

Helen Sear, ...*the rest is smoke*

'The great book of the universe' wrote Galileo in his *Il Saggiatore* (1623), is written in the language of mathematics'. By this, he does not seem to mean that nature is simply a matter of number, or not directly, since he goes on to say that the characters of that language are 'triangles, circles, and other geometric figures without which it is not possible for humans to understand a single word of it'. Traditionally, indeed, nature has been thought to be both prodigious in number yet also resistant to numbering. When Archimedes set out to reckon up the number of grains of sand that the universe might contain, he had to invent some new terms for very large numbers, but he did nevertheless come up with a particular number – 10^{63} . Walking through a wood, or along a beach, we know there must be some number or other of pebbles, or leaves, or flies, or grains of sand within a given space, and yet the idea of actually totting them up seems like a kind of folly or even scandal, the kind of thing a desperate lover might be asked to do in an Impossible Tasks ballad like 'Scarborough Fair'. Perhaps a kind of impiety might even be implied in this kind of enumeration: if, as Luke assures us, such numbers are known only by God, by whom 'the very hairs of your head are all numbered', then the arrogation of the right to keep count may seem to infringe the accounting prerogative of divinity. The absurdity of the fact that the Answer to the Ultimate Question of Life, the Universe, and Everything in Douglas Adams's *Hitchhiker's Guide to the Galaxy* should turn out to be 42 is not just that it seems like such a comically banal kind of number (though obsessed fans have immediately got to work to spoil the joke by showing that it is not – that it is 101010 in binary, that light refracts from water at 42 degrees to form a rainbow, and so on), but that the answer to such a question could be any kind of number at all. A number cannot be a meaning, and a meaning cannot be a number, because what we mean by meaning seems so inimical to number.

The sight of a number in a natural context is an infallible indication that two different kinds of world have come into collision. When Mole and Rat come upon Badger's front door in the middle of the wood in Kenneth Graham's *The Wind in the Willows*, they scrape away the snow to reveal a bell-pull and a name-plate, but it would have been surpassingly strange for the door to bear a number. There are spaces and places in nature, but no addresses, whereas Sherlock Holmes's residence at 221b Baker Street makes it clear that his world is an urban one in which the grid of order and sequence has been dropped over the physical facts of the city. I nowadays have a four-word address: most letters directed to Steven Connor, Peterhouse, Cambridge will get to me reliably enough, even without the specification of whether the East Anglian Cambridge or the one 3000 miles away in New England. But in fact the most important feature of the address is the six letters of the postcode that countersign the address, which are almost enough on my own to pick me out from among the world's teeming billions. In most important respects, as Michel Serres has noted, my address, which might once have been thought of as a particular spot on the earth, is a number, or the conjuncture of a few numbers: mobile phone, IP address, National Insurance number.

But there are also many ways in which nature and number may be said to be coming closer together. Our understanding of the age of the cosmos has both expanded hugely and also, insofar as we can in fact estimate for it a measurable duration, has contracted into finitude. The immensity of time since the Big Bang is nevertheless for us a dateable immensity, to which we can assign a number – 13 billion years. It is ever more important for us to know the volume of the ice in the Antarctic, the amount of solar energy falling on the surface of the Sahara, and the number of breeding pairs of Siberian tigers. GPS positioning is allowing conservationists to monitor from space the growth and condition, not just of forests, but of individual trees. The penetration of number into nature and the increasing construal of nature in terms of number may be part of the long historical process, of which human beings are the principal though not perhaps the sole historical agents, of making the implicit explicit, and the potential actual. Perhaps we will never again be able to think of nature as

the immeasurable, the boundless and the infinite; certainly, if a romantic sense of nature's wildness and unencompassability is to be preserved or rescued, innumerability will have to pass through enumerability. We are going to have to keep count, to make provision for the improvidence of wildness.

Helen Sear's *company of trees* seems to inhabit this space of uneasy coincidence between nature and number. The piece arose from coming upon a group of trees in the Monmouthshire woodland close to her home in Wales, marked with gnomonic numbers, daubed in lurid orange. Orange has gathered very disturbing connotations for us. Orange is the colour of the rising and the setting sun and of Autumn fruits and vegetables, and it has much stronger religious associations in Asia than in Europe because of its symbolic value in Buddhism and Hinduism. But elsewhere the associations of orange have been determined by its high luminescence, which has meant that it has become associated with emergency, for it is the colour of life rafts and life jackets and aircraft black boxes, and with a particular kind of visual pollution. As the colour of alarm and prohibition, orange also often marks the invading or defiling presence of the human. Orange marks the presence of the human Max Apple's story 'The Oranging of America' concerns the travels of Howard Johnson across America, visiting Howard Johnson Motor Lodges which are marked on his map with an orange dot. The orange jumpsuits in which noncompliant prisoners are dressed in the aptly-named Camp X-Ray in Guantanamo has given the colour a sinister political significance, while the presence of orange in a wood or forest may recall the defoliant known as Agent Orange employed during the Vietnam War, though its name derived from the colour of the drums in which it was kept. In the photographs from which Helen Sear built up the *company of trees*, the numbers seem to hover in front of the tree on which they are inscribed, as though our eyes were somehow unwilling to allow the blending of number and natural form. The visual uncertainty is increased by the fact that the orange of the number nevertheless hints at an oddly amicable kind of commerce with the russet mantle of the leaves and the warm, low, winter sunlight.

What are we to make of these numbers? Inevitably, the interference of number and natural form prompts us to reflect on what principle of ordering may be involved here. Why have some trees been given a number and some not? What is the principle of their sequence and non-sequential adjacencies? What is being counted, and discounted here? Is it some kind of join-the-dots exercise, in which moving from one number to the next in series might spell out some message in the landscape? Is it a map? A running sum? Are we present at some kind of crime scene? In one of the photographs taken as preparation for *company of trees*, the numbers seem to have spread like a kind of fungal disease across a thick glade of trees, a digital forest springing up within the physical forest, the seemingly random distribution of digits ironically mimicking the distribution of the bluebells scattered across the ground between the trees. The orders of the physical and the calculative begin to merge.

Irresistibly, the numbers seem to hint that the trees are marked out for some special attention and perhaps branded for destruction, or the attentions of Andrew Marvell's 'architects [who] square and hew/Green trees that in the forest grew'. Another work, *Stack*, seems to be bred from this logic. *Stack* began from a long photograph showing a large stack of dozens of felled tree trunks of different diameters viewed end on, framed by frills of bracken. This photograph has then been printed directly on to a sheet of aluminium and the sheet sliced into seven-foot high vertical strips, which have then themselves been stacked against the wall, like floorboards or fence palings. Sign and substance have changed places. Something like the mythical squaring of the circle seems to be enacted here, the fitting of the rough-hewn contingencies of tree-trunks to the grid of exact perception and measurement. This double focus recalls *Blocked Field* (2012), in which a rectangular pile of hay-bales is represented in a grid of rectangular photographic blocks, which both echo and regularise the segmentations of the bales. Photographic space allows us thereby to occupy

simultaneously the irregular and approximate geometry of objects in the world and the exact and abstract Cartesian gridding of space.

We might fancy that these photographs were visual meditations on the accidental pun that connects natural to mathematical kinds of *log*. After a few inconclusive efforts to show the derivation of this word from Old Norse words for a tree, the *Oxford English Dictionary* throws in the towel and says 'It is most likely that clog and logge arose as attempts to express the notion of something massive by a word of appropriate sound.' But why are 'clog' and 'log' self-evidently appropriate sounds for something lumpy and dense? What is it about these words that suggest that they may somehow be more solidly material than other words, and therefore less like words and more like things? But when mathematicians refer to *logs* they do not have lopped trees or firewood in mind, but rather *logarithms*, from *logos*, ratio and *arithmos*, number. So that elementary and uncomplicated word *log* seems to bring together the realms of what in medieval thought were called the sensible and the intelligible, or, as we might gloss it, the hard and the soft, conjoining the most formlessly material kind of sound, a sound that seems just to have the same quality of inert massiness as what it names (*loggy* means heavy or sluggish), with the word *logos*, a word of commanding philosophical reach, which signifies thought, word and signification all together and gives us *logic* along with *captain's logs*, *logging in* and all the *-ologies*. The philosopher Martin Heidegger in fact derives *logos* from Greek *legein*, a word that includes in its meanings speaking, reading and the gathering of wood, this neatly closing the circle of implication. There is, it seems, a densely-branching tree of connections between logging and logic, the material and the mathematical.

In *company of trees*, the segmentation of spatial forms is extended into the segmentation of time, in a film made up of rapid cuts and coalescences. A young woman in a simple red dress circles clockwise and anticlockwise around a single tree, her hand gently laid on its trunk. Her circling may suggest a kind of maypole dance, or some other woodland ritual. The garish red gash of her dress may recall Little Red Riding Hood, or even, though the film was shot in Welsh woodland, but remembering the place where it was to be shown, the figure in red that is glimpsed at intervals, always at the corner of the eye, throughout Nicolas Roeg's Venice-set thriller *Don't Look Now*. The smooth continuity of her circling movement is broken apart by the rapid slicing of the image with intercut scenes of leaves and trees. The mysterious numbers inscribed on the trees flash in and out of view, sometimes seeming to recall the numbers of the leader tape at the beginning of a cinematic reel. Orange dots, related perhaps to the shape that features in *brand no. 2*, flare and fade hallucinogenically, leaving us unsure if they are accidental blemishes or punctuation marks. Time, it seems, is passing, perhaps being counted out or down by the numbers as in the many different counting routines in Peter Greenaway's *Drowning By Numbers*. If the figure might be regarded as a kind of protective hamadryad, her slow circles are perhaps a ritual defence against the slicing and felling hinted at in the buzz-saws we hear on the soundtrack to the film. For in fact time does not pass here, so much as mix, thicken and turn in on itself.

In *Sightlines* (2011-14), a series of portrait photographs in which the faces of the subjects are obscured by the heads of artificial birds, Helen Sear has explored the value of the impeded or interrupted view. In *company of trees*, she goes much further, to create a second-order visual scene out of something like a process of pure interruption, from which the eye, constantly baulked by the restless flickering of the images, of a still and securely out-there object on which to focus, must put together a mobile synthetic multiplex, throbbing with shadows and spectral forms, that seems to hover holographically in the mid-space between seer and seen. Persistence of vision is deployed amid and alongside the resistance to vision. Helen Sear has sometimes spoken of wanting to deal, not just with the body in the landscape, but with the landscape as a body. *company of trees*, the title of which does not allow us to decide if the trees form a company among themselves or if they offer company to the human

subject, gives us just such a body, a whirligig molecular recombination of hands, limbs, leaves, branches and sky. Even speed becomes strangely indeterminable in this film, for its viewer is drawn simultaneously into a breakneck rhythm of displacement and altered focus and a much slower, more stately rhythm of circulation, as the central, anchoring figure wheels zoetroptically and, we may even feel, astronomically round her tree trunk. Sear has always been interested in the ways in which photography can enter into active relation with its objects; here, the power of the photograph to decompose and recompose is taken to a kind of limit.

The searing red-orange numbers of *company of trees* have the quality of seeming to jump clear of their visual substrate. Colour, about which Newton and Goethe famously offered their alternative explications, Newton claiming that colour was a natural fact, Goethe that colour was subjectively produced in perception, is put to work in Sear's photographs to produce a middle region between world and mind. *base no. 3* appears at first sight simply to document the unusual contrast of emerald green moss and lichen on a tree stump and the bronze of leaves littering the woodland floor. But the longer one looks at these strange autumnal springs, the more the colours start to hum and internally communicate, creating an allegorical interchange of decay and growth seemingly self-bred from our own looking.

Sear has always, it seems, been as interested in looking with, looking round and looking through as she is in looking at. In the beautiful *The Beginning and End of Things*, we appear to be looking down into a pool that is reflecting the tops of trees above our heads, the shape of the pool being warped and doubled as in a fairground mirror. Looking simultaneously up and down, inwards and outwards, we might be observing the swaying and bellying of a nebula or an amoeba.

If there is one concrete metaphor that animates Helen Sear's photography most of all it is that of the layer – the metaphor that in fact organises most digital image editing software. Her processes of production often suggest a series of veils or membranes that may be alternately piled up and peeled away, recalling the ancient doctrine that vision involves the perception of 'eidola', mobile cuticles that are constantly being skimmed off visible objects and intercepted by the questing eye. Rather than merely giving us the world, or giving us to it, the photographic act is an overlaying, of times and places, signs and sensations. As she walks through the woodlands near her home, an inner eye has harboured the image of the Venetian chapel in which that work will be shown, its columns commingling with the trunks of trees, the checker-board of its floor-tiles projecting across the leafy ground. In *caetera fumus*, Mantegna's painting of St Sebastian pierced by arrows in the Ca' d'Oro or Golden House in Venice is abstracted into a collection of red stems arranged over a field of citric yellow rapeseed blossom, the body of Sebastian both absent and painfully persistent in the perforated space between the branches.

Perhaps the most flirtatious and audacious of these overlayings is the piece entitled *altar*. Here Sear has prepared a little diorama, made of a sheet of canvas, two rocks and a slab of bread, in which to unfold her not-quite-mock morality drama. The title of the piece connects it with the altarpiece in the Venetian chapel where her work is to be shown, even as it acknowledges the altering of scope and tone. The word *altar* is popularly supposed to be connected to the idea of altitude, since an altar was itself often lifted up, just as the sacrifice made upon it would ascend in smoke to the heavens above. Here, it is the altar itself, in the form of the slab of bread, that is to be consumed, the agent of its elevation being the blue tits and coal tits which flit in and out of the frame, nibbling it away to nothing. There is something playful, even cartoon-like in the pocket drama that is enacted, as first one bird, then successively 2, 3, up to 8, make their entrances and exits from the little stage (fly away Peter, fly away Paul; come back Peter, come back Paul). The aperture through which we observe the slow consumption recalls the circular iris of early cinema, its final fade-out

being a kind of 'That's-all folks'. And yet, there is also a kind of sombreness about the whole ceremony. First a single drop, perhaps of condensation, perhaps of rain, then several drops, slide tear-like down across the surface of the ellipse, as though it were slowly being overtaken by some swelling, silent, yet unblinking sorrow at the spectacle of erosion before it.

Helen Sear has sometimes in her work sought to push photography towards a kind of sculptural condition, combining digital and physical techniques of manipulation to open up and occupy imaginary spaces of depth within the image. In the images that made up the two series *Inside the View* and *Beyond the View*, on which she worked for some years from 2004 onwards, she developed a remarkable and painstaking technique that enabled her to interlace landscapes and portraits, enabling the viewer to be simultaneously, or alternately, before, within and even behind the landscape that they are viewing. It is as though one were being offered the chance of being able to see inside one's own looking. Her new work carries forward that remarkable project of introspection, taking us further than ever into the strange intermediary zone, compounded of world, eye and hand, that we know, or thought we knew, as photography.

Steven Connor