



METHODS OF ITERATING
WRITTEN RESPONSE

Risograph

Iteration I

“Exploring the medium by trying to make a High-fidelity copy”

Medium & Project chosen: Risograph

Cover of latest Counterpoint magazine issue illustrated by Elis Tolsma. Counterpoint magazine is an independent magazine which explores a different concept on every issue through independent journalism and illustration. The magazine is Risograph printed on speckled recycled paper using only 3 colours per each issue.

What's unexpected?

I didn't expect for the drums and stencils of different colours not to match, every copy is different, every copy totally unique. No matter how many times we tried to adjust the position of the stencil and drums on the machine, every copy would come out different because the machine also moves the paper when it grabs it from the tray and the stencil and colour drums move at every duplicate print. That was the most unexpected to me. I thought we would have more control over it.

What do you understand better or different?

I now understand better how it works. To 3 colours, first we need to do one drum colour print, let it dry and then print the other two on top. By printing two colours at once instead, without the third, one can be more efficient, precise, and sustainable with the resources available.

The stencil is the most precious resource of Risograph printing. By making small designs printed in an A3, the more economical and environment friendly I can be with this experiment.

Once the colours are separated and create a flat greyscale PDF, the machine burns the artwork in the stencil within the machine by creating tiny little pixel holes (which can be seen with a loupe) and then the colour drum applies the colour on it.

What kind of output favours? And what relationship does it have to graphic design?

The Risograph printer is a Japanese digital duplicator manufactured in 1986 by Riso Kagaku Corporation. The more copies the more affordable and sustainable use of machine and resources. At the publishing workshop in CSM, the Risograph produces A3 prints.



Is my iteration high fidelity? Did it pose a technical challenge?

First, I researched Risograph and traced the illustration on illustrator. Due to time constraints I didn't fully finish the illustration but printed it anyway. - I missed to include the shadows and made some other errors.

The technicians explained step by step and helped me print.

Differences: I made some mistakes such applying a colour on the background to try get a similar tone to the original paper, coloured some text in the incorrect colour, used fluor orange instead of regular orange, the paper was different, how the illustration was created and processed was different (this could be seen with a loupe), the shadows were missing... Furthermore, on every copy of paper, the machine would also create colour marks on the paper from residual ink on the rollers from past printed projects. However, this could be easily removed with a rubber.

We printed the artwork in a variety of different papers:

- Copy paper
- Crush Corn 120gsm
- Munken Pure Rough 120gsm
- Redeem 240gsm
- Five Seasons 90gsm

The closest to the original artwork would be a mixture of Five Seasons and Redeem paper.

Conclusion

I failed at making a high fidelity copy but I enjoyed a lot the process and the most exciting thing to me was to look for new differences and errors in every single copy the machine released. It became like a game about spotting for differences. The ink was smudgy and the machine temperamental. Overall, impossible to be perfect and I embraced it. The machine had the control of the outcome and found it to be super fun and a little magic.

Questions that rose while at the printing workshop:

- How can I create new colours by only using two colour drums?
- What other interesting results can I produce by applying graphic pattern combinations rather than full blocks of colour?
- What about manipulating images to print them in duotone?

My intention is to explore these in my next iterations.

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Iteration II

“Exploring the medium by exaggerating and recording its imperfections”

Medium & Project chosen: Risograph

“Iteration I” inspired me to attempt to record the movement of the Risograph copy machine for *“Iteration II”*.

What’s unexpected?

By printing only with two colour drums, there’s no need for colour registration (which is very difficult or impossible with more than 2 colours with Risograph)

What do you understand better or different?

The printing colour order and the stencil movement.

1. Whichever colour drum is on the left – that will be the first printed colour. (You can switch colour drums around to see how the colour would be different)
2. The stencil can be moved up to 2cm
3. The machine has a skew and it’s almost impossible to align opposite corners of an A3. If you print artwork in the middle that’s possible though. The further out to corners the more difficult.
4. If you put an object to “scan-to-print” or “photocopy” – you have less control over colour output than if you create your own file.

What kind of output favours? And what relationship does it have to graphic design?

This machine is made to create duplicates. That’s its purpose, even if it creates imperfect copies.

While exaggerating the move of colour drums in *Iteration II* it occurred to me that I could create a unique piece of artwork by duplicating a design over and over on to the same sheet of paper rather than other pieces of paper. This could create a unique output difficult or impossible to replicate.

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Iteration III

“Creating a unique piece of artwork by exploiting the machine’s purpose”

“Iteration II” inspired me to attempt to create a unique print by printing a simple element multiple times on the same sheet and moving the stencil and drums. However, that idea was critiqued during the tutorial, and I was encouraged to continue experimenting with Risograph animation.

In the end I attempted both, I illustrated Eadweard Muybridge’s Animal Motion (1887) Cat running, hands clapping together images and created a very simple ellipse file with the intention to print multiple times on the same sheet. This was a slow process and taxing on the paper but the outcome and room for the machine to do its magic was greater. This was, to me, more interesting than making animated work with Risograph. In an ideal world, and perhaps, something to try in the future, I’d scan each print and create an animation.

This time I printed with the Halftone effect and experimented with photography since I hadn’t done that in previous iterations.

During this project I tried to try new things at every iteration, I continued enquiring about the tool/medium which is Risograph. I am aware the visuals I created had no context, just shapes in colours, and mostly used images of cats since they make me feel positive and safe.

What was surprising was how the machine did whatever it wanted at times, ignoring my settings, and how much more meaning had to me to create the artwork by printing over and over, I created an attachment to the final artwork, like if I had handcrafted it or slow cooked it. By creating the design with the machine on the spot rather than pre-created with a computer and then requested the machine to produced. The machine and I co-created the print, and it was very satisfying and interesting.

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FINAL WRITTEN RESPONSE COMBINING 3 ITERATIONS

Risograph is “magic”. The machine has its own free-will, dances, creates ghosts and has more control over the outcome than us.

After reading the article “Critical of What?” by Francisco Laranjo, 2014, my understanding of Critical Graphic design is much clearer. As he outlines it, critical graphic design can be directed to three to four different directions; 1) critique to build a disciplinary discourse within the community, 2) critique towards socio political issues addressed with design practice, 3) criticality of one’s practice, and 4) criticality of ones’ creative design practice within the discipline to encourage development through reflective practice.

For this project, I have mostly done the later. Through this set of iterations, I researched and reflected on my knowledge and understanding of the chosen tool, it’s uses and my own practice using this tool. To answer the brief, I reflected on what I had never tried before, researched into the tool/medium, and after trying to replicate some artwork, came up with some experiments to continue investigate the tool and wrote my written responses through self-reflective writing style.

On *Iteration I* or “High-fidelity” copy, I learned about Risograph printing, how it works, how to create work considering colour separation and understanding how the machine works. On *Iteration I*, what surprised me the most was how difficult was it to align colours drums and stencils (registration), it was nearly impossible. All prints came out different as the machine overtook the control over the outcome.

For *Iteration II* I wanted to “record” the movement of machine. Due to a few factors such as limited available time to book the publishing workshop and mindful use of precious resources, I decided to experiment using only 2 colours rather than 3. To my surprise, using only 2 colours gave more control. The machine still did move, created “ghosts” and other marks but it was easier to control the 2 stencils. *Iterations II*, however, raised new questions and offered me another opportunity to try this tool in a different way.

In *Iteration III* I continued exploring the machine’s movement and Risograph animation using available to the public images accessible on the Welcome Collection by Eadweard Muybridge’s Animal Motions (1887). I illustrated “A cat running. Collotype after Eadweard Muybridge, 1887” and used some of the photography frames of “Two hands, clasping one another. Collotype after Eadweard Muybridge, 1887” In contrast to previous iterations, this time I’ve decided to print half tone rather than grain and tried to print photography which hadn’t done yet. What surprised me the most while working on *Iteration III* was my enjoyment and attachment to the process of exploiting the machine’s purpose by printing multiple times on the same surface a very simple element.

Like Exercises in style (Queneau and Wright, 1998) at every iteration I tried a different approach and explored printing in different colours, different papers, moving stencils alignment, explored gradients, and tried different printing settings available by the Risograph printer. However, it was the simplicity of the Ellipse that gave me the most meaningful interaction with the tool, like “the simplicity and banality of the material” Queneau starts from that gave “birth to so much” in Exercises in style (Queneau and Wright, 1998).



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