

Diary of a Bright Blue Molecule

preamble

This I am, bright and blue. Named and unnamed I've been here all along. I don't really have a Day One, although the myths of blue are ancient. There's no history of blue. We could say there's a history of the idea of blue. We could say there's a science and a history of the science of blue. Yet blue (that's me, bright blue molecule) has never not been. So, in this diary, first is arbitrary.

First (arbitrary) -- being

Bright blue molecules tremble when figured as an artifact of human perception and human purpose. What bright blue molecules are just is. You can be sure of that. What they are not has nothing to do with what they are: so what if bright blue molecules are not vermilion? Not riding with the four horsemen of the apocalypse? Not opposed to combustion? Not the sound of middle C? Not the absence of retinal S-cones?

next, following arbitrarily (2) -- burning

In the constellation Orion, Rigel is the bright star, one of the brightest stars in the sky. Rigel is a bright blue firestorm, a blistering Supergiant one hundred times more massive than the Sun and fifty-thousand times more luminous.

next (3) -- pounding

Gold is so malleable that it can be flattened into leaf less than one hundred nanometers thick. And then it glimmers with bluish-green light.

next (4) -- concocting

Beginning in medieval times blue dye was produced in Germany from a local plant known as woad. To produce woad blue, the workers drank beer. They drank and drank until their urine was 15 proof. Then the workers would urinate into vats of fermented woad. On Sundays the workers would submerge fabric in the alcoholic urine woad water. Mondays at lunchtime the fabric would be retrieved. The drunken German workers would hang the dripping fabric on clothes

lines. Marvelously, the magic of air caused bright blue molecules to saturate every fiber of the fabric.

next (5) -- ascending

In plumage, bright blue molecules lend sky to bird wings. The tiny tails of blue tit nestlings radiate ultraviolet blue, and likewise the pate of the Blue Skimmer dragonfly. Blue appears up in the air. Wind skims off the clouds in blue soup afternoons. Beyond the air are blue teas of heaven and blue sands of the sun.

next (6) -- menacing

In gaseous form bright blue molecules of Ammonium, (4-(alpha-(p-(diethylamino) phenyl)-2, 4 - disulfobenzoydene) - 2, 5 - cyclohexidien - 1 - ylidene) diethyl hydroxide monosodium salt will kill a rat. Be careful. Ammonium, (4-(alpha-(p-(diethylamino) phenyl)-2, 4 - disulfobenzoydene) - 2, 5 - cyclohexidien - 1 - ylidene) diethyl hydroxide monosodium salt is not a domestic poison. A stealthy poison, Ammonium, (4-(alpha-(p-(diethylamino) phenyl)-2,4 - disulfobenzoydene) - 2,5 - cyclohexidien - 1 ylidene) diethyl hydroxide monosodium salt travels under many noms de guerre, such as Acid Leather Blue, Acid bright azure, Acid Brilliant Sky Blue Z, Blue patente, Carmine Blue, Disulfine Blue, Fenazo Blue, Hidacid Blue, L-Blau, Lissamine turquoise, Merantine Blue, Xylene Blue and Schultz number 826.

next (7) -- shifting

When the sound waves of the note G are doubled, the tone of G is said to be 'raised one octave.' Doubled again, the G tone sounds in an octave higher still. The point is how the vibration can be twice as fast or four times as fast, sixteen times faster, two-hundred and fifty-six times faster and on and on. The oscillation of these sound waves (the frequency of their vibration) can be doubled and redoubled and doubled again and again until the waves become radio waves, and from these frequencies doubled and redoubled up to those of television waves, then to microwaves, then to infrared waves, then to light waves. Then, silent, the waves are blue.

(8) -- beginning

In the Central American jungles, ancient chunks of stucco-covered wood suggest that Mayan scribes favoured blue buildings. Occasionally an idle scribe would scribble glyphs on the inside plaster walls. Some such glyphs show great learning and the flourish of calligraphic spontaneity. On the painted walls of Naj Tunich in Guatemala many glyphs include the turtle head, the Mayan letter a. The Naj Tunich glyphs translate as a poem about when the ocean was a big blue turtle (a-ku). The blue turtle crawled up to sing under the white Sun. The turtle sang on, into the heat of noonday. The sun desiccated the turtle into bright blue dust which the wind lifted up to form the sky. Blue rain replenished the oceans, but not nearly enough bright blue molecules remained. To this day turtles are green or brown.

(9) -- feeding

Comb jellies are transparent gelatinous animals that float in the surface waters of the sea. Feeble swimmers, they give themselves over to the tides. Comb jellies are noted for their daytime iridescence and their luminescence in the night. Comb jellies search for food with a singular sticky tendril. Without a face, sightless, they haven't a nose anywhere on their shivering gummy bodies. Their tendril nevertheless can taste the colour blue. The comb jellies feed on the hatchlings of Double-Tail Steel Blue Bettas. Comb jellies are so attuned to blue they can detect bright blue molecules in tangerine juice, in coconut milk and in the sweat of swimming frogs.

(10) -- masquerading

Bright blue molecules served to defeat Hitler in World War II. They shielded the good ships, helped the good ships lurk upon the oceans. The bright blue molecules collaborated with Allied paint 5-S Sea Blue A, B and C, Allied 5-N Navy Blue and 5-B Thayer Blue. There were also bright blue molecules involved in Western Approaches and Berwick. At times the sky harmonized.

(11) -- mapping

The late twentieth century begat a SPOT surveillance vehicle that orbits the Earth, mapping it from above heaven. This new mapping required the invention of false colour. On a SPOT map clear water appears dark-bluish, while turbid water appears azure. Bare soils, roads and buildings may appear in various

shades of blue. A plume of smoke appears bright bluish white.

(12) -- sensing

Dolphins cannot perceive the colour blue.

(13) -- moving sideways

Bright blue molecules have no gravity. They roll in every direction, roll sideways like sapphire honey, drift aside like cerulean dust. Bright blue molecules are tangential like beryl thorns, askew like gentian bones. Bright blue molecules slide along the plateau, the planless plane on the plainest cyan side.

(14) -- saying

Apparently some bright blue molecules are palpable in spoken words. It's not a matter of where or how or why. It's a matter of skin met with the smalt of near-blue and past-blue, such as when saying waxen sky, tincture of cumulus, shallow shadows, ocean mirror, shrouds of glass.

(15) -- persevering

The endurance of fossils is measured in zones, such as the earliest time zone, the Jurassic, symbolized by the fossil ammonite *Psiloceras planorbis*. A number of zones make a period and periods are grouped into eras. A zone is a mere moment of geological time -- barely one million years.

After the death of a creature who curled in the shell known as crucibulum there was an immeasurably long equilibrium in the surroundings, layers of rock so different from any living habitat. The shell wasn't crushed by the rigours of time and eventually came to rest in sediment. For thousands of years entire lakes within oceans of changing water swirled above this protective sediment of ocean-bed mud. Inevitably the mud was rinsed by foreign minerals, provoking a cataclysm of chemical change. Dissolved foreign minerals infused the shell in an ossifying bath of pyrite or silica. A fossil seeker with patience might eventually find a crucibulum from the Miocene period, the Cenozoic era, twenty-two million years ago. The name crucibulum fits the form, a name bestowed by humans; humans are as we know in bondage to the objects of everyday use. Humans holding the fossil upside down will recognize the crucibulum's conic

shell, with finely bowed struts radiating from its apex. To them it is reminiscent of a crucible of course, the crucible familiar to smiths, artisans and alchemists for hundreds of years. The crucibulum would be fifty millimeters deep, shaped like a calcareous thimble, empty.

Meanwhile, mineral taxonomists search patiently for rare crystals not yet seen or named, but surely waiting somewhere, locked perhaps in sediments of former ocean-beds now withered to a trickle, like Big Fish River, or Rapid Creek in Yukon Territory, wide, gushing, rough and icy, yet a trickle compared to a Caenozoic Sea. For a lifetime a taxonomist will rummage through streams and sand till he finds the undiscovered.

Once upon a time a taxonomist found a crystal of the vivianite group, a water-bearing phosphate, a mineralized fluid, the kind that takes billions of years to turn a crucibulum to stone. There, in the hollow of the crucibulum fossil, vitreous, almost colourless pale blue, camouflaged as water, the new, authentic crystal was poured out and caught in a fine sieve.

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