The Earth, the Sky and the Ground in Between

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I should like to begin with excerpts from the works of two very different authors. The first is the Scottish author Nan Shepherd, a native of the city of Aberdeen, where I also live. Shepherd was a teacher by profession, but also a keen walker, who spent many long days roaming the Cairngorm Mountains. During the 1940s she wrote a little book in praise of the Cairngorms, entitled *The Living Mountain*. It was left in a desk drawer and not published until 1977. Even then, few knew of the book, and only in the last few years has it emerged as a classic of Scottish literature – so celebrated, indeed, that Shepherd's portrait now appears on £5 banknotes issued by the Bank of Scotland (Image 1)! Here she is, describing what it feels like to stretch out on the mountain-top:

> So there I lie on the plateau, under me the central core of fire from which was thrust this grumbling grinding mass of plutonic rock, over me the blue air, and between the fire of the rock and the fire of the sun, scree, soil and water, moss, grass, flower and tree, insect, bird and beast, wind, rain and snow – the total mountain. Slowly, I have found my way in.

Image 1

My second author is the ecological psychologist James Gibson, whose classic monograph, *The Ecological Approach to Visual Perception*, was first published in 1979. Gibson begins by setting out the key constituents of the terrestrial environment, as they would manifest themselves to a perceiver placed within it. The environment consists, he says, of three components, namely a *medium, substances*, and the *surfaces* that separate substances from the medium. To continue in his words:

> Our planet consists mainly of earth, water, and air – a solid, a liquid, and a gas. The earth forms a substratum; the water is formed by the substratum into oceans, lakes, and streams; and the formless gases of the air make a

> layer of atmosphere above the earth and the water. The interface between any two of these three states of matter – solid, liquid, and gas – constitutes a surface. The earth-water interface at the bottom of a lake is one such, the water-air interface at the top is another, and the earth-air interface is a third – the most important of all surfaces for terrestrial animals. This is the *ground*. It is the ground of their perception and behaviour, both literally and figuratively. It is their surface of support.

Let's compare these passages. For both Shepherd and Gibson, atmospheric air is up above, and the earth is deep down below. But what lies between sky and earth? For Gibson, it is the *ground*, conceived as a solid platform of support that separates the air above from the earth below. But for Shepherd, what lies between is – well – *everything*, the 'total mountain'. What's going on here? How can there be such different views? And which is right?

In Gibson's characterisation, as we've seen, the ground is an 'earth-air interface'. Now by definition, an interface has two sides: whether a top side and an underside, or an outside and an inside. While the interface serves to keep the two sides separate, confined to their respective domains, it is also perforated by holes or keys that allow information, and sometimes materials, to pass from one side to the other. A metalled road or pavement, for example, may be perforated by drains that allow rainwater through to underground channels, or manholes that allow human access to subsurface infrastructure. The paved surfaces of the city, of course, also provide support for its inhabitants. Indeed, the campaign to pave the urban environment, in the modern era, was driven above all by its twin functions of support and separation. On the one hand, the paved surface provided a secure foundation for fast and efficient transport, above all by means of wheeled vehicles, which might otherwise become stuck in mud, or be overturned by surface irregularities. On the other hand, paving was considered of benefit to public health, since it sealed the ground, preventing the stench of the earth from rising into the air, where it was believed to cause illness among those who breathed it.

Yet on a paved surface, nothing can grow. For growth to occur, it is necessary for carbon dioxide in the air to bind with rainfall already absorbed into the soil and taken up by the roots, in the presence of sunlight. This is photosynthesis, and all life depends on it. Thus, in the growth of living things, earth and air meet and mingle. Where the ground has been paved, growth is only possible through cracks in the pavement – that is, until the surface itself, overwhelmed by the elemental forces of earth and air, eventually crumbles.

Let's now leave the city for the countryside, or join with Shepherd in the moun-

tains. Here, the ground is not paved. And its surface has only one side, not two. It is not an interface, it is not hard, and for plants at least, it is not a surface of support but a medium. Plants grow in the ground; they don't rest *upon* it. What matters to the plant is the depth to which light can penetrate. From the plant's point of view, indeed, the ground is not really a coherent foundation at all, but an indistinct and permeable limit of illumination, above which it shoots out green leaves, but below which it adopts the different habit of root growth. How can we describe this kind of surface?

To answer this question, I would like to draw an analogy between the ground of habitation and the page of writing. It is an ancient analogy, that can even be traced etymologically to the origin of the English word 'page', which comes from the Latin word *pagus*, meaning an area of inhabited countryside with its farms and fields (from which are also derived English word 'peasant', for the farmer, and the French word 'paysage' for the landscape he tends). The act of writing, with pen on parchment, would then be likened to that of tilling the fields with the plough. In the days when almost everyone knew how to handle a plough but few could write, it was a natural comparison to make. Now, of course, the situation is reversed. Almost everyone can write, but how many still know how to handle a plough?

Now the parchment that medieval scribes used for their principal writing material was highly absorbent. It was also very expensive. For that reason, it was common for the same material to be used over and over again. To reuse a parchment that has already been written upon, you have first to scrape the surface with a knife, so as to remove as much of the original traces as possible. You can then write again. In principle, you can repeat this operation until eventually, the parchment is scraped so thin that it is no longer usable. However, since the material is so absorbent, the traces of previous writing can never be completely removed. Thus, on a parchment that has been used several times, recent inscriptions appear to cut through the ever-fainter traces of earlier ones, giving rise to what students of writing call a *palimpsest*.

Modern readers, conditioned by their familiarity with the printed word, can all too easily jump to the conclusion that the formation of the palimpsest is equivalent to overprinting, in which one layer of inscription is simply added over another. But a closer look at how the palimpsest is formed reveals it to be precisely the opposite. Let me explain by means of a diagram (Image 2). This shows a parchment in exaggerated cross section, such that a line of ink appears as a vertical mark, as wide as the line is thick and as deep as the ink sinks into the fabric of the parchment. In the diagram I have indicated two lines inscribed

at time T_0. Later, at time T_1, the surface is scraped, and two new lines are inscribed close to the old ones. The same is done again at time T_2. Now, looking at the surface at T_2, observe what has happened to the traces. The original traces from T_0 are only just visible right at the surface, and will surely disappear if the parchment is used again. The traces from T_1 are shallower than they were, but still clear. Deepest of all are the most recent traces, from T_2. Thus, far from past inscriptions sinking ever further down as new ones are added on top, quite the reverse occurs: it is the past that rises, even as it is undercut by the present.

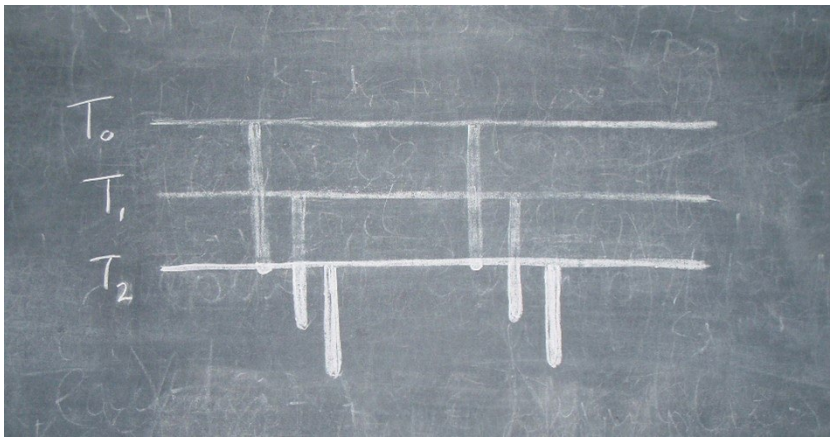

Image 2

It is just the same with the ground. Archaeologists, in particular, have seized upon the metaphor of the palimpsest to refer to a ground that, over the ages, has been repeatedly used, eroded and used again. One of the originators of the analogy, the archaeologist Osbert Crawford, writing in the early 1950s, expressed it thus:

> The surface of England is like a palimpsest, a document that has been written on and erased over and over again; and it is the business of the field of archaeology to decipher it. The features concerned are of course the roads and field boundaries, the woods, the farms and other habitations, and the other products of human labour; these are the letters and words inscribed on the land.

Setting aside the nationalist tenor of his remarks, I would like to draw attention to the paradox they embody, namely that it sets archaeologists to work in deciphering traces of a past that, by rights, should have already been erased by the present. That there is something left for them to work on is an index of the fact that the erasure is never complete, that something always remains. Suppose, for example, that you are surveying a landscape for evidence of ancient trackways. The most ancient tracks, worn by feet from centuries past, are now barely

visible traces on the surface, on the point of vanishing. It may take a specialist eye to see them. Unless artificially preserved, the weather will soon wipe them out altogether. By contrast, the newest incisions, recently cut in the landscape and not yet subject to significant erosion, are strongly marked. In between are historic traces that, while manifestly weather-beaten and sometimes obscured, are still easy to recognise. Thus, in the land just as on parchment, the past is not buried under the present but actually closest to the surface, while the present, undercutting the past, digs deepest. The past comes up as the present goes down. This is not a layering so much as a *turning over.*

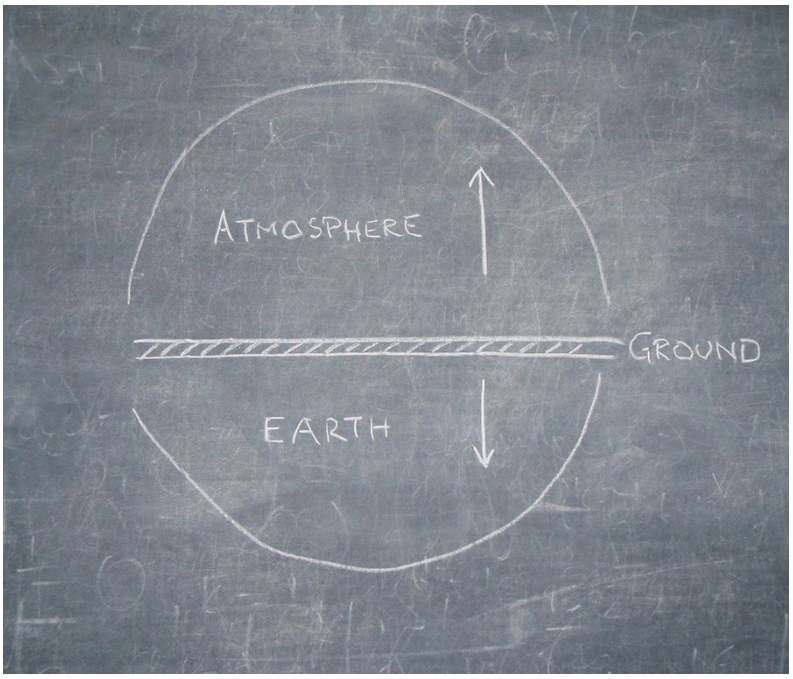

Image 3

Now were the ground an interface between the substances of the ground and the atmospheric medium, as Gibson imagined it, then it would look in cross section something like this (Image 3). Outside the paved environment of the city, however, the ground has no topside or underside. It doesn't hold earth and atmosphere apart. On the contrary, as Shepherd understood, it is the zone of their interpenetration. It is a palimpsest. The ground as palimpsest doesn't separate the earth from the sky, or serve as an interface mediating exchanges between the two. It is rather where earth and sky are rolled into one – where rain meets soil and turns it to mud, where wind meets sand and blows it into dunes, where snow meets ice and coats the surface in a blanket of white. Here, to recall Shepherd's words, between blue sky and bedrock, are 'scree, soil and water, moss, grass, flower and tree, insect, bird and beast, wind, rain and snow'. The ground,

thus understood, exemplifies what I want to call a *deep surface*. Formed as the earth's 'rising up', or eruption, meets the atmosphere's 'beating down', or erosion, this ground has depth, but is of no measurable thickness. Should we to attempt to measure it, we would find that starting from the lower, atmospheric horizon, there is no limit to how far up we could go and that, conversely, starting from the upper, earthly one, we could keep on going down without ever reaching rock bottom. A diagram shows what I mean (Image 4).

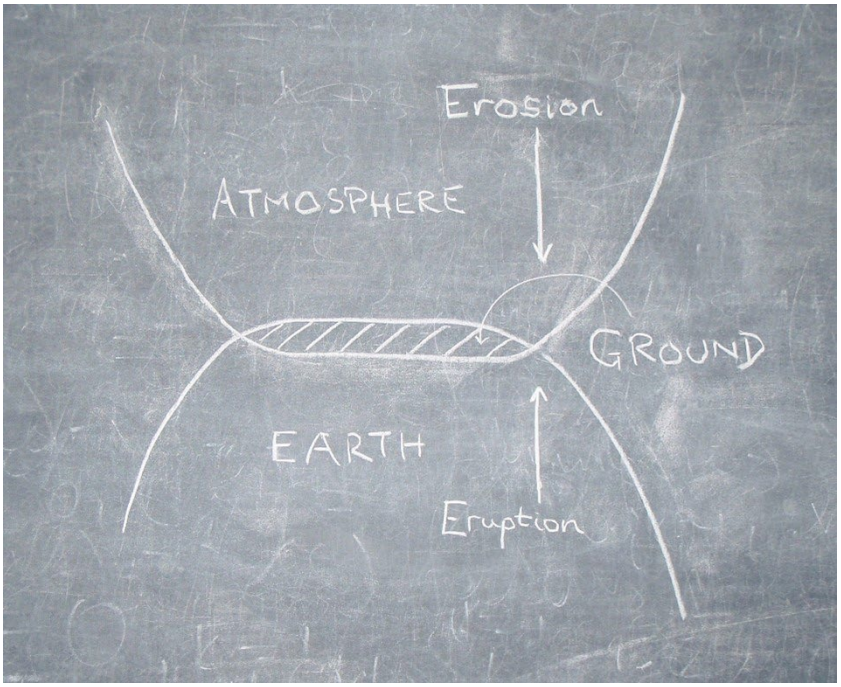

Image 4

The double meaning of the English verb 'to wear' aptly illustrates this understanding of the ground as a deep surface. The word can mean to 'put on', as in wearing clothes, but it can also mean to 'strip off', as a surface that is worn by use or by exposure to the elements. Were the surface an interface, then these meanings would directly contradict one another. But with the palimpsest, they are one and the same, for it is in the very process of erosion that depth comes to the surface. This is a surface that covers, but doesn't cover *up*. Such, indeed, is the surface of the ground.

One thinker who came close to picturing the ground in these terms was the Victorian critic and connoisseur John Ruskin. Introducing the fifth and final volume of his *Modern Painters*, published in 1860, Ruskin described the ground as a 'veil of strange intermediate being'. At bottom, Ruskin argued, the earth is dead and cold, but at its surface – in the textures of its meadows and forests, rocky

outcrops, moor and heath – it ministers to its inhabitants through this veil. Perhaps, then, we could follow Ruskin in thinking of the ground as a veil of intermediacy rather than a plane of separation. Ruskin himself began with the injunction: 'To dress it and keep it'. Dressing here, is an act of care, of looking after. The veil covers, but does not cover *up*; it is a revelation, not a disguise. Imagined as a veil, the ground doesn't hide the earth's depth *beneath* its surface but allows us to feel the depth *in* its surface.

But the ground can also deceive. This is how camouflage works. It tricks the perceiver into supposing that what is actually an interfacial, double-sided surface, covering up things hidden within or beneath, is really a one-sided, deep surface like that of a veil, which is open to the sky rather than closed off against it. Thus, the military commander paints the tarpaulins under which he conceals his tanks in motley shades of green and brown, rendering them indistinguishable, to aerial reconnaissance, from open ground. And open ground, since it has no other side – since it covers but doesn't cover up – appears to have nothing to hide.

I want to loop back, now, to the idea of turning, by bringing in another concept, namely *volume*. The word comes from the Latin *volvere*, 'to roll'. Thus, it is cognate with such words as 'evolution' and 'revolution'. The original volume was a scroll of papyrus or parchment, usually inscribed with writing. To read it, the scroll had to be unrolled, or *evolved*, after which it would be rolled up again, or *revolved*. But later, as the scroll gave way to the manuscript book, or codex, the continuous roll would be folded into sheets, like a concertina, so that the reader, rather than unrolling the volume, would turn its pages, opening up each fold only to close its predecessor behind. On turning the page, *recto* to *verso*, what was once over goes under, and what was under goes over. But there was no going through. For although every sheet had two sides, *it was not an interface*. Rather, like the mythical Janus, the page was two-faced. And the only way to get from one face or side to the other was by the simultaneous folding and unfolding of the turn. But the codex was always open, regardless of the particular page to which it was turned. Not until the manuscript was replaced by the printed word was the book finally closed. For in the printed book, the pages are laid one over another to form a stack. Although you still have to turn the pages to read it, the book itself is now perceived as a thing of layered sheets to be worked *through*, top to bottom as beginning to end. That's why we typically think of the volume these days as a three-dimensional box or container, to be filled with contents (Image 5).

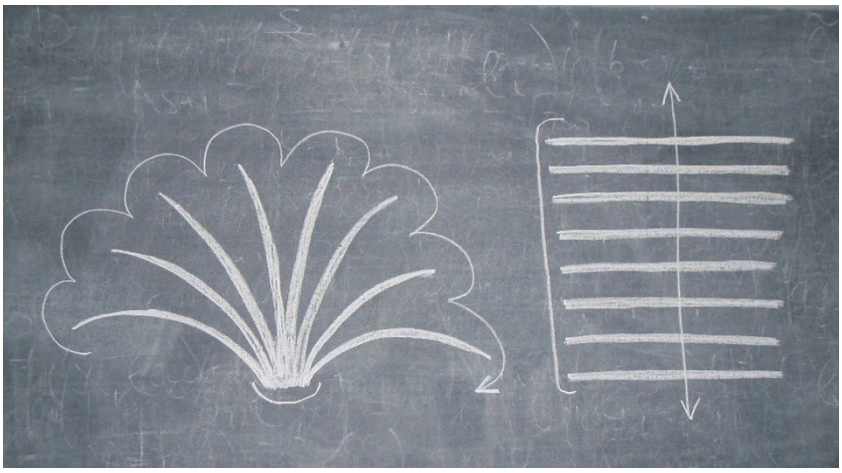

Image 5

I've already compared the page and the ground. Has the ground, then, undergone a parallel transformation, from turnover to stack? It's true that you cannot exactly roll up the ground like a scroll. But you can turn it. Put yourself into the shoes of the medieval ploughman, who would turn the ground with every turn of the seasons in the agricultural calendar. The purpose of ploughing is to bring to the surface nutrient-rich soil from deep down, while burying soil already drained of nutrients by previous cropping, along with any remaining weeds and stubble. Thanks to this continual turnover, the ground will continue to yield, year after year. It is repeatedly renewed, not by adding layer upon layer as in a stack, but by breaking it, cutting through with the share so as to raise the deep and bury the shallow. That's what makes the ground surface – like the scroll and the codex – into a volume. It's a surface that turns with the seasonal passage of time, with the alternations of weather and the husbandry of crops, wherein the past rises up even as the present sinks below. This is a ground not just of cultivation but of memory. For with its turning, memories of persons that lived or events that happened long ago are brought to the surface so that inhabitants can engage with them directly, as if present in the here and now.

But with the volume reconceived as a box or container, with contents layered in a stack, time no longer rolls, folds or turns the ground. It rather pierces through successive grounds like an arrow, pointing either upwards from past to present, or downwards from present to past. Here every ground, every layer, establishes its own plane of synchrony, while layer succeeds layer in a diachronic sequence. To reach the past, as in archaeological excavation, you have to dig down. Memory here is like an archive, deposited in stacks with the oldest records furthest down. There they stay, sinking ever deeper as time moves on. As a deposit, the past contains no potential for renewal. It is over. Renewal can come only from superimposition, by adding another layer to the stack, and then another, and an-

other. Each successive layer is understood to be a fundamental platform – level, void and hard – upon which everything stands, each in its proper location.

The ground of turning, we could say, is *soft*. We leave footprints in soft ground, whether in wet mud, sand, snow, or moss; for the same reason, footprints are impermanent, and readily eroded by the weather. Prints are temporal things, held within the seasonal round. But the ground of layering, by contrast, is *hard*. Whereas we leave footprints in the soft earth, on the hard surface of the pavement we can only stamp. Paving, as we've seen, has upper and lower sides; it is interfacial. It has a measured depth, and its support is conditional on the strength or load-bearing capacity of its materials. But the immeasurable depth of soft earth is felt in its embrace of the atmosphere. And this embrace is unconditional. You can fall onto or into the earth, but you cannot fall *through* it. There can be gaps or holes in a pavement, but in the earth, there are neither gaps nor holes. There are only pits.

The final pit, of course, in which we end our lives, is the grave. Yet it is normal, after burial, for the pit to be covered over with a slab. And the slab, like a paving stone, *does* have a topside and an underside. Once put in place, it covers up and conceals the body laid below. Over time, earth and vegetation will grow over the burial site, leaving it virtually indistinguishable from its surroundings, pending possible 'rediscovery' through archaeological investigation. Is the earth, then, open or closed? Perhaps, as the practice of burial suggests, it is both. As generations come and go, the earth alternately opens to the sky and turns against it. Maybe, in a way, both Shepherd and Gibson were right, even though each told only half the story.

“Fertile thinking is oriented toward depth, and profoundness is desired, but superficiality is devalued; being directed to the surface is intellectually nearly taboo.”

- Sybille Krämer, author of “The Cultural Technique of Flattening,” Metode (2023), vol. 1 Deep Surface

“If you encounter an impenetrable surface, you may have to think again; try squinting your eyes, spin around three times and stay in the vertigo, maybe enjoy it.”

- Julie Barfod, author of “The room I that I am, the room I give birth to,” Metode (2023). vol. 1 Deep Surface

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