

Training Nature

Multi-plate relief block hand-printing processes in  
European manufacturing of wallcoverings

Artistic Research and Development  
KUF Report

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“The individuals [interior surroundings] represent his universe, combining faraway places and memories of the past. A person’s living room provides a box seat at the theatre of the world.”  
Walter Benjamin, Paris, capitale du XIXe siecle, 1939

This investigation began as pedestrian research in 2017 whilst visiting London, on a social rendezvous with Marcelle Hanselaar, a fellow artist and printmaker. The Ned, a private members club and hotel, had recently opened and Marcelle invited me on a tour.

On arrival, what drew my eye was not the ostentatious green marble pillars or the bullet proof bank vault in the basement or the swimming pool with a rooftop view of the Square Mile. Attention was drawn to a panoramic wallcovering with an elaborate colour scheme, installed along the hotel's corridors; embodying the distinct materiality of block hand-printing.

With the support of KUF funding, this initial discovery led me on a journey in 2018 to Zuber & Cie in France, Anstey Wallpaper Company in the UK and Svenskt Tenn in Sweden, to gather primary research; to investigate in depth historical relief block hand-printing processes that continue in European manufacturing up to the present day.

My report sources interviews with representatives of manufacturing during my visits to a museum, a store and a factory; captured as photographic and video documentation on a smartphone. This is supported by secondary data from publications, websites and social-media.

The field trip delivered invaluable firsthand experience and new knowledge to compare, contrast and inform my artistic research; in the transformation of reduction to multi-plate relief block hand-printing.

Zuber & Cie

*Zuber: Two Centuries of Panoramic Wallpaper*  
Brian D Coleman, Gibbs Smith, 2019

*Le Papier Peint*  
Véronique de Bruignac, Charles Massin, 2017

*Manuel du fabricant d'étoffes imprimées et  
du fabricant de papiers peints, Éd. 1830*  
Louis-Sébastien Le Normand, Hachette Livre, 2013

*French Scenic Wallpaper 1795-1865*  
Odile Nouvel-Kammer, Flammarion, 2000

#### Weblinks

<http://thened.com>  
[1,3] <http://zuber.fr>  
<http://museepapierpeint.org>  
[2] [http://sfomuseum.org/exhibitions/  
zuber-scenic-wallpaper](http://sfomuseum.org/exhibitions/zuber-scenic-wallpaper)

#### Videos

[http://youtube.com/watch?v=XKA0zYj8P\\_s](http://youtube.com/watch?v=XKA0zYj8P_s)  
<http://youtu.be/4EN5xsAWcLU>  
<http://youtu.be/9gAH8ap6Tq0>  
<http://youtu.be/5ZzklOEGW0w>

Established in 1797, Zuber & Cie has remained a family run business based in Rixheim (Alsace, France). The company is the last manufacturer of “Papier Peints” (painted wallpaper) to apply early 19th Century techniques in its production; described as a multi-plate relief block hand-printing process on hand-brushed backgrounds.<sup>1</sup>

Their scenic panoramic wallcoverings are divided between six and thirty-four paper panels (thereby the final panel connecting up to the first panel), requiring thousands of uniquely carved relief blocks hand-printed in registration “à la planche”, on a specially adapted table. The panels are designed to be fitted into the layout of the room which they are installing; since it is possible to cut the sky according to the height of the wall and adapt the pattern to the level of windows, doors and chimneys with the aid of transitional elements (trees, rocks) and the addition of frames around the scene (borders, columns, friezes and panelling). However, the original thematics of distant countries and the complex colour schemes remain “authentically” the same.

Designed by Jean-Julien Deltil (1791–1863), Zuber introduced “Les Vues d’Amérique du Nord (Views of North America),” in 1834. It requires 1,690 printing blocks, 223 colours, and thirty-two lengths totalling forty-nine feet. A French portrait of the New World in the 1830s, it features several idealised scenes beginning with New York Bay as seen from New Jersey and culminates with a sublime natural wonder—Niagara Falls—the ultimate North American tourist destination.<sup>2</sup>

Communication with Zuber took place by email, before visiting their London showroom and doorstepping their factory in Rixheim. Their website and Instagram account contains photographic and video media, promoting the “à la planche” printing process. Zuber’s historical narrative appears paramount to the company’s identity, with an archive of more than 130,000 documents and 150,000 woodblocks listed as historical monuments of French heritage; claiming 90% of factory production still relies on hand-printing techniques.<sup>3</sup>

Although I had informally documented Zuber’s panoramic wallcovering at The Ned, due to concerns of copyright infringement, I was not allowed to photograph their London showroom. However under a watchful, though reticent eye of Guillaume Pommier, a Zuber representative, I was permitted to browse an extensive collection of wallpaper sample books and digitally printed mock-ups of their scenic panoramic wallcoverings.

I was unable to secure an interview by email due to ‘nobody present’ on site at the factory. But unperturbed, I visited Rixheim in the hope of gathering primary data of Zuber’s “à la planche” printing process. My firsthand experience on location led to the realisation that although the building has the capacity for manufacturing, the team on site is a small outfit. The craftsmen that I was able to observe were screen-printing ‘by hand’ rather than block printing. I was later informed by email that in future, I would be required to ask three months in advance, for a meeting with a Zuber representative.

Fortunately, Musée de Papiers Peints shares the same formal location as Zuber's factory, adjacent to Rixheim's Town Hall. The museum was opened in 1983 to hold Zuber's collection of scenic panoramics; as a permanent display of wallpaper printing machines, with an extensive archive of wallpapers and knowledgeable staff on site. Cécile Vaxelaire, the Assistant Curator, answered many of my questions and permitted access to the museum's reference library of three thousand publications; notably the *French Scenic Wallpaper 1795-1865* by Odile Nouvel-Kammer (2000), which includes a complete record of Zuber & Cie's history.

The museum has installed an "à la planche" printing table, which also functions as a prop for demonstrations to visiting groups. The didactic wall captions describe multi-plate relief block hand-printing as the following;

"The engraver transfers the design with tracing paper, then applies a red tint to define the printed matrix and subsequently removes the surrounding wood. Traditionally the printing block is formed from a laminate of three different woods, the top layer being the wood of fruit trees to be hand-carved in relief. Metal pins are then hammered into the side of the block to register onto the paper.

The printer loads the block with distemper, a blend of coloured pigment, glue binder and chalk thickener, from the tray filled with water. It has an impermeable canvas stretched across it covered with felt onto which the distemper is applied with a brush. The printer places the block on the paper and exerts pressure onto it with a lever. The printer

must pay close attention to the "colour progression" i.e. the order in which the colours are printed. Drying between each colour by hanging each panel vertically allows the colours to be superimposed on top of one another."

The museum gives an account of block hand-printing wallpaper as a time-consuming but technically precise process that disappeared almost entirely after the First World War and which today makes up a very small proportion of European manufacturings overall production.

Throughout the 20th Century, competing wallpaper companies offered panoramic imitations with simplified designs and a limited range of colours. Newer machine-printing processes replaced hand-printing and allowed virtually any material to be imitated. The museum confirmed that the last engraver employed at Zuber was in the 1970s and multi-plate relief block hand-printing that continues today is completed by the order, in an open edition adapted to the individual clients' interior measurements; new wallpaper designs in Zuber's collection rely on screen-printing 'by hand' or digital print technology e.g. The recent collaboration with House of Hackney.

Anstey Wallpaper Company

*Product Support Manual*

[5] Carl Ashby, Anstey Wallpaper Company, 2008

#### Weblinks

[4] <http://anstey.uk.com>

[6] <http://wmgallery.org.uk>  
<http://stylelibrary.com/morris&co>

#### Videos

[http://youtu.be/fAy\\_intiqVM](http://youtu.be/fAy_intiqVM)

[http://youtu.be/q-4Tt8w\\_NE0](http://youtu.be/q-4Tt8w_NE0)

#### Seminars

Agenda: William Morris / Hannah Ryggen  
KHiO, 23 February 2018

#### Exhibitions

Love is Enough; William Morris & Andy Warhol  
Jeremy Deller, Modern Art Oxford, 2015

English Magic: Jeremy Deller, British Pavilion  
55th Venice Biennale, 2013

Pioneers: William Morris and the Bauhaus  
William Morris Gallery, 2019

Anstey is the largest contract wallcovering printer in the UK, with the broadest machine profile in Europe. Established in 1920 and currently based in Loughborough (Leicestershire, England), it is a subsidiary of Walker Greenbank PLC. The business operates a unique combination of gravure, rotary, flexo, surface printing, screen-printing, digital printing and hand block printing methods. As well as producing the Walker Greenbank brands, it also produces for third party clients in the UK and overseas.

Walker Greenbank PLC describes itself as ‘custodians’ of the original company Morris & Co. dating back to 1891 and founded by William Morris. The company went into voluntary liquidation in 1940, but the design archives and remaining wallpaper stock were purchased by Arthur Sanderson & Sons. Today the Sanderson family, now owned by Walker Greenbank PLC, ‘preserves Morris & Co’s unique Arts and Crafts heritage within its modern interpretations’.<sup>4</sup>

Communication with Anstey was conducted by email and telephone; to meet with Sabrina Earp, Account Manager for a tour of the factory in Loughborough. The company promotes their manufacturing at European design fairs and online with videos, a website and social media. Anstey has also self-published a product support manual, which not only explains the variety of print ‘operations’ available to the client, but also credits the pioneers of craftsmanship, such as Jean Baptist Reveillon, Jean Zuber, and William Morris; thereby locating the Anstey brand within a prestigious historical narrative of European wallpaper manufacturing.<sup>5</sup>

The factory tour was an overload to the senses, and a memorable experience for the sounds, smells and visual stimuli of a large-scale, busy working environment. Anstey is open to visitors, occasionally arranging educational tours for clients and college groups. Unlike my visit to Zuber & Cie or Svenskt Tenn, I was positioned as a ‘third-party client’ with the potential to develop my artistic research by encompassing manufacturing into my studio-led practice.

On the day of my visit, all semi- and automated machines were functioning and supervised by a team of engineers/printers. It was noisy and productive, with large vats pumping ink into a mechanised production line of fast rotating cylinders; multi-printing reels of paper in vast quantities. I was allowed to photograph and film the machines, but copyright prevented me from documenting the wallcoverings by recognisable brands and artists including: Timorous Beasties, Morris & Co, House of Hackney, Zoffany, Sanderson and Co, White Cube and Soho House.

Colour mixing is an integral component to all print processes at Anstey and surprisingly, this is still performed by eye-hand coordination rather than with a measuring instrument. With the integration of digital technology, tacit knowledge is required to colour match projected light on a monitor (subtractive colour) to pigmented ink on paper (additive colour).

The flat bed screen-printing press and two block hand-printing presses were not in production at the time. Both processes are more time consuming when

performed by hand, compared to the automated machines; these presses are only in operation for smaller scale and infrequent orders. Screen-printing orders tend to rely on new designs, but block hand-printing is dependent on repeat orders, specifically for Sanderson & Co.

There is a slight variation in the design between the British table-top press and the French “à la planche” set up. The additional overhead crane on a table-top press to counter-lever the weight helps to manoeuvre the heavy printing blocks and an inking trough with a rotating felt blanket ensures an even surface covering when loading the block with distemper. The variations in the design reflect the difference in the weight, the quantity and the versatility of the woodblocks in use; but both presses achieve a similar materiality.

The printer’s repetitive actions of loading the block with distemper, registering onto the paper and applying pressure with the foot pedal, leads to a distinct signature in the finished wallcovering. To ensure consistency, one factory craftsman is designated the role of printing by hand, which in turn increases the time required to complete each print run.

Therefore, the majority of client’s emulating block hand-printed wallpaper are actually produced using high-speed rotating rubber cylinders on a surface print machine. The semi-automated process mimics the soft reticulation and the thick lip of the distemper usually achieved by hand-printing relief blocks, but within a fraction of the time.

The archive of woodblocks is stored in a climate-controlled environment within the factory. The majority of the collection consists of original Morris & Co woodblocks; as heavy multi-layered blocks of carved fruitwood with sunken brass plates. Surprisingly, some woodblocks were allegedly salvaged from skips in the mid 20th Century, when Morris & Co. went into insolvency and wallpaper trends turned away from the Arts and Crafts movement towards a Modernist style of decoration.

William Morris was a major contributor to the Arts and Crafts movement in the UK; his textile designs profoundly influenced interior decoration in the 19th Century. In 2012, the restoration of the William Morris Gallery in Walthamstow (London, UK) and the appropriation of Morris’ block hand-printed wallpaper and socialist writings by contemporary artist Jeremy Deller, contributed to a reappraisal of the movement’s social and design principles for a 21st Century audience.

The original Morris and Co’s hand-printed wallpaper *Apple*, launched in 1877, relied on three registered woodblocks. This design can still be ordered today as block hand-printed wallpaper but in a greater choice of colour schemes. However, *Acanthus*, similarly launched in 1875, as a large-scale design that relies on thirty woodblocks printed in fifteen colours, is now surface printed on a semi-automated machine.<sup>6</sup>

Svenskt Tenn

*Svenskt Tenn: 90 År av inredning*  
ed. Annica Kvint, Svenskt Tenn, 2014

*Josef Frank, Against Design*  
[7, 8, 9, 10] MAK, Birkhäuser Verlag GmbH, 2016

Weblinks

[11] <http://svenskttenn.se>  
[12] <http://ulricehamnstapetfabrik.se>

Videos

<https://youtu.be/mR2jmsgNqJI>

Estrid Ericson established Svenskt Tenn in 1924, and between 1933-57 developed a successful partnership with chief designer Josef Frank; a Viennese architect who emigrated first to Sweden and eventually to the US, to flee persecution during World War II. Svenskt Tenn exists today as a flagship store in Stockholm (Sweden) and is owned by the Kjell and Marta Beijer Foundation; to support a high standard of Swedish craftsmanship in the manufacturing of furniture and interior design.

Communication with Svenskt Tenn was by email with Per Ahldén, Curator of Svenskt Tenn's archive, in the hope of arranging a visit to the material collection. In the event, I was invited for a meeting with Per in the store's Tea Room. The interior was a carefully curated installation of Svenskt Tenn designs interspersed with original artworks and handcrafted objects; to create a contemporary experience amongst Josef Frank's historical motifs. The archive was not open to visitors and the original Haus und Garten woodblocks are held in Svensk Museitjänst (Swedish National Heritage). I was therefore encouraged to acquire various publications available to purchase in store, and to reference their website and social media; espousing the values of Svenskt Tenn and Frank's legacy.

One of the leading representatives of Viennese Modernism, Josef Frank liberated the living room from standardised solutions. As an architect he was influenced by the Bauhaus movement, but also demonstrated an admiration for the earlier Arts & Crafts movement. His designs were based on the legacy of these, even undertaking an exhibition of William Morris' textiles at Svenskt Tenn in 1938.<sup>7</sup>

For Frank, [designing domestic interiors] could assist Jewish people [and diasporas] in the experience of progressive group identity, and social mobility therein, by serving as emotional sites where one could project a sense of place whilst also crossing frontiers, with titles such as Manhattan, Hawaii and Florence.<sup>8</sup>

During his tenure at Svenskt Tenn, Frank realised over two hundred textile and wallpaper designs intended for block hand-printing. He was able to create visually meandering patterns with a single block by designing the matrix so that it aligned with the adjacent section along all four edges; thus producing a pattern by repeated rotation as exemplified by *Mirakel* (originally designed for Haus und Garten). He also employed the half-drop and occasionally the brick repeat, as well as rotating the matrix by 90 or 180 degrees; to achieve a less frequent repetition of the printed motif.<sup>9</sup>

However, beginning in the 1930s the production process at Svenskt Tenn transformed block hand-printing into screen-printing. Patterns completely changed to accommodate the limitations of screen-printing along the length of a flat bed or on a rotary cylinder e.g. *Fioretti* transformed into *Labyrinth*.<sup>10</sup>

The archive was established in 2010 and the material collection forges a coherent narrative of Josef Frank's legacy for future generations to experience. Per was keen to highlight recent public exhibitions and associations with international cultural institutions; The Fashion and Textile Museum in London (2016), MAK in Vienna (2017) and The Design Museum in Helsinki (2018).

The archive is also an invaluable resource; to accommodate post post-modern trends of authenticity and authorship. In order to achieve continuity with Frank's vision and his original colour schemes, the archive of print material can be referenced and colour matched for manufacturing in the 21st century; for future printing on fabric, wallpaper and ephemera.

Svenskt Tenn's wallpaper is now produced by a Swedish contract manufacturer on a semi-automated Olbrich surface print machine.<sup>11</sup> Ulricehamns Tapetfabrik wallpaper company was launched in 2018 and has re-established the town's wallpaper-making traditions, dating back to the 1850s. The manufacturer is responsible for a resurgence in Scandinavian wallpaper design heritage and produces surface printed and screen-printed wallpapers for: Långelid/von Brömssen, Svenskt Tenn, Littlephant, Studio Lisa Bengtsson, Gudrun Sjödén, Sandberg Wallpaper and Mimou.<sup>12</sup>

Svenskt Tenn aims to appeal to a contemporary audience; by re-framing an historical brand as an exemplar of Swedish design heritage, by its association to international cultural institutions, by exhibiting emerging artists and designers, and by its socio-political endeavours to work with sustainable materials and quality craftsmanship.

## Outcome

*The Shape of Craft*

[17] Ezra Shales, Reaktion Books, 2017

## Weblinks

[13, 14] <http://prospectmagazine.co.uk/magazine/postmodernism-is-dead-va-exhibition-age-of-authenticism>

[15] <http://degournay.com>

[16] <http://greyroseinteriors.com/blogposts/the-ned-london>

<http://chelsom.co.uk/wp-content/uploads/2018/06/Sleeper-July-2017.pdf>

## Videos

<http://youtu.be/V3zaLbhen6g>

The collated research documents present-day multi-plate relief block hand-printing processes in European manufacturing of wallcoverings; once revered in the 19th Century for its innovative craftsmanship, only to become an occluded technology in the 20th Century.

This was conceivably due to the hegemony of the marketplace; demanding quantity before quality and simplicity over complexity, by the machine usurping the hand and in turn, digital technology usurping the machine, with the loss of tacit knowledge required to hand carve new relief blocks and the change in trends for interior wallcoverings.

In an Age of Authenticism,<sup>13</sup> with a focus on craftsmanship, there has been a reappraisal of European block hand-printing in the 21st Century; as a manufacturing process of national and cultural heritage. Historical motifs taken from original woodblock matrices have been reintroduced, modified and transformed by screen-printing, surface printing and digital printing processes. Ideas of specificity, of values and of authenticity,<sup>14</sup> have extended to semi-automated mechanical production; as 'authentic' manufacturing processes that still rely on tacit knowledge.

Finally, to return to the source of my research; for which The Ned's staff had originally credited Zuber as the manufacturer, in addition to three bespoke wallpapers printed at Anstey. It was only later confirmed at Zuber's London showroom that the wallcovering was actually 'a Chinese hand-painted copy'; one that appeared remarkably similar to Zuber's block hand-printed scenic panoramics.

De Gournay, a British wallpaper company established by Claud Cecil Gurney in 1986, employs a team of craftsmen in China to hand-paint wallcoverings for an international market.

The company credits 17th Century hand-painted chinoiserie wallcoverings, intertwined with Chinese culture and its influence in Europe, as inspiration for their designs.<sup>15</sup> However, from my firsthand account, de Gournay also appropriates the thematics and materiality of Zuber's block hand-printed wallcoverings, to depict historical scenes of distant countries, as demonstrated in the 'Voyages of Captain Cook' hand-painted wallcovering.<sup>16</sup>

It was at this stage in my research that I understood Zuber's reticence for sharing knowledge. This experience continued to persist, although to a lesser extent, whilst visiting Svenskt Tenn and Anstey Wallpaper Company. The regard for copyright infringement on the authorship of historical woodblock designs, is impeding shared knowledge of multi-plate relief block hand-printing processes that continue in European manufacturing; limiting its medium specificity as a post-digital process.

One method to overcome this obstruction is to engage my artistic research with the manufacturing process directly, as advocated by Ezra Shales.<sup>13</sup> In 2020, with further support from KUF funding, the intention for my studio-led practice will be to interconnect with firsthand knowledge in the print factory; by utilising my own multi-plate relief blocks, previously CNC routed at KHiO, in the post-production of a wallcovering printed on Anstey Wallpaper Company's original table-top press.

This KUF report is accessible on CRISTin, a research information system for metadata and KHiODA, the university's institutional open digital archive for text documents, images and video.

<http://app.cristin.no/persons/show.jsf?id=767279>

<http://khioda.khio.no/khio-xmlui/browse?value=Browne,%20Victoria%20Rowena&type=author>

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