

Revealing the INVISIBLE PALETTE

Caroline Zoob talks to Dutch doctor and embroiderer Marjolein Hessels about the secret colours held within the plants that surround us.

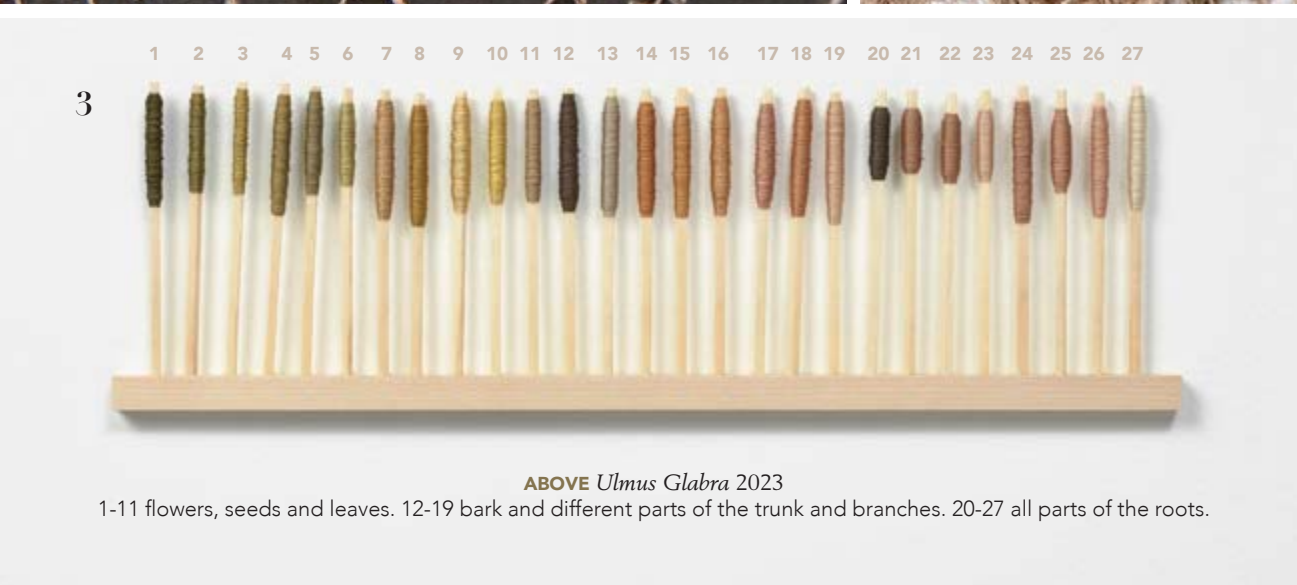
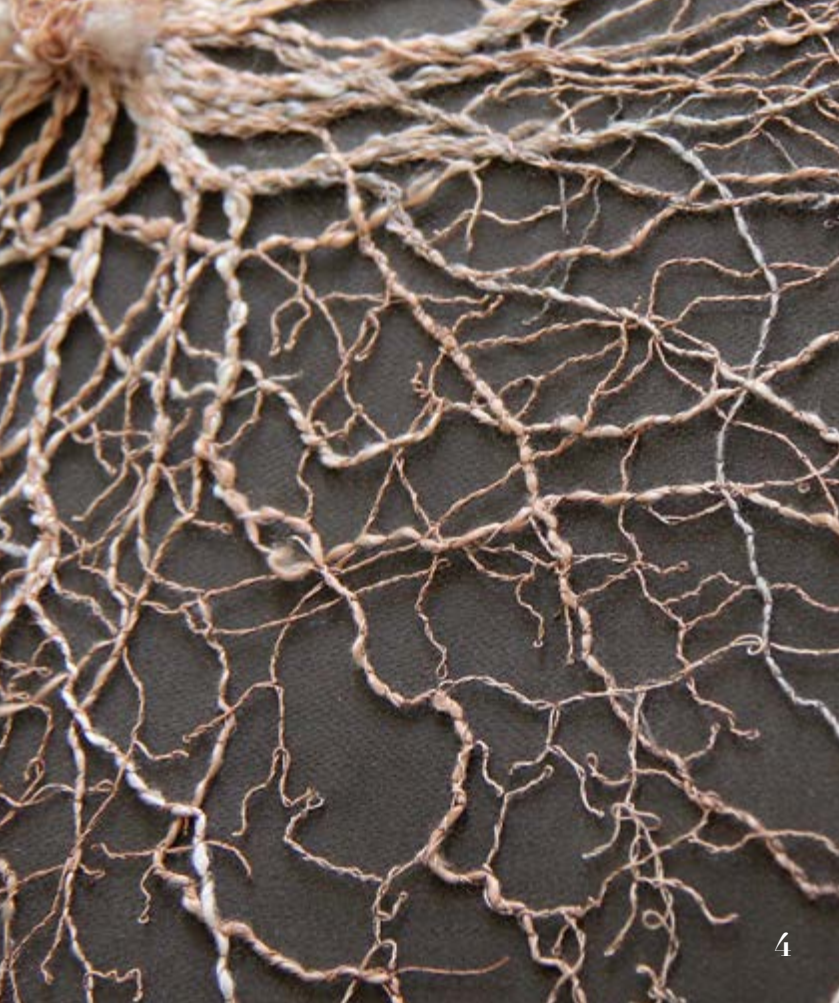
PHOTOGRAPHS RONALD SMITS

In February 2022, a violent storm uprooted a fifty-two year old elm tree in Amsterdam's Vondelpark. For several months, it lay where it fell, its complex fretwork of roots unearthed for all to see. The spring brought a burst of life from the dying tree: buds and fresh leaves, and a last 'confetti of seeds' before it was finally removed. For Dutch artist Marjolein Hessels, the tree was a source of secrets, unknown to those taking photographs of children playing hide-and-seek around its enormous trunk: secrets in its bark, leaves, buds and even the soil from which it had been torn, secrets which she was inspired to reveal in her largest work of embroidered art to date, completed only recently. This combination of scientific curiosity and artistic impulse is at the heart of Marjolein's work. For many ➡➔

BELOW *Ulmus Glabra* (Wych Elm) 2022. 2m x 1.6m Hand-dyed silk threads on silk tulle.

Marjolein collected material from the fallen wych elm over a few months to create the embroidered diptych at a ratio of 1:10. One panel is a lateral view of the uprooted tree and roots while the second is a transverse view of the entire root system. The tulle supporting the latter has been dyed a deep purple-brown by an infusion created with the roots of the elm and the earth in which they stood. The metals in that earth also contributed to the colour, acting as a mordant.





ABOVE *Ulmus Glabra* 2023

1-11 flowers, seeds and leaves. 12-19 bark and different parts of the trunk and branches. 20-27 all parts of the roots.

DETAILS LEFT: MARJOLEIN HESSELS

years, they were in competition: her artist mother, recognising her daughter's talent for art, encouraged her to go to art school rather than opting to study medicine at Amsterdam's Vrije Universiteit (VU). Marjolein chose the sensible route, qualifying as a doctor and later specialising in paediatric preventative medicine. Some of her contemporaries chose art school, attending the prestigious Gerrit Rietveld Academie, which Marjolein passed each day as a medical student, always curious about what her friends were up to behind its striking, glass-paned facade. Once qualified, and practising medicine, that curiosity overwhelmed her and she embarked on a part-time degree in Applied Arts.

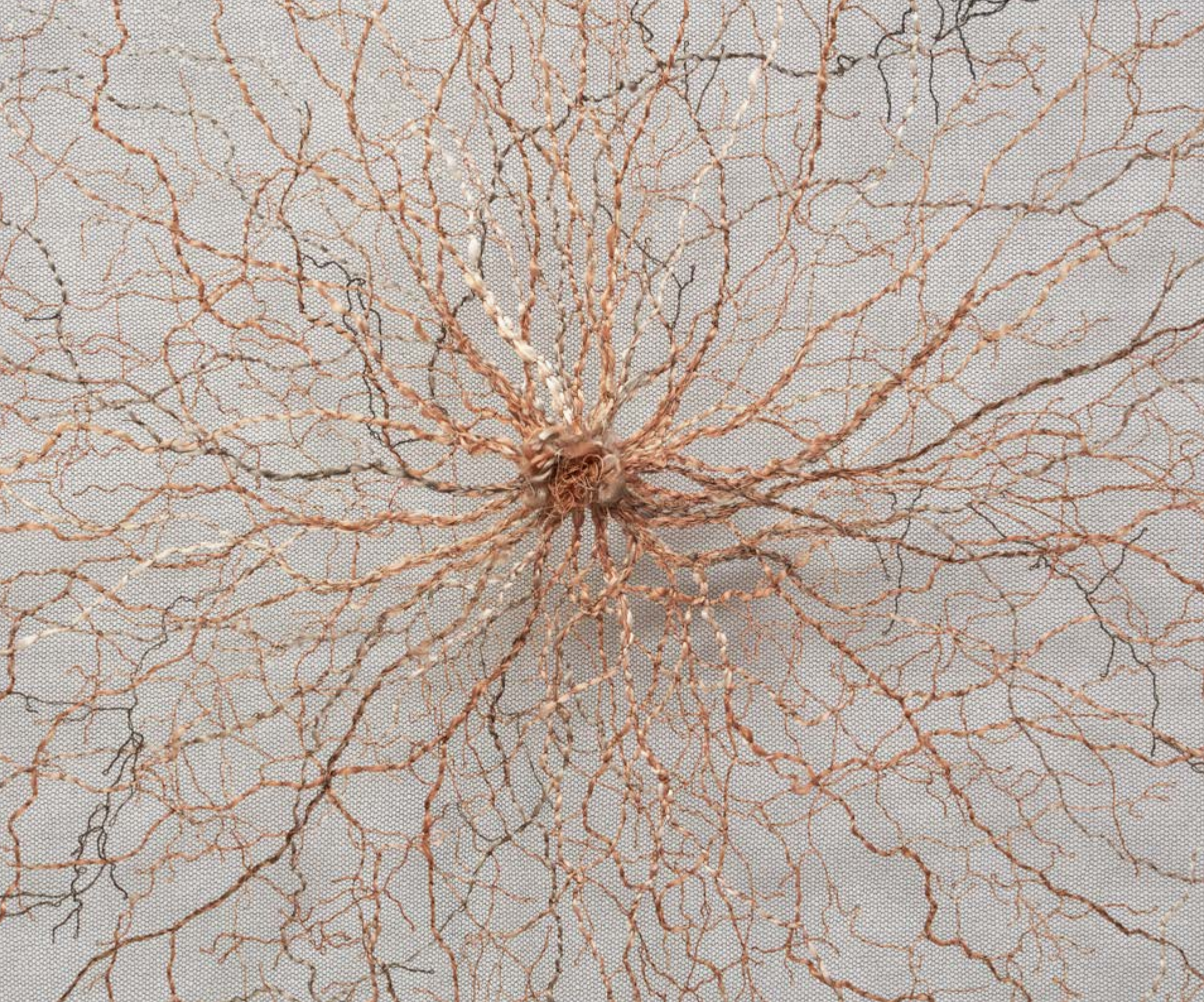
Today, Marjolein divides her time equally between her work as a doctor and her art. Yet they are no longer competitors for her attention: "As both a physician and an artist," she explains, "I am concerned with living organisms." These dual interests coalesced in some of her work at the Gerrit Rietveld, where, aside from her prize-winning light and sound installations, she created large anatomical embroideries featuring the tracery of blood vessels and veins, applying her needle and thread with both extraordinary delicacy and rigorous scientific accuracy. In 2019, alongside her successful practice in preventative paediatric medicine, Marjolein developed an interest in anthroposophy, and began to train in anthroposophical medicine, something ➤

OPPOSITE Clockwise from top right

1 Earth from around the roots of the wych elm is used to steep the tulle against which the embroidered roots will hang. **2** Silk threads coloured by the roots and earth, rinsed and dried, ready for winding onto spools. **3** The colours yielded by the material gathered from the wych elm and wound on spools. **4** None of these roots are couched, they are all pulled through the tulle and other threads are stitched into them. Note how some of the thread is unspun silk, twisted and pulled through the silky tulle.

BELOW Detail of leaves of the uprooted wych elm from the Vondelpark. Marjolein has dyed different threads – some unspun, some twisted. The tulle hangs in front of the wall, so that shadows of the stitched leaves and branches become a part of the piece.





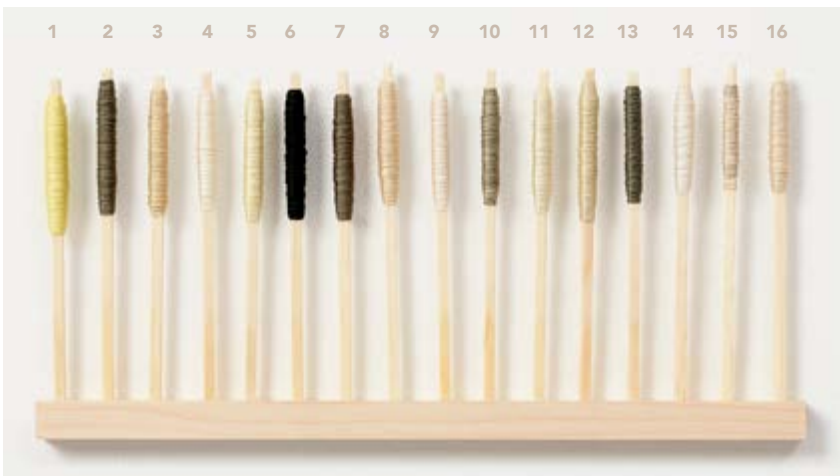
she uses in her medical practice today. Briefly, anthroposophy was founded by Rudolf Steiner in 1912 and is a view of humanity and nature that embraces both the spiritual and scientific. Marjolein was drawn to the holistic approach of anthroposophic medicine, which aims to strengthen the whole constitution of ➡

LEFT *Ulmus Glabra* (wych elm) – roots (detail). Silk threads on silk tulle.
The silk threads were steeped in a dyebath consisting of the roots and earth in which they grew around the wych elm (see previous page).

BELOW Marjolein working on the panel, taped to a large cupboard.



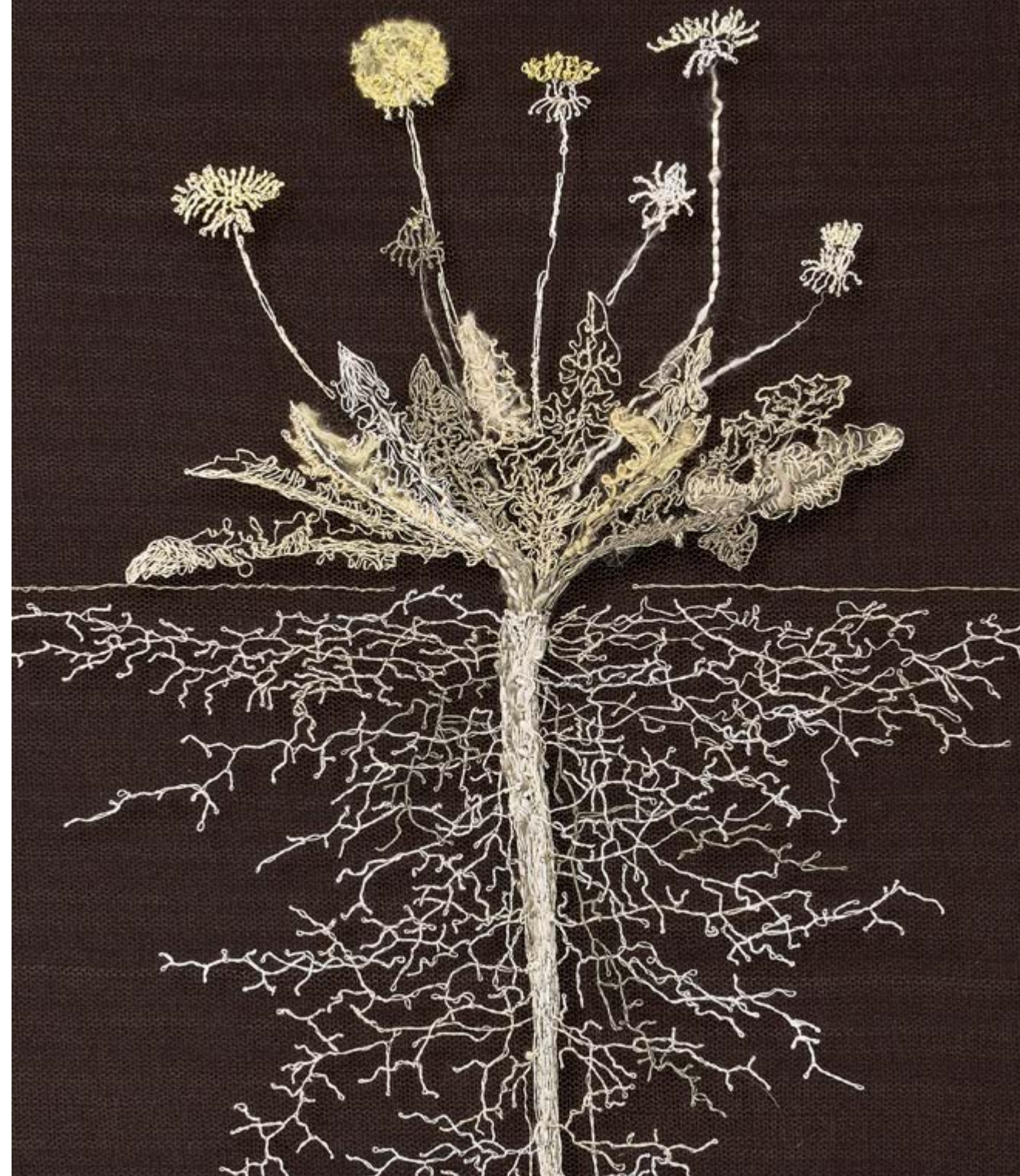
LEFT: MARJOLEIN HESSELS



'The plants are recognisable from their shapes, but the colours used to embroider the constituent parts are the secrets left behind by the material from which they derive.'

OPPOSITE & ABOVE RIGHT *Taraxacum officinale* (common dandelion). Silk threads on silk tulle.

TOP LEFT All parts of the dandelion collected, sorted and chopped up ready for making the dyebaths or what Marjolein calls her "teas". **ABOVE** *Taraxacum officinale* (common dandelion). Silk threads and wood. 1 fluffy seed, 2-5 flower, 6-12 stem and leaves, 13-16 roots. The colours harvested from all parts of the dandelion are much lighter than one might expect: the roots give white to light grey, the leaves off-white to golden yellow, the flowers soft yellow and it is the pale, fluffy seeds that yield the bright yellow colour most associated with the plant. Mostly, Marjolein does not add mordants to her infusions, but on this occasion she added iron sulphate to some of them, creating the beautiful greys and dark greeny-browns, using the latter to dye the tulle before she embroidered the dandelion, which is given added depth by the deep brown silk hanging behind it to support the embroidery.





“You are given flowers for a reason: these were anniversary flowers and so the resulting portrait is significant. I like significance in things...”

the patient, taking into account all aspects of their being: physical, emotional, mental, spiritual, and social. Without going beyond the reach of this article, one aspect of anthroposophy highly relevant to Marjolein’s work, both as a doctor but particularly in her artistic practice, is the duality of the internal and external, the seen and the unseen. Our arteries and blood vessels are essential forces for our life and health, yet we cannot see them. A little dandelion emerging out of a crack in the pavement has an unseen root system as tall as a human being and its brilliant yellow flowers produce an off-white colour while the fluffy pale seeds yield a bright yellow. And thus we arrive at the truly fascinating aspect of Marjolein’s embroideries of plants.

Dyeing with plant matter is as old as time. What makes Marjolein’s approach different is that she embroiders the constituent parts of her chosen plants using the colours yielded by those parts, whether or not those colours actually resemble the parts of the living plant. Where other embroiderers strive to match the visible colours of the living plant, Marjolein’s concern lies with what is invisible in the living plant. If the fresh green leaves yield a pale pink, that is the shade they will be in her embroidery. The plant has thus been turned inside out, making the invisible visible. This imbues her work with something other, a significance beyond the mere replication of, say, botanical embroidery. “In my training as an anthroposophical ➤



LEFT, ABOVE & BELOW Bouquet 24 October 2021. Each bold and brilliant flower – chrysanthemums, deep orange roses, rowan berries, oak leaves and kangaroo paw – in the vibrant autumn bouquet given to Marjolein by her husband on their wedding anniversary was made into a dyebath. The colours the flowers yielded form part of the artwork (below). Marjolein also dyed separate pieces of tulle which she applied to the base tulle before stitching through all the layers.





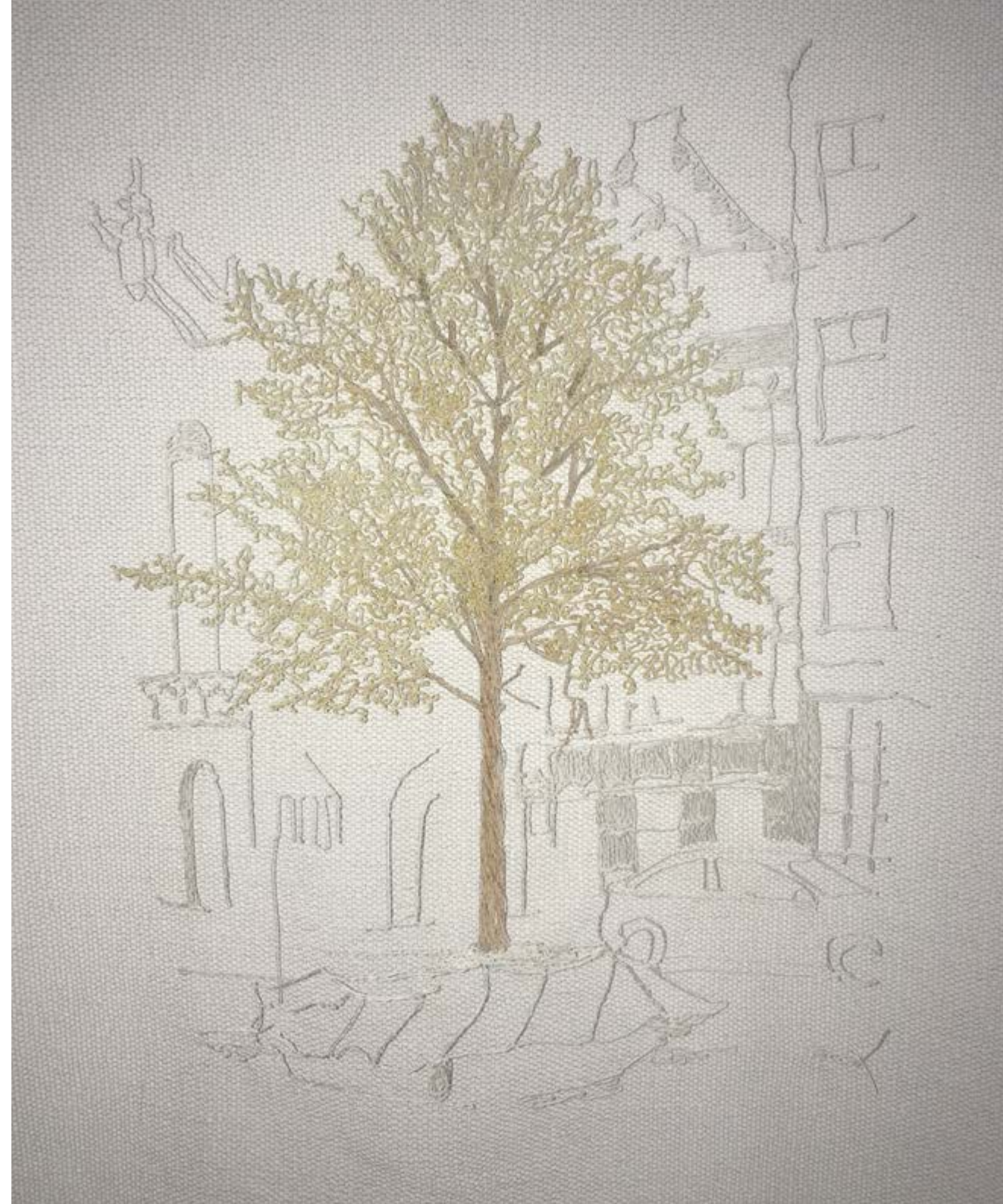
ABOVE AND OPPOSITE

*A present for a friend, a portrait of one of the distinctive *lep* trees that line the canalside streets in Amsterdam. The house is stitched in white twisted silk, and the tree in the harvested colours. Unusually, Marjolein is working with a hoop, possibly because of all the architectural features. The drawing lies beneath the tulle, but she slips her needle through the fabric without going through the paper.*

doctor, I learned about the physical body but also about the other parts of the human being that are not visible or tangible. These colours represent that for me." The plants are recognisable from their shapes, but the colours used to embroider the constituent parts are the secrets left behind by the material from which they derive. It gives the viewer an opportunity to relate to both the visible and the invisible; science and art combined with the sheer mysteries of nature, and ever so slightly mind-bending.

It is also a slow and meditative process. The organised precision with which Marjolein dissects and prepares the constituent parts of the plant for what she charmingly refers to as "teas" reflects her scientific training, as do the neatly wound spools of resulting silks, each labelled with the part of the plant from which the colour derives. Anyone who has tried dyeing thread will know the patience required to rinse, dry, smooth and wind the thread, and this is silk thread which is much finer and harder to handle. These arrangements of spools are also covetable artworks, abstract representations of the plants even before Marjolein starts to stitch. She works with different silk threads: the raw silk – buying it in hanks, undyed and unspun – and twisted threads of pure silk in different thicknesses from Gütermann. Working with silk is vital to Marjolein, seeing the filament of pure silk as an essential "lifeline". The base fabric for all her work is unprocessed silk ➡

THIS SPREAD ALL PHOTOS: MARJOLEIN HESSELS





LEFT & FAR RIGHT *Anthriscus sylvestris* (L.). Hoffm. Common cow parsley. Silk threads on silk tulle. Marjolein had the drawing on the left under the tulle as she worked, keeping the roots pretty much exact and allowing herself a little more artistic licence with the plant above the ground.

BELOW Pen drawing of *Anthriscus sylvestris* made in 1992 by Professor Erwin Lichtenegger. The actual plant was 77cm high, with roots 149cm deep and a diameter of 117cm. The drawing is scaled down at 71cm x 38cm.



tulle, an off-white, sheer and delicate material that is often used to make bridal veils and ballet tutus. Working with a fine, blunt-edged tapestry needle, Marjolein weaves the threads through the tulle, taking the needle in and out at the same time, with a motion akin to running stitch. The resulting tracery on the tulle really is like drawing with a needle and thread: there are no recognisable embroidery stitches; she is merely taking the thread through the tulle. It might be the fine silk sewing thread, or she might pull off a bundle of unspun silk, twisted at one end so that it is just thin enough to thread her needle, and pull the rest of the bundle through the tulle to create texture, rather as she has for the centre of the roots of the Vondelpark elm. Sometimes she will go over the threads with another thread for emphasis, not whipping, but always running the needle in and out through the tulle, the silk threads slipping easily through each other and the fine tulle.

Roots have been an obsession of Marjolein's for a while, having been alerted by a friend to the work of Professor Erwin Lichtenegger and Dr Lore Kutschera, scientists who exposed and made drawings of the root systems of hundreds of plants and trees.

Mostly, Marjolein works with the tulle hanging vertically in front of her, like a curtain, with the drawings or, sometimes, with the actual plants behind the veil. ➡➡



"I follow the lines of the plants and under my hands things start to grow. I often don't know what I am doing while I am doing it".

For the past year, Marjolein has been working on the diptych of the Vondelpark elm at a scale of 1:10, taping the drawings and the silk tulle to a very large cupboard and a pair of artist's easels. The view of the felled elm is two metres long and that of the up-ended roots is two metres by one-and-a-half metres. For the threads used to stitch the roots of the elm, having noticed that adding iron sulphate to the dandelion leaves had produced a beautiful dark greeny-brown, Marjolein decided to use the earth in which the tree had stood for more than half a century, wondering how

any metals in the earth might 'sadden' the colour. The resulting deep brown colour was "like magic, it made me feel like a witch!"

Looking at row upon row of spools of coloured silks, like DNA sequences on sticks, is certainly spellbinding, as is allowing the eye to trace the two-and-a-half-metre long tap root of the dandelion. ❖

📷 @marjolein.hessels

RIGHT *Anthriscus sylvestris* (L). Hoffm. (detail). Note how perfectly Marjolein has captured that slightly dry, tubular stem of the cow parsley, threading the different silks, some twisted, some filament, some unspun, through the tulle like a fine pencil drawing, always using the colours harvested from the different parts of the plant.

BELOW *Anthriscus sylvestris* (L). Hoffm. Silk threads and wood. 1-3 flowers. 4-11 stems and leaves. 12-14 roots.

