THE RISOGRAPH AND ANALOGUE RESILIENCE

Gregory Thomas

Figure 1. Gregory Thomas *Brillograph*, 2015, Risograph print.

There's been a quiet counter-current trend of people going back to analogue technologies despite the overwhelming advances in high-tech gadgetry and production that makes our lives more convenient. The compact disc succeeded the vinyl record and the venerable cassette tape as the chief product to deliver music to the masses via a trip to the store. As computers became more affordable and the internet more widespread, the CD started to decline in popularity when music could be easily downloaded (either legally or illegally) straight to your computer or music-playing device. The fallible, easily scratched CD was discarded after enjoying a shorter reign as music format king than its vinyl counterpart had. And yet despite the demise one physical music format, the vinyl record has seen a resurgence in popularity, reflected in sales.[1] While you could make an argument for superior sound quality as one of the reasons why, there is a tangible element: the thrill of the chase in picking through a record bin; the large and legible cover and sleeve artwork; and the ritualistic act of flipping sides and dropping the needle. An extra depth of dimension beyond just music; a physical experience that connects you more to the media.

Photography also has experienced a similar resurgence in people returning to its physical roots. In the luxurious post-digital Western world, the advances that have made taking and seeing a photograph instantly, limited only by your memory card size, and the ability to reproduce colours almost perfectly plus the screen-based nature of digital

technology, has left a gap of affectual value inherently found in material experience and physical process. The very factors that made shooting digital replace film are the same factors that are seeing the post-digital generation (and those wanting to relive a nostalgic process) take up shooting film. The requirement to carefully consider each shot due to the limited amount of exposure on a roll means that the photographer is engaging in critical thinking and processing the scene they are shooting rather than firing away madly, playing a percentage game where they're bound to get a good shot *if they shoot enough.*

The developing and darkroom image-making process that has been a staple of art school photography – and something sadly being phased out by many institutions – engages a creative area that's outside of the actual image itself – that is, the material you're handling and how it can be transformed by physical and alchemical decisions in wet processing. That is not to say that someone working primarily through digital means cannot engage with materials in the same way; it's rather a question of how much control the creator has over the whole process that can affect and evolve an outcome that might not be reached if they are relying on a third party to process and print the image for them. The print world has experienced a similar phenomenon. The combination of extra involvement in the image-making process, and the alternative aesthetic of the printed result, has seen the Risograph being adopted by designers, design studios and creative institutions worldwide.

The Risograph is essentially an automated screenprinting machine that looks like a photocopier. Much like it's silkscreen cousin, an image is made into a wax stencil, affixed to the meshed drum which contains ink and a squeegee. During printing, paper is grabbed by the machine, passed through under the rotating drum where the squeegee pushes ink through the stencil onto the paper, which emerges on the other side with the printed image. While it's an automated printing process, manual attention is required from the start. Older models relied almost exclusively on scanning in from a pre-made stencil, while later models started integrating PC serial connections and USB support. Even so, it can take some doing and attention to detail to get the image as desired. Registration is rarely perfect, and it is a machine version of rubbing your stomach and patting your head to get it right. Ink intensity takes multiple prints to adjust – and this only if the scanning has gone right to start with.

In terms of the actual printed result, it's the unique, less-than-perfect nature of the Risograph aesthetic, where no two prints are exactly the same, that provides an interesting, cool – and dare I say increasingly hipster – point of difference when compared to the average full-colour glossy print offered by your standard print company. The automated screenprinting technology, where ink is pushed through both a screen and a wax stencil, emulates a printed aesthetic that is both nostalgic and hip when one thinks of the zines and radically charged political and music posters so often produced by the Risograph's progenitors – the mimeograph, spirit duplicator and Gestetner during the twentieth century.

The qualities of the ink mean that printing on a matte, textured paper is more desirable and successful than on a glossy stock, which is something that 'limits' the Risograph in a wider commercial sense but helps narrow down a 'look.' The ink sits back into the page, highlighting the grain of the paper. Detail is lost. Image sharpness is blurred, or halftoned, and made fuzzy. Ink gets picked up by machine parts and transferred to other parts of the page. Some areas get obliterated into a dark mess and other areas washed out, causing dramatic contrast in a photograph. It's a transformative process that translates a stencil into something of its own. Moreover, adjustments that influence the outcome can be made on the machine itself. The machine becomes a drawing-like implement in its own right, rather than the 'end' machine where the operator darts back and forth between the computer and printer, tweaking the settings on screen to get it 'perfect.'

The Risograph has become a perfect operating tool to complement the digital generation of graphic designers looking for greater involvement in the making process. Rather than finalising a project on screen – whether or not it started with hand-drawn concepts in the first place – which is then passed off to a third party for realisation, the designer is further involved in the process. The physical object manifests in their hands as they experiment with the medium and make running adjustments that transform it from a flat, digital graphic into an inky object with layered

visual depth. The ability to have such a machine in-house expands the role of the designer to the point where they can create from scratch; without a client-oriented project as fuel, the designer isn't confined to operating at a point along the way for the project. Taking on the extra roles of author, publisher, distributor, and so on doesn't necessarily redefine the role of designer, but adds an extra set of critical and creative skills that can be applied in other ways and in other media.[2]

There are also reasons that make this adoption in some ways a practical and financially beneficial one: the latest Risograph machine released by a Japanese company uses 95 per cent less power than a toner-based system;[3] its soy-based inks are environmentally friendly and the tubes they come in can be refilled if need be. At up to 185 pages per minute it's an incredibly fast way for an institution or business to print one-colour flyers *en masse* – which is one of its chief uses in primary and secondary institutions, public departments and churches worldwide.

Figure 2. Gregory Thomas, spread detail from *"Phototype" Issue 1*, 2014/15. Risograph printed zine.

And so, somewhat ironically, the fascination with going back to analogue technology is just as quickly flipped around and emulated digitally as photography has experienced with apps like Instagram and Hipstermatic, which aim to digitally recreate the unique effects of film (such as cross-processing or light leaks) without the process of finding an old film camera, some film, a place to develop the film (or yourself) and then scanning the negatives or prints. Their borrowing of the language of photography ensures that anyone can get that cool alternative aesthetic to the point where it's not really alternative. A trip to the creative portfolio website behance.net and a search for 'Risograph' provides a mix of documentation of real Risograph prints and digital compositions where the designer has cleverly made their image look like it's been printed through a Risograph. This bypasses the actual need to use the machine itself, to get a trending style that appears to be different. I experienced this reference to print syntax last year when

I ordered a vinyl copy of Arcade Fire's album *Cities*. Opening the package, I found what appeared to be a screen-printed cover in glorious 40 x 40cm format. The image was a photo of a car parked in front of a house, with a red light leak to the side, which appeared to have been shot on slide film and cross-processed. I slipped the album out of the protective sleeve and ran my hand over the surface – completely smooth. The large halftone dots were visual tricks; holding the cover up to my nose I could see halftones inside the halftones. A printed 'Inception!'

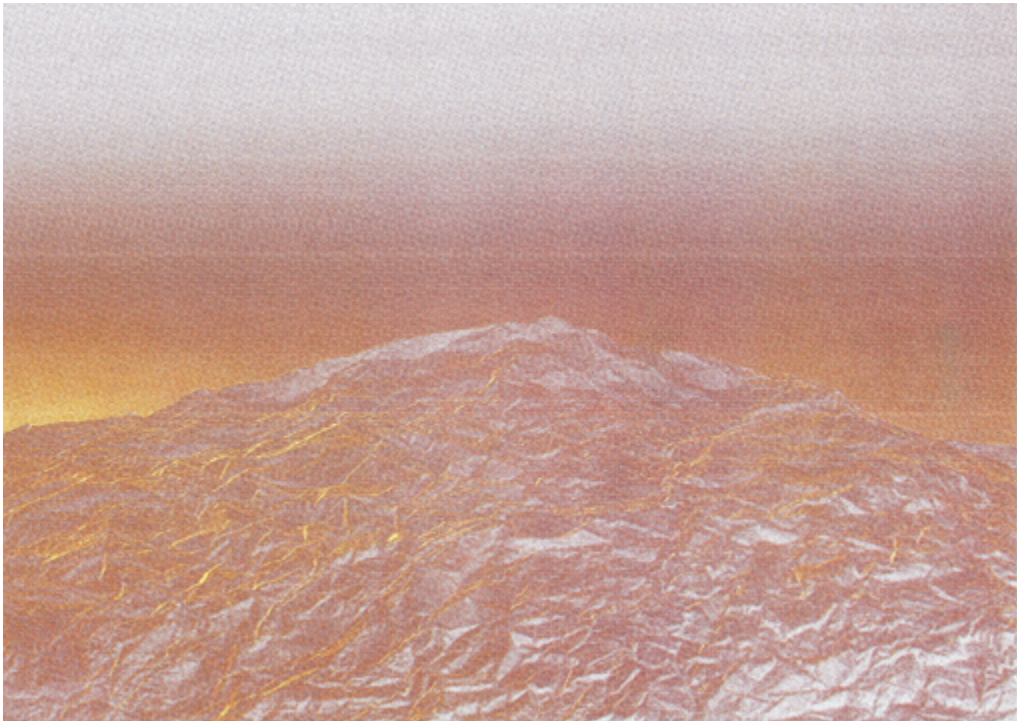

Figure 3. Gregory Thomas, *Mt. Papuros*, 2015. Tritone Risograph print.

For institutions such as the Dunedin School of Art, Otago Polytechnic's School of Design and Ilam Press at Canterbury University, the Risograph provides an interesting teaching tool for art and design students to come to grips with various aspects of image-making and book production. The automated screen-printing machine prepares students for silk-screen printing features such as composition, registration, layering, halftoning and how ink overlays and mixes to form new colours, as well as having implications for paper stock and format. It also helps students work out the complications of editorial design and pre-press work such as layout, typography, imposition, bleed, trim and aspects of bookbinding. The high-volume capacity of the machine and simple mechanical setup helps students gain fundamental skills while simultaneously allowing them to experiment with different realisations of their work, both graphically and physically.

Gregory Thomas completed a Bachelor of Visual Arts in 2012 and a Bachelor of Design (Communications) in 2014 and is currently undertaking a Master of Fine Arts. His multidisciplinary practice takes the city and urban architecture as subject, utilising photography and printmaking process as means of production.

1 "Sales of Music on Vinyl Hit 18-Year High," http://www.theguardian.com/music/2014/nov/27/sales-music-vinyl-18-year-high.

2 "Points of Departure," http://of-departure.tumblr.com/post/16024406553/at-the-start-of-the-2011-i-began-a-local

3 "Riso Releases World's Fastest Digital Duplicator," *Graphic Arts*, 6 Jan 2015, http://graphicartsmag.com/news/2015/01/riso-releases-worlds-fastest-digital-duplicator.