

AM CONSTANTLY FASCINATED BY THE WAYS IN WHICH ARTISTS RESPOND TO external challenges. But no-one expects encounters such as those faced by residents of the city of Christchurch in the South Island of New Zealand when it was shaken by a series of massive and destructive earthquakes. These centred on the outskirts of the city in September 2010, in Christchurch itself in February 2011 and the neighbouring port of Lyttelton on Banks Peninsula in June 2011. All had repercussions in the wider region, and were followed by well over 14,000 aftershocks.

Since that time, Cheryl Lucas, a well-known ceramics artist working in Lyttelton, has adapted her making skills to enable the hand production of roof finials, decorative tiles, bricks and chimney pots to replace originals lost from some of the city's heritage buildings. While Māori have inhabited Aotearoa New Zealand for at least 1000 years, European colonisation was comparatively recent, starting early in the 19th century. Nonetheless, many buildings from that time and in subsequent

Grace Cochrane describes the reconstruction of chimneys in the aftermath of the New Zealand earthquakes

decades are valued for their history; this is particularly relevant for Christchurch as in 1856 it was the first New Zealand settlement to be designated a city.

Dozens of buildings were destroyed or severely damaged during the earthquakes and by the consequent effects of liquefaction,

where water-soaked layers of sand and silt beneath the surface squirted through cracks of the ground, further destabilising it and wrecking buildings above. In 2012 it was reported that "To date, 174 of the 585 listed heritage buildings in Christchurch . . . and 34 of the 334 listed heritage buildings in Banks Peninsula have been demolished." But residents were resourceful, both in trying to save what they could while also seeking creative alternatives: a transitional cardboard Cathedral was erected, while retail outlets in the city centre soon started operating from a collection of shipping containers in the Re:START shopping mall. Apart from the national

Earthquake Commission, the Canterbury Earthquake Heritage Buildings Fund was also formed to provide financial assistance to owners of qualifying buildings. There was also a strong and supportive response from local art, crafts and design communities to help restore some aspects of their historic buildings as well as to think creatively about alternatives and record the event through their work.

Chimney pots, especially reproductions of those made in the 19th or early 20th centuries, may appear a strange pursuit for a contemporary artist, but Lucas has accepted these commissions for several reasons. Firstly, she sees her involvement in this process of recovery as both a privilege and a responsibility. But coincidentally, the subjects of her work in recent years have been to do with the metaphorical revisiting of rural and domestic histories, through making installations of ceramic forms such as jugs, bowls and other containers. She said in 2012, "I have a curiosity about forms, objects and images and how they can divest themselves of meaning – and how makers can influence how something is viewed, used and experienced. Fundamentally my interest

is in our social and environmental existence. The forms I make can range from the most menial functional works to large sculptural installations."

Of her award winning entry for the inaugural Premier sculpture prize at the 2011 Sculpture on the Peninsula event, Andrew Wood wrote in *Ceramics: Art and Perception:* "Tucked inside the airless round of an old slaughterhouse, Lucas's *Harder Larder* was arguably the most site-responsive of all the exhibitions, with a variety of ceramic forms



Facing page: Chimney Pot made in stoneware for Rolleston House. 2012. 650 cm. Photo by Cheryl Lucas. Above: Cheryl Lucas made the finial on the right for this chapel at Christ's College. 2011. Photo by Cheryl Lucas.

– some resembling bladders, others sausages, jugs or basins, many hung from butcher's hooks – presenting an unforgettably grim take on the traditional still life." Lucas notes now that this work was made with the earthquakes freshly in her mind: "It was a kind of response to the unavailability of supermarkets."

With regard to restoration work, however, between 2011 and 2014 Lucas has made a considerable number of sill bricks, decorative tiles, chimney pots and a roof finial. By the time the earthquakes occurred, she was already known to Ben West, in his local stonemasonry company, Stoneworks. In 2008 he had been commissioned to work on an extension to the historic Hunter building at Victoria University in Wellington, in the North Island, and had needed 16 replicas of ceramic ventilating bricks for an old part of the building. Lucas made a mould and used Abbots Brick Red clay from Dunedin to reproduce the bricks with their slotted interiors.

After the first earthquake in 2010, West was contracted to work with his team to restore stonework on a number of buildings in Christchurch and, as part of this process, brought various damaged ceramic elements (such as finials and chimney pots) back to his yard. Originally manufactured in places such as the Darfield Pottery and Homebush Pottery and Tile Works, west of Christchurch, and the Sydenham Pottery Works in the city, these items were no longer available. At this point he again approached Lucas to seek her assistance. She was keen to help, while realising that clients were anxious to replace exactly what was lost and that there would be no opportunity for contemporary design



Above: Cheryl Lucas with three replacement chimney pots made for a 1920s house, with original example second from the front.
2014. 520 cm. Photo by Peter Rough. Below left: Original broken finial on a chapel at Christ's College damaged in 2011.

Photo by Ben West, Stoneworks. Below right: Completed new finial made by Cheryl Lucas in three sections for a chapel at Christ's College. 2011. 1.75 m. Photo by Cheryl Lucas. intervention unless the function had changed. At the same time, many of her neighbours had lost their houses while her own home and studio was badly shaken and damaged.

Although all the pieces subsequently made are a far cry from working on her own ideas, Lucas says, "I have enormous respect for the people who once made these things as an extension of their work in producing drainage and sewer pipes." In a similar way, making these architectural details has also become an extension of her own studio work. "It has shown me that there is another part of me where I enjoy the process of making and of solving technical problems of scale and shrinkage. It is weird – maybe I sometimes like working within limitations." In fact, she has had to become extremely resourceful to make sure she met those limitations. Questions she asks herself include: "How authentic can I make it? What are the physical requirements? What can I manage? What budget is available?" And she marks each piece with her surname and the year, to clearly show that they are reproductions.

A consistent issue has been the need to test different clays for 10–12 percent shrinkage between making and firing, so that the new pieces would be the right proportions to fit their locations. And testing also had to be done to match clay and glaze colours and textures with materials and processes used more than a century earlier. At the same time, Lucas had to experiment with drying routines, using cloth and plastic bags over the tops of large items, and sometimes lamps inside, to ensure even drying by forcing the moisture out; some pots took two months to dry completely. And finally, to fire the big pots she developed a system of not only placing them on grit in the electric kiln, but on a circle of light card from discarded printed hoarding posters, which enabled her to safely

slide the pots in without scraping the grit or chipping the pots. "Miraculously" she says, "in all this time nothing failed."

The first commission through Stoneworks came from owners of a 1920s house in the suburb of Cashmere, who wanted 20 sill bricks with curved edges for their windows. She made the bricks in 2010 but, before the repairs were complete, the entire building collapsed in the second earthquake in February 2011.

This project was followed in 2011 by a commission to remake a roof finial for a small chapel at Christ's College, which was founded in 1850 and whose complex includes the oldest school building still in use in New Zealand. The original finial had been made in three parts to fit over





a metal shaft, so Lucas faithfully made it again in sections, coil-throwing to build the forms in a buff-coloured Abbots stoneware clay that she used for sculptural work, testing and calculating shrinkage so that the finished piece would fit the shaft and its position on the roof. She

acknowledges that her "biggest worry concerned the thickness of the scrolled part at the top of the finial, which might blow up in the kiln", so dried it slowly over several months. The 1.2 metre-high piece was finished with a satin matt glaze which she used for her own work, with slips and oxides added to make a brown colour to match

the original, which Lucas believes would have been soda-fired.

The next project was a 650cm-high chimney pot for Rolleston House, a timber building which had opened in 1919 as a hall of residence for what became Canterbury University and is now a youth hostel. Lucas worked from the architect's drawing because despite archival research there was no evidence, in either fragments or photographs, of the shape of the original, and it had to fit the existing chimney stack. Again the piece was coil-thrown, in buff stoneware, then high-fired with the satin matt glaze, this time stained with an ochre colourant. Another chimney pot was then needed for the kitchen building for the present Canterbury University site in the suburb of Ilam. The exterior and interior dimensions for this short, wide pot were critical, because it had to fit an existing vent in the chimney. Again working from the architect's drawings, Lucas threw this 500cm-wide piece in Abbot's Brick Red terracotta clay, to be left unglazed. In each case the building sequence would originally have been in reverse, with the chimneys being made to accommodate the pots.

Perhaps the most complex project was that in 2012–2013 for the chimneys of what is now the office and activity centre of Dyslexia House, built originally as an inner-city villa. Across the road from the





Above: Chimney pot made in stoneware for Rolleston House. 2012. 650 cm. Photo by Grace Cochrane. Below: One of the Duslexia House chimney stacks with tiles and chimney pots made by Cheryl Lucas on original bricks that she had refired. 2013. Pots: 700 x 480 cm. Photo by Cheryl Lucas. Left: Example of an architect's drawing showing proportions of the chimney stack for a chimney pot to go above the Canterbury University kitchen. Photo by Grace Cochrane. Bottom left: Bricklayers from Stoneworks rebuilding the stacks before Lucas' chimney pots were placed over the new flues. Photo by Cheryl Lucas. Bottom right: **Dyslexia House**.



*Photo by Grace Cochrane.* 







Above: Cheryl Lucas pointing to the chimney pot she made to replace one of the damaged pairs at Riccarton House. 2014.
Photo by Grace Cochrane.
Below left: Chimney pot components for Riccarton House awaiting final assembly before firing. 2014. 950 cm. Photo by Cheryl Lucas.
Below right: On the left, one of the 11 original chimney pots from Riccarton House, next to the replacement for the damaged 12th pot. 2014. 950 cm.
Photo by Cheryl Lucas.

Gothic-style Christchurch Arts Centre (formerly the site of Canterbury University College), it is in a busy area beside the tourist tram which runs between Cathedral Square (with its badly damaged cathedral) and the Canterbury Museum. The chimney stacks themselves were being rebuilt with 150 original bricks, but this time sliced in half lengthwise to make them lighter in weight. The stacks had been decorated with inserted patterned tiles, while each of the five original chimney pots, made at the Homebush Pottery, had four impressed patterns on their external surfaces. Lucas made 16 tiles; five chimney pots, four of them to be installed in pairs; and also refired the 150 cut, and now porous, bricks to ensure their strength.

For the decorative tiles, having started by carving plaster for a mould, she eventually decided make a cast from the two different patterns on the originals, each incorporating European floral motifs. She allowed for a slightly wider border, making the press-moulded pieces as thin as practicable to take the relief and still be safely set in place. To help make them light and

inhibit warping and shrinkage, she mixed a casting slip of terracotta clay with 25 percent soaked and shredded cheap white toilet paper. This meant she could also work on the pieces when dry to fix, finish or refire their surfaces.

The chimney-pots for Dyslexia House were massive. Originally made at the Homebush Pottery, at  $700 \times 480 \, \mathrm{cm}$  her versions were bigger than the originals because they were now to be used with a gas flue system and also had to have 'weep-holes' around each base. Working from a diagram of each location, issues included trying to make the original designs suit the larger scale and anticipating the consequent weight of the big pots on the chimney stacks. She coil-threw each one and, when they were leather hard, turned them over onto a mattress with the assistance





of her partner, Peter Rough, sliding them upside down the board. "It was terrifying turning them over." The previously and partially-cut clay rectangles marking the ventilation holes could then be further cut and popped out.

As well, each pot was to have four motifs of a chrysanthemum, a Homebush-designed version of the Imperial Seal of Japan. Lucas carved these separately, developing a system using plastic lids and incising tools to locate and mark each circle and central dot, before working on additional incisions for the radiating petals. Later, back again at Christ's College, three similar chimney pots were needed at the residential School House. These were made in the same style and decoration as those on Dyslexia house, but in the original smaller size.

An important separate commission came in 2014 from the family trust for the 160 year old

Riccarton House. Located in what has been preserved as the Riccarton Bush in the centre of Christchurch, this was the home of the pioneering Deans family, who constructed it next to the 1844 Deans Cottage, identified as the oldest remaining colonial dwelling to be built on the Canterbury Plains, following initial settlement at the port of Lyttelton. This important building had 12 chimney pots, in pairs and a group of four, but one of these metre-high pots had broken and, as it was part of a pair, it was again critical to test shrinkage and glazes to get the dimensions, shape and colour correct. This pot was not only large, but heavy, as the crown had been made separately to slide down over the column and rest on lugs below the top. "It was a critical process to lift the crown and combine them at the same stage of wetness so they would adhere and dry evenly," Lucas explains.

In late 2014 Lucas completed three more chimney pots for another house in Cashmere, a project that came her way following a report on her work in the local paper. Measuring 590cm high when wet, she planned these "plain but lovely 1920s tapered pots" to shrink to 520cm when dry. And she is excited by a new project where one of the pots, made in the early 1880s, is signed "Austin & Kirk Ch Ch", a company that she can now find out more about in a recently published book entitled *All Fall Down: Christchurch's Lost Chimneys*. As she says, "It is absolutely fascinating, and it makes you realise how important it is to mark work."

Lucas continues with her own artwork, some of which includes ceramic installations based on the plastic orange road cones and the oozing presence of liquefaction that are still such features of the city. Of her restoration work, I know that I am one who will never be able to look at chimney pots in the same way as before. But after four years, how does Cheryl Lucas feel about this significant variation in the direction of her work? "Ah, well...", she says, "I enjoy the process and I like the fact that these buildings are being repaired and that the pieces I make are useful and not just decorative. But buildings are symbolic of who we are at different times, and it has been strange to use floral motifs from another time and another part of the world. I would love to work on a new house where it would be possible interpret some of our local flora in a contemporary way."

Grace Cochrane, Member of the Order of Australia (AM), is an independent writer and curator, and former museum curator, based in Sydney, Australia. New Zealand-born, she initially studied in Christchurch, and has worked with craftspeople and related organisations since arriving in Australia in 1972, including writing *The Crafts Movement in Australia: A History* (UNSW Press, 1992).





Top: Cheryl Lucas making two replacements for a broken Austin & Kirk pot of 1879/1880 for a triple brick house built in 1885. 2015.

Photo by Peter Rough.
Above: Ben West with one of the chimney pots for the School House,
Christ's College. 2013. 520 cm.
Photo by Cheryl Lucas.