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Master study in Design v/Oslo National Academy of the Arts







Colour is everywhere; Iceland on a cloudy day

KEY WORDS

Colour is the property possessed by an object of producing different sensations on the eye as a result of the way it reflects or emits light.

Narrative is a spoken or written account of connected events; a story.

Experience is a practical contact with and observation of facts or events.

Compisition is the action of putting things together; formation or construction.

Ambience is the character and atmosphere of a place.

The Beginning

This project began with my curiosity of colours. How can I use colours in a constructive way as an interior architect with focus on spaces. Through out my projects I feel I have somehow left colours behind and focused more on form, concept and details.

Colours have always interested me but also scared me because of the trends of colours that are always changing and it is very hard to come up with a good colour combination. And what is a good colour combination and what can colours bring to a space? How do people experience colour?

I feel this project was my chance to dig deep into the world of colour and learn more, investigate and test out how colours are together and how they can affect the user.

I believe that colour is a design tool that provides colour characteristics and expressions in design and light is a part of that.

With this study I aim to test out colour palettes in a chosen space and as well investigate different colour schemes and how they can create an experience with a narrative.

To then take my findings from the method I used for the colour study to work out even further with more focus on a specific space in a restaurant.

The more effectively a restaurant design uses color to set up an image, create ambiance and trigger customer's appetites, the more the chances are for long-term outcome

COLOUR ...

Colour is the characteristic of visual perception described through color categories, with names such as red, orange, yellow, green, blue, or purple. This perception of color derives from the stimulation of photoreceptor cells (in particular cone cells in the human eye and other vertebrate eyes) by electromagnetic radiation (in the visible spectrum in the case of humans). Color categories and physical specifications of color are associated with objects through the wavelength of the light that is reflected from them. This reflection is governed by the object's physical properties such as light absorption, emission spectra, etc.

from wikipedia.



... is often strong and vivid in nature.



...is a part of our development.



...is floating around us



...is paired with other colour to create a palette.



...can be faint in different time of the day.



...is used to spark interest



...changes in the shadow



...is blended to make paint.



...is different through out the year

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To get inspired and Learn more, I studied some masters in the field of architecture, design, art and colour. There are many to look to and get inspired from and I chose few to see different working methods regarding colour. Both modernist and contemporary. Men and women in the field.

Le Corbusier modernist

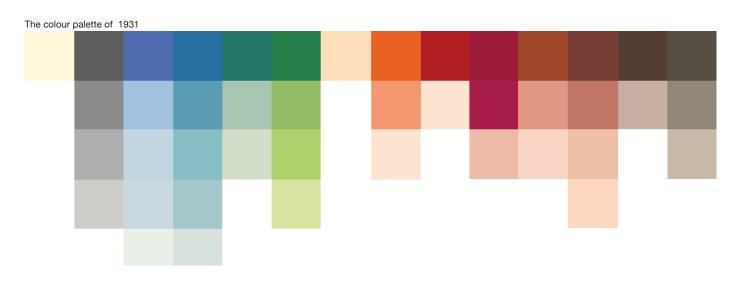
A Swiss-French architect, designer, painter, urban planner, writer, and one of the pioneers of what is now called modern architecture.

Le Corbusier's colour theory revolves around three concepts. First, you create the atmosphere or ambiance using colour; second, contrast is achieved by applying synthetic pigments; and third, transparent synthetic pigments are used to alter surfaces without affecting how the eye perceives the space. He believed colour was instrumental to orchestrating spatial effects.

He did recognize that we all respond to colour differently, in different ways and different time of the year and different times of our lives.

You can use view finders to choose colours, 3, 4 or more colours at the same time to help choose a palette.

The Le Corbusier Colours, Architectural Polychromy //



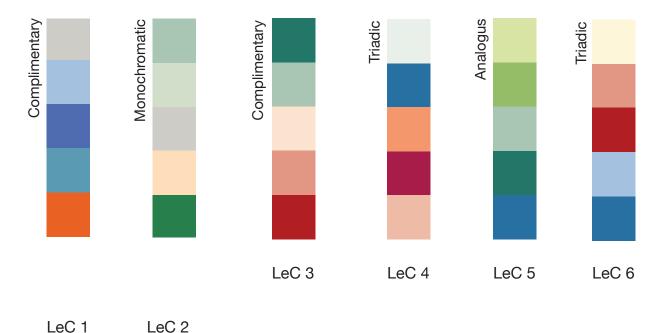


Using Le Corbusier's Architectural Polychromy colours to create new palettes.

Corbusier's colours are specially chosen for architecture. I saw when I went through the palette that the colours fit very well together, all of them. I see that his overall palette of 1931 is chosen very carefully, not many option of colours but the colours have different value to them.

I used the colour palette of **1931** // 43 shades in 14 series. The series are composed of solid colours and masterfully graduated brightening. In order to recognize personal harmonies and to select individual preferences, Le Corbusier also created different colour keyboards with moods that reflect specific functions of the colours. Good tool to help you choose colour palette for your work.

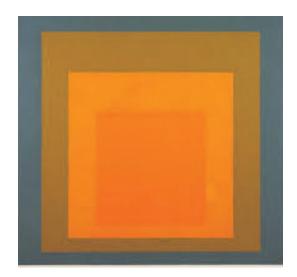
I chose to make 6 palettes from his colours. Corbusier uses his colours in a specific way in a space. I used different harmonious colour schemes (with Newtons Colour 12 coloured circle) to build the palettes. Those schemes seem to be inbuilt in me by now. Later in the process I use these palettes in my colour study, to see how they work in a spatial context.

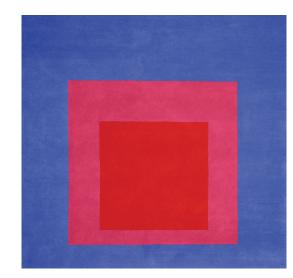


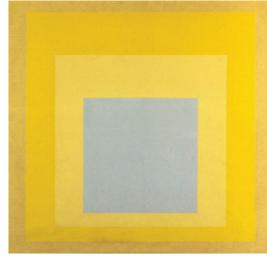
"Colour in architecture – a means as powerful as the ground plan and section. Or better: polychromy, a component of the ground plan and the section itself."

Le Corbusier –

Josef Albers modernist







Josef Albers was a German-born American artist and educator. Is known as one of originators of modern design.

His book Interaction of color had a great impact on me, regarding how you can control how you see colour and really use it different ways.

In Albers book he talks about Factual

colour, meaning what colour is in isolation and then Actual

colour, how the colour appears in context. These two words have made things very clear for me and going through how light, other colours and different context have great affect on colour. As well for the best ways to test out colour is to use color-Aid sheets for example because when you use paint it can be different each time.

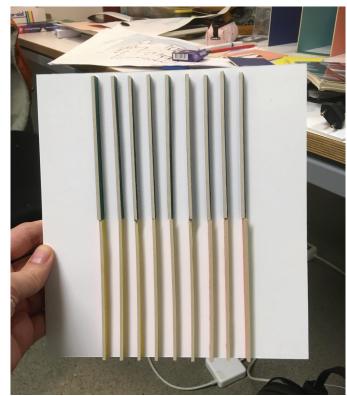
I tried testing out his methods and there is one thing to think about colour in 2D and then take it into a 3D version. But I found a book called Dimensional

Color from one of his student, Lois Swirnoff that shows where she and her team did experiments by using his methods in 3D. It nice to see his try-outs come to life and made me even more eager to try them out myself.

On the page on the right, one can see that colour can be an element of surprise and second guessing. You have the control when it comes to colours and they can as well lead you to discover many things, just by testing out different ways of using them.

I did a test here on the next page, were I tried out after Albers theory //

It may not show as well in a picture as in real life. But, the colours from the site reflect to the white wall and they are different from each side. Giving the white wall a faint version of the colour that you have on the side. Walking by this small structure of colour, gives movement and change. But it gives an exciting and surprising element to the space, when you walk by and it colour changes along the way.









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Emmanuelle Moureaux contemporary

Is a Tokyo based French architect and designer who is known for application of color throughout her designs.

She uses colors as three-dimensional elements, like layers, in order to create spaces, not as a finishing touch applied on surfaces. As well to allow people to experience color through touch and feel as well. Handling colors as a medium to create space. She wants to give sentiment through colors with her creations, which range from art to architecture.

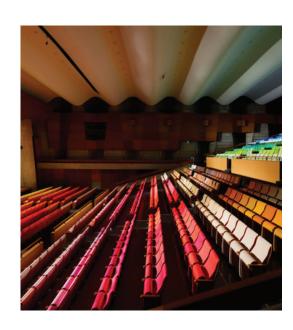
In many of her projects she uses all the rainbow colours. Using often bright colour palette that creates an astounding wave of colors in her work. It nice to see when you expand one hue over to the next so how it stretches out and can create something bigger than it was before.

In one of Moureaux project, where she crafts 1000 different colors for Japanese auditorium seats, she uses the ceiling (seen in picture on the right) for reflection of all those strong colours. It makes the experience even greater sitting in the auditorium. When colours are used in this way, I feel it brings the element of surprise and sometimes movement. I feel she looks at the bigger picture and is not afraid of doing bigger scale projects as for the smaller ones.

She has found her special way of working with colours and it will be interesting to she what she will do next.







Tekla Evelina Severin contemporary

Is a Swedish interior architect, photographer and de-

The Scandinavian gueen of colourful minimalism.

She is known to have her way with colour. She doesn't think there are rules about colour combination and she is always looking for new combinations.

After I read about different colour theory last year from different masters of colour it was interesting to look back and noticed that I was reading about men and their work. It made me more eager to find out women's view on colour. I have been looking for women in the field of colour and I thing Tekla Evelina fits the role nicely.

After reading through the book Colour - A Visual History I saw, Mary Gartside's Abstract Colour Blots and see how she views and illustrates colour in a more organic way than I have seen before. She reminds me of Severin's work regarding how she looks and works with colours.

After viewing Severin's work I saw how stuck I have been with the "rules" I have found about colour from many modernist like Newton, Gaute and so forth. Without saying that it is a bad thing but you don't want to stop discovering new things because you think you now it all and there are already "rules" for it. You can never let your eye stop looking for new things and as well that "rules" are meant to be broken, especially when you can be discovering.

Tekla is very active on Instagram and uses that platform to discover colour combination through her photography. I will continue to fallow her to get inspired.







pictures barrowed from teklaevelinaseverin.com and instagram.com/teklan/

Concepts to keep in mind throughout the reading

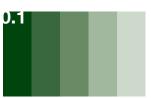
Color Scheme Harmonies

Techniques for creating colour schmes

There are a number of predefined color scheme standards that make creating new schemes easier, especially for beginners. When you mix in tones, shades, and tints, you expand the basic 12-spoke color wheel into an infinite number of colors for use in your designs. One of the simplest ways to create a professional looking color scheme is to take a few tones, tints, and shades of a given color (avoiding the pure hue), and then add in another pure hue (or close to pure) that's at least three spaces away on the color wheel (part of a tetradic, triatic, or split-complementary color scheme) as an accent color. This adds visual interest to your color scheme while still retaining a sense of balance.

Neutrals are another significant part of creating a colour scheme. Grey, black, white, brown, tan, and off-white are generally considered neutral colours. Browns, tans, and off-whites tend to make colour schemes feel warmer (as they're really all just tones, shades, and tints of orange and yellow). Grey will take on a warm or cool impression depending on surrounding colours. Black and white can also look either warm or cool depending on the surrounding colours.















0.1

Monochromatic colour schemes are made up of different tones, shades and tints within a specific hue. These are the simplest colour schemes to create, as they're all taken from the same hue, making it harder to create a vibrate or ugly scheme (though both are still possible). Monochromatic schemes are easy to create, but can also be boring when done poorly. Adding in a strong neutral like white or black can help keep things interesting. This schemes creates a relaxing and harmonious feeling.

0.2

Complementary schemes are created by combining colours from opposite sides of the colour wheel. In their most basic form, these schemes consist of only two colours, but can easily be expanded using tones, tints, and shades.

Using colours that are exact opposites with the same chroma and/ or value right next to each other can be visually jarring (they'll appear to actually vibrate along their border in the most severe uses). This is best avoided, either by leaving negative space or by adding another, transitional colour between them. This combination tends to be naturally pleasing on the eye.

0.3

Analogous colour schemes are the next easiest to create. Analogous schemes are created by using three colours that are next to each other on the 12-spoke colour wheel. Traditionally, analogous colour schemes all have the same chroma level, but by using tones, shades, and tints we can add interest to these schemes and adapt them to a spatial context. They tend to be easy on the eyes, generally peaceful and sets comfortable mood. A combination that is often seen in nature.

0.4

Split complementary schemes add more complexity than regular complementary schemes. In this scheme, instead of using colours that are opposites, you use colours on either side of the hue opposite your base hue. This gives more creative freedom and feels more lively or joyous then when only using complimentary colour.

0.5

Triadic schemes are made up of hues equally spaced around the 12-spoke colour wheel. This is one of the more diverse colour schemes. They can be difficult to do well, but add a lot of visual interest to a design when they are done effectively.

0.6

Tetradic (Double-complimentary) colour schemes are probably the most difficult schemes to pull off effectively. Colours have equal distance between all colours and are distributed evenly around the wheel. The scheme is always vibrant, nervous and colourful, there is equal tension between all colours. It is an aggressive scheme, requiring very good planning and a sensitive approach to relations of these colours.

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Creating a colours scheme is the most challenge for me as a designer. Finding a combination that has an affect on the space and does something for the eye and the experience of the user. Something that you feel either comfortable with or something that gives you joy and makes you excited or calm for example.

I started combining colours to create different schemes. I made a random shape that reminded me of a plan drawing of a building. For me this was an abstract way to start to play with colour schemes and then create a palette. A palette that intwines different colours. With known strategies and schemes, the colour wheel helped me create colour schemes that were harmonious and as well some of the combinations of colour came from my perspective of how I perceive colours from different contexts and places. But some of those choices came with no specific rules but more as an experimental approach.

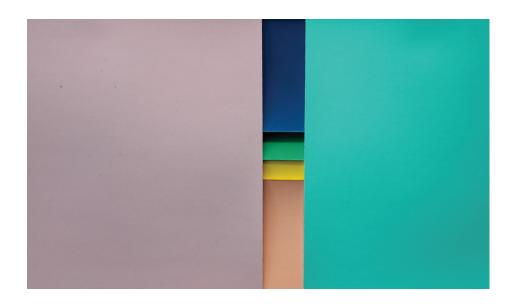
I like to work analogue, using my hands which usually helps me with my process and to see things differently. That was my start, I knew I wanted to work with colours in a spatial context and I wanted to learn how one uses colours and how to use colours with clear aim to understand more about the theory behind colours.

So I thought a perfect start for me was to just go for it and make a spatial model and use colours. But then because of the difficult situation that has been a part of this semester, my idea of using analogue models as my main focus to test out colours had to change into a digital format along the way. In my work process I still wanted to try out different methods of working with colour.

With more hands-on approach, I blended colours myself using pigments, wich gave me different contact to the colours.

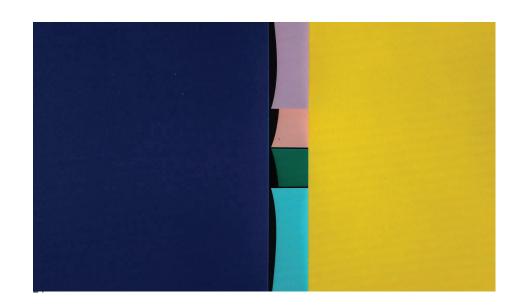


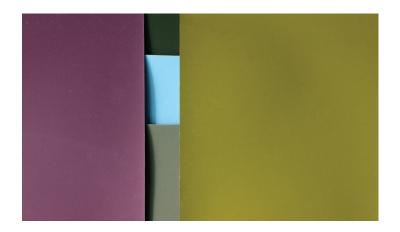
First palette tests in 2D. Thinking about what happens if some of the colour where taken out or put together differently.



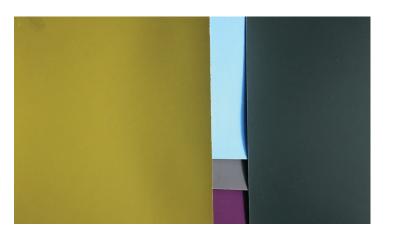
Combining colours

The main colour and the accent colour; With the use of Color-aid sheets I tried to mix up the main colours and accent colours. And here the idea is to see how spatially different it can be when the bigger space/area are in different colours and play with combinations at the same time. This will be interstion to look at in an actual spatial context.









Creating Auður's Colour Palettes

Custom color schemes are the hardest to create. Instead of following the predetermined color schemes as mentioned in the pages before, a custom scheme isn't based on any formal rules. The palettes are created from my perseption and based on my knowledge of colour.

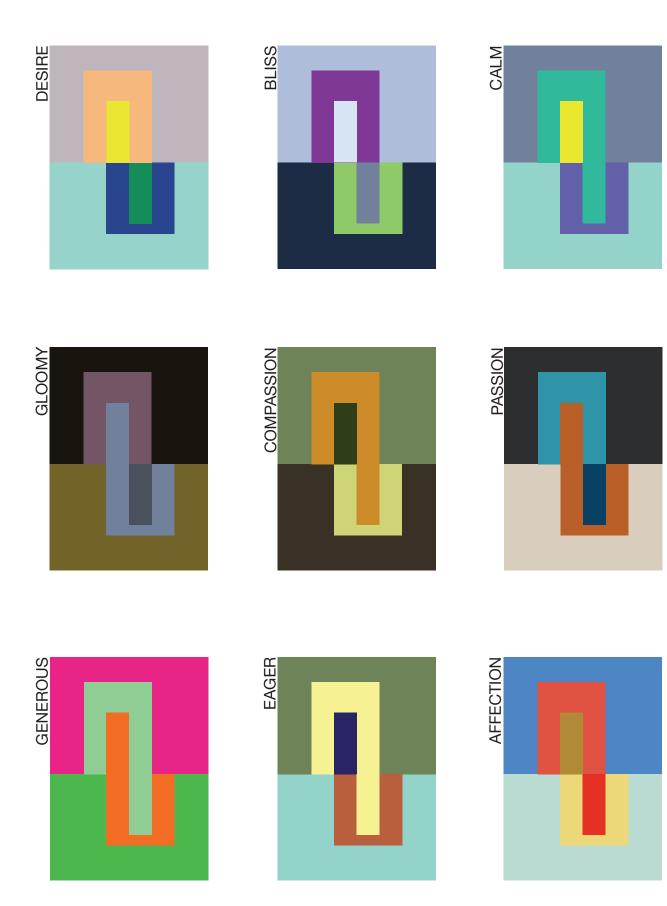
Some of the palettes come from my translation of a specific place and in some of the palettes you can clearly see that I am using some of the colour scheme as a base for a palette. Most of my knowledge comes from



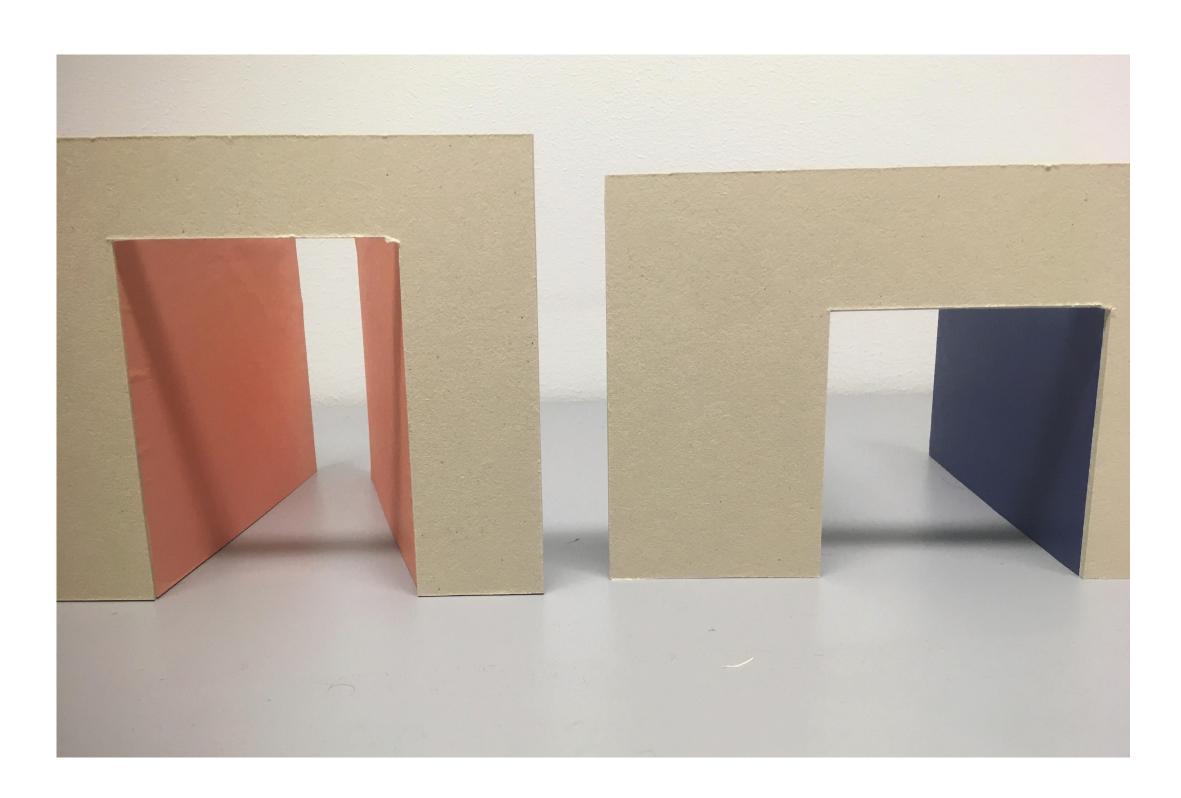
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the learning that came from the process of my thesis Colours talk, but there I started to look at colour schemes and to create my own, trough my own perseption. I wanted to continue from where I ended it in the thesis and started to create some more palettes to get me going. The eye starts to see what you have learned and therfore you use some of the harmonious schemes to create your own. I chose words for emotions to name the palettes, it is a translation on how I see that specific palette.

Auður's Colour Palettes



Going from 2D to 3D: Models

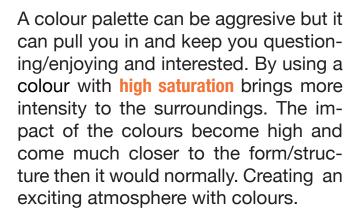


My first model tests using the Desire palette didn't work as I was hoping for because of the material I used. But, it was a start of something interesting. Looking into how colour is in 3D.

With a quick model test like this I saw how much light and shadow impacts the colours and the space. That is something I will need to look into and is a big part of colours in a spatial context.















2 models with same palette: One with the high saturation and every surface is covered, the other the colour isn't on every surface but in covers part of the white walls because of reflection. Seeing how lighter the effect the colour is on the later one, but at the same time it brings an element of change and suprize throughout the day with the reflected colours. Conclution is that these colours are not strong enough to work with further for this project.



NEDRE FOSS GÅRD

For my studies, I used an existing building, Nedre Foss Gård, because it was available and for its spacious and divers configurations. The programming of the place, as a restaurant, was a fitting program for my studies. I feel it helped me to get more layers to the project, a real place I could visit. The program gives another layer of colour understanding, regarding how colour affect the space, with colour psychology in mind and as well for creating ambiance that speaks for different kind of rooms that a restaurants beholds.

The building, Nedre Foss Gård, has been rebuilt and today it is a replica. The interior is bland regarding colour, it is white and they use materials like wood, marble and messin, a neutral and pale palette. I feel that designers and architects today are afraid to use colours in their work and I think that is mostly because of little knowledge about colour theory and history, and because they don't often try or workout with colours and rather "play it safe".

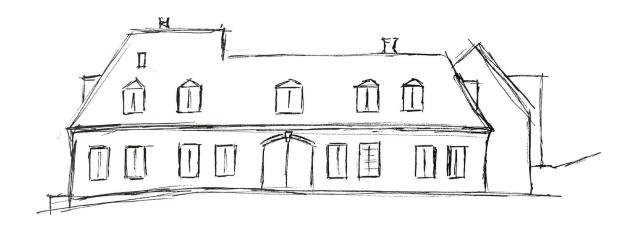
Why this building and this function.

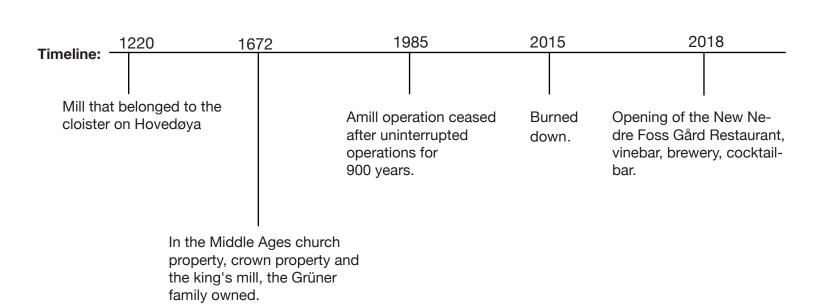
- The program/function has its relevance to my field. One comes there for a short period of a time to go out with an experience
- It has the scale I need, with different room sizes and different floors
- Connecting space, outdoor indoor.
- It has a history
- It is close by the school with thought of going there often to study and analyse.





History of Nedre Foss Gård





Interior of Nedre Foss Gård today



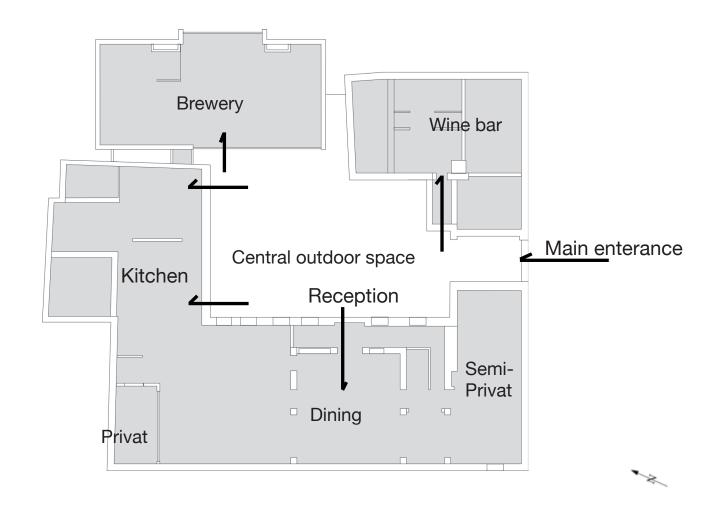


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White paint, Wood, Marble and brass are widely used in the restaurant.

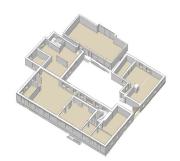
MAPPING - 1. FLOOR

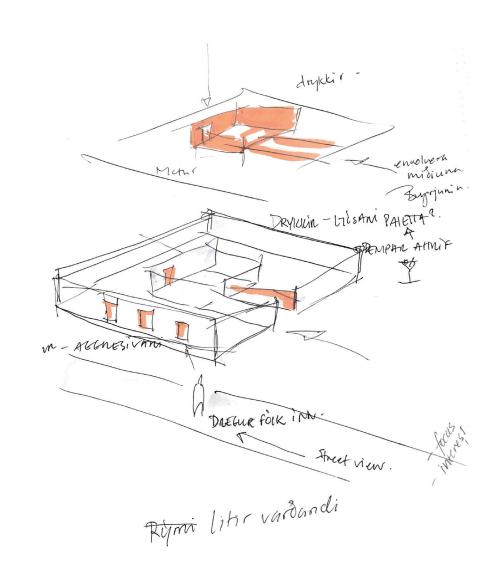
Placing of Main areas TODAY.



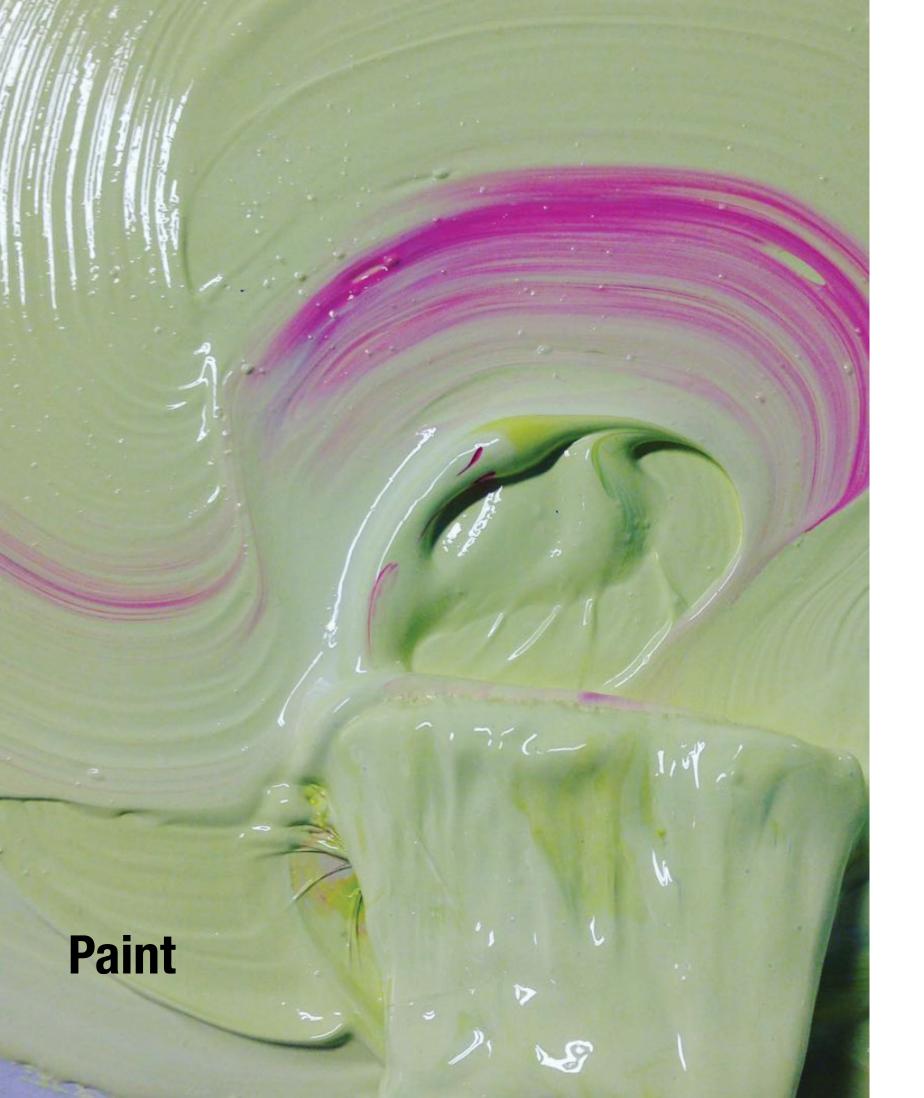


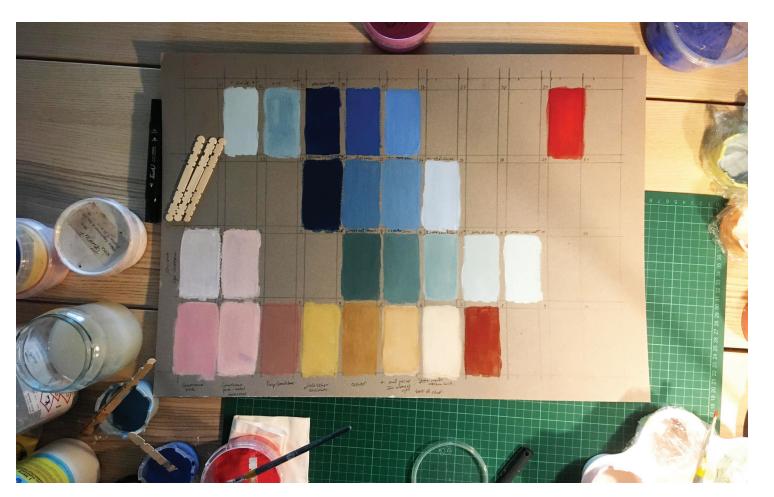






- First thoughts: sketching of the plan





Pigment & Paint

For me as a designer I want to take care of my surroundings and try to use materials that are natural and sustainable.

Looking into different companies and systems regarding colour and paint, there are many out there. And I guess it depends on time, quality and money as so often that has to take count. Many use colour systems like Pantone and NCS, Natural Colour System.

Pure & Original was started by Erwin Floor in 2006 interested me because of their sustainability and natural approach. They create beautiful paint with respect for human and nature, using only the best materials and natural pigments. Their paints meet the most strict environmental requirements.

All of their paint is stained with 100% natural pigments, providing the most beautiful colours and a full, rich look, not to mention the perfect opacity. Marrakech Walls and Fresco Lime paint are even 100% mineral-based paints. As stated by the company; Not only is the paint of Pure & Original beautiful, it is also durable. It is made with less chemical additives as possible, some paint qualities are even completely ecological. Perfect for kids and allergies. The Pure & Original paints are made with 100% natural pigments and contain no chemical additives.

As well there is Miljømalern AS, which is a professional painting company here in Norway. It could be a well fitted company to use. Because of their reduced environmental impact and they use traditional paints, linseed oil and natural paints (This paint is coloured with natural pigments).

Colour Facts / Nedre Foss Gård & History

There doesn't exist a lot of information nor findings of colours from the interior of the building.

Nonetheless swatches show that the facade has been light, white, ochre and sandstone coloured pink.

The pink colour was considered masculine for some time and it is interesting with colours, because each period has its fashion colours and they can say a lot about people's tastes over time.

The colour tradition in Norway is changing all the time as well. In principle, Nedre Foss Gård is protected as it currently stands. If a conservation-worthy building regains a traceable colour, it is not required to be used. Now the facade is white, it could just as well have been ochre or reddish pink says Jens Treider, building antiquarian.

Because of the lack of historical colour information from the building I looked at interior and exterior colours of buildings in Norway from around 1700. I looked at both exterior colour and interior.

Exterior main colours were: light ochre - olive green - English red and DODENKOPF (deep red tone). Then there were more accent colours as in for doors, windows and so on. Those colours were lighter, like; sandstone pink, light grey and umbra and ochre.

On the next page one can see that the interior colour are more and richer

Mostly strong colours; yellow - green - red. As well as earthly tones and lighter tones of the main colours.

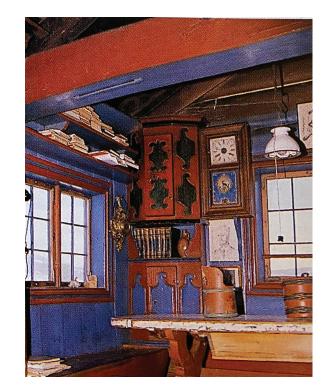
It's fun to see how colourful they interior spaces were back in those days. These colour can be used for inspiration for the colouring of the interior of the restaurant.

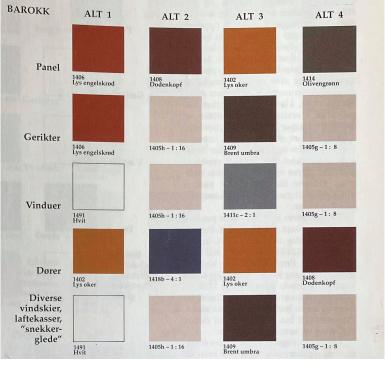
Interior



Image from Gamle Trehus, 2011.

Exterior





Images from Gamle Trehus, 2011.

Sandstone pink & Ocher

I wanted to try out for myself to blend pigments and see what I could get from making paint myself and get a better understanding of colour making.

I started with the colours that were found at the exterior that was mention here above: Sandstone pink and Ocher. Then I saw how light and low in saturation they looked when I started blending. I used 2 types of Ocher pigments. For the Sandstone pink I used earthy pigments because sandstone is an earth colour. I tried these colours in few shades to have few variations. Then I kept on trying to blend other colours as well.





Sandstone pink: this test got to pink.



Sandstone pink: I felt this was to my taste and fitted better for the colour.



Deep Sandstone pink: I wanted to try to make a darker shade.



Golden Ocher.



Ocher.



Ocher: Lighter shade, added zinc white pig-



Pink Sandstone.



Yellow ochre is a natural mineral consisting of silica and clay, owing its color to an iron oxyhydroxide mineral, goethite. It is found throughout the world, in many shades, in hues from yellow to brown.

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Blue tones.. gradually lighter.

of main and accent Colours.



Starting point

- Unstorical
Lolours from Nedre Foss Gard

· How the strong, darker colour swith them.

More Strong Vibrant Colour recelect









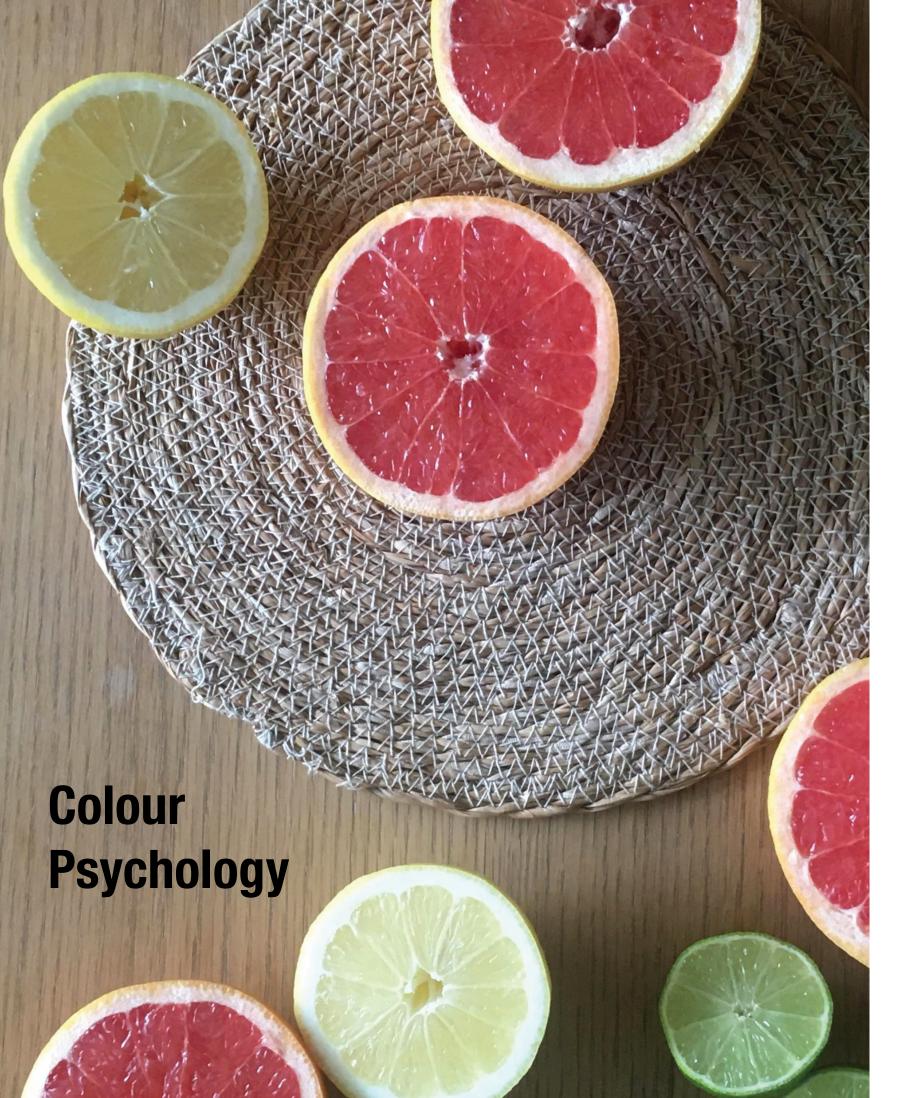






Farthly tones.

Ziena Odver.



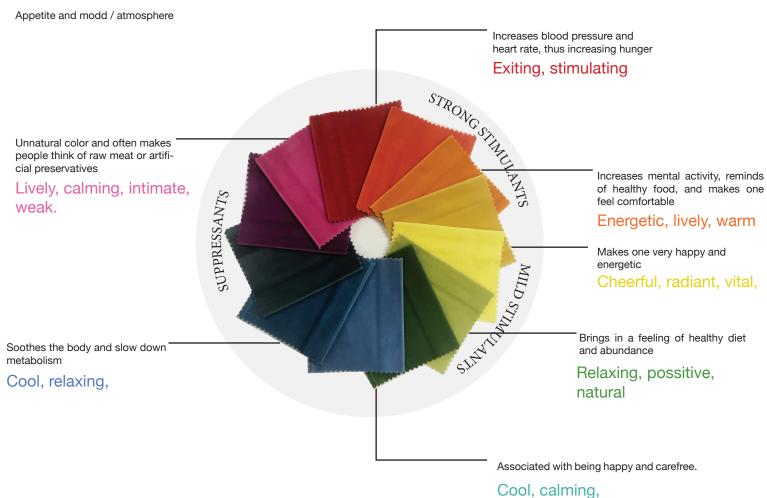
Colour is a Sensory Perseption.

The sense of a colour and the message it brings is of greatest importance in creating the psychological mood or the atmosphere that holds up the function of a space.

When researching about colour and food, I found few colour wheels that described how colour influences us.

In restaurant design, the colour wheel can be divided into three sections, according to its effect on appetite: Strong Stimulants, Mild Stimulants, and Suppressants. As well for the feeling we get from the colours. I put together a colour wheel with some of those information.

Colour wheel



Restaurant Color & the User

Restaurant is much more than the food and service. The user should also enjoy the space, it is about engaging the customer on a deeper level and making them want to come back. A big factor to create atmosphere is colours. Users react to colours in a different ways. Red and yellow are easy and positive but can be overbearing. It depends on how strong and vivid they are. Purple and blues can repress appetite. Neutrals are easy but look tired over time and so on. What does the colour say regarding how people perceive them and is it the same for everybody?

The more successfully a restaurant design uses colour to set up an image, create atmosphere and activate customer's appetites, the more the chances are for long-term outcome. Colours that one uses for a restaurant can have a big impact on the customers, how long they spend in the space, and how they feel.

Colours can make customers happy, lift their appetite, increase the number of guest and make the dining space seem more spacious or intimate. But, they can also have a negative effect on customers, so it's important to understand the meaning of colour and use it for you advantage.



Food and the plate

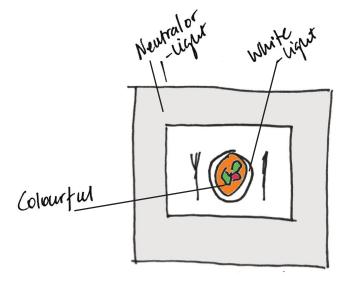
A new study has shown that plate color affects how people perceive the flavor of the food they taste.

They did a study trying out the same desert on a white disk and then the same one on a black disk. The desert appeared more intense against the lighter, white background than against the darker, black background, and that this visual illusion worked in favor of the white plate.

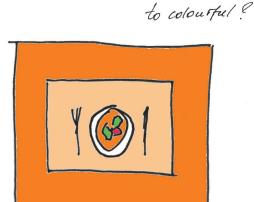
Over all people felt the desert on the white disk to much more fresh and better tasting.

Could the colour of the floor affect how you perceive the flavour of the food?

Dining speculations

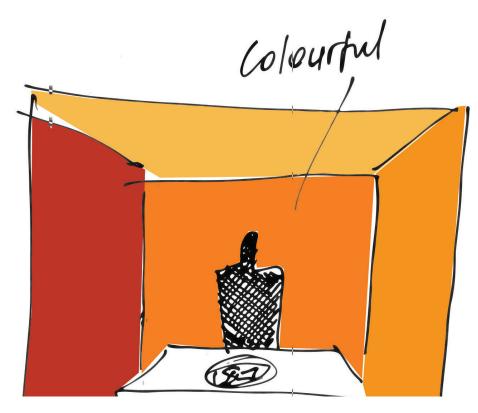


Neutral floor. White plate. The food in full focus.



Floor with a strong colour.
The food blends with other colours and can change your taste?

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The space can be colourful as long as the framing of the is white or neutral colour. When you look down and see the food there is nothing that is in the way!

Daylight influence on colour in architecture

Ólafur Elíasson artist, focuses on how people experience things, like; art, space, light and colour. He says;

"What is in it for you? what are you actually doing here? It is about the ability to see something!."

The experience gets stronger when you let yourself stop and see and I have discovered through doing this project that light and shadows lifts the experience of the everyday to become more and even deeper than on a bland day, when everything is for example without shadows. They create more contrast and interest in life. Ólafur talks about how different quality of the daylight is in the world in the documentary Abstract – Olafur Eliasson: The Design of Art. I see how daylight can influence the way we perceive colour in a space during the day and the year and where we are in the world. By looking at a white room, you start to see the colours come in and change throughout the day. That is something I look better at in the next pages.

Maud HårleMan, a Swedish architect did a thesis about how daylight influences on colour design.

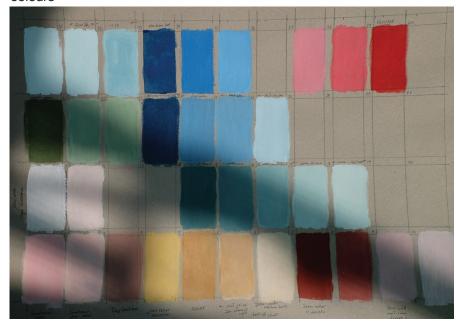
It is based on perceived colour and colour experience indoors. She attempts to look at the unknown and that is how daylight from two compass points; North and South, affects perceived colour and the ways in which colour is experienced by people. The study shows that one and the same interior colouring will appear different in rooms with windows facing north or facing south. The aim of this study was to describe the perceived colours to be expected in rooms with sunlight and diffused light, and therefore to develop a tool for colour design. The studies were made in north-facing and south-facing rooms. She got people (students and architects) to go into the rooms and got them to use their own words on how they perceived the light. She looked at the emotional response they had on different colours, warm and cold colours, in both of the rooms. The study tried out, both to have cold colours in the south-facing rooms and warm colours in the north facing room and then the opposite. Over all people liked warm colours better in both rooms.

The state of the s

A) Indoor - daylight: at 16:30 - Even light



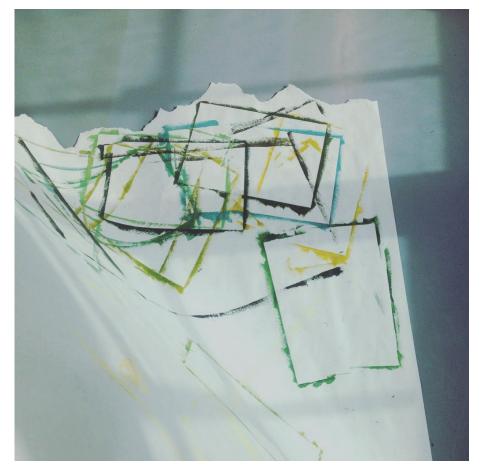
B) Indoor - aritficial light: at 22:00 - yellow light, shadows and darker colours



Observation



52 C) Outdoor - daylight: at 16:30 - White light and shadowplay



Colour testing in the daylight.



Colours are different through out the day but they are as well different regarding what time of the year it is. With surrface that is not straight, like on the leafs, they create shadows for the background and colour changes

Moments

Goethe viewed darkness not as a lack of light, but rather as a way to interact with light. The a result from these interactions were colors.

"Light and darkness, brightness and obscurity, or if a more general expression is preferred, light and its absence, are necessary to the production of colour... Colour itself is a degree of darkness."



Light and shadow movements



KHIO this semester

Daylight Study 1.0: Nedre Foss Gård - Mars & June

How does the light conditions through out the day affect a white space.



9:00

This early in the morning the daylight is not very strong. For a restaurant at this time is more focust on working light instead of the people that come to enjoy the food and the surroundings. Artificial light.



12:00

The space here has started to light up but no strong affect on the colour. It is neutral and with smooth shadows.



15:00

At this time of the day you get most of strong daylight coming in the windows, creating strong shadows and movement. Because of the light bouncing; the ceiling becomes brighter but at same time the floor seems darker. Strong contrast is the focus.



18:00

At this time of the day, the colour in the room changes a lot and creates yellow blends. This is around the start of the busiest time of the day for the restaurant and shows that one needs to take to account how the colour in the room will appear different that it is. The use of artificial light could be very important at this point, colder artificial light could play as a good balance to the warm light.



20:00

The same is for this time as above, we have big changes in just 2 hours regarding light and colour. The overlaying colour has turned from warm and yellow to cold and blue.



9:00

Similar outcome as in Mars.



12:00

Similar outcome as in Mars.



15:00

At this time of the day in June you get a strong daylight coming in the windows, creating strong shadows and movement. This part of the day is longer and stretches longer than in the winter time and is still moving around at 18:00. Creating longer movements of light and shadow throughout the day with big contrasts



18:00

At this time the room starts to get a little bit of warm overlay. As described in text above the shadows and contrast are strong.



21.00

At this time of the day, the colour in the room changes a lot and creates yellow to redish blends. This is a busy time of the day for the restaurant and shows that one needs to take to account how the colour in the room will appear different that it is. The use of artificial light could be very important at this point, colder artificial light could play as a good balance to the warm light.



23:00

At 23:00 the room will mostly be lit up with artificial lighting.

Daylight Study 2.0: Nedre Foss Gård - Mars & June

How does the light conditions through out the day affect a **couloured space**. I chose a colour palette I put together from Le Courbusiers colours, called LeC 6.



9:00

The space here has started to light up but no strong affect on the colour. It is neutral and with smooth shadows.



12:00

The space here has started to light up but has no strong affect on the colour. It is neutral, soft and with smooth shadows.



15:00

The crisp light. The sharp daylight comes in the windows and gives a strong "sunform" on the floors that makes this bright light reflect to the ceiling and the ceiling becomes its lightest colour. The colour of the floor becomes richer.



18:00

At this time of the day. The space get a more yellow tone over the surfaces; walls, ceiling and floor. The space seems more monotone and flat.



20:00

The space gets very purble because of the blue light. Artificial light will at this time light up the space primerly.



9:00

The space here has started to light up but has no strong affect on the colour. It is neutral, soft and with smooth shadows.



12:00

The space here has started to light up but has no strong affect on the colour. It is neutral, soft and with smooth shadows. Colour iinside the windows starts to fade a bit compared to the one at 9.00



15:00

At this time of the day in June you get a strong daylight coming in the windows, creating strong shadows and movement, with big contrasts. It is intresting to see how strong the colour is inside of the windows.



18:00

The crisp light. The sharp daylight comes in the windows and gives a strong "sunform" on the floors that makes this bright light reflect to the ceiling and the ceiling becomes its lightest colour. The colour of the floor becomes richer.



21.00

At this time of the day. The space get a more yellow tone over the surfaces; walls, ceiling and floor. The space seems more monotone and flat.



23.00

The space gets very purble because of the blue light. Artificial light will at this time light up the space primerly

Under by Snøhetta

The restaurant provides a journey (experience) into the unknown. By welcoming guests to the Norwegian marine environment. As well the gest gets to experience life under sea and the movement that it brings. It feels that the space is a part of the sea and by using colour, the gradient of colour in the textile in the ceiling guides you to the space a bow that ends in a contrast colour of the green below. It leads the eye to a another experience.

I talked to a Heidi Petterswold, senior interior architect at Snøhetta about how colours can have an affect on how we perceive the food itself in a colourful environment. She said that a big window to the sea (focus point of the restaurant) was very important. The white table clothes that are often used in restaurants have been used as a frame for the food. But in the restaurant design at Under that did not work because of to much reflection in the window. They wouldn't even use white plates.

Heidi mentioned when it comes to the presentation of the food and the best way to control the colour of the food is by choosing the right lighting. At the restaurant they used a lighting system called Liquid light system that would provide the best LED colour index and it can be mounted in small focused downlights.





Concluding

Light is very important when thinking about colour and as well to control the colour of the food. One can use more than one type of light, for both function and for the right atmosphere.

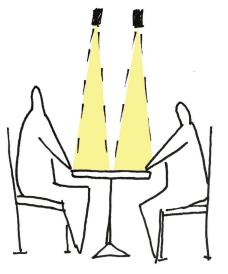
After doing the daylight study I shaw how colour comes into a white room as well it comes into a coloured one and you can clearly see how a space is affected by the sunlight, the sun brings us colour. Looking into what matters regarding food I see that light is very important and that it needs to be controlled throughout the day and the year to get the best experience for the customers. The study was interesting in many ways but ongoing with the project I did not go much into the details of it.

For the restaurant I would use a similar system as they did in the restaurant Under. The Liquid light system would be good choice to get the best outcome. These lighting fixtures are combined into one system and can be controlled by a computer. This makes it possible for the lighting to change according to the seasons of the year and throughout a day. When there is a sunny day the natural light conditions in the restaurant are a lot different than on a rainy grey day. The lights are also programmed in a way that they pulse (gentle change in intensity) according to the waves outside.

I want to give the user the right light that lights up the plate and the menu to make the food experience the greatest and give the user light to read the menu. As well to enjoy their coloured environment.

To conclude, the best way to make sure that the food looks at it's very best is to make sure the lighting is perfect. "Light creates ambience and feel of a place, as well as the expression of a structure."

-Le Corbusier

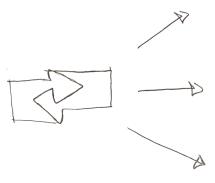


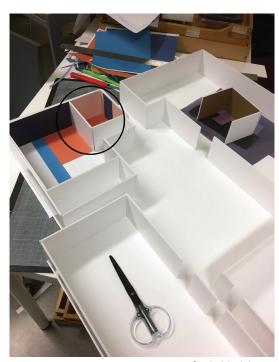


Model Studies / Analouge Nedre Foss Gård

Transitions

Transition from one room to another is important in this project. How the rooms connect and how the flow is between the different spaces. How you how you perceive colour and experience a journey between rooms. Different ways of transitioning; One colour that moves with you from one space to the next. It there a stop in between spaces that clears your colour from your mind until you step into the next colour. From light to dark and so forth.





Scale Model 1:50



The floor colour flows between rooms. Making the transition between them easier. More natural, connecting 2 rooms.



From a neutral colour to a strong orange hue. That makes the transition bigger and more of a beginning of something.

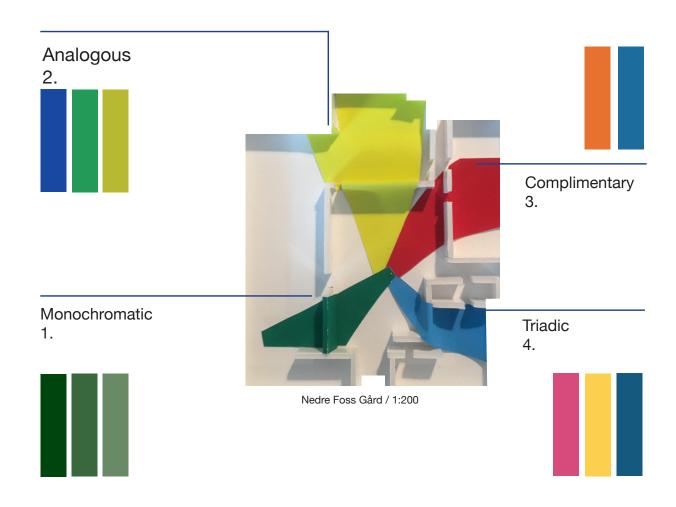


Going from one strong colour to the next makes the transition more intense. You may need to adjust.

Colour Strategy/Restaurant Idea:

Colour experience blended with the dining?

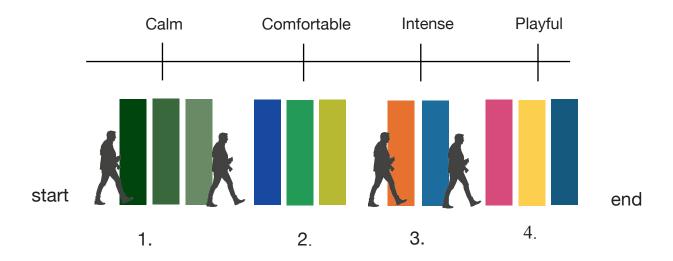
Starting in Monochromatic (starters) in a calm space. Changing into the main dish, where the colours start to have more play to them. Ending the eating experience with the desert in the complimentary space, where the colour start to give some tension. Ending then with drinks in in the triadic space with the most colour play. This Idea lets the user experience different colour itensity between rooms and function.



Experiencing the transitions between spaces.

To get a different experience with changing colours from one space to the next are the transition spaces. Going from one colour to the next. Going from colour to black? and then to a new colour. Experiencing retinal after images or by going from one colour to the next and taking the colour with you into the text space, how is the transition and what does it do to your mind and then again to the designed flow of the floorplan?

Maybe you will get the contrasting colour in the next space or do you want to have a clear transition of colour and no connection between the coloured spaces. Be it a black space or a space with no colour a light that takes the colours away before you step into the next room. I think the transistion between spaces are very important here.





Experimenting with the building

What happens when you expand the colour to the next floor of the building. The colour reflects from one floor to the next. Creates a flow between floors and does something new to the view. I wanted see how I could get colour to interact with the building in different ways.

But in the end I did not go that way. That could be the next step. I wanted to focus more on what colours can do regarding experience and atmosphere before I go into big changes like this. I chose to focus on the 1. Floor of the building.



Section/ Scale Model 1:100



Green space with play of light and shadow.





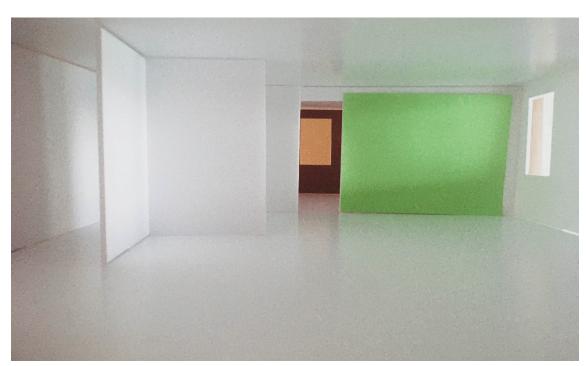
Looking down to the Green Bright light guiding you to Reflective colour. this space.



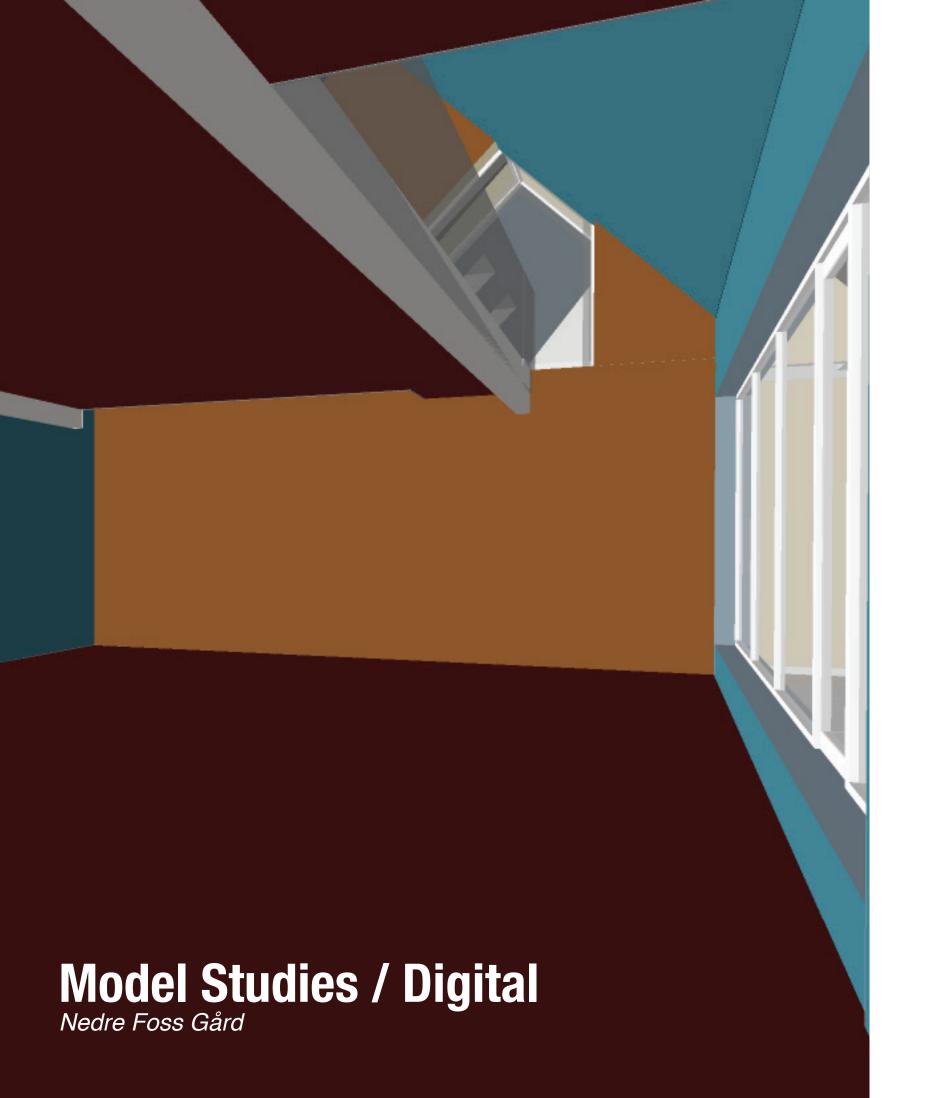


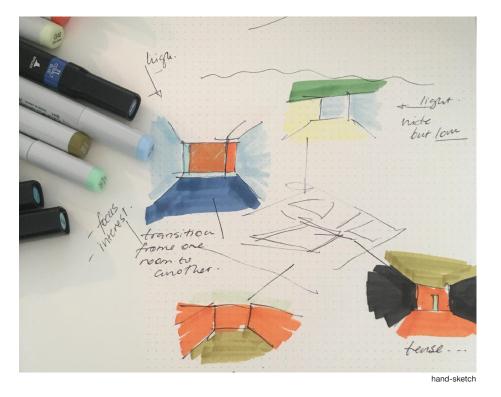


Scale Model 1:30



Model work at home. It was a process that I gave up on because it was slow and did not give fast enough results. In these model pictures you can already see the impact that colour has on the space as well for the interaction of daylight. After this model I made a decision to continue with digital models.





How Colors Change the Perception of Interior Spaces

To provide the desired spatial experience, there are elements which change the perception of a space without changing an inch of a wall. This can be done by painting surfaces, using different materials, or applying different coatings. Lighter and cooler colours make the space appear larger. Darker colours make them appear more closed and smaller to the eye. The arrangement of colours or textures in an environment changes the perspective, making the room appear taller, longer, wider, or highlighting a particular element.

Monochromatic colour schemes

Monochromatic color schemes are a result from a single based hue and is extended using its shades, tones and tints. The use of a monochromatic color provides a strong sense of visual. These colour schemes are often used because it is an easy palette to use and the palette is nice and calming. Some of the images, you can have a look to the right to see another colour and it can make your eyes wonder and bring more contrast. As well to create tension. The eye looks for a contrast. These images can



My Colour Study

I investigate and try to see how colours have different affect on a space.

That will help me read into atmosphere and perception of the space.

The result of experiments included is described verbally; using own words that have been applied in a descriptive and reflecting method to find sensory differences and specific, yet common description.

On the next page I will start using the different palettes that I created earlier and try them out in a space in Nedre Foss Gård. Then I will test the palettes that I created earlier from Le Corbusier's colours.









Auður's Colour Palettes in use

GLOOMY (A)



The space is dark but lightens up with the structure of the building. The highlighted structure gets more focus because of the light colour and causes the eye to be drawn to it. The dark ceiling makes the space seems smaller.

Intimate – calming. Dark room makes the space more compact, smaller, and creating feeling of intimacy, calm and cozier,

GLOOMY (B)



With the same palette but different placing of the colours. It seems like the space is more open in height of the ceiling, because it has lighter colour and as well for the depth of the room because the wall in the back is darker colour. The colour on the floor as well helps to brighten up the space.

A lighter colour in the ceiling makes the space apaer larger. And the dark colour in the back lengthens the space. Still creating an intimate feeling because of the surrounding walls. **BLISS**



Here is an obvious heaviness in the floor. The room appears compact and cozy because of the darker colour from the wall and leaving the ceiling white that makes it feel taller. The walls will absorb most of the natural light, giving a feeling of enclosure that can be beneficial for certain functions. It feels crisp because of the colour tones.

EAGER



Here we have the bright ceiling and it feels spacious and open. But with the heaviness in the floor. The focus is maybe on the floor because of its red colour the surroundings are more blended colours that are similar in tone. The colours here are very warm, with the red and yellow. The space it happy and energizing.

CALM (A)



The space here has a analogus colour scheme. With a hint of a friend colour. Very calm and even space but the orange colour from the outsite space to the right gives it a more contrast and interest. Lets the eye wonder. Creates tension. The greens make the space feel relaxing.

CALM (B)



The space here has a analogus colour scheme. With a hint of a friend colour. Very calm and even space but the orange colour from get more contrast and interest. It can be inportant.

GENEROUS (A)



The contrast of the colours makes you want to look and take in the room. The focus is not just on one point. There is an intensity here because of how the colours are arranged. The space is bright in colours but seems heavy an compact. But warm and joyful.

GENEROUS (B)



Here you have the same tensity as in the last picture but already here, the ceiling is lighter in colour and makes it more open or the seem taller and more spatious than the picture to the left.

COMPASSION (A)



those ones gets highlighted and causes the eye to be drawn to it. The dark ceiling makes the space seems smaller. The space feels calm and could be very intimite because of the dark surrounding colours.

COMPASSION (B)



The center of the room gets more focus because of the light colour, It seems like a different space because the colours are used differently. Taking the orange and the yellow into the Compassion palette. These colours open up the space and make it more cheerful. Taller and longer space. Different atmosphere. Happier and warmer.

AFFECTION



The space opens up to the sides because of the white outer walls. The space still has the feeling of intimacy because the floor and the ceiling seem to be pulling towards each other. I feel it keeps a curtain kind of balance between the colours.

PASSION



The Space feels heavy, with the dark brown colour in the ceiling or it seems like its pulling down. It has a passioned palette, deep colour but still with vivid colours of the orange and the blue. It has an interesting tension between colours. The light colour on the floor helps to keep the room to be not too heavy. But it still feels intimate and cozy.

DESIRE (A)



The playfulness of the colours makes you want to look and take in the room. The focus is not just on one point. The palette looks childish in away, it's very bright but warm at the same time.

DESIRE (B)



The difference from IMAGE A to B is that, already this palette with out the yellow is less childish and more a bright pastel colour scheme. The space is light and open.

Findings:

I saw that using many colours in a palette is hard to use constructively in a space. Especially when you are not yet working with details like; baseboards, door and window frames and so on. I discovered that I already have a set of colour image regarding restaurant themes. That tells me we tend to use the same things over and over again. How a taco restaurants looks like, how a more fine dining restaurants have a special feel and overtone to them. Can we not break away from that? I think palettes can expand to the furniture.

Regarding the palettes, there are two palettes that are rather childlike regarding colour combination when you see it in a spatial context. Using strong colours that are far away from each other in the colour circle can be hard to use and very challenging.

Colours can clearly create a specific ambiance. The interesting part was to see with just the change of a colour in the ceiling, making it darker or lighter, has a great difference to a room and how we and how we feel in it. The space can translate as more intimate and more private or more public because it's very light and open and so forth.

PALETTES THAT WOULD WORK FOR THESE DIFFERNT SPACES:

PASSION



BREWERY/DRINKS
- COSY, INTIMITE

GLOOMY (A)



BREWERY/DRINKS
- COZY, INTIMITE

EAGER



DINING/FOOD - WARM, HAPPY

CALM (A)



WINE TASTING - EASY

The compassion palette with objects and people //



Tells more about the ambience that I am trying to create. The furniture, are apart of the palette now, using the orange in the tables. Thinking about the overall experience, the furniture, object, the people.

Le Corbusier's Colours in use

Here I used Corbusier's colours that I made new palettes from. I wanted to go more free style regarding his methods. Le Corbusier had specific thought about how to use colours in a room. what's the main colour, accent colour should be.

Can it be used differently and if so, how?

Using the palettes with specific space in mind. Can I make a space to seem more Public - intimate - Private or something in-between?

LeC 1-1



Palette of blues, the palette is strong but I could go with lighter blues that would give more calming and peaceful effect. Lighter palette would look good in twilight, with some shadows. Having in mind a bigger more public space. to then create tension between spaces. I am combining a strong orange colour to create tension.

LeC 3



Here is a playful palette. With nice contrasting colours and lighter tones. The room is spatious and relaxing.

LeC 4



This palette has a good balance and is playful in combination of colours. The dark ceiling and the colours are playing well together. The dark red colour in the end drags the space and makes it longer. The warm colour in the walls are hugging the space and makes it feel "cosy".

LeC 2-1



strong colour contrast from the wall behind but something more is and is more crisp. Still rather uninteresting. needed to keep interest.

LeC 2-2



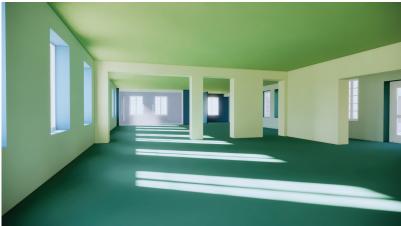
This seems like a monochromatic palette. But used with neutral co- Here the palette works better, I thing because the dark colour is now lours. It seems rather bland and uninteresting. The good thing is the in the middle holding up the space, it creates balance in the space

LeC 5-1



This palette seems to be very monochromatic but the blue colour becomes like green in the context. The space seems like its floating because the same colour all around but then the dark structure is holding the space. Something is not working right her. The yellow in the green makes the space warm.

LeC 5-2



Here the palette works better because the balance of colours here are working. The heavyness in the floor, the blue colour in the windows and the blue in the back wall shows its difference. Accent dark green colour in the door and windows work well. Yet the ceiling is not doing anything for the space. Seems calm and relaxing. 81

LeC 6



When the surroundings walls are in a dark colour it feels like the space is hugging you. With the red colour the space feels warm. The space is intimate but has good air to it because of the light ceiling. The space is happy and cosy.

Findings:

After testing out Auður's palettes and the palettes I made from Corbusier's colours I saw how his choice of colours is done with strategy. Few colours that are then extended with tints, making the palettes calmer and easier to use. I think that I used those palette differently from Auður's palettes because I already had a learning full experience doing that study. I started to think even more about what I wanted from the colours regarding the space. With these palettes I am still using strong colours because I want to push my colour limit.

The most learningful of all doing these studies was that I used colour differently over and over again. With each test I understood more, I think it fits well to say "Learning by doing" is the way to go.

PALETTES THAT WOULD WORK FOR THESE DIFFERNT SPACES:



WINE TASTING - FUN, LIFELY

LeC 6



DINING/FOOD - WARM, HAPPY, COZY

LeC 2-2

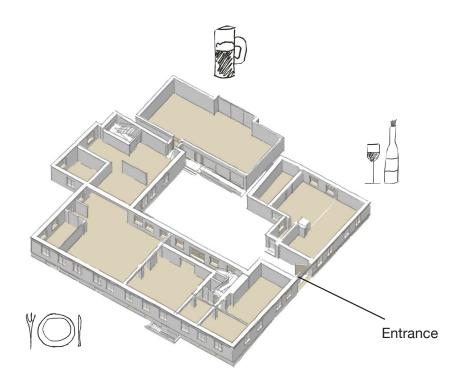


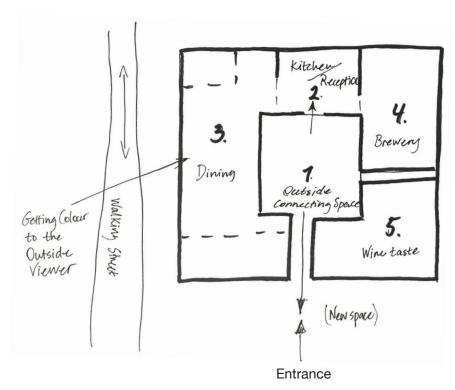
CENTER SPACE - CRISP



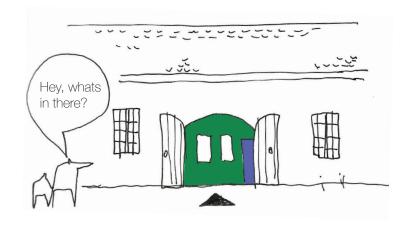
FOCUS AREAS - Nedre Foss Gård - 1.floor

In this chapter I have chosen 5 areas to apply my colour study further to. With the idea of specific and different connections between these the spaces and with colour strategy in focus, I try to create an experience and different tensions between the spaces. With the knowledge gained from previous colour/ light studies, and observing of the 1.floor plan; I was more capable to find out what colour combinations and schemes I wanted to facilitate and test out in each programmed space. This is my proposal.





Courtyard: Area 1



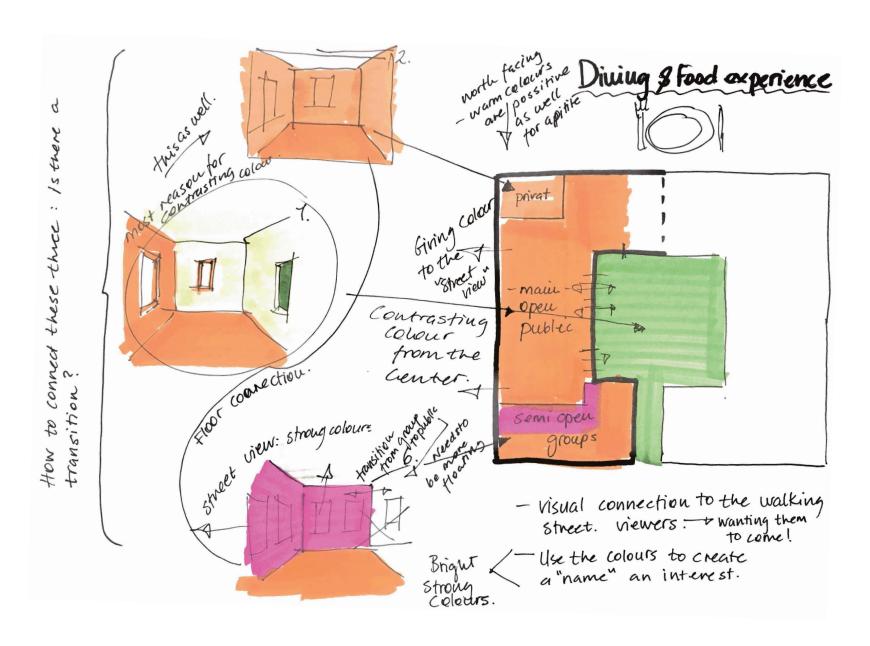
When the building with the white facade opens up their doors to their establishment the magic starts. The colours call out to the people on the outside inviting them to come and enjoy the experience end journey it has to offer.

The Courtyard greets you and there the experience begin, this center is the connecting point to the different spaces that are there. The single green colour works with the other spaces but in different ways.

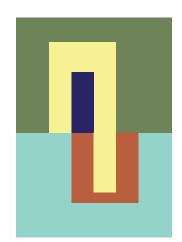




Dining & Food: Area 3 - Focus -







From Auður's colour palette, chosen to use as a starting point for the Dining area.

EAGER

KEY-POINTS //

Atmosphere: Happy, energizing, warm. Create a cozy feeling.

Colour: Good regarding appitete

Selling view: Restaurants have their most busy moments at night. The visual contact from the street can be a reflector of the space to the outside world. Getting people to want to check it out.

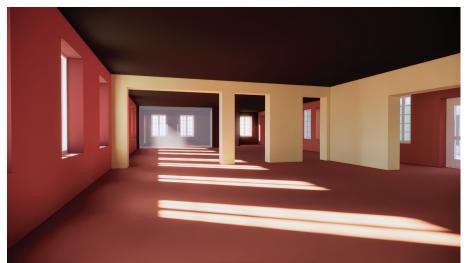
Bonus Spaces: There are two rooms in the main space that are for groups. Use constrast colours and still have the floor in the same colour to connect the spaces. Still keep the flow if this one bigger space.

Time: The warm and happy colours leaves you to stay and wanting more. The room surrounds you, making it intimate.









3. Dining

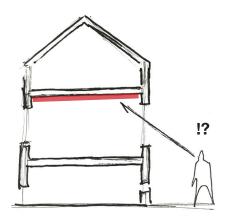
- Ceiling -

What a different colour can have on the perspective of a room. By applying different colour to the ceiling it shows a change of perpective and character as well.

The colours really affect each other and the context colour is making the space even more orange, brown, light or dark.

I wanted the ceiling to have a strong, bright colour that reflects to the outside and at the same time gives the space a warmer and more "cozy" feeling. The darker colour brings the the space closer to you.

Here I need to rethink the floor as well. Could be to compact to have the same colour on the floor.



VISUAL CONTACT

- Floor -

I chose to have a strong colour in the ceiling because of the visual contact to the outside. It fits well, becaues the darker ceiling makes the space feel smaller and therfore more intimate and welcoming.

I felt both that the contrast to the floor should be lighter to still keep the lightness to the room and for it to not become to heavy to be in.

I chose the light tinted yellow colour for the floor, with the experinece of dining in mind. As talked about in earlier in the process.

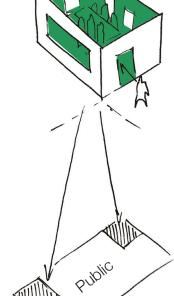
I see that the palette is complex (many colours) for the space to take in but the palette can be stredged out in the privat rooms and in use of furniture as well.











Private (group)

BONUS SPACES

In the Dining area, there are 2 rooms that are privat and semi-privat. Those spaces can

be different from the main dining area.

- -Make the window smaller
- -Getting tension by using contrasting colour



View from the outside looking in to the Dining area //



At night time - Visual contact from the outside looking inside



At day time - from the courtyeard. Here the interior pops out because of the contrasting colours.

Thoughts about furniture //



Neutral furniture. Give a more blend feeling and lack of character.



Expanding the palette into the furniture. By added colour to the furniture makes the overall space even richer.

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Semi private space that create tension with its contrasting colour. Work well together creating more interest and are more calm separately.

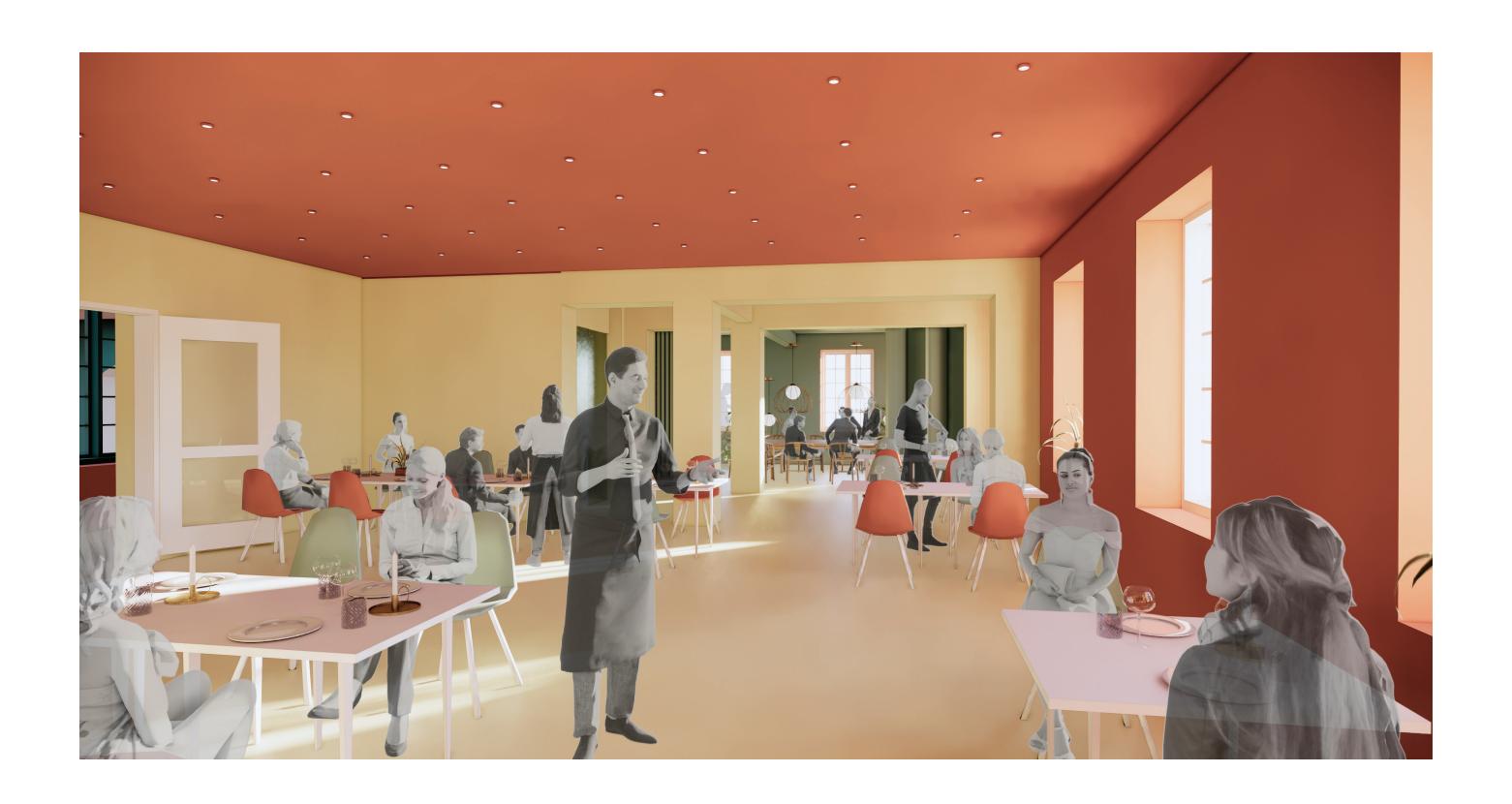


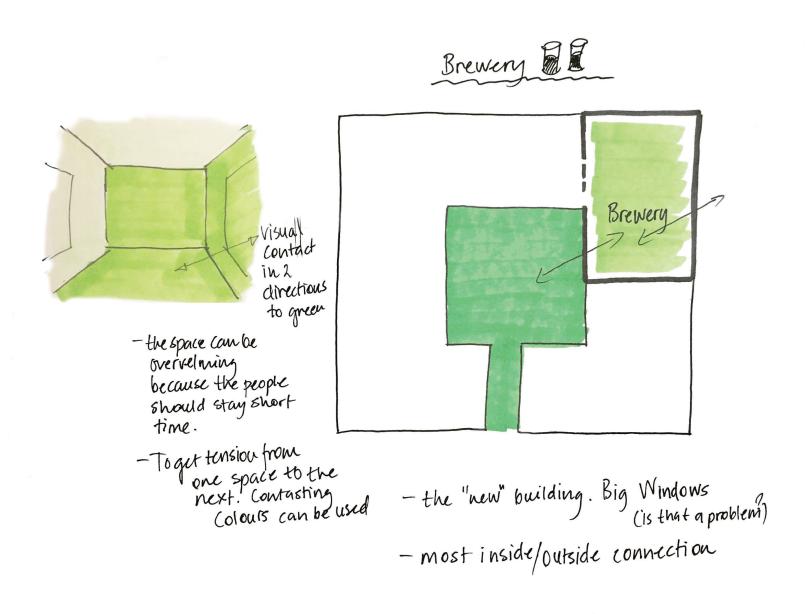
Private space that create tension with its contrasting colour. Expanding the colours from the palette.

Atmosphere: Main space is cheerful, radiant, energizing, warm and comfortable. The smaller privat spaces create tension and interest against the main space. They are more relaxing, calm and cool.

Perception: The darker ceiling and exterior walls makes the space feel smaller than it is and therefore more intimate. The light yellow colour still keepst the space light.

Time: The warm and happy colours leaves you wanting to stay.







Here I am using a monochromatic colour scheme. I chose the colour myself that I felt fitted well in the space and played with the colours in the other spaces.

KEY-POINTS //

Atmosphere: Airy, bright, naked, crisp, forms a contrast to dining space

Perception: Trying to emphasize the hight of the space. It's a vertical space. Thinking about the surrounded treas.

Colour thought / palette: Monochromatic

Inside/Outside: Open to the center space and the nature behind the building, creating a flow. Large windows.

Time: Shorter stay, It's not a bar. But you can lengthen the stay to the courtyard, for example during summer.

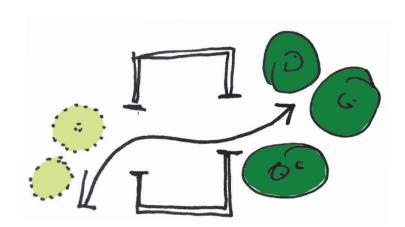
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4. Brewery

Thoughts - sketching

This space is different from the others, the ceiling height lifts up to the second floor. That is something that could be emphasized regarding colour. The space is meant for shorter stay, to come and get a drink before dinner or get a drink to take out to the courtyard. The space functions firstly as a brewery, it has big tanks in there and equipment for that purpose. Secondary would by serving of drinks and for shorter stay to drink and taste beer that they have made.

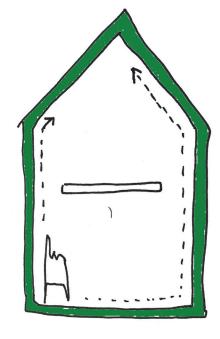
Connecting the space to the outside areas. Both the courdyard and to the nature to the other direction. Making this space connecting to the outside areas. Creating a more natural flow of the inside outside.



The big windows of the space allows the surrounding greens to flow inn and through the space, as a drive for theme colour.



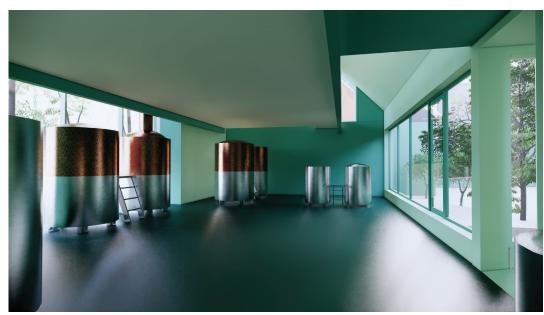
Simple furniture, for shorter stay. Tall and vertical like the surrounding trees.



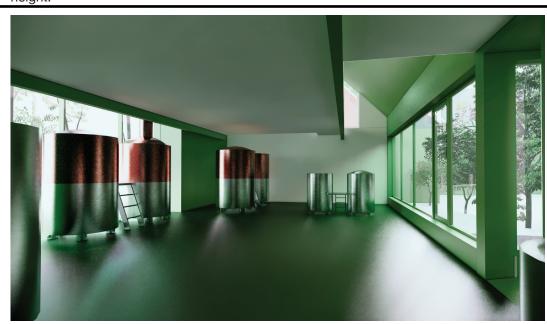
Emphasize the hight of the space. The same colour is used for walls and ceiling to exaggerate this perseption.



The colour here is to blue toned and needs more contrast/wider monochromatic spectrum.

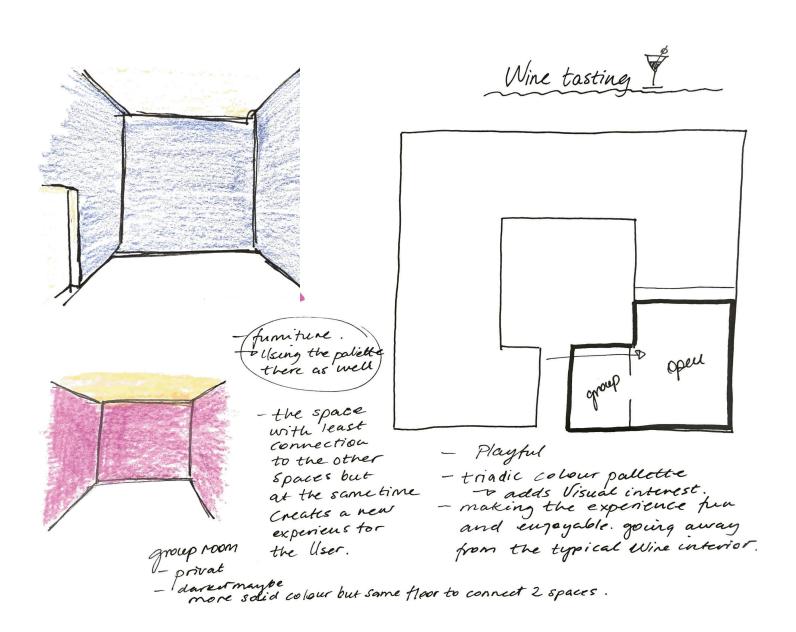


Dark floor is better for the space but the wall in the end is too dark to emphasize the height.



Here the green tone is the right one with more yellow in it.

Wine tasting: Area 5



CHOSEN PALETTE



KEY-POINTS //

Atmosphere: Playful and fun

Colour thought / palette: Triadic.

Even though there is a lot of different colours in use, the palette works well

Group room: Added room to the wine bar is a semiprivate group room. The use of colour can be an expansion of the colour palette.

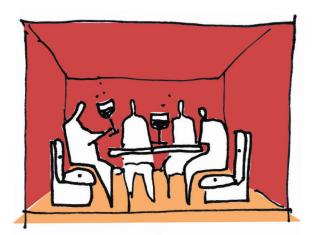
Time: The space is playful and has tention but at the same time it has a warm and good feeling, that you can stay for a short and long time.

5. Wine tasting

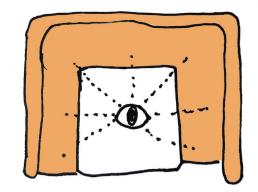
Thoughts - sketching

Triadic schemes are made up of hues equally spaced around the 12-spoke colour wheel. This is one of the more diverse colour schemes. They add a lot of visual interest to the design when they are done effectively. The space can become unique and vibrant without being too harsh on the eyes.

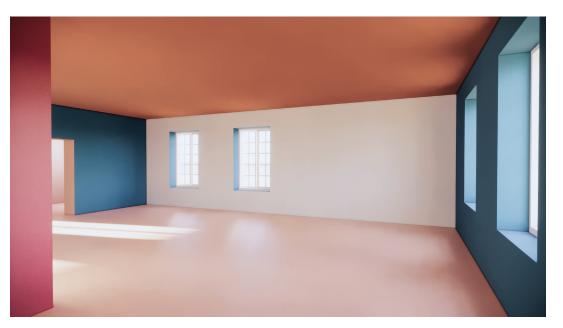
Wanting to ceate a playful, fun and enjoyable space for wine tasting.



Group room I don't go to much into but the idea is to have that different from the public area (wine bar). It has a strong colour all around that creates intimacy. With one big table for the people to sit around.



Wine-bare that is fixed. Can be used for serving and for shorter visits



To much going on with different colours in to many places, doesn't give the right balance of colours.s



The dark blue colour is to heavy for the ceiling and with dark floor, makes the space to tight.



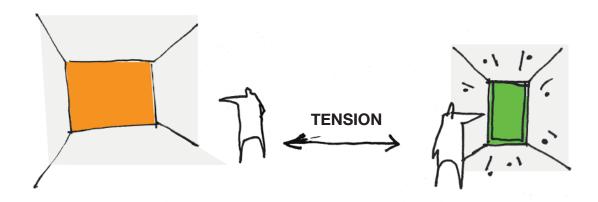
The space seems grounded, and the dark colours on the walls create more intimacy. As $_{05}$ well for the getting those different colours play well to gether but at the same time create playfullness in the space.

Reception: View from Area 2

TRANSITIONS

You walk into the reception with white and grey tones. That helps to balances your colour view after walking through the strong coloured courtyard that then exaggerate the experience of the space to come. One's attention automatically is drawn to both the right and the left space, the sharp transition between contrasting colours creates tension and excitement for the viewer.

By then walking from the dining area through the reception that clears your colour mind and prepares you for the next spatial experience.









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Visual Programming // COLOR CONCEPT: Neutral - white/grey COLOR CONCEPT: Contact to the outside Monochromatic 5. COLOR CONCEPT: Solid Green LeC 4 Ō COLOR CONCEPT: Analogus COLOR CONCEPT: Triatic Hey, whats in there? ENTRANCE 110 111

Summary

With the unexpected situation which affected the whole world, my project took somehow swift in direction, from hands-on to more digital study. Drawing up the house in 3D was a bit time consuming but crucial at same time. With the new situation/crisis, I have to admit that time was often a bit challenging; to be able to work only from home, in a tiny apartment, being a mother with homeschooling, and noise from ongoing constructions outside all at same time. I felt often I lost a lot of work hours and concentration. I missed the facilities in the school, specially my colleagues and studio place - a workplace to go to.

Originally, I intended to work much more with physical models, and testing. This is how I usually work. But with the unexpected change of situation I was forced to look at alternative methods, to traverse more to digital formats and modelling. This sudden change gave me another unknown angle on the project that had a diverse but great and meaningful influence on the outcome. I showed myself that with change of plans there are also change of methods. It was challenging but at the same time a very fruitful experience.

If I would have continued to work further with the project, my next step would be going into more depth regarding furniture and detailing, implementing that into the space and experience with the colour study as the main driver.

This project taught me how to work with colours through altered, basic, and unusual techniques and media, creating a method and documentation that will benefit me on further journey in my professional field. I am looking forward to reviving further studying and keep on putting colours, light, and ambiance up for a test.

Bibliography

BOOKS

Aanensen, H. O., Brænne, J., & Drange, T. (2011). Gamle trehus: historikk, reparasjon, vedlikehold. Oslo: Gyldendal.

Albers, J. (2013). Interaction of color. New Haven: Yale University Press.

Loske, A. (2019). Colour a visual history. London: ILEX.

Maud Hårleman

KTH Royal Institute of Technology . Daylight Influence on Colour Design : Empirical Study on Perceived Colour and Colour Experience Indoors.

WEBSITES - MAGAZINE ARTICLES

Chapman, C. (2010). Color Theory for Designers: How To Create Your Own Color Schemes. Retrieved from https://www.smashingmagazine.com/2010/02/color-theory-for-designer-part-3-creating-your-own-color-palettes/

Edel, Bakkemoen (2018). Glede over at Nedre Foss gård er gjenreist etter brannen. Retrieved from

https://www.aftenposten.no/osloby/i/6nzO0O/forvandlingen-av-en-brannruin

Richard, Traylor (2019). How Restaurant Color Schemes Affect Your Custom ers. Retrieved from https://www.webstaurantstore.com/blog/1884/interior-color-choices-and-your-restaurants-message.html

Wynne, parry (2011). Plate Color May Boost Food's Flavor. Retrieved from https://www.livescience.com/17046-plate-color-flavor-psychology.html



I have missed my space in the classroom and most of all my classmates this last semester. Our talk about the project, good feedbacks and some laughter in stressful times.