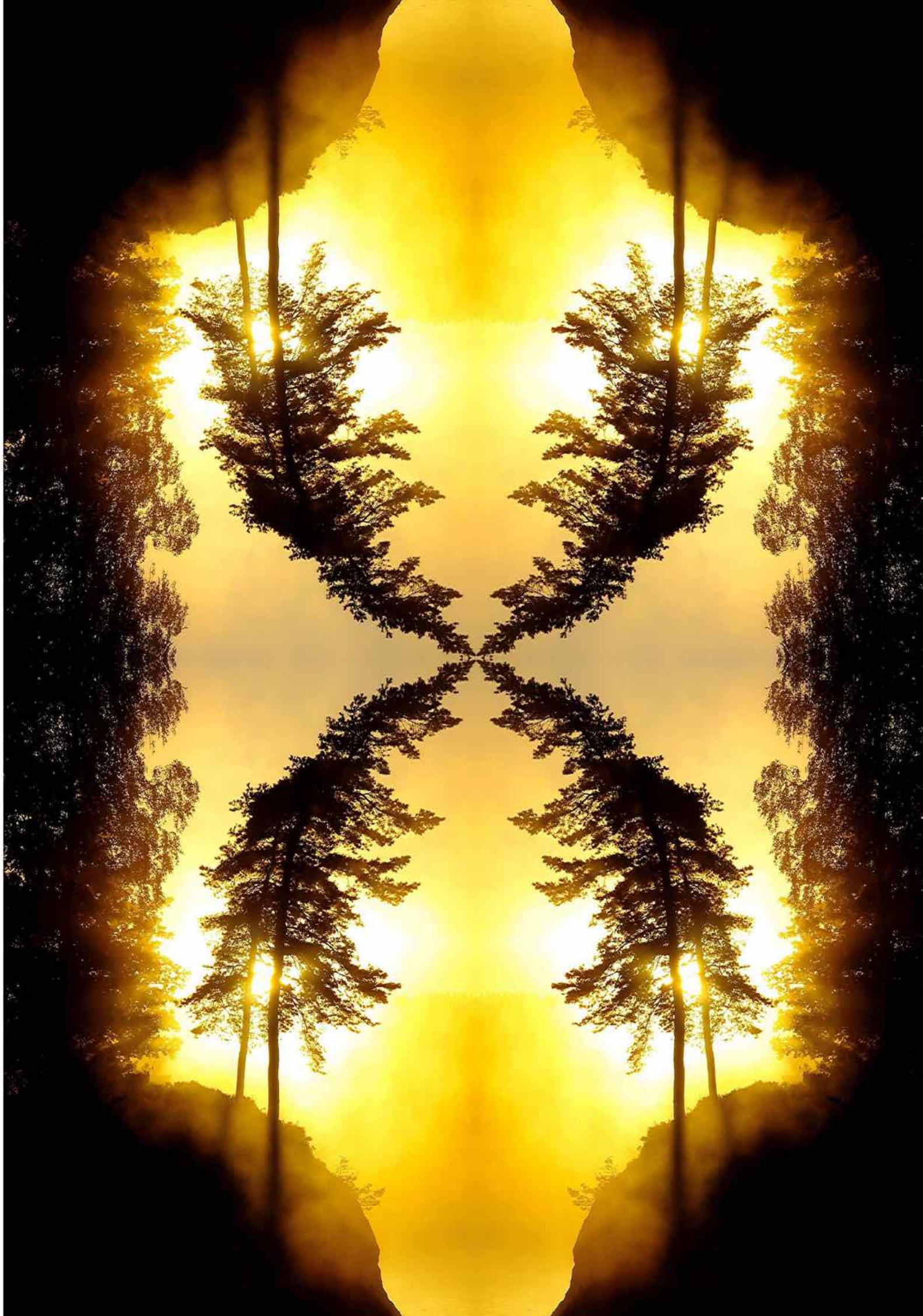


Symmetry in Nature

Roddy Fox



Symmetry in Nature

This kaleidoscope of imagery came about as I sought a sense of harmony in my life whilst Kate, my wife, had surgery and then chemotherapy for colon cancer through 2014. It started as a safe space where I could explore shapes and forms in my nature photography, discovering striking patterns that pleased and intrigued me. When I showed them to friends they suggested I publish them as a book so I set about making this selection.

<i>Grasses</i>	1 - 6
<i>Mosses and Lichens</i>	7 - 12
<i>Webs</i>	13 - 16
<i>Hedgerows</i>	17 - 24
<i>Flowers and Blossom</i>	25 - 32
<i>Leaves</i>	33 - 42
<i>Trees</i>	43 - 47

The original photographs were taken over a six year period from 2008-2014 in the beautiful countryside around the two places where I am fortunate to live and work. These are at Rhodes University, Grahamstown, South Africa and at University West (Högskolan Väst), Uddevalla, Sweden. My best nature photographs come when making time stand still, becoming one with the place, the light, the fragrances, the shadows, the rippling grass: crouching down to take the grasshopper's view. You can see the types of places at the end of the book as I have included two pages showing where most of the pictures were taken. Each contains a panorama, map, a detailed listing of the locations of pictures and four typical scenes.

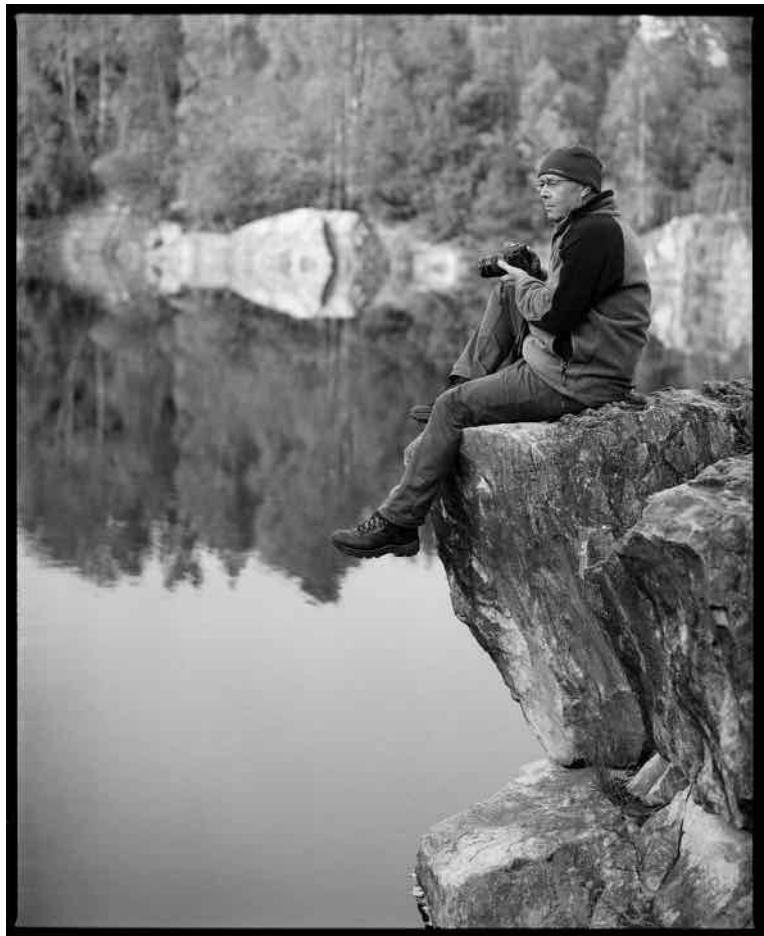
<i>South African Landscapes</i>	48
<i>Swedish Landscapes</i>	49

All of the images in the book were produced in the same way. An interesting area in the original picture is cropped out and then copied. The copy is flipped over and joined with the crop to make a single symmetrical pair. To produce the final image the symmetrical pair is then copied, flipped and joined in turn so that there are now four image mirrored together. Page 50 shows how this has been done using the book's cover as an example.

I am not the first photographer to find the striking and intricate imagery in nature through this type of process but I think that you will find the South African and Swedish subjects unusually evocative and intriguing.

To Kate: may you have a long, happy and healthy life.

Roddy Fox



At Lövsta, Sweden
© Jan Malmström
<http://www.janmalmstrom.com>

The book author retains sole copyright to his contributions to this book.

© Roddy Fox
<http://about.me/roddyfox>

Published by EarthBound Africa,
Robinson Street,
Grahamstown,
South Africa 6139.

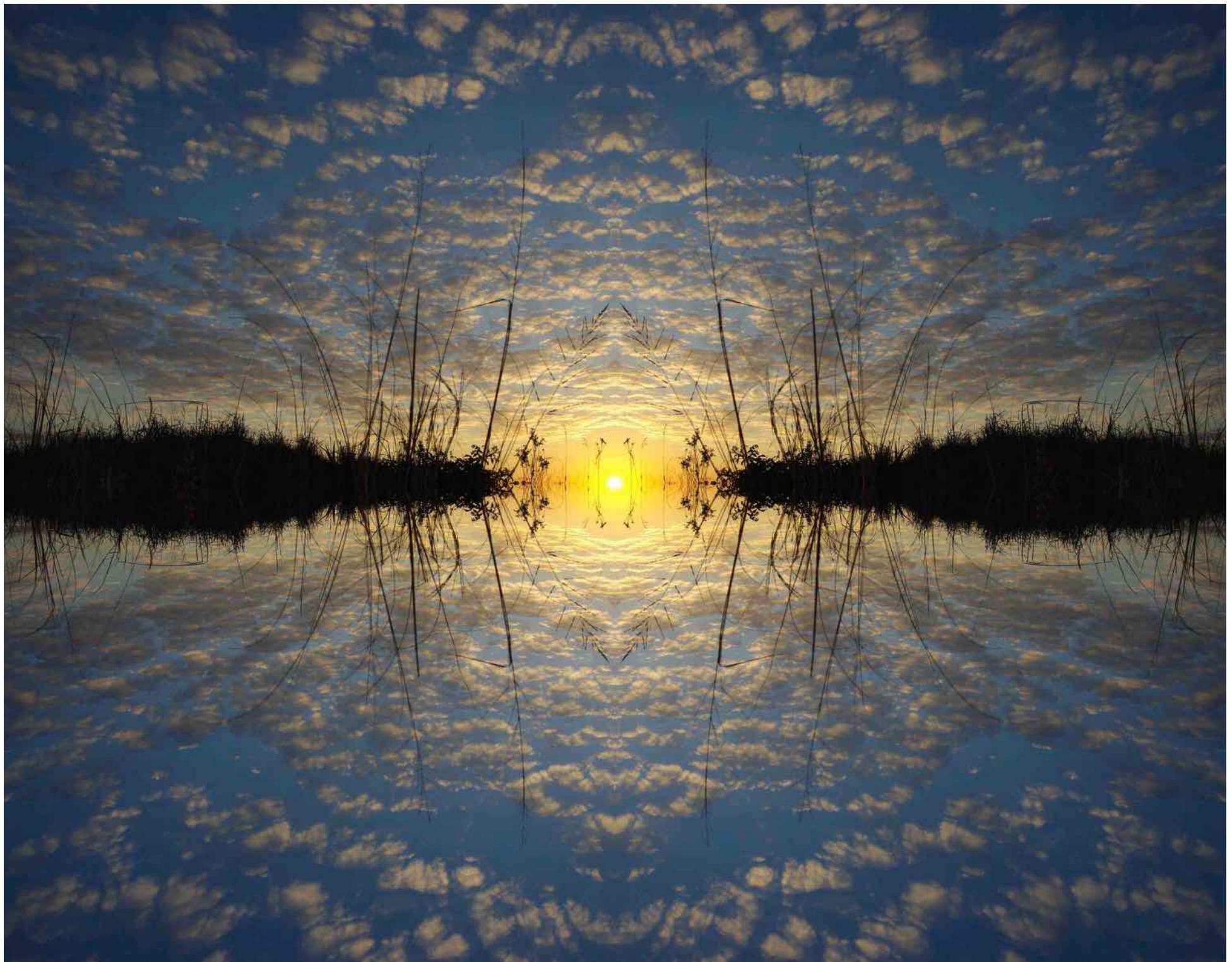
January 2015.

ISBN 978-0-620-64587-4

The Blurb-provided layout designs and graphic elements are copyright Blurb Inc.
This book was created and distributed using the Blurb creative publishing service.
<http://www.blurb.com>



GRASSES



Open Sky. Mountain Drive is the range of hills that lie just south of Grahamstown. On the top it is a rolling grassland with steep drop offs to north and south. It's one of my favourite places to walk, mountain bike and take pictures. This is a winter sunset picture looking west along the spine of the hills. It was taken on 3 July 2010.





Steeple of Grasses. This picture was taken as I was walking above the cuttings of the N2 bypass on the steep northern side of Mountain Drive, Grahamstown. These grasses were silhouetted beautifully against the morning sky. 25 April 2009.



Lone Arch. The same grasses are shown here against a winter sunset. This is taken looking north-east with the lights of Grahamstown down in the dark valley below. The orange and lilac bands of the belt of Venus make a softly-lit backdrop. 12 June 2014 at 17:40.





Tracery of Frost. An 8:00am walk from Äsperöd, Uddevalla, took me down through woodland and fields to the Bäveån River. Cold night air ponds up in the misty fields by the river and so it forms frost on the dead grasses. I kneeled down in the icy grass to catch the sun just as it rose over the tree tops. There is an Art Deco feel to this picture. 15 October 2010.



Spiders in the Grass. This is one of the first images I worked on. The grass makes a nice archway with jewels of sunlight refracting through the melting ice crystals. Once I had mirrored the image I saw the two spidershapes facing each other. The picture was taken at Äsperöd on the 15 October 2010.





Open Eyes. Cow parsley grows by the river meadows along the Bäveån River in Uddevalla and they are a lovely subject to photograph. This picture was taken on 11 October 2010.

MOSSES AND LICHEN



In the Depths. Lichen and Moss are another of my favourite subjects. This picture was taken on a long nature photography walk with my friends Jan Malmström and Janet Hall who live in Hundby, Sweden. You have to lie flat on the soft, wet mosses or stretched out across knobbly rocks to take them. Your nose is literally to the ground. The picture above was taken on 8 October 2011.





Through the Letter Box. Fallen pine needles, leaves and lichens are catching the light on the rocks above Sillen, Hundby. 25 September 2009.

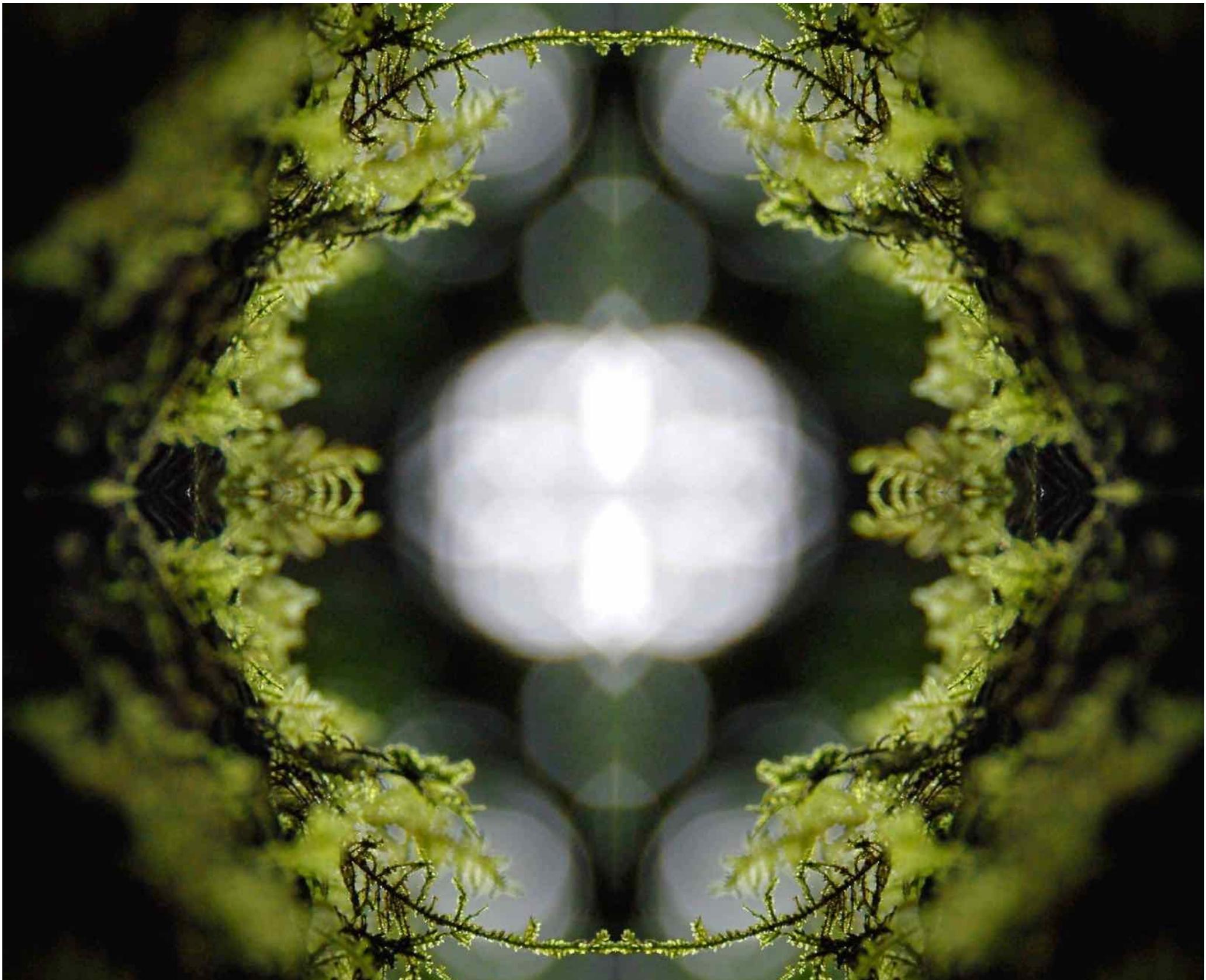


Beneath the Rock. This is another picture taken on the same October walk at Hundby with Jan and Janet. The small polyp shaped lichens lay nestled beneath a mossy rock covered in fallen pine needles. They were an obvious feature to crop and mirror. 8 October 2011.



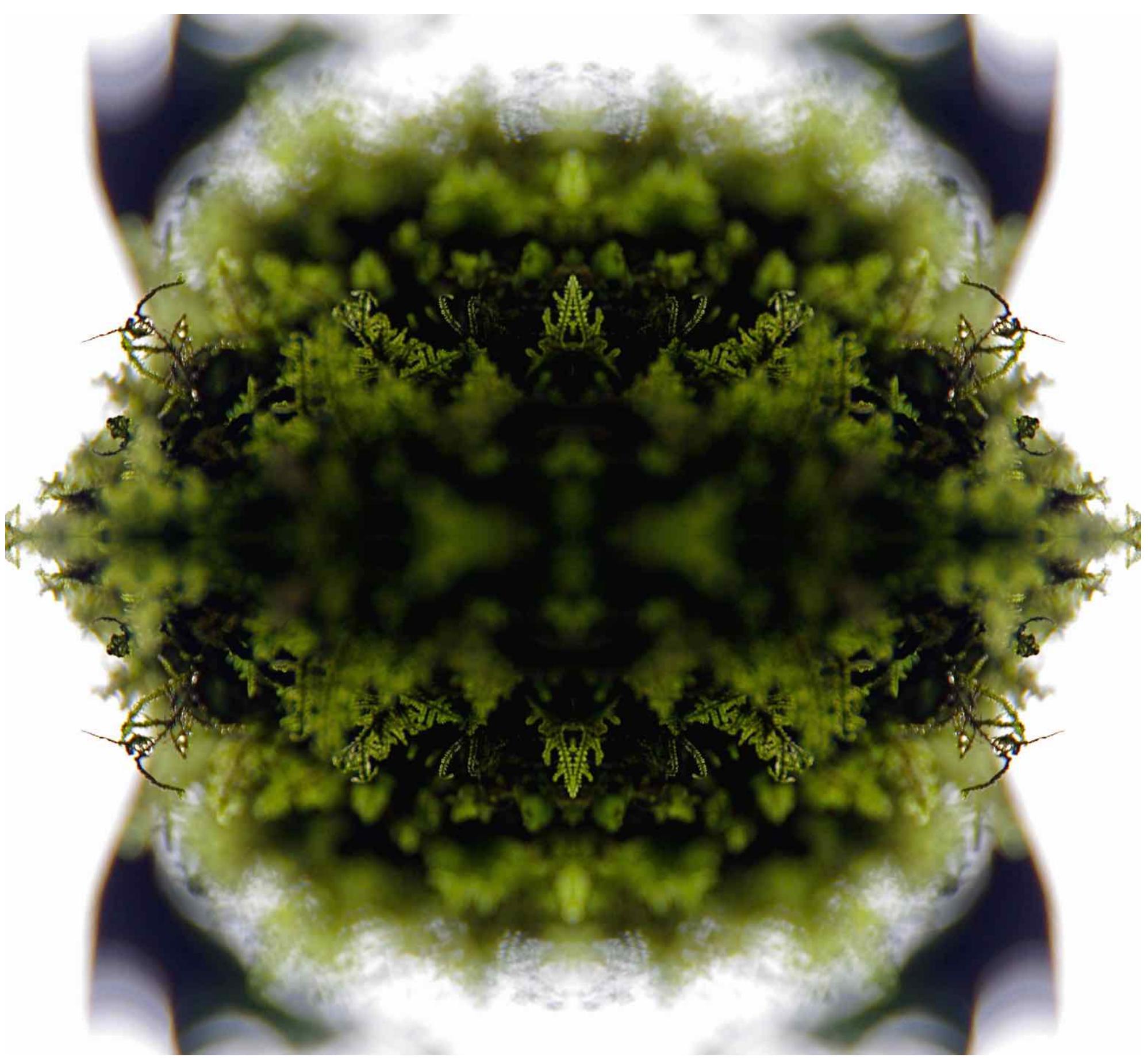


Praying Hands. These are pieces of fallen bark on a bed of moss and berries. 8 October 2011 at Hundby.



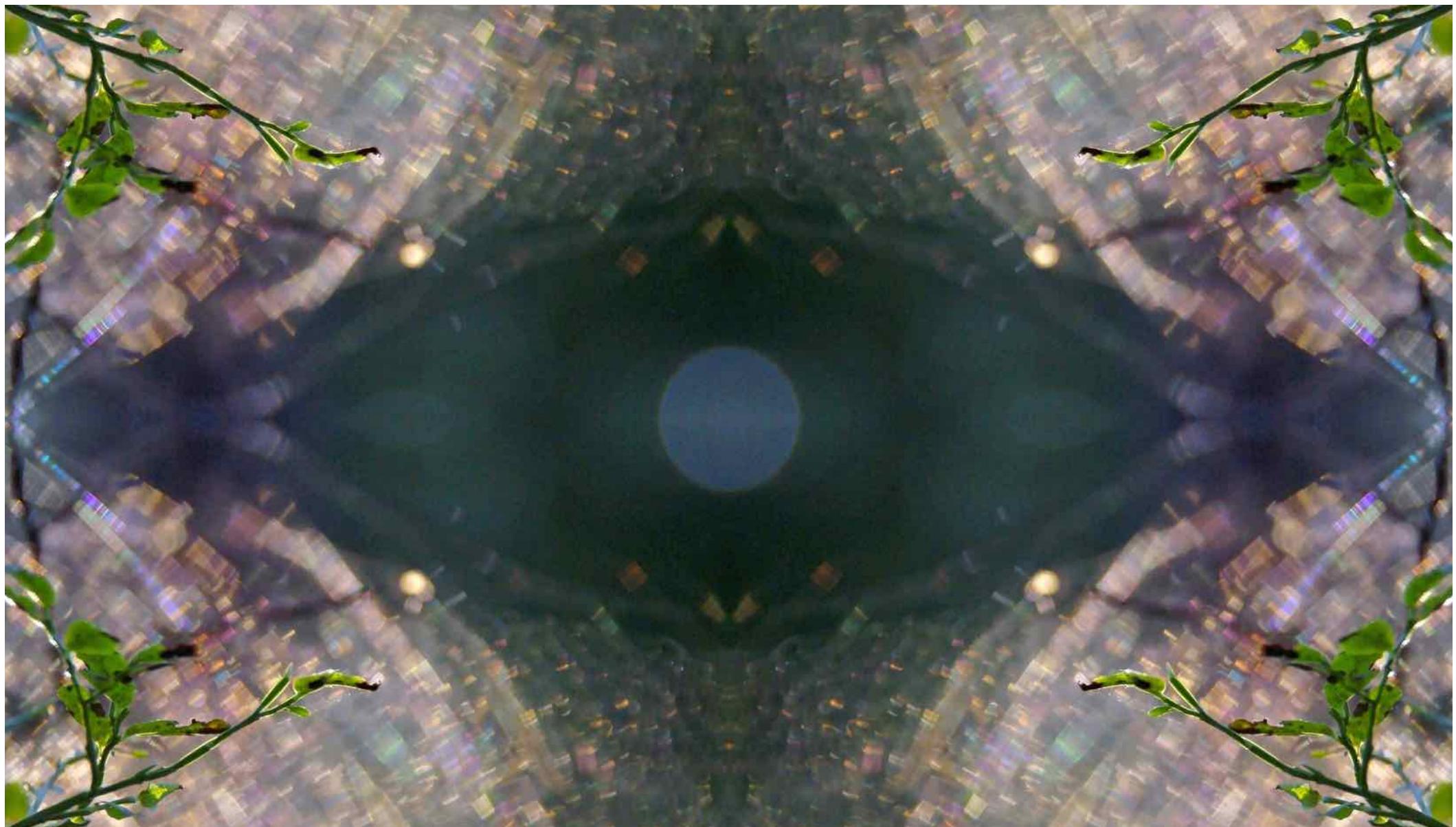
Tree Hugging Mosses. I did some tree hugging myself to take this picture. I was on a nature walk with my wife, Kate, and daughter, Helen, at Hogsback, South Africa. 10 January 2009.





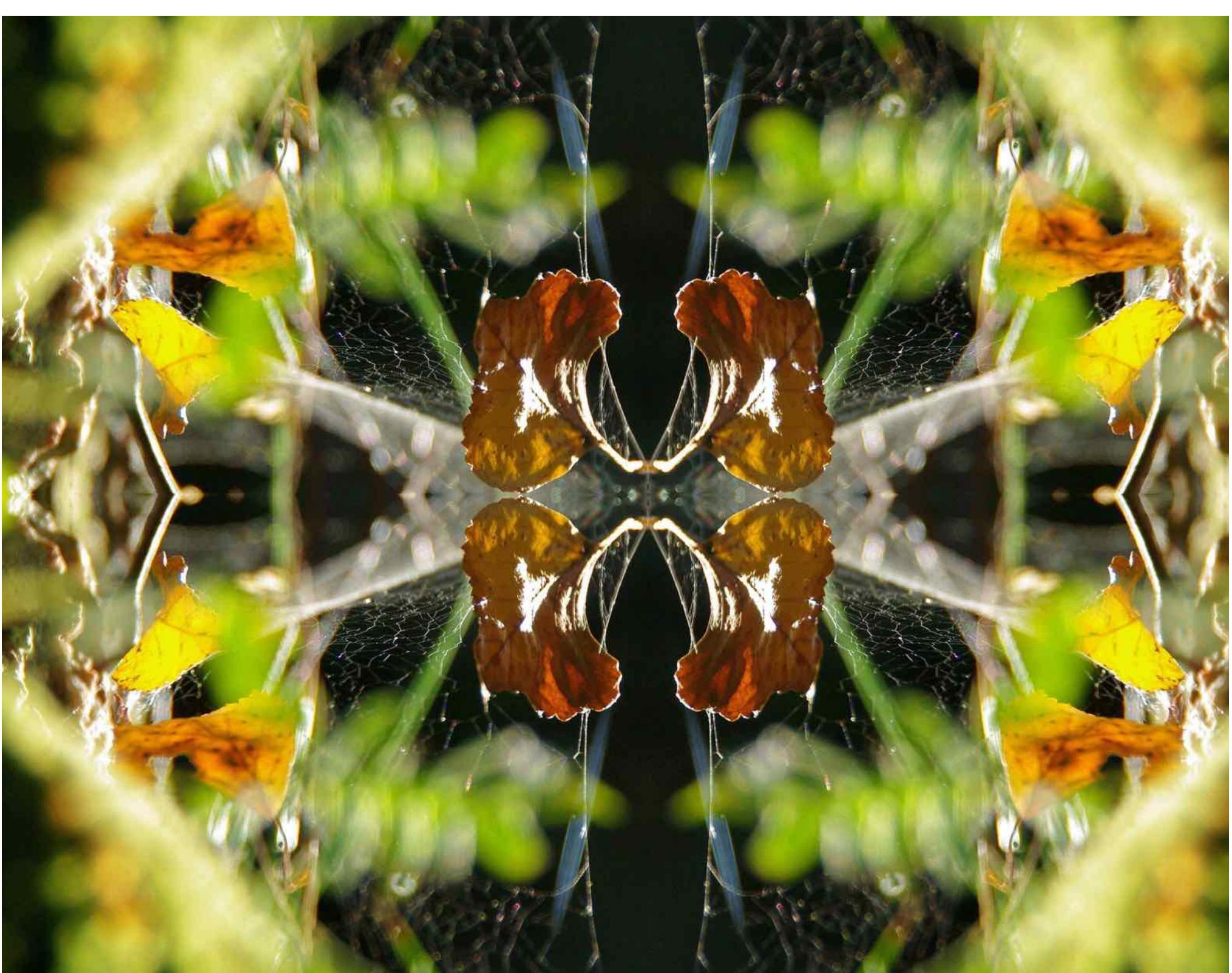
Eye of Moss. This picture was taken minutes after the one on the previous page, I am looking straight up the bole of a huge yellowwood tree at Hogsback, Eastern Cape. I was on the same nature walk with Kate and Helen: we took lots of mossy and ferny pictures that day. 10 January 2009.

WEBS



Eye in the Grass. From 2008 to 2010 I spent spring and autumn visits to Sweden in a tiny cottage above Byfjorden, Gustafsberg, just outside Uddevalla. There are beautiful forest and fjord walks there and so plenty of photo opportunities at dawn and sunset: before and after work. This picture was taken just before 6:00 in the evening as the sun's rays filtered across the forest floor picking out the webs in the blueberry bushes. 10 September 2009.



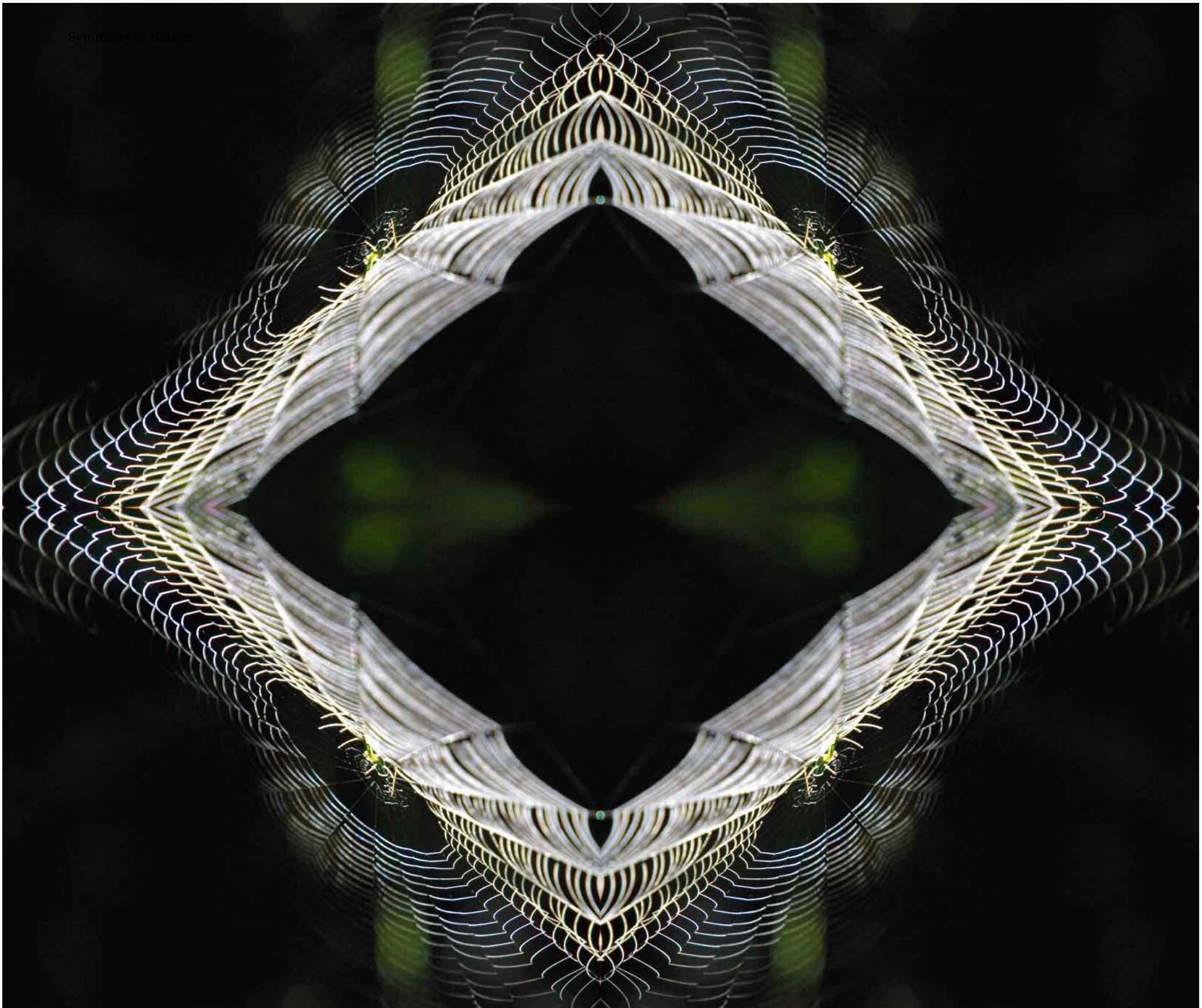


Trapped Oak Leaf. You are going to encounter a lot of spiders' webs in the grasslands and forests of South Africa and Sweden. They can make fantastical geometrical arrangements. This late afternoon picture is from Bassholmen island, in the Bohuslän archipelago, Sweden. 17 September 2009.





Pearls of Dew. The tunnel spiders make funnel webs in the grass to catch their prey. In this picture it is the fresh dew of a warm summer morning that is catching the light whilst the spider lurks in the background. It was taken whilst walking up Mountain Drive, Grahamstown, on 10 January 2009.



Diamond Web. The slanting light through the dark tree canopy picks out this spider's web. It's in the Kologha Forest, Amatole Mountains, South Africa. You need patience and the ability to be quite still for these pictures - otherwise the spider hides. 22 March 2010.

HEDGEROWS



Dragon Thistles. These thistles are silhouetted against the pale evening sky above Byfjorden, Uddevalla. 28 August 2008.





Frosted Brambles. I was taking a cold morning walk down to the Bäveån River, Uddevalla, when I passed these pale, pastel coloured, blackberry bushes. They had a light dusting of frost. 21 October 2011.



A-Frame. The stems of this dandelion make a strong contrast with the fluffy seedball and soft backlit trees. It was growing on the hillside outside Äsperöd, Uddevalla. 18 September 2014.

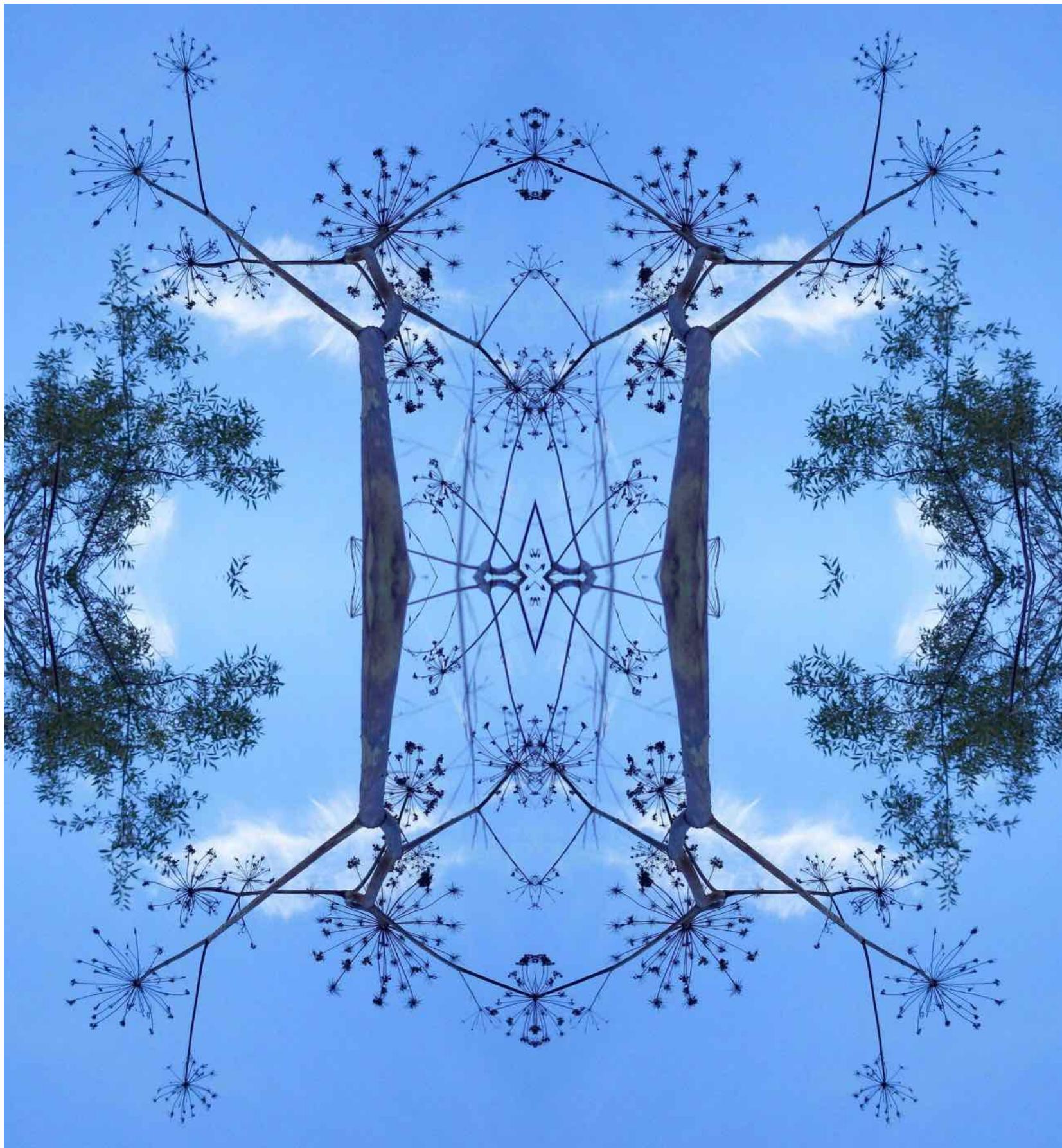






Dandelion Arabesque.
Gustafberg is a popular place for Spring weddings in Uddevalla. There was a reception in full swing when I took this picture. The grasses were full of May flowers while the yellow heads had already fallen off the dandelions.

28 May 2010.

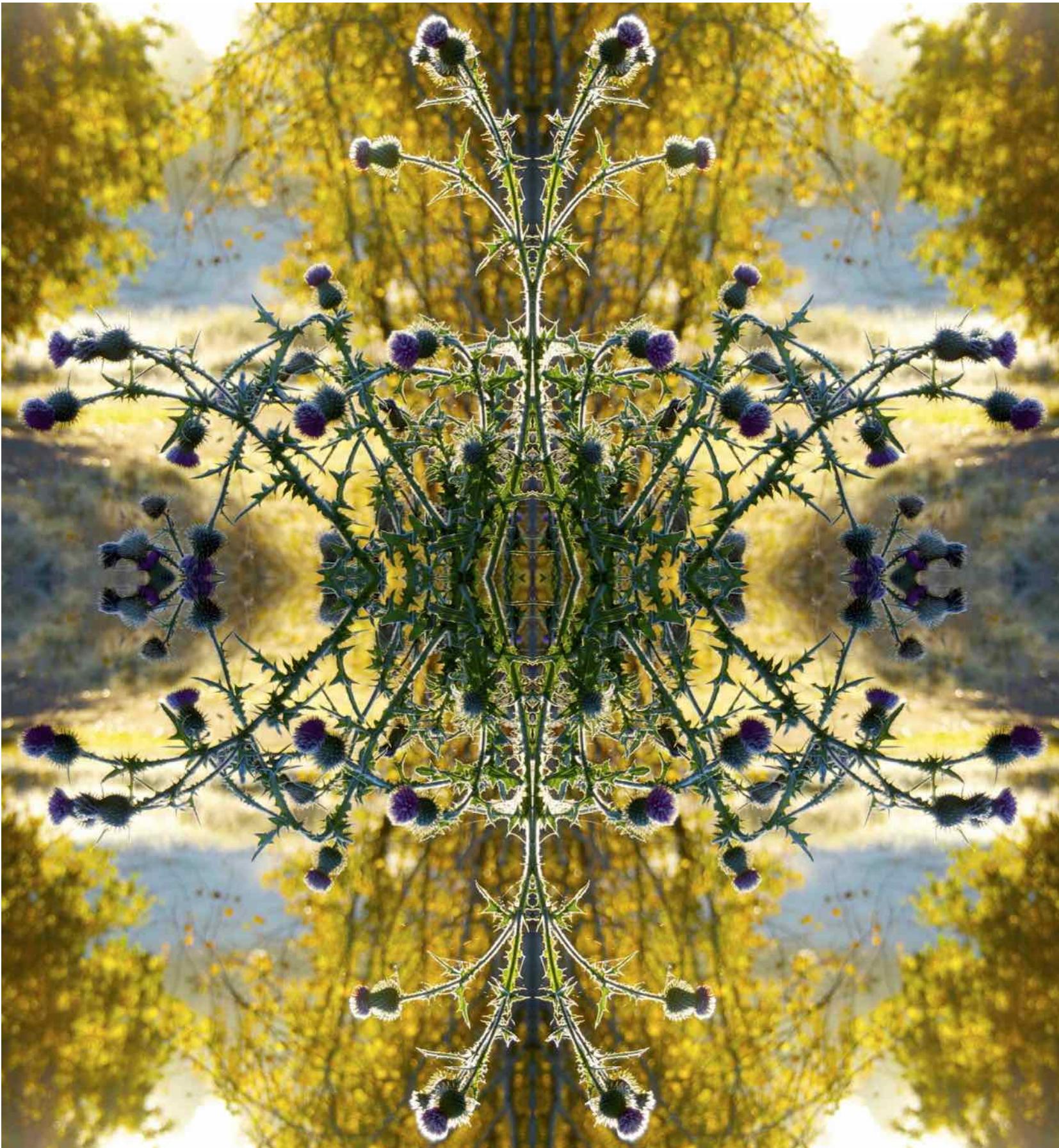


Pond Skaters. The cow parsley seed heads are like the splayed fingers of pond skaters skittering across the evening sky. Äsperöd, 22 September 2014.





Teasel Archway. The teasel's curving stems are joined here to make gothic arches. Äsperöd, 15 September 2014.



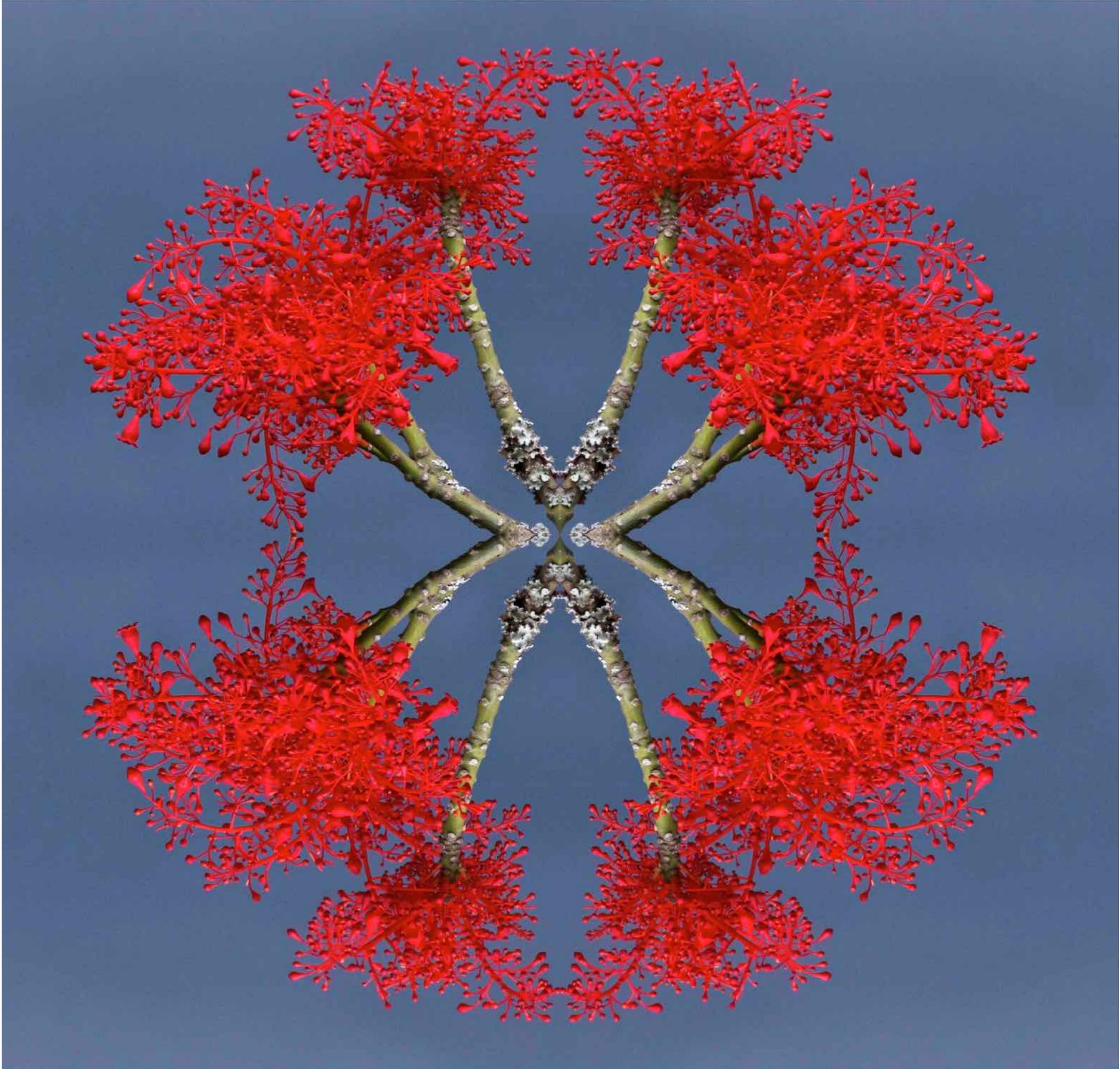
Spray of Thistles. All of the plants in the hedgerows section are common along the pathways and forest clearings around Uddevalla. These backlit thistles make a lovely fan shape. Äsperöd, 11 October 2010.

FLOWERS AND BLOSSOM

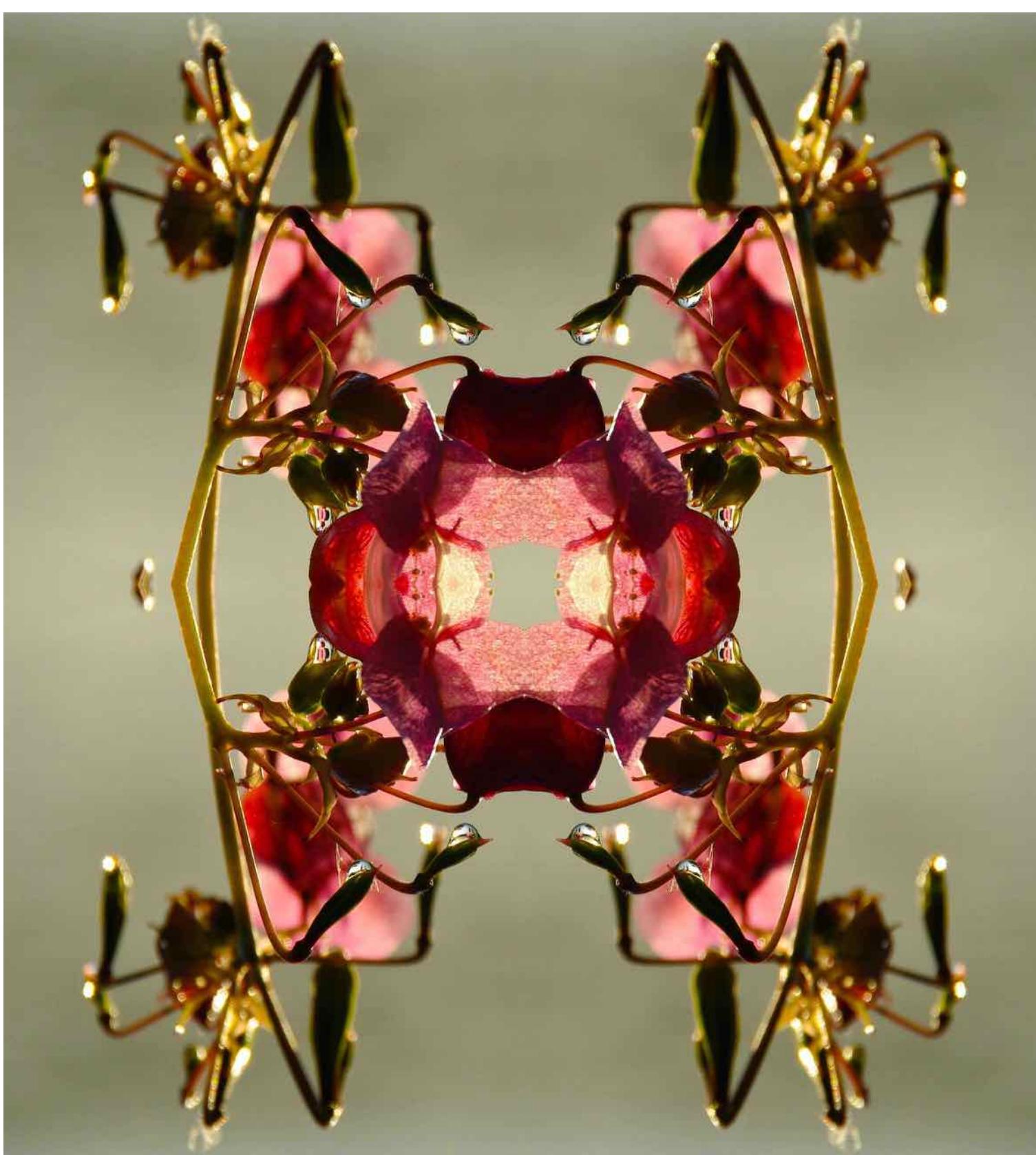


Smiling Bauhinia. Our bauhinias blossom from late spring to early summer. One of my favourites grows above Grey Dam, Mountain Drive. 7 December 2008.





Maltese Cross. These coral tree blossoms make an eight sided Maltese cross - a regeneration cross. The tree is just outside our stoep in Grahamstown, it was strikingly lit in front of huge, dark grey storm clouds. 12 November 2014.



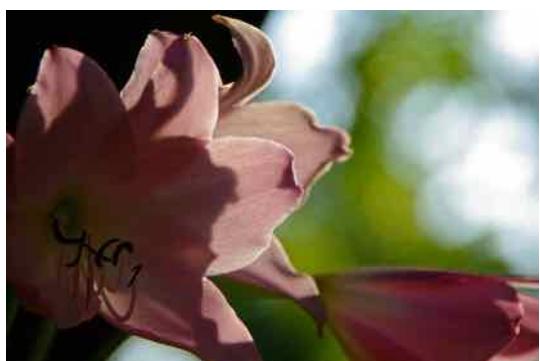
Himalayan Balsam. These wafer thin flowers grow beside Strandpromenaden, the path that runs beside Byfjorden, Uddevalla. The glinting dew drops give elegant highlights in this picture. 16 September 2009.



Hexagonal Hibiscus. This old hibiscus flowers each year in our garden. Its yellow petals have a wonderful texture and provide a frame for the green hexagonal star in the middle of the picture. 22 November 2014.

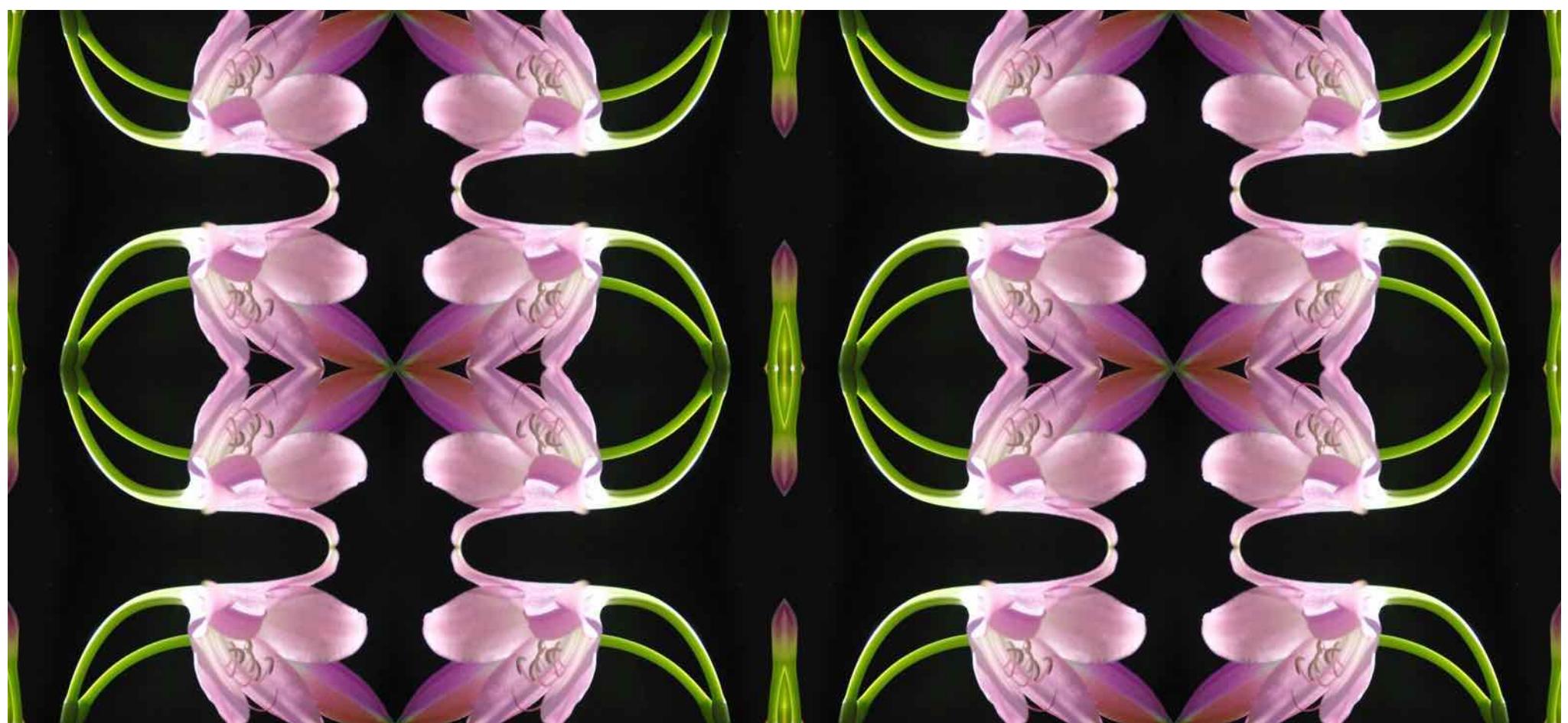
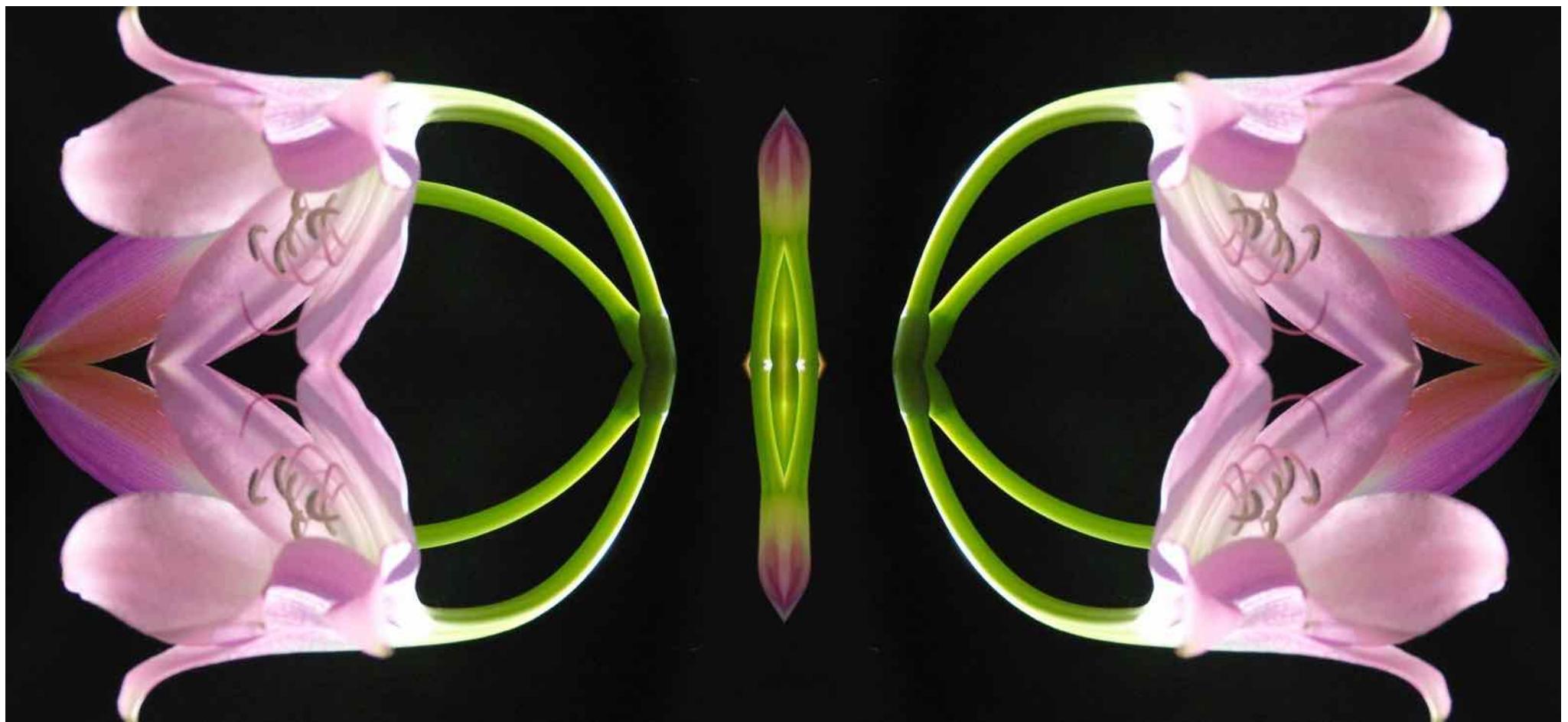
Egyptian Eye. These beautiful lillies bloom beneath an old oak tree in Grahamstown's Botanic Gardens. I often admire them as I walk past. The thick foliage above gives dappled light and deep shade against the summer heat. Here it is highlighting the delicate petals against a dark background.

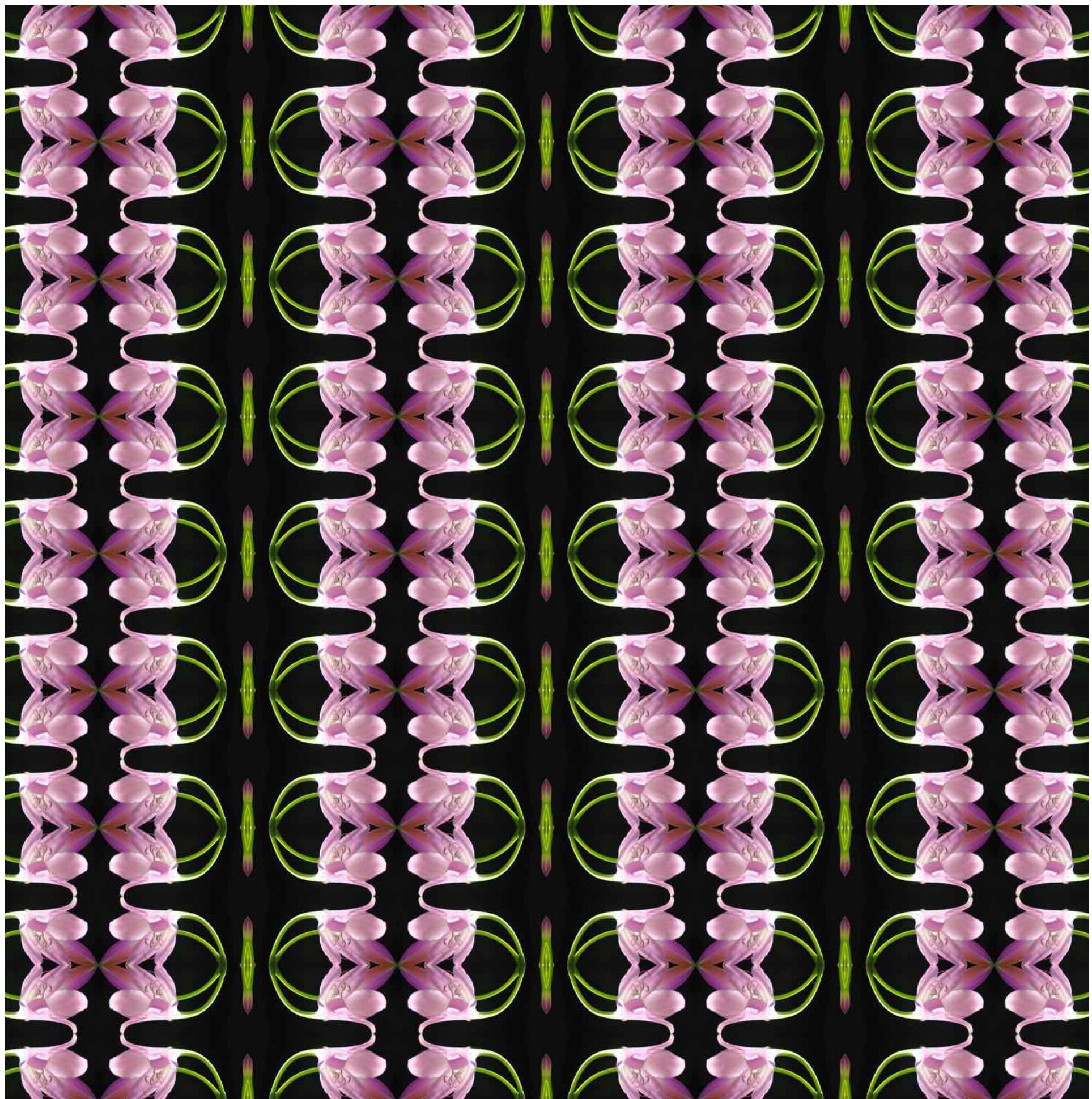
The eye in the centre of the picture reminds me of the symbol Utchat - the sacred eye of Egypt. 27 February 2009.



Lyrical Grace. The simplicity of the form in this picture meant that I could construct a flowing pattern of interlinked flowers and stems against the very dark background. 27 February 2009.







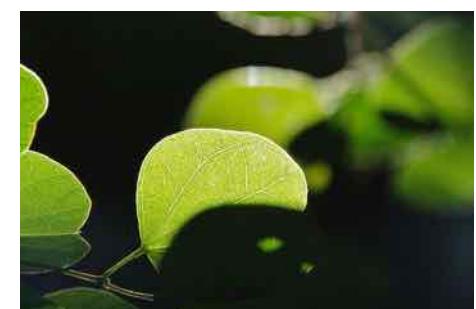


Infinite Lillies. Arum lillies are iconic southern African flowers. They grow along the sides of the stream running through the Botanic Gardens in Grahamstown where the replanted thicket vegetation gives a richly textured background. The picture makes the figure eight infinity symbol. 13 November 2014.

LEAVES

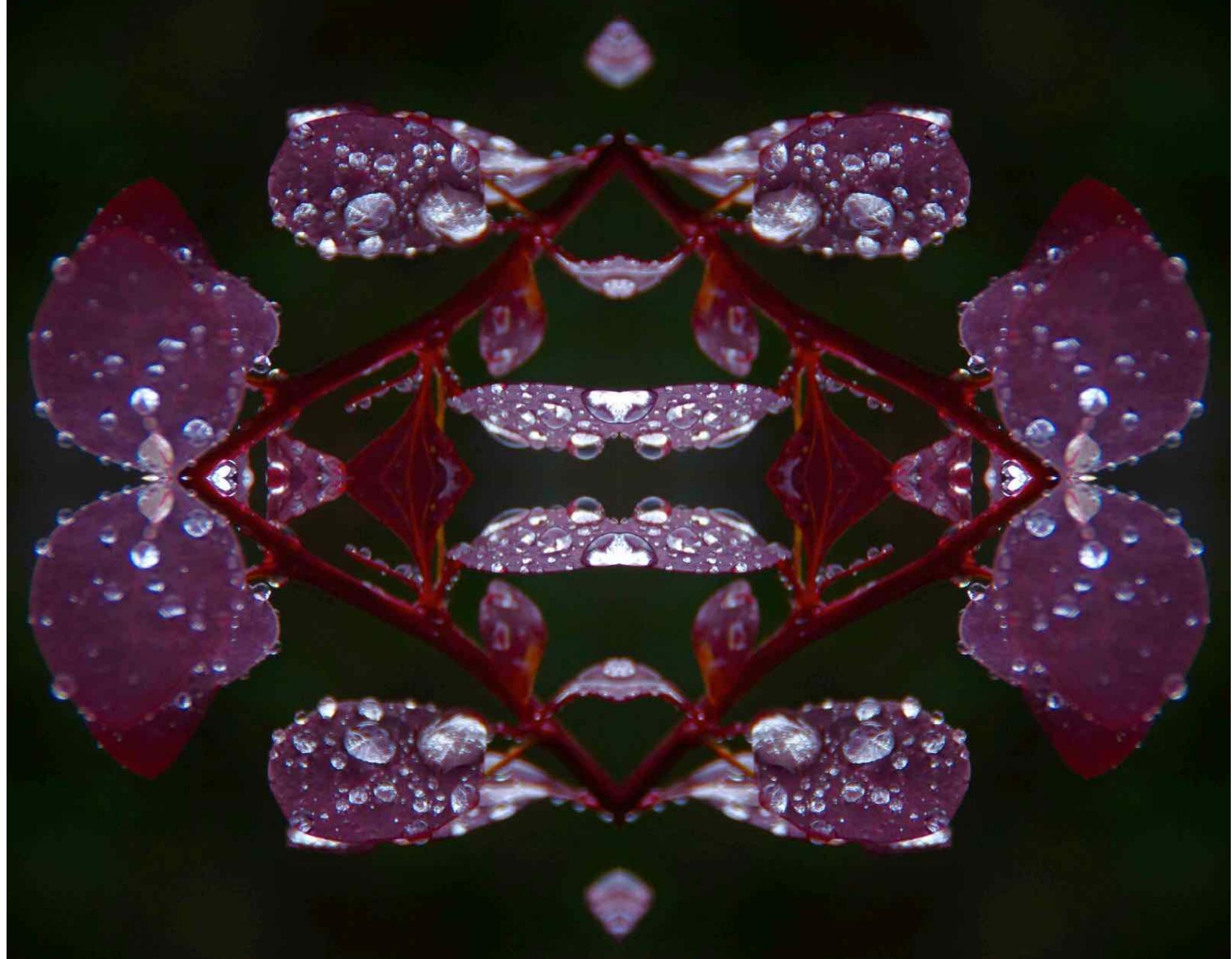


Seagull's Wings. September 2010 was my first time living on the edge of the forests at Äsperöd, east of Uddevalla. This leaf makes the high-elbowed arch of a gull's wings over a sea of moss.
6 September 2010.





Alien Eyes. The bauhinia's leaves are called angel's wings. Here they cast shadows that make make other-wordly eyes. 7 March 2009 in our Robinson Street garden, Grahamstown.



Cragside Cross. Cragside, in Northumberland, England, has a fairy-tale quality with winding paths through dense rhododendrons and avenues of fir trees. I was being taken round by my sister-in-law, Jeannie Davy, after a heavy rain shower when I took this picture of branches covered in rain drops. It is in the deep valley beneath the house itself. 8 July 2014.





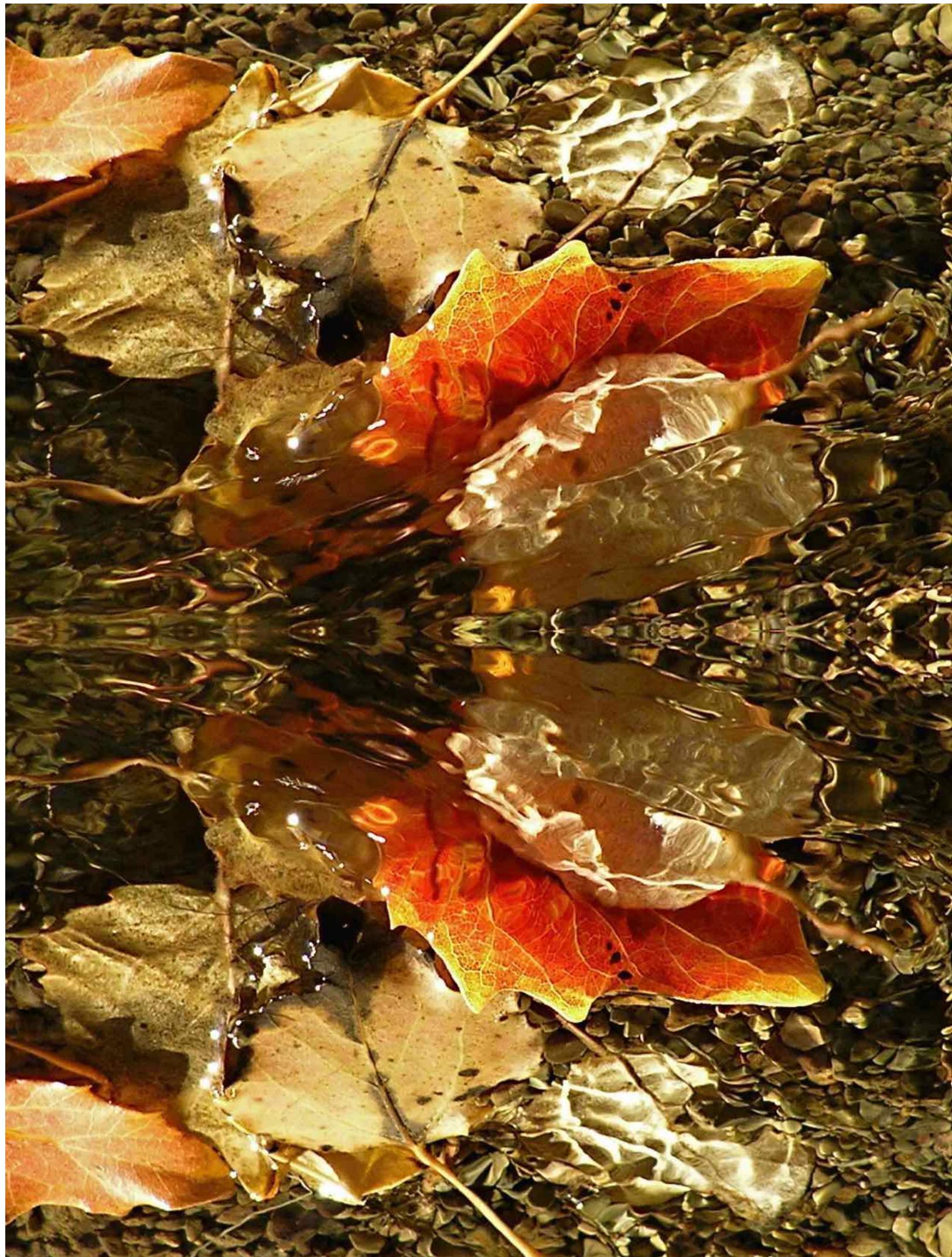
Raguly Cross. These leaves were catching some winter warmth in front of the old stone wall in Grahamstown's Botanic Gardens on 22 July 2008. I was walking past to give an early lecture when I saw the rich colour and the angular patterns. There is a Raguly Cross in the centre with its characteristic sawn-off edges.



Autumn Maples. After Uddevalla's first snow fall of autumn I cycled out through the countryside south of Åsperöd to photograph the leaves in the bright mid-day sunlight. These maples completely covered the ground in front of a farm fence. 20 October 2010.



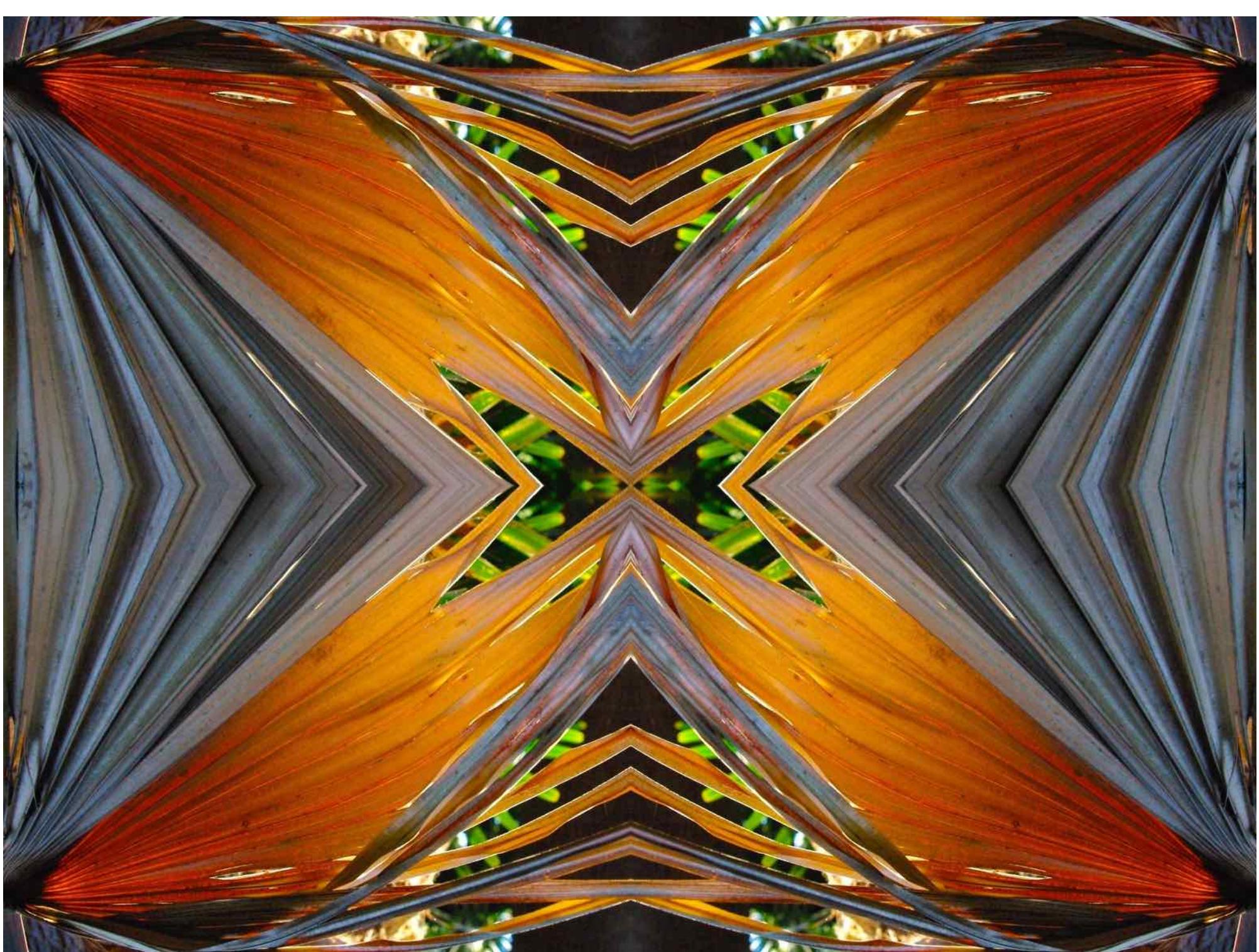






Open Palms. The leaves had drifted down into the crystal clear waters of the river on Compassberg Farm in the Sneeuberg Mountains, South Africa. The mountains are high and frequently cold so these were the very first autumn colours of the year.

18 March 2008.

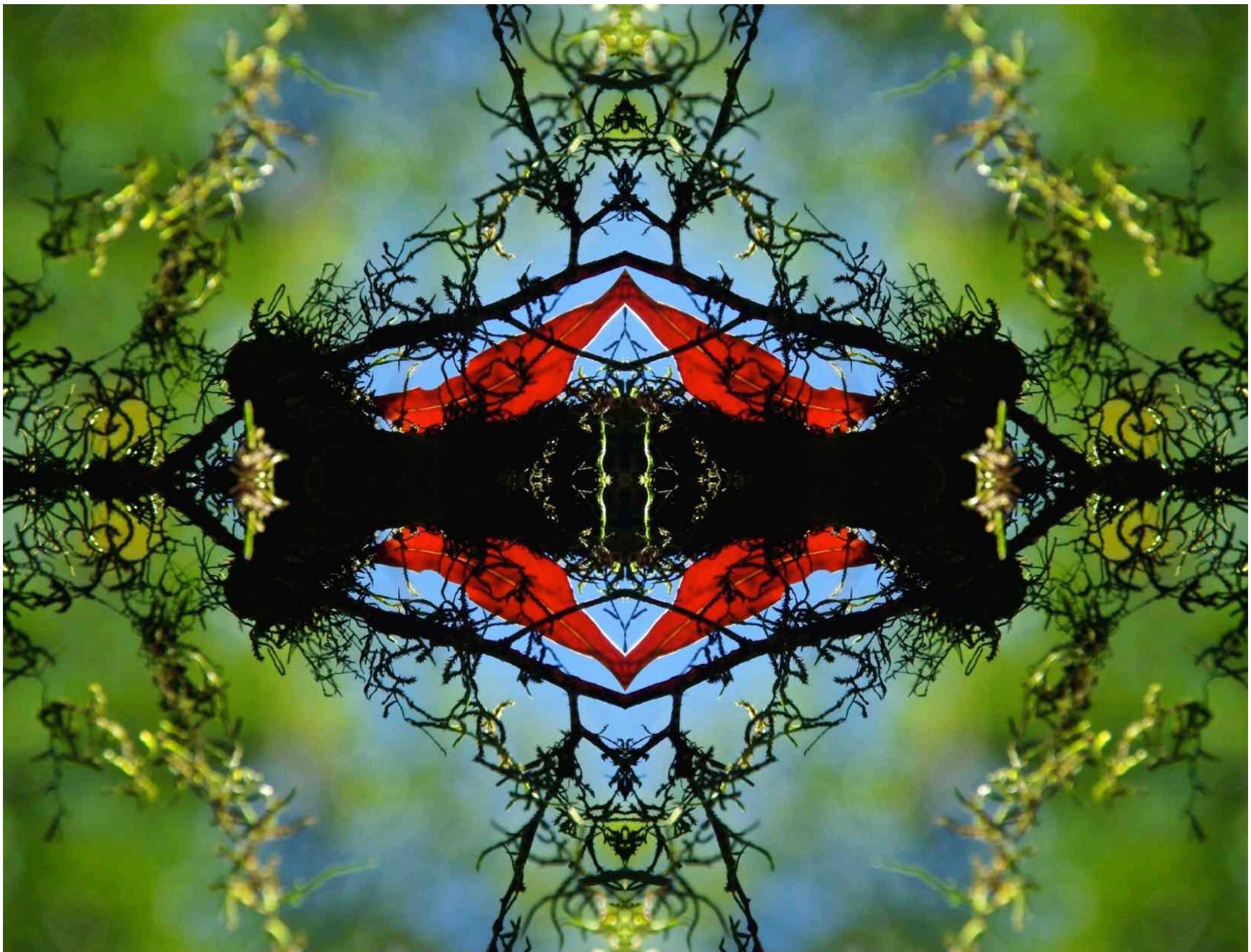


Cross of Palms. I was on an early morning walk to work through the Botanic Gardens, Grahamstown, when I saw that the backlit portion of this palm was almost glowing. 27 February 2009.

Autumn Jewels. The soft focus purple flowers frame two autumn leaves in Trädgårdsföreningen, Göteborg. The Garden Society's gardens are an oasis in the busy city centre. 25 October 2008.

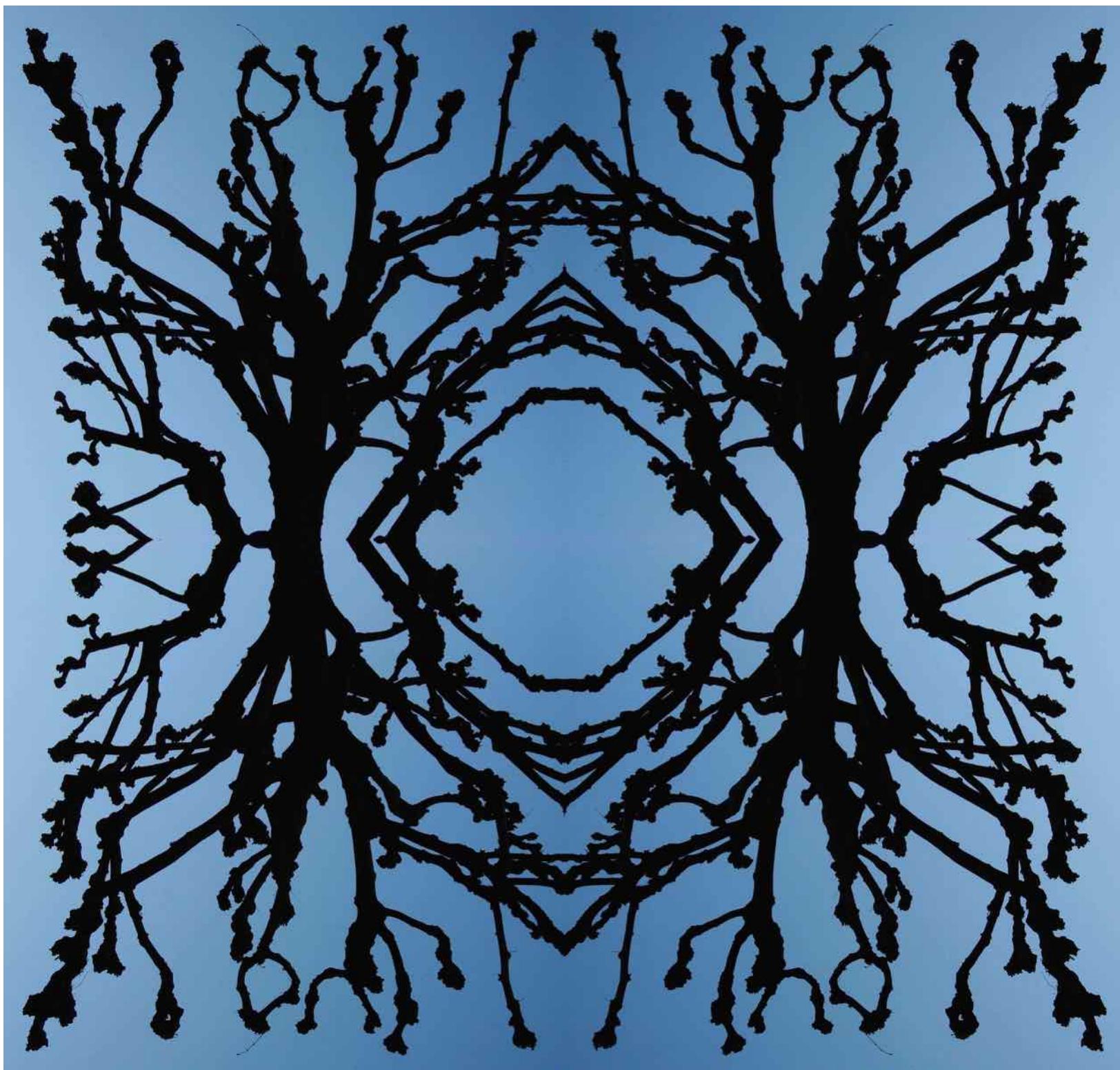






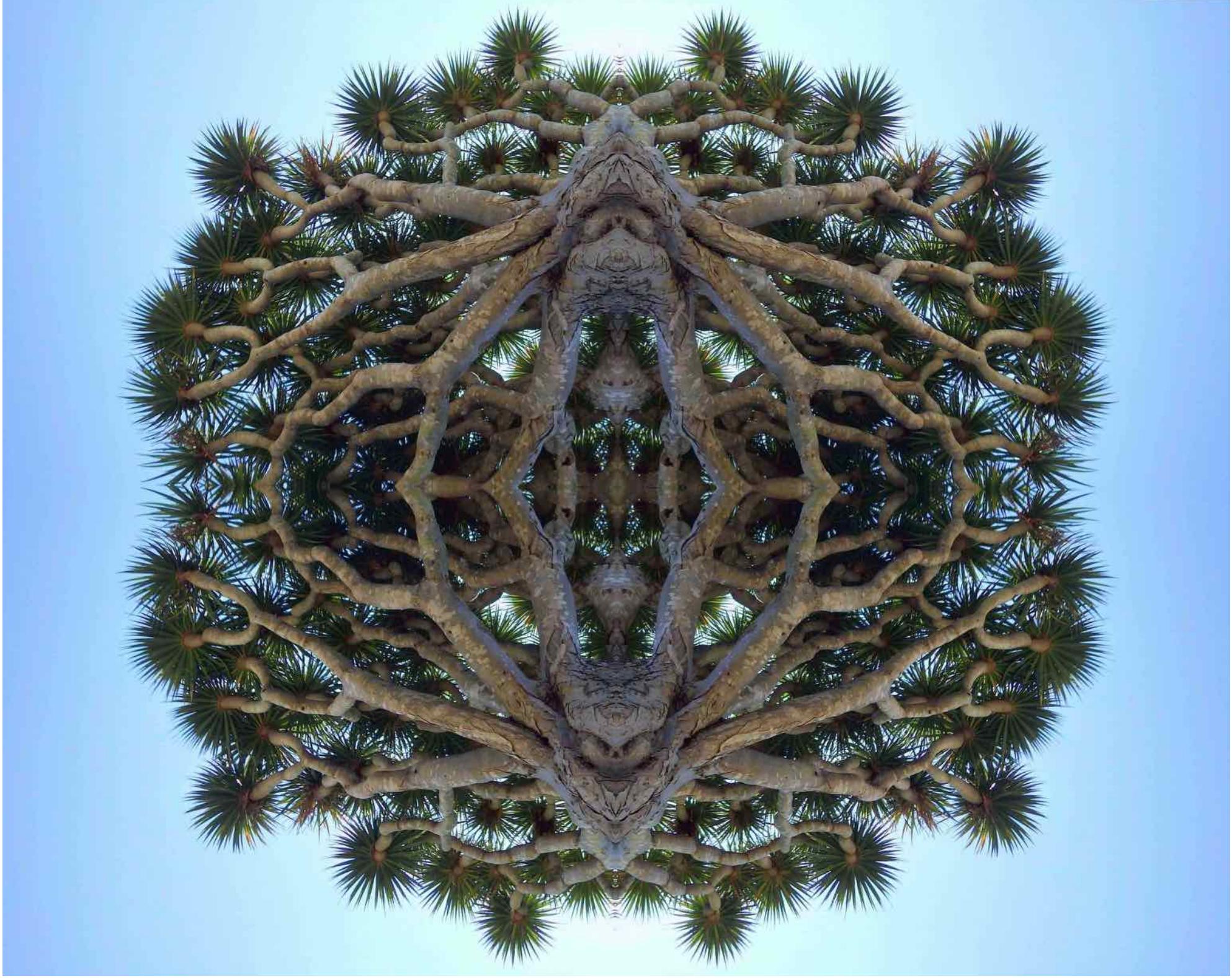
Kologha Tapestry. A single red leaf is the centrepiece of this kaleidoscopic tapestry with back lit colour, deep shadows, and soft focus greens and blues. It had fallen from the canopy high above onto a mossy branch. Kologha Forest, Amatole Mountains, South Africa. 22 March 2010.

TREES

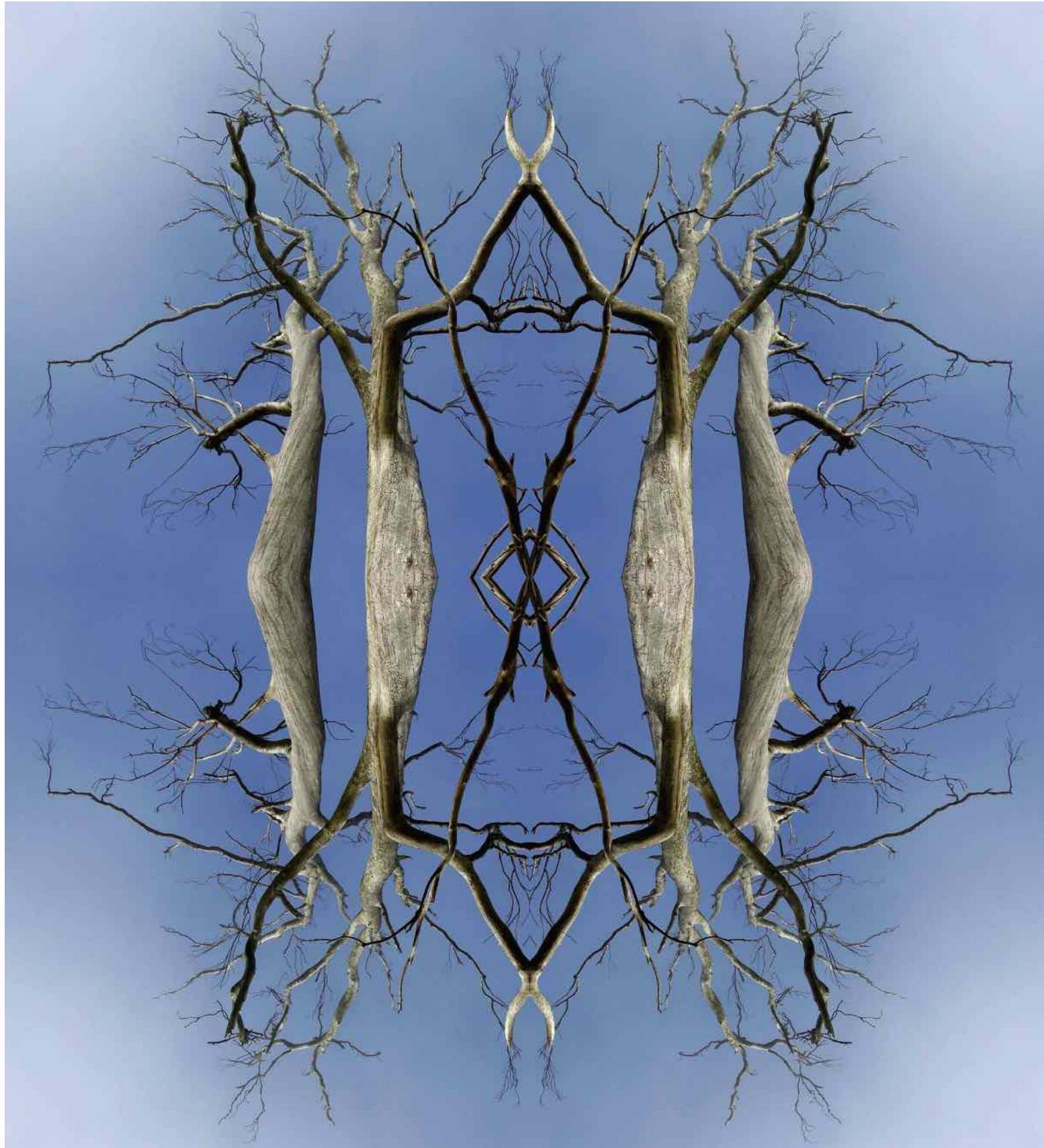


Oldenburgia Gateway. This striking silhouette is a fire blackened Oldenburgia Tree on the southern side of Mountain Drive, Grahamstown. Fire is a natural process on these grasslands and they burn most winters. 5 May 2009.





Dragon Tree Mandala. These exotic trees from Cape Verde are very eye catching. This one lies just outside the main gate of Grahamstown's Botanic Gardens, I pass it nearly every day on my way to and from work. The branches divide after every flowering and they make lovely intricate patterns.
29 October 2013.

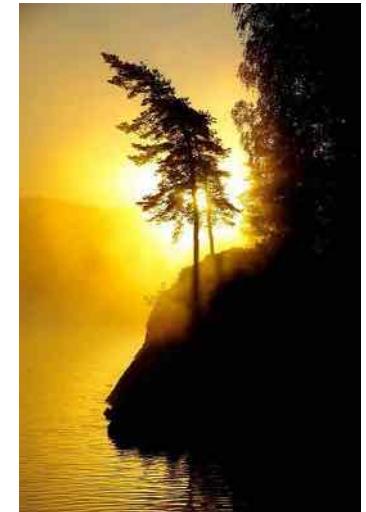


Window to the Sky. The eucalyptus trees on Mountain Drive, Grahamstown, make dramatic shapes. These ones combine to make a skylight. 25 April 2009.





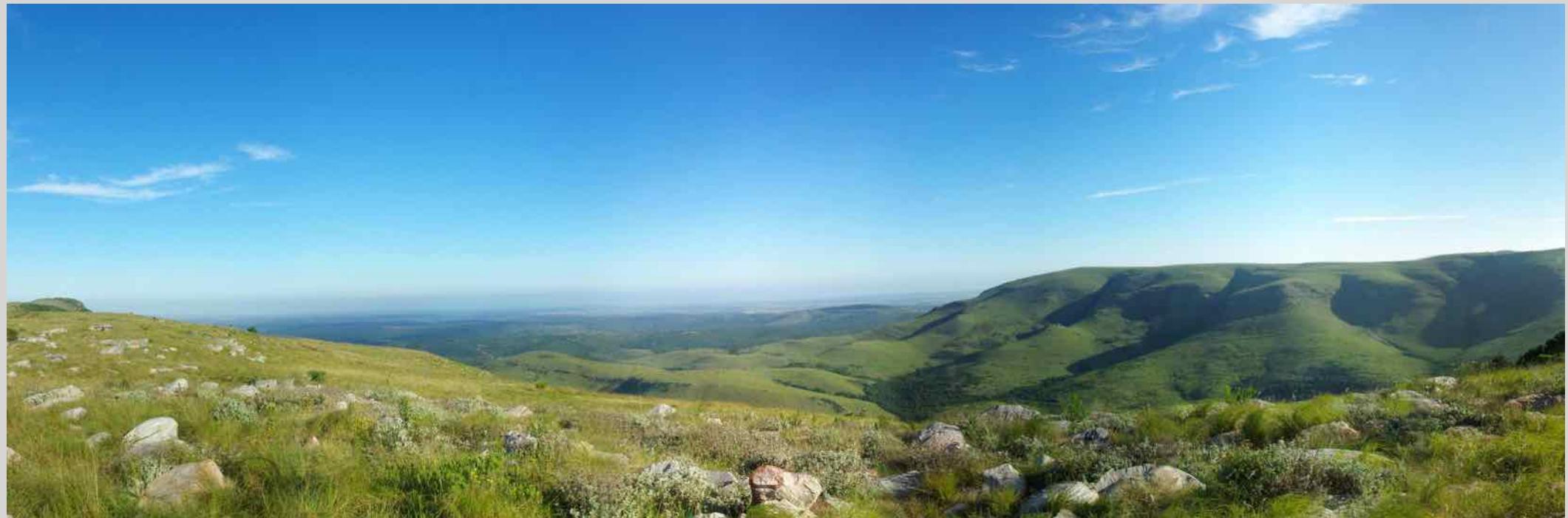
Eye at Sunset. This fir tree makes an elegant curve that forms an eye to gaze at the sun setting beyond Byfjorden. It was taken from the viewpoint above Gustafberg, Uddevalla. 7 May 2010.



Into the Future. Two lone trees bent with the winds stand next to the coastal path at Gustafberg, Uddevalla. The image pulls us to the centre, to the future. 30 September 2009.



SOUTH AFRICAN LANDSCAPES



Mountain Drive, Grahamstown



Mountain Drive, Grahamstown

Photo Locations

Grahamstown: 1, 2, 3, 15, 25, 26, 28, 29-31, 32, 34, 36, 40, 43, 44, 45.

Compassberg: 38-39.

Hogsback: 11-12.

Kologha: 16, 42.



Botanic Gardens, Grahamstown



Hogsback, Amatole Mountains

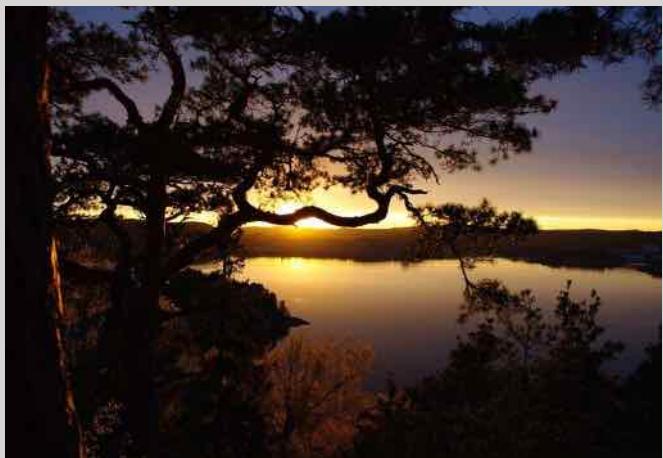


Mountain Drive, Grahamstown

SWEDISH LANDSCAPES



Bäveån River, Äsperöd, Uddevalla



Byfjorden from Gustafsberg, Uddevalla

Photo Locations

Uddevalla: 4, 5, 6, 13, 17, 18, 19, 20-21, 22, 23, 24, 27, 33, 37, 46, 47.

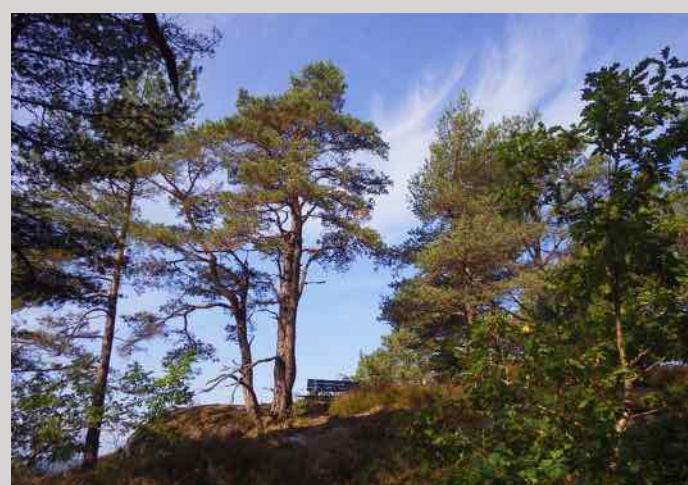
Bassholmen: 14.

Göteborg: 41.

Hundby: 7, 8, 9, 10.



Dalgången, Äsperöd, Uddevalla

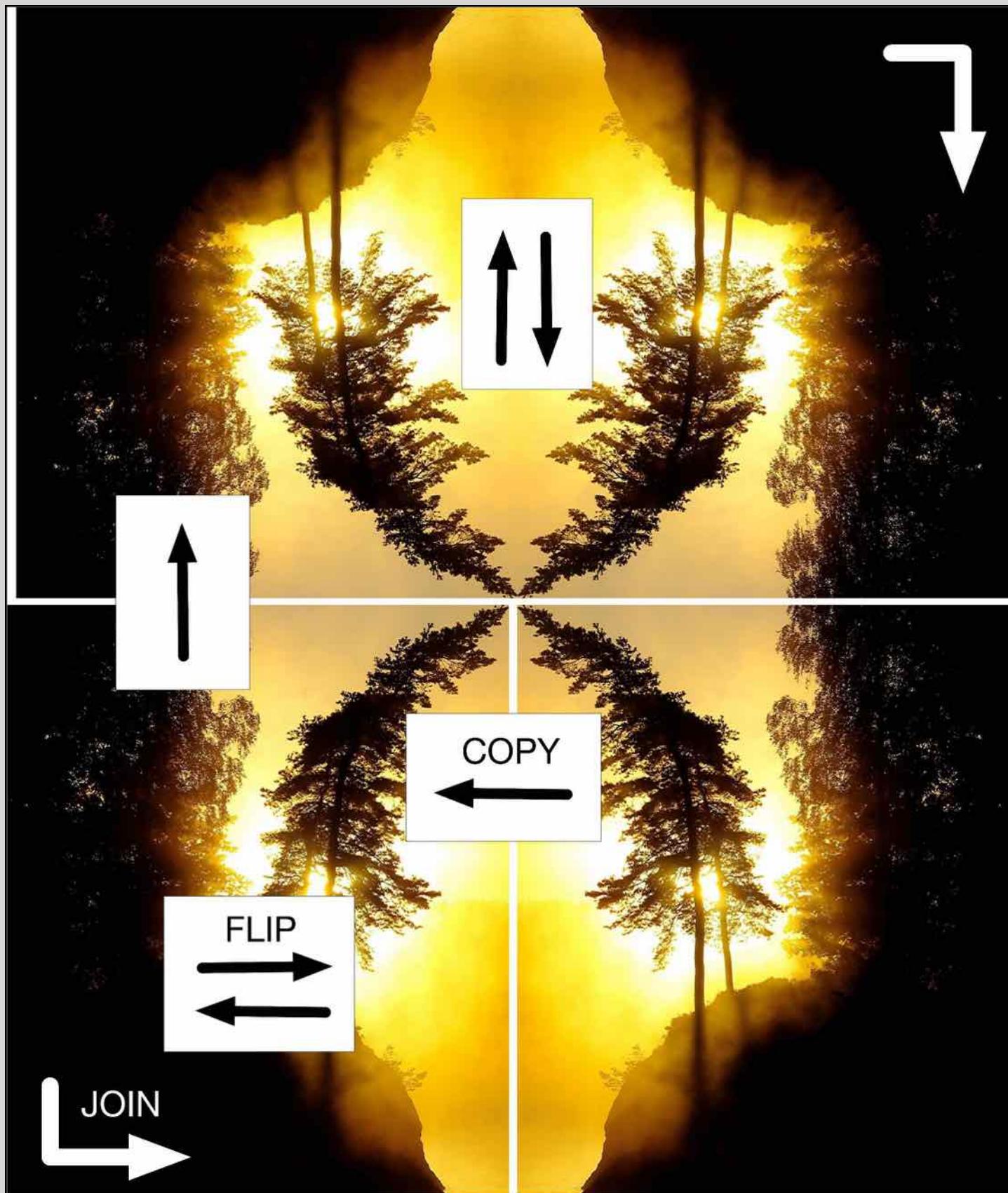


Emaus Lookout, Uddevalla



Stortrön, Hundby

IMAGE CONSTRUCTION



The images are made by cropping an interesting area in the original picture, copying the cropped area, flipping the copy and joining it to the original to make a single symmetrical pair. In the cover image the original crop is at the bottom right of the picture. The symmetrical pair is then copied, flipped and joined in turn so that there are now four joined images. I used Preview for the original cropping and OmniGraffle for the copying, flipping and joining.

TECHNICAL DETAILS

1. *Open Sky*. Pentax K200D with DA 18-250mm lens at 18mm, 1/180 at f6.7, ISO 100.
2. *Steeple of Grasses*. Pentax K200D with DA 18-250mm lens at 70mm, 1/1000 at f11, ISO 200.
3. *Lone Arch*. Pentax K-5 with DA 18-250mm lens at 65mm. 1/160 at f4.5, ISO 3200.
4. *Tracery of Frost*. Pentax K200D with DA 18-250mm lens at 120mm. 1/125 at f27, ISO 100.
5. *Spiders in the Grass*. Pentax K200D with DA 18-250mm lens at 55mm, 1/250 at f8, ISO 100.
6. *Open Eyes*. Pentax K200D with DA 18-250mm lens at 55mm, 1/125 at f8, ISO 100.
7. *In the Depths*. Pentax K-5 with DA 18-250 lens at 65mm, 1/160 at f7.1, ISO 200.
8. *Through the Letter Box*. Pentax K200D with DA 18-250mm lens at 250mm, 1/250 at f6.3, ISO 200.
9. *Beneath the Rock*. Pentax K-5 with DA 18-250 lens at 250mm, 1/160 at f6.3, ISO 400.
10. *Praying Hands*. Pentax K-5 with DA 18-250 lens at 38mm, 1/125 at f4.5, ISO 400.
11. *Tree Hugging Mosses*. Pentax K-200D with DA 18-250 lens at 230mm, 1/180 at f6.3, ISO 1600.
12. *Eye of Moss*. Pentax K-200D with DA 18-250 lens at 250mm, 1/60 at f6.3, ISO 400.
13. *Eye in the Grass*. Pentax K-200D with DA 18-250 lens at 180mm, 1/45 at f6.2, ISO 1600.
14. *Trapped Oak Leaf*. Pentax K-200D with DA 18-250 lens at 200mm, 1/180 at f6.2, ISO 400.
15. *Pearls of Dew*. Pentax K-200D with DA 18-250 lens at 250mm, 1/500 at f9.5, ISO 280.
16. *Diamond Web*. Pentax K-200D with DA 18-250 lens at 250mm, 1/45 at f6.3, ISO 1600.
17. *Dragon Thistles*. Pentax K-200, with DA 18-250 lens at 250mm, 1/750 at f11, ISO 400.
18. *Frosted Brambles*. Pentax K-200D with DA 18-250 lens at 29mm, 1/13 at f5.6, ISO 200.
19. *A-Frame*. Pentax WG-3 GPS, lens at 4.5mm, 1/640 at f7.9, ISO 250.
- 20-21. *Dandelion Arabesque*. Pentax K-200D with DA 18-250 lens at 38mm, 1/125 at f6.7, ISO 140.
22. *Pond Skaters*. Pentax K-200D with DA 18-250 lens at 38mm, 1/125 at f6.7, ISO 140.
23. *Teasel Archway*. Pentax K-200D with DA 18-250 lens at 38mm, 1/125 at f6.7, ISO 140.
24. *Spray of Thistles*. Pentax K-200D with DA 18-250 lens at 55mm, 1/90 at f5.6, ISO 100.
25. *Smiling Bauhinia*. Pentax K-200D with DA 18-250 lens at 250mm, 1/250 at f8, ISO 280.
26. *Maltese Cross*. Pentax K5 with DA 18-250 lens at 145mm, 1/250 at f9, ISO 1600.
27. *Himalayan Balsam*. Pentax K-200D with DA 18-250 lens at 170mm, 1/350 at f9.5, ISO 140.
28. *Hexagonal Hibiscus*. Pentax K5 with DA 18-250 lens at 120mm, 1/1000, f6.3, ISO 160.
29. *Egyptian Eye*. Pentax K-200D with DA 18-250 lens at 250mm, 1/350 at f6.7, ISO 400.
- 30-31. *Lyrical Grace*. Pentax K-200D with DA 18-250 lens at 250mm, 1/250 at f6.3, ISO 1100.
32. *Infinite Lillies*. Pentax WG-3 GPS, focal length 4.5, 1/800, f2.8, ISO 250.
33. *Seagull's Wings*. Pentax K-200D with DA 18-250 lens at 92.5mm, 1/60 at f5.6, ISO 1600.
34. *Alien Eyes*. Pentax K-200D with DA 18-250 lens at 250mm, 1/500 at f9.5, ISO 800.
35. *Cragside Cross*. Pentax K-5 with DA 18-250 lens at 250mm, 1/500 at f7.1, ISO 400.
36. *Raguly Cross*. Pentax K-200D with DA 18-250 lens at 35mm, 1/250 at f4, ISO 200.
37. *Autumn Maples*. Pentax K-200D with DA 18-250 lens at 70mm, 1/125 at f6.7, ISO 100.
- 38-39. *Open Palms*. Olympus C-765 UZ lens at 63mm, 1/400 at f3.7, ISO 64.
40. *Cross of Palms*. Pentax K-200D with DA 18-250 lens at 25mm, 1/90 at f6.7, ISO 1600.
41. *Autumn Jewels*. Pentax K-200D with DA 18-250 lens at 250mm, 1/350 at f8, ISO 800.
42. *Kologha Tapestry*. Pentax K-200D with DA 18-250 lens at 230mm, 1/350 at f8, ISO 560.
43. *Oldenburgia Gateway*. Pentax K-200D with DA 18-250 lens at 32.5mm, 1/750 at f9.5, ISO 280.
44. *Dragon Tree Mandala*. Pentax WG-3 GPS, focal length 4.5, 1/800, f2, ISO 125.
45. *Window to the Sky*. Pentax K-200D with DA 18-250 lens at 18mm, 1/750 at f8, ISO 200.
46. *Eye at Sunset*. Pentax K-200D with DA 18-250 lens at 250mm, 1/350 at f8, ISO 280.
47. *Eye into the Future*. Pentax K-5 with DA 18-250 lens at 77.5mm, 1/750 at f11, ISO 140.





Roddy Fox's nature photography has been published in poetry collections in South Africa and the USA. His work has also been featured in landscape exhibitions and local, South African, newspapers. This is his first photography book.

ISBN 978-0-620-64587-4