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Fig. 1: Michel Chevreul,
*De la loi du contraste
simultané des couleurs*,
Plate 6–7 (1839).

In Paris, at the Gobelins Manufactory, the dyers searched through all the dyeing samples to find exactly the colour that matched the thread they had been presented with by the weaving department. This was how the weavers got the right colours for the tapestries. It was not very practical. At the same time complaints came from the weavers that the colours in some of the weaves were matt and unclear. In 1824 the chemist Michel Eugène Chevreul was engaged as director of the dyeing department, and began his work classifying colours to create a common reference system for dyers and weavers. He soon learned that the problem with the matt colours was not a matter of chemistry, but of how the eye perceives colours when they are placed up against one another, like the threads in the weave. Through experience from the factory Chevreul developed the theory of 'simultaneous contrast'. When the eye sees two colours up against each other, the brain will attempt to make the difference between them as great as possible, in terms of both brightness and hue. A bright colour against a darker one will be seen as brighter than if it is seen in isolation, and the dark one will similarly be seen as darker. And two colours, says Chevreul, can intensify each other because the brain tries to make them as different as possible. The complementary colour is the one that produces the greatest contrast. So a red thread beside a green thread will according to Chevreul's theory become even redder because we perceive it as if the green thread gives it a little of its complementary colour, which is red. In 1839 Chevreul published the book *De la loi du contraste simultané des couleurs* (The laws of simultaneous contrast of colour). It had 735 pages of text and 40 lithographic plates with hand-coloured illustrations and was oriented towards a large area of production that could apply the theory to work with carpets, clothing, coloured glass, tapestries, textile prints, wallpapers, coloured paper, mosaics, painting, printing, maps, gardens and interiors.

'Gobelins' was originally a name for tapestries with detailed patterns, figures and landscape made at the Gobelins Manufactory. Today the word is used in some languages of tapestries in the Gobelin technique, no matter whether they have been woven at Des Gobelins or somewhere else. The name Gobelin comes from the family of dyers who owned the site on which the first factory was built.

Fig. 2: John Goffe Rand's patent for metal tubes, 1841.

The American John Goffe Rand was a portrait painter, and in 1841 he patented the paint tube. It had been common to buy oil paints in pigs' bladders, but with the screw top the metal tubes became easier to seal and the paint easier to portion out; the painters could squeeze out a wider spectrum of colours on the palette than earlier.

Mercerizing is the treatment of cotton in the form of thread or cloth with potassium hydroxide. The treatment increases the strength, lustre and colour absorbency of the cloth. The method has its name from the Englishman John Mercer, who invented it in 1844. He was a chemist and worked with textile printing and dyes.

DMC, Dollfus-Mieg et Cie, was founded in Mulhouse in 1746 and is the oldest textile factory in France. Mulhouse has also been called the 'little French Manchester' and lies near the border with Germany to the east and the border with Switzerland to the south. DMC was a leading manufacturer of textile prints and weaves throughout the 1800s, and in 1839 the company had 4200 employees, a spinning mill with 20,000 spindles, 300 mechanical looms and 1500 manual ones. In that year the first experiments were done with making twined cotton yarn to embroider and sew with, and in 1841 the yarn production began that was to make DMC even bigger. Mercerization enabled cotton yarn to compete with silk thread and DMC made the world's first mercerizing machine in 1850 and could thus offer a wide selection of less expensive thread: the world's largest, according to the company itself. DMC had more than 100 sales outlets all over the world, and constantly won awards for goods and production forms, for example at the World Exposition arranged in Paris in 1855. Around the turn of the century DMC closed down its weaving mill and printing factory and focused on making thread oriented towards what they called 'needlework for women'.

The industrial revolution began in Britain around 1750 and lasted until the 1870s. In other European countries the transition to an industrialized society happened more slowly and only made real progress when Britain rescinded the ban on exports of machinery in 1842.

Fig. 3: Thérèse de Dillmont. *Encyclopedia of Needlework*, 'Plain Sewings: Fig. 1' (Eng. ed. c. 1900).

Fig. 4: Thérèse de Dillmont. *Encyclopedia of Needlework*, 'Linen Embroidery: Fig. 162' (Eng. ed. c. 1900).

At the beginning of the nineteenth century, embroidery was no longer considered the equal of painting and sculpture as it had been in the Middle Ages. In the Middle Ages men and women worked together in guild workshops and in monasteries, and embroidery was one of the art forms that were practised. Art was now taught at the academies of art, while craft training still took place in the workshops. Men from the bourgeoisie trained in art and painted for a public, the women engaged in handwork as a good education and in order to decorate the home. Embroidery was no longer an artistic pursuit. Beyond the 1800s it was seen rather as trivial, as a duty women had in everyday life – that is, if they belonged to the middle class. More and more housewives embroidered smoking caps and scarves, cigar boxes, footstools, curtains and samplers, bookbindings, cushions, tablecloths and screens, ties and furniture upholstery, and covered all the surfaces in the home, while the men went to clubs and cafés after work and put on embroidered slippers when they came home. The embroidered motifs were animals, historical scenes, the royals, Biblical stories, flowers and landscapes. A woman had to have good taste, but paradoxically she was not meant to embroider for her own pleasure. Embroidery was first and foremost an activity meant to please her surroundings. If she belonged to the working class and worked in industry, embroidery was hard work for low wages.

Fig. 5: Georges Seurat Broderie. *La Mère de l'artiste* (Embroidery. The Artist's Mother (1882–1883), Conté crayon on Michallet paper, 31.2 × 24.1 cm.

When the painter Georges Seurat was a boy, he lay on the floor and drew, and his mother sat in a chair and embroidered. After he moved away from home, he came to see her almost every day. They dined together and he drew her where she sat in her chair by the window. Her name was Ernestine. They did not speak much, but their quiet rhythms were a language they shared.

Fig. 6: Illuminated section of Michallet paper from the last half of the 1800s.

'Michallet paper' is a French hand-made laid paper with an imprint of the paper mould in which it is made. The mesh has dense bottom lines with criss-crossing chain lines and forms a grid on the wire side of the sheet. The felt side of the sheet has a smoother surface from the felt on which it has lain and dried. The size of a whole sheet is 63.5 × 48.2 centimetres.

Fig. 7: Georges Seurat, *Maison carrée* (1882–1884), Conté crayon on Michallet paper, 30.6 × 23.8 cm.

Seurat uses the grid in the Michallet paper in the composition and structuring of the drawing. The chain lines are horizontal and the bottom lines vertical in *Maison carrée* (Square House). He does not draw contours but models the surface up systematically with Conté crayon and 'stumping'. Stumping is a technique for applying and working with chalk and charcoal on paper. A stump is a roll of paper, cork or leather.

Fig. 8: Tina Jonsbu, *2A0, arbitrary points* (detail) (2013), ink on paper, 118.9 × 168.2 cm.

I draw random points. I want to cover the sheet and place the points close to one another. As close as I can with an even rhythm. The sheet measures 1189 × 1682 millimetres. I don't aim, don't lower the speed. I draw in several layers, go over the sheet again and again. I build up a surface. The points press the sheet down against the underlay. The pen has a pink colour and a 0.1 millimetre point, and the inscription promises that the ink will not fade. I cut the sheet from a roll of white water-colour paper and fray the edges. It lies on a table and the point of the pen hits the sheet without losing ink. I move around the table with my chair. My arm has a good long reach, so I sit for a long time in one place. Now and then I stand. The tabletop gives sound to the tapping of the pen. It can be heard in the next room.

Fig. 9: Pattern sheet for Berlin wool work, Germany (c. 1840–50), hand-painted on machine-printed squared paper, 9.6 × 9.5 cm.

Fig. 10: Unbleached linen, 11 threads per centimetre.

Fig. 11: Tina Jonsbu, *Graph Paper Collection* (1997-), pencil on squared paper from Paris, A4.

Canvas is woven from hemp, linen or cotton and is used for counted thread embroidery. Canvas is woven in plain weave, the simplest weave type where the warp alternately goes over and under the weft and forms a regular grid.

Ludwig Wilhelm Wittich's spouse, or Madam Wittich, as she is called – I haven't found her first name – convinced her husband that it would be a good investment to start production of embroidery patterns. This was in Berlin in 1810. He was a painter and engraver, and she herself embroidered. She turned out to be right, for in 1840 about 14,000 such patterns had been published all over the world, and *Berlin wool work*, as it is called, was extremely popular. There were 21 producers in Berlin alone. The patterns were printed in black and white as squared paper where each square represented a stitch. In the squares there was a symbol for the colour to be used. Then they were painted by hand, so that the embroiderer could immediately see the colour. It was not to be difficult. The colour shading was often precise and thorough in the early hand-painted patterns. The women embroidered with woollen thread on canvas and counted their way to the placing of each stitch in relation to the squares in the pattern. It was finely woven canvas when you embroidered a painting, coarser for a simple design, and the wool came in all thicknesses and colours. Gradually silk threads and cotton threads were also added. Wittich paid artists as much as 40 pounds to get a pattern made from a painting or an engraving, and at first Berlin wool work was exclusive and expensive. The printing techniques developed, and with more colour options the patterns were published and became cheaper and more accessible, among other ways through the many women's magazines that appeared. The palette of threads became larger with the chemical dyes, and the colours in the embroideries became brighter and stronger. Embroideries were rarely signed.

Graph paper is paper printed with lines which form a grid. The first sheet to be printed and sold was called 'coordinate paper'. It was first printed in 1794 and was patented by a Dr. Buxton from England. Squared paper has mainly been used for mathematics and technical drawings as well as graphs and notes, and then as pattern sheets for Berlin wool work. The accuracy of the printing is important, and the squares have exact dimensions.

Fig. 12: Thérèse de Dillmont, *Encyclopedia of Needlework*, Table for DMC's colour range of cotton thread, part 2 of 2 (Eng. ed. c. 1900).

In the laboratory at DMC in Mulhouse the colorists were specialists with long experience of textile chemistry. In the containers around them they had natural dyes such as indigo blue and red from madder, which grew in the fields around the factory, and there was carmine from the cochineal insect. They knew that if they developed bright, strong colours, this meant high earnings for the factory. The colorists worked with academic chemists and were part of a national research milieu that searched for new materials and pigments and cheaper production methods. The British chemist William Henry Perkin discovered the pigment *mauveine*, which is used to create the colour mauve, in 1856. Afterwards, when he discovered that he could produce it as a stable synthetic dye by using aniline, this inspired intensive research and a hunt for new colours. Around 1900 hundreds of synthetic dyes were discovered that could be used not only in the textile industry, but also by craftsmen, designers and artists.

Fig. 13: Thérèse de Dillmont, *Encyclopedia of Needlework* (Eng. ed. from c. 1900).

In 1884, at the age of 38, Thérèse de Dillmont left the embroidery shop she had with her sister in Vienna, moved to Dornach near Mulhouse, and started a school of embroidery in collaboration with DMC. At the same time she wrote her comprehensive reference work *Encyclopédie des ouvrages de dames* (English translation: *Encyclopedia of Needlework*). The book was published by DMC in 1886. It comprises more than 800 pages with history, patterns and techniques for embroidery and stitching, and although specialized machinery could do good work by this time, it is first and foremost needlework she writes about. She also recommends thread and colours from DMC when she describes procedures. She does not write about Berlin wool work. Women from all walks of society did embroider at the end of the 1800s. Needlework was no longer associated with women who produced for industry in poor working conditions, nor was it confined to well-off middle-class women relegated to suitable domestic activities, and there was an increasing interest in embroidery as an art. Thérèse de Dillmont's book was at first published in French, but later it has been translated into seventeen languages. It is one of several similar books which were published at the same time. In 1885 Dillmont opened an embroidery shop in Paris. Later she opened several shops, in among other places Berlin and London, and she published a succession of booklets with patterns and embroidery techniques from different cultures and continents.

In *Encyclopedia of Needlework*, "Plain Sewing", page 1, (English translation, 1890) Thérèse de Dillmont writes: "Position of the body and hands: Before describing the different kinds of stitches, a word should be said as to the position of the body and hands when at work. Long experience has convinced me that no kind of needlework necessitates a stooping or cramped attitude. To obviate which, see that your chair and table suit each other in height, and that you so hold your work as hardly to need to bend your head at all. The practice of fastening the work to the knee, besides being ungraceful, is injurious to the health."

Fig. 14: Georges Seurat, Sketch for *Un dimanche après-midi à l'île de la Grande Jatte* (1884), oil on canvas, 70.5 × 104.1 cm.

The year Thérèse Dillmont opened her first embroidery shop in Paris, the 26-year-old Georges Seurat went with Paul Signac to the Gobelins factory. They did not meet Chevreul there – he retired when he was 97 – but they met his assistant. Seurat was in progress with *Un dimanche après-midi à l'île de la Grande Jatte* (A Sunday afternoon on the island of La Grande Jatte) and they were interested in the theory of simultaneous contrast. He painted dots and short strokes in close array. He did not mix them, but placed the colours close to one another on the canvas. He liked the way he could get the colours to interact and tried to make them bright and strong. Systematically and with precision he built up the picture surface. When he took some steps backward and looked at the painting, the colours of the points mixed before his eyes. Sometimes he experienced that the points were too small and the strokes too thin, and then the colours were muddied. He liked this methodical and logical way of painting and saw it as a kind of science. It took two years to complete the painting, and in 1886 it was shown at the Société des Artistes Indépendants (The Society of Independent Artists) in Paris. It measured 207.6 × 308 centimetres. The same year Thérèse Dillmont finished her book – that took two years too. It measured 15 × 10 × 4 centimetres.

Just a month after the Salon des Indépendants had been packed away, Michel Eugène Chevreul turned 100, and this was celebrated as a national red-letter day. He was awarded medals and distinctions, also by Queen Victoria in Britain. He died when he was 102. Thérèse Dillmont reached the age of 43 and Georges Seurat 31.

Fig. 15: Left-over threads from *Embroidered picture: Kitchen*.

"I wasn't given embroidery kits when I was a child," says Yngvild, "for my mother thought it would hamper free creativity". She was a college lecturer in textiles, trained in the 60s, and the free imagination was the ideal. I wasn't given colouring books either, although I very much wanted them. We are sitting in a café, and I am embroidering with left-over thread from the cross-stitch embroidery *Embroidered picture: Kitchen* from Eva Rosenstand/Clara Wæver. My mother finished that picture when I myself had not finished it at one point in the eighties. It is one of many such embroideries I did during my childhood and youth. My mother and I both love the embroidery kits. We chose subjects from a catalogue, and *Kitchen* is a motif by Carl Larsson. He often painted his home and family.

Fig. 16: Lone Jonsbu, *Blue tit* (c. 1980), embroidery on linen, 18 × 24 cm.

Karin Bergöö studied art in Stockholm and later in Paris. She met Carl Larsson in France, and in 1883 they married and moved to Sweden. Karin was a promising painter, and had ambitions of earning a living from art. But a year after they married, Karin stopped painting; Carl could not accept that Karin was a better painter than himself. She designed and wove textiles for the home, embroidered and made clothes for herself and the children – there were eight of them – and designed furniture – light and easy and strongly coloured, and quite different from the heavy interior traditions and dark colours that were fashionable in their time. You have to see the presence of the hand, she said, and in the textiles she experimented with and combined different craft traditions, Swedish as well as Japanese, which were more stylized and simplified. In her colourful tapestries and carpets there is an abstract formal idiom that was unusual at the time. As well as being her studio, her workshop was a central room in their home, with looms and a joiner's bench. It was a room she liked to abandon the housework to be in. Karin created the motifs that Carl painted, and he admired her work. Their home is a museum today.

The *Arts and Crafts* movement was a reaction against the industrial work where machines replaced human beings, the middle class grew and many workers lived in difficult conditions. We must preserve the craft traditions, thought William Morris, the leader of the movement. We must have a society where we ourselves create what we surround ourselves with. It will give us back our dignity. Industry is becoming impersonal, mechanical. We must unite artists, designers and craftsmen, stop the division of labour that industry is creating. We must rather look at the Middle Ages and build up craft-based workshops where we also learn about materials and techniques. He thought that Berlin wool work, with its mass-produced patterns and laboratory colours, was typical of the lack of creativity and understanding of what it takes to create beautiful surfaces and motifs. Morris encouraged freehand embroidery and natural colours. The Arts and Crafts movement spread from Britain to the British Empire, and to parts of Europe and the USA between 1880 and 1920.

Women had to get an education, women's work had to be professionalized! The women's movement challenged the boundaries of the unselfish femininity that the Victorians prized so much, and along with the Arts and Crafts movement this changed attitudes to embroidery. Embroidery was appreciated as income-generating work and gained its own status as an educational subject in 1872, when *Art Needlework* was introduced and creativity and experimentation became important. Around 1900 embroidery was practised professionally by tailors, embroiderers, teachers and artists. At the same time millions of women engaged in embroidery as a leisure activity.

Fig. 17: Tina Jonsbu,
Blue tit (2017),
embroidery on paper,
12.3 × 9.3 cm.

I sew arbitrary stitches on paper. I embroider with small stitches and try to find a rhythm. The needle makes holes in the paper, and the thread scrapes against the edge of the hole. Up, down, up, down. The paper softens, and I embroider soundlessly. The needle breaks down the paper and the thread holds it together. I cut the paper from a sheet of Japanese paper. It is 14.8 × 11.2 centimetres and I hold it in my hands and embroider within the radius of my body. It doesn't take up much room, and sometimes I sit with others when I am embroidering. I feel my way forward with the needle to find a point to pierce it through. The thread is leftovers from *Embroidered picture: Blue Tit 3* from Eva Rosenstand/Clara Wæver and I embroider with single threads. I use the colours one by one and follow the order on the thread card. I begin with 'dark green'. 'White' was used up. I embroider for 13 days until the thread comes to an end. I embroider on bus, in airport, on plane, in car, in living room, on veranda, in cottage.

Fig. 18: Tina Jonsbu,
Millimetre Paper
(2009-), a point of
ink in each square of
the millimetre paper,
21.59 m × 27.9 cm.

Fig. 19: Embroidery kit
from Eva Rosenstand/
Clara Wæver (date
unknown).

In her diary entry for 28 November 1920, Karin Bergöö Larsson writes: "Just now I'm weaving rugs with a weft of many memories. Here red stripes from the red coats of the girls that I sewed and which their father often painted them in. The white rugs were once dresses. A blue-dotted strip is from the clothes I modelled in with the children jumping around naked among the tree trunks on Bullerholmen."

Today the shop is called Eva Rosenstand/Clara Wæver, but in 1890 it was the 45-year-old Clara who at last opened her own shop at Vesterbrogade 62 in Copenhagen. She and her sister Augusta sold embroideries and embroidery materials and made great demands on quality and precision in the materials, colours and patterns. On the side they taught young girls and took them on as apprentices to teach them to sew 'dowry' or 'bridal chest' clothing. Hedebo embroidery was a Danish tradition that they kept alive. Examples of this were shown at the World Exhibition in Vienna in 1873, and Thérèse Dillmont also included the technique in her book. The Wæver sisters collaborated with artists who supplied original drawings for pattern production. When I visited the shop for the first time, at the beginning of the 1980s, it was at Østergade 42 and had been merged with the embroidery shop Eva Rosenstand. Eva Rosenstand had introduced kits for cross stitch embroidery to Denmark in the 1960s. Before that they had cut out cloth in the shop, found yarn and laid a pattern in. Now a complete kit could be supplied with all the materials necessary for an embroidery motif; for example *Fox Earth* and *Blue Tit*, which are still to be found in their catalogue.

Fig. 20: DMC embroi-
dery kit: *Seurat. Bathers*
at Asnières, counted
cross stitch kit.

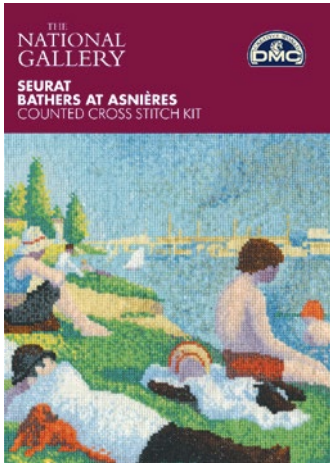


Fig. 20.

Table giving in alphabetical order the names with the numbers of the shades enumerated on the COLOUR CARD for the dyeing of the COTTON and LAX ARTICLES bearing the D-M-C trade mark.

COLOURS	Ultra-dark	Very dark	Dark	Medium	Light	Very light	Ultra-light
Greys:							
Ash grey	853	413	317	414	318	418	369
Beaver grey	843	344	645	647	648	649	650
Blue grey	590	591	592	593	594	595	596
Brown grey	865	866	867	409	410	411	412
Cream grey	336	339	339	339	339	339	339
Dove grey	363	363	363	363	363	363	363
Dust grey	363	363	363	363	363	363	363
Felt grey	363	363	363	363	363	363	363
Flax grey	363	363	363	363	363	363	363
Greenish grey	595	596	597	598	599	600	601
Hay grey	520	521	522	523	524	525	526
Hazel-nut grey	868	869	421	422	423	424	425
Iron grey	360	361	362	363	364	365	366
Lead grey	876	877	379	380	381	382	383
Lilac grey	332	333	334	335	336	337	338
Lime-tree grey	391	392	393	394	395	396	397
Mignonette grey	924	925	926	927	928	929	930
Mourning grey	655	656	657	658	659	660	661
Mouse grey	425	426	427	428	429	430	431
Neutral grey	626	627	628	629	630	631	632
Pearl grey	625	626	627	628	629	630	631
Smoke grey	878	879	640	641	642	643	644
Steel grey	356	357	358	359	360	361	362
Ticking grey	387	388	389	390	391	392	393
Tinder grey	329	383	384	385	386	387	388
Twine grey	460	461	462	463	464	465	466
Wood grey	874	875	610	611	612	613	614
Lilac:							
Lilac	313	398	314	328	399	783	784
Pinks:							
Briar rose pink	570	571	572	573	574	575	576
Bright pink	565	566	567	568	569	570	571
Geranium pink	891	892	893	894	895	896	897
Old pink	3704	3705	3706	3707	3708	3709	3710
Rose fast dye	3356	3357	3358	3359	3360	3361	3362
Tender pink	845	846	847	848	849	850	851
Reds:							
Bordeaux red	845	846	456	457	458	459	460

Fig. 12.



Fig. 17.



Fig. 3.

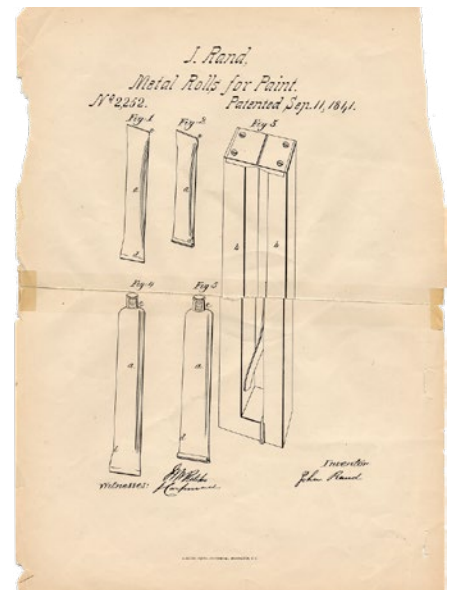


Fig. 2.



Fig. 15.

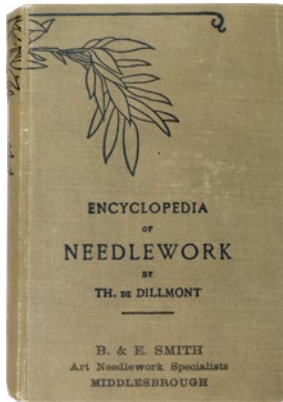


Fig. 13.

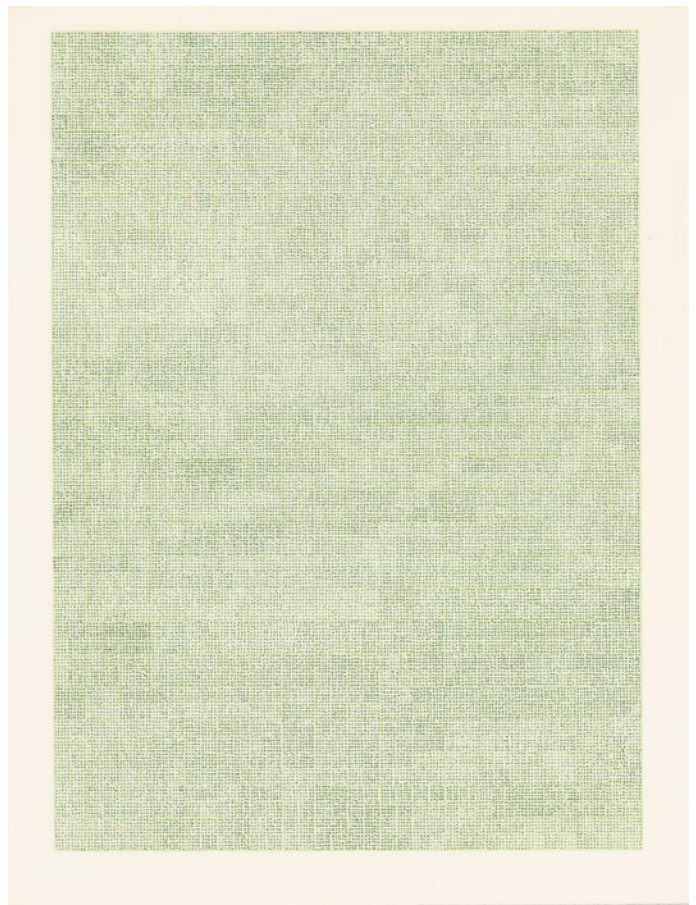


Fig. 18.



Fig. 10.



Fig. 14.



Fig. 7.



Fig. 8.



Fig. 16.



Fig. 6.

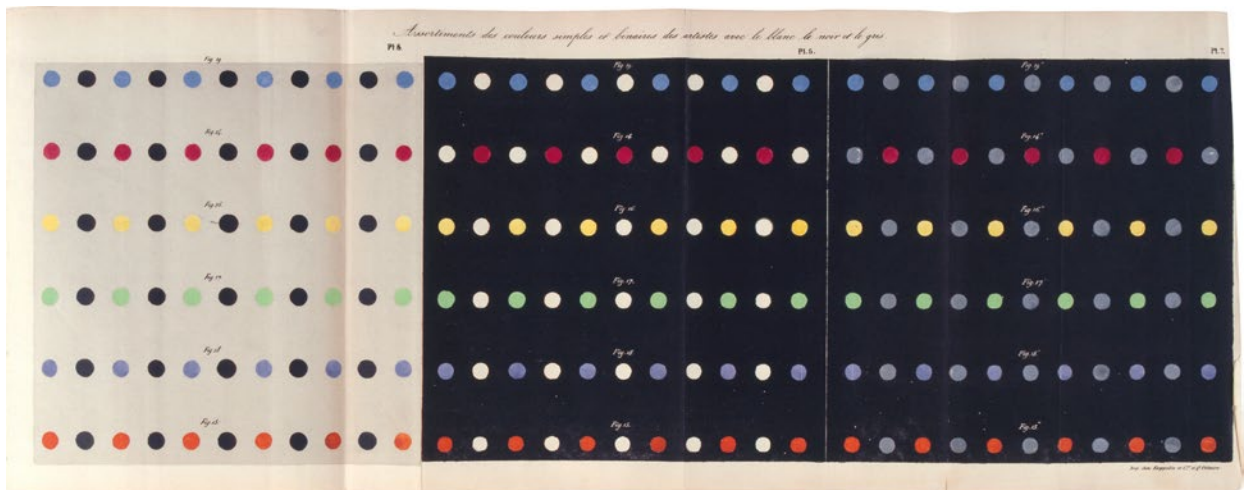


Fig. 1.



Fig. 19.

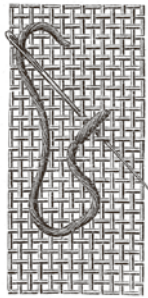


Fig. 4.

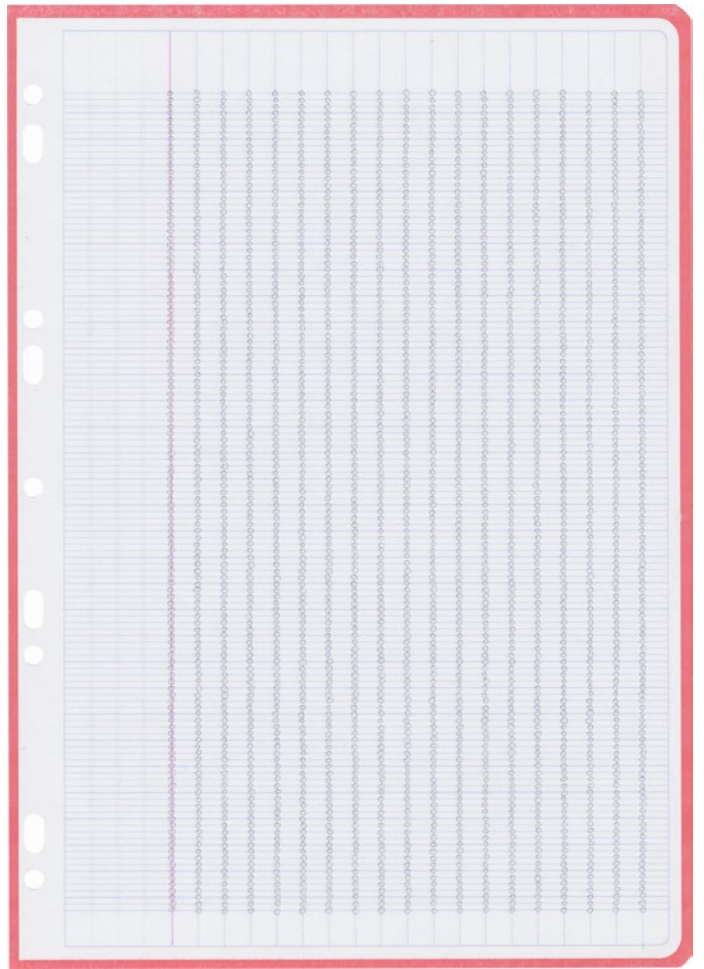


Fig. 11.



Fig. 5.



Fig. 9.

The Vorma

In June 2017 I sailed in a boat down the river from Minnesund. It is under the old railway bridge at Minnesund that Lake Mjøsa ends and the River Vorma begins. It felt a little like sailing into a jungle although the temperature told a different story. The trees hung out over the river; it was intensely green and far between the clearings. What I noticed most was all the greenery, which was quite overwhelming. Just under the water surface I saw large areas of sandbanks, and now and then there were timber poles from the time when timber was floated down the river. Farther down, a train passed on the western side. The railway followed the water all the way down to the station; the rails ran on grey gravel and broken stones, and dominated what I saw when I looked westward. Gradually, as we approached the built-up area Eidsvoll, I saw more houses and farms. We went ashore before we passed Sundbrua, after which the vegetation increases again and the river runs on through Eidsvoll and Nes until it flows into the River Glomma. It is 32 kilometres long. It was on this trip that I decided to investigate how I could work with the Vorma as the framework for an embroidery.

With the approach of spring in 2018 I had decided on a work in which I would capture the colours along the riverbank and find a system of my own to embroider with. A photographer could photograph the whole bank, or I could photograph it myself. I could get help with sorting the colours digitally and reorganizing the pixels such that the order became a colour scale, for example, with different groupings of colours where one pixel was one stitch. That system could also have given me a solution to how much I should use of each colour. But I ended up deciding that it was my experience of the colours along the Vorma I wanted to embroider, and that I had to register the colours as I saw them when I was in the landscape, without a camera. It is like using colours from a one-to-one relationship between me and the Vorma.



My palette will consist of 482 colours. The colours are the selection in the series Mouliné Spécial 25, art. no. 117 and I found them on DMC's colour chart for mouliné yarn and pearl cotton. I will find the colours I saw along the Vorma

in the colour chart. It has 20 'columns' with a colour field one centimetre wide in the form of transverse stripes.

I also evaluated other colour charts for embroidery thread. A chart for 130 flower colours in cotton could have been a good starting point, but it also seemed to control my thinking about what to capture on the riverbank when they were defined as 'flower colours'. One chart had 194 colours in wool and showed thicker threads that had more friction and build, and could get fuzzy, it said. I prefer the smooth cotton that can be divided into six thin threads. I know that I embroider effortlessly with it. And I know that the stitches lie densely against the cloth and appear to become part of it. I can go to almost any yarn shop and buy the thread, and I think of the chart as a kind of standard for embroidery thread.

Mouliné Spécial 25 was developed for embroideries in all sorts of variants. I know it as thread for cross stitch embroidery where the patterns show how you should embroider and what colours to use. It is used for landscapes and flowers, animals and birds, buildings, lakes and rivers, historical events and versions of well known paintings, food and maps, pixies and trolls, letters and borders. There should be many possibilities and approaches to finding colours from the riverbank in this selection.

It is the monochrome thread in the colour chart that I want to use to compare with colours along the Vormå. When one and the same thread has different colours, I will probably try to see it as one uniform colour when I compare it with foliage, for example. When the thread is uniformly coloured, I can find the same colour in the foliage, or I can decide that it is not there. I think that the margins for finding what I see, not what I think I see, or want to see, become narrower that way. Dyeing threads myself is never an option. That way lie infinite possibilities for quite different works.

I decide on a long format for the cloth on which I am to embroider. For a long time I have evaluated several small formats in the series. The cloth became flax ribbon, unbleached linen. Flax ribbon can be obtained in rolls in Denmark and has 11 threads per centimetre. An undivided roll has 25 metres of cloth where the long sides have selvages, and usually it is divided up and used to embroider bell pulls and runners, serviettes and belts. I think of the long, unbroken format as the river, and unbleached flax reminds me of the sandbanks in the Vormå. Unbleached flax ribbon is available in widths of 0.8, 1.5, 2.5, 4, 5, 6, 8, 10, 12, 14 and 20 centimetres. I have rejected the narrowest widths because the cloth must be light and easy to embroider on, and not troublesome. And I think the narrow widths from 0.8 to 6 centimetres are more like material for costume ribbons and recall brooks and streams rather than rivers. I ordered cloth samples of 8 (even though I thought these were too narrow), 10, 12, 14 and 20 centimetres to test how the different widths lay in my hands and what it was like to embroider on them.

I want to embroider without big gestures, so I can take the embroidery with me in various contexts without disturbing people or drawing attention to myself.

When I turn 20 centimetres wide material, my arms move all the way up to my shoulders. I turn a width of 8 centimetres with my hands alone, by twisting my forearm a little. I often have to turn the cloth when I am embroidering, when I attach threads or change my grip, or just want to see how the other side of the material looks. I continue to evaluate widths of 10, 12 and 14 centimetres as possibilities and lay 8 and 20 aside. 8, as I saw it, was a bit too much 'brooks and ribbons'.

When May comes, I try hiring a boat and a boatman. I have to do the colour registrations in June, and have a colour chart and a note pad ready. When I have to decide what kind of boat, how many days and how many hours a day, I understand that very little is clear to me, and that it is impossible to sit on deck with a colour chart in my lap and aim at the right colour among 482 small samples close together in a folder. While a boatman waits and tries to manoeuvre the boat into standing still. I cancel the boat trip. A boat trip was the prelude to the work, and I have tried to find solutions from an imagined, floating starting point somewhere on the river. It feels like being put ashore when I cancel the boat trip. I get solid ground under my feet, my hands on my material, and a new drive in the work.



The next day I make 25-metre paper rolls; cut paper, tape together sheets for rolls 10, 12 and 14 centimetres wide, and roll them out on the floor. I have to see what 25 metres with these dimensions looks like. Maybe I see them as lines rather than surfaces, maybe they should be shorter, and maybe I shouldn't have put away the 20 centimetres wide cloth, for perhaps 25 metres 20 centimetres in width is like a stream? I look at the lengths and move along them; see them in relation to the wall and see them in relation to the floor. I roll them up, take the train to Eidsvoll and go to places along the Vormå and photograph for the next two days. I see stones, deck chairs, flowers, paths, bark, leaves, grass tufts, floating logs, bogs, clay, construction materials, raspberry bushes, I meet the riverbank one-to-one and it all becomes more tangible for a while.

I embroider further on the cloth samples, test the thread lengths and how I should embroider; try to get everything to fit into a system where all the choices can be explained: the period of time I should register, how I should register, what I should register, how much I should register, how much I should embroider, how dense the stitches should be, how frequent the embroidered registrations should be, how it should be presented and how the relationships among time, geography and the format of the cloth should be.

The stretch from Minnesund to Verdens Ende is 9.9 kilometres. I measure that on the map on the net by clicking and stretching the measuring tool down over the river. 'Verdens Ende' (the End of the World) is a tongue of land that is gradually being washed away on the west side of the river, a little south of Sundet. I've never sailed beyond it. I think this is a fine, if rather personal boundary, but if I cut the length of the cloth to 9.9 metres, it becomes a logical format for defining a stretch to work along. If I divide the cloth into 12 pieces for 12 months, it becomes

82.5 centimetres per month. What about 12 metres of cloth and one metre per month? That is a neater calculation, I think, but what about the relationship with the actual stretch? I measure my way 12 kilometres down the river, and hope I encounter something that makes sense, but I don't. Onward: 12 metres of cloth for one year and one embroidered registration per 12 centimetres produces 100 registrations in a year.

I see that I am alternating between thinking of the long format as a timeline and thinking of it as an image of this particular stretch of the river. But what do I actually mean when I think of the flax ribbon as the river? It is the riverbank, but also the river, especially if I lay it flat. There is just the fact that, when the cloth lies flat and *is* the river, and the colour recalls the sandbanks, I cannot make it fit when it is the riverbank I intend to take the colours from. And there are banks on both sides of the river. A mental image I have shows a long piece of cloth with three long, embroidered stripes, two for the riverbanks and one for the river in the middle, and this is disturbing to me. I know that I don't want to embroider it so 'figuratively', but the image illustrates that I am not making it all fit together. I see the riverbank as vertical, the river as horizontal, as it runs through the landscape. If the cloth is the river, it becomes a little like putting trees and houses out in the water when I embroider colours from the riverbank.

A thought: When the water is clear and still, trees, houses, clouds and sky are reflected in the water surface, and everything becomes horizontal. I see this when it gets darker too, and when the surface is more agitated – more blurred and less clear, but the reflection bobs up and down with the waves.

A thought: The format can be time, without being a timeline. The format can be a distance. The format can be a distance experienced over time.

Embroidery sample: I hold the sample as if I am embroidering the riverbank, and then I embroider across and think in terms of a horizontal format. I hold the sample as if I am embroidering the river and then I embroider downwards and think in terms of a vertical format. When the flax ribbon comes by post, I try with the whole roll, lay it in my lap and feel what it is like to hold the material as if in vertical and horizontal format, and I sense that it is best to alternate, as the embroidery requires me to turn and rotate the cloth.

Some decisions sneak their way in before I have time to formulate them for myself. For example I embroider almost all the samples on pieces 12 centimetres wide. I try with 14 centimetres, but put it aside before I have completed what I meant to. I prefer embroidering on some samples of bleached linen 12 centimetres wide rather than trying more on 10 centimetres of the unbleached linen. That is how I decide on flax ribbon 12 centimetres wide and order a whole roll without knowing how much of it I will use.

The train stops on the eastern side of the river, and I walk across the bridge to Sundet and am at the yarn shop 'Hold Maska' when it opens in the morning.



I like to pluck the skeins down from the rotating rack one by one, one level at a time, and I lay the skeins on the counter in groups corresponding to the eight levels of the rack. The colours are not ordered as in the colour chart. It takes two hours to buy the thread and I have eight small bags with me when I leave. I still need a set with 35 new colours and some that are sold out, but there are 442 variants on that particular day.

Before this I tried to find a shop that had the whole range in the latest DMC colour chart, and had to make phone call after phone call, hours of searching on the net and long delivery times. The thread could not be supplied in complete sets unless I bought the package with a dark-stained sewing box for storage. I found a complete range including the colour chart in a metal box, but it had to be ordered from France and would take about eight weeks to arrive, and I couldn't wait. The skeins had to be plucked one by one from boxes with 12 in each, an agency said. They couldn't manage that. What I thought would be quick and simple turned out to be slow and difficult, and I thought I had got myself in a logical impasse when it came to buying yarn. It was a relief to discover the yarn shop in Sundet. I can be a bit more easy-going and free, I thought, so it will be the palette they have in that shop. It fits the work to buy the yarn in the shop by the Vormaa. Then the thread palette will in a way have a connection with the river. Later I see that this isn't true. The selection in the shop has nothing to do with the experience of the Vormaa, and I order what is missing from an online shop.



One type of stitch for buildings, another for water, a third for vegetation, a fourth for animals, a fifth for machinery, a sixth for something I can't remember. I think there is a fine variety, but a lot to keep control of, and difficulty in defining what is what, and I conclude the test. Arbitrary stitches are free of the form the colour is taken from. I do them without thinking. And it is easy to find a comfortable rhythm as the needle wanders over the cloth. The rhythm creates organic lines. The lines mix and the colours merge. My thoughts stray as I embroider. I choose to use arbitrary stitches. Double threads fill more than single threads, and single threads are often used for contours. In addition, double threads are easy to fasten by making a loop through which I sew the first stitch. I choose to use double threads.

The skeins lie across the working table in the order in which I took them down from the rotating rack. I reorganize them so that they lie in groups that correspond to the order and colour columns in the colour chart. I see the quantity, I can touch it, and I think it gets easier to imagine different ways of making a functional palette.

I need a system for registering which colour codes the threads I choose have. 482 skeins of yarn is a lot to take with me to the Vormaa. I must have threads with me for every single colour, and I have to know which colour codes they have. I must be able to take a colour out to compare it with the motif and put it back in a fixed order of threads.



I search online for a practical system for the thread samples. I go to shops for embroidery and shops for tools and for office supplies. I look for thread organizers, boxes, plastic pockets and folders. I look for solutions and for ideas. I make models for hand-held thread organizers, cut out in cardboard and plastic. Some are made for one yarn colour, some for a group. There can be a thread card for each colour in a box, and a thread sample at the end so that I have an overview of all the colours and can take them out one by one out and keep them together in one hand as I find the colours in the motif. It would be fine to see the colours gathered like that in my hand, but it can take a long time to get the threads put back in the proper place in the box, and I imagine it's like putting on the brakes when I am busy registering.

Registration test from photo, section of bank

166	3052	3024	369	904	
580	934	ECRU	966	3047	
165	936	302	955	772	
3819	471	647	704	993	
522	471	3787	907		
524	3348	3817	906		= 28

Observation: I discover that the colour of the single thread disappears, even in weak backlight, when I hold it up in front of a motif, and that it is easier to compare colours when I hold up a whole skein or several threads together. I need more thread than a small sample; small nuances may distinguish the different colours.

Is it more effective if I take all the yarn out with me and consecutively cut off lengths of thread for the colour I see? I can gradually collect the threads in envelopes and they will be ready to embroider with. Or I can cut the skeins into specific lengths in advance and simply pull out threads one by one as I find the colour in the motif.

Gradually I conclude that colour samples and a thread store must be one and the same thing. I will wind each skein up on a small card the way I see embroiderers do. The cards are put in boxes like index cards, with the long side down, so that the embroidery thread is visible as an area of colour. I need deeper boxes.

The summer is warm and dry, and I imagine how it can go when I am at the Vormaa and take out the palette. I imagine that the thread palette lies in plastic boxes that are divided into small compartments that fit the thread-holders. Five boxes are necessary to make room for all the colours. I carry them in a backpack – I can't face the thought of carrying something large or heavy that bangs against my hips or legs as I walk. I imagine that I sit along the riverbank and pick threads from the boxes, and I feel that the palette must have the space in one unit. It won't do to unpack and pack several plastic boxes repeatedly and lay them out on the ground to get an overview. I think the registration would be unmanageable that way – and what if it rained?



– Where shall we go? says the skipper. We can go up towards Lake Mjøsa or down towards the sluices in Svanfossen. He knows his way around and knows about every single inlet and who lives where and how I can get down to the river and what it was like here before. We go downward. That is, we criss-cross in and out of inlets and then we go upward again and slide across the sandbanks there. I see the sand more clearly. *Skibladner* zigzags around this stretch. It has sailed here since 1856. In those days the paddle steamer carried post and people from the railway station at Eidsvoll, for that was the terminus; and all the way up to Lillehammer, and a dam was built to regulate the water level in the Vormå when the steamboat traffic came. It lay just below Eidsvoll in Sundfossen and has gone now. But the dam in Svanfossen is still operating. Now *Skibladner* follows a waterway that twists out around the sandbank and carries tourists in the summer season.

The river washes away the soil that keeps the roots in place, and the trees topple into the water in several places. There are tree trunks under the water surface too. When I sailed down the river a year earlier and decided that the Vormå was to be the setting for the embroidery, it was this eastern riverbank as a kind of landscape motif that I was most interested in. The motif is like a long green strip we sail along. I sit out in the middle of the river and look at it. When I moved from the middle of the river over to the riverbank, I stood amidst what I had earlier looked at from a distance, and the motif dissolved. It went from being a long green strip to infinitely many possible motifs, and I struggle to find an approach to what I actually want to take colours from.

– Here there could be crocodiles, says the skipper, far up an inlet. He says there used to be cattle paths along the river, and it was fine to walk on them. But now it isn't cows we hear when a branch breaks. There is a bird sanctuary on both sides all the way to Minnesund, so there are more birds than before, and clearing the forest is prohibited.



I am thinking that the Vormå is more than what I see as landscape; that it is people and animals and meetings. History that has been and history that is being made now. Like this boat trip, for example. And that much of what I see and experience from the boat I can't see and experience if I sit in on the riverbank. Pikes can incidentally look a bit like crocodiles.

I brood over whether I will get more layers of content in the colour registration if I use a camera to supplement what I register one-to-one. With a camera I can include passing events and motifs that I otherwise wouldn't be able to find the time and peace to register. Then I can work from the boat too, and it is perhaps natural to move both on water and land when the river is the starting point. I can find the thread colours later when I see the images on my apparatus, since there will be time and peace. And I stress that the work with the Vormå needs situations that are good to work in. If I use a camera, I can move around more flexibly and get to where I want in a sensible way, I think, and that can become a composite picture of the Vormå.

A disturbing thought: If it is my personal experience that is important, shouldn't I abandon the Vormá as the framework? Perhaps it is more natural if the work comes with me where I am, rather than that I try to follow the Vormá? I can get the colours where I am moving around anyway, instead of struggling to find a path where there is no path, and where I otherwise would not have gone. I can abandon the Vormá and register colours directly. The thought seems liberating. Sometimes I find solutions that are first and foremost good for other reasons than the artistic ones, but that is difficult to see. That is often a brief, liberating thought. It feels very like good thinking, because it is also liberating. And now it is liberating, I assume, because it is July and I am about to go on holiday, and because I am impatient and frustrated and think this new idea solves everything. The thought only lasts a few days, and when I again ask myself what I should register, I return to the Vormá as the framework.

The holiday period is approaching, and before we get into the car and drive south, I fortunately understand that I do not need to make 482 thread-holders in special sizes, for they are sold in embroidery shops and are called bobbins. It makes no difference to the colour registration whether the cards are handmade or not. The bobbins are punched out in white cardboard and measure 3.6 × 4.1 millimetres. We swing into Halden and buy all the bobbins they have in the embroidery shop there, for I didn't find one any closer. I order 200 more online, so I can be sure to have enough.

Back home lies a brown cardboard box. I assume that it can just hold 482 bobbins and 482 skeins of thread – I've calculated it. I found the box in a shop in town on one of my searches. It is good to hold, and the cardboard feels solid and stiff enough. Now all I need is a satchel or bag to carry it in. I have the embroidery yarn, the box, the bobbins, a number stamp and stamping ink that dries quickly on the smooth surfaces of the bobbins. The figures on the number stamp are 3 millimetres in height and should have room on the left-hand side of the small hole. When I stamp there I will see the colour numbers when the bobbins stand in close ranks in the box. None of the colour numbers have more than four digits, so it was enough to buy a stamp with four rubber strips. When we pass the border to Sweden I have solved the problem of the palette, and that feels like passing a finishing line.

The wind is strong on the west coast of Jutland, and early one morning on a sofa inside the holiday house, before the others wake up, I am happy to be on holiday and that I don't have to register colours here, there and everywhere I happen to be. It could be unbearable never to put aside thinking about colours for the embroidery, and I can't have considered that in that case I would have had to take the thread palette with me to all these places I happen to be. Nor am I really interested in collecting colours from many different places and perhaps different countries.

It is very quiet in the house, and I have the camera in front of me and look at pictures from the boat trip a few days earlier. The pictures bring back places, smells

and sounds and memories from the trip. I look at the pictures and remember. If I register colours in a photo from the Vormá and compare the thread colours with the colours on my screen, isn't it the case that I am registering colours from a memory, not colours from the Vormá? I have chosen the detail and what I see, but the lens, the camera settings and the screen do something to the colours after I have observed them. I think back, but can't envisage the colours as they looked to me on the spot. If I register the colours in what I see when I am at the Vormá, isn't it the colours from a 'now' I am registering? I wonder whether I can bring back memories of places, smells and sounds from the trip when I embroider with the colours I have registered.

I put the camera away and know that I will not use it to capture passing events and motifs that I won't otherwise come to. That is not what is important. It doesn't give the most comprehensive impression of the Vormá I will create, but an impression from my time along the Vormá, and that is a small explanatory shift in my thinking. I move my time to the Vormá and keep the one-to-one relationship between myself and the river.

Historja (History), the 23.5 metres long embroidery by Britta Marakatt-Labba, tumbles around in my brain along with Torvald Moseid's *Draumkvedet* (The Dream Poem) of 55 metres and Tapisserie de Bayeux (the Bayeux Tapestry) of 70 metres. They appear to me as formats without thorough investigation of what the works are about. All three are wider than my roll of cloth, the first one 39, the last one 50 centimetres. *Draumkvedet* is composed of pieces of cloth with different heights, but I think most about the length.

I can splice the material, sew it together to double the length, or triple the length for that matter. I can make it whatever length I want, I can make it even longer than the Bayeux Tapestry, but I want to embroider in a format that first and foremost 'refers to itself'. My thoughts revolve around how I can use the long format in my work on its own terms.

Inasmuch as I see the length of the roll of cloth as the whole of the Vormá, some of the tangle of thoughts is unravelled. It is good not to have to work out a logical relationship between format and distance. The whole river, no more, no less, but the whole river from Minnesund to Vormsund where it meets the Glomma. And the whole roll of cloth, no more, no less, but the whole roll as it has been produced in the factory. The relation becomes one-to-one between river and roll. And they remain the sizes they come in.

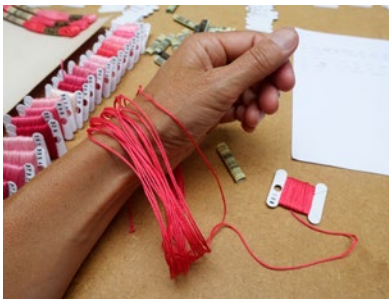
I calculate that if I embroider registrations with 12 centimetres between the midpoints, I should do at least 208 colour registrations if I am to fill out the whole format. I just have to decide where and when I must do the registrations.

Repeated attempts at an explanatory train of thought: The long format may also refer to time. The format can be time without having a chronological narrative. The long format can be an experience over time and it can be the Vormá as

a length. It can be the experience of the Vorma over time; an experience is not linear. I think of the experience as a 'now' in which future and past are also present.

The places along the Vorma have stories at different levels, some quite personal, some historical, some that are dreams or imaginings of something that may come to happen. The stories lie there, between the trees and the buildings, in the landscape. But I cannot see them. They exist as experiences and knowledge in my consciousness. I have grown up with the river. I want to find colours in what I see, and I envisage that when I embroider the colours that I register along the Vorma, it is an indication of a landscape and an indication of an experience that I embroider, for I leave a lot out when I only go with the colours. I think of the colours as a basic structure, and think that the basic structure can be filled with my own or others' experiences and knowledge.

On the boat home from my holiday I buy a large shoulder bag in the duty-free shop. With a zip fastener so I can close it, and water runs off it if it is not too much, for the cloth is a little smooth and glossy. One large compartment and a couple of small ones that fit the notebook and pen, and a camera, and other things so far unknown that it may be smart to take with me when I am to register colours. The thread box fits in the large compartment, and another piece of the puzzle is in place when I get home.



I stamp the colour numbers on the bobbins; have the colour chart in front of me and follow the order from top to bottom on the colour columns. On the whole the stamping is accurate. Now and then the rubber bands are displaced a little, and the numbers do not stand quite in line, but that's fine. It takes me a day, and then I have twenty columns of small cards, or bobbins if you like, lying in front of me on the table. They have all been given a number, and I bring out the yarn skeins. The thread feels soft and light on my wrist before it slides out between my fingers towards the card I hold in my right hand. It is hard to say whether I bind the threads on the bobbin with my left hand, or lift the thread up on the bobbin with my right hand, and possibly I do both at once and in a single motion. The tension in the thread is necessary to make even layers, and I feel like a living reeling device. It takes me three full days to wind up all the skeins of thread.



The time is 22:35, and it is beginning to get dark outside my studio. I have just wedged down the last bobbin and the box is bulging a little – but it worked. The bobbins stick up a couple of millimetres over the edge of the box, and so no shadows are cast in over them. I can grip a bobbin with two fingers without pushing aside the partition walls I have put down in the box, for they lie just a centimetre lower. Again I have all the colours gathered just as I had when I wanted to use the actual colour chart for registering from the boat in the spring. The order is the same, and each 'column' in the colour chart is marked with a cardboard partition marker. Now the 'chart' has a cover and a height of 6.2 centimetres, and I see all the colours at once and do not need to bend more sides out to get an overall view. The thread palette is given a place on a manhole cover in front of some bushes outside, and I try for the first time to register colours with it.



I have to get busy because the sun has gone, and I choose the withered leaves and the pipe that lies on the concrete right in front of me. My relief is great when I immediately discover that I have found out how to keep order in the colours I register. I feel a happy tingling in my stomach in fact, as I have thought up and tried out ways of collecting the colours without succeeding, and then it takes care of itself when I lift a bobbin, hold it in front of the motif, see that it is the right colour and put it down again – quite simply put it down again with the short side, the colour number, upward! So then I take another bobbin, hold it up in front of the foliage, see that the colour does not match and put it down in the box again. With the long side down, quite simply, back as it was before I lifted it up. I hold my left forefinger down in the box where I use my right hand to lift a bobbin up, so I know where to put it down again. There's a sparkling feeling in my stomach in the end when I have 24 bobbins with the short side up and note the numbers down in the order in which they stand in the box. I tip them back into neutral position, and they are ready for a new registration with no more extra work. I walk into the studio again, terrified of dropping the box on the ground. It is dark.



Embroidery test 22.07.2018: I embroider two areas with 24 colours in each, two areas with a distance of 12 centimetres between the midpoints. I start each thread in the midpoint and am not certain how the areas will meet.

Clarification of persistent disturbing thought in June and July: What if I only go to one place on the Vormá? Go there repeatedly and register colours from what I experience there. Then the format can still be long and narrow, as a format for time. But if I also stick to the idea of the format as an image of the place, it should presumably rather be square, if I am to go to the same place again and again? That fits better with a square, I think, and perhaps even more with a circle. These have no direction, but a centre. And when I go to the same place and get my bearings from there, then in a way I am choosing that place as a centre for the registrations. If I were to decide to embroider colour registrations from a place in square or round format, densely and in layers, I would lose the option of comparing shades and changes in the colours. I hope that the colours change when the light and the weather and the season change, and I am uncertain about whether I hope that because the changes are interesting, or because they create possible variations. But I decide to stay with the long format and not to think any more about the square one in this work.

I have not decided which places I should register, or the order. And not how far up or down the river I should go or for how long, or how many registrations. I have sketches and lists of actual places and time intervals, but I don't get any further. I decide to begin without knowing everything about how I will solve the problems of how, where, what and when.

Free! Or in flight? Free in flight! In free flight. Just starting without knowing where I will land feels like flying. You can be a little more free and easy, I say to myself. You are taking a trip along the Vormá. See what happens, see what you find, see where you can go and how far you get! Let the trip decide. Just start!



Not everything is ready, but the thread palette is ready, and I set myself up on some stone steps pretty far away from the water's edge, by the house I have most often seen the river from. I have to get closer, but not today. I try to have the box in my lap, and it is unstable. I put it down in front of me, beside me, and try to find a comfortable sitting position. I hold an embroidery hoop with a diameter of 33 centimetres and have concluded that it should define which section I take colours from, and I am very pleased with exactly that. An embroidery hoop is a natural thing to use, I think. It has a relationship with the work. When I hold it close to the grassy ground, it frames a small area I can observe close up. When I hold it up and it frames a section of the bank on the other side of the river; this gives me a distance I can relate to. Perhaps that will be evident from the thread colours I find. The details disappear and it is the colours that there are most of that I perceive. When I hold the hoop close to my eyes, I basically see the same as I see without a hoop. The unchanging size gives me variables depending on how I place the hoop in relation to myself and in relation to the landscape.

My satisfaction vanishes quickly when the hoop moves around and out of position, and I make repeated attempts to stabilize it to get both hands free to make the first registration. It ends up a little aslant against a post and I twist myself into the right position, half lying down, to see it as a circle, not as an oval frame. The light changes often while I look out the colours I see, and everything feels pretty unstable. I note 46 colours and make plans for how I can make the hoop steady and easy to work with.

Colour numbers:

666	3756	988	520	—	632	3790
—X2	—	987	—	922	—	—
3688	928	—	677	301	3861	3023
604	926	15	422	—	3860	3024
—	924	3364	612	3859	779	648
3041	—	3363	611	3858	712	646
3042	501	—	—	3857	436	645
—	—	3053	976	407	—	—
—	890	3051	—	3772	3787	—



The sun has gone, but it is still light, and I try again. This time with a slightly smaller embroidery hoop: a diameter of 21 and with the stick from a flag fastened between the screws that hold the hoop together. The kind of stick the flags have when they are small and made for waving or decorating a flower box. I see two pins and some red thread remains at one end. But the thickness is fine, and I can adjust it at different angles against the hoop, as a supporting leg. Now the hoop will stand steady, I assume. But it does not, although it is better than the diameter 33.

An embroidery hoop with a diameter of 12 centimetres and flax ribbon with a width of 12 centimetres. A fine numerical match. I went to Oslo to get hold of



it, and now I have set up the considerably smaller hoop on the stick and I like the format. I can hold it close to my eyes without losing sight of it, and it weighs less, so it should not move so easily. The hoop more or less punches out a section of the landscape, and I can choose the composition when I position it. Perhaps the hoop can be described as a peephole in an imaginary peep-hole cabinet where I arrange the landscape as a tableau. I do some more registrations, and in the twilight I move closer to the river. With the hoop the sections become like framed pictures, and I imagine that what I see is two-dimensional. That helps me to fix my gaze, and I don't have to turn my head and stretch my neck to register colours when the angle stops me from seeing. But when I sit on a small bathing jetty with the thread palette in front of me and I have just managed to lean the stick with the embroidery hoop up against the jetty post to get a section from it, I realize that this makes my experience of the Vorma very stressful and irritating in purely practical terms. And when an angler appears and casts his line a little way off, I notice that I don't like the thought of being seen as strange, for I must undoubtedly be perceived as odd when I sit here in a slightly unnatural posture and keep my gaze fixed on the hoop. The angler stands with his back to me, but I see myself as he would have done, and then I go back to the house where, a little earlier in the day, I stuck the stick with the frame in the ground to keep it stable and straight, and laid a stack of heavy books on the stick to hold it in place in horizontal position. There was no one who saw that.

4. Jetty post. Time: 20:25–20:49

| | | | | | | | | | 3011 | 422 612 611 3045 | 3823 | | | 3777
3858 3857 22 | 738 3371 3031 | 642 640 3021 3033 3781 07

Despite my enthusiasm of the last 24 hours for a 12-centimetre peephole, I sit down with only the thread box in front of me. Soon it gets darker, and I pick out a concrete module in the guard rail along the road in front of me. The river is below. The concrete module is its own frame. Not the grass in front, not the detritus, the asphalt or the water. Only the concrete element. The water below can be another frame. The asphalt a third. The grass a fourth.

5. Concrete element. Time: 21:20–21:27

| | | | | | | | | | 935 934 | | | | | | | 453 452 451 3861 3860 | 3887
844 05 3866 | 646 645 535 3799



Just as it was liberating to use the embroidery hoop, it is liberating to pack it away. I feel I am moving into the experience, and the landscape as image unravels and is again flowers, trees, soil, stones, clay, water, view, jetty, the ground I stand on. I hear, smell, feel. I think my presence becomes stronger when I choose colours without delimiting the area with a physical frame. Instead of narrowing my gaze, I open it up and have 360 degrees with colours and a motif around me. It's the beginning of August, and tomorrow morning I'll walk down to the river. I must get closer, I know that for sure.

Twigs and leaves bob up and down in the water, right below the jetty in Sundet. They are moving all the time and changing formation. It is quiet around me, because I came early, and after 11 minutes I have found the colours, I think. There were 34. If I had looked through the embroidery hoop, there would have been fewer, for the twigs would have moved out of the hoop. Now the twigs and leaves are their own frame, and it doesn't matter that they are floating around below the edge of the jetty I am sitting on. I sit for a long time on the edge of that jetty and find colours in the copper beech on the right, the floating jetty, the furnishings on the floating jetty, the foliage on the point and on the facade of the house that lies out towards the water. That is what first and foremost stands out for me where I sit. I am there on the jetty for a good three hours before I pack up my things and go home.

7. Twigs on water. Time: 10:16–10:27

349 817 | | | | | | | | 966 | | 704 703 906 905 472 936 935 | 10 12
523 3051 | 831 3045 167 | 3822 | | 720 922 918 945 400 300 | 948
3774 950 | 09 433 801 898 3371 | 3021 08 |

Note, studio, 03.08.2018: I am no longer sure how much the variations in light and temperature will do to the registrations. Perhaps I should use the month of August to make all the registration. This year August also has autumn colours. A more intense presence at the Vorm. The registrations go faster than I think.

I sit down. The bag is slightly at a distance. The box lay in a plastic bag when I took it up. I take no chances, it mustn't get wet. It may start to rain, and I may forget myself and put the bag in something wet, or there could be another accident. In my notebook I write the date and place, time, longitude and latitude. 60°19'8" N, 11°16'55" E are the longitude and latitude shown by the compass on my telephone, but I also give a brief description of where I sit and what I register the colours of. Finally I take a quick photo as a reminder of the registration, for I think it will be difficult to remember everything if I need other information than what I write down, and it may be necessary to find out something I don't know what is yet, since I haven't decided everything yet.

The notebook is quite ordinary, stapled and with squares, and I didn't buy it specifically for this work. I thought I should find a notebook that fits the work in texture and colour, format and size, but found nothing I thought functioned any better than anything else, and I am not sure what I was looking for. I have this general idea that everything must have a reason, which in this case means that I don't just take a book because it is simple and just as good as anything else. All the same I end up doing just that. It's the one I use and it is practical in both size and format, and the colour and surface are in fact like the thread box's.

I sit very comfortably on a small folding chair for which there is room and a little more in the bag. The chair sank into the sand when I sat down and the mud

spread around my shoes. I am by the river. Almost right out in the river. Small waves splash in over the sand and drive detritus and pine needles and small sticks in front of them. I choose to find the colours in what accumulates where the water withdraws.

I lift up a bobbin, hold it so I can see the thread area against the area I have chosen, and block off my right eye. It is easier to compare the colours with one eye than with two, for with one eye I lose depth vision and see the thread area and motif as the same surface. I put the bobbin down again, sweep my eye over the thread colours and take another, while my left forefinger marks the place where it has to be put down again. I repeat the process and 37 bobbins stand with the short side up when I can't find more of the colours from the beach area. I write the numbers down. Number after number in the order they have in the box. Vertical lines for the cardboard markers that separate the colour columns from one another in the thread palette. 20 in all.

14. Beach. Time 14:56–15:20

3364			420	613	612	611	3045		976
				453	437	435	436	433	801
898	3371	3864	3863	3862		640	3787	3021	844
3782	3032	3790	08	840	839	838		647	3022
3023	646	645	535	3799	310				

I look up and choose a new area: dead trees in the water, and on the banks, dry soil. I choose quickly and without thinking too much about why. I try to choose intuitively on the basis of where my attention shifts to.

13. The inlet bottom, reeds and grass
14. Beach
15. Dead trees and dry forest floor
16. The riverbed, beach and reeds
17. Bilberry bush, pine and water surface
18. Flower and grass tufts
19. The water surface
20. Camping stool
21. Chair
22. House, outhouse and jetty
23. Farmhouse, field and trees
24. The water surface
25. The riverbank

Attention and concentration require an effort. 13 registrations and five hours after I get down to the point called the World's End, the energy dissipates. I gather up my things and feel that it has been intense. Intense because the registration requires me to concentrate and because the repeated activity also leaves me

space to listen and see and smell. I experience a presence that is perhaps not a closeness to nature as a grand totality, but rather to the demarcated area I am looking at. The smells, the sounds, the temperature, everything becomes part of what I register. In a way it remains among the numbers I write down. And perhaps it can be retrieved again when I am later to embroider the colours that go with the numbers.

A cycle of one year inevitably reduces the intensity of the registration. I have 25 metres of flax ribbon I have to use, and an idea that I should do at least 208 registrations to fill it with embroideries. If I distribute 208 registrations over 12 months, that will be 17 per month, and today I do 13 in one place before I feel I have finished, and it is natural to keep going until I feel finished, because I like the intensity of it and the unpredictability of what the selection will be. If in the course of a year I take five trips a month along the Vormá, that will be 3–4 registrations each time. And if I am to register the colour variations over one year, they should presumably be regular, comparable colour registrations? I think they should, if there is to be a point in having a period that lasts a year. I don't need to think of a year as a cycle with shifting seasons, it could also just be 365 possible days to register colours. But it is the changing colours that are characteristic of the seasons I think of when I see a year as a period of time.

Mental image: I sit with bare hands, for I must have bare hands. Gloves won't do on a snow-covered riverbank for several hours. Or even just for half an hour. It's far too cold to sit still with bare hands, and I have trudged down to the river in loose snow.

Mental image: It rains every day. The thread box and the threads get wet. I can make a shelter from the rain, that is possible. A roof, a tent, but an umbrella is difficult because I need both hands, and it isn't easy to get an umbrella into a good position.

I feel reluctance and a touch of fatigue when I think of the logistics, the travelling and the mobility throughout a year – it takes 'mobility' for me to go out with the box and sit down to register. And it is as if the more I have to organize for the colour registrations, the greater grows the distance between myself and the river. I just want to be there. I want to familiarize myself with it.

Obvious, but still clarificatory thoughts: It isn't the colours of the seasons I am looking for. It isn't summer colours, autumn colours, winter colours and spring colours. I am looking for the colours of the experiences I have along the Vormá. I am trying to take the colours of the experience of the Vormá with me, so that I can later embroider the colours, and then perhaps the experiences will remain there among the threads.

The various colours of the seasons are already so well established visually that a work that encompasses a year will inevitably be about them. I reject the idea of the year and decide to register colours in August. A little more free and easy,

I tell myself, and quite ordinary. – See how much you manage, see what you find, see where you can go, and see what the result is. But a month is enough if you are to keep up the intensity and the desire. It isn't so important how many registrations you get, and it isn't so important what order you do it in. Just do it and see what happens. August is a fine framework.

Field set: Thread palette, notebook, propelling pencil, eraser, camera, telephone, folding chair, flask, packed lunch, seat pad, toilet paper and a USB battery pack.

Earlier I have only been on the riverbank in a couple of places, apart from the obvious places in Sundet and the old bathing spot. I know about some more places I can go down to, and I go to the places I know first. I want to go to the river's edge where it is possible to get from land. To follow paths that exist, but not to cross private property without asking permission. I choose not to do that, for I won't ask permission. I think that gets troublesome and these trips mustn't be troublesome. When no one has to give me permission, and I don't need a boat, I manage my time myself. I avoid what I see as obstacles.

It rains in August too, and I sit beneath a bridge as the cars rush by above me. The stone is large and flat and good to sit on. Almost like a bench. The bridge foundations have large concrete surfaces, and I note 39 thread colours from there. Down the river there is fog over the water. I compare the thread colours with the colours of the fog, but it is difficult because there is backlight when I hold the bobbin up. The sky in the background is light, even though it is raining heavily, and I see the thread in shadow. I tilt the colour field a little so that the light falls on it, and I have 30 colours when I turn towards the riverbank in the bend a little farther in from where I sit, still under the bridge. I get 40 colours from the houses there on the slope down towards the river. Just the houses, not the vegetation. Before the rain eases off and I walk on, I get 24 colours from a light red stone block at the water's edge:

31. Stone block. Time: 13:55–14:02

		819		23		778	3727	3726	315
							935	934	
523	3053	3052	3051	524	522				
225	224	152	223		948				647
3022	3023	646	645						

I keep to an area that gives me shelter: under bridges, under roofs by the water. Along the station area there are four landing wharves for leisure boats. I begin with Wharf 1, and gradually it gets darker as I go on to Wharves 2, 3 and 4. The colours change gradually, both in the palette and in the boats, for I am sitting in the dark and the boats are in darkness. I think the colours I pick out would have been the same earlier in the day. Possibly there would have been more colours then, because I would have seen more nuances than in the evening. I should have gone back to check in the daytime, but I chose not to do so.

Along the railway tracks north of the station the footpath suddenly comes to a halt in front of the gate in a tall wire fence. On the right-hand side runs the river, on the left-hand side the train runs behind a thick noise baffle. I read STOP. I stop. There is a site on the other side, but I see neither machinery nor people. At some point there is to be a footpath all the way north to Minnesund, where the Vormå begins, but now the gravel road onward is full of puddles and grassy knolls and it looks as though the construction work has been abandoned, since there are heaps of gravel and concrete elements there, and a few deck chairs, and someone said it has been like this for a long time. So although the notice says I have to ask for permission, I don't. I am afraid this firm will say no, unlike what I believe about the private property owners. The notice says I must have a helmet, protective footwear and working clothes Class 3 in addition to other safety equipment when required, and I think they can't be entirely up to date about the situation. I hold on to the last fence post while I step on the stones that stick up at the water's edge and swing around to the other side. Then I walk on northward. I am a little worried about being challenged, but it is not bothersome.

41. The water surface northward and buoys
42. Buildings (timber-floaters' hut and shelter)
43. Plant
44. Buoy
45. Stones at the water's edge
46. Riverbed
47. Vegetation on the riverbank
48. Small stone
49. Railway construction
50. Rusty pipes
51. Posts and box
52. Lantern post
53. Ridge and top
54. The riverbank

Gradually, as the registrations increase, and as I become more familiar with the thread colours in the box, I do not know whether I am working with a starting point in the colours of the threads or the colours of the motif. The palette is limited and when for example I have to find the colours in the scree I am sitting in, it is easier to hold up the white, grey and beige thread colours systematically and see whether I find them in the scree. I think it is easier not to miss nuances that way. After checking the obvious colours I go through all possible shades. Sometimes I find very light colours which for example have a touch of pink, yellow, green, and which are in a quite different place in the palette than one might immediately think.

At the end of the road which has not yet become a footpath, 3–4 kilometres north of the site gate, I look straight at a flagpole with a pennant in red, white and blue. But I don't find a single red, white or blue thread colour that matches

the pennant among the thread colours I have. I would like to have done so, for it would have been fine to render the pennant in red, white and blue. But I see only a suggestion of pink, and otherwise it is brownish-grey. I remind myself that I must always try what I think doesn't fit, for the brain adds more than the colour my eye sees. A couple are quarrelling while one of them mows the grass around the flagpole, and they have no idea that their voices carry across to the other side. Usually, though, there is no one sitting here and listening and the distance is too great for anyone to see me.

55. Country house. The point and the buildings and the flagpole. Time: 14:59–15:17

							3760		
319	890	3347	3346	3345	895		470	937	936
935	3362		580	3051	520	3011		420	610
	729	783		740			3858	3857	632
	453	3860	09	738		3865	07	841	648
310									

56. The water surfaces, as far as I can see upward. Time: 15:22–15:25

						161	322	939	3753
3752	932	931	930	3750		311		500	
	934								

The time is 15:22 and the water surface reflects blue sky. After three minutes the colours have gone but I manage to capture them, for my hands move quickly up and down in the box. I regard the colours of sky, clouds and sun as the colours of the river when I see their reflections on the water surface. It is possible that this distinction between sky and earth has to do with the flax I think of as 'river'. When I think about it, everything I register is of a kind I can take hold of. It has a surface, it has a structure and I know more or less how it will be if I touch it with my fingertips. I can't take hold of the blue colour on the water surface, but I can dip my fingers into it and feel the water I see as blue.

- 57. House and vegetation
- 58. Stone
- 59. Scree
- 60. Stone in scree
- 61. Flower in gravel
- 62. Clay and bog
- 63. Buoy
- 64. Slope
- 65. Railway wall
- 66. Railway sleepers
- 67. Cross mark in gravel
- 68. Vegetation over railway wall
- 69. Stone

Here on the west side I am in the shade now and I put on the sweater that was earlier far too warm and walk south again. It is nice to rest my eyes when the sun has been so glaring. I don't use sunglasses. I want to see the colours unfiltered. Over on the other side of the river the evening sun gives the farm buildings golden colours. They are bright and beautiful, and I stop to register them. Not the avenue and the land around it, but the warm colours of the barn, the cowshed, the farmhouses and the garage. I don't manage it. The thread palette and I are in the shade, and the houses are in the sun, and when I hold up a bobbin to see the colour against the barn, the thread becomes quite dark to my eyes. I twist and turn the bobbin to get more light on the thread, but the difference is too great and my eyes are unable to see the colour in the foreground and the colour in the background at the same time, and as if on the same plane. I am dazzled. If I am to register colours on the west side from the east side, I must do it before the shade comes, I note.

70. Flower. Time 19:32–19:41

	819	3354	3733	3731	150		23	3689	3688
3803	3685	33		778	3727	316	3726	3802	315
902	208	327	553	552					
		3363	3362		523	3053	3052	3051	520
						453	3861		3782
3866		3072							

In the forenoon the riverbed appeared clearly and distinctly when I walked along the river's edge. I saw stones and mud and algae and plant remains and some sort of cable or perhaps pipe. The water was calm, and it was the bottom I saw rather than the water surface. I saw no sky or clouds in it, and the sunlight struck the bottom without resistance. Now I can just make out the bottom right up against the land where the river is only some centimetres deep. Farther out the surface is impenetrable to the eye, and the colours seem to come from what is over the water, not under it. I look at the time. It is 20:00.

A flock of ducks swims and dives with the current. Now and then they almost disappear in the waves. I manage to note down some colours from their plumage before the strong morning sun creates so much backlight that the ducks disappear out of my sight.

86. Birds. Time: 13:48–13:57

¹⁸ 938 – 3371 – 3862 – 3031

¹⁹ 3865 – ECRU – 3021 – 3033 – 3782 – 3790 – 841 – 839 – 838

²⁰ 648 – 646 – 310

A thought: I don't need a camera to register the passing moment. The passing moment is brief, and I won't freeze the moment to make a close study and see what colours there are in the moment as if the moment could be longer. I manage what I can, and some of it is so momentary that I do not manage it.

Clarification: It takes the time it takes, and I stop either because the motif has gone, because I do not find any more colours in the motif, or because there are no more colours in the palette. Essentially, it should be enough to say that I register until I do not find more colours.

Observation: Sometimes the motif moves. Sometimes the motif *is* moved. If I look at a leaf, the light can change the colour in an instant because a shadow crosses it or the wind takes hold of it. The change gives me a thread colour if it exists in the palette. I imagine that when I register colours during the movement the embroidery will have the movement in it.

A thought: The passing moment materializes when I embroider the colours from it. Then the passing moment has a duration. The flax ribbon takes on a succession of different time frames. A little like taking photos with different shutter speeds.

A lovely white flower grows in front of me on the grass. It sways back and forth in the wind, and I try laying the bobbin against the plant to see better. The light falls differently on plant and bobbin and I loosen a little thread to lay it flush with the plant. It must look quite odd and helpless. The thread winds and blows around the plant, and now it is the thread that is far too thin to compare colours with. I try laying two or three threads together. Several colour shades are revealed to me when the distance from the motif gets smaller, and when the thread lies against the plant the structural difference becomes clear. The thread and the plant have different structures, and I have difficulty comparing the colours when they receive the light so differently. It is both fascinating and overwhelming. I stop.

Adjustment: – It isn't a plant study you are out here conducting. You could do that, but then you should have a different colour range and you should be able to mix the colours you see if you are to be consistent. This work is something different. I will embroider the encounter between the Vormá and myself in August 2018, by taking colours from what I experience along the riverbank.

A thought: When I hold the bobbin up against a motif and close one eye, I am able to see beyond structure and see colours in a single plane. I take away the structure and the distance. All that remains of the structure and the distance is what can be seen as variations in the colours I find.

The distance from the flower is perhaps half a metre or a metre when I begin again.

90. White flower. Time: 15:31–15:38

¹⁰ 989 – 988 – 987

¹¹ 472 – 471 – 937 – 936 – 3364 – 3363 – 3362 – 15 – 16

¹² 10 – 11 – 12 – 165 – 3819 – 166 – 581 – 580 – 523 – 3052 – 522

¹⁹ 3865

²⁰ 3072

Observation: The thread palette has become the central element in how I work with the colour registration. I check which thread colours I can find again in the motif, rather than checking colours in the motif and seeing whether I have them. This is a change in the colour selection of whose meaning I am unsure.

A thought: Since the thread palette has a limited number of colours, it will still become the ultimate limitation for which colours there are and the number of colours. I believe that the change is first and foremost a change in method, and that it is an easier way of arriving at the same selection.

I don't dare step further out on the bridge, for the construction seems even more fragile than the dwelling on the other side, and the wooden boards are missing in the middle. Behind me, where the stream flows out, lies the power station, and at one point the bridge was a short cut between the buildings. Now no one lives here, and the power station has been non-operational since the sixties. The turbine was lifted out and transported away on a raft almost 30 years ago. Afterwards it stood for a period in the Eidsvoll town hall, the turbine from Jøndal power station. – Park at the end of the road and walk along the farmland. There should be a path on the northern side of the stream. From the southern side you won't get across, for flooding took the bridge. It was the skipper who explained about the direction. The path appeared on the edge of the forest and I followed it down to the inlet. Once a car road went all the way down. I know that because an abandoned car stands below the house. The vegetation goes around it and has grown in through the windows. From here it is not visible, but I tried to get down to the inlet on the other side and saw it before I turned back. Trees lay toppled over the path and it was like moving forward in a gruelling obstacle race. On this side people probably come from time to time. I sit as far as possible in on the bridge, with my legs dangling down along the stones it rests on. The loose planks on the house roof cast sharp, dark shadows down on the house wall. I write in the book that I hear wasps, flies, birds and that butterflies are fluttering around.

97. House. Time: 12:50–13:07 (13:14)

- 7 775 – 3841 – 930
- 8 3761 – 519 – 598 – 3810 – 928 – 927 – 3768
- 9 966
- 11 702
- 13 830
- 14 676 – 729 – 680
- 16 3776
- 17 407
- 18 453 – 451 – 437 – 3862
- 19 3865 – 844 – 05 – 08 – 3866 – 840
- 20 648 – 646 – 645 – 318 – 01 – 535 – 3799 – 310

Observation: When I close my right eye and look, it is different from when I close my left eye and look. Everything is brighter when I look with my right eye. Sometimes it helps me to alternate.

Opposite, the riverbank lies in shadow. I sit in the sun and see the colours on the threads well. I would like to find the colours in the shade the way I see them from the sunny side, but the thread palette has several missing. It doesn't have colours that match what I see. I think that it perhaps isn't so often that shadow is a main motif in embroideries. Strong, clear colours are probably more usual. You might think that I would find black and the darkest grey innermost against the tree trunks, but I don't. I register 12 colours, and they are all varieties of green. There are about 90 more green shades in the box, but I see none of them on the riverbank. Over there in the shadows the colours are dark and subdued.

103. The riverbank. Time: 14:55–15:03 (14:55–14:59)

- ⑨ 500
- ⑩ 319 – 987 – 3347 – 3346 – 3345
- ⑪ 936 – 935 – 934 – 3363 – 3362
- ⑫ 520

Dark colours for seaweed and bog and damp stones are also missing. I sense, without knowing for sure, that I register different motifs with the same colours because the colours that constitute the difference between them are not in the thread palette. Can stones at the water's edge, vegetation on the riverbank and for that matter a fence plank and a bridge end up with the same colour combinations across the flax ribbon, I wonder? The colour numbers in the notebook are unable to tell me anything about it – I don't know my palette that well. That is fine, for there is a suspense in not knowing and wondering how things will turn out. I need to be curious when I am to embroider – it's a motivating force.

A thought: In the limitations a gap often appears where something unexpected can happen, if I am consistent.

Observation: The house is in shadow, and I register it one more time from exactly the same place. I found 36 colours when it was in sunlight, now I find 21. Only eight thread colours were the same in the two registrations.

111. House. Time: 17:36–17:49 (17:38–17:41)

- ⑥ 827 – 813
- ⑦ 3841 – 3325 – 3755 -931
- ⑧ 3761 – 519
- ⑬ 611 – 3046 – 3045
- ⑰ 758 – 3778 – 356
- ⑱ 451
- ⑳ 646 – 762 – 01 – 03 – 3799 – 310

A bang! Voices. Two men? No one to see, but I hear that they are talking and I hear that they are moving. There's a lot to be taken care of when you are running a farm, I think; there is a farm up on the hill behind the trees. I turn around and register the colours of the power station. There are 41. The fern beside me has 14 and there are ants creeping everywhere. There is a bang again. A little closer. Registration number 108 was a yellow shot-cartridge, number 109 a black shot-cartridge. They are rusty and lie on the path right behind me. Branches crack and I pick out the apple tree beside the house. I see no one. The tree has 13 of the colours in the box, and at last some of the red threads match. The time is 18:27 when I hear twigs and leaves rustling above me and the bang is certainly a shot. No voices, no branches cracking. No one reacts when I clear my throat, and I pack my bag, stand up and wrap a red scarf around me without taking the time to note down the colour numbers of reeds and grass at the waterside. I try to move in a way that can't be mistaken for a deer when I follow the path through dense forest and out into the farmlands. Deer like farmers' fields and I don't quite know if my red scarf can be seen at a distance. I pass a jeep with camouflage-coloured seat covers and still see no one.

157. Lake. Time: 13:52–14:05 (13:55–14:02)

- ⑤ 157
- ⑦ 160 – 161 – 3756 – 336 – 823 – 939
- ⑪ 934
- ⑳ 762 – 318 – 414 – 02 – 168 – 169 – 317 – 3799 – 413 – 310

– The boundary between the Vormå and Lake Mjøsa is at the railway bridge, he says. I am drinking coffee with the working team at the Mjøsa Collection. The men here work taking care of boats, buildings and history from the time Mjøsa was a main transport artery. That was what I thought! I didn't know, and I don't think he does either, but that's how it is now. The boundary runs here beneath the railway bridge. I wonder whether the loose end of the roll of flax ribbon is the source or the mouth of the river if I think of the cloth as the river.

When I lay the roll in my lap and pull the loose end towards the right, I see the roll as Lake Mjøsa and the end of the cloth as the front of the water volume on its journey down the riverbed. And it's as if I'm letting the water run down when I pull out the cloth. When the roll is completely stretched out this front becomes like the mouth of the river; at the other end the source is exposed. The 'source' has been wrapped around the central axis and I think the cloth will be more creased there, for innermost in the roll there is little rounding, and flax is easily shaped. When I envisage the creasing at this end, I sense a discrepancy between the energy in the flax ribbon and the energy in the river. There is a force in the source of the river that does not fit with creased cloth. The creased end looks like an ending more than a beginning. As if something is ebbing out. I turn the roll, lay it in my lap and pull the end out towards the left and see the edge of the endpiece as the boundary between Mjøsa and the Vormå, an imaginary line like the one beneath the railway bridge. It is the starting stretch for the river and it is

the starting stretch for the flax ribbon, and I think now they are linked together in a shared grip, and I am sitting right where the gripping point is. From here the cloth can be rolled out the way the river runs down the riverbed. I don't know how far south on the river I reach to register colours, but I know that I will not go farther up than the railway bridge.

- 158. The riverbank
- 159. Railway bridge
- 160. Farmland and house
- 161. Grove of trees
- 162. Flower

Behind me on the waterside stands a ferry under protective covering. It sailed the waters to the north. A little farther into the inlet the slipway projects into the river, and probably all the vessels here have been on it. On the previous slipway *Skibladner* broke in the middle when it was winched up, I am told, and so this one was built. 46 colour numbers. Out in the inlet I see 16 colours in a hopper barge. It's the last of its kind in Norway, and I think it belongs to my experience of Vorm. So does the sand I am sitting in. Just now the sand is my centre, and within a segment the size of an A4 sheet there are sand grains, stones and seeds and 25 colour numbers. The boat that sailed past out on the river is sound more than colours. I manage 12. The colours will perhaps be a memory of the sound, I think. And when the water trickles along the stones at the water's edge it is the trickling and the cool draught from the water I am aware of, but I write it down as colour numbers for water.

- 163. Caravan trailers and tent
- 164. Boat on the river
- 165. Boat harbour
- 166. Grassy knoll
- 167. Boat on the river
- 168. Ferry on land
- 169. Slipway
- 170. The water surface
- 171. Buoys on land
- 172. Hopper barge
- 173. Sandy beach
- 174. Straw

I look down the river to where it bends and vanishes. There is dense vegetation around an open area with pylons, and my gaze stops at the cornfield below them. The colours in it are brighter than in the surroundings and perhaps that is also because the field has a distinctive shape, almost like an extended right-angled triangle. Around the field the lines are waving and curving.

A few days ago my gaze stopped at the property beside me. I sat in the sand on the other side of the river strait and didn't see it then, but now that I am

closer, I see that the farmyard tree has autumn colours. 19 of them are in the thread palette.

The small pebbles make the folding chair rock a little. Now and then a bit of brick lies there. The one I like best is very small and has rounded edges after many years in the river with other stones. A very minimal embroidered field will come from it, I note when I count seven colour numbers. At the end of the 1800s three brickworks operated along the Vormå. Now there are none.

Thoughts: Can the colours evoke the smells, the sounds, the temperatures, the weather, the moods, the stories, the movements from the Vormå when I embroider? And what will be left in and between the stitches when I have finished? What will be left in me and what will be left for others?

I drive a little back and forth and must check the map again. There is supposed to be a passage, and when I finally find it the train whizzes over when I drive under. I have never been here, and I am uncertain which path I should follow. Outermost on the point I can see a long way. I look straight across, down and up the river, and I think it is a different river the way I see it now. The riverbank slopes so I get dizzy at the sight, and fortunately there are no paths here. I wonder whether I should sit down at the point and register colours with this view, which is strange to me and fine. The line of sight is short to the water's edge, but down the slope it is many metres ahead. I must get closer. At the same time I decide to erase the first registrations in the notebook, for I was too far from the water's edge when I made them. I must be close up – I am sure that's the right thing. I can easily see motifs at a distance when I sit at the water's edge, but I will not sit far from the water's edge. Two roads go down to the river a few hundred metres farther north.

175. Reeds and forget-me-nots by the water's edge
176. Clay and grass by the water's edge
177. Rowan
178. Plant
179. The riverbank
180. Birch
181. Bog by the water's edge
182. Plant in the water
183. Vegetation on island
184. Buildings on island and buoy
185. Flowers on the beach
186. Sandy beach
187. Chair
188. Spruce on point
189. Boat on land 1
190. Boat on land 2
191. Boat on land 3
192. Clump of trees over the water

193. The water surface in inlet and river

194. Leaves and detritus on the beach

No one to see. And although I have the clear impression that this is not a private beach, I feel like a stranger and keep looking around to see if someone is coming. Someone who is going out with a boat or jumping on the trampoline. I prefer to work undisturbed, I have noted that, and I don't like to be observed. If anyone should come when I am sitting comparing colours, I will pretend I think it is quite natural to be sitting with a box of threads. I always try to be prepared for that. When I sat beneath the bridge farther out in the rain, a man came by, watched for a little, tapped me on the shoulder and said I was clever.

If I embroider the motifs chronologically on the flax ribbon, the northernmost motif '157. Lake', for example, will position itself at the 'southern end' of the format. That is jarring, and it doesn't help that I have established that the format can both be time and river. If I embroider in accordance with the geography, the northernmost motif will be the first embroidery, and the southernmost the last. That sounds logical, I admit. But who am I to distribute the motifs? Should I count my way forward to the positions on the basis of an exact scale for the ratio of river to flax ribbon?

I have walked down to the water on the eastern side and I have walked down on the western side. Not the whole eastern side first and then the western side, but back and forth. Not from north to south, but north, south, north, north, south, north, south. Following no other system than walking where I feel like going and where it is possible for me to get down to the water. I think it is more free and easy when I do it like that. It makes no difference what I do first and what I do last. August is the limiting framework, and that is enough.

Repeated attempt at an explanatory train of thought: The long format is time. It is August 2018. I like the way it is time in both definite and indefinite form. The long format is river, or it is the Vormå. I like the way it is 'river' in both definite and indefinite form. The north end has been determined as the loose end of the roll.

River, flax ribbon and embroidery start in the imagined line beneath the railway bridge, and I decide I will do the registrations in the order north-south.

205. Bank of the inlet

206. Horse grazing and horses

207. Jetty, boats and buoys

The notebook is almost full, and I write more densely than before to make room for the last registration. It is 29th, not 31st August, but I have finished. Below the power station the river flows on 19.5 kilometres before it meets the Glomma, and it is quite all right that I did not get any farther down. I have not covered the whole stretch and I do not know whether the embroidery will fill the whole length of the flax ribbon.

The reflections and the mirroring in the water surface suddenly vanish, and before I manage to pack the thread palette away, the raindrops make dark spots on the lid of the box.

208. The water surface. Time: 14:24 – (13:25–14:35)

- ⑩ 3347 – 3346 – 3345
- ⑪ 471 – 470 – 469 – 936 – 935 – 934 – 3362
- ⑫ 580 – 3051 – 520
- ⑬ 612 – 613
- ⑭ 09 – 3371
- ⑯ 646 – 645 – 415 – 413 – 169 – 3799 – 3107



So I erase five of the first registrations, for 1, 2, 3, 5 and 6 were done too far from the river for me to call them 'along the river'. Nor were they done as a view from the river, but with a view of the river. 25 metres of cloth and 203 valid registrations, and it looks as if the roll of cloth will be almost full of embroideries. $250 : 203 = 12, 3153 \text{ cm}$.

The northernmost motif is 'Lake', north of the railway bridge. The next-farthest north is 'Railway Bridge', then 'Bit of brick' and 'Straw'. I leaf back and forward in the notebook, I read the coordinates, study the digital map and try to position the motifs as points on a map printout I have on the table in front of me, but it gets chaotic. I have registered in the directions up and down the river, across, behind and beneath me, close up and far away, but I have only registered the longitude and latitude for the place I sat. In what order should I embroider the motifs? I write a numbered list where I begin with the northernmost sitting point. That is not where I registered the northernmost motif, but I registered ten others, and I order them from north to south. I write down the 20 motifs from the next-to-northernmost sitting point, and 'Lake' becomes embroidery number 11.

A thought: The narrative becomes linear, but jumps back and forth in time when I embroider the registrations along the flax ribbon.

A thought: If I place all the registrations on the map as small points, draw the lines criss-crossing and lengthwise between them, a network is drawn across the river, and the network binds together riverbanks, view and sections and small and large motifs and experiences. When I embroider the motifs I unite riverbank, view and section and small and large motifs and experiences across the flax ribbon.

Mental image: The embroideries on the flax ribbon reflect the experiences along the Vorm a the way the river reflects the surroundings on the water surface.

The list is finished, and I have numbered 203 motifs from 1 to 203 and 19 sitting points from I to XIX. Each motif has been given a title that says what I have registered the colours of.

I have no information about the order in which I have perceived the colours of a motif. Nor any information about how much I have seen of a colour in a motif. It would also have been almost impossible to measure quantitative relationships among the colours I saw. The way I have written the registrations in the book, a colour number only says that I have seen the thread colour to which the number refers. The order of the numbers is the order in which the bobbins stand in the thread palette.

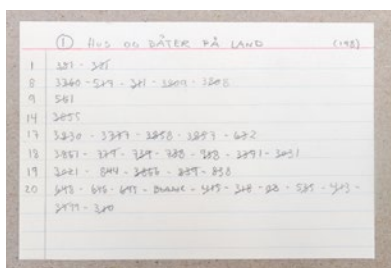
Reminder: It is a suggestion of an experience along the Vorma I am to embroider. The colours suggest what I have seen.

Decision: I decide to embroider one thread for each colour and think it is most consistent that the quantity of a colour is fixed.

Decision: I have already decided that I will embroider with double thread. Now I finally decide that it should be 50 centimetres long. Tangles on it won't be as easy as on a longer one, and I can stretch the thread without needing to stretch my arm far up in the air. A skein has eight metres of divisible thread. That is six single threads and a total of 48 metres. I can cut metre by metre from the thread skein, and there will be no wastage.

Before I begin to embroider, I will prepare 203 envelopes with thread sets that I can take with me out of the studio along with the roll of cloth. 203 is rather a lot to carry around, but there will more or less be room for three, four, five or ten envelopes in a bag together with the roll of cloth. In each envelope there will also be an index card with the information I consider necessary.

On the table: Thread palette, notebook, embroidery list, 300 semi-transparent envelopes (12 × 8 centimetres), 250 index cards (11.8 × 7.8 centimetres), pencil and flax ribbon.



The index card must give the embroidery number and colour numbers that belong to the motif. I try several ways with more and less information, but in the end I write on the cards what will be practical for me: title and embroidery number from the list I have made, registration number so I can find the registration again in the notebook, and finally the colour numbers. I erase one number after another gradually as I cut the threads and put them in the envelope. In the envelope the order is cancelled out and the threads are mixed together. I can see no logic in embroidering with the threads in the same order as the colour chart. That order has to do with the organization of the registration, and out along the Vorma I can hardly say that one colour comes before another when for example I see a rose bush with hips. Do the colours of the hips come before or after the colours of the leaves, and what about the colours of the stem?

The ten motifs from sitting point number I are at last prepared. I do not have to prepare 203 envelopes before I can begin to embroider, I decide. Then it would take a couple of extra weeks, it turns out.

I pull an arbitrary thread up from the envelope with the registration number 1: 'House and boats on land' (195). I no longer know the colour number of this particular thread, but I know that the colour belongs to the registration 'House and boats on land' and I begin to embroider the first motif on the roll of cloth as I intended: each motif is embroidered out from a central point. Each thread starts at the midpoint and ends arbitrarily. Arbitrary small stitches that do not cross one another. A rhythm that is good to embroider with and 12 centimetres between each midpoint. I am on my way!

Note: I put the cut-off ends back in the envelope. On the other side of the card. There they lie like another version of the colour numbers in the registration and they can be made out through the envelope.

Two days after I began embroidering, I pick out the stitches for '2. Bit of brick' and '3. Foam'. I don't get the in-between spaces to function, either visually or in terms of the experience along the Vormä. It feels stiff and divided, not the way I experienced the trips along the Vormä. I want to pull the motifs together, into a continuous line along the roll of cloth. That will be more like the experience I had, I think, and I am excited about how it will be. I don't have enough registrations to fill the whole roll of cloth if I do it that way, but I do it anyway. I haven't been along the whole river either.

Scene 5

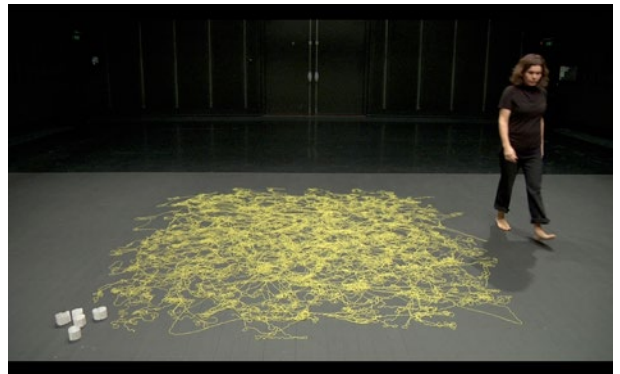
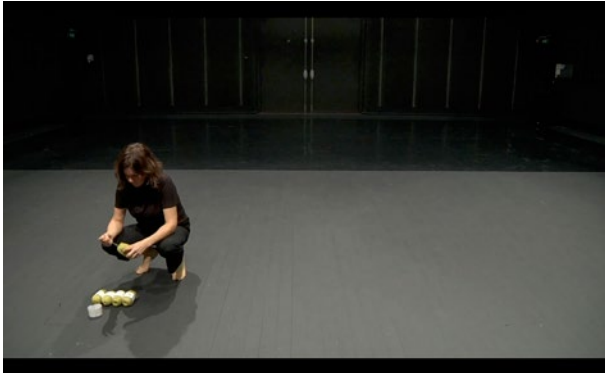
Place: Scene 5, Oslo National Academy of the Arts
Date: 23–25.02.2018

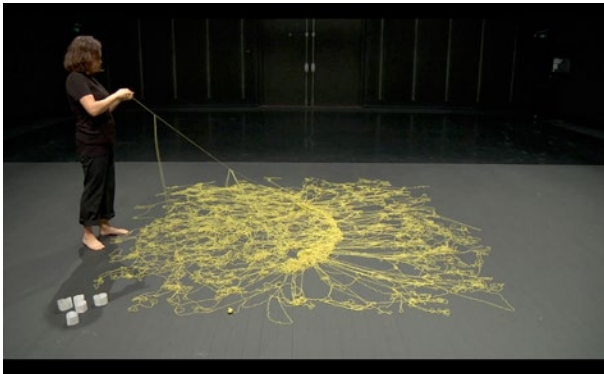
1

I began with a ball of red *DMC Petra, Size 5, 100% cotton, Made in Turkey*. The thread was 400 metres long, and it took 27 minutes to lay it out on the floor within the area I had marked out with corners of tape. It measured 4 × 4 metres. I tried to find an even rhythm where I unwound the thread from the ball, let it fall on the floor, and made sure not to trample on it while I walked around without thinking too much about where – sometimes a little unsteadily when I had to put my foot somewhere that did not feel natural. I was wearing shoes. The pace was slow enough for the thread to fall on the floor and lie there the way it landed without being pulled after me. Otherwise it would have pulled more thread with it and made straight lines in the 'drawing' that formed on the floor. When the end of the thread landed on the floor, I took it up and wound it in again. That took 9 minutes.

2

It was called *Aurifil Mako' Ne 40/2, 100% cotton, Made in Italy* and was multi-coloured sewing thread 1000 metres long. I laid it out in the same way as the previous thread and intended not to trample it. It was thin and light and ran quickly off the small reel. After a while it had formed some open and some closed areas on the floor. That determined where I trod. The pattern grew denser, and I walked in a ring around the area to avoid trampling on the thread. The whole sewing thread lay on the floor after 41 minutes, and I put the reel down where the end of the thread landed and took a break before I wound it up in again. The thread 'jumped and danced' on the floor surface when I began to wind. After 5 minutes the floor was empty. The next time I will tread on the thread, I thought, so I can walk back and forth across it.



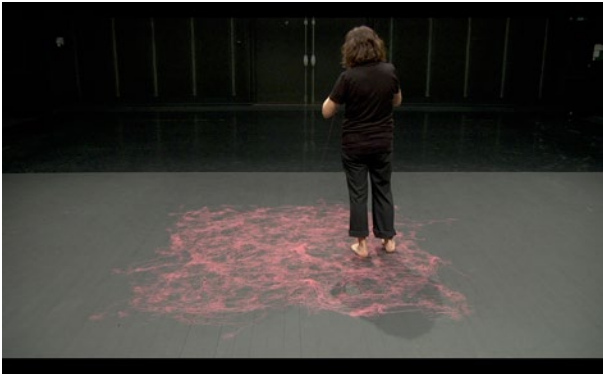
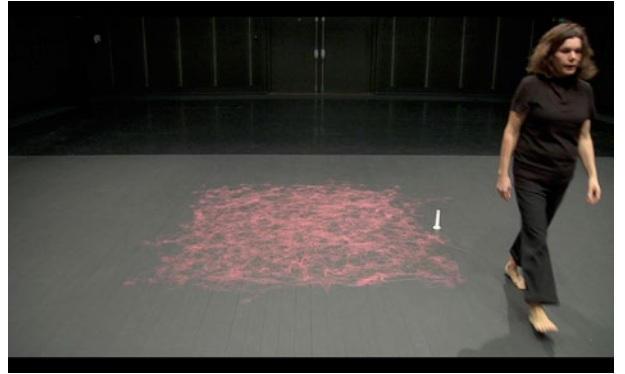


3

I had taken off my shoes and was barefoot when I was to unwind 5 balls of olive-green *Sandnes yarn alpaca silk, 70% baby alpaca, 30% mulberry silk, Made in Norway*. Each ball had 200 metres of thread, and they lay ready on the floor. I had reduced the area to 3 × 3 metres and wanted to see whether the thread could make the surface denser. How fast I could walk was regulated by how fast I could lay out the thread, and the speed varied somewhat throughout the 50 minutes it took before all the thread was unwound. It was soft and pleasant to tread on. I wound the threads in again. They became knotted together without me trying to untie the knots, and I couldn't find all the ends again. So I coiled many threads together in the ball at the same time and spent 8.5 minutes on it.

4

When I laid out the previous threads I had walked in and out of the marked area, even though the thread lay inside. This time I had decided not to tread outside the markings. It was not so good walking barefoot on pink *Madeira Burmilana No. 12, 50% wool, 50% acrylic, Made in Germany*. I repeatedly got a toe stuck in the thread or the thread got stuck under a damp foot. I thought it was hard to accept the 'destruction' this created in the pattern formed by the thread, but I did not move it back into place. I spent 40 minutes laying out 1000 metres of this thread and 7.5 minutes winding it in.



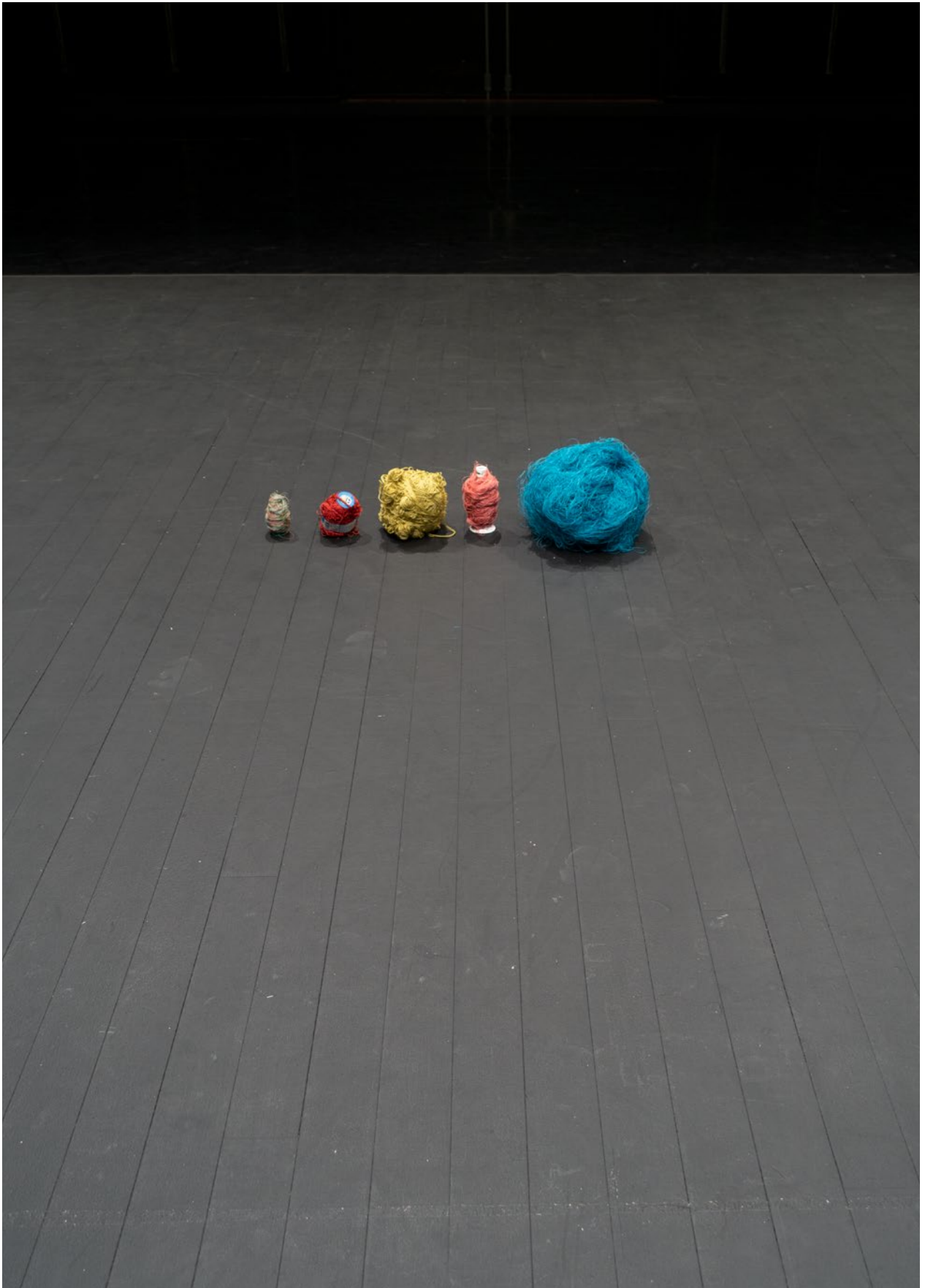
5

I had calculated that about 7000 metres of blue woollen yarn was wound on the thread cone. It was considerably larger and heavier than the other reels and balls. I planned to take a 10-minute break every 50 minutes. My shoulders, back and feet still ached when I finished after 5 hours. The room smelled of woollen yarn, and I had almost 'woven' a rug while walking. Would it be the best thing to wind it in again, or to *fold* it together? I began winding, to be consistent. The 'rug' was lifted up with the threads I pulled at, and I lashed, or folded it around the cone. It took 12 minutes.

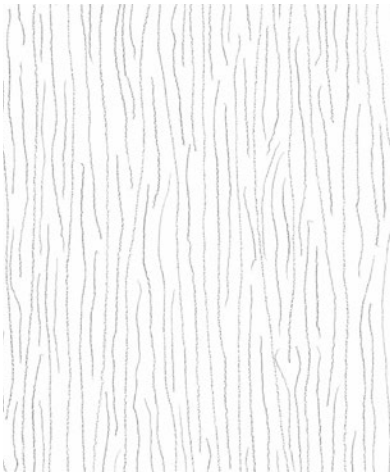
Comment: When I laid out the thread in the black box 'Scene 5', it was on the basis of an ongoing collaboration between the dancer and choreographer Jana Unmüßig (1980, Freiburg, Germany) and myself. The collaboration started at the Summer Academy of Artistic Research in Tromsø during the summer of 2016, and our dialogue evolved from the action of 'laying out and winding in thread', and has mainly taken place through artistic investigations which in various ways

inform our practices. Among other things we have had a presentation at Somatische Akademie in Berlin (20.09.2017): *Thoughts on Threads* with the dancers Lisa Densem (NZ), Aline Landreau (FR) and Alistair Watts (AU), as well as a presentation at 'Floating Peripheries Conference 2019 – Sites and Situations', University of Lapland, Finland (14–16.02.2019), where Jana and myself carried out the action.





Where is Sol LeWitt?



Dia:Beacon, New York, March 2015

I stood in front of *Wall Drawing #46* by Sol LeWitt. The full title is *Wall Drawing #46: Vertical lines, not straight, not touching, covering the wall evenly*. This drawing, like the 13 others in the exhibition 'Drawing Series...' was executed by other people following his written instructions. The motion and variations in the pencil lines indicated the use of the hand, and the human presence that is so characteristic of a hand-drawn work. I know the size of a pencil, and I could recognize the slowness and the time it must have taken to fill 30 square metres with these lines. I was made aware of 'the human' as a size; the body that had worked its way over the whole wall surface, centimetre by centimetre, and slowly covered the whole wall evenly with vertical, not straight lines. In the wall drawing that Sol LeWitt had not drawn himself, I experienced the artist's personal imprint as intensely present. This changed my notion of the importance of executing a work oneself.

A few steps more into the exhibition I found LeWitt's *Wall Drawing #123: Copied lines*. In this several drawers had each made their own vertical line one after another until the wall was full. The task is to copy the preceding line, but to start as high up on the wall as each drawer's arm can reach. Once everyone has drawn a line, the first one begins again. The fact that there are several of them and they have different heights creates a rhythm in the drawing. In the end all the individual lines fill the wall surface as one work. If there had only been one drawer, it would have been quite different. I imagined that Sol LeWitt stood and watched while the artists drew, and that he was just as intrigued this time as the other times *Wall Drawing #123* had been drawn.

The exhibition opened in 2006 and showed earlier wall drawings by LeWitt, from the period 1968–1975. They were drawn in pencil, and he had himself picked them out and decided where they should be in relation to one another.

Galerie Yvon Lambert, Paris, May 1970

Sol LeWitt drew *Wall Drawing #46* himself the first time it was executed, in the Yvon Lambert Gallery. He dedicated the drawing to the visual artist Eva Hesse, who had died two days earlier, just 34 years old. Hesse was a close friend and colleague of LeWitt, and the lines in *Wall Drawing #46* were a tribute to her organic lines and forms. This was the first time Sol LeWitt drew the 'not straight' lines in a wall drawing. He said himself that he took something from Hesse and something from himself to create a bond between them, and that he thought it worked well. Later *Wall Drawing #46* has been executed by a single drawer. In the exhibition at Dia:Beacon this drawing was the first the viewers saw. It stood right opposite the entrance door.



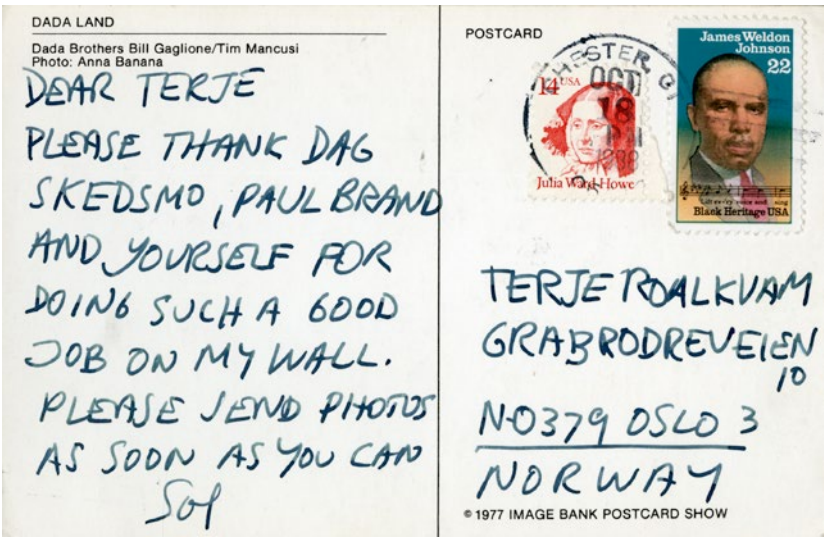
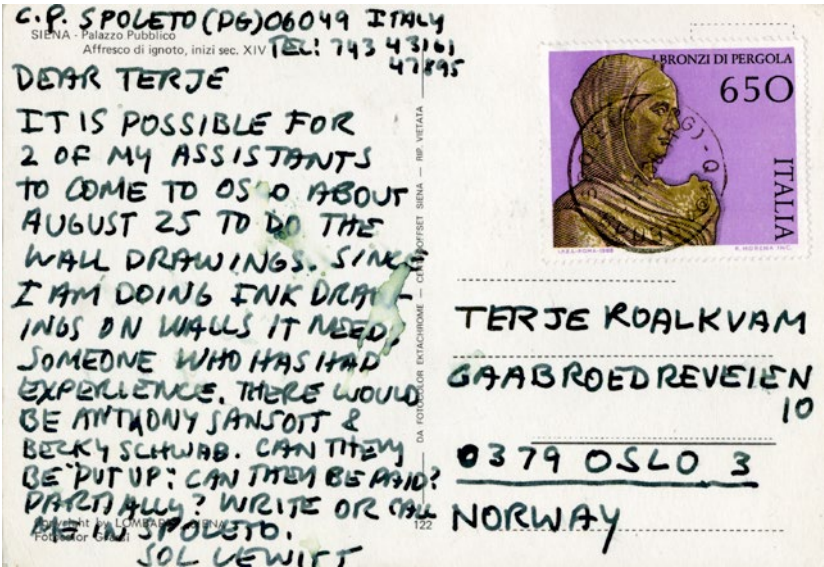
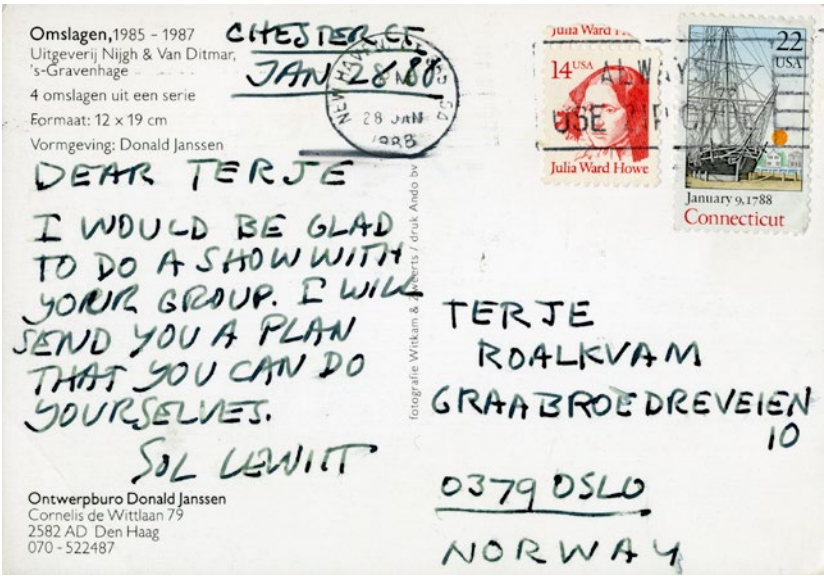
Drammen Kunstforening, October 1988¹

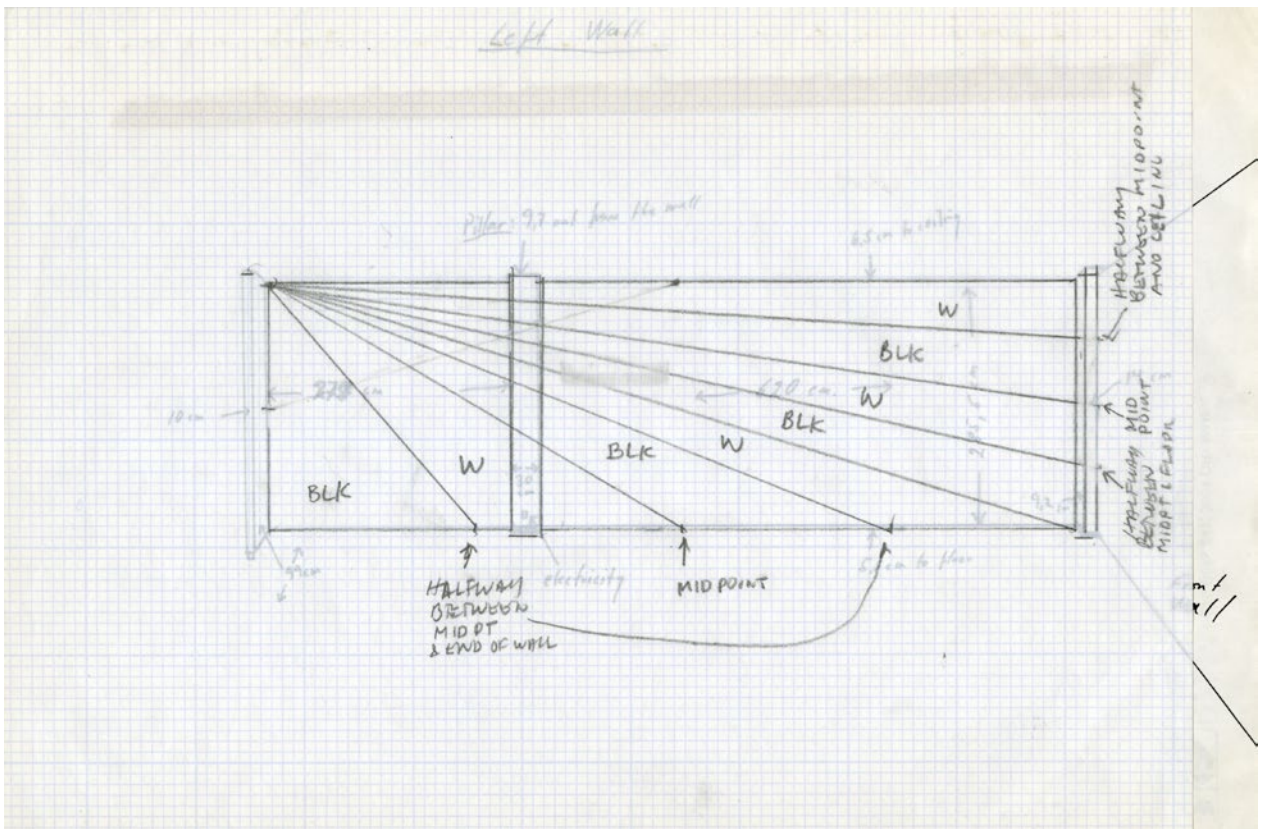
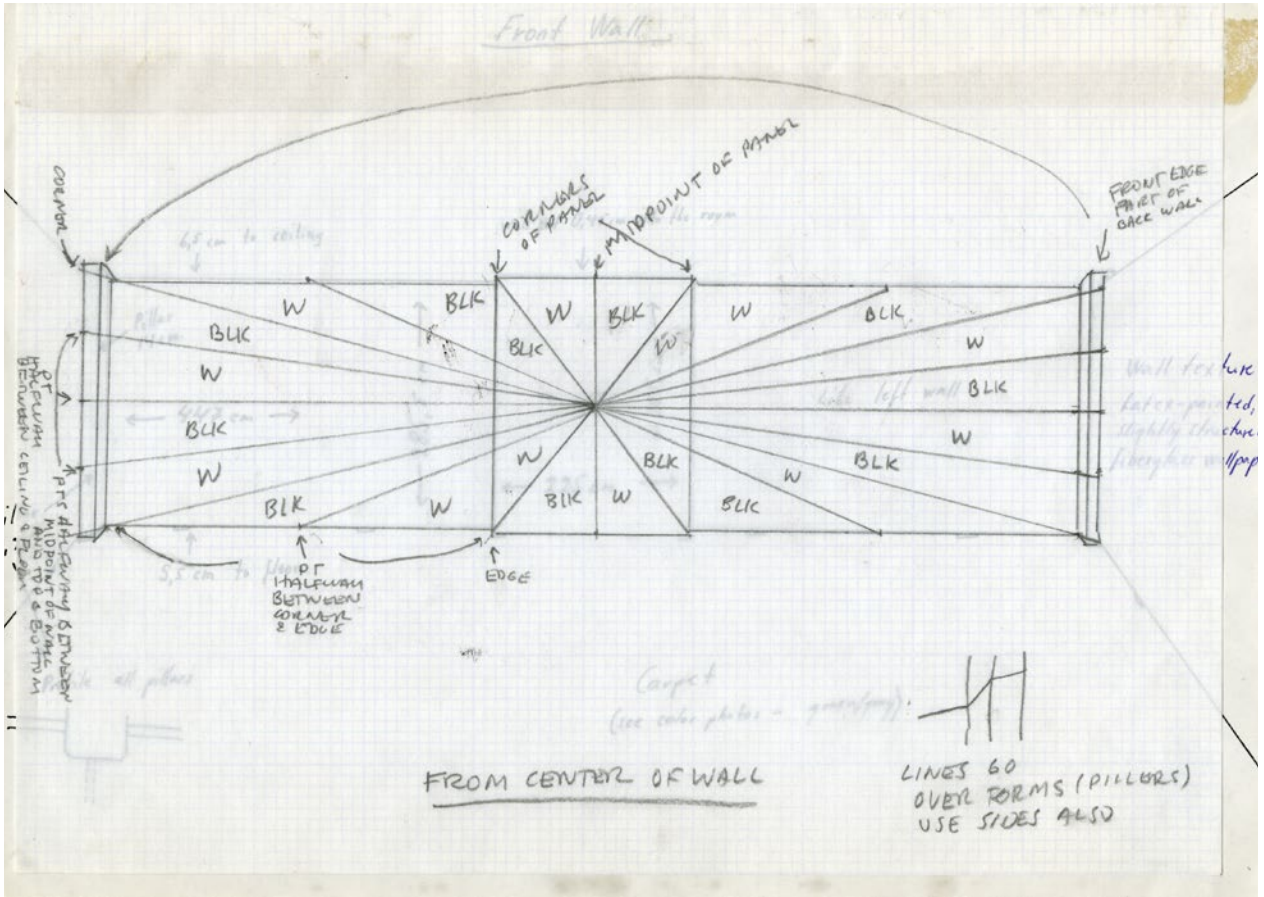
The first time *Wall Drawing #582* was shown, it was the visual artists Terje Roalkvam, Dag Skedsmo and Paul Brand who executed it. Sol LeWitt had immediately answered yes when they invited him to exhibit with them at the exhibition '3+1'² at Drammen Kunstforening, and he made the plan for *Wall Drawing #582* for that occasion.

LeWitt had decided to make an ink drawing and wanted to send over two of his own assistants. This would have been too expensive for the artists and Drammen Kunstforening, which would have had to cover the travel, accommodation and fees of the assistants (or part of their expenses, as LeWitt suggested in the postcard). Roalkvam had been an assistant on a major commission with wall painting a few years previously,³ and Skedsmo worked with tape masking in his own paintings. After talking with them on the phone LeWitt was assured that the three had enough experience to do the wall drawing themselves. The plan for the drawing came in the mail a month before the opening. Over the A4 sheets that LeWitt had received from Drammen, with dimensions and a sketch of the walls in the exhibition space and a small ballpoint note about the texture of the walls, lay semi-transparent graph paper sheets with a plan for the drawing. LeWitt had drawn on top of the sketch, and had thus determined the scale of the drawing in the simplest possible way. The drawings he sent were his own original drawings. There was no description of how the artists were to proceed when they were to make the drawing, but over the phone LeWitt explained the mix between ink and water, and that they were to use classic Indian ink. They stamped the ink on the wall with cloths to avoid brushstrokes, and applied the colour in four layers. There was no budget for a fee, nor did LeWitt ask for one. On the contrary he sent the artists a small gouache work each, with a dedication written on it. He usually did this when it was a 'first installation'.

Tegnerforbundet, Oslo, November 2016⁴

It was nine years after Sol LeWitt died, and it was the Estate of Sol LeWitt⁵ that granted permission to install *Wall Drawing #582*. It had taken both time and patience to get in contact with the foundation. Tegnerforbundet showed the wall drawing in an exhibition dedicated to the project at Drammen almost 30 years previously in connection with the Drawing Biennial 2016.⁶





Drawings and photos of the space were sent to the Estate of Sol LeWitt, with plans to rebuild the exhibition space to adapt it to *Drawing #582*. The space was given a new wall and in that way became symmetrical and a little smaller in size. This way it would also be less costly to get the drawing executed. However, new light rails had to be bought, so that the three walls concerned would have uniform lighting. The walls had to be washed with tack cloths, primed and painted with specific materials to get the right structure before the space could be approved.

The performance was supervised by an authorized installer,⁷ who was flown in from Helsinki. He had full control of preparations and plans, and gave oral instructions to the assistants. When I met Terje Roalkvam a few months before the exhibition, it was not clear whether he would be approved as an assistant, but together with two students from the National Academy of the Arts in Oslo he was involved this time too. Tegnerforbundet arranged for and bought materials according to a list the installer had sent: brown paper and dishwashing gloves, rolls of plastic and cans with lids, wooden strips of two-to-three metres and two measuring tapes on rollers. Twenty-four rolls of masking tape of different kinds, and four paint rollers with trays. Ten blades for cutting knives, one paint brush which was ten centimetres wide and flat with no metal, and six small water colour brushes and an ink pen. Eight rolls of receipt paper without carbon, ten metres of jersey, plastic cups and 30 litres of distilled water. White wall paint, black acrylic paint, varnish, matt medium and rolling scaffolds.

Water quality varies, and around the world different minerals and organic material can affect the colour of ink. Sol LeWitt had experienced this, and since last time the black ink had been replaced with black acrylic paint, and when the installer thinned down the paint, or when the brushes were cleaned, the working team used distilled water. They worked from the top down, and then from the bottom up. They exchanged places and repeated the process. One layer with rhythmic motions, the next by dabbing cloths against the wall. There was to be no application pattern, but a clean black surface where only the wall structure could be made out through the layers. Before they began with the black layers, they applied two white ones, and before that they applied two layers of matt medium with brush and cloth over the tape edges, such that the paint would not be drawn in beneath the tape, and such that the edges were exact. They covered the areas that were to be white with paper. There was to be no black paint there. They applied ten layers of paint and it took a total of ten days before the drawing was taped up, the spaces filled, the tape taken down and the installer had approved the last polishing and lighting.

(It might be good to have a greenish-black #582 if the water is chlorinated in one place, and a brownish-black #582 in another place if the water pipes are rusty).

(It might be fine to see how *Wall Drawing #582* would have been if it had been done the way the space at Tegnerforbundet normally is. Not quite smooth walls, not symmetrical, but three walls, and the line principle in the drawing could have been the same).



CafeRo, Oslo, 5 July 2019

In front of us on the table lay the postcards, the letters and the plan from 1988, and the catalogue from the exhibition at Drammen Kunstforening. I hardly dared touch it. I saw that Sol LeWitt had written down the telephone numbers where he could be reached both in Italy and in the USA. Terje Roalkvam showed me the principle drawing for *Wall Drawing #582* in a book with first installations of Sol LeWitt's wall drawings. In the book were also the photographs the artists sent Sol LeWitt after they had finished the wall drawing. On the hand-drawn plan that lay on the table, the 'left wall' was the one that corresponded to the 'right wall' on the principle drawing – that is, the opposite. The installer discovered this when Roalkvam showed him the drawing from 1988. He had never seen that drawing before and had to discuss the matter with the Estate of Sol LeWitt. Which drawing was the right one to start with? The installer re-drew his plan. They must have concluded that LeWitt would have done that too.

(I see *Wall Drawing #582* from 1988 and *Wall Drawing #582* from 2016 as two different artistic projects. The absence of Sol LeWitt becomes obtrusive in the latter.)

1 The text is based on conversations with Terje Roalkvam.

2 The project '3+1' lasted six years (1986–1992). The three artists invited international artists who worked with issues that were relevant to their own practices to exhibit with them. The first guest was Carl Andre (1935–) at Galleri F15, Jeløy (1987). The second guest was Sol LeWitt (1928–2007) at Drammen Kunstforening, and Richard Long (1945–) was the third, at Galleri Wang (1990). Commissioned wall paintings by Per Kleiva (1933–2017) at Ellingsrudåsen School in Oslo 1976–1977).

3 The text is based on information from Tegnerforbundet in Oslo and conversations with Terje Roalkvam.

4 The Estate of Sol LeWitt represents Sol LeWitt and the Sol LeWitt Collection.

5 The exhibition '3+1: Paul Brand, Terje Roalkvam, Dag Skedsmo – Sol LeWitt' at Tegnerforbundet, Oslo, consisted of *Wall Drawing #582* (1988), 25 of Sol LeWitt's Artist's Books from the period 1968–2002 (T. Roalkvam's private collection and new works by T. Roalkvam, P. Brand and D. Skedsmo).

6 Andrew Colbert (USA), authorized installer for the Estate of Sol LeWitt.

3 investigations

Rapportblokk

How would it be if other people executed my work on the basis of precise instructions?

In the work *Rapportblokk* (Report Block) (2015) 79 people drew, each on their own sheet, from a block with 80 sheets of squared paper. They drew a pencil circle around each cross formed by the lines on the sheet. I had filled out the first sheet in the block. This was part of the work *Graph Paper Collection* (1997–) which is an on-going work in which I collect sheets of graph paper and draw on them. I asked people I know – family, friends, neighbours and colleagues – if they would like to each fill in their own on the sheets that remained. In age the participants ranged from 16 to 82 years old. I chose the participants on a basis that had little to do with a scientific approach: they were simply people I was comfortable asking. I knew it would take time, even though the sheets were only printed on one side. The work was to be shown in an exhibition at Østfold Kunstsenter the same year.¹

I numbered the sheets in the order in which I tore them out of the report block. I had already drawn number one myself. The first person who agreed to participate was to have sheet number two, the second sheet number three, the third number four, and so on.

I wrote a description of the task. The action I regarded as so straightforward and simple was not so straightforward and simple to formulate in words. I tried to describe what I myself had done when I drew on the first sheet, and was surprised to see how many choices this action had involved. I went in detail through what I do when I fill a sheet of graph paper, and wrote the description as a series of items, because I thought it would be easier for the reader to get the general idea that way.

When I myself draw, I don't experience it as an 'error' if a circle gets a little 'skewed' or if it isn't quite round. I see the small variations that arise as part of



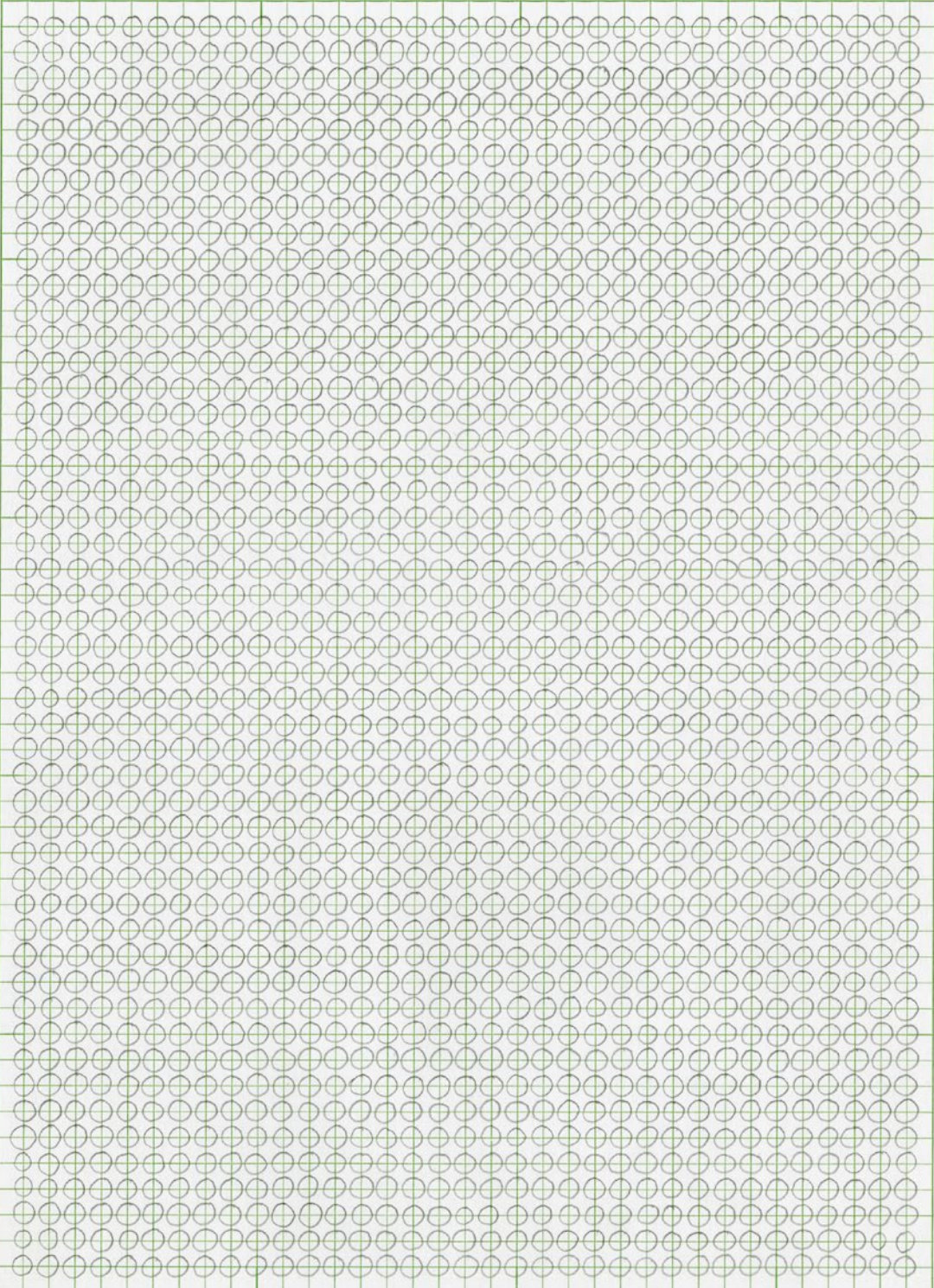
the drawing and I don't rub them out. However, I thought that someone who is trying to follow precise instructions would perhaps be concerned about small errors and irregularities, and would not know what to do with them. So I added item 4 to clarify that 'errors' are fine, but if they felt a need to correct, then they could also do that: 'If you think you are drawing "wrong" you shouldn't use an eraser, but you can correct it by drawing over it again.' I was trying to shift the evaluation of what felt 'right' over to the participant.

I had made packages with everything the participants needed to accomplish the task and send the sheet back to me. On the way to the post with the whole pile, I met a neighbour who asked if the circles should be equally large. She had seen the example I sent in my first enquiry. I had taken that for granted, and suddenly I realized what endless possibilities it could lead to if I didn't clarify any more. I turned back, went home, carefully opened 79 envelopes and exchanged the description with a new one where I had added: 'The circles should be approximately equal and not touch one another'. Then I went out again to post the pile.

I got some sheets back almost immediately, but not so many. In the meantime I was greatly in doubt about how much I should remind them of the task they had been given, and whether I would in fact get them all back. The task was voluntary, even though they had accepted the terms I had given them. What was I to do if some quite simply didn't deliver? My goal was to fill the whole block. Had the work failed if it couldn't be done, if a number in the sequence was missing? What if someone did something quite different from what I had described? I was in the same suspense every time I opened a return envelope.

In the end I had got them all back, and only had to send one reminder. When the heap of 80 filled-in sheets lay in my studio, I sent the participants a mail where I asked if they had the opportunity and desire to write a short response saying how they had experienced doing the drawing. One word, one sentence or at most an A4 page. I got 62 answers, I had deliberately not made this response part of the description of the task, because I thought that I could create a kind of expectation of how it should be experienced. I preferred that the reflection on the experience would come more spontaneously afterwards.

- An exercise I had looked forward to. Children in bed, table cleared and washed, looked out the fine pen, sat down. Empty head. Restless along the way. Halfway: restless to be finished. Then: empty head again and a mind just wandering. And then almost sorrow when one was finished.
- A hunting experience. Hunting for the perfect circle that goes evenly and symmetrically around a centre. With every cross a new chance. A new possibility of encircling the prey.
- At first relaxing, later boring, discipline – like sport, I have to manage it. Strained to maintain a focus and try to get perfect circles on every one, but that was actually impossible, or I didn't want it enough. After a while I began to get stiff

	Blad/Bilag 39/80
	Dato 25/10-2015
	Signatur Tina Arnesen
	

	Blad/Bilag 25/80
	Dato 2015.10.28
	Signatur Mats J. Spurrum
	

in the 'drawing muscles' and then I just wanted to be finished, something that detracted from perfection even more.

– It was an odd experience. The rings did not get better with practice and I got a pain in the arm. It was difficult for me to stick to a system/procedure, something I recognize from other things I do. Struggled a little to sit still and get it done without doing other things at the same time.

– Was there a possibility that I could complete the task in a way like no one else? I read the text again and there were no possibilities for my own interpretation. Drew circles and thought about what I should do when I had finished, and about how long it would actually take. The greatest experience was that I remembered so many of the thoughts I had while I was doing the drawing.

– Thought it was hard to keep focused all the time. A bit boring too.

– I had an aching hand after 2–3 lines. My eyes were ready for a break around the same time. Probably because I felt that I had to be so accurate. I thought it looked good. I liked the fact that it was neat, systematic and tidy. I liked the fact that the possibility of making mistakes was very small if the instructions were followed.

– Along the way as I drew the circles I started having a dream – perhaps rather a daydream – that used to come when I was 4–5 years old: a single image where I alternately looked out over a thick carpet from some way up a staircase, alternately zoomed in on looking at some stitches on the carpet being sewn. I saw the stitches as a mixture of the base of a sewing machine and a zip that moved slowly on. I had a feeling of enormity, necessity and the impossibility of sewing one's way through the whole carpet. I've thought about whether it had to do with the experience of standing before life, but I was beginning to get very short-sighted at that time, and I think maybe the daydream was my brain working with just having to see clearly close up. But the two images have never quite left me.

Despite my precise description, the drawings showed that there was still room for variations that don't arise when, with what is now a trained hand, I carry out the same task. In the description I had not said anything about the order in which they should draw the circles. For example I could have said that they should begin at the top left-hand corner and fill in the sheet line by line downward, the way one writes; or that they should begin in the middle of the sheet and draw that way out to the edges, or that they should draw the circles in random order. I myself often make different 'step' patterns and diagonal fields. The participants had dealt with this in various ways:

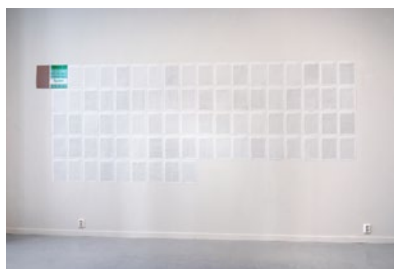
– I filled in the sheet, forward and backward, forward and backward.

– For the sake of variation I tried to change around which direction I went in and where on the sheet I drew the circles. That way it became patterns and less uniform.

- ... then I made my own rules for where and how I should draw the circles – for example 12 ahead, downward, 3 to the left and perhaps 8 to the right – and then again slavishly following the crosses and rows.
- First I thought I would be a kind of human printer, and started up at a rapid tempo, line by line. After 1/4 of an hour this became a little monotonous, so I began to fill in vertically, a bit further down from left to right. Varied the tactics with vertical and horizontal strokes in square fields that got smaller and smaller.
- I liked this task when I stopped drawing back and forth and up and down and instead drew diagonally and in the middle. Then it was as if everything became possible and I was able to draw anything, so then I drew a swimmer on the starting block that I later drowned in circles. That seemed like a proper drawing.
- We both began the filling process very systematically, row by row, from left to right. But gradually we had some breathing problems, and our eyes got crossed. Especially NN's, who in time developed very intricate patterns for filling-in. It actually looked most like an interesting knitting pattern. I went for a slightly steady system, filling in sections. I used a kind of 3 \diamond 3 system. Three ahead and three downward.
- It was fun to plan how I could best manage keeping more or less the same grip on the pencil and the same hand position in relation to the sheet without risking touching what I had already drawn. I am left-handed and ended up beginning at bottom right and working my way horizontally towards the left and upward with each line.
- I must simply admit that it was pretty monotonous and boring, but fortunately I very much like listening to podcasts. [Along with the reply I received a picture of the filling-in of the sheet. An open space had the shape of a skull.]

Wherever an 'error' was drawn over, the circle was thicker and darker. On each sheet, but also when I saw the sheets together at a distance, this created irregularity. Not everyone had taken the opportunity to correct 'closed circles' that looked like sixes and small d's. Some sheets were full of ovals.

I had wondered whether I should ask the participants to register the time they spent drawing, but in the instructions I only asked them to note the date for when they had finished. The task was not meant to give the participants the impression of being any kind of efficiency measurement, but all the same it might be interesting to know how much time they spent on it. Some hesitated for three weeks before they started, and some finished the sheet quickly and were willing to fill in more. Some did a little every day, some did it in one continuous session. One said afterwards that he had spent fifteen minutes, others spent four weeks.



In the exhibition I hung the cardboard folder and the 80 sheets beside one another on a wall in the order I had torn them out of the block.

Atelier Felix

As a continuation of *Rapportblokk*, in which the participants did the work at their own pace and in their own surroundings, I conducted an investigation where I was present when the participants were drawing. The room and the situation became a shared framework for the execution. It took place at Atelier Felix in Kunstnernes Hus during Extended Stipendiatforum² in 2016:

Fourteen people sat around the table. I myself stood at the end of the table. They all performed the same task: drew circles around each cross that was formed by the lines on the sheets.³ I didn't know everyone, but they had agreed to be part of the investigation. This time I had chosen that it would not be the sheet, but the time that would determine when they had finished; they were to draw for 30 minutes. It is not an aim to fill the whole sheet, I said: try to find a rhythm and a tempo that suits you.

I had shown them an example of a filled sheet of graph paper, but otherwise I gave them the description of the task orally. I asked them to begin at the top left of the sheet and continue downward the way one writes.

After ten minutes I decided to say they could stop, that we had finished. I thought the mood in the room was intense and unpleasant, and that the time passed terribly slowly. I saw that some people were totally absorbed in drawing, or at least focusing on what they were doing, while some regularly looked around them, looked at me, as if looking for an opportunity to leave before they nevertheless continued to draw. It was very quiet apart from a little resigned sighing and the pencils scraping against the paper. Now and then they stretched their arms and straightened their backs. I stood there like the personification of the work description and felt that I had assumed the role of a strong defining force in the room. I disliked the imbalance that arose between me and the participants and was very uncomfortable. But I managed to stick to the plan and didn't stop them before half an hour had passed.

On the lined sheet they had been given along with the graph paper, the participants wrote about how they had experienced drawing. I was given both sheets:

– I felt great discomfort. Felt very nauseous. Wanted to be finished as quickly as possible. I wasn't interested in perfection, but speed helped me. I did it as quickly as I could, so I could then relax for a few seconds. I hate repetition. It makes me think of slavery, about going to school, compulsion, about not being a subject, about being subordinated, about learning to be less than the subject one is. About the military, about systematization and renouncing responsibility. The body is unwilling. Feels oppressed, wants to get away. Nothing relaxing in this for me. And all this with sheets of paper with lines and squares repels me. But I filled the sheet. It gave me a feeling of contributing, and that I had done my job – made the effort. And was pleased with the speed.

– Rhythm, flow, error, error. Shaking hand, error, rhythm, rhythm, flow, flow, flow, error, error, error, rhythm, rhythm, flow, flow, flow, flow. I get all the way down to

the bottom of the page. Think rhythm, then it will be neatest. Rhythm, rhythm, flow, flow, flow, error, error. Shaking hand, straighten up, error, error, rhythm, rhythm, rhythm, flow, flow, flow, flow, flow, flow. Nice row. Rhythm is important. Reach the bottom of the page. Error, error, rhythm, rhythm. How far have the others got? Error, error, rhythm, rhythm, flow, flow, flow, flow. Nice row. Rhythm, rhythm, flow, flow, concentration, concentration, rhythm, rhythm, flow, flow, feel faint, can't see the cross. Concentration, rhythm, flow, flow.

– I thought of willpower. The marshmallow test where children of pre-school age are tested on whether they are able to resist the temptation to take the marshmallow lying right in front of them, expecting to get two later. But I was uncertain of what the reward was here. Thought about the childhood need to sit and in peace to draw. Almost fell asleep! Perhaps because I was intent on not exerting myself, not getting stressed, but that my body had to feel good. Thought about result versus process. Hard to ignore the aesthetic dimension – try to make it nice. Perhaps that's the reward. Or not. Disappointment if it gets uninteresting in terms of my preferences.

Afterwards I have read what they wrote and studied the drawings, and tried to see the material as the result of a methodical investigation. One had filled about a third of the first page of the sheet, seven had got through a good half of the first page and six had begun on page two. One had broken the rule 'line by line downward' and otherwise there was varied precision and several kinds of 'closed circle', as in *Rapportblokk*. Those who deviated most from the instructions were most interesting in terms of drawing. On the basis of the written comments and what was said around the table when they had finished drawing, 30 minutes was a factor that triggered stress and impatience for some of the participants.

I could have planned and arranged the investigation in Atelier Felix in better ways. Those who drew sat very close together, and if the aim had been that they should have a positive experience of filling graph paper with pencil circles, I could have given the participants more options so they could adapt the action to more personal preferences, such as type of drawing utensil, circle sizes and progress through the sheet.

In *Rapportblokk* it emerged clearly that the drawings were to be part of an artistic work that I would show as mine. The participants signed their sheet in the right-hand corner, such that it was clear who had done the drawings. For me to have an overview of who had done which drawing, a signature was not necessary; I had a list of names and related sheet numbers. It was important to credit them. It wasn't me who had done the drawings, we had done the work together, and they had devoted their time to it.

The drawings that were done at Atelier Felix were not signed. I called them an investigation and had no plans to show the drawings afterwards. Nor did I know in advance how many participants would come, so there was more uncertainty about what the result of the work would be. I wrote the names in a list that referred to the numbers I had given the sheets.

I saw in *Rapportblokk* that the relatively strict instructions nevertheless left scope for variations by the individual. The variations were not unexpected in the next investigation. When I look at the drawings from Atelier Felix, the narrative of the execution comes to mind – the room, the situation, who had made them, where they sat, the sounds, the motions and the facial expressions. The text sheet that lies beside the drawings is of course one reason for that, but also the memories associated with them. In *Rapportblokk* that part of the execution is not accessible to me.

Text sheet 6:

– I was thinking about it as if writing the letter “O” Writing and along with it pronouncing it to myself silently so it was phonetic background for this otherwise mechanical work. Those letters “o”, which were nicer also had a nicer tone and those made too quickly and imperfectly had a slightly creepier sound. Since “o” is a sound for surprise, the whole activity was a bit like gambling. Sometimes was everything all right, sometimes I made a mistake, or not so circular shapes. Mistakes sounded more like surprise and the perfect ones were more as expected.

After I read this text I have ‘heard’ the drawing; when I look at it, I hear the circles as pronounced o’s. That has changed the work for me – the explanation dominates the work so much that it has almost become a different work. I am uncertain whether it belongs to the person who drew it or to me.

SAAR

At the Summer Academy of Artistic Research in Tromsø in 2016,⁴ I presented my doctoral work for a group of six people including myself. The group was familiar with *Rapportblokk* and the investigation at Atelier Felix after an earlier presentation that week, and asked for graph paper and pencils so they could also draw. After consideration I had decided not to hand out the material in this context; I thought that it would not add anything beyond what the two earlier investigations had done, and I wanted to have as much time as possible for the dialogue. When I did it all the same, I did not spend time explaining any more, but said that the task was to encircle the crosses on the sheet. This was more as a gesture to the group. We sat around the table and each drew on our sheet while we talked. The dialogue lasted one hour.

From the dialogue:

- When you become ‘the dictator’, your role is about control, also for those who follow you, but that is absolutely not characteristic of your own work. You investigate and draw on your own terms.

- What you do in your practice, and what we do here, are two quite different projects. You instruct us and abandon your own investigation; an odd contradiction. In a way you give us the project, and we tell you what it is. I feel I am taking over your practice ... and I can become obsessed with this I feel ... continue until sunset.

- A musician can practice for seven hours a day to perform a piece. That is constant repetition, and no one questions spending time on that. It's about where knowledge arises. Where does insight into your works arise?
- When a dance company is to function as a single unit, the dancers continuously practice movements. They have to practice together in order to think, move and create insight. That gives them a profound bodily knowledge.
- You said that everyone can do this, but I can't. I couldn't have done what you do, I would soon have got bored and done something else. I don't have that intense commitment to keeping it going. I don't really care about how it goes. You must have a driving force.
- When I draw this, it strikes me that this – this drawing on graph paper – is research. So when you do it for yourself, it is research in itself. You investigate something, and when you have made a work and see the result, you respond to it in the next work. The insight arises when you do it yourself, not when you instruct others.
- It's the subjective act in your works that is interesting. I don't know why this should be interesting.
- I like the idea that this is an exercise. An exercise in the meaning of trying to understand what you are doing when you make circles and dots. It's a kind of connection between us in the space, an exercise in the fact that we are doing this. Doing becomes a way of communicating, where the outcome of the exercise is a thought process.

These extracts are not direct quotes from individuals in the group, but an attempt to collect input I received through the dialogue, and which arose in a combination of doing, listening, asking, answering and thinking out loud. Who expressed what is not so easy to define when the dialogue goes back and forth, from person to person.

I have hardly looked at the drawings they left.

1 *Rapportblokk* (2015) was shown at Østfold Kunstsenter, Fredrikstad, 31.10 – 20.12.2015 and at the Drawing Biennial 2016, Oslo, 23.09 – 23.10.2016.

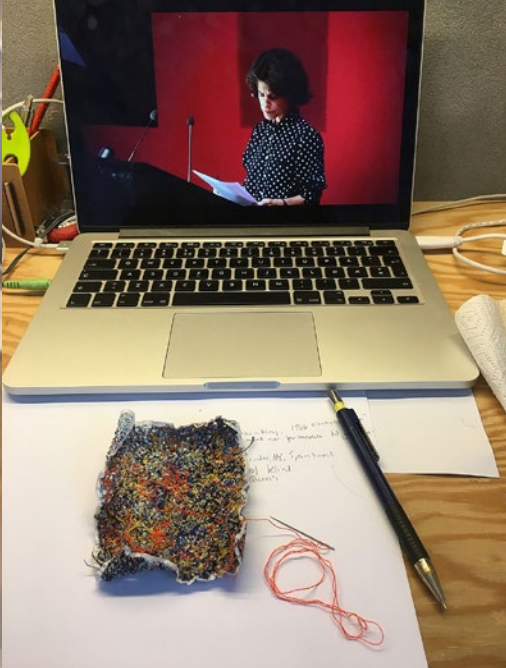
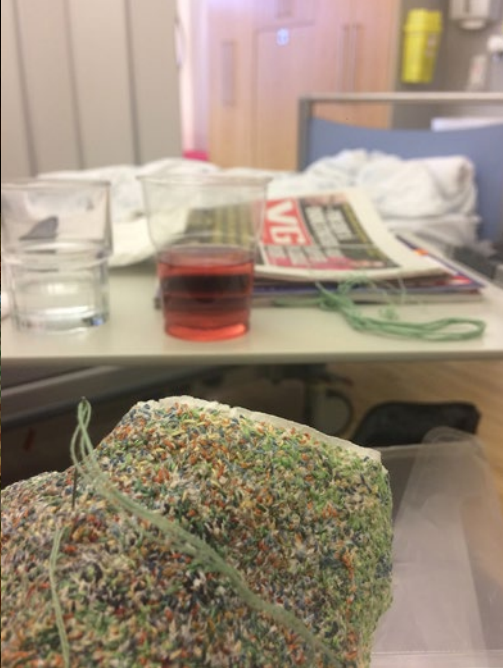
2 Extended Stipendiatforum (Utvidet Stipendiatforum), Kunsternes Hus, Oslo, 29.02–06.03.2016. Organizer: 'Stipendiatforum', a forum for research fellows at the National Academy of the Arts in Oslo, initiated by the research fellows Jesper Alvær, Liv Bugge and Ingrid Midgard Fiksdal.

3 Similar sheets are part of *Graph Paper Collection* (1997–).

4 Norwegian Artistic Research Programme arranged SAAR (Summer Academy for Artistic Research) at Tromsø Art Academy 07 – 14.08.2016. The participants were research fellows and supervisors from Nordic universities and academies with a doctoral education in artistic research.









Weave

I had long thought about weaving and registered for an introductory course.¹ Inherent in weaving is a predetermined system and a repetitive action that is a good point of departure for a work, I thought. I was given a manual that described all the stages stepwise, from the calculation of the thread amount through the setting up of the warp² to the reasons for errors in the weaving. The introductory text was ten pages long. I didn't read it very thoroughly.

It took two weeks to set the warp up in the loom.³ Everything had to fit and everything was connected. It was a shaft loom.⁴ I chose to work with a plain weave, the simplest weave binding,⁵ where the weft threads alternate between passing under and over the warp thread,⁶ as it is raised and lowered.⁷ Every second thread was raised when I trod a treadle⁸ down and passed the shuttle⁹ through the shed¹⁰ that is formed in the warp. To and fro. And after a few rounds I beat the thread back towards me with the beater,¹¹ and packed the thread together so the weave became dense. Now and then I got down from the loom bench, loosened the warp beam,¹² and pulled the weave in onto the cloth roll,¹³ put laths between the layers and locked the beams in place again. I tried to find a rhythm. My whole body needed a rhythm, not just my hands. I thought, 'This is the closest I'll get to playing an instrument'.

I wove. I thought of the whole warp as a format to fill and was in suspense about what could arise along the way. Like the suspense when I filled a sheet of A6 paper with small embroidery stitches and didn't know how it would be until I had finished with the whole skein of thread.¹⁴ The weave grew, even and fine, with straight selvages.¹⁵ The warp was natural-coloured flax, and the weft threads were dark brown wool; light-coloured vertical lines, dark horizontal ones in a regular grid. The variations in the weave were just as expected. The way I thought hand-woven canvas should look. No unexpected variations appeared, and when I tried to put in a variable that could perhaps disturb the regularity, it was not long before it was part of the regularity and became a pattern. But I had found a good rhythm and liked the feeling of being one with the loom; sitting in it and getting it to work the way it should.

Suddenly a warp thread broke. Perhaps I had pushed the reed too hard and too many times towards me; that can wear out the thread, I was told. Maybe I had tightened the beams too much; there can be too much tension in the warp. Perhaps all the warp threads had not been drawn in a straight line through heddles¹⁶ and reed; then they wear out against the metal in the reed. Perhaps the treadles are tied too high, perhaps the reed is too dense. The warp has to be sprinkled every day, otherwise it gets dry. There are weaving knots that can splice the warp thread.

I continued in the rhythm I had found and with which I was comfortable; didn't sprinkle the warp or splice any threads, and the irregularities increased through the weave. The warp thread wore out and the grid dissolved. I broke with the loom's system and followed my own, such that my weave was gradually broken down. Long before I reached the end of the warp, I heard the sound of the last warp thread snap and the weave loosened. It felt like a struggle I had won.

1 Introductory course in weaving with Assistant Professor Hege Bratsberg, Department of Art and Craft, National Academy of the Arts in Oslo, 02–27.10.2017

2 *Warp*: The threads that run lengthwise in a weave.

3 *Loom*: A device constructed for the production of woven textile. The size varies from small hand-held frames to large machines.

4 *Shaft loom*: Hand loom with horizontal warp.

5 The pattern for the intersection points between warp and weft is called the binding. The pattern is drawn on graph paper.

6 *Weft*: The thread system that is inserted through the gap (the shed) formed between raised and lowered warp threads. Also called the woof.

7 Plain weave requires only two shafts with heddles (see endnote 15) and is also called *two-shaft binding*. The two shafts are alternately raised and lowered so that the weft thread can be inserted.

8 In a hand loom the shafts are raised and lowered by a set of pedals that are called *treadles*.

9 *Shuttle*: A tool that is used to pass the weft yarn to and fro between the warp threads on a loom.

10 *The shed* is the gap between raised and lowered warp threads.

11 *Beater*: A tool that consists of a rectangular frame with a metal insert known as a *reed*. The warp passes between the tines (teeth) of the reed. It is used to beat the weft threads together in the loom.

12 *Warp beam*: Roller in the loom on which the warp threads are wound.

13 *Cloth roll*: Roller in the loom on which the woven cloth is wound.

14 *Embroidery on paper*, 2017–

15 *Selvage*: The outermost edge of a woven textile.

16 Every warp thread passes through a *heddle*, in this case a cord of cotton with an 'eye' in the middle. The heddles are used to raise and lower the warp thread and are hung up in *shafts* (see endnote 7).



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P. 62: Estate of Sol LeWitt/BONO 2019. Photo by Jan Åke Petterson

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P. 74: Tina Jonsbu, *Rapportblokk*. Photo by Asgeir Midthjell

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Colophon

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