## Capturing more than a moment

Since the beginning of photography, there has been a desire to disseminate photographic images to a wide audience. Today, this dissemination can happen instantaneously via different platforms on the internet. Even when the image stays in the digital world, the author often changes it to enhance the flavour of the moment, to please the audience or to encapsulate a message. Taking the image out of the digital realm means the creation of a photomechanical print. Photomechanical reproduction, from historic ones to present day methods, imposes rules on the image taking itself. Some reproduce colour better than others; some are better when it comes to grayscale, or some are more archivable. It might seem restricting but can be an additional artistic tool. Translating a photographic image into a photomechanical print gives the photographer the chance to create additional image content, capturing the essence of the moment or choreographing the audience's reaction.

My interest lies in how to capture the essence of a memory in an image. The photographic image serves as a note. My recording method is slow and therefore captures more than one moment in time. I am using Maxwell's principle to record colour images on black and white film and print them as continuous tone Woodbury gravures.

## 1. RGB photography

In 1861, based on the RGB model of colour perception by Young [1] and Helmholtz [2], James Clerk Maxwell [3] suggested that a full colour image can be reconstructed from the intensity patterns of light passing through a red, green and blue filter recorded on a black and white film. Today, this very principle is used in digital cameras for the recording and in displays for the reproduction of colour images. I am going back to basics. To capture an image, I am using an analogue camera and red, green and blue filters. Three images are taken, one through the red, one through the green and one through the blue filter. It takes time. Any movement in the scenery results in a coloured 'ghost'. The ghosts dictate the procedure of image taking. If they are wanted, like in Figure 1, two timescales can be recorded: the now, i.e. movement of people and the one which connects the past and the future, i.e. the buildings. If they are not wanted, for example in portraits (Figure 2), the sitter must be engaged and understand that the slightest movement will lead to a coloured shadow. Snapshots are not possible, and the sitter will take ownership of the image by assuming a pose which can be kept for a minute or two. The photographer is relying on the sitter's collaboration.



Figure 1: Jemaa el Fnaa, Marrakech, 2022



Figure 2: Said, Morocco, 2022

## 2. Woodbury gravure

In 1891 the Woodbury Permanent Photographic Printing Company advertised 'Woodbury gravure, patented' as a modification of Woodburytype [4], their main reproduction method, which 'entirely obviates all mounting and cockling'. At that time metal lithography was replacing Woodburytype as the commercial photomechanical printing method and companies like the Woodbury Permanent Photographic Printing Company were fighting for survival. What Woodbury gravure was, is unclear. The method described in [4] does not give the appearance of images marked as Woodbury gravure, for example in [5], see Figure 3.

Woodburytype and Woodbury gravure are continuous tone. The image is not broken up into dots. I think that relief plates and thin paper were used to create greyscale by

pushing the paper into the plate. I will use 'Woodbury gravure' for continuous tone printing methods which are not Woodburytype. Figure 4 is an example of a relief print (right) next to the inverted scan of the silver halide negative (left). The contrast is enhanced by the choice of printing method and how deep the plate was cut. It captures the heat of the day by increasing shadows and reflections.



Figure 3: Flight of stairs at Mihintale from [5]



Figure 4: Tins, 2023. On the left the scanned silver halide image, on the right a print pulled from a relief plate.

When RGB colour images are printed as Woodbury gravure, the choice of printing method for the execution of the continuous tone print, will allow another layer of encoding.



Figure 5: Paul and Heather, 2022. Left: Digital reconstruction of the RGB image. Right: screen print with Spectraval pigments on black paper.

Figure 5 depicts two Canadian friends. On the lefthand side, the image is the digital overlay of the three RGB analogue negatives. I have chosen to print it as a screen print with Spectraval speciality pigments. These pigments are not pigments in the classic sense but generate colour by selective reflection. It is the same effect as in butterfly wings. When the print is moved, the colours are changing. This effect represents not only the colourful and dazzling atmosphere of a hot and humid day but also my friends' eccentric characters.

At point of image taking, I have already the printing method in mind. For black and I white Woodbury gravures, I am looking for structure. For colour images, I am looking for anchor points which will help with the registration of the layers and will allow 'ghosts' without making the image unreadable. It is almost a process of back-engineering.

Keywords: RGB photography, photomechanical print, Woodbury gravure

- [1] T. Young, "II. The Bakerian Lecture. On the theory of light and colours," *Philosophical Transactions of the Royal Society of London,* vol. 92, pp. 12-48, 1802, doi: doi:10.1098/rstl.1802.0004.
- [2] H. von Helmholtz, *Handbuch der physiologischen Optik*. L. Voss, 1867.
- S. Klein, P. Elter, and A. Trujillo Vazquez, "Maxwell's disappointment and Sutton's accident," *Journal of Physics A: Mathematical and Theoretical*, vol. 55, no. 49, p. 491002, 2022/12/16 2022, doi: 10.1088/1751-8121/aca8db.
- [4] W. Crawford, *The keepers of light : a history & working guide to early photographic processes*. Dobbs Ferry, N.Y.: Morgan & Morgan, 1979, pp. 318 p., 12 leaves of plates.

[5] H. W. Cave, *The ruined cities of Cylon*. London: Sampson Low, Marston and Company, 1897.