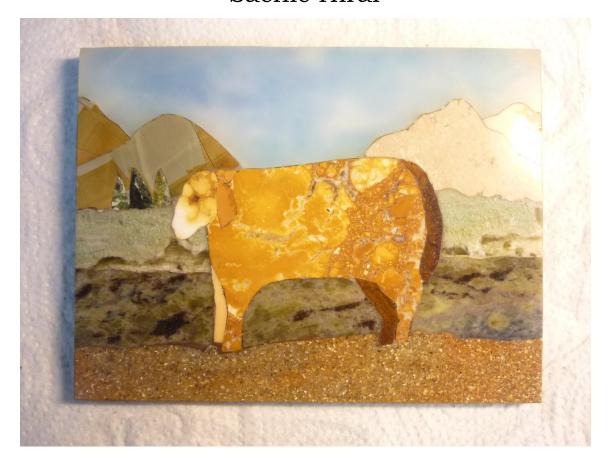
Sheep and Prayer weaving as mosaic

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Inspiration

Inspirations for this works come from my life in Sweden, life and travelling in Italy and learning Florentine Mosaic in Florence. I stayed in Italy for 2 months last summer in 2011. Then I learned Florentine Mosaic from Maestro Roberto Marrucci for 1 month. It was the first time that I worked with stone mosaics.



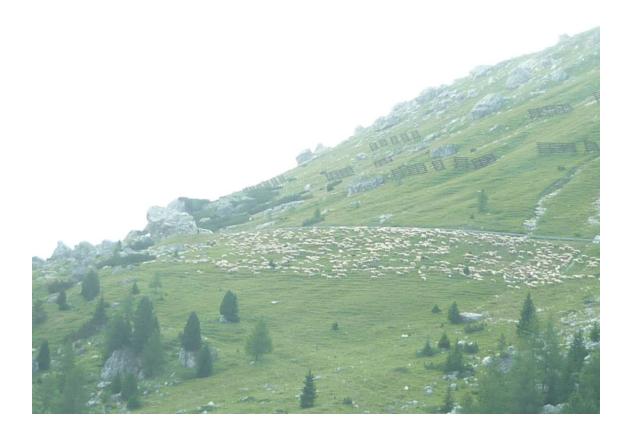
La pecora Appenninica, Florentine mosaic, $10\text{cm} \times 15\text{cm}$, 2011, Sachie Hirai

I went on a short trip to Ravenna in Italy. This town is known Byzantine style mosaic. Many churches have mosaic pictures.



Bacillica di Sant'Apollinare in Classe, Italy Photo was taken by Sachie Hirai, 2011

I climbed a mountain in north Italy Then I saw a big flock of sheep in the mountain. I felt my heart was washed and cleansed in the mountains. It was a coincidence that the mosaic picture I made before the trip and the landscape that I saw on the trip were similar.



Going to see sheep in Sweden is one of my inspirations. Small parts of general daily life in Sweden give me many inspirations. For example when I went to buy warp threads in Kinna, I saw a flight of birds which flew opposite me in the shape of V. This scene became one of a pattern for my weaving. Those experiences I came up 2 sides of the world. One is having the sunlight. The other is living under the starlight. I expressed these views in grey and brown 2 different tones of fabrics. My motives are related to these themes.



Fårets dagar 2011, at Borgholm castle in Öland, photo taken by Sachie Hirai

Talking about motifs for patterns of the 2 sides of the world is having the sunlight and living under the starlight. In my life in Sweden I felt long Scandinavian winter time contains darkness, silence and gives empty space for thinking. When the sunlight comes back it is a time for acting with what you found during your thinking time. For instance there is a tree. It is a tree. When there are many trees which will make groves and forests. Then the land is mountain, it makes a woody mountain. Sheep need company so they live in a flock. The sunlight has living life, the light, present moment, future, movement, people, animals and the nature. The under the starlight has living life, death, darkness, time, past, thinking, stars, people, animals, silence and secrets.

Having sunlight motifs:

Olives: Symbol of peace and a substantial life

Lemons: Like a mess of the sunlight

Sheep: Living with people in the world

The world: The world of the sky and the earth close to a small lake and a with flock of cows

Walnuts: Sharing with people for long life and fertility. It is often used for wedding.

Squirrels: Sharing a walnut innocently

Trees: Standing at the same place all the time

Church bells: Telling something important

Stars: Wishing upon stars and dip into the world in the sky

Living under the starlight:

A deer: Gazing at people silently from the edge of the forest

Deer: Jumping and relaxing on the border between nature and human world

An owl: Staring each other when driving through the leafy tree tunnel at night.

Fig trees: Symbol of life and productiveness. Shining leaves under the starlight.

Missing animals: Wishing to see specific animals but no chance to see them in the nature

Olive trees and cypress: Symbolic trees in the landscape in Toscana, Italy

History

Bunden Rosengång

Bunden Rosengång is in world widely. It is woven especially north and east Europe. This weaving is twill weaving basically. It is weft faced weaving. It means wefts cover the warps. The warps cannot see both side of fabric. There are many kinds of Rosengång. At first Vanlig Rosengång (common rose path), which is simple and basic. The second one is Bunden Rosengång (bound rose path). It is very similar to Vanlig Rosengång. The difference between them is back side of Bunden Rosengång has loose yarns. It does not make same patterns on front side fabric. The third Fast Rosengång (it can be translated as fixed rose path), which makes same patterns both front and back side. The last one is Motsatsbunden Rosengång (opposite bound rose path) which needs to prepare pattern construction opposite side. What makes each Rosengång diversity is drafts, number of shafts, colours, size, scale and materials. What type of weaving? This weaving is belonging to konstvävnad (art weaving). It contains complicated pattern weaving not only the point of pattern which includes the process of designing and weaving. Artistic expression adds the uniqueness more.

"De vanligaste vävslagen, som räknas till konstvävnader, är : Rosengång, Dukagång, Rölakan, Rya, Munkabälte, Krabbasnår. Opphämta, Flossa" by authors: Ingrid Osvald-Jacobsson, Anna Skeri-Mattsson in the book "I vävstolen Handbok i vävning". 1

Bunden Rosengång has the possibility to make figurative and abstractive geometric patterns. The technique which I chose was Bunden Rosengång for 4 shafts. Draft is also simple. The construction of pattern works symmetrically from the centre point of patterns. Weaving style is putting different colour squareshaped mosaics. It means 4 squares of pattern appear to on the other side of pattern horizontally. If I say numbers of composition of patterns 1,2,3,4 makes 5,6,7,8 totally. 8 squares in a same line when you weave weft yarn 1 by 1 per square.

Refer to see Bunden Rosengång diagram on page 8.

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footnote:

^{1,} Ingrid Osvald-Jacobsson and Anna Skeri-Mattsson, "Konstvävnad", *in I vävstolen Handbok i vävning*, ed. LTs förlag, Stockholm 1937, pp.86.

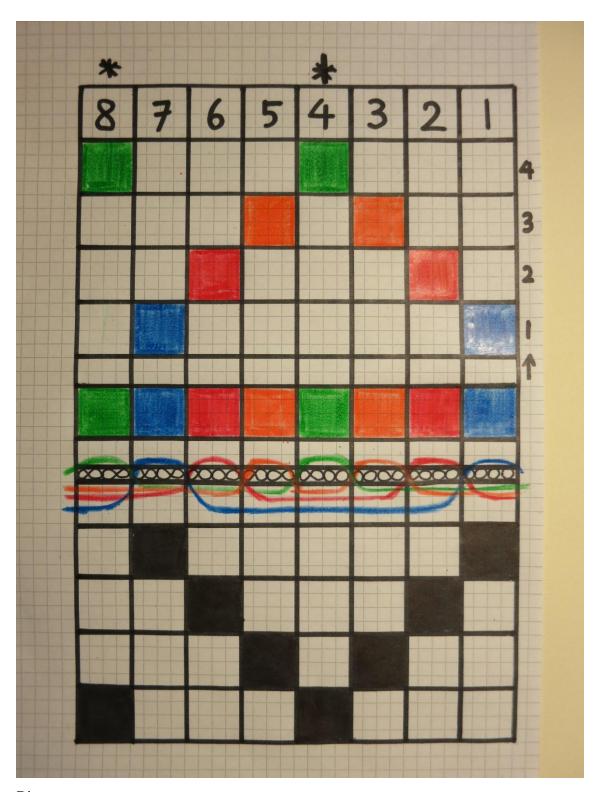


Diagram
Bunden Rosengång pattern system and section of warp movement, 2012,
Sachie Hirai

Does Bunden Rosengång have different names? There are some different names of Bunden Rosengång in each area in Sweden. "Gubbatäcke" means old men fabric in Västergötland. It comes from the situation of cold house in old times. Old people often needed to sit down on a thick fabric. In Västerbotten people call "Tjöcketöcke"(thick fabric) or "norsktäcke" (Norwegian fabric). In south Lapland people call "lillstinten"(little girls). People in Småland call "jungfrudansen" (young wife/lady dance). Old fabrics give people tracing back to its origins. If you have a fabric or fabrics from someone who does not know face to face it could be a secret or silent talking with her or him. How do you listen to the story?



Öland, Bunden Rosengång, 100cm x 73cm, 2010, warp: unbleached linen weft: wool, hand woven, Sachie Hirai

HISTORY

FLORENTINE MOSAIC

Florentine mosaic was developed during Renaissance in Florence, Italy. This mosaic comes from Rome at first. The Medici family supported Florentine mosaic workshops in Florence. This mosaic is unique art expression. It is made of natural stones. Technique is pietre dure (polychrome hard stone) inlay.

PROCESS OF FLORENTINE MOSAIC

I learned some process of Florentine Mosaic by Florentine Mosaic Maestro Roberto Marrucci. Mosaic materials comes from nature mainly Italy. Crafts persons go to the nature and collecting rocks become materials. Then the rocks are made into approximately 4mm thick. For example, there is a stone called Arno, which comes from Arno River in Florence. This stone is soft green olive leaf colour with yellow ochre patterned.

Process in summary:

1: Sketching and designing
In old times people often sketched and painted in oils and water
colours.



Process 1 and 2



process 4

- 2: Tracing the design
- 3: Numbering or marking for each parts
- 4: Choosing stones

- 5: Cutting by machine or using bow saw by hand
- 6: Filing stone edges by metal file
- 7: Assembling stones
- 8: Lining stones with natural rosin and wax glue
- 9: Polishing











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Processes of Florentine mosaic photo taken by Sachie Hirai, 2011



La pecora Appenninica, Florentine mosaic, 10cm x 15cm, natural stones, 2011, Sachie Hirai

DEVELOPMENT

Bunden Rosengång and mosaic has common composition, colours, and motifs and so on. These elements make patterns with colours. For instance square shaped mosaic pieces makes pictures. Bunden Rosengång is similar. It can be say 8 same sizes of squares in a vertical same line. 4 squares have 1 pair of same colour. This pattern composition system works as mirror system from the centre of 1 square. The difference between general mosaic and Florentine mosaic is whether there are spaces between each pieces and no space. Florentine mosaic does not have any spaces between each stone piece.

Refer to see diagram on page 8.

MATERIAL

Material which I worked with wool comes from Sweden. Warp yarns come from a carpet factory. Wefts are Lovikka yarn. Lovikka is located north Sweden. Lovikka mittens are famous in Sweden. Lovikka yarns are used for knitting thick mittens. This yarn is thick, soft and contains air. It makes warm mittens. Wearing and using these mittens makes it will be felted naturally and strong little by little. I used white, light grey, dark grey, brown and black natural Lovikka yarns. I did spinning and made hand spun yarns. Carding by hand and using hand carder machine sometimes before spinning. When I had fresh wool then I worked from washing process.

SHEEP

Wool comes from Gute får, Gotland får, Rya får, Svensk Finull, Pälsfår (gobeläng), Leicester får and Texcel. There is a group of Northern European sort-tailed sheep. It exists in Scandinavia, British Isles and Baltic areas. It was the first sheep in Europe. It is small and has a short tail. Many sheep breeds have relatives. I would like to introduce Allmogefår. It means historical old type of sheep which is close to Rya får. I did not use this wool. I knew this historical group by my acquaintance sheep farmer and sheep festival in Kil, 2012. This sheep has an association, föreningen Svenska Allmogefår. Allmogefår are Dala-pälsfår, Roslagsfår, Skogsfår, Gestrikefår, Helsingefår, Värmlandsfår, Klövsjöfår, Åsenfår and Svärdsjöfår. I had a chance to see and feed Helsinge får. I talked with Helsingefår farmer. The farmer said keeping pure breeds of sheep is important. The reason why is they are not so many sheep. Helsingefår has some different characters of wool in the same sheep. Wool colours are changed by each seasons and affected by sunshine. Top of the hair often sunburned especially summer time. Hairs close to the skin are soft and often dark colour. Hairs between the top and the bottom are medium colours. But it depends on each sheep and conditions. Sheep live in a flock. There is a leader, which leads the flock.



Lovikka yarn



Wool yarn



Hand spun yarns

PROCESS

Main technique was weaving and spinning.

Test 1



First pattern sample fabric, width $20 \, \mathrm{cm} \times \mathrm{length} \ 1300 \, \mathrm{cm}$, Material: warp: cotton yarn, weft: wool, cotton, linen yarn, November 2011

The first process was collecting Swedish traditional patterns from books. I wove around 70 different patterns. The fabric width was 20cm x length 1300cm. 1 square of pattern scale was 1cm. This sample weaving was learning patterns tendency by practical work and testing materials.

Test 2:



Tests weave scale 2cm, width 20cm, Material: warp: wool yarn, weft: wool yarn, November 2011

This test was changed wool wefts and 2cm pattern scale. I tried to make new threading.

Test 3 and 4
These tests were changed thick wool wefts and 6cm pattern scales.
Threading is 3 times more than test 2.



Test 3, width 48cm, material: warp: wool yarn, weft: wool yarn, December 2011





Test4, width 48cm, material: warp: wool yarn, weft: wool yarn, December 2011

There was a difficulty to solve some problems. One problem was space between warps and wefts. I tried to add plain weave by hand and tried to solve the problem. Other problem was solving loom control problem.

Test 5
I tried this test though it was not suitable for using general looms. I decide to finish it.



Test5, width 6cm, material: warp: wool yarn, weft: wool yarn, December 2011 After these tests I considered and compared the results of each tests. My first image of 1 square pattern scale was 10cm x 10cm. There are some possibilities to make this bigger size. But the thing was wefts and warps balance condition. It means wefts and warps support each other. In this big scale of Bunden Rosengång there was a difficulty to make this supporting system. The system which I reached was covering warps, which means the warps on the surface of warps. It has a space between warps and wefts. If I could be successful in inventing a supporting system I could weave by using weaving loom. There was a possibility to weave stable big scale such as 6cm, 10cm or bigger Bunden Rosengång. The way of making big scale was successful. Even if 1cm scale was already bigger than common scale which often weave. I decided to weave 2cm pattern scale finally. Why did I want to make big scale was attract pattern more clearly and give impact. I cut off typical way of finishing basic style and shapes. There is a reason for usable things at home. My project work is not usable thing in daily life. It is not decoration and comfortable carpet For step on or sleep on it. The fabric which I worked on was performing by itself and more artistic fibre sculpture.

FINAL PIECE PROCESS

1: Designing pattern for 4shafts, single pattern draft and threading V. (V and point)

Patterns: Swedish traditional patterns: (some of them have names and places or areas where does the pattern come from)

Combined patterns: traditional style and my original design

My original design patterns: I designed creatively.

This design process took a long time. The way of designing patterns was using pencils and grid papers simply. Filling in each grid was by pencil 1 by 1. First design was monotone.





Designing process by pencil, October 2011, January 2012

, 2: Designing and calculating numbers of patterns for final length of piece and arrange the orders.

3: Preparing weft









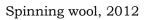


4: Carding and spinning Half of patterns were woven with hand spun yarns approximately.



Carding wool, 2012







hand spun wool balls, 2012

5: Weaving Repeating the process weaving, spinning and carding



Finnwool lamb



Hand carding

Weaving, 2012

6: Finishing

2 fabrics totally: 1 fabric width 55cm x length 1300cm.

Fabric 1 is brown colour scales. Fabric 2 is grey colour scales.



Sheep and prayer, width $55 \text{cm} \times \text{length} 1300 \text{cm}$, material: warp: wool yarn, weft: Lovikka yarns, hand spun yarns, 2012, Sachie Hirai



Sheep and Prayer, width 55cm x length 1300cm, material: warp: wool yarn, weft: Lovikka yarns, hand spun yarn, 2012, Sachie Hirai

RESULT

"What was weaving for mosaic" was making an interpretation of hand weaving background, people and sheep in each environments. Weaving and spinning these action moves connecting mental state to a recollection of past. This mental movement is praying for future and sheep. This symbolic multi-diversified animal for wool textiles and people will live together. The sheep Appenninica which in the mosaic, she climbed a mountain by herself. She found a world of herself on the way to the summit and the top of the mountain. She knew the meaning of living. Living this moment and present continues to the future. The meeting points of Bunden Rosengång and Florentine mosaic is praying for life and lives with all my heart. Saying and expressing with words is a direct way of expression. Putting into works as patterns and shapes through natural material has already transcended way of communication. The acting of both praying for weaving and weaving for praying are holy feeling. Weaving the nature, wishing into patterns are sheep and prayer. What I made was not reproduce old fabrics or Swedish like. It was born naturally.

SUMMARY

The starting point of this Bunden Rosengång project was a big first step to the next project in the future. The result "what is Bunden Rosengång?" was reflection of the passage. This reflection gave me thinking and showing wool textiles, sheep and people in the life. What have I learned through this project was encouraged me so much. I believe this project has infinite possibilities that I believe. Bunden Rosengång, wool and sheep have various promising. I would like to continue working and developing Bunden Rosengång. In the future I would like to show new style of Bunden Rosengång.

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