

# Superabundant: how blowing things up helped my silversmithing

By Lucian Taylor

A few years ago I was feeling somewhat disconsolate about the work I was producing as a silversmith. Whilst I had become reasonably accomplished at getting metal to 'bend to my will', it seemed this had gone hand in hand with the finished pieces being increasingly staid. Perfectionism, rather than leading to excellence was having a deadening effect on my output, plus, to be honest, I was a little short on new ideas. I wistfully thought back to the vibrancy inherent in my early student work in metal: whilst my skills and knowledge of metalwork were more limited then I was much more entranced by the possibilities of the material.

I was in need of finding a way of reinvigorating my relationship with silver.

I had the opportunity to be part of a mentorship scheme for mid-career craft practitioners. It was a long time since I had invited a third party into the inner recesses of my practice but I thought it could be a constructive method of moving things forward. My mentor, Simon Grennan, was not a silversmith or even a craftsperson but instead came from a fine art background. I think his 'outsiders' perspective proved very useful. Simon could be a harsh but fair critic. On our first meeting his pronouncement on

of my existing body of work was that the making of it had not added much more than would have been present in a drawing. Whilst this was uncomfortable to hear, he certainly had a point, and his diagnosis concurred with my own suspicions.

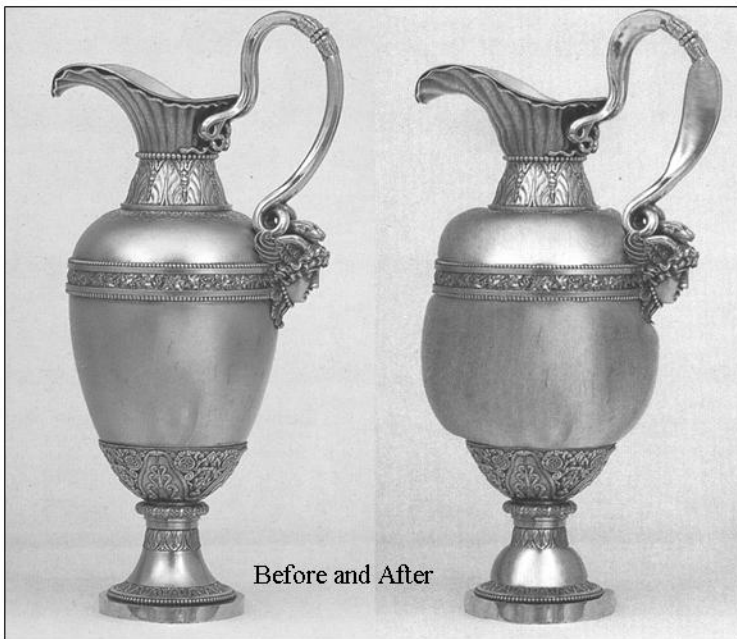
We agreed that I should step away from the bench for a period and go 'back to the drawing board'. It had been a long time since I had engaged in drawing in an open ended way rather than doing it for

design/presentation artwork. I decided I wanted to focus my ideas around themes of abundance and luxury. I had for some time been uncomfortable with the thought that if I stripped away all my artistic pretensions I was, after-all, merely a maker of inessential luxury goods. It seemed sensible and necessary to confront this disconcerting thought square on and see if I could make something creative of it rather than have it niggling away at me.

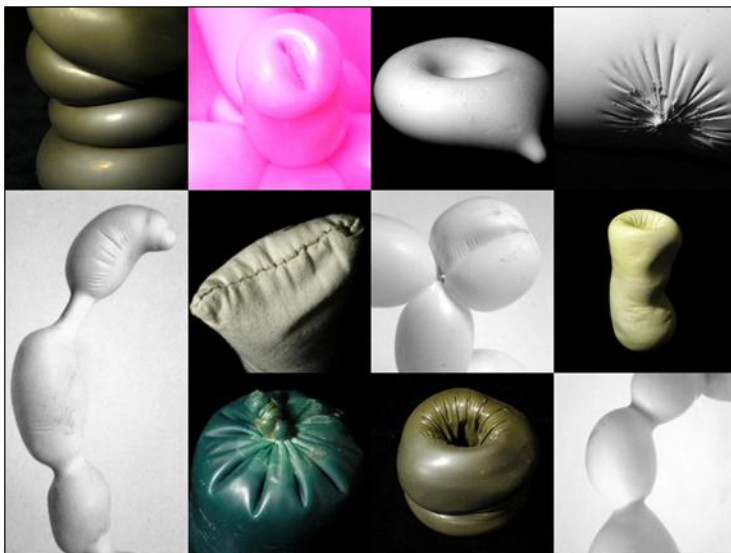
I found myself particularly drawn to the Dutch still-life painting of the 17<sup>th</sup> Century,



Wolfgang Heimbach: Woman Looking at a table



Before and After



Stuffed Membranes



Still life: donuts and coke

particularly *vanitas* paintings whose prevailing theme alludes to the futility of life and the transience of earthly joys and possessions, often the objects depicted are silverware and other luxury items, plus the obligatory skull. Vanitas paintings reveal the conflict in Dutch society between the undeniable attractions of affluence and Calvinist attitudes deriding the consumption of luxuries. There is an inherent contradiction in a vanitas painting that I immediately identified with: whilst attacking luxury it is, in itself, a luxury item. Norman Bryson's essays on still life painting: "Looking at the Overlooked" were an invaluable guide to this research.

On a more contemporary note regarding consumption and over-consumption, I also found myself fascinated by the increasing concern in Britain, America and other parts of the developed world about the growth in the population's waist line (I myself, much to my horror, had personal experience of this). Whether it was individual choice of the persuasive powers of large corporations it seemed that many people were finding it hard to distinguish between want and

need. Morgan Spurlock 's film "Supersize Me" and Eric Schlosser 's book "Fast Food Nation", come to mind as two responses to this manifestation.

I pondered the parallels between the human body and hollow-ware exemplified by the naming of the parts: the foot; the belly; the neck; the lip. Getting whimsical I fancied that perhaps the objects I made were a little sedentary – not put to work enough, and that they, like me, as a result become a bit plump. With this in mind I took myself off to life-drawing class.

After this period of drawing it was time to start making again, but not yet in metal. Instead I carried out a series of experiments exploring the aesthetic qualities of a stuffed membrane using fabric, rubber and various fillings. In addition I thought it appropriate, since I was stuffing other things, that I also stuff myself: a huge pile donuts (to celebrate Krispy Kreme opening their first UK outlet in Harrods ) washed down with a family sized bottle of Coca Cola served this purpose well (I have not eaten a donut since though ). It was refreshing to be working / playing with materials other than silver and doing silly things like poisoning myself with fat and sugar. The mentorship program gave me the permission that I had denied myself to work in such a way.

Moving back into metal I began to make a series of experiments in copper foil and lead solder, making small enclosed forms. These had a tube opening which allowed me to blow them up using a car tyre foot pump. I found myself delighted with the way that the metal moved under pressure, creasing and buckling at the



Foil Experiments

edges and creating succulent, plump forms. Whilst I set the initial conditions I could never be sure exactly how the piece would inflate and this was a refreshing challenge to my previous way of working where I aimed to have absolute control at all stages of making. I could have quite happily continued to make these foil test pieces indefinitely but I had a show approaching and I was keen to incorporate the outcomes of my experiments into it. It seemed appropriate that the first 'finished' object I attempted to create was a remake of the family sized Coca Cola bottle that aided my donut binge.

I used Rhino, a 3D CAD programme, to create a computer model of the coke bottle and used tools within the programme to create a flat pattern that could be used to make a seamed vessel (a bit like the pattern one would use to make a cuddly toy). I had been using CAD for a number of years as a design tool and had found its precision and accuracy simultaneously impressive and a burden – it was too easy to become a slave to the perfectly finished representation on the computer screen, resulting in the making process being tedious and adding little to the outcome. I liked the idea of the CAD creating perfect geometries that would then be distorted when the piece was inflated. Normally as a silversmith I would solder seams together but I was reluctant to engage in the ardu-

ous process of fitting the edges precisely enough together to allow them to be soldered, I wanted a more efficient and direct method and so I chose to fuse the edges together using the fine, hot flame of an oxy-propane torch. Once fused together I left the seams untouched, delighting in the contrast between the roughness of the welded seam against the smoothness of the metal around. A bottom was added and a top with a tube opening.

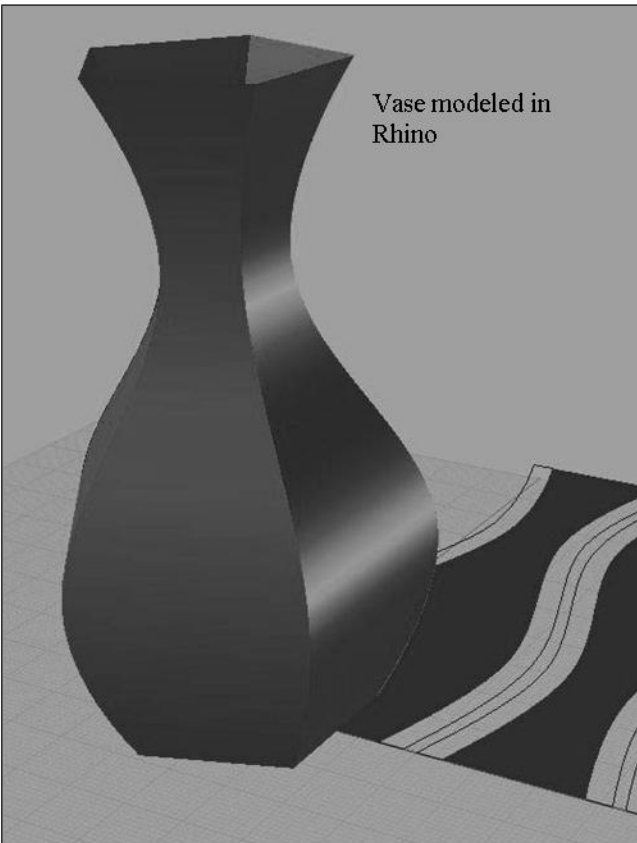
Not having an air source with enough pressure to shift the thicker metal of this piece, I considered other ways of inflating it. If steam could power an industrial revolution then perhaps it could be employed to inflate a bit of metalwork. A small amount of water



Superabundant, early pieces

was injected into the vessel and the top of the tube was sealed. Covering myself in all manner of protective gear I tentatively began heating the vessels. Gradually as the water turned into steam and the steam pressure increased the piece began to swell. Success!

I went on to produce a number of pieces this way. Not without issues: steam like air is highly compressible. This compressibility, like a spring, stores up a lot of energy so when it blows it really blows, and hot steam exploding from a canister is not something to be toyed with. For safety reasons I would not recommend this method to anyone. An explosion also has deleterious effects to the object you are trying to make!



Vase modeled in Rhino

In a short space of time I managed to produce a reasonable collection of these inflated or "Superabundant" vessels and to my delight the show proved to be a great success, both in terms of sales and acclaim. It is always risky as an established maker to radically change one's work, but for me, at that time, it was necessary.

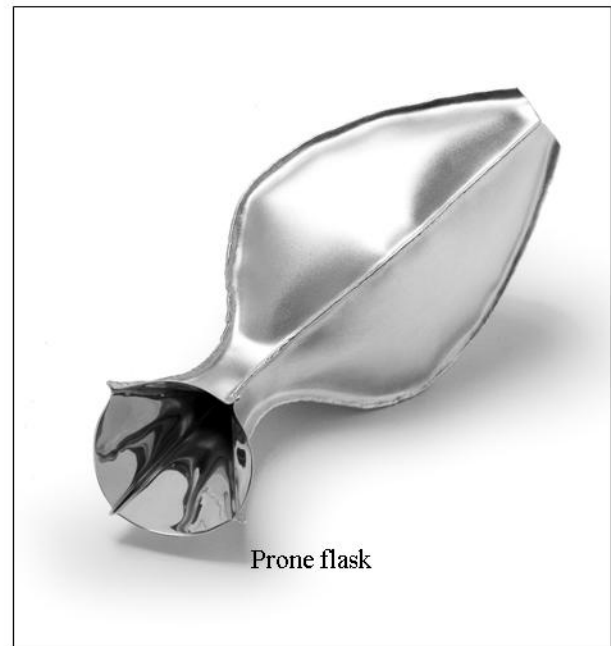
The mentorship program came to an end around about the time of the show, much to my regret – part of me felt I would have quite happily had a mentor as a permanent fixture. Looking for other ways to stir up my practice, I applied for and was awarded a three month residency in Scotland at Cove Park. I thought I might be inspired by the stunning Scottish landscape but instead my muses were the greedy ducks that would come demanding bread at all times of the day. I resolved to create my own version of a greedy duck, reduced to its bare essentials: a funnel neck and a capacious belly. On a technical note, it was the first time I tried to use my seaming technique on an asymmetric object, it took a lot of modelling and working out.

The mentorship program had stirred me from the rut I was previously in and given me a better understanding of the typical trajectory of creative endeavour: that a new

area of research can give rise to a burst of creative energy that produces new ideas and new work. Over time this there is a natural flattening out of this creative force and a process of refinement takes over. It is possible to inject new energy into the body of work but it tends to be incremental rather than revolutionary. Ultimately stagnation can occur, where the maker is simply parodying the ideas in the earlier work. To guard against this and keep a freshness in the practice one must

periodically embark on a new area of creative research and so the cycle begins again.

In terms of refinement, there was much I needed to do on a technical level. Whilst I liked the lumpiness of the gas welded seams, I was uncomfortably close to not being able to control the locality of the melting. Additionally the seams exhibited considerable porosity and were prone cracking. I needed a more exacting method of welding. A fellow silversmith allowed me to play with his TIG welder for an afternoon, which was enough time to convince that I needed to invest in one. TIG stands for Tungsten Inert Gas, also known as GTAW (Gas Tungsten Arc Welding). Using TIG is a bit like using a very hot but very controllable tiny flame, but instead of the heat being produced by burning gases it comes from an electric arc between the tip of the tungsten elec-



trode and the work piece. Argon is pumped around the electrode to shield the work piece whilst it is being heated. As with gas welding the metal to be joined is brought to a fully molten state within a confined area. TIG is renowned for produced high quality, ductile welds and though not traditionally part of the armoury of the silversmith makes a very useful addition (a TIG welder is also very handy for welding up steel stakes etc. ).

The other matter to address was the undesirability of inflating the work using steam pressure. It 's hard to say whether I was more concerned for my own safety or the welfare of the piece I was working on but either way my nervousness was limiting the extent that I was prepared to inflate the metal. I resolved that there had to be a better, safer way to inflate these pieces. Using water seemed like a good idea. At the sort

of pressures I needed to achieve water is basically incompressible, so there is no danger of explosion should a seam fail (it only requires a drop of water to be released for the pressure to drop right down to atmospheric ).

Forming metal objects with liquids (oil or water ), known as hydro-forming or fluid forming is an established method of manufacturing in industry, particularly for automotive parts. Industrial hydro-forming is done at pressures of many thousand of pounds per square inch but I calculated I only required around 600-700psi for what I was trying to do. Looking around for an affordable, controllable high pressure water pump, I settled on a pressure testing pump as might be used by heating engineers to check for leaks. Ebay provided me with a second-hand one for a reasonable sum. Using the TIG welding in conjunction with hydro-forming gave me the control I needed. It allowed me to push inflate the pieces to a much greater extent than I had previously dared. In a sense this additional control had given me more freedom. Now if a seam should leak I could simply drain the vessel re-weld the seam and continue inflating – a huge relief! Now the limits of inflated are more governed by the ductility/work



Above: TIG welding bench  
Middle: Hydro-forming using the test pump  
Below: Big Beautiful Vase I



hardening of the metal as it contorts when the piece is inflated.

I continue to produce “Superabundant” pieces as the process still surprises and engages me, but I have learnt not to carry on milking the same idea until the last drop is gone. Currently I am experimenting with other ways of creating the ‘skin’ of hollow-ware: fusing tiny wires and granules and creating meshes. Hopefully I will avoid the creative rut that I was in before the mentorship program. Having said this if my old mentor wanted to pop in for a chat and a cup of tea, he would be very welcome, I might even stretch to some Jammie Dodger biscuits.

Lucian Taylor regularly participates at the Goldsmiths’ Fair, his work will also be included in the Exhibition *Mindful Of Silver* at the Goldsmiths’ Hall, London. Check out his website: [www.luciantaylor.co.uk](http://www.luciantaylor.co.uk)



Above: Becoming spherical, before inflating  
Below: Becoming spherical, I finished.