

## Dots

Let's establish something from the very start. We are not talking about Dorothy's possessions. Although, it might be illuminating to consider the intricate associations between Dorothy and all that she encounters on her journey. But no, we are concerned with specs, tiny circles, minute deposits, graphic symbols for particles – dots.

Perhaps it helps to contemplate the act of making dots, to dot, dotting. Dotting feels like something we know instinctively to do. Dotting can be a daubing with a stick, denting with a flint, padding with a finger. Dotting sounds rapid. We dot mindlessly in the midday sun, creating patterns that manifest our half-awake state of mind. Dotting the skin with chalk dust or mud results in an elevated presence, evoking spirits, breaking our human contour, meshing us within the landscape and recalibrating us with nature. A bored child dots their pen against the otherwise empty sheets of lined paper, one eye on the task and the other beyond the horizon. Spiders dot work surfaces as they excrete from high up on the ceiling, creating star charts that only spiders can decipher. Elegant mammals dot the soft mud under their hooves as they pick their way towards fresh water. The sun dots our retina when we momentarily cast our eye up to the sky and glance the raging light of burning hydrogen. Galileo's pen nib catches on the fibres of the paper and creates dots of ink –  $E=MC^2$  and the child notices a reflected flash of light from an upstairs window across the school's playing field, dots of after-image on their retina resemble grapes.

Dots we assume to be round, but their definition fails well before the molecular level. A full stop on a printed page, when magnified, reveals itself to be a coral island with a coastline of inlets and promontories or maybe some type of volcanic activity. These territories, thrown up by the micro-tectonics of the printing press are understood by Sigmar Polke, who quietly navigates them and charts their fragile existence. A mass of printed dots can easily deceive our relatively poor sense of sight. Dots of varying sizes printed over a sheet of newspaper lure us into believing visions of other places, events and people. The blurred and fused dots of darkness approximate the complex tones of reality sufficiently for us to believe a truth, an indexical intimacy, the moment captured. Through Descartes' eyes we are seeing smudges of dark and light that look as tangible as existence.

The study of 'dot patterns' is a minefield. At the blink of an eye, a joyful and undemanding Polka dot pattern becomes a gateway to complex mathematical systems, dot pattern functions, moiré patterns and other visual expressions of beauty in numbers. Dots stack, or don't stack exactly, the little gaps illuminating the divinity of three-hundred and sixty degrees. Dots add up to seven, but each face of the dice knowing nothing of its five cousins. Dots layered over dots shift infinitesimally, magnifying miniscule variations as light shines through mineral deposits or gases. All of this imagery can be shared, scanned, converted to binary, transported by signals and wires, reassembled and squirted onto paper like a cat spraying its territory. Do you remember the dot matrix printers of the last century that rasped like cicadas as the print head stridulated across the thin paper? Now printers purr. Perseverance edges over Martian grit scanning the dots in high definition, which in turn are dotted through the cosmos as digital dots and reassembled as dots of light that dot across our retina. Numbers are in communion with dots and all that doesn't stack up.

When is a dot not a dot? When it is a speck? A fleck? A bit? A jot? A molecule? Let's not go molecule, we'll only want to go sub-atomic and then it is a skip and a jump to the 1957 film *The Incredible Shrinking Man* or omnipotence or something sublime. A speck is worth talking about. Is a speck different from a dot? Well, this has opened a can of worms. I'll look for some definitions. First result suggests *"a speck is always tiny, and it's usually a piece of something... a dot is a circle or droplet - it is usually small, but doesn't have to be."* OK, that partly makes sense. but there is also *"dot means a small spot, whereas speck means a tiny spot"* So they are both spots, not dots or specks. And then how about this *"Speck is a synonym for dot in spot topic"*. Who knew there was 'spot topic', my work is done. I like the thought of a speck being a tiny piece of something else whereas a dot, no matter what its size, is whole and of itself.

So much for magnification. Let's pull out a little. Let's look at the world from a distance. My first experience of flying was in a *de Havilland Rapide* with its generous windows affording magnificent views of a miniaturised world below. Flying around two-thousand feet over the Surrey countryside, vegetation became approximate, bushes and trees appeared unfocused and generally round. Farming equipment, storage silos, telegraph poles, buckets, children's trampolines, hot tubs and garden dining furniture all reduced to rounded semblances. But from thirty-five thousand feet entire olive groves are sprawling sheets of green dots with rough edges contrasted against red earth. The map is not the terrain, until you look down on it from way above. For that reason, maps are fascinating. Something transformational occurs in our perception when we trace a line of dots across the surface of a map, imagining the array of printed marks as a border or path or track; one calibrated step with the eye representing twenty-five thousand steps across the ground. When cartographers first drew their maps, they used pens and ink to carefully create more than linear borders with their uniform dots. They drew scree, shingle, orchard, foreshore. With breath held in and heartbeat slowed, they penned their way across the country, meeting all challenges with joy. Ink on paper, the map is the terrain.

Dorothy had no map when she set out to find the Emerald City. A good vantage point somewhere above the yellow brick road may have quickened her step. She might have seen the cartoon trees, rounded green and implausible shimmering against an equally vivid fields of corn. She might have seen the Emerald City in proximity to the Wicked Witch of the North lying dead beneath the crumpled hot tub and thought it not worthwhile. Perhaps Dorothy actually took a flight in a *de Havilland Rapide* and fainted at the sight of Reigate so far below her and imagined the whole thing. Dot's got a lot to answer for.