

The Dust That Measures All Our Time

[Steven Connor](#)

αρχας είναι των όλων ατόμους και κενόν, τα δ'άλλα πάντα νενομίσθαι
There are atoms, and the spaces between them; surmise makes up the rest.
(Democritus, in Diogenes Laertius, 9.7.44, 1925, 2.452)

Sand belongs to the great, diffuse class, undeclared, rarely described, but insistent and insinuating, of what may be called quasi-choate matters – among them mist, smoke, dust, snow, sugar, cinders, sleet, soap, syrup, mud, toffee, grit. Such pseudo-substances hover, drift and ooze between consistency and dissolution, holding together even as they come apart from themselves. And, of all of these dishesive matters, sand is surely the most untrustworthy, the most shifting and shifty.

Nobody would seriously consider taking a stand on a cloud, but sand has betrayed many an architect and edifice. Sand is at once architectural and archiclastic. An eighteenth-century continuation of Baron Munchhausen's adventures describes how the Baron and his party survive a whirlwind of sand by scooping an igloo-style sand-chamber in which to shelter from the storm, and then digging a tunnel from their bunker back out into the light (Anon 1792, 2.969). Sand has the capacity to engulf and inundate, blurring contours, eroding and erasing every edge and eminence. As such it is the ultimate mockery of the permanence of stone, for it is no more than one of stone's own moods, the manner in which stone, atomised, consumes itself. Shelley's 'Ozymandias' imagines the monumental statue of Rameses the Great dismembered on the Egyptian sands. The shattered chunks of head, legs and pedestal portend a further, finer comminution, after the *membra disjecta* themselves will have been milled away into flatness: 'Round the decay/Of that colossal wreck, boundless and bare,/The lone and level sands stretch far away' (Shelley 1977, 103).

Surely the most treacherous of all kinds of sand is quicksand, whose prefix indicates that it is alive enough to hunger for the lives of the unwary. Quicksand doubles the dubiousness of what is already an uncertain substance; where sand is hard and soft at once, quicksand, a fine sand that has become saturated with liquid, is also amphibiously wet and dry, bonelessly loose, yet syrup-gluey. Walter Charleton, in his tormentedly Latinised Englishing of Pierre Gassendi's neoatomism. uses quicksand to image the paradox of all matter, the 'perpetual *inquietude* of Atoms, even in compact Concretions... because the Revibrations, or Resilitions of Atoms regarding several points of the immense space, like Bees variously interweaving in a swarm, must be perpetual: therefore also must they never quiesce, but be as variously and constantly exagitated even in the most solid or adamantine of Concretions... To apparence nothing more quiet and calm: yet really no quicksand more internally tumultuated (Charleton 1654, 124-5).

Sand has also been a source of quickening. Drops of sweat or spittle on sand or dust were thought to breed mites and fleas by spontaneous generation. Mythical beings have frequently been shaped from sand, like the djinns who take flight in the form of the Zôba'ah, a whirlwind that raises the sand in the form of a pillar of great height (Keightley 1905, 26). In Cornish tradition the troublesome spirit Tregeagle was condemned to toil endlessly at the task of making a truss of sand, bound with ropes similarly of sand, and carrying it out of the water to a rock: the howls of the storm are said to be his cries of rage as the waves repeatedly scatter his work (Bottrell 1873, 140). A more contemporary emanation of sand is the irascible Psammead, or sand-fairy, of E. Nesbit's *Five Children and It* (1902), found by a group of children in a sand-pit, which has the power of granting wishes by blowing itself up to enormous size and then suddenly letting itself down again. Sand fairies are rare now, it explains, because they used to live in the sandcastles made by children in the shore, but nearly all died out after catching cold from the seawater flowing into the moats around the castles (Nesbit 1994, 17).

Sand is reversible. Only utter desiccation can attain to this pouring, milk-smooth liquefaction. Sand-baths were used in the ancient world both to draw out the damp ague of rheumatism and as a kind of sauna, to promote perspiration. Sand is the product of abrasion, but is also itself abrasive, used in sand-blasting to etch and burnish. Pliny tells us of the use of sand under a saw edge to make a clean cut in marble, and to polish it after it has been carved (Pliny 1962, 41)

Sand signifies neutrality, indifference, and uniformity; yet it also has hairtrigger sensitivity and responsiveness. A grain of sand (in actual fact often a tiny parasite) is the irritant that provokes in the oyster the nacreous secretions that build into a pearl. Sand has a favoured relation to sound, putting a hoarse rattle in the throat of the wind, and is itself all ears. In 1787, the German physicist Ernst Chladni showed how drawing a violin bow over a metal plate could induce in the fine sand sprinkled on it hierophantic figurings of the sound, in quivering mandalas and ripple-fingered arpeggios. Though sand can disfigure and obliterate, it can also disclose the ghost wrist of wind and the perturbations of the earth. It is a detection and reception mechanism, forming ridged isobars, shivering musculature, oscilloscope of the air's sculpting shoves and gusts.

Sand participates in dream and vision. The Sandman brings sleep by throwing or blowing sand into the eyes of children. But the sand does more than merely seal the eyes, for in many versions of this nursery tale, it is the very stuff that dreams are made on, the numb matter of sleep, swirling, particulate, that the sandman carries in his sack. The somnolence of sand is redoubled when in *Top Hat* (1935) Fred Astaire soothes Ginger Rogers to sleep in the hotel room below him by spreading sand on the floor and hush-dancing a susurrous soft-shoe shuffle. The origins of moon-walking are to be found in the novelty slides and scrapes across a sanded stage by music-hall acts like Wilson, Keppel and Betty. Specious it may be,

but sand is also the secret stuff of omen and auspice, in the practice of divination through tossing and scrying handfuls of sand, known in Arabic as *ilm al-raml*, the science of the sand, or what might have been its Greek equivalent, *psammomancy*.

Sand is not only temporary, it is also the most temporised form of matter. It is the image or allegory of time, shifting, yet unshiftable. It seems a compiling of the minced, mounded years that go into its making, and grains of sand imitate the elementary atoms of time, moment upon pattering moment. Sand is featureless, without joints or divisions, even though it is nothing but division all the way down. Yet it is this very feature that makes it useful in the measurement of time, for, unlike other materials, sand will flow easily and regularly, even as its volume diminishes. Sand-glasses came into use in part because of the need to measure time at sea, far from any landmark; speed would be measured by counting the number of knots in a rope paid out from the back of the ship in the time it took for the sand to run through a half-minute glass. A half-hour period of watch, known as a 'glass', was also measured in this way. Grains of sand, in the form of quartz crystals, with their precise oscillations, still micro-regulate our time. In fact, the sand of hourglasses was often not quartz sand at all, but powdered marble, or eggshell. But we find it hard to give up the idea of the affinity of sand and the glass through which it runs, since silicates of sand are still the most important source of glass. George Herbert imagines this interfusion when he writes that 'flesh is but the glasse, which holds the dust/That measures all our time; which also shall/Be crumbled into dust' (Herbert 1941, 65), while for Gerard Manley Hopkins the soul itself is 'soft sift/In an hourglass – at the wall/Fast, but mined with a motion, a drift,/And it crowds and it combs to the fall' (Hopkins 1970, 52).

Sand enters into composition with cinema, and cinema is repeatedly drawn to the shimmer and mirage of sand. The graininess that is the signature of film, tiny particles of metallic silver formed from photosensitive silver halides on its surface, is the tactile nap that seems to distinguish analogue from digital images. Yet this granularity is also a reminder of what film shares with sand in its composition, namely the capacity to create the illusion of a continuously variable wave from very large numbers of discrete, indiscernible particulars. Strictly speaking, all apparently analogue forms are smoothed accumulations of digital, that is, discontinuous forms, like the illusion of movement formed from the multiple images on the filmstrip. The glissandi of sand, producing molar solidity and motion from the molecular massings of disparate bits of matter, are therefore essentially cinematic. Filming sand, through the glass lens that is itself another of sand's semblances, cinema seems to come upon the elementary syntax of its own process.

Sometimes seemingly razor-hewn, the crescent declivities, scoops of duneshadow and chiaroscuro escarpments of sand can make it seem a physiology of light itself. Wind-pestered, sea-sieved, pestled by the sun's long pulse, sand piles and plies itself, then crumples in sighs. It is an arena of hallucinations, a terrestrial aurora.

The eye surmises ledges and laminar curtains peeling away, furling fringes of aching incandescence, frizzling surf-edges of riptide, lifting aprons, sheets of paint that sag and rill, pools of liquid that sizzle dry in an instant, cliffs that collapse in gentle, pensive catastrophes, whole panes suddenly shivering, slowly closing eyelids, a letting down of blinds. Never less, never more, never now again what it once, only just now, was, mulling itself over, taking its own measure, counting up and losing count, showing its workings in its long, humped volumes, page turned on crumbling page in the calendar of its becomings, combing and grooming, sieving and riddling, going with the grain, never ceasing going over it all again, keeping on going, going on coming, the desert does itself like an incalculable sum.

References

Anon (1792). *A Sequel to the Adventures of Baron Munchausen, Containing his Expedition into Africa*. 2 Vols. London: H. D. Symonds and J. Owen.

Bottrell, William (1873). *Traditions and Hearthside Stories of West Cornwall. Second Series*. Penzance: Beare and Sons.

Charleton, Walter (1654). *Physiologia Epicuro-Gassendo-Charltoniana, or, A fabrick of science natural, upon the hypothesis of atoms founded by Epicurus repaired [by] Petrus Gassendus ; augmented [by] Walter Charleton*. London: Tho. Newcomb for Thomas Heath.

Diogenes Laertius (1925), *Lives of Eminent Philosophers*. Trans. R.D. Hicks. 2 Vols. London: William Heinemann; New York: G.P. Putnam's Sons.

Herbert, George (1941). *The Works of George Herbert*. Ed. F.E. Hutchinson. Oxford: Clarendon.

Hopkins, Gerard Manley (1970). *The Poems of Gerard Manley Hopkins*. 4th edn. Ed. W.H. Gardner and N.H. Mackenzie. Oxford: Oxford University Press.

Keightley, Thomas (1905). *The Fairy Mythology: Illustrative of the Romance and Superstition of Various Countries*. London: George Bell and Sons.

Nesbit, E. (1994). *Five Children and It*. Ed. Sandra Kemp. Oxford: Oxford University Press.

Pliny the Elder (1962). *Natural History, Books 36-37*. Trans. D.E. Eichholz. Cambridge MA and London: Harvard University Press.

Rushdie, Salman (1988). *The Satanic Verses*. London: Viking.

Shelley, Percy Bysshe (1977). *Shelley's Poetry and Prose*. Ed. Donald H. Reiman and Sharon B. Powers. New York: Norton.