

**Don't be petrified, it's not paper, its fibre, yeast and fungi in your clay.** (abridged)

Graham Hay

*Useful insights into past trends in my own work, generalised across other contemporary clay artists, may be a result of the political, economic, and institutional environment we operate within.*

*Note that this is not a static environment, but it is a dynamic environment so that our individual and collective behaviour, and art must change over time.*

### **Historical Context**

Two years before this first published image of my work, the economic and legal environment Australian potters operated within changed radically when Gough Whitlam cut tariffs by 25 percent across the board.

Then the Industries Assistance Commission / Industry Commission(IC) / Productivity Commission continued to review (1977, 1979, 1984) and further ratchet down tariff protect for Australian made “tableware, toilets, tiles and other ceramic products”.

The TAFEs and universities appeared to be oblivious to this changing situation, and continued to teach industrial ceramic production skills, despite the jobs requiring these skills rapidly disappearing. The institutions continued to do this for nearly forty more years, partly due to institutional inertia and and strong demand for recreational classes.

This was the situation in WA in 1992 as I knew it when I changed my formal occupation from economist, to clay worker. The dismal future was confirmed when I formally approached the then Craft Council of WA, and they could not list even three West Australian ceramic artists surviving solely on studio income. I knew that it would be unlikely that I might survive financially by making what the IC categorised as “tableware, toilets, tiles and other ceramic products”.

Given this environment it appeared to me then, and now, that many professional potters are essentially affluent, highly educational individuals who have made a lifestyle choice, and cross-subsidised their loss making studio activity from alternative, sometimes related activities in the arts and fine craft administration, teaching, publishing, manufacturing, or a supportive spouse.

Those that don't have this income support, or have an unusually low cost of living and/or outstanding small business skills, didn't survive very long.

### **Plan to Survive**

Very aware (even then) of the likely influx of cheap, mass produced imports I convinced my undergraduate lecturers to exempt me from wheel throwing units, in return for doubling my hand-building units.

With over developed business skills, and a desire to survive full time as a maker, I latched onto the emerging paper clay technology.

I completed Masters level research into the medium while just an undergraduate (1992-5), and created a large body of unique work.

Images of this work also launched me around the world, exhibiting, speaking and demonstrating at first ceramic and then more and more paper clay specific exhibitions, conferences, symposiums at the national and international level (see [grahamhay.com.au](http://grahamhay.com.au)).

### **New Techniques**

I deliberately deferred buying any studio equipment, as it predetermined the shape and form of so much clay work, plus would have increased the cost of producing my work.

Today I still own no electric wheel, slab roller, wall mounted extruder or pug mill. I only bought my first kiln last year.

Instead, as an early adaptor of new clay technology, especially paper clay, I developed new (and re-discovered some old) methods which negated the need for this equipment.

For example I adding wool to paper clay slip, creating long, thin rods of dry paper clay, which could be used to create extremely delicate works.

Using paper clay probably saving me over \$30,000 in equipment, or \$3000 pa in interest/depreciation.

Treating some of my many paper clay workshops as research laboratories, I stretched the way clay was used, by demonstrating and encouraging students to dip and fire foam rubber and sea sponges. Using what I had discovered, I begun to exhibit fired foam rubber paper clay works from 2000.

Following my demonstrating at the first international paper clay symposium in 2004, a number of artists took up this technique (1) . The beauty of this material is that as the paper clay slip shrunk to plastic, to dried and during firing, the foam absorbed the pressure, and the very thin walls did not crack. Plus even when dry these “lump” could be joined together with slip to create incredibly light and strong forms. This was due to the irregular “cubes”, plus as the paper clay slip is sucked into the foam, it creates a honeycomb reinforcement within each “cube”.

I'll talk and demonstrate more about this-if you are interested, during my demonstration on Sunday.

Due to concerns about burning rubber, I also experimented with dipping cake and bread in the paper clay slip.

In 2009 I convinced a participant at a paper clay workshop for the Australian Ceramics Association, at Sydney Institute of TAFE, Gymea Campus, Sydney to bring along a bread-maker, and substituted clay power for half the flower mix.

The cooked result looked like "brown" bread, but the taste was definitely "earthy"!

Last year I repeated the exercise in my studio with different percentages and firing the result. The yeast expanded in the soft clay body to create a very light and open ceramic body.

### **The Unfired Option**

Parallel to this I have been making and exhibiting unfired works. The first was in 1996 in the *Off the Rails* exhibition at Craftwest Gallery, Perth.

A published image of this work inspired the head of the ceramics studio at the National Collage of Arts, (Lahore, Pakistan) to invite me to be an artists in resident there in 2006.

Because Shazia Mirza had invited me based upon an unfired work, I encouraged the students and staff to "experiment with not only adding paper to their clay bodies, but also plant material, foam, cloth, plus processed and unprocessed food.

I also fostered a disruption of the traditional linear process of making, drying, bisque, glaze and fire, by encouraging them to substitute glue instead of fire to bind the clay, and introducing techniques of combining fired, dry, soft and liquid paper clay.

The concluding formal exhibition featured fired and deliberately unfired paper clay works. I believe that fostering an experimental attitude is appropriate in Pakistan, as cheap Chinese imports have flooded the country, even more so than in Australia." (2)

In 2007 I summarised some of my arguments for unfired composite clay works in a short article for the now Journal of Australian Ceramics. As indicative of the renewed interest in this area, as soon as it appeared the UK Craft Potters Association sought permission to reproduce the article in their journal. (3)

In Asia unfired clay has has a long history with ritual and spiritual significance. This is less so in the West. In the 1970 Unfired Clay exhibition at South Illinois University, West Coast US artists exhibited unfired work, covered themselves and even utes with clay as performance works. This 'mud 'n dust' school of thought claimed a brief

“intellectual domination of the field” for about five years. There is mention of spiritual aspects of making clay objects which can return to the earth if left outside.(3) Whether this is due to the close conceptual link between clay human flesh, or the influence of eastern religion is debatable.

Later artist Andy Goldsworthy was to highlight unfired clay as medium, used clay both outside and within galleries to create unfired works.

Since the late 1990’s Malene Pedersen (Denmark) has been creating large unfired installations using thin sheets of unfired paper clay More recently she had added cooking spices and perfume to create works that communicate not just by sight or touch.(4)

In the US, Rebecca Hutchinson and Melody Evans have worked either exclusively or partly with dry unfired paper clay installations.(5)

More recently Phoebe Cummings in the UK has built a reputation on a similar practice constructing elaborate organic forms on site with raw clay.(6) In 2011 she was awarded £10,000 during the British Ceramics Biennial for an unfired work. It would appear that there is both a trend and acceptance for unfired works.

In 2008 I lead a workshop where participants converted over 2 ton of earthenware and terracotta paper clay into 17 mostly unfired sculptures for the Blessing of the Fleet Festival held on the Geraldton harbour jetty.(7)

The artists were then invited to exhibit all the works at an exhibition in the Geraldton Regional Art Gallery.

Afterwards the artists were encouraged to keep, or recycle, their works into further works.

## **Paper**

Despite being passionate about clay for more than 35 years, I confess I have strayed often outside this clay “box”.

Since the early 1980's people have donated paper to me for make into paper clay.

Having more paper than I needed, I developed unique techniques to compress, cut and carve this free art material.

I guesstimate that since then I have convert over 40 tonnes of donated official documents into artworks.

As the work became bigger, and increasingly were exhibited or installed outside, people begun to question the durability of the material. Being compressed, the material has the

durability of untreated hard woods.

In 2008 I decided to try to design a paper work that could quickly break down.

I sought advice from Dr Neale Bougher (Mycologist/Senior Research Scientist, with the Western Australian Department of Environment and Conservation). He gave me Scarlet Bracket Fungus “fruit” which I inserted inside a work. Unfortunately, despite sitting in water for a month, the water did not penetrate far enough into the tightly compressed paper, to encourage the fungi to grow.

I then commissioned Donna Franklin to grow the fungi, which she did at Faculty of Natural and Agricultural Sciences, at the University of Western Australia. During construction I inserted the still growing fungi into a new sculpture.

This unsealed, and only lightly compressed, work was located outside in a high rainfall area of south Western Australia.

Finally three years later, in June 2011, it is successfully started growing small fungi “flowers” on the clay and cellulose fibre!(8)

### **Building a Studio Apprentice**

In September 2010 I began researching and blogging about 3D printers, with the ambition to use them for ceramics.

This idea originally grew out of discussions with Antonella Cimatti, who slip casts and slip trails porcelain paper clay. (9)(10)

I wanted to use this technology with paper clay, but 3D plastic printers were very, very expensive.

In September 2010 I had been quoted US\$15,000 for a commercial desktop 3D printer from Dimension 3D Printers and sent a free print sample.

The breakthrough was the RepRap kit set Desktop 3 Printer started by Dr Adrian Bowyer, at the University of Bath (UK).

What triggered my interest is the claims that a machine could be built for below AU\$1,000, and that the building and operating was becoming easier (ie moved from Geek to handyman complexity).

Many people had designed improvements to the design. Plus the computer files and designs are all open source and free for anyone to download and use.

I tracked down a local inventor group who had begun printing out parts for each other,

but they underwent a clubhouse relocation and many of the machines I saw were incomplete, and untested.

I then saw that Unfold, in Belgium had modified a RapMan printer so that it printed clay!

A UK potter Jonathan Keep had contacted them and simplified their design.

In April 2012 I was invited to be an Artist in Resident in the ceramics studio at Perth central TAFE college.

A RapMan 3.2 was purchased for me to play with.

After building it, printing out new plastic parts for a clay printing head, I begun assembling and testing the machine. I will be documenting my progress on my website.(11)

## Summary

Over the years I have anticipated and responded to a changing environment outside the studio, by what I did inside the studio.

While being mad about clay for nearly 35 years, I have frequently strayed from the orthodox model/box of the studio potter.

My story is incomplete, but I hope it inspires others in their individual journey.

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