

Dirty Butter***Artificial Selection* by Elize Vossstätter**

In 1880, a German pharmacist named George Grübler started a business in Leipzig, manufacturing a dye called gentian violet. The name came from the *Gentiana*, a genus of flowering plants with petals ranging from deep blue through indigo to the end of the spectrum; but the colour was entirely synthetic. Gentian violet was one of the aniline dyes that emerged in quick succession after the discovery of mauveine in the mid-19th century. Colour was denaturalised, industrialised: no longer just a precious pigment extracted from the natural world, but now also something mass-produced by chemists fiddling with molecules, and sold by the tonne to the garment industry.

Grübler sold his dye mainly to biologists for histological staining: i.e. to stain cell walls, organelles and chromosomes, so as to probe their microscopic structure. Gentian violet was used by early geneticists and the cancer researchers who developed chemotherapy. Today it remains vital in the classification of bacteria, producing slides stippled with pink and purplish specks.

Using artificial colour to render complex or intractable natural structures is not dissimilar to the way climatologists code weather maps (with new shades of violet for unprecedented heat waves as we move further into the Anthropocene). Or, at the other end of the scale, the way astronomers picture impossibly distant phenomena via 'false colour' images. Arbitrary palettes are assigned to encode intensities and wavelengths lying outside human apprehension – the ultraviolets and distant radio galaxies that show up as tiny flecks or blurry chromosomes.

From cell walls to climate models, from microscopes to telescopes – binding colour to biophysical structure is a way of making visible those natural orders, and disorders, which are too small or too large for our understanding, which do not work at the human scale. 'The images I am interested in show us things that we can't possibly be seeing,' writes James Elkins in his reflection on the visual grammar of modern science: 'In things so far away, so faint, so large or soft or bright that they couldn't possibly be contained in the rectangular frame of a picture – and yet they are.'

In Elize Vossstätter's *Artificial Selection*, a body of work begun in Leipzig and finished in Cape Town, each canvas is first coated in gentian violet. The dye is mixed with rabbit skin glue to size and 'seal the pores' of the canvas (the glue is a traditional artist's preparation derived from boiling down animal collagen). The violet undercoat is partly practical (the dye has anti-fungal properties), partly aesthetic (it provides an interesting colour base) but mostly ritualistic. It underlies a long process of Vossstätter playing in the increasingly scrambled relations between the human and the beyond-human, using a method that she first evolved in her previous series *Natural Order*.

After the violet comes the slow layering of beeswax, each layer stained with different pigments. Some (particularly in *Natural Order*) are earthly, subtle, oxidised and ochreous – like weathered minerals, dirty snow, mussel shells. Others (particularly in *Artificial Selection*) are loud, luminous and garish – like azo dyes, highlighters and tartrazine. The process of kneading colours into the wax has something culinary about it, something delicious, as if we are in the realm of confectioners, chocolatiers or cake icers. The medium was one that Vossstätter stumbled on when someone in her studio left behind a block of beeswax. Combining it with turpentine produced a 'dirty butter' that could be coloured and then spread onto the canvas.

Once the layers have been built up, she uses thermal energy (a hairdryer, sometimes a blowtorch) to soften the wax – then scrapes, scores, stipples or picks away at it. The process awakes chains of colouration and texture from beneath the surface. The buried swirls and sedimentations of pigments are revealed, forming patterns that can be deeply beautiful – mineral, fractal and mycelial – but might just as well be unsettling, lurid or, as she puts it, 'sickly'.

The works accomplish a sustained blurring of scale. On the one hand, there are traces of a micro-organic universe: double helixes, amoebas, the trails of worms in silt or insects under bark. On the other hand, the canvases evoke the massive alterations to the biosphere that characterise an age when human activity has taken on the parameters of a geomorphic force: tar sands, tailing ponds and quarries. Some works pull towards the abstract clarity of land art and natural history. Others are more like those fusions of melted plastic, sediments and organic debris that needed a new word: plastiglomerates – genre-blurring composites of plastic and geology will go down as stratigraphic markers of our age.

The canvases, some of them diptychs, smudge and pick away at those categories we can't help falling back on, even while knowing they no longer really hold up: natural/artificial; organic/synthetic. They ask us to imagine these less as opposites than as co-extensive and implicated in each other. This is something that the COVID pandemic has brought home, with its uncanny oscillation between viral particles and vast global supply chains; between micro-behavioural patterns and world-economic systems.

Even some of Vossstätter's pre-pandemic works seem to intuit a coming infection, suggesting that the biosphere has long been running a high temperature. In *Natural Order*, multi-species swarms infest and permeate the membranes of human figures. In *Artificial Selection*, the biophages and deteriogens have done their work: the anthropoids are all dissolved into more abstract strings and nucleotides, polymers and proteins. There is the sense of the canvases being, as she puts it, 'overruled by some organic element', but also by the intensely tactile, unpredictable nature of the process she has devised. This exceeds the conscious designs of its handler/creator, and will always have an element of surprise as she bores and mines the wax: 'It's like going to get a Kodak film developed in the '90s.'

Sometimes the scored lines coax into being the most ravishing filaments of colour: chains of chlorophyll green, icy blue and mineral brown. 'Ice has a memory,' writes Robert Macfarlane, explaining how air bubbles trapped in Arctic ice sheets archive changes in the earth's atmosphere: 'It remembers in detail and it remembers for a million years or more... Ice has a memory and the colour of this memory is blue.' The bio-chemical abundance of Vossstätter's work summons words from schooldays: xylem and phloem, amethyst and chalcedony. Some colour fields are feathered like cut gemstones or cross-sections through a geode, where the crystallization that happens within total geological darkness is revealed to human eyes. The eyes (my eyes at least) search out threads of colour as pure natural property – cadmium, ultramarine, indigo. But step back from the canvas a little and you might be looking at opencast mining, or hydrocarbons blooming on water.

There are cut and polished semi-precious stones in Vossstätter's studio – which is a bit like a nineteenth-century naturalist's *Wunderkammer* – along with fossils, feathers, an abalone shell unfolding in logarithmic spiral. 'And what do we do? We make an ashtray out of them.' Stubbing out a cigarette on mother of pearl or tiger's eye – is that just a local thing, or global? She points out teaspoons made from shell: once so precious, now they read as disposable plastic. In a cupboard is a range of antique tools used to scrape and distress the wax, implements that once belonged to her mother, a jeweller – though the rising cost of beeswax led Vossstätter to sell off many of these collectors' items. Since she started the work, the price of her medium has more than doubled: this is partly due to the decline in global bee populations (the wax is harvested from commercial hives once they have been abandoned).

She recycles the bits already picked off and fallen to the floor, melting and recombining them – new paintings will carry old genetic traces, archaic bits of DNA. This is partly what accounts for the darkening tonality of the pieces – from glacial landscapes to crude oil – as the butter gets dirtier. Thinking she had been sold fake wax at one point, Vossstätter called up a supplier. They told her to check the surface after it had melted and cooled. The hexagonal structure of honeycomb would be there faintly on the surface. And it was: a ghostly trace, a memory of organic structure.

'What does it mean to still be working in oils, when the people who first made those paintings had such different ideas of time, permanence and the future?' One of the hypnotic results of Vossstätter's method is the way it seems to condense and distil so much time into the canvases. This is the time of biological accretion, of slow deposit and sedimentation, oxidation and erosion. It is the evolutionary time of natural selection: the millions of years required for mutation, selection and speciation; the 'Ceaseless Metamorphoses' generated by the splitting and recombining of genetic code. One painting references the 'abominable mystery' that Darwin spoke of in trying to understand how flowering plants, the angiosperms, had managed to evolve and diversify so rapidly in earth history. Though Vossstätter feels that perhaps this work is too plant-like, too much like the kelp forests in which she has been doing a lot of swimming: 'it comes too close to being only one thing.'

In the less vegetable, more mineral works, it is as if the geological timescales invoked by land artists – those big ticket, masculinist interventions in the great outdoors – have somehow been domesticated, shrunk and ironized. As if eons-long processes of erosion and grand canyons have been made to run their course in a studio in suburban Cape Town, urged on by a hair dryer. 'And the leaf blower, the borehole pump. The dogs, someone fixing the gate. It's very different to where I live in Germany'.

On the streets of Leipzig, says Vossstätter, you can buy something called *spagetti eis* – there is a picture of it on the studio walls. This is vanilla ice cream that has been fed through some kind of mincer, turning it into long pasta-like worms. Then it is topped with red, cherry-flavoured sauce and white chocolate (parmesan?) sprinkles to look like some horrendous Bolognese. 'I love it. That says it all.' The sort of queasy shift involved in toggling between sickly ice cream and meaty pasta; the sense of humour and ridiculousness there; also the absurd ingenuity that humans expend on trifles, trash, junk – these feelings are also in the works.

Some have an anarchic sense of humour that comes from collapsing divisions between, say, a cartoonish amoeba and the most detailed image ever released of a human cell. The beautiful/ugly thought that a tinsel wig (also in studio) might be just as 'natural' as the pile of kelp next to it (human civilization and all its mass-produced junk is, in one sense, a naturally occurring process). Or, vice versa, the heretical sense that this segmented flatworm is just as 'artificial' as the bolus of stuck-together masking tape next to it (truly there is nothing natural in nature, nothing given and nothing sacred). How to bring it all into one frame, 'a world that precedes, includes, and exceeds us', how to stay with the trouble, sift through the muck and the miracle?

The works continue to play sly games: subtle gradations over here, Crayola scribbles over there. My eyes search out the chlorophyll threads, the ice core blue. But the wormy plastiglomerates remind that everything and everywhere is now touched by the human stain.

Hedley Twidle, July 2021

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