

# Research and Re-create

IN 2018 INGEBORG MEIJSSSEN COMPLETED TWO YEARS OF WEAVING SCHOOL AT SYTZE ROOS IN AMSTERDAM. AFTER 25 YEARS AS A LEGAL ADVISOR IN THE FINANCIAL INDUSTRY, SHE HAD TAKEN A BREAK TO CONSIDER WHAT SHE WANTED TO DO NEXT.

– I LONGED TO WORK WITH MY HANDS, FOR VISUAL AND TACTILE STIMULATION.



– CRAFT HAS ALWAYS BEEN A PART OF MY LIFE, ever since I was little, and textile, in some form, was a natural step, she tells us, when we visit her in her studio located alongside a number of other small businesses in a former warehouse in Amsterdam.

Changing careers from having her own legal advisory firm with employees to a life in the textile field began with an afternoon course at the Textielmuseum in Tilburg. She had never sat at a loom before but weaving grabbed her instantly. She searched for a school that educated professional weavers and three days later, she started the course at Sytze Roos Weaving Academy in Amsterdam.

– The school gave me the tools to truly

master the loom and the ability to think for myself. But in the beginning it was unknown territory, and pretty frustrating. I come from the world of academics and I wondered where the instruction books were. I thought, “There must be a right and wrong way to do this?” It took a while before I got into the pedagogy, that you find the technique through doing and through getting to know the materials. Thanks to weaving school at Sytze Roos, I have great use for that knowledge in the weaving I do now, both reconstructing 17th century canvases and weaving unique wool fabrics where I chose the design and quality.

After her two years at Sytze Roos, she started her own business with her own studio. A neighbor at the warehouse, art historian and painter Lisa Wiersma, was working on reconstructions for the Dutch TV series *Secret of the Master* with other experts in the field. On that show, a famous work by a painter is analyzed from a number of aspects: the history, the technique, the materials used, etc.

– We were at the coffee machine, chatting, and I offered my weaving expertise if they needed it in reconstructing a handwoven canvas of a 17th- or 18th-century painting. Her answer came quickly: “Can you weave a canvas in three panels that together measure 3.80 x 4.50 meters? For Rembrandt’s painting *The Night Watch*.”

That specific project didn’t work out, Ingeborg was given too little time. But she offered to show how the seams of the canvas, as is believed that they are in the canvas of *The Night Watch*, should be executed for the reproduction.

Following this a conservator of the Rijksmuseum got in touch with Ingeborg and asked her if she could help determine some characteristics and anomalies in the handwoven canvas of 17th-century paintings. And so began a research collaboration between Ingeborg and team of conservators and researchers of the Rijksmuseum.

The Rijksmuseum in Amsterdam has more than 2000 17th-century paintings in its collections. About 1100 are on canvas, and the rest are painted on other materials, such as copper, wood, and paper. Only eleven of the paintings on canvas are unlined. The others have a lining canvas glued to the backside, as a conservation measure. Such a lining canvas makes it often impossible to see the actual canvas; on the front there is paint, at the back is the lining canvas.



p. 10: Ingeborg Meijssen in her studio in Amsterdam.  
A loom from the 17th century in her studio.



Above left: Handwoven fabrics in wool from the Netherlands.  
Below left: Cones with wool in "sheep colors".

Right: Dutch Tweed. The fabrics are bespoke and tailored by New Tailor.



– We use x-rays of 17th-century lined paintings to be able to see the canvas. And strictly speaking, even in an x-ray we cannot see the actual threads. The radiation in an x-ray goes through the threads. What we see when we look at an x-ray is the imprint of the threads in the ground layer that is applied to the canvas prior to painting. Because we cannot see the actual threads in an x-ray, we cannot with certainty say what the thickness of the threads is. We can look at the distance from one imprint of a thread to the next imprint. We also look at the angles of the imprints. Both the distance and the angles provide us information that we use to see if the canvasses of two paintings perhaps match or if two paintings might originally have been painted as one large painting. This provides valuable information both in relation to the paintings and to the way 17th-century painters worked.

As part of the ongoing research Ingeborg has spent many hours weaving reconstructions of 17th-century canvas, both on a modern loom as well as on a 17th-century loom.

– In a quest to reproduce the characteristics and anomalies we see on the x-rays of 17th-century canvas, I have woven many samples with different thread densities. It was fascinating to gain a better understanding of the various weaving methods and the importance of the construction of the loom. One important aspect for achieving a high density is that the back cross beam is placed higher than the cross beam at the front, so that the warp is tilted. This construction can be seen on 17th-century looms I have woven samples on, and I notice a big difference compared to my modern loom.

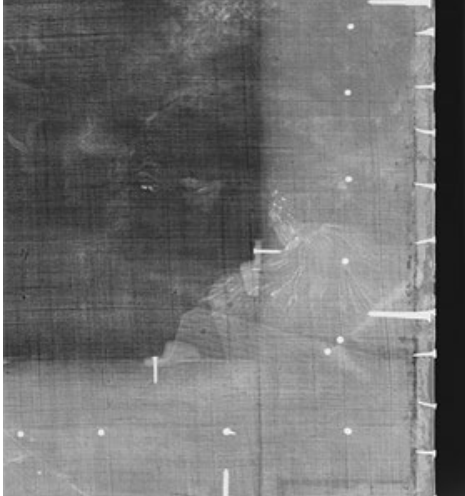
Ingeborg and the team of researchers were recently asked to look at a 17th-century painting in a church in Amersfoort.

– For us the painting is rather unique because it is unlined so at the back of the painting we see the actual threads and the weaving. An x-ray as well as high resolution photographs will be taken of this painting. This will enable us to compare how the canvas shows itself in the x-ray with how the canvas looks in reality. This will give us valuable information about how to interpret canvas and threads in an x-ray. Information we can use in the future when we examine 17th-century paintings where we only have the x-ray because they are lined.

– There is so much still unknown when it comes to 17th-century canvasses. Very little research has been done, even worldwide. For example, it is widely assumed that canvas is made of linen but most 17th-century paintings have never been examined in relation to the threads used in the canvas. Fifty years ago, a visual assessment of 17th-century



X-ray of an 17th-century painting in the Rijksmuseum.



Frans Hals, Pieter Codde, 1637: *Militia Company of District XI under the Command of Captain Reynier Reael*, the painting measures 209 x 429 cm.



French canvases was done in a French study, determining that 70–80% was woven of hemp. With modern microscopy technologies it is possible to make more definitive and precise attributions. Whether it is hemp or linen might ultimately provide information as to where 17th-century painters got their canvas from. It might also be important in relation to the right conservation of these centuries old paintings.

– The canvas of the Amersfoort painting has some frayed edges. As part of our research we will be able to take samples of both warp and weft threads to determine the fibre type and also hopefully where the fibres were grown in the 17th century. This fibre research will be done in collaboration with Naturalis Biodiversity Center and the Vrije Universiteit in Amsterdam.

– As little research is done so far, there are assumptions made that sometimes turn out not to be correct. It is, for example, widely believed that large canvases must have been originally woven as sails for ships. Research shows however that sail cloth was never woven wider than about 80 cm. A sail is made of many narrow pieces sewn together, each with different densities depending on its placement in the sail in relation to how the wind would catch the sail. So large canvases were not originally made as sail cloth.

On the format of the canvases for a number of the 17th-century paintings: we've just visited

Rijksmuseum and seen the current Frans Hals exhibition. Many of these are monumental, painted on canvases woven in one piece, so no seam.

– Even if the height of the painting, over two meters, was the breadth, many questions remain about how it is possible to weave this. As weavers we pose ourselves this question instantly. Many other researchers however do not immediately realise that there is such a thing as a maximum width one weaver can weave. The multi-disciplinary approach makes this research invaluable.

For Ingeborg the 17th-century canvas research will evolve into a PhD thesis. She is at the very start of the process now but one thing is for sure: there are many questions left to answer in the fascinating field of 17th-century painters' canvas.

We change tracks. A warp of wool from Dutch sheep is in her loom.

– We throw away a large amount of the wool that is produced. In the Netherlands, there was previously a strong tradition of weaving thick, wonderful, warm blankets for the bed. When these were replaced by down and synthetic comforters in the 1980s, industrial production of those blankets disappeared, and industrial wool preparation along with it. Today, we have practically no industry that can take care of the wool.

The wool Ingeborg use comes directly from the sheep farmer, she sorts and washes the

wool herself in the huge former warehouse. The wool is spun by a small spinning mill in the Netherlands that can spin according to her wishes. There are lots of cones with yarn in natural “sheep colors” on the shelves. They become interior and garment fabric in her loom. Ingeborg works with an upholsterer as well as with New Tailor, a gentlemen's tailor with shops in both Amsterdam and Utrecht. The customers come to Ingeborg's studio, choose a fabric, and the garments are sewn by New Tailor.

– One might think my two areas of interest are different, but there are many ways they overlap.

And, I think, even her work as a lawyer. Striving for the truth and sincerity: that is what she does in the theoretical and practical work on the 17th century canvases, and her work with the Dutch wool.

The next day, we visit Sytze Roos Weaving Academy in Amsterdam. At 11 AM, a group of students arrive to weave in the looms. Ingeborg Meijssen is one of them. She's studying a third year in order to gain new skills and challenge herself. She has chosen to weave a curtain with thin linen and Japanese paper yarn in the warp.

– It's stimulating to be able to try new techniques and materials. And one thing is for sure: you're never truly fully trained.

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