

MUGGERIDGIAN SOLIDS: COLOUR, TEXTURE, FACETS

Andrea Muggeridge

Throughout 2018 I explored many concepts relating to paper – stacking, colour, texture and facets – and, in an attempt to stay true to the concept of three-dimensional shapes and paying attention to the sides, edges and angles, I created my own three-dimensional shapes which I call the Muggeridgian Solids. These three-dimensional shapes, along with the use of different colours and textures, allowed me to represent different feelings and emotions. When these different shapes are strung together, they create a combination of emotions that may seem contradictory – but this relates to my everyday life and what I experience. These conflicting feelings and emotions create constant stress and anxiety in everything I do on a daily basis. In order for me to minimise the damage involved in combating these feelings, I take pleasure in repetition, folding paper and braiding.

The Platonic Solids are based on the elements that make up the earth, and together they represent the earth's creation. There are five Platonic Solids and 13 Archimedean Solids, and I worked with a selection of shapes from both categories. It was the Greek philosopher Plato (427-347 BCE) who established a theory that there are five significant solid shapes and that they each symbolise an element of the universe.

Early examples of the Platonic Solids are the five Neolithic carved sandstone balls,¹ carved in stone and displayed at the Ashmolean Museum, University of Oxford. They are believed to have been created around 2000 years ago and have given rise to a host of theories surrounding their use. Some believe they were created for elite members of Neolithic society as a demonstration of wealth,² while others believe they are the earliest examples of the Platonic Solids. The balls are all spherical in shape and most have patterns of nodules on their surface. These nodules appear to have been placed strategically, providing a recognisable depiction of the five solids that these balls represent. Some commentators believe the nodules were not randomly placed, as they match the mathematical geometric structure of the Platonic Solids.³



Figure 1. Andrea Muggeridge, *Clustered Emotions*, 2019, wallpaper; silicone glue, rice, beans, lentils, beanbag beans, pillow stuffing, cut packaging sponge, popcorn kernels, polyester fiber; black waxed cord, square brass tube, various dimensions.

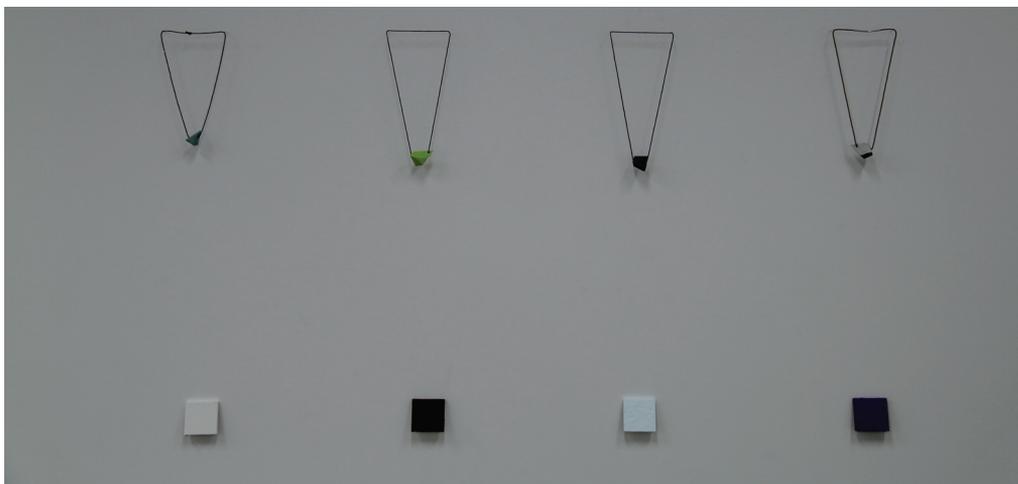


Figure 2. Andrea Muggeridge (L-R), *Support, Reassurance, Encouragement, Enjoyment*, 2019, wallpaper; silicone glue, Resene house paint, black waxed cord, embroidery thread, rice, beanbag beans, popcorn kernels, beans, various dimensions.

Plato suggests that each solid symbolises an element of the universe: the tetrahedron reflects fire, the octahedron air; the icosahedron water; the cube reflects the earth and the dodecahedron “is the shape of the universe as a whole.”¹⁴ Later, however, Aristotle modified Plato’s theory, suggesting that the fifth element was actually “space-filling ether”¹⁵ and made the dodecahedron the fifth element in its place.⁶

In my project, I wanted to take a similar approach with the Muggeridgean Solids and make the shapes I created represent different emotions rather than physical elements. At the same time I felt that these shapes could be interactive; I want them to be able to be squeezed, touched and held, and played with in a tactile sense. Different colours and materials were used to create the shapes, and when the element of texture was added using Resene wallpaper samples, it gave the objects more tactile properties. I revisited the concept of fidget toys – things you could hold, touch, play with and manipulate, objects which assist observation and concentration, as well as relieving anxiety for the user. I like the idea of being able to hold an emotion or feeling in the hand.

The selection of work that I created was intended to adorn the body – to be worn around the neck. The three-dimensional shapes were created to be held, touched, squeezed and to be played with. I asked: Would the viewer be able to imagine wearing the pieces, and imagine the tactile aspects of the pieces when displayed?

I didn’t see these questions being an issue for my work – each piece is bright, colourful and inviting. In the past, viewers have seen these works and have felt the impulse to hold, touch and play with them, feeling nostalgia, relief, joy or a sense of comfort. One piece was titled *Comfort*, which invokes this notion in the viewer’s imagination. I never intended my jewellery to fit a particular gender. When I chose colours for my pieces, I give reign to my natural intuition about colours and which colours work together. I want people to feel the freedom to choose pieces that appeal to them without the restrictions of gender labels.

The jewellery I have created is both ornamental and functional. The functional element is the tactile quality which can help de-stress and aid the wearer in high-anxiety situations. Fidget toys and puzzles have the same functional properties, as they allow the user to focus and relieve their tensions and anxieties. Being able to hold, touch and play with my jewellery pieces creates a natural process of repetition. Repetition is also a key part of my creative process. For instance, making the braids involves constant repetition, which is obvious to the viewer on close inspection. Even from a distance, the repeated elements are visible in the use of different-coloured threads. The cutting and



Figure 3. Andrea Muggeridge, *Empathy*, 2019, wallpaper, silicone glue, pillow stuffing, black waxed cord, various dimensions.



Figure 4. Andrea Muggeridge, *Relief*, 2018, wallpaper; Resene house paint, silicone glue, beanbag beans, popcorn kernels, lentils, embroidery thread, various dimensions.

the folding of the Muggeridgian Solids are further examples of the repetitive crafting process that marks my work. Visually, I want people to be able to see the crafting process involved.

When it came to naming each piece, I wanted each shape to reflect a distinctive feeling or emotion. By filling each shape with specific materials, such as beanbag beans, rice and stuffing, I endowed the pieces with different weights and textures which allowed each one to become an attractive tactile object for the owner. This led me to create specific names for each piece that reflect these feelings and emotions, like a lucky charm creating talismanic properties. Reassurance, Warmth, Relief and Comfort are among the names chosen. These names will hopefully remind viewers of their own positive experiences associated with the particular word and emotion that each piece represents or symbolises.



Figure 5. Andrea Muggeridge, *Strung Paint dipped beads*. 2017. beech wood, white nylon cord, brass tube, resene house paint.

In creating the Muggeridgian Solids from the wallpaper samples, I took the three-dimensional shapes I had created and photocopied each shape as a template, making sure to print each template in various sizes. This allowed me to choose the sizes of the shapes and the colour combinations to put together on each braid. I added tabs onto each edge of the template so that, when folded, there was a spot for the glue to adhere to and hold the shape together. This gave a tidy edge to the folded shape.

After the shapes in the wallpaper were cut out, I needed to decide where I would have the holes in order for the pieces to become wearable and strung on cord. I used an eyelet punch which had been passed on to me by my grandma. I punched the holes in strategic spots on the template. I wanted the shapes to connect together face-by-face, but I also wanted the holes to be made in unpredictable places on the shapes. I folded all of the shapes, leaving one of the faces on each solid not glued down, so that I could thread the shapes onto the cord before filling. For filling, I used a variety of materials that had a certain texture and/or weight to them. I used rice, popcorn, beanbag beans, pillow stuffing and plastic beans that had been cut up, filling each shape and gluing it shut. I tied a knot on each end of the braid, allowing each necklace to be placed over the head and eliminating the use of hooks or clasps.

Over the last few years, I have experimented extensively with braiding, using various materials and colours and adjusting the number of strands. With this body of work, I wanted to provide a very clear visual representation of this experimentation by creating braids using embroidery thread and black waxed cord.

As a final touch, I also added Resene house paints to add more texture. I like to syringe, dip and pour paint. This method allows the paint to move and create both thick and thin layers on the surface of the material. It creates dried drips on the surface and a soft malleable surface that invites you to touch. However, this unpredictable application method had its disadvantages. For instance, when I placed an object in a tray to dry, the paint could transfer onto other surfaces, places on the shapes where I didn't plan to have paint, and or smudge the braid. This creates a mess and slowed down the making process.

Over the last two years, I have researched various aspects of three-dimensional shapes – their sides, edges and angles – and explored the many elements that fall within sacred geometry, such as the golden ratio, the Archimedean Solids and the Platonic Solids, which represent the elements that make up the world we live in.

My making process allows me to reconnect with craft through spool knitting and braiding, as well as my experimentation with materials such as clay, wood, metal, paper and paint. This has allowed me to develop my own unique, three-dimensional shapes – the Muggeridgian Solids.

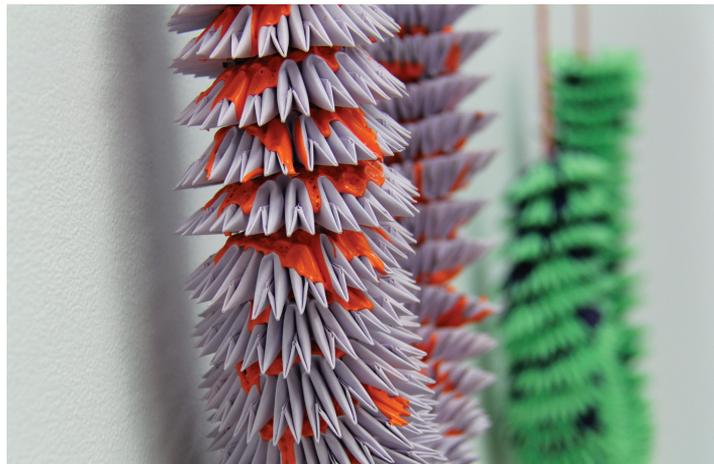


Figure 6. Andrea Muggeridge, *Golden Venture Neckpiece Purple*, 2016, paper, Resene house paint, embroidery thread, copper, various dimensions.

Andrea Muggeridge graduated with a Master of Visual Arts from the Dunedin School of Art in 2018. Her practice is centred on jewellery and paint as well as mixed media. She pushes the boundaries of traditional materials, adding her own unique contemporary interpretation. She is a practicing artist in Dunedin.

- 1 Frank Wilczek, "Beautiful Losers: Plato's Geometry of Elements," *PBS Online*, 30 December 2011, <http://www.pbs.org/wgbh/nova/blogs/physics/2011/12/beautiful-losers-platos-geometry-of-elements/> (accessed 16 June 2017).
- 2 Alex Whitaker; "Carved Sandstone Balls," *Ancient Wisdom Foundation*, April 2012, <http://www.ancient-wisdom.com/scotlandballs.htm> (accessed 29 July 2017).
- 3 Ibid.
- 4 Wilczek, "Beautiful Losers."
- 5 Ibid.
- 6 Ibid.