



LIZ SHREEVE

2015

Liz Shreeve is No. 3 of 8 emerging artists at Culture at Work

Liz Shreeve's exploration of simple geometric forms have inspired an evolving series of paper sculptures of surprising beauty, complexity and strength. Her practice also explores the principles of colour, contrast, tone, shadow and light, which are used to emphasise the many possible 'faces' of the forms. In 2015 she partnered with mathematician, Associate Professor Leon Poladian, to determine new arrangements for the repeating geometric elements. Her residency enabled her to trial new patterns, increase the scale of work, and to document it in different light settings. Sherryl Ryan and Ivana Jirasek provided her with curatorial support with this work and its exhibition. The emerging artist residency program is supported by State Street to assist artists toward professional development and employment in the arts sector.

CULTURE AT WORK

STATE STREET®

Image: *Deep Blue*, watercolour on cut and folded paper



Fall, watercolour on cut and folded paper

ARTIST STATEMENT

I became very aware of the significance of numbers and geometry as my three-dimensional paper sculptures evolved. They evolved into unexpected forms. They were generated from a repeated sequence of actions that created forms which echoed those found in the natural world.

I recognised that it was numbers or, more specifically, packing geometry that controlled the forms. It didn't matter if it was the natural, organic process of growth or the slow accretion of paper units to make a sculpture, the principles were the same. I also recognised that I did not have the mathematical sophistication to fully comprehend the process and needed support to take my work further.

The residency at Culture at Work provided the opportunity, and the driving force of Sherryl Ryan, to interact with other artists and scientists. I was introduced to Leon Poladian, Associate Professor of Applied Mathematics at Sydney University, who opened my eyes to the possibilities for new work and gave direction to my studio experiments. I also became more aware of the art/maths genre, and was selected to exhibit my work at the Bridges Art/Maths Conference in Baltimore, USA this year.

The new works take mathematical principles as a starting point, but the final works are not illustrations of mathematical principles. There has been a cross fertilisation of ideas resulting in a new vigorous hybrid.



Liz Shreeve with Curator Ivana Jirasek

Culture at Work's co-operative processes enhanced my professional development and thinking about future directions, including ways to generate opportunities for future exhibitions and projects. It has also exposed my practice to a whole new audience.

Liz Shreeve 2015



Liz Shreeve with Associate Professor Leon Poladian

True to the collaborative ethos of Culture at Work, Liz's residency was an artist-led research project engaging with science. In her case, the creative input of a mathematician, Associate Professor Leon Poladian, stimulated new options for her geometric paper constructions. The exhibition OFF GRID presents these new works with smaller transitory studies illustrating Liz's creative process.

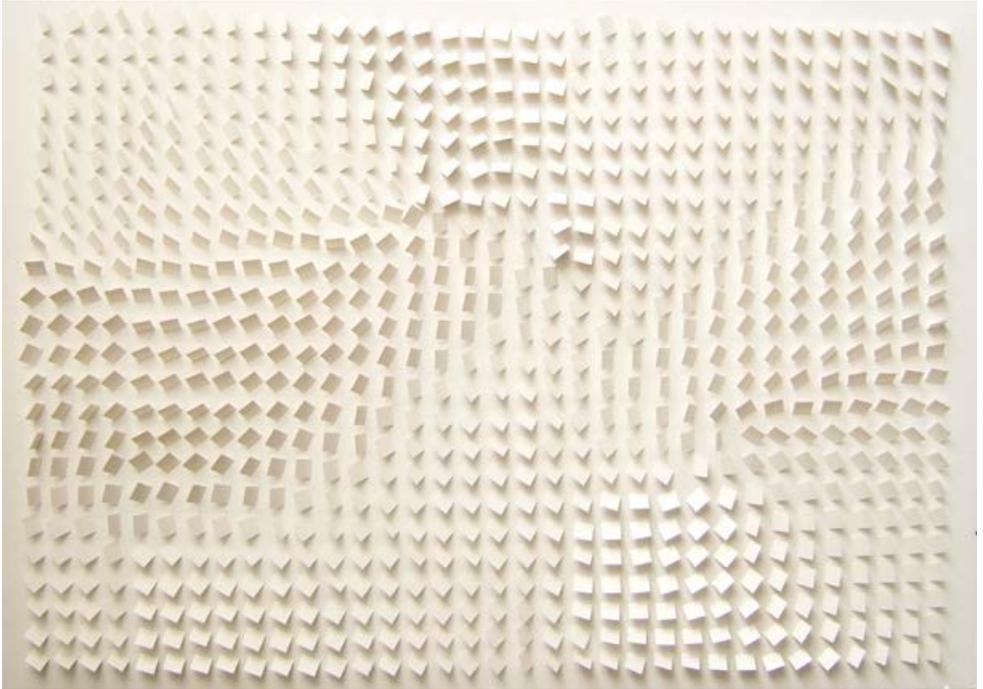
For artists, bringing the discipline and creativity of science into their thinking is an inspired model for creativity, innovation and learning that benefits us all.

THE MATHEMATICIAN'S PERSPECTIVE

I have always enjoyed the challenge of trying to explain mathematics to different audiences: whether it be engineers, pharmacy students or biologists. The act of creating each new explanation and responding to new audiences, reinvigorates my thought processes and reinforces my own appreciation of the universality of mathematics. Trading ideas with an artist adds another dimension which I don't often get to experience while teaching or doing research. For example, when I first met Liz I was intrigued by the spherical tessellations and I discussed how I teach spherical coordinate geometry to second year engineering students, especially the way the grid elements change near the poles of the sphere. Liz and I later sat down together and worked through some

trigonometry to discover a mathematical reason for why some of her sphere designs exhibit an undesired flattening effect near the poles. We also discussed at length her periodic grids and the various symmetries that could occur. This branch of mathematics is called group theory and there are 17 different possible symmetries associated with wallpaper designs (or anything periodic in two dimensions). Liz and I started systematically looking at these possibilities together. Most recently we've been discussing ideas from my third year mathematical biology unit and drawing of vector fields.

Associate Professor Leon Poladian
School of Mathematics and Statistics,
University of Sydney



Vector I, cut and folded paper on paper

LIZ SHREEVE Curriculum Vitae

Selected Solo Exhibitions

- 2015 *Off Grid*, Culture at Work Gallery, Pyrmont
- 2014 *Paper Tiling*, Factory 49, Marrickville
The Sense of Light, Stella Downer Fine Art, Waterloo
- 2012 *Growth and Differentiation*, Factory 49
- 2010 *Colour Processing* Factory 49
- 2009 *Boxing Light* and Wall Installation, Factory 49
- 2008 *Catching the Light*, Factory 49
- 2007 *Light Constructions*, Factory 49
Reflections Xavier Art Space, St Vincent's Hospital, Darlinghurst

Selected group exhibitions

- 2015 *Colour on the Concrete*, UTS Gallery, Sydney
Bridges Conference Exhibition, Baltimore, USA
Paper Works III, Brenda May Gallery, Waterloo
- 2014 *Paper* Factory 49
- 2013 *Factory 49 @ Stephen McLaughlan Gallery*, Melbourne
Gallery Artists, Stella Downer Fine Art
- 2012 *Paper Now* Incinerator Art Space Willoughby
Scope Miami Art Fair, Miami, USA
Hang'Art, Grenoble, France
- 2011 *Poste Concret*, Paris Concret, Paris, France
Japonisme Stella Downer Fine Art

- Circle/Square* Tin Sheds Gallery, Sydney
- Ufft Project* Drufabriek Cultural Centre, Netherlands
- 2010 Melbourne Art Fair, Stella Downer Fine Art
Constructed Painting, Level 17, Melbourne
Carriage Artworks, Carriageworks, Sydney
- 2009 Bell Street Project Space, Vienna, Austria
Paint Stella Downer Fine Art

Grants, Prizes/Residencies/Publications

- 2015 Finalist Hazelhurst Art Award
Residency Culture at Work, Pyrmont
- 2014 Finalist Mornington Peninsula Works on Paper
Finalist, Woollahra Small Sculpture Prize
- 2013 Winner Works on Paper, Nth Sydney Art Prize
In Situ Mosman Festival of Sculpture and Installation
Finalist Hutchins Works on Paper, Hobart, Tas
- 2012 NAVA Australian Artists' Grant
Winner Sculpture, Waterhouse Art Prize
- 2011 Winner, Watercolour, Blacktown City Art Prize
Arts NSW Funding Grant
Winner Mixed Media, Waverley Woollahra Prize
- 2009 Winner, Works on Paper, Glebe Art Show
- 2007 Hill End Residency, Bathurst Regional Council and Arts NSW Grant

Liz Shreeve is represented by Stella Downer Fine Art

exhibition dates	gallery hours	opening drinks
Tue 19 – Sun 24 May 2015	11am – 4pm	Tue 19 May 6 – 8pm