

Second year report:

The craft of hat making, dyeing, and documenting present and historical materials

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19.09.2024



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HÅNDVERKSINSTITUTT
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Introduction

I have decided to use English as the main language for the project, although it is not my first language, this is to make the work more accessible. I wish to emphasise that my research and the work I am doing are from the perspective of a maker working in the specific conditions of hat makers and milliners in present-day Norway.

When I started, my ambition was to further specialize in some straw techniques. Although straw still is a part of my project, a more general mapping of materials is a necessary first step for me as a crafts person. This has led me to focus on the history and use of historical and present-day materials. I also wish to gain a better understanding of the fibres and the dyeing of materials through my scholarship practice.

In Norway, we have not been able to buy millinery materials locally for decades. This is a challenge for micro businesses working with short deadlines and limitations to how much materials we can have in stock. Being able to dye the varied materials used in our craft is especially useful, as this limits what we must keep in stock to neutral colours, plus some of what we know to be frequently requested, like black. Getting to experience and master these techniques and doing so with the resources and conditions available locally, is important. Many factors contribute to the result of the dyeing process. Simply relying on what others do in other countries is therefore not sufficient. The knowledge gained by experimenting locally, under the conditions and with the supplies we have is crucial to how I can implement dyeing in the way I work.

Being bias: Milliners often use our material on the bias. This also is an argument for dyeing myself, as this makes it possible to work more sustainable and waist less precious materials like fine wool and silk. I can cut and dye the amount of fabric on the bias that my currant project recure with minimal left-over pieces.

Primary and Secondary Matter

Primary

- A way forward for the craft. Can dyeing our materials locally make our craft more efficient and sustainable going forward?

Secondary

- Is it possible to gain a deeper understanding of the craft of hat making by documenting the materials used historically?

Early in my career, I realised that dyeing materials would be a game changer for the possibilities and the pace of what I can and need to create. This is the right time and situation for me to develop the skills and techniques, with the local conditions, to implement it in my practice.

I know the practice of dyeing in millinery workrooms is more common in the UK and other countries. I have not heard of Norwegian milliners doing this on a regular basis, although most do a little from time to time, for example when making silk flowers, or dyeing the odd feather. Dyeing myself would make it possible to make larger orders, to have in stock, from a supplier I know and trust on quality, rather than looking for who has the right colour, doing small orders, and spending production time on traveling to the post office, complicating accounting, and paying frequent custom and postage fees.

My research of the history of hats and the craft has a 3-year timeline. I needed a strategy to narrow the scope of my research to what I feel is critical to the future of our craft. To collect material samples and gather information about them, will give valuable insight into each single piece, and it will also add value collectively, as a body of work. I hope to gather information about which materials have dominated throughout the decades, and about the techniques used to give them the desired shape. Materials are a good starting point for conversations with masters and makers both in Norway and internationally. This will inform my practice as I learn and master new areas of my craft. Gathering an "Encyclopaedia" of millinery materials, will also hopefully be something to build upon and be useful to others in the future.

Methodology

Dye work

My general experience dyeing textiles comes from my work with costumes. Most of my costume dyeing has been done with Dypro as well as effect/ costume break down with fabric paint such as Hatosilk, with paint guns and various tools.

When I started looking into dyeing millinery materials, and having the opportunity to go in depth, I decided to experiment and do trials. I have researched different dye stuffs, fibres and gained a better understanding of the chemistry, doing this interlock well with the research I am doing in general of the materials. By handling them over and over again cutting, washing, dyeing and ironing swatches, deepens the understanding and inspires to do more research about every individual weave, history, origin and fibre. It also gives me opportunity to reflect as I am spending the time dyeing samples, on what kinds of hats and headwear I will use the materials for in the future, when and to what they have been used historically, which is increasing my awareness and knowledge of the possibilities. Spending the time up close with all the different samples also helps to recognise fibres and weaves in the historical work in my research.



Dyed silk fabrics.

In millinery as in the rest of the textile industry, we work with animal, plant, regenerated and synthetic fibres. However, some of our materials differ somewhat from classical materials used in clothing for the body. As world-renowned milliner Steven Jones talks about, making clothes (for example in dressmaking) you work with gravity. A milliner's job is to defy gravity; a hat or headpiece is meant to stay on someone's head for hours on end, without making life miserable for that person. Therefore, it must be as light as possible, and sometimes, like with sculptural and oversized theatre and film pieces even almost lighter than possible. The sun exposure is also an issue for most milliners, so lightfastness is very important, however most hats made by millers cannot be immersed in water so colour fading due to washing is not as much of an issue.

I am focusing on the kind of materials used in hat making when I do my research into dyeing. Examples of these materials are feathers, fur felt, wool, various kinds of braided and woven "straw" (plant-based fibres) like sisal, sinamay (abaca), wheat, barley and raffia, silk and wool woven textiles, ribbons, some regenerated and synthetic products relevant for hat making. I have been working with dye swatches mostly so far, but not exclusively.



Immersion dyeing silk with acid dyes.

The dye stuff I mainly work with is acid dyes (with citric acid) and fibre reactive dyes (with salt and soda ash). Both these dyes are known for the brilliant colours, consistency in results and colourfastness.



Preparation of swatches going into dyebaths. These are high and low processed plant fibres, and some regenerated fibres going into a cold-water fibre reactive dye bath.

Encyclopaedia of millinery materials

I have started making binders with the materials I have in stock, as well as the stock of the National Theatre. Between the two, there are quite a few treasures (materials no longer being produced). When I have a solid basis, my plan is to continue a dialogue with retired and active makers, and suppliers. I hope that others have materials that are no longer in production, and that they are willing to donate samples to the Encyclopaedia, or that I can collect good photographs to analyse, and gain insight from. I realise this is a life's work, but the scholarship period is very good start for it. I have been in online panel talks which touch upon material history, online seminars, and collected articles from profession journals. As well as having a dialogue with colleagues.

In my collaboration with the National Theatre, we have done quite a bit of making which touches upon both the historical aspects of hat making, old and new materials and experimenting on dyeing different kinds of fibres. I have been given time to go in depth and experiment on a much higher level than I could do without combing my scholarship goals and the projects done for stage.



Binders of material swatches, and boxes of swatches cut for dyeing. Sushi trays have been handy in organising the cut swatches ready to go in dye baths.

The process

Working condition and situation

Because of unforeseen circumstances, I had to move my dye practice to my home. I have set up a dye kitchen, that works well. This is not ideal, but in the current situation it is the best way forward. On the bright side this reinforces my thesis that this practice is possible to implement even for a very small business.



Cleaning swatches after dyeing. I use a handy salad spinner as a substitute for a textile centrifuge, this helps the processes of rinsing out the left-over dye matter.

I have collected the most relevant materials for the dye practice I see as helpful to my thesis about how to work with a good flow as a milliner with time restricted and limited excess to supply. And I have found a protocol for how to get as many quality samples as possible, before my scholarship position ends.



Cataloguing and registering swatches low processed plant fibres, such as sisal, abaca, buntal, straw and pineapple silk.

Felt dyeing has been an issue, as hat felts are so densely felted that the dye stuff do not penetrate the felt cone or capeline to the core. I have considered doing trails with pressure cookers, however, because of the already vast scope of the scholarship project and restricted time, I might not have the capacity for this. In my research of the production of felts in factories it seems the dyeing is done at a halfway point in the felting process, which makes sense since the density of the fibres is way less difficult to penetrate at this point, it seems also that the factory's dye with the help of pressure. I have reached out in hope of visiting a factory in eastern Europe but have not succeeded in making this happen.



Wool fabric, wool and hair felt swatches after dyeing, rinsing and drying.

Dyeing

The process thus far has been to establish a space for me to do safe experiments. Upgrade some of my equipment and source more of the dye stuff and materials relevant to my studies. I have established a system for the samples and documentation of the trials I am doing. I have been able to implement dyeing into some of the collaborations with the theatre. Gaining information from publications and the manufacturers' product descriptions, attending online and in-person workshops, and talking with colleagues has been important, as well as the numbers of experiments I have done. There are also good reassures online both for dyeing theory and trouble shooting in the dye prosses. Nora O. Krogh (MA textile design) have also given great advice on my dye process.

As the books of material analysis and dyeing mostly overlap, I have collected my samples according to the fibres, for example plant based, silk, hair and wool. For many of these I have also sourced currently produced materials most relevant for hat making, in addition to the old ones (out of production).



Back stage at Nationaltheatret; A few of the hats and headpieces I have made, currently on stage. Many of them include dye work. Reenforcing the thesis of how this can become a sustainable and useful practice.

I mostly do same fibre immersion dyebaths, and some dip dyeing. Different weaves of 100% silk go in one bath. Different weaves of 100% wool go in one dye bath. The fish steamer pots are great for this work, as they are long and shallow, I can easily follow the progress in how all the different swatches develop and take on the colour. I mainly focus on acid dyes and fibre reactive dyes.



Buntal hat for Pia Tjelta in "Dødsdansen" 2023. This was dyed black from a natural / unbleached buntal flat weave before I made the hat.

Some may think the colour range of dye stuff I am doing might be a little excessive, however I find it useful to have as many repetitions of the process as I have time for, as both to gain knowledge and experience. It will also be useful in the future to be able to make quicker decisions and get more precise results for the projects I am working on, many times being able to use standard colour range from the suppliers, with small adjustments when needed.

Collecting samples of materials, analysis of them

This work is a life's work. It also somewhat overlaps with the dye part of the project. I have started sorting out my, the family business and theatre's collection of materials to catalogue. I also got some materials on my trip to London this year, as well as some photos of materials from Sean. This is a process/ project that will never end, which I find inspiring more than daunting. I will get a solid basis and good protocols for a work methodology by the end of my scholarship, but I see this as more of a beginning than an end of a project. I also hope that this work will benefit others, and that, at some point someone else will carry this work on. At this point it is physical catalogues with samples, photos and written research. I am hoping to look into digitalisation in the future.



Old hat veilings and crin

Collaboration with communication department at Nationaltheatret

Film

We created a film to highlight the millinery work in the theatre. I filmed the whole process of making a top hat for stage in my studio at Brobekk by myself. In addition, Merete M. Stuedal joined me some hours to do a short interview and do some filming. She then cut and edited the film, with some additional footage from the fitting room with actor Pia Tjelta and a hat for “Dødsdansen”.

This resulted in an informative and fun short video for social media about theatrical millinery. Currently it has been viewed more than 18 800 times and has 70 shares all over the world.



Set-up for filming some of the work process of making a top hat, with lighting and tripods.

Exhibition

As “Alice in wonderland” was going back on the board at our main stage this was a good opportunity to highlight the craft of hat making to the public, as the mad hatter is one of the most iconic characters of the story. In collaboration with Gunhild Aarebrot Kilde, from the theatre's education and communication department, we created an exhibition showing hats I made for Nationaltheatret the last 5 years, tools of the craft and raw materials. It was “staged” as The Mad Hatter’s tea party. Potentially the exhibit was seen by about 80 000 audience members in the theatre during its 8 mounts on display. The plan is to use the same space to exhibit the final work in the scholarship and present my findings true out the 3-year scholarship position.



Set-up of about 20 hats, tools and materials for hat making.

Travel to London

I travelled to London July 17th to July 21st. July 2024 with my colleague Victoria Valand. First day we visited the Natural History Museum, which currently have an exhibition about birds. We saw several taxidermy bird species that we use feathers from in the craft of millinery. Next, we went on to the Victoria and Albert Museum to join a guided fashion history tour. Afterwards we went an extra round ourselves, including the European part of the exhibition which has some additional garments and textile objects that were exciting to see. Unfortunately, we didn't have time for the jewellery collection, this would have been really nice to see. Hopefully there will be a next time.



A lady's turban 1820-1835. Victoria and Albert Museum.

The second day we visited various suppliers that Sean (supervisor) had recommended. It was particularly interesting to visit Hopkins Fabrics. They supply historical inspired textiles from weaving mills and printing houses, they also stock some antique and vintage textiles. Particularly exciting as a milliner were reconstructions of silk ribbons from the 1800s and some original Crin from the early 1900s (early versions of nylon). I bought some materials for the project but have also subsequently been sent swatches for the entire product range. Hopkins has primary customer groups in museums, film and stage (and some others who are engaged in the reconstruction of historical garments)



Hopkins fabric. Selection of silk jacquards.

Another useful supplier to have visited was MacCulloch & Wallis. According to some contacts, they are the last physical store in London city that sells special materials for milliners (hair felt, straw, some specific ribbons, etc.). I have bought supplies from them online and it was very useful to see the selection in person. The last supplier we visited was The New Fan Trimming Company. They have a wide variety of décor, such as beads, stones, feathers, flowers, etc. of varying qualities for different uses.



Hat bodies at MacCulloch & Wallis

On our last day we went early to see my scholarship mentor Sean Barrett. We were at his home and workshop for 10-11 hours. We talked about different historical headwear, the development of the industry, suppliers, materials and how the international film industry work and Sean's work process. His experience and practice are invaluable to be able to learn from. He generously shares his time, suppliers, experience, knowledge and other sources.



Some impressive, very old and wide silk ribbon from Sean's private collection.



Very interesting raffia braids from Sean's private collection.



We got to do a close-up study of some original Victorian morning bonnets collected and preserved by Sean.



Amazing old velvet on crin from Sean's private collection.

Thank you to the Norwegian Craft Institute for the support to travel and that we got additional support for Victoria to join me.

Thank you

I want to thank my manager at the National Theatre, Katarina Grasmø and colleagues, for seeing the need for an inhouse milliner/ hatter in this great institution and respecting millinery/ hat making as a craft. For your openness to listen to lofty ideas, and willingness to give some of them a chance. Having both the position as a theatrical milliner under your leadership and collaborate with the scholarship at The Norwegian Craft Institute, I strongly believe is benefiting all parties. I am impressed by how effectively we have made it all happen. Thank you!

Thank you to my second and third-year mentor Sean Barrett, for all our interesting talks about the craft. I appreciate our collegial relationship and friendship. I am grateful for the vast knowledge and experience you are so generously sharing from.

Thank you Rakel Melvær Berge for great advice on supplies, which became a turning point in my project. It was a short but crucial conversation. I appreciate your knowledge and having you as my colleague.

Thank you, Leonardo Michelin-Salomon Garavelli and Hilde Ekeberg at Norsk Håndverksinstitutt for your understanding and support in a particularly delicate and difficult situation.

Last but not least thank you Gunhild Aarebrot Kilde and Merete M. Stuedal for the collaboration and help to create awareness of the craft of millinery, with both the well-produced film and exhibit. It was a privilege and great experience to get the opportunity to reach out to new people and showing the craft of millinery. I truly appreciate your expertise and help.

References

This is some of the books/ resources that has informed my work the past year, but not directly quoted in my report:

Women's Hats, Headdresses and Hairstyles, Georgine de Courtais, Dover Publications, inc. 1973, 1986

A Dictionary of costume and fashion, Mary Brooks Picken, Dover books on fashion, 1999

Metmuseum.org, The costume Institute collections

Swiss Straw Work: techniques of a fashion industry, Veronica Main, Main Collons Publishing, 2003

My world according to me- a technical Workbook, Ian Bennett, self-published 2018

Textilepedia, Fashionary International Ltd ISBN 978-988-77110-9-4

Headwear, Alan and Vanessa Hopkins ISBN 978-0-9931744-3-8

Collaborations

Communication department at Nationaltheatret, Gunhild Aarebrot Kilde and Merete M. Stuedal