Women owners of architectural businesses are less likely to be employers, and are more likely to be owners of unincorporated (typically smaller) businesses than men.
- The gender pay gap persists. The gap has slowly decreased over the twenty-first century, but still trends upwards as a cohort ages.
- The pay gap remains when data from employees only is analysed separately.

New data analysis provides a preliminary understanding of cultural diversity in Australian architecture.

- The number of Indigenous architects is well below the proportion of Indigenous people in the overall Australian population.
- Roughly one in three architects identified through the Census were born in countries where English is not the dominant language, such as places in Europe and Asia.
- The architectural workforce is concentrated in the metropolitan areas of the states and territories – women even more so than men. This has the potential to leave those in the regions more isolated.



## 1 - The Count

The proportion of women in architecture has grown from 20% in 2001 to 31% in 2016.

The straight count of women and men from the Censuses shows an increase in numbers year-on-year.

The overall count of the architectural workforce has increased by 51% in fifteen years (from 11,283 in 2001 to 16,991 in 2016). The numbers of women have more than doubled (2,296 to 5,340), and more women have been added to the architectural workforce than men: 3,044 women and 2,664 men (Table 1.1). This discrepancy is not because women are graduating in greater numbers than men, but because the majority of older and retiring architects are male.

This means that women have increased their share of the architecture population by eleven percentage points over this period, from 20% in 2001 to 31% in 2016. In 2016, the most populous states of New South Wales and Victoria are one-third women.

**Table 1.1**Architects in Australian states from the Census, by gender, 2001–2016

		2001			2006			2011			2016	
State	Men	Women	M : W	Men	Women	M : W	Men	Women	M : W	Men	Women	M : W
ACT	188	35	84 : 16	238	66	78 : 22	243	71	77 : 23	232	71	77 : 23
NSW	3,476	998	78 : 22	3,754	1234	75 : 25	3,634	1,554	70 : 30	4,147	2,011	67 : 33
NT	55	9	86 : 14	42	16	72 : 28	55	24	70 : 30	34	22	61 : 39
QLD	1,450	255	85 : 15	1,734	431	80 : 20	1,759	537	77 : 23	1,801	704	82 : 28
SA	518	114	82 : 18	569	126	82 : 18	630	184	77 : 23	632	216	75 : 25
TAS	112	18	86 : 14	169	43	80 : 20	202	47	81 : 19	202	69	75 : 25
VIC	2,412	709	77 : 23	2,813	911	76 : 24	3,299	1,372	71 : 29	3,592	1,804	67 : 33
WA	776	158	83 : 17	880	259	77 : 23	1,010	355	84 : 26	1,011	443	70 : 30
total	8,987	2,296	80 : 20	10,199	3,086	77 : 23	10,831	4,142	72 : 28	11,651	5,340	69 : 31
Grow	Growth on previous Census			13%	34%		6%	34%		8%	29%	

## Where do architects live?

The vast majority of Census architects live in the cities – 92% of women and 89% of men in 2016.

Census architects have a strong tendency to reside in the greater metropolitan areas of each state and territory capital city (Table 1.2). This distribution is much higher than for other workers. In the 2011 Census, 89% of self-identified architects lived in the major cities, compared with 75% of all professionals and 68% of all occupations. Architects tend to be bound to metropolitan centres because project work is predominantly found in such centres, and much regional work can usually be completed from a distance – although this marked



distribution pattern suggests that major parts of the country are not easily served by the profession. Within the greater metropolitan areas, architects also cluster closer to the centre of the cities rather than in the wider suburbs.

This is not to say that there are no architects living outside the centre of the metropolitan cities, but they are rarer and may therefore be relatively isolated from the companionship, activities and events that support architects in the main centres, as well as access to CPD. Such isolation also can be a potential risk factor for the mental health of architects in the regions. 6 Women in the regions may face different or additional challenges to their urban counterparts. This is an area that would benefit from further research.

Overall, there has been little change for Australia as a whole over the years of the Censuses in this pattern of metropolitan concentration. However, there is some variation between states and genders (Table 1.2).

Table 1.2 Proportion of architects living in metropolitan areas by gender, 2011-2016

		2001		2006				2011			2016	
State	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
NSW	89%	92%	90%	88%	91%	89%	88%	90%	89%	88%	92%	89%
NT	76%	60%	72%	77%	71%	76%	85%	74%	82%	68%	73%	70%
QLD	72%	78%	73%	72%	80%	73%	77%	83%	78%	77%	84%	79%
SA	96%	97%	96%	95%	100%	96%	97%	98%	97%	98%	98%	98%
TAS	74%	70%	74%	71%	68%	71%	66%	65%	66%	68%	59%	66%
VIC	92%	93%	92%	92%	94%	92%	92%	95%	93%	93%	95%	93%
WA	94%	98%	95%	94%	97%	95%	96%	97%	96%	95%	95%	95%
TOTAL	88%	91%	89%	87%	91%	88%	88%	92%	89%	89%	92%	90%

In 2016, apart from the small state of Tasmania, a greater proportion of the women in each state lived in the metropolitan areas than the men - there is a consistent three to four percentage point difference between the two.

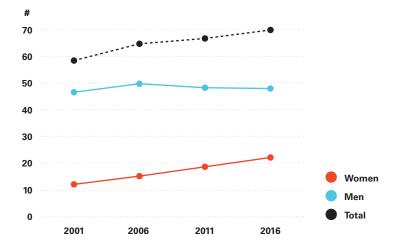
While the smaller states and territories are more vulnerable to fluctuations in percentages from Census to Census because of smaller numbers, the two most populous states show a consistent difference in their urban concentrations. In 2016, 93% of architects in Victoria lived within the greater Melbourne area - 93% of the men and 95% of the women. However, New South Wales was slightly less metropolitan-centric, with 89% living within greater Sydney - 88% of the men and 92% of the women. These two states have changed little in this pattern over the years. Queensland, on the other hand, has been less centralised historically than the two larger states, but shows an increasing concentration in the greater Brisbane area, from 73% in 2001 to 79% in 2016.



## Architects relative to population

The population of Australia has also increased since 2001, so it is useful to understand how the numbers of Census architects relate to the overall population. Figure 1.1 diagrams the number of architects for every 100,000 people in Australia. Despite the more than 50% increase in numbers from 2001 to 2016 noted earlier, the growth rate of Census architects relative to the total population is a more subdued 20.1% (from 58.4 to 69.9 per 100,000 people).

**Figure 1.1**Number of Census architects per 100,000 people by gender



Over this period, more than half of the growth relative to the population occurred in the early years of the century, which were a boom time for construction in Australia, with consequent good employment for architects.

There is also a clear gender difference in this growth, with the increased numbers of women accounting for all the recent growth of architects in the community. Women have steadily increased their numbers relative to the population (a near straight line increase). Men have been relatively stable overall, but the slight decline since 2006 caused the more muted growth of all architects as a group.

## Census architects compared to registered architects

The numbers for those who identify as architects in the Census will always exceed the numbers of registered architects – for example, unregistered architectural graduates might identify as architects in the Census, as may those whose registration has lapsed. This difference means that the Census data is very important for understanding the larger architectural workforce, and the role of registration in the wider industry.

In 2011, we determined that around two-thirds of the architectural workforce was registered, but that there were nearly twice as many women working in the profession as were registered architects. By 2016, the proportion of Census architects who were registered slightly increased from 66% to 69%. This increase is particularly marked for women, where the registered comprise 57% (compared with 51% in 2011). This is an encouraging sign. Gaining registration is an important milestone in architecture. Careers research has found that credentials such as registration particularly matter for women in the progression of their careers.

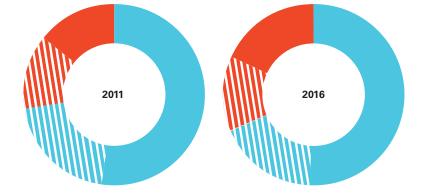
7. Matthewson, "Numbers in a Nutshell".

8. In 2016, there were 13,544 architects on the state and territory registration boards lists: 3,278 women and 10,266 men. Figures obtained through direct email request to registration boards or from their Annual Reports. Adjusting for those registered in more than one jurisdiction yields approximately 3,065 women and 8,623 men. This adjustment is based on a formula generated by the AACA national register in 2012, which found that 17% of men and 6% of women were double-ups; Gill Matthewson, "Dimensions of Gender: Women's Careers in the Australian Architecture Profession" (PhD diss. University of Queensland, 2015), 56. Until there is a single register, this calculation will always be approximate. For 2016, we have used 16% for men and 6.5% for women to account for increased women owner numbers (see section 3 of this report) and decreased men - owners being more likely to be registered multiple times.

9. Deborah A. O'Neil, Margaret M. Hopkins and Diana Bilimoria, "Women's Careers at the Start of the 21st Century: Patterns and Paradoxes", Journal of Business Ethics 80, no. 4 (2008): 273.



**Figure 1.2**Registered architects as a proportion of Census architects, 2011 and 2016



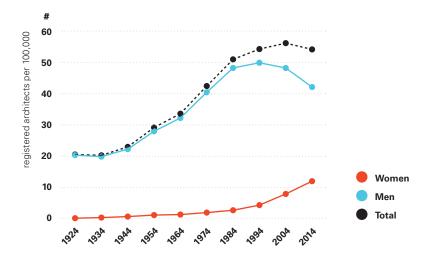
Registered men
Unregistered men
Unregistered women
Registered women

# The proportion of women in the Census who are registered has grown from 51% to 57% in five years.

It is also useful to measure the number of registered architects relative to the population. Although the number of Census architects per 100,000 people has increased since 2001 (Figure 1.1), historical data shows that the number of registered architects relative to the population has been declining since the mid-1990s (Figure 1.3). However, while registered men are declining, women are increasing – the same pattern as Census architects relative to population.



Note: Figure 1.3 uses the gross number of registered architects rather than an adjusted figure to take account of those registered in more than one jurisdiction as was used to generate Figure 1.2. This means that the actual numbers of registered architects relative to the population will be lower than those shown.



This overall decrease is even more marked when the numbers are adjusted to take account of those registered in more than one jurisdiction. In 2011, there were 10.8 female registered architects per 100,000 people, which rose to 12.6 in 2016. However, the male figure dropped over this period from 42.2 in 2011 to 35.5 in 2016. Overall, there was a decrease from 53 to 48.1.

This most recent data repeats the same pattern. Even though the proportion of registered architects to Census-identified architects increased between 2011 and 2016 (Figure 1.2), this increase was not enough to counter the overall movement downwards.

The growth in the number of women architects is very clear in all these metrics, as is the relative decline in male numbers. None of this is unexpected, given the number of women graduating from architecture schools in the past 25 years.

10. Registration figures 1924–1994 from Julie Willis, A Statistical Survey of Registered Women Architects in Australia (Adelaide: University of South Australia, 1997), 31–32; 2004 figures from Paula Whitman, Going Places: The Career Progression of Women in the Architectural Profession (Brisbane: Queensland University of Technology, 2005): 31; 2014 figures sourced from individual boards by author in 2015.



# 2 – Age

The overall Census count shows that women are entering architecture in increasing numbers – women represented more than half the numerical increase between 2001 and 2016 (53% of 5,708 people). But what happens as women age? Tracking the numbers of men and women over time reveals very different patterns for women and men.

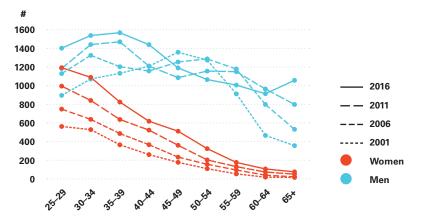
This is important for understanding the experiences of different cohorts. The profession has had trouble retaining women – the Census data allow us to understand if this is changing, and provides evidence of the need for structural change to assist women to stay in the profession.

## Age profile

The age profile for women and men is distinctly different (see Table 8.1 and Figure 2.1). The numbers for women form a clear ski slope. This pattern has not changed from Census to Census, but the slope gets steeper with each subsequent Census, as the numbers of women in each age group increase.

The age profile for men forms a less distinct pattern with more variation over time – more mountain range than ski slope. There is a marked kink downwards for men aged 40–49 in the 2011 Census and 35–44 in 2006. We suspect this is due to the poor economy that most of this cohort graduated into in the early 1990s. But by 2016, the craggy mountain range pattern has eroded to a smoother downward decline due to a dramatic loss of men who were in their fifties in 2011. There is also a sharp upward tick in those over 65 as the baby-boomer men age and boost those numbers.

The median age of women has increased since 2001, and the median age for men has decreased.



For men the median age is getting lower over time, while for women the median age is increasing. In every Census year, more than half the women are under 35, but roughly the same half-point age for men is 45. In 2001, 57% of the women were under 35; by 2016 that proportion was 51%. Men are shifting in the other direction, moving from 51% under 45 in 2001 to 55% in 2016.

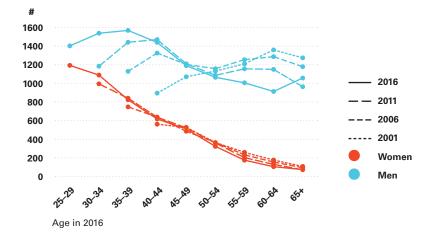
Figure 2.1 Numbers of architects from Census by age group, by gender, 2001–2016



## Age over time

The Census also tells us a lot about what happens to men and women in architecture as they age. Figure 2.2 shows the gains and losses in numbers for each age group from Census to Census. This is done by aligning the data from each Census by age group, based on the respondents' age in 2016. 11

Figure 2.2 Architects from Census aligned by age group, by gender, 2001–2016



Prior to age 40, the numbers increase from Census to Census within an age group, significantly for men and less so for women. This is due to older-aged graduates entering the workforce, immigration and architects returning from a stint abroad. Students of architecture also slip in and out of employment throughout their study, which would also affect the Census workforce.

However, at around age 40 the order of the lines flip, with declining numbers from one Census to the next - dramatically so for men and less for women. This depicts a pattern of older architects leaving.

The story behind this change in pattern is unlikely to be straightforward. No longer identifying as an architect in the Census does not necessarily mean that people have left architecture as a broader discipline. It may simply indicate leaving the direct production of buildings within an architectural practice. Teaching architecture, writing about it, as well as some specialisations, service roles, and managerial positions within an architecture firm are possible shifts that might result in people changing their self-identifications in the Census.

More women than men are not converting their degrees into architecture careers, and are leaving the profession very soon after graduating.

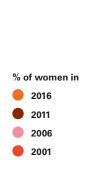
There is a strong gender twist to the data, which suggests that more women are leaving the field very soon after entering it. For example, there is an abrupt drop in the percentage of women in the cohort aged 30–34 in 2016 – they drop from 46% to 41% of the age cohort between 2011 and 2016. This is because in this period, the number of men increased by 354, while women gained just 94. Given the average graduating proportion for women was around 44% for this age cohort, this difference is curious and worrying. 12

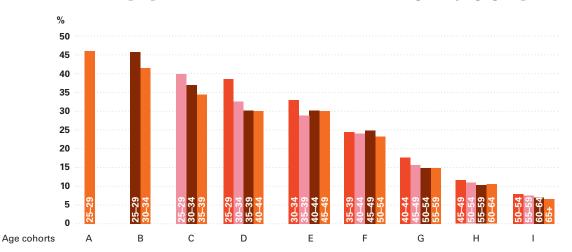


Older age cohorts also demonstrate a large loss, and show more women leaving than men. For example, by 2016 nearly one-third of the male architects and 40% of the females who were 45–49 years old in 2001 (and 60–64 in 2016) have disappeared. Of course, there is a vast cocktail of reasons why women (and men) might leave architecture, some of which would have nothing to do with gender. But if leaving was unaffected by gender, we would not see this skew.

The degree to which women leave architecture is visible in Figure 2.3, which tracks the proportion of women across the Censuses aligned by age groups.

Figure 2.3 Proportion of women in Census by age group cohort, 2001–2016





A particularly interesting pattern is evident in those over age 40 since 2011 (cohorts D to I). For most of these cohorts, the proportion of women has held steady since 2011. This 'holding level' means that from 2011 to 2016 there was equitable attrition of men and women from architecture for those cohorts. That is, older women are staying in the profession. This period covers a time of heightened awareness of gender equity in architecture in Australia. It is possible that this awareness has stemmed the flow of women from the profession to some extent.

From 2011 to 2016 there was equitable attrition of men and women from architecture for those aged over forty. This is a significant shift from previous years.

But this effect is not replicated in the younger age cohorts. This loss of younger women is of great concern because it tells a story of architectural careers thwarted right at their very beginning. For those under the age of 40 in 2016, there is a very clear pattern of women's share of the age group declining markedly as they age from one Census to the next. This confirms that more women than men leave architecture at these earlier ages. This is the typical pattern in the data, and is much more marked in the younger age groups than in the older. Women were 39% of architects aged 25–29 in 2001; by 2011 (now aged 35–39), they were nine percentage points down at 30%; two-thirds of that percentage drop occurred between 2001 and 2006. The drop for those aged 40–44 in 2001 (50–54 in 2011, and 55–59 in 2016) was much less, but followed a similar pattern of a greater loss of two percentage points by 2006, followed by a lesser one point by 2011.<sup>14</sup>

<sup>12.</sup> Data for graduates 2011 to 2013 from Matthewson, "The Gendered Attrition of Architects in Australia," 172, Table a. Note: there is, as yet, no data for graduates after 2013. It is possible that more mature men are studying architecture than women, but it is unlikely that they are of sufficient numbers to account for this abrupt drop.

<sup>13.</sup> See Ann de Graft-Johnson, Sandra Manley and Clara Greed, Why Do Women Leave Architecture? (Bristol: University of the West of England, 2003) for a list of reasons why women (and men) might leave.



The notable exception to the declining pattern from 2001 to 2011 was for women in their mid-forties to mid-fifties in 2016, who actually increased their share of Census architects in 2011. These are likely to be women returning to architecture after time out with children in their thirties. Those in their late forties have kept this proportion into 2016, but those in their early fifties have declined slightly again.

#### Census compared with graduation

The number of women in each age group declines with age (Table 8.1). To some extent, this pattern reflects the fact that women have only reached substantial proportions of graduates since the mid-nineties. However, the Census still shows a marked decline in women's participation compared to their approximate graduation rates. Figure 2.4 compares women as a percentage of the workforce within their age groups with the approximate graduation rate for that cohort. The pattern is similar to that of 2011.

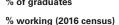
The black outline shows the percentage of women graduating for each age cohort, while the solid yellow circle shows the percentage of women working in architecture for that cohort in 2016. If leaving architecture was unaffected by gender, then the black and yellow circles would be the same size in every age group. In fact, the yellow dots contract within the black circle for every age cohort except the youngest, where the proportion of women in the workforce is greater than that of female graduates. The contraction is abrupt for women in their thirties and then holds steady from Census to Census in the later years (except for those aged 50-54 in 2016 who drop another two percentage points on the 2011 share).

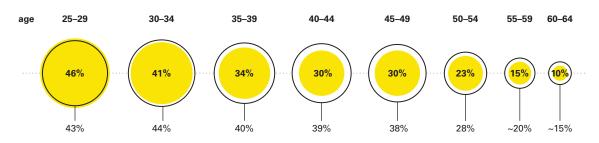
The anomaly apparent in the youngest group (where the Census circle is larger than the graduation one) may reflect the number of students and those yet to graduate working in this age group. It makes the contraction and the loss of women from the profession after age 30 even more stark.

The greater attrition pattern for women as they age, compared to men, is a significant feature of the gendered nature of the profession. Despite a degree of equitable attrition in recent years for older women, the pattern for younger women persists.









14. See "Numbers in a Nutshell" for the 2011 Census diagram



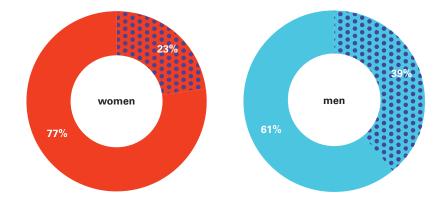
# 3 – Employment status

The employment status of women – whether they are employees or owners of architectural businesses – is another important indicator of participation within the profession. The Census shows an increased proportion of women in each employment category over the years, which relates to the overall increase in the number of women active in the profession. In 2016 women are still more likely to be employees rather than employers, however, there has also been a significant increase in the number of women in ownership positions.



Men

Owners



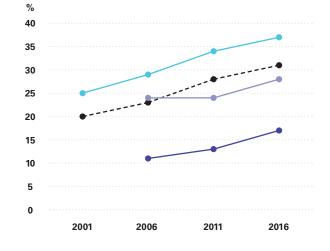
The data available through the Census categorises employment status in terms of whether someone is an employee, an owner, unemployed, or an unpaid worker in a family business. In 2016, no architects identified as unemployed or 'not in the labour force' and only a very small number nominated themselves as working in a family business.

Ownership is further categorised in terms of whether the business is unincorporated or incorporated. The latter are limited liability companies (that is, the business is a separate legal entity). All owners in this category would be principals or directors of firms. Unincorporated entities generally include sole practitioners, contract workers, consultants, and some traditional partnerships. Traditionally, only larger practices would have been incorporated; however, increasing concern over liabilities in the profession (combined with other advantages of being incorporated) means that small practices might choose to incorporate. This means that there is not always a straightforward correlation between practice size and business structure. An indication of this is that in 2016 one-third of incorporated architectural businesses did not employ people (and were therefore smaller entities). In addition, one-fifth of unincorporated businesses did have employees. Despite this statistic, on average, incorporated architectural businesses tend to be larger than unincorporated ones.



As women's numbers increase, their proportion in every employment category increases from Census to Census (Table 3.1 and Figure 3.2).

Figure 3.2 Women as a proportion of employment categories, 2001–2016



# AllOwners, incorporatedOwners, unincorporatedEmployees

## The spread across employment categories

One of the strongest patterns over time is the increasing proportion of architects who are employees – from 57% of the Census-identified architectural workforce in 2001 to almost two-thirds (66%) in 2016 (Table 8.2). This has been driven to a large extent by the high percentage of women who are employees (over three-quarters, 77%) and their increasing proportion of the architect population. But this pattern is also visible in the men: in 2001, 54% of men were employees, with that figure rising to 61% for 2016. Consequently, the overall proportion of owners declined from 2001 to 2016.

## An increasing proportion of architects are employees.

In 2011 and 2016, less than one-quarter of the women owned their own business (23%). This is actually a drop from the previous Censuses. Women were relatively evenly distributed between the two types of ownership – incorporated and unincorporated. Men, in contrast, are much more commonly owners of incorporated businesses (typically larger practices), an almost 2:1 ratio in 2016 (2,916 to 1,526).

**Table 3.1**Census architects by employment category by gender, 2001–2016

		2001				2006			2011			2016	
Employment	Men	Women	% W		Men	Women	% <b>W</b>	Men	Women	% W	Men	Women	% W
Employee	4,837	1,605	25%	Employee	5,518	2,263	29%	6,147	3,149	34%	7,045	4,077	37%
Family	11	5	31%	Family	-	-	-	82	29	26%	82	29	26%
Unknown	-	-	-	Unknown	127	38	23%	34	12	28%	82	33	29%
On Own	2,258	500	18%	Owner, unincorporated	1,251	387	24%	1,603	499	24%	1,526	605	28%
Employer	1,881	176	9%	Owner, incorporated	3,303	389	11%	2,941	453	13%	2,916	596	17%
TOTAL	8,987	2,296	20%	TOTAL	10,199	3,086	23%	10,831	4,142	28%	11,651	5,340	31%
All owners	4,149	676	14%		4,554	795	15%	4,544	952	17%	4,442	1,201	21%



#### Women as business owners

Numerically, women have increased their ownership from 2011 to 2016 by 26%, with particularly impressive growth in women as owners of incorporated companies (32%) (Table 3.2). The slight decline of 2% in the number of men in ownership over the same period is due to retirement and the strong pattern of senior men leaving (Figure 2.2). We also need to remember that such dramatic percentage growth is also a result of the smaller numbers of women to begin with. Regardless of these caveats, the women who are staying in architecture are increasing their share of ownership positions. In 2001, women comprised just 14% of all owners; by 2016, that figure was 21%. (Table 3.1)

**Table 3.2**Census architects growth by employment category by gender, 2011–2016

		Wor	nen			М	en		Total				
Employment	2011	2016	Diff.	Growth	2011	2016	Diff.	Growth	2011	2016	Diff.	Growth	
Employee	3,149	4,077	928	29%	6,174	7,045	871	14%	9,323	11,122	1,799	19%	
Unincorp.	499	605	106	21%	1,603	1,526	-77	-5%	2,102	2,131	29	1%	
Incorp.	453	596	143	32%	2,941	2,916	-25	-1%	3,394	3,512	118	3%	
Owners	952	1,201	249	26%	4,544	4,442	-102	-2%	5,496	5,643	147	3%	

# Women who stay in architecture are increasing their share of ownership positions.

The increase in women owning incorporated concerns is especially interesting and represents an important shift. Historically, the proportion of women owning small practices has been fairly close to the overall percentage of women in the architectural workforce (Table 3.1), reflecting the fact that women facing discrimination within a practice often leave to start their own. In contrast, the proportion of women owning incorporated (larger) businesses lags well behind overall figures: in 2006 and 2011 they were under half. However, in 2016 the proportion of women owning incorporated businesses lifted to just over half (17% compared to 31%). This increase hints at greater acceptance, and suggests women may be gaining increased access to power and influence in the profession and over the built environment. Influence is not solely determined by practice size, but there is a significant correlation, and larger practices have a greater role in public buildings and spaces.

## Women business owners as employers

Women owners of architectural businesses are less likely to be employers, and are more likely to be owners of unincorporated businesses than men.

The data for 2001 and 2016 reveals a sharp gender difference when it comes to owners who employ others, with women far less likely to have employees than men. In 2016, more than half the male owners have employees (53%), whereas for women the figure is 35% (albeit up from 26% in 2001; Table 3.3).

<sup>16.</sup> Dana Cuff, Architecture: The Story of Practice (Cambridge, MA: MIT Press, 1991), 145.



**Table 3.3**Census architects by employee/employer by gender, 2001 and 2016

\*Total figures do not include family workers and 'not stated'

			Num	bers			Distribution							
	2001			2016				2001		2016				
Employment	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total		
Employee	4,837	1,605	6,451	7,045	4,077	11,122	54%	70%	57.2%	61%	77%	66.3%		
On own	2,258	500	2,768	2,086	786	2,872	25%	22%	24.5%	18%	15%	17.1%		
Employer	1,881	176	2,070	2,356	415	2,771	21%	8%	18.3%	21%	8%	16.6%		
TOTAL*	8,976	2,291	11,289	11,487	5,278	16,795								
	Percen	tage of o	wners w											
	45%	26%	42%	53%	35%	49%								

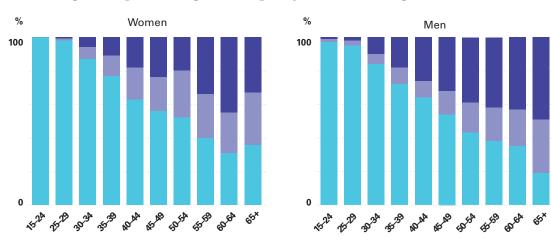
Although there has been substantial growth in the number of women employers (more than doubling from 176 in 2001 to 415 in 2016), there has been no change in the proportion of both women and men who are employers. However, the proportion of those working solo has dropped, feeding into the increasing proportion of those who have become employees.

## The influence of age on ownership

Analysing the distribution of owners/employees by age cohort provides a useful finer-grained picture of gender disparity in this area (Figure 3.3).

**Figure 3.3** Employment category by age by gender, 2016



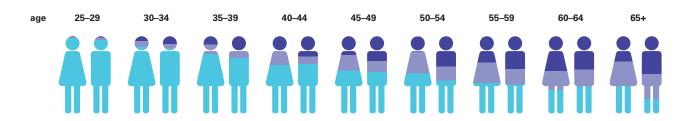


As might be expected, the proportion of those working as employees decreases as people age. The proportion of owners starts to increase for architects in their mid-thirties, a pattern that holds for women and men (and aligns with conventional wisdom that this is when architects tend to strike out on their own). Men show a very clear pattern with both forms of ownership steadily increasing with age as employees decline. The pattern for women is less predictable and, as a group, they adopt ownership more slowly. This becomes clearer when the information is represented in age pairs (Figure 3.4).



In almost all age pairs more of the women's bodies are in the pale blue of 'employee'. The proportion of dark purple 'owners of incorporated businesses' more often matches the men of the previous age group, while more of the women's bodies are in the mauve 'owners of unincorporated businesses', which generally also indicates smaller firms.

Figure 3.4 Employment category by by gender age pairs, 2016



Owners, incorporated

Owners, unincorporated

**Employees** 

By age group, women adopt business ownership more slowly than men.

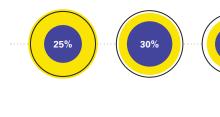
By age fifty, the proportion of male owners exceeds male employees, but women reach that state five years later. This tip-over point for men is five years later than it was in the 2011 data. This means that the next age cohort down has not followed the same pattern as their predecessors. Whatever conditions allowed men of this age (50-54 in 2016) to get into ownership were not perhaps replicated for the following age group (however, we do not have this data for previous Censuses).

#### Ownership, graduation and the workforce

The story so far is summarised in Figure 3.5, which adds women's percentage of ownership of incorporated businesses to their share of graduates and the workforce that we saw in Figure 2.4. Once again, the shrinking of the circles demonstrates women not maintaining their equitable share - except for those in the 60-64 age cohort, where women are 10% of both the workforce and owners. This is the alignment that gender equity advocacy aims for.

40-44

Figure 3.5 Comparison of participation measures for women in architecture owners of incorporated businesses



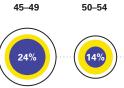
30-34

25-29

age



35-39



45-49



55-59

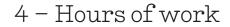


60-64

% of graduates % working (2016 census) % of all owners of

incorporated business





Long hours (complaints about them and excuses for them) are commonly reported in investigations into the profession globally. With earlier analysis of the 2011 Census, we confirmed that long hours were common in architecture and that the profession is not very tolerant of part-time hours, especially when compared to other professions.

In 2011, 40% of all architects worked over forty hours a week, compared with 31% of all professionals. Moreover, 23% of architects worked over forty-eight hours a week, compared with 18% of professionals. On the other hand, only 17% of architects worked part-time, compared with 27% of all professionals. That is a large gap, and it is strongly gendered: 13% of male architects worked part-time in 2011, just two percentage points under the average of 15% for all professional men. However, 29% of female architects worked part time, substantially under the average of 38% for all professional women. However, 29% of female architects worked part time,

The dominance of long hours has declined since 2001, markedly so for men.



The most notable trend over time is the drop in the proportion of those clocking long hours (Figure 4.1, for detailed figures see Table 8.3). In 2001, 58% of the men and 36% of the women reported working longer than the standard working week of 35–40 hours. Women's long hours have fluctuated but sit at 30% in 2016. For men, that proportion has dropped a striking thirteen percentage point difference from 58% in 2001 to 45% in 2016. Given that the proportion of men working part time increased only slightly over the period (10.5% of men worked part time in 2001 and 11.8% in 2016), the shift recorded for men towards working standard rather than long hours (from 32% of men in 2001 to 43% in 2016) is significant. It suggests that the culture of architecture may be shifting away from an entrenched attitude that long hours are the only way to practise.

The proportion of women and men recording part-time hours increased from 2001 to 2011 (less dramatically for men than women), but dropped for both into 2016 (women from 30% in 2011 to 27% in 2016; men 12.7% down to 11.8%).



Figure 4.1 Architects hours worked per week, 2001–2016



<sup>17.</sup> Ann de Graft-Johnson et al., Why Do Women Leave Architecture?; Jane Sturges, "A Matter of Time: Young Professionals' Experiences of Long Work Hours," Work, Employment & Society 27, no. 2 (2013).

<sup>18.</sup> Matthewson, "Numbers in a Nutshell."

<sup>19.</sup> Matthewson, "Dimensions of Gender," 49.



## The impact of family structure

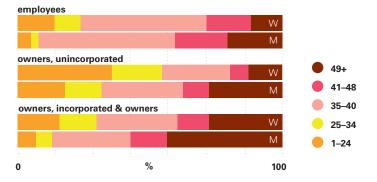
Parenthood strongly impacts on the ability to work long hours, particularly for women, but increasingly also for men. The dramatic difference between men and women in terms of hours worked is no doubt largely a result of the wider societal expectation whereby mothers are much more likely to reduce their hours to care for children.

In 2011, 41% of those who identified as architects in the Census had dependent children (6,201): 37% of the women and 43% of the men. In 2016, although the number of parents increased to 6,691, the percentage of those who were parents dropped uniformly across the board by two percentage points: 39% of all, with 35% of the women and 41% of the men. Section 2 showed the loss of older architects from 2011 to 2016, which may have had some impact on this pattern of parenthood.

## The impact of employment status

We might expect that owners of a business would work more hours than employees, and this is borne out by analysis of the data (Figure 4.2). Owners of incorporated enterprises did indeed work the longest hours - both men and women. More than one-quarter (28%) of female owners recorded working over forty-eight hours a week, as did nearly half (43%) of the male owners (the figures in 2011 were 22% and 44% respectively).





A high proportion of women and men working in unincorporated firms worked part time. This pattern supports the contention that time-flexibility is more possible within this business structure. This is emphasised when this group is compared to employees - for both men and women, a greater proportion of employees worked longer hours than did the owners of these small businesses.

## The impact of age

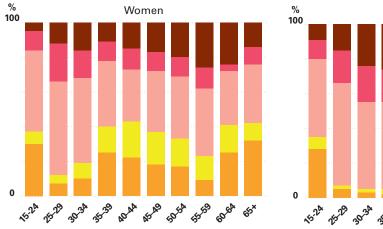
Age also matters for hours worked. There is a common perception that younger architects have to work long hours in order to learn all the complexities of the profession. The data complicates this assumption, showing that ownership levels have a greater impact: long hours increase at the same time as ownership rises from age thirty (Table 4.1).

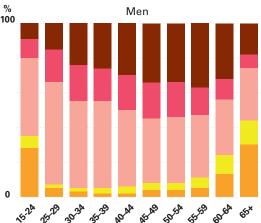


There are many more men working longer hours than women, particularly in the older age groups (Figure 4.3). The dominance of the longest-hours (more than 48 per week) for the men is very clear; for men in their fifties, it rivals the proportion of men working standard hours. More than half the men between the ages of 40 and 60 work longer than the standard working week hours.

**Figure 4.3**Hours worked per week by gender by age, 2016

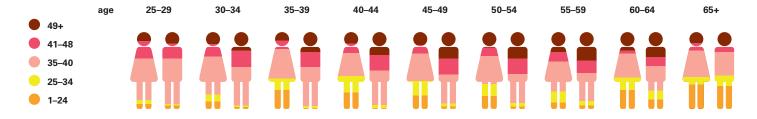






Age pairs highlight the difference between women and men in hours worked (Figure 4.4). While there are men working part-time (less than 35 hours a week) in every age group, significantly more women do so in all age groups. The only age groups that show similar work patterns are those aged over 65 and under 30. For all others, there are marked differences. The orange and yellow part-time colours are not getting much above men's ankles until they are over 60, while the pink of standard hours makes up much of the clothing of the women, but generally only covers the trousers of the men.

**Figure 4.4**Hours worked per week by gender age pairs, 2016



While long hours are still a strong feature of the architecture profession, particularly for men, there has been an easing off in recorded working hours since the 2001 Census.

To some extent, this pattern of long hours reflects the patterns of ownership seen in Figure 3.2 (which showed that significantly more men are owners of incorporated businesses) and Figure 4.2 (which showed the long hours worked by owners of such businesses).



While long hours are still a strong feature of the architecture profession, particularly for men, there has been an easing off in recorded working hours since the 2001 Census. These figures are possibly affected by economic trends, and we might have expected to see fewer architects working long hours in the 2011 Census, which was a grimmer year for architects than 2016. However, this is not necessarily the case: in lean times, architects work longer hours because fees are low. And in flusher times, some work longer hours because there is too much work to do, especially if they are the owners of their own businesses.

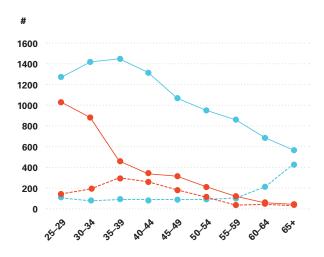
Although long hours have reduced since 2001, they have changed very little, particularly for men, since 2011. Men continue to bear the brunt of the long-hours work culture, just as women appear to bear the career consequences of not working long hours, such as reduced ownership levels.

## Working part-time

One of the best ways to demonstrate the gendered difference in hours is to divide people into those working part-time and those full time. Although Census data suggests that architecture is less-accommodating of part-time work than other professions, there are still many women who do work part-time in architecture, as compared to very small numbers of men.

**Figure 4.5**Part-time and full-time hours by gender by age, 2016

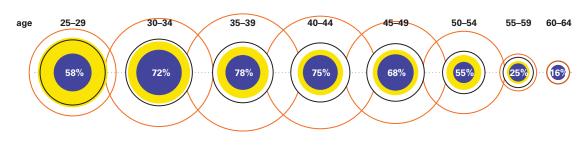




Overlaying the circles of women working part-time on Figure 3.5 reveals the substantial proportion of women working in this way. In all cases, the part-time circle is much larger than women's share of the age group.

Figure 4.6
Comparison of
participation measures for
women in architecture –
part-time work







# 5 - Income

Income is another very important indicator of inequity, in particular the presence of gender-based pay gaps. The good news from the Census analysis is that, in general, there have been increases in the numbers of people in the higher earnings brackets since 2011 and a decrease of those in the lowest for both men and women. But the gender pay gap persists.

## Gender pay gap

Gender pay gaps elicit a lot of attention in the general media. Any gap is a sign of discrimination, but no indicator is more fraught in terms of process than the pay gap. Data is often collected through online surveys from whoever responds, which means that the responses are not a 'probability sample' and are therefore not representative. The relatively small numbers gathered from such surveys can also cause outliers to dramatically skew any analysis. 20

The Census data is particularly important in this context because it counts almost everyone. It also allows a breakdown by age. This matters because men in architecture as a group are older than women, and therefore are likely to be more experienced and senior, and earning more. Census data can also be adjusted for full-time and part-time workers. Substantially more women work part-time, which also lowers their overall average earnings. Figures that are not adjusted in relation to these distortions are highly misleading.<sup>21</sup>

age group	2001	2006	2011	2016
25–29	7.7%	7.1 %	5.8%	5.2%
30–34	8.8%	9.0%	5.8%	7.0%
35–39	16.3%	9.5%	8.3%	9.4%
40–44	14.8%	14.4%	13.9%	10.3%
45–49	13.5%	15.3%	8.5%	14.6%
50–54	-	19.7%	14.8%	15.5%
55–59	-	-	17.1%	15.8%

Table 5.1 Gender pay gap by age, full-time workers, 2001-2016

The gender pay gap persists. It has slowly decreased over this century, but still trends upwards as a cohort ages.

Analysis of the pay gap data across the Census years for full-time workers by age group shows several patterns (Table 5.1). The first is that the gap within an age group generally lessens over time; for example, in 2001 the gap for 35-39 year olds was 16.3%, while in 2016 it was 9.4%.

The second pattern is that the pay gap is smallest for younger age groups. While this is positive, the presence of any gap in these early years is concerning. The 25-29 age cohort has near equal numbers of women and men (Table 2.1), and we can assume similar levels of experience. This is also the period before one of the major impediments to career progression and increased earnings (namely,

20. Gill Matthewson, "Shock Horror Statistics." Parlour, 2 March, 2016, http:// archiparlour.org/shock-horror-statistics/; "Breaking News: Women are not Condiments," Parlour, 23 February, 2017, http://archiparlour.org/ breaking-news-women-notcondiments/.

21. When we calculated the gender pay gap from 2011 Census figures without accounting for these distortions, we found a high but ultimately unhelpful figure of 20%. Gill Matthewson, "Mind the Gap," Parlour, 16 March 2016, http:// archiparlour.org/mind-the-gap/.



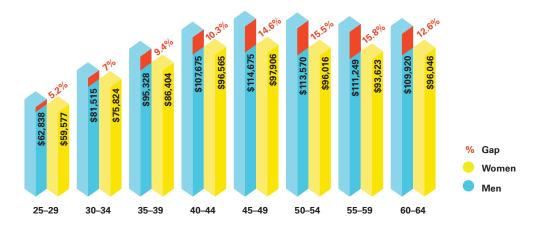
maternity) kicks in for most women. In addition, the Architects Award (2010) establishes legally mandated minimum rates of pay for junior levels including the early years following registration. Yet there is still an average gender pay difference for the age group, albeit declining from 7.7% in 2001 to 5.2% in 2016. This gap is a discouraging factor for women remaining in the profession.

While an overall 5.2% difference might seem small, it is the beginning of a pay difference that grows over time. Table 5.1 tracks what happens to an age cohort over time (indicated by the diagonal of the shaded cells). Those aged 30–34 in 2001 had an 8.8% difference; in 2016 (now aged 45–49), the gap has widened to 14.6%. This pattern is more or less repeated for the younger age cohorts (the variability with the older cohorts may be due to smaller numbers of women) and is a stark illustration of how a pay disadvantage at the beginning of a career casts a long shadow. It hints at increasing economic disadvantage, and points to opportunities not offered and a muted ability to influence the profession.

## Income disparity

In 2016, the average income for men working full time in every age group is consistently higher than that for women. The pay gap is glaringly obvious.

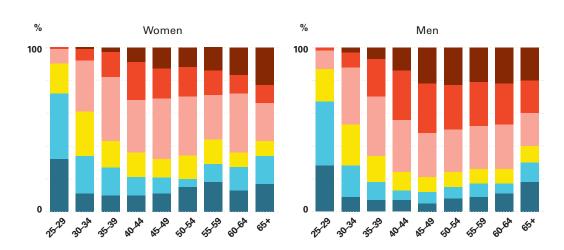
Figure 5.1 Gender pay gap by age by annual income, 2016



Another way of understanding income disparity is to consider the distribution of the different incomes per age group. Figure 5.2 shows this distribution for full-time workers.

**Figure 5.2**Distribution of full-time earnings by age group, by gender, 2016







Once again, the pattern for women is very different to that for the men. The red/brown bands of higher earnings are far more dominant for the men than they are for the women. Conversely, the blue bands of lower earnings dominate the chart for women. This becomes clearer in the age pairs shown in Figure 5.3. This diagram shows how full-time women architects as a group wear the blue 'socks and leggings' of lower earnings for longer than men, and men's faces and the upper parts of their bodies turn red/brown well before women's do.

**Figure 5.3**Distribution of full-time earnings by age group, by gender, 2016



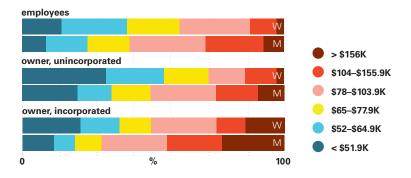


Once over the age of 45, at least half the men earn over \$104,000, taking the reds down to their belly buttons, while their heads and necks flush the brown of over \$156,000. Women never reach that level of coverage; there is no more than their head and shoulders in the red/brown zones, meaning that around 30% of women over the age of 40 earn over \$104,000.

## Pay by employment category

The pattern of ownership, with more men owning incorporated firms than women (Figures 3.2 and 3.3), might explain some of the discrepancies in pay, especially that visible in the older age groups. The annual Association of Consulting Architects Salary Survey shows that while directors of larger firms do indeed earn more, these firms also pay their employees more. Consequently, there are employees in these larger firms who sometimes earn more than or close to the directors' rates, and very often they earn much more than directors of smaller concerns.<sup>22</sup>

Figure 5.4
Distribution of pay for full-time workers by employment category, 2016



Analysing the 2016 income data by employment category shows a significantly greater proportion of both female and male owners of incorporated businesses are in the high income brackets (Figure 5.4). For the men, a higher proportion of employees are in the high earning brackets than male owners of unincorporated businesses, but the opposite is true for the women.

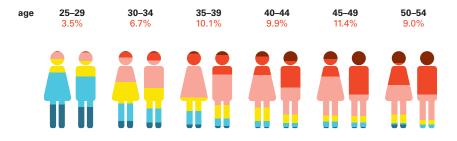
22. Gill Matthewson, "Annual Salary Survey Report, 2017," Association of Consulting Architects, http:// aca.org.au/article/ 2017-salary-survey findings.



# The pay gap persists – even when data from employees only is analysed separately.

This indicates that the earnings of owners distort the overall figures seen in Table 5.1 and Figures 5.2 and 5.3. When the same age group analysis is done of full-time employees only, the picture changes (Figure 5.5). Gender pay discrepancies still exist, but to a lesser extent than are visible in Table 5.1 and Figure 5.3. The gap drops from 5.2% to 3.5% for the critical 25–29 age group, which is a positive move. However, the difference for those aged 30–45 is very minor – less than one percentage point – which indicates that the pay gap persists even when controlling for the significant variable of ownership. (Note the older age groups are not shown because the small numbers of female employees in these groups distorts the calculations.)

Figure 5.5
Distribution of employee full-time earnings by age group, by gender, 2016

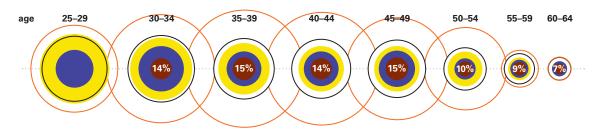




Different firms might have different capacities to pay or earn fees (as noted above), depending on their size, location, client base and types of work. However, women are now spread throughout the profession in firms of all sizes and configurations – especially in those younger age groups. The gap, therefore, is clearly problematic. It is also possible that discrepancies slip in over time within a firm. Maintaining pay equity requires constant vigilance from HR departments and/or directors/principals, and the establishment of equitable policies around recruitment and remuneration (not to mention ensuring that these policies are followed).

Figure 5.6 adds the proportion of women in the highest income bracket to the diagram of graduates, architects in the workforce and owners of incorporated businesses previously seen in Figure 4.6. The decreasing concentric circles demonstrate once again that gender infiltrates all aspects of the profession.

Figure 5.6
Comparison of participation measures for women in architecture – high earners



- % of graduates
- % working (2016 census)
- % of all owners of incorporated business
- % of all part-time workers
- % of earners over \$156K





There is increasing interest in understanding the impact of cultural background, ethnicity and race on architectural careers, and the way that these intersect with other factors such as gender.<sup>23</sup> However, there has been little research on cultural diversity in Australian architecture to date.

We have taken the opportunity to source Census data that gives some preliminary insight into the cultural make-up of the Australian architectural community. There are two sets of data available to frame these questions — those architects who identify as Indigenous, and information about the country of birth and country of parent's birth. Of course, country of birth data provides a limited understanding of cultural diversity. However, we hope that it provides a starting point for the profession to consider these questions, and to explore how multiple factors intersect in the making of architectural careers.

## Indigenous architects

Somewhere between twenty-eight and thirty-one (or 0.2%) of architects in the 2016 Census identify as Aboriginal and/or Torres Strait Islander. This figure is not precise because the ABS randomly changes cells to protect privacy when numbers are this small. This also means that the figure of five Indigenous women architects is not necessarily accurate.

Indigenous architects form a much smaller proportion of the architect population than they do of the population as a whole.

Such small numbers make statistical analysis difficult, but they do raise many larger questions. What is clear from the figures is that Indigenous architects form a much smaller proportion of the architect population (0.2%) than the proportion of Indigenous Australians in the population as a whole (2.8)%. <sup>24</sup> But these numbers also suggest that there could be more Indigenous Australians working in architecture than are registered – a figure usually described as "a handful". <sup>25</sup> Gender discrimination is by no means the only discrimination at play in architecture in Australia, and there are multiplying and intersecting challenges for Indigenous architects. <sup>26</sup> We hope that these figures make a small contribution to the work of IADV and others advocating for Indigenous architects and bringing together architectural and Indigenous communities.

## **Country of birth**

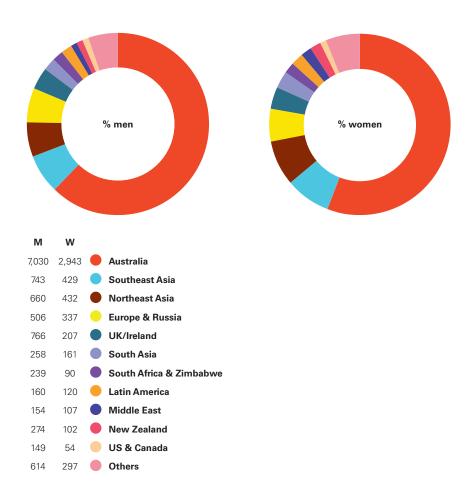
In 2016, one-third of the general population of Australia was born in a country other than Australia. For architects, the percentage was even higher – 41% were born outside the country. This strong diversity in ethnic origin among architects (like the presence of women) is not fully reflected in the senior levels of the profession or in its public culture. 28

- 23. Fiona Young, "The Bamboo Ceiling," Parlour, 10 November 2017, http:// archiparlour.org/thebamboo-ceiling/
- 24. ABS, "Census: Aboriginal and Torres Strait Islander Population" 27 June 2017, http://www.abs.gov.au/ausstats/abs@nsf/mediareleasesbyRelease Date/?OpenDocument.
- 25. Jefa Greenaway, "Connecting to Country through Architecture," Pursuit, University of Melbourne, 15 December 2017, https://pursuit.unimelb. edu.au/articles/connecting-tocountry-through-architecture.
- 26. See Indigenous
  Architecture and Design
  Victoria, http://iadv.org.au/.
- 27. ABS, "Census reveals a Fast Changing, Culturally Diverse Nation," 27 June 2017, http://www.abs.gov.au/ ausstats/abs@.nsf/lookup/ Media%20Release3.
- 28. Of course, this data gives no indication of the extent to which people identify culturally with their country of birth. Nor when they arrived in the country: some would have immigrated as children with their parents; others would be international students who have stayed on in Australia; and still others immigrated here after study in another country.



Those working in architecture in Australia were born in a wide range of countries and nearly one-third (32%) were born in non-Anglosphere countries.<sup>29</sup> There is a gender difference in where architects were born, with a lower proportion of female architects born in Australia (56% of women and 61% of men) (Figure 6.1). For men, the most common birthplaces outside Australia were the UK and Ireland, while for women it was South East Asia, China, Taiwan, South Korea and Japan.

**Figure 6.1**Architects, country of birth by gender



When we look at the country of birth of parents, the numbers increase further. More than half of Census-identified architects have one or both of their parents born overseas (55%, compared with a national figure of 49%).<sup>30</sup> More women have foreign-born parents than men (58% of the women have a mother born outside Australia and 54% of the men; 60% of women have a father born overseas, and 54% of the men).

29. For this calculation, we are using the loose categorisation of Australia, New Zealand, UK, Ireland, US and Canada as English-speaking countries that maintain a relatively close affinity of cultural, diplomatic and military links with one another.

30. ABS, "Census Reveals a Fast Changing, Culturally Diverse Nation."



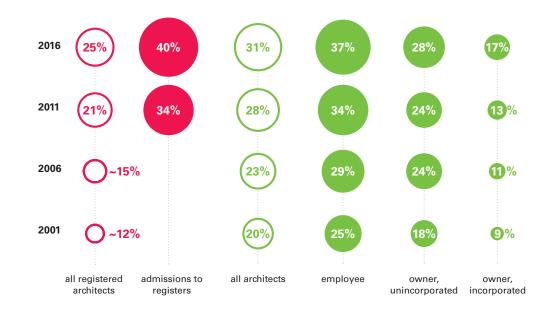




## 7 - Summary

The numbers of women in architecture have grown steadily over time, as is demonstrated through the two main metrics – registered architects and women identified as architects in the Australian Census.

**Figure 7.1**Women in Australian
Architecture, 2001–2017



Registered women

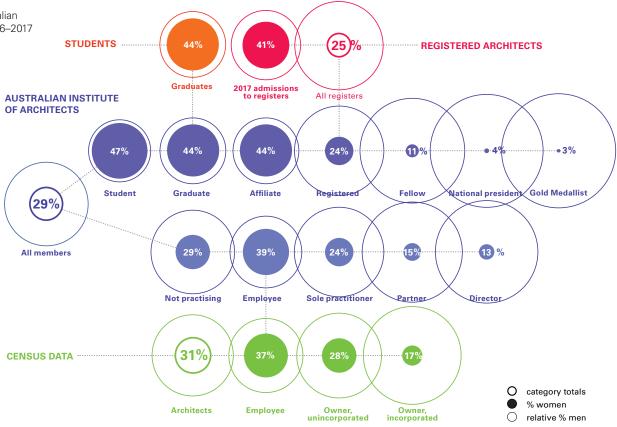
Analysis of statistical data from the Censuses shows a more complex picture of women's participation. The numbers of women are assuredly growing, but, for some, that growth is compromised by gender-based discrimination. The greater attrition pattern for women as a group compared to men in the immediate years after graduation, the persistence of the gender pay gap and the clustering of women owners in smaller businesses are all indicators that gender impacts upon in the architecture profession.

The pattern of attrition visible in the Census data is repeated in all other data sets. Figure 7.2 summarises the most recent data from all available institutional sources. It shows that, whatever the measure used, women are present in strong numbers in the junior ranks of the profession, but disappear from its senior levels.

The situation is getting better for women, but the pace of change is slow.







The premise of Parlour and its advocacy is that greater diversity in the architecture profession will improve its ability to meet the complex, challenging and changing needs of the future. Bluntly put, diversity ensures a stronger profession that ultimately makes better architecture. Achieving this goal requires concerted effort and constant monitoring. This report is part of that monitoring.



# 8 - Additional data tables



**Table 8.1**Architects in the Census by age, by gender

		2001			2006			2011			2016			
Age group	Men	Women	M : W ratio	Men	Women	M : W ratio	Men	Women	M : W ratio	Men	Women	M : W ratio		
15–24	313	209	60 : 40	336	303	53 : 47	372	329	53 : 47	472	424	53 : 47		
25–29	895	562	61 : 39	1,129	748	60 : 40	1,184	995	54 : 46	1,402	1,193	54 : 46		
30–34	1,071	528	67 : 33	1,325	638	67 : 33	1,441	841	63 : 37	1,538	1,089	59 : 41		
35–39	1,132	365	76 : 24	1,203	486	71 : 29	1,470	637	70:30	1,568	824	66 : 34		
40–44	1,209	260	82 : 18	1,157	366	76 : 24	1,210	523	70:30	1,440	618	70 : 30		
45–49	1,359	177	88 : 12	1,254	233	84 : 16	1,086	360	75 : 25	1,190	511	70 : 30		
50–54	1,274	109	92 : 8	1,287	156	89 : 11	1,156	203	85 : 15	1,065	324	77 : 23		
55–59	912	53	95 : 5	1,179	95	93 : 7	1,150	131	90 : 10	1,006	176	85 : 15		
60-64	466	18	96 : 4	798	39	95 : 5	964	73	93 : 7	913	106	90 : 10		
65+	356	15	96 : 4	531	22	96 : 4	798	50	96 : 4	1,057	75	93 : 7		
TOTAL	8,987	2,296	80 : 20	10,199	3,086	77 : 23	10,831	4,142	72 : 28	11,651	5,340	69 : 31		

**Table 8.2**Distribution of
Census architects
by employment
category by gender

	2001				2006				2011		2016		
Employment	Men	Women	Total		Men	Women	Total	Men	Women	Total	Men	Women	Total
Employee	54%	70%	57%	Employee	55%	74%	59%	58%	77%	63%	61%	77%	66%
-	-	-	-	Owner, unincorporated	12%	13%	13%	15%	12%	14%	13%	12%	18%
-	-	-	-	Owner, incorporated	33%	13%	28%	27%	11 %	23%	26%	11%	16%
Owners	46%	30%	43%	All owners	45%	26%	41%	42%	23%	37%	39%	23%	34%

**Table 8.3**Census architects hours of work by age by gender

Note: The figures here do not align with Table 2.1 because a small number do not report their hours.

						Age ç	group				
	Hours	15–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 +
	1–24	125	85	105	186	133	88	56	13	25	22
	25–34	27	55	89	113	127	98	52	22	16	7
Women	35–40	194	638	505	292	178	174	114	59	30	24
Wor	41–48	44	254	171	83	72	56	35	18	4	7
	49+	19	139	168	85	86	88	64	40	24	10
	Total	409	1,171	1,038	759	596	504	321	152	99	70
	1–24	126	70	45	36	29	40	40	47	116	300
	25–34	30	32	31	50	57	49	49	57	96	141
Men	35–40	202	804	746	763	621	433	433	348	285	301
Σ	41–48	52	265	309	293	277	237	237	161	113	82
	49+	40	205	369	401	422	399	399	355	288	185
	Total	450	1,376	1,500	1,543	1,406	1,158	1,158	968	898	1,009



# On Parlour

Parlour: women, equity architecture is a research-based advocacy organisation working for equity in architecture and the built environment. Our work is based in Australia and our material, resources and tools used across the world.

As activists and advocates we aim to generate debate and discussion. As researchers and scholars we provide serious analysis and a firm evidence base for change. As women active in Australian architecture we seek to open up opportunities and broaden definitions of what architectural activity might be.

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Parlour provides a "space to speak".

It brings together research, informed opinion and resources on women, equity and architecture. It provides places for active exchange and discussion, online and off. It seeks to expand the spaces and opportunities available to women while also revealing the many women who already contribute in diverse ways.

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