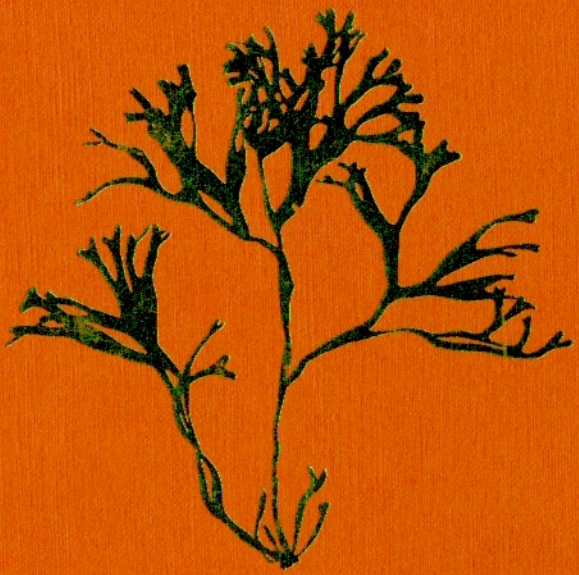

The Seaweed *Collector's Handbook*

Miek Zwamborn

Translated from the Dutch
by Michele Hutchison

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Images on preceding pages:
Diving bell invented by Franz Keßler, around 1600.
Fucus vesiculosus from Hydrophytologiae Regni Neapolitani icones, Neapoli 1829.

At first I saw everything from below,
and then I was algae.

Monika Rinck

The sixteenth-century Dutch fishmonger Adriaan Coenen presented descriptions and paintings of his beach finds enclosed by marquetry-like frames.

3

Tidelines

AND NOW AN IMPORTANT FIGURE appears on the sea stage. He spent his life onshore but knew all about the sea's riches: Adriaan Coenen, a beachcomber from Scheveningen, wholesaler in fish and fish auctioneer. Coenen was born in 1514 and, over the course of his life, produced at least four album portfolios dedicated to whales, marine mammals, fish and other creatures that lived in the seas of Europe.

Three of these illustrated albums have been preserved in their original state: *Visboeck*, *Walvisboeck* and *Haringkoningboeck*. They were never published, but right from the start were considered valuable. Coenen's aquarelles, now faded considerably, were beautifully colourful. He always united the sea creature and its description in a decorative frame, as though to say: 'What you see and read here belongs together forever'. The texts are descriptive and honest. Coenen had never even seen some of the natural phenomena he describes and he admits this in his captions.

He wrote of the strange plants growing on rock and reefs in the sea:

Our fishermen call these beach feathers and catch them in the herring nets. They stick these beach feathers in their hats and when the feathers dry out, they dip them back in the water so that they open up again.

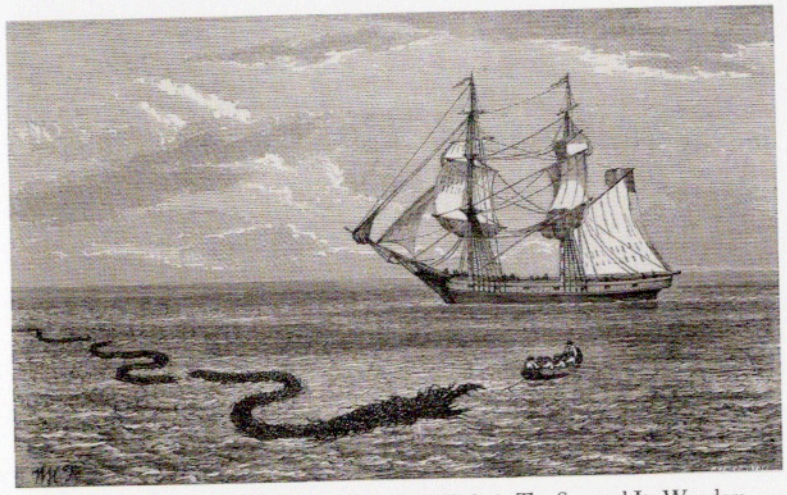
The caption to the following picture reads:

> *These fingers and thumbs, as our fishermen call them, cannot be distinguished from real human hands, except then in colour and because they are plump with moisture. Our fishermen catch them on hooks from a rocky seabed.*

Later in the book, he writes about grapes and dill, by which he probably means bladderwrack:

> *I do not know what kind of plant these grapes can be. I have found them growing on oysters, and usually their berries are dry and empty. I have found some that were as large as two human heads, but also as one human head or smaller ... Dill is a plant or herb that grows on the English cliffs, our fishermen who fish for herring along the coast there have told me. After severe storms, large quantities of this dill end up on the Dutch beaches. Yes, on certain occasions you could load a hundred wagons with the dill along a mile of the coast. When I was young us kids played with it and called it kermes* [freak show], *because it had such strange growths. We made whistles, key cords, and belts from it, because this plant is as tough as leather. It hardly decays, but goes hard in the sun and the sand. This dill has cost the lives of many people who were shipwrecked because they could not swim ashore as a result. The swimmers get entangled in it. Our fishermen also told me that children in Scotland eat this dill, but that is not very believable, even though all countries have their own customs and eccentric tastes.*[6]

In *The Sea and Its Wonders* (1871), Mary and Elizabeth Kirby describe a terrifying sea monster that could easily have made it into Coenen's albums. In ancient travel accounts, sailors often claim to have spotted sea snakes. No one ever got close enough to catch one of these snakes,



The sea monster described by Mary and Elizabeth Kirby in The Sea and Its Wonders.

until one day a ship, whose name has been forgotten, was crossing the ocean. The weather was calm and the captain looked out over the sea. He suddenly noticed a large sea snake. Its body moved up and down through the waves and appeared dozens of metres long. Its giant head was clearly visible, as was the lion's mane that hung around its neck. Within a few minutes the entire crew was on deck observing the monster. The captain was determined not to let it slip like captains before him. He sent some of his men out in a rowing boat to capture the snake with a length of rope and some rifles.

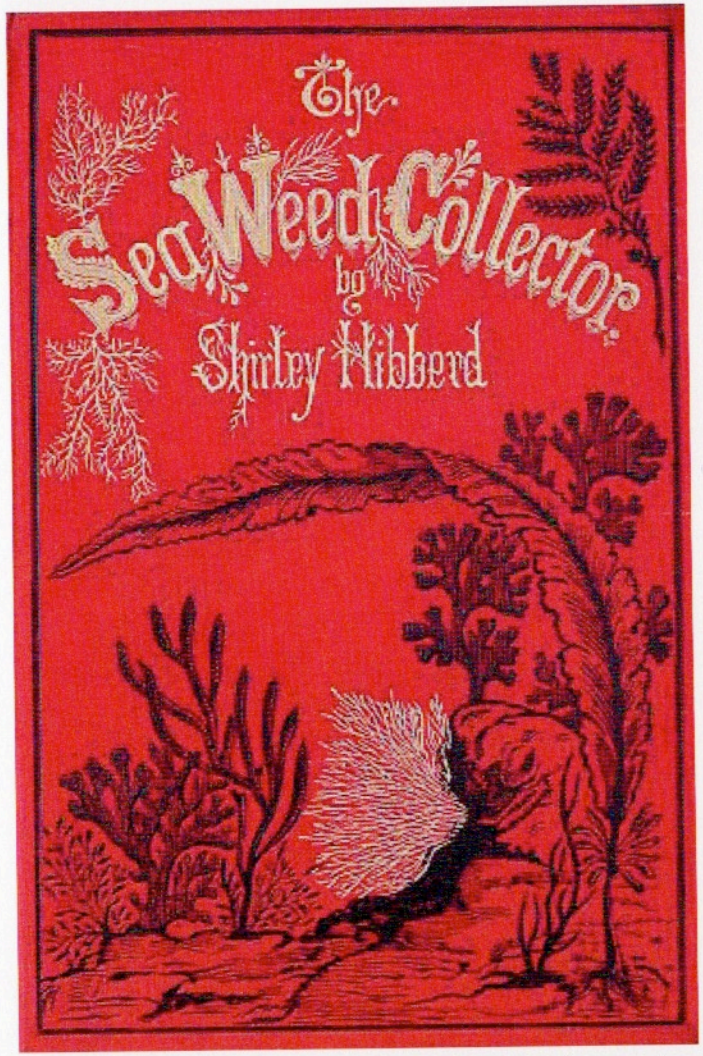
The sailors rowed until they came close to the animal. It was a massive beast that kept diving down and ducking under, but they managed to tie the rope around its neck and, uniting their forces, they dragged the sea snake back to the ship. Once hoisted on deck, the animal turned out to be so covered in shells and other sea creatures that it was not easy to see what kind of animal it was. After the captain

had stabbed his knife in it, it transpired that it was no more than a monstrous piece of seaweed, 30 metres long and 1.2 metres across.

Why does seaweed so appeal to the imagination? Perhaps because it only reveals itself twice a day at low tide. In the meantime it remains mysterious and open to interpretation. What do we think of? Its flexibility, the way it dances, always moving, free of inhibitions? Its elusiveness? Its slippery body? Perhaps we recognize in it a lifeform and source of food that was crucial at an early stage of human development. During excavations in southern Chile, archaeologists discovered remains of various types of seaweed in the fireplaces and graves of a prehistoric settlement on Mount Verde. This discovery led to the theory that the great migration to the American continent did not take place over land but along the coasts, with (dried) seaweed taken along as provisions.

Between 1750 and 1840, a collective enthusiasm for the coast came about in Europe, especially among women. Shells and seaweed were collector's items you could use to recount your journey to the sea. Until then, the nature that was appreciated was mainly heavily cultivated, while seaweed represented untamed, uncultivated nature. It was hidden under water and survived in an environment influenced by the moon. It was untouched and undiscovered. Just as ferns became precious collectors' items in the nineteenth century, so had seaweed taken on a function as an esoteric, subtle counterpart to the eccentric, fragrant, colourful flowers and fruits popular in the century before that.

When dried, seaweed keeps its suppleness more than flowers do. Each dry specimen retains its former elegance, as though the flexibility never disappears from the cells. You can take a strand of seaweed from a herbarium and place it in water. It doesn't matter how old it is,



Shirley Hibberd's book, The Sea Weed Collector *advised Victorian naturalists on 'what to look for and where to go' to study British algae. She recommends going out equipped with 'stout boots, a knife, a lens, a memorandum book and a pencil'.*

it will still regain its former elasticity. A dried leaf from a land plant, on the other hand, cannot tolerate moisture: it starts to mould and soon disintegrates.

It is little wonder those well-to-do ladies cast off their bodices at the beach. At the seaside they were able to give free rein to their thoughts and perhaps their limbs became more supple, as gelatinous as seaweed, due to the stretching exercises its picking required. The fashion in seaside attire underwent a change because a long skirt puts its wearer at risk of stumbling and it is hard to jump from rock to rock wearing smooth-soled pointy shoes. Sitting politely on the beach soon went out of fashion; pulling on their waders, people ventured deeper and deeper into the sea. Those who did not dare simply hired a fisherman. Perhaps this admiration and sensory experience of nature at its wildest was a reaction to the 'picturesque' experience of having viewed landscapes from the sidelines and never really being a part of it. Seaweed collectors also found themselves in a liminal position but didn't just gaze quietly into the distance. They moved through the landscape enjoying themselves before taking home the elegant evidence of their toils.

In 1856, John Leech published a cartoon in the British satirical magazine *Punch*. It depicted Victorian seaweed collectors caught up in the euphoria of gathering it. There they were, all bent over in the same direction, heads obscured. Their underskirts are revealed and you can see their legs. The shape of their bent-over bodies reminds me of the cowhide *Luft und Wasserharnisch* [air and water harness], a design by Franz Keßler from the beginning of the seventeenth century in which one can walk along the seabed beneath a kind of inverted cup. (This is the eccentric drawing reproduced on the first page of this book).

A frequent sight in coastal regions: with their typically bent-over shapes, these seaweed collectors resemble the seashells, barnacles, crabs and seaweed streams they are eagerly searching for. The seaweed-picking mania sketched by John Leech.

Basel University's library contains a stunning seaweed herbarium from 1851. It is a modest book. A red fabric cover with a gold-printed title – *Algae* – encases the 22 blue, green and pink pages. The seaweeds are mounted on small white sheets of paper, slotted into four diagonal cuts like an old-fashioned photo album. Tissue paper covers the delicate specimens.

The album was compiled by Eliza M. French (1809–1889), an American algologist who sold her seaweed samples to collectors. She must have filled hundreds of these albums. Budding tourism and seaweed mania meant great demand. In elegant minuscule handwriting I read the name, place and month in which each individual piece of seaweed was found. The samples look like they were simply plucked from the water and arranged across the page.

American seaweeds collected and mounted by Eliza M. French.

Semi-transparent rice papers cover the specimens like airy summer sheets.

French set to work with endless patience. On the title page, for example, she arranged two garlands of red and green algae by size. A precision that makes me feel uncomfortable. How did she manage to affix this filigree? French loved her material and bent it to her will. Sometimes small irregularities occur, asymmetry, through which the plants display their playful character. For example, the burgundy-coloured *Polysiphoides fucoides* that points to the top left of the page, picked in July, collected at Fort Trumbull at the mouth of the Thames River on Long Island Sound in Connecticut, has been taken out of the water slightly too energetically.

Page 9 from January shows a wine-red *Dasya elegans*, from the East River, New York, with dark winding branches, full in the middle and thinner towards the ends, where a piece of green algae has got entangled. The fifteen-centimetre-long speckled *Delesseria americana*, taken from the Thames River in July, is covered in dark red polka dots. The fragile stipe and the double-folded leaf edges do not seem to consist of plant material but to have been made by a glass blower.

With the utmost caution, I study page 16 with its *Spyridia filamentosa* from Pounder Island, picked in August. The offshoots have become transparent; they seem to emerge from the paper. Page 19 shows a lime-green mossy feathered weed, the leaves of which have been mounted like iron filings. The album is arranged in an idiosyncratic manner. There is no system underlying it, which brings me much closer to the collector than with a field guide, in which the algae are arranged by type. The scalpel with which Eliza French fashioned her seaweeds could be seen as a painting tool.

The album in Basel concludes with a hymn in which seaweed is given a voice:

1

Flowers are we
Of the wild sea
And rocky shore;
Borne by the waves
From hidden caves
When storm clouds lower.

2

Nor sun, nor air,
Nor toil, nor care
Our beauty gave;
Far down below,
Where young pearls grow
Our garlands wave.

3

North winds shake
The chill snow flake
Over the wave
Our fragile forms
Abide the storms
And tempests brave.

4

Flower of earth
Fade at birth
In the summer, say
And the poet breathes
Over pencilled wreathes
His lettered lay.

5

But who shall trace
The passing grace
And melting hue
Of oceans child,
Who treads the wild
Of waters blue!

6

The artist knew
Where Porphyra grew
Of Tyrian clime,
And Ceramia's blush
Hath a brighter flush
For enduring time.

7

Ye may bear us far
As the beaming star
From our mossy home
Yet, a smile we give,
And our crushed hearts live
Where'er we roam.

8

Who love to rove
The verdant grove
For nature's sake,
Come and lave
On the sparkling wave.

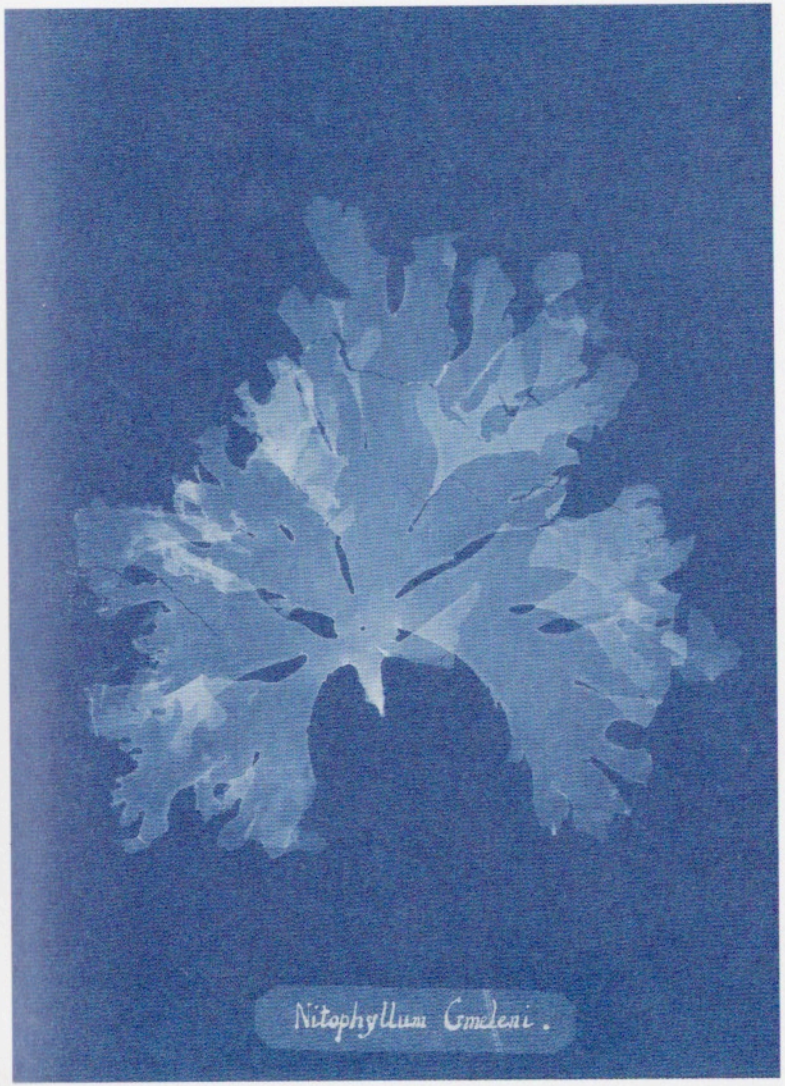
9

And a lesson take.
From the coarse and stern
The heart may turn
For beauty's power;
But, under the dross
Of the stern and coarse
Lie pearl and flower.

Once when I was diving, I came across a knot of iridescent rainbow weed (*Drachiella spectabilis*). I wasn't aware that a voice could crack under water. Anyone walking along the tideline that afternoon would have heard my exclamation of wonder through the pipe of my snorkel. I was startled by the sound I made. The weed glowed. From a certain angle, the fronds looked like it had been sprayed an intense Prussian blue. I cut off a piece, but above water it turned out to be a boring greenish-brown in colour, all enchantment lost.

The seaweeds that Anna Atkins (1799–1871) photographed are bathed in that same deep blue. I saw them for the first time in the library of Kew Gardens. The world's very first photo album focuses on algae. *Photographs of British Algae: Cyanotype Impressions* is the title of the book that is four centimetre thick and consists solely of loose sheets. It was brought in on a trolley. I was handed a green velvet cushion to lay the book on and a long thin bag of sand to hold down the pages. Atkins' book was created under water, each page of it submerged. The sun lit up the paper and the seaweed spread on it blocked the light so that its silhouette emerged during fixation in the rinsing bath. Against their blue background, the algae seem to have been laid back in the sea.

As a girl, Atkins enjoyed an education in the natural sciences that was unusual for her time. Her father, chemist and mineralogist John George Children, taught her at home and ensured that Atkins could progress in the field of biology. At the age of twenty-four, she made the illustrations for his translation of Lamarck's *Genera of Shells*. The 250 highly detailed shells demonstrate Atkins' talent, her patience and dedication. Encouraged by William Fox Talbot, inventor of negative



An almost transparent red exotic species, photographed using cyanotype technique by Anna Atkins, floats between science and art.

processing in photography and a friend of her father's, Anna Atkins became proficient in preparing 'cyanotypes', the blueprints invented by Sir John Herschel. She prepared her own paper by applying a mixture of ferrous ammonium citrate and potassium hexacyanoferrate with a sponge. The paper was hung to dry in a darkened room and was ready for use after a few hours. Exactly what the following steps were remains guesswork. There are no pictures of Atkins in action, only a portrait of her in her old age in which she is looking away from the camera, one pale hand restless on a chair, the other hidden in the folds of her striped skirt.

Larry J. Schaaf, who published a facsimile edition of Atkins' prints, *Sun Gardens*, believes that she stripped the seaweed of sand and growths in the sea and, once she got home, immediately continued its preparation with scissors, dissecting forceps and a camel-hair brush. Once cleaned, the weeds were arranged on a piece of paper in a bowl of water, lifted up out of the water still on the paper and then sandwiched in a press between sheets of blotting paper. After a few days, the specimens were dry and ready for exposure. Atkins probably worked well ahead, waiting for the sun so that she could take several impressions on clear days. Her preparations were not only home-made; she was sent dried algae from all over the world through her father's network.

The photosensitive paper is exposed for between five and fifteen minutes depending on the weather. In 1843 she wrote in the introduction to *Photographs of British Algae*, 'The difficulty of making accurate drawings of objects so minute as many of the Algae and Confervae has induced me to avail myself of Sir John Herschel's beautiful process of cyanotype to obtain impressions of the plants themselves, which I have much pleasure in offering to my botanical friends.' Atkins became the first person in history to use the cyanotype technique in

photography. She released her recordings in limited editions and can boast of being the author of the very first published book of photographs. This was the first time a book with illustrations was copied single-handedly and without a printing press. Thirteen copies are known to exist, containing hundreds of unique recordings, created over a ten-year period. The printed species are sometimes large, laid out from the top left to the bottom right, or small and arranged in the middle, making the seaweed seem to float in a sea of infinite depth. However, as scientific records, they fall short. Precisely because of their lack of date and location, the simplicity and intimacy of Atkins' compositions, their transparency, the lack of detailed representation on those radiant blue pages, the algae are given the space to spread out and enchant.

More than 170 years later, the blueprints have lost none of their beauty. It is as though, after seeing them in Kew, they have spread beyond the bounds of the book. Their holdfasts have fixed themselves somewhere inside of me. At odd times they rise up in my mind's eye, floating on the undercurrents of my memory. Should these images ever escape my mind, one of Atkins' editions, with a total of 307 seaweed species, has recently been added to the Rijksmuseum's collection in Amsterdam.

After seaweed's starring role in early photography it also appeared in 35mm film recordings at the beginning of the twentieth century. In his experimental film *H2O*, American filmmaker Ralph Steiner (1899–1986) focused on water surfaces. His film, released in 1929, the first part of a triptych, is a true immersion and silent ode to water's ripples, waves, rays, circles and dimples, orchestrated by wind and

light. Shortly after that, in 1931, his twelve-minute *Surf and Seaweed* was released. Much later, in 1960, he added a soundtrack and called it *Seaweed, A Seduction*.

Steiner focused his camera on the irregular force of the waves; the way the sea rushes ashore and winds back after every roller. After six minutes, the focus shifts from surf to bladderwrack. The water in between the weed looks like luminous white tubes, as if hundreds of glow-worms were hiding there. Seaweed becomes, thanks to Steiner's lens, a leaden substance, neither liquid nor solid. Slowly rippling, it breaks through the sea's surface, almost reticent, but at the same time lascivious in its twists and turns. The soft rubbing and pulsing of the bladderwrack makes for an almost sensuous image, a sensual play between algae and water. The film ends with the sea washing back across the magical bank of seaweed and the wind spinning long white threads from the water.

It was 'that joy of seeing' that inspired Steiner to shoot his first film, indicating that the beauty of objects and the moment of seeing (in other words, the visual experience) was primary to his work, continuing the naturalist tradition in a new medium.

Rougher in nature and more complex in its construction, but also picking up on the beauty of seaweed is *Man of Aran*, an Irish documentary directed by Robert J. Flaherty, which premiered in grand style in London on 25 April 1934. One of the windows of the Gaumont-British cinema even housed a giant stuffed shark for the occasion. The documentary garnered much criticism because it did not offer a realistic up-to-date image of Aran. The family members who played the leading characters turned out not to be related to each other and the shark fishermen had already forgotten the tricks of their trade. When commotion arose after the screening and the film's veracity was brought into question, Flaherty said, 'One often has distort a thing to catch its true spirit.'

That same year, the film won the Coppa Mussolini (Golden Lion), the prize for best foreign entry at the Venice Film Festival. One winter's afternoon, I put on *Man of Aran*, in a similar black-and-white coloured landscape, and I follow the young family, dressed in wool, fighting the elements. Halfway through the film, seaweed is harvested, not on a calm day, but in the middle of a storm. It blows in all directions. With superhuman effort, a field is laid on one of the bare cliffs. People scratch earth out of the grooves between the rocks, where the seaweed and stones crushed with a heavy hammer, are raked into long thin beds. It is a scene that exaggerates reality, but the

'The Seaweed Gatherer' – a still from Robert J. Flaherty's 1943 film, Man of Aran.

devotion with which new land is won, the striving to make something grow there, moves me. I would like to believe in an indestructible human being who can survive in an extreme environment featuring seaweed.

In early film history, seaweed plays starring role after starring role. Hands filled with kelp swish past in Jean Epstein's 1929 film *Finis Terrae* in which four fishermen camp out on the French island of Bannec to harvest seaweed for three months. They pile up the seaweed and hope that by burning it in the correct manner, they will produce valuable ash. A fight arises in which one of the boys, Ambroise, injures his thumb. He tries to leave the island but fails because of the wind and the pain of his wound. On the neighbouring island of Ushant, people wonder why, on Bannec, only one mound of weed is burning. The alarm is raised and the doctor sails over. Because of the thick fog, he does not notice that he is passing a boat. Jean-Marie, the instigator of the fight, is able to hand over the collapsing Ambroise to him just in time. In the final scene, Jean-Marie sits at Ambroise's bedside and holds him tight.

Epstein shot five films about the sea in his lifetime. He claimed to 'fear and worship the sea. She encourages me to do what I am most afraid of.' Aside from one, all of his films are set on the Brittany coast. Like the rhythm of the tides, which he focused on in his work, he was drawn back and forth to that region.

Finis Terrae was produced without professional actors. Much of the camera work is hand-held and Epstein often added slow-motion montages. He believed that film could show us the fundamental objective truth that is usually overshadowed by subjectivity. In various interviews he said that he swore by what was also the French word for camera lens: *objectif*. The untouched coast enabled him to grasp the

elements in their wild simplicity: the strong, linked arms of the boys, a fluttering hair ribbon, the physicality of life, the undisturbed rocks and many moods of the sea. Jean Epstein offered the viewer – or still does, at least his films have this effect on me – an escape from the alienation of the modern world. In addition, the filmmaker had his own reason to look for alternatives. Under the pseudonym of 'Alfred Kléber' he wrote an essay, 'Ganymède', about homosexual ethics, which was only attributed to him after his death. In the previous Catholic-Church-dominated century, fishermen were more or less sheltered from the strict regime due to their irregular sailing times. In the parallel world of male-controlled fishing, intimate friendships flourished. *Finis Terrae* can thus also be considered a parable: two young men who slowly give in to each other's love, with thanks to the kelp.

Knockvologan, June 17 2017

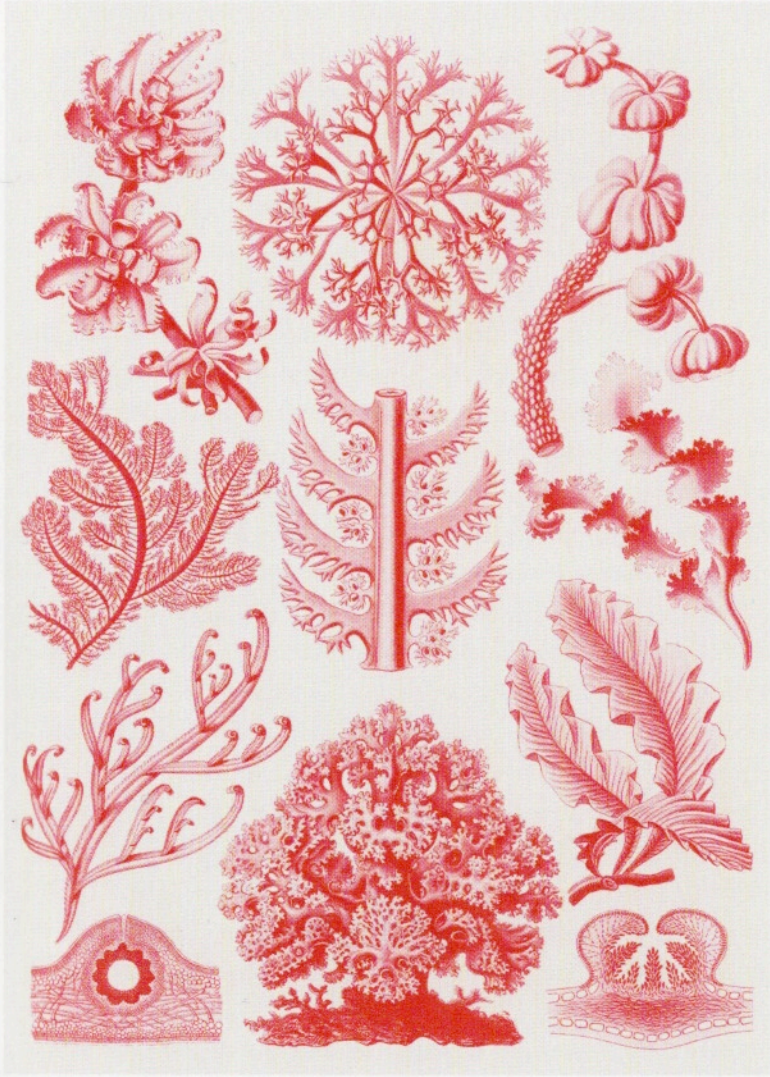
Yesterday's ebb was at 4.06pm. I waited for the first wave to launch the turn of the tide and searched for red seaweed in the surf. Red seaweed is rarely beached intact, its fronds are often battered or faded in colour so that you can see the sand through them, or other algae that happen to be drifting by in the current. Sometimes the remaining pigment appears to have imploded, turning the seaweed deep red, magenta or fluorescent orange. Appropriately the word 'fluorescent' is derived from the Latin *fluere*, which means 'flowing'.

In the shallow water, the seaweeds appear to be taking part in an artistic diving competition. In slow motion, each individual copy shows itself in different positions: wide-ranging, folded or twisted. Here, lower plants carry out swallow dives, double somersaults and twists to Olympic perfection.

The same movements take place later in the day in a stainless steel sink where, after lots of practice, I place algae on loose sheets of paper. I arrange the pieces one by one above the submerged white paper using a long needle. First the algae must be untangled with the needle. It reacts immediately to touch, swishes the other way and takes on a new shape. I'm sketching under water. A piece of Irish moss that had been floating a second ago touches the edge of the paper. Its tip flips over, no worries, back under water. Again and again, the needle picks up the final fork. Once the last frond has descended, I very carefully pull the paper up at an angle. I lift the wet sheet by its corners and lay the preparation to dry on a towel before covering it with tulle and tissue paper, and pressing down, otherwise it will stick. Plenty can still go wrong, I know by now that seaweed is unruly.

The red seaweed called laver is one of the most difficult types to dry. It shrinks terribly, tugs at the paper and rolls it up exasperatingly, seaweed and all. Anyone wanting to start a collection would be better off trying brown algae. Rinsed in salt water you can simply hang it over the shower rail or lay it on a rug in your living room to dry. It stands out beautifully against a whitewashed wall.

In one of the Victoria and Albert Museum's white high-ceilinged rooms, Julia Lohmann is examining a green semi-translucent structure. 'Naga kelp is extremely elastic and sticky,' Lohmann says as though the green shape she is holding has formed itself. The hollow strips of aluminium, reed and seaweed are reminiscent of the architectural plant studies made by photographer Karl Blossfeldt, but also of Ernst Haeckel's detailed drawings. Under Lohmann's leadership, all these individual components have been brought together in an impressive



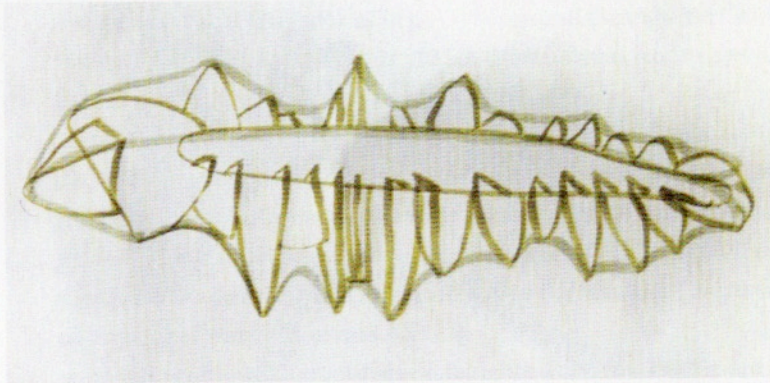
Ernst Haeckel carried out field research on Helgoland as a medical student, alongside his professor, Johannes Müller, fuelling a life-long love of seaweed and jellyfish.

sculpture called *Oki Naganode*, which has since travelled to all the major European museums.

Lohmann is a designer and one of the pioneers of the international seaweed industry; her focus is on innovation. In 2007, she visited a kelp farm in Hokkaido in northern Japan, where most of the *nori* sheets come from. She was surprised that kelp was not used as a building material. In a country where seaweed is part of the food culture, other uses of kelp had not occurred to anyone.

In 2013, during a residency at the Victoria and Albert Museum in London, she founded the Department of Seaweed, initially a platform for exchanging knowledge about seaweed and exploring it as a material. By now, the Department of Seaweed has grown into a collective research project for which she will soon be awarded a PhD. Her dissertation focuses on the social role of designers and the applications of seaweed in contemporary design. In addition to reporting on attractive experiments, she argues for sharing acquired knowledge. 'Seaweed as a material cannot be compared with any other raw material,' says Lohmann. 'So we shouldn't look at other industries, but develop new, clean processes.' A small circle of specialists brought together by Lohmann works at the Department of Seaweed: students from the Design Academy in Eindhoven and HFBK in Hamburg, a French textile designer, a New Zealand carpenter and a British anthropologist. 'The first ring,' she calls them. 'It's funny,' says Lohmann, 'I'm getting more and more convinced that seaweed selects people rather than the other way round.'

Over time, Lohmann hopes to expand the department to work with more seaweed colleagues worldwide. Seaweed is a material that is ideally suited for making connections and forming colonies.



A sketch of Oki Naganode from Julia Lohmann's dissertation. The complex seaweed construction stands solidly on the ground but looks more springy than a trampoline.

Her working method is reminiscent of the way in which seaweed multiplies.

It seems that seaweed has been used throughout history in many coastal cultures to make objects, but since the material is perishable they have not been preserved. The objects might also have been so mundane that their use wasn't transmitted orally or in writing. Moreover, a large proportion of the people who used these objects were unable to write.

'Washed away by the tide,' Lohmann says, aptly. And not only have the objects become lost but also the craftsmanship has disappeared. Lohmann is trying to pump life back into these techniques. Kelp inspires her as a raw material for applications, for example as a veneer, and she tries to process it so that it remains flexible and transparent and she can model it.

The woodcut produced between 1810 and 1850 by Kubo Shunman shows three different algae and haikus by Haikai Utaba, Takarabune and Gurendô Nakakubo.

In addition to the precise scientific drawings that were produced in the West, there are oriental drawings in which algae have a different symbolism. The art of capturing the essence of things, not reproducing something to perfection but sketching it in all its simplicity, was regarded as the highest pursuit of an artist during the Western (206–208 BC) and the Eastern Han dynasties (25 BC to AD 220). In China in these periods, Zen poems were written in a loose *caoshu* or cursive script, with simple, sketchy forms of the individual characters. The poets chose the thinnest rice paper, which meant that they had to start all over again after the smallest mistake, because it was impossible to erase anything from the delicate paper. In this way, masters and mistresses tried to give an impression of spontaneity, both in terms of content and technique.

Centuries later, between 1730 and 1880, coloured woodcuts called *surimonos* were produced in Japan. The Rijksmuseum in Amsterdam owns two such *surimonos* on which seaweed is depicted in combination with cursive script: a still life, and a lobster's feeler with a bit of seaweed on it. A *surimono* is a luxuriously executed print with images combined with one or more poems. Thick paper, blind printing and metal pigments, such as copper and silver powder, are often used in the printing. The prints were usually commissioned by poets and served as an exclusive gift to friends and business relations.

Seaweed almost always suggests prosperity in Japanese poetry. In classical poetry there is often talk of *tamamo*, which is usually translated as 'valuable seaweed' or 'gemweed', but it is unclear whether this meant a specific seaweed or not.

The haikus on the *surimono* with the lobster feeler all refer to the New Year. Perhaps the depicted crustacean was served as one of the

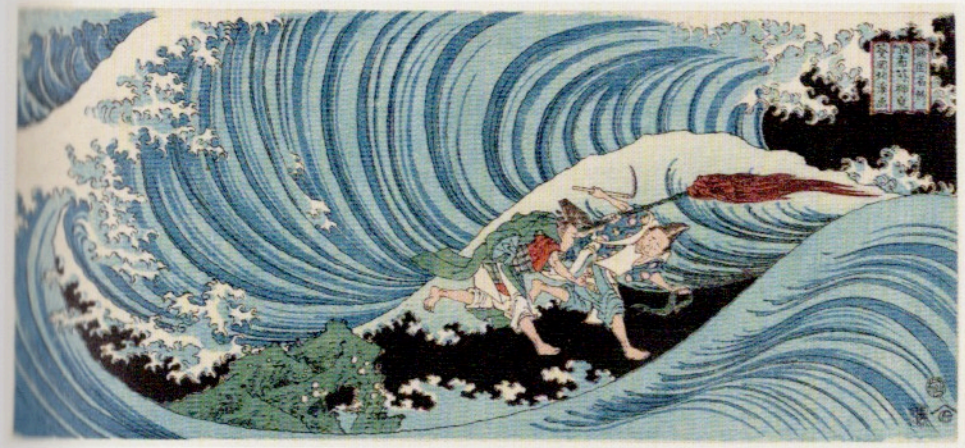
finest parts of a *osechi-ryōri* party dish. One of the haikus on this print reads:

Let us beg the old
bamboo-cutter for this:
bamboo decorations.

For New Year in Japan, the gates of important buildings and the doorposts of houses are hung with garlands made of bamboo, a symbol of prosperity and longevity. Seaweed decorations are also often added.

New Year and seaweed are connected in an even closer way. In the city of Kitakyūshū, which overlooks the Hayatomo mountain in the province of Fukuoka, the following ritual has been performed for centuries. On the first day of the new year, at sunrise, three priests walk into the icy water to cut seaweed, at the mercy of the currents and the tide and with only a torch to light their way. The freshly picked *wakame*, the first of the year, is offered to the gods on the Mekari altar. It is believed that the fresh seaweed will bring good luck for the new year. In the past, the Mekari ceremony was performed in secret; nowadays, you can witness it from a distance.

The Japanese word *ukiyo* has its origins in Buddhism and once expressed the transient, fleeting nature of reality. Literally it means 'floating world'. In the mid-eighteenth century, woodcuts made in the *ukiyo* style became popular in Europe. They had a major influence on the European fin de siècle art world. Gradually, the term came to refer to a restless searching for the transitory joys of life. These days, the meaning of *ukiyo* has transformed further to 'dangerous life' and 'dare to live'.



The Seaweed Harvest Ritual in Nagato *by Totoya Hokkei.*

This *ukiyo-e* bears the title *The Seaweed Harvest Ritual in Nagato* and is part of the 'Famous Places in the Provinces' series by Totoya Hokkei (1780–1850), made around 1834. You can immediately see that harvesting is a dangerous task. A high wave rolls over the two seaweed pickers; they run for their lives as they gallop together through the curl of the wave reminiscent of Hokusai's *The Great Wave of Kanagawa*. Hokusai was Hokkei's teacher. Is the figure on the left wearing a jacket, or has he placed a large *kombu* around his shoulders? Beneath the wave, we see the green of his mantle reflected, or is that seaweed too?

Japanese poets from the Edo period experienced a devilish pleasure in shortening and distorting their *kana* (syllabic scriptures) in all possible and impossible ways, in accordance with their own handwriting. Apparently there were few rules. Hokusai too distorted the usual characters, producing them sometimes one way and at other times another.

The *surimono* illustrated on page 50 was composed as a still life with algae. Its verses includes New Year wishes and reflections on the richness of the sea and are again full of wordplay and double meanings. *Miru* in the first verse is a kind of seaweed but also means 'seeing'. *Arame* is the name of another species and also means 'if only we had', and *nanoriso* is also a kind of seaweed, but the declension used here means 'saying your name'.

If only we had
seashells and seaweed!
– Gūrendō

Ship's sails from Edo,
one by one –
boats full of treasure.

Oh how stunning
to see them sail there!

Like red coral when the poets announce their names
for the poetry session

All neatly in a row in the treasure ship
cranes and tortoises too,
to inspire you, sir, to longevity.[7]

The verses were probably addressed to the emperor or some other nobleman.

After an afternoon's beachcombing I see the silhouettes of the algae spread on the sand projected on the inside of my eyelids at night before I fall asleep: green and red, brighter than in reality. The seaweed floats freely inside my head, like the colourful stickers I stuck to the car's windows as a child.

In Amsterdam, I visit 'Matisse's Oasis', a retrospective in which the artist's work is linked to that of contemporaries such as Malevich, Mondrian, Cézanne, Seurat, Kirchner, Picasso, Rothko, Van Gogh and Manet. Each of these masters steered their own course and developed works in which the real world was made abstract. Henri Matisse was inspired by the many forms seaweed takes during a trip to Tahiti and, once he was back in his studio, he began to paint shapes that reminded him of the exuberant flora and fauna of the island. Birds, corals, fish, jellyfish, sponges were simplified into colourful symbols that came together in dreamy images freed from the restraints of gravity.

In 1941, Matisse was bedridden for months following a stomach operation. Painting became impossible. Assisted by Monique Bourgeois, a young nurse, Matisse developed a new working method by cutting shapes out of paper instead of using a brush on canvas. Bourgeois coloured the papers for him. She held up the clippings against the wall opposite Matisse and pinned them up according to his instructions. That is how his first series of collages was created, out of necessity. If you look at them from close up, there are little jags everywhere in the clippings. The lines do not merge seamlessly with each other. Curves behave in a contrary fashion, but the shapes still come together, falteringly, not exactly streamlined. The silhouettes have clearly grown from scissors and paper. Matisse continued to cherish the dynamics of cutting and the growth of his silhouettes. It is precisely this irregularity in the forms that makes his compositions so lively.

In 1943, long after Matisse had been declared cured, Monique Bourgeois decided to join the Dominican sisters of Vence convent, close to where she had nursed and assisted Matisse. A couple of years later, in 1947, Sister Jacques-Marie, as she was now called, showed Matisse her sketch for a stained glass window. She told him that the sisters wanted to have a new monastery chapel built, the Rosary Chapel. Matisse had never been a member of a church and had no experience of religious art, but the thought of designing a window appealed to him so much that he suggested making the design for it. It turned out to be more than just a design for a single window: for four years he worked on what he himself later would regard as his masterpiece. Matisse painted a Madonna and Child on the white wall tiles of the chapel with sparing black brushstrokes, and designed the pews and the floor. The chasubles were the last to be designed. These robes are made of fabrics that Matisse picked out himself and were sewn under his supervision at the Dominican sisters' Atelier d'Arts Appliqués in Cannes.

In 1952, the designs for the chasubles, which traditionally each have a different colour (aside from red, they are also green, white, purple, black and gold, relating to the ecclesiastic liturgy), were still hanging on the wall at Matisse's home. They were admired by visitors such as Picasso and compared with pinned butterflies. Alfred Barr, author of the first standard work on Matisse, counted them among his purest works.[8]

The chasubles are still worn for Pentecost and on the martyrs' name days. Then the Vence Chapel is transformed by a play of colours as daylight is projected onto the stone floor through the stained glass drawings. Seaweed made of light. The simple black lines, painted by Matisse on the wall, are illuminated by radiant yellow and green

Matisse's studio in Villa le Rêve, Vence, May 1948.

sunlight streaming in through the windows. The priest's slow gait and arm movements allow Matisse's forms on the chasuble to move freely through the space, bright and autonomous within a complete oneness.

The sea begins somewhere else each day. I head for the surf in a straight line. The waves of the retreating tide have whipped up the sand. My feet sink into it. I wade through knee-deep water and feel the cold sea seep in through the holes in the knees and elbows of my wetsuit. Beyond the island of bladderwrack, I make my first crawl strokes.

In the sea, one writes without chair legs, footstool and desk. There is no slow work, no more staring out of the window or eating apples. As an underwater writer you have to discard everything, be submissive, strap on lead blocks; otherwise, you will float back up to the surface and all the newly written words will ebb away.

The forest that I swim through is powerful. The algae seem to be driven by a mysterious current, they calmly wave back and forth. While snorkelling in the bay I lose all sense of scale. I have never seen a landscape so slowly and completely in motion. Loose fronds float past below and above me. Many are almost transparent, but none of them look lifeless. Jagged leaf edges, torn-off stems, broken-away holdfast, only out of the water does the seaweed surrender to the test of time and shrink away. Decay is nowhere to be seen under water.

To my left and right I can see in the corner of my eye how algae each have their own substrate and territory. I try to concentrate on the different stages of development and investigate various clusters for their shape and size. I look around as I hold on, slowly flippering,

one hand clutching onto a rock. The sea here is so clear that the sun projects the rippling surface onto the bottom. Everything is moving: the water, the rays of light, the seabed, the seaweed and the creatures. Two young dabs shoot away, the red tentacles of the mottled anemones waft back and forth, and a small school of needlefish hide when my other hand creates a shadow. On the algae I see other algae. I run my fingers over a kelp leaf with a delicate brocade of *Obelia geniculata* attached to it. I do not pick it, even though I can barely resist doing so. Millions of zoospores and gametes around me are already on their way to creating a new generation. All these travelling particles that carry life within them and will settle on the seabed or some other surface have a strange effect on me. Will they settle on me too? Is the water making me permeable? In all this interconnectedness, you might see an example of an ideal world in which species are tolerant and offer each other holdfast in the current in order to survive. Pure symbiosis.

Knockvologan, 15 August 2019

'Form forms forms,' says designer Maria Blaisse as she lifts a dripping *Saccorhiza polyschides* from the surf at Bàgh a' Chnoic Mhaoileanaich. 'Look, everything is so precisely in tune,' she continues, showing me the weed's undulating character by cutting open the stipe with a penknife. Her voice is rapturous. 'If you run your finger along the ruffles from this kelp's base, they will lead you back to the inner spiral, which has caused the edges to curl.'

For two weeks we collect and study freshly washed-up brown algae and wade past the banks of weed on the rocks to explore seaweed's

Seaweed, knitted and felted from the series Onda *by Maria Blaisse.*

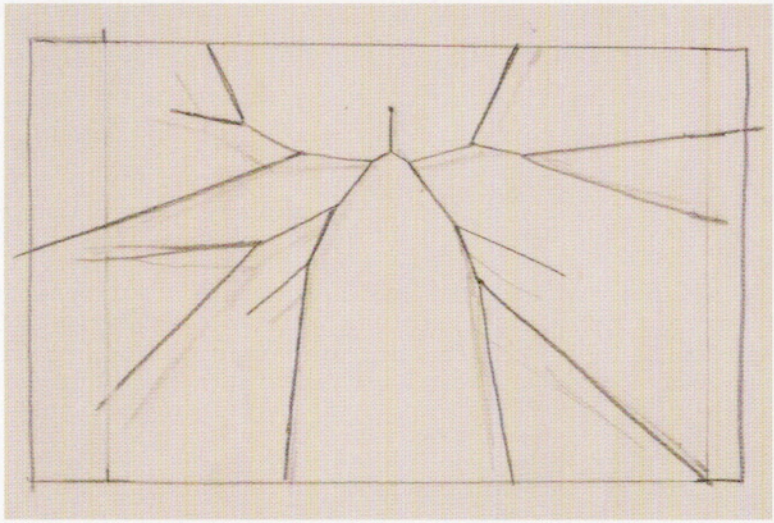
ability to stand up to whatever the directional pull of the current. The curling stems channel water upwards, allowing the plants to rise up in immense intertidal forces and replenish themselves with daylight.

Blaisse seeks the potential qualities of the materials she uses and is fascinated by their inherent movement. Since the 1980s, she has been exploring and developing numerous curved shapes, such as wearable sculptures that wrap themselves naturally around the wearer's head or body. The forms are highly architectural.

Her pieces are all variations based on the emergence of form from the concave and convex parts of a doughnut shape. Blaisse's work is a continuous dialogue with materials, precise observations, analysis, humour and her response to an overdesigned world. Her aim is to incite a flow of continuous creation, to develop work that is alive and alert, and to invite designers to move beyond waste.

The American painter Ellsworth Kelly had started studying Fine Art at the Brooklyn Academy when he was sent to France as a soldier during the Second World War. He served with the 603rd Engineers Camouflage Battalion, also known as the 'Ghost Army', and was involved in the camouflage of military installations and subterfuge manoeuvres and decoys to mislead the enemy.

Undoubtedly influenced by the precision that camouflage requires in a specific area in two and three dimensions, Kelly's pursuit of concrete forms that do not represent anything but are purely formal is understandable. In the mid-1940s, Kelly started making line drawings of plants and flowers. His plant studies are mainly contour drawings of leaves, stems and flowers, entrusted to the paper in flowing, striking lines. However minimal, Kelly's work is extremely dynamic in nature.



A challenge for seaweed to maintain its symmetry in an empty sea. Ellsworth Kelly's Study for Seaweed, *1949.*

The plant forms are captured in firm lines. Kelly copied the parts using tracing paper. During the war years, his eyes became trained in light and dark, foreground and background, shape contrasts and camouflage colours, a specialism that he began to apply in his own work. Subject and ground come together in this series. It is a flat kind of reality, but brimming with vitality and, no matter how much white there is on the page, his work never resembles a sterile herbarium.

Between 1947 and 1949, Kelly drew a selection of seaweeds. For his *Study for Seaweed*, he stuck a piece of kelp to the door of his Breton cottage in Belle-Île. He wanted his drawing to be as pure as possible. The shadow lines, which may only be pentimenti and actually concern a correction because the kelp did not end up in the middle of the paper, are allowed to remain. The image thus appears like a cut-out,

but because Kelly has framed the entire plant the algae gains an ambiguous quality. It is fixed and free at the same time, reflecting the way that kelp anchors itself to the substrate.

When a hailstorm breaks out over the beach, the hail starts by filling up the ripples in the sand. The waves from earlier are now marked out; a wave of hailstones above a wave made of sand. Wind lashes the hail low across the mudflats towards the surf; seaweed blocks its path, causing a pileup. I watch the bouncing balls. On the windy side, the seaweed turns increasingly white. The hail accumulates until letters seem to appear; an as-yet-unreadable text is written on the beach in compressed ice. Each piece of beached seaweed generates a different font. Kelp stretches letters into capitals, while strands of rockweed make notes in italics. Larger hailstones are attracted to larger algae, smaller hailstones to smaller algae. When I walk back half an hour later, the text has moved along a little and the white shadowy edges around the seaweed have been erased.