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The eye of the storm: visual perception and the weather

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Much has been written on how we see landscape; virtually nothing on the relation between visual perception and the weather. This essay is an attempt to take the study of vision out of doors. I argue that weather enters visual awareness not as a scenic panorama but as an experience of light. Rather than placing sight and light on opposite sides of a boundary between the mind and the physical world, I follow Merleau-Ponty in claiming that light is fundamentally an experience of being in the world that is ontologically prior to the sight of things. Though we do not see light, we do see in light. Drawing on James Gibson's tripartite division of the inhabited world into medium, substances and surfaces, I link the relation between landscape and weather to that between surfaces and medium. Since weather, as a phenomenon of the medium, is an experience of light, to see in the light is to see in the weather. In the canons of western thought, however, the surfaces of the landscape are identified with the limits of materiality. This, in turn, renders immaterial the medium through which persons and organisms move in perception and action. Thus while the landscape appears to be real, the weather can only be imagined. Overturning this ontology, I show that in the perception of the weather-world, earth and sky are not opposed as real to immaterial, but inextricably linked within one indivisible field.

On a breezy day in early March I was standing on the shore along which the North Sea laps the beach of the city of Aberdeen, in north-east Scotland, where I live. The tide was high, leaving only the narrowest strip of shingle free from the spray of ceaseless and tumultuous breakers. As a colleague once remarked to me, the sea on this side of Scotland has muscles. For a short while, the sky overhead was brilliantly clear, yet towards the north, whence the cold wind blew, mountainous clouds were building up, and a blur upon the horizon portended an imminent shower. Moments later it was upon us. The sea changed from a serene blue to an angry grey, the disappearing horizon swallowed up the ships in the distance, the white foam of the wave-crests that had once sparkled in the sunlight flickered eerily in the all-enveloping gloom, and a mixture of rain and sleet filled the air. Fortunately the shower did not last for long. Almost as suddenly as it had come, it slipped away southwards. The rain stopped, the horizon reappeared, the ships came back into view, and the cloud that had once merged with the sky itself reappeared as a massive presence *in* the sky, no longer threatening on the retreat. But for that brief period, the world looked completely different, and I felt different too. Yet I had been standing all the while on the same spot, looking out upon what was supposed to have been the same view.

There was, of course, nothing odd or unusual about this. We all know that as the weather changes, so does the look and feel of the world we inhabit. What is odd, however, is that in the scholarly literature on visual perception, scarcely a word is to be found on the question of *how* the weather impacts upon practices of vision. For the most part, you would think that there is no more weather in the world than in the studio, laboratory or seminar room. This essay is part of an attempt to take the study of eyesight back where it belongs, out of doors. A simple way of putting it would be to say that I am interested in the visual perception of the weather. How do we see what kind of day it is? The matter is immediately complicated, however, by two considerations. One is that our experience of the weather, when out of doors, is invariably multisensory. It is just as much auditory, haptic and olfactory as it is visual; indeed in most practical circumstances these sensory modalities cooperate so closely that it is impossible to disentangle their respective contributions. Thus we can normally see what the weather is like only because we can hear, feel and smell it too. The second complication is that the weather is not really an *object* of perception at all. We might use our eyes to survey the scene and pick out objects as foci of attention. As I aim to show, however, the weather enters into visual awareness not, in the first place, as a thing we see, or even as a panorama, but as *an experience of light itself.*

SIGHT AND SOUND

In order to explain what I mean by this, I should like to dwell for a moment on the question of the difference, and the relation, between vision and hearing. For there

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is a curious and puzzling asymmetry in the ways these sensory modalities are commonly described. If you ask 'what do we see?', the answer usually comes back in the form of a list of visible *things* – commonly observable objects in the environment. But if you ask 'what do we hear?', the answer will typically comprise an inventory of *sounds*. For example: we see the door, but we hear the banging of the door when a gust of wind slams it shut; we see the black cloud but hear thunder; we see the waves but hear their breaking on the shore; we see the dog but hear its bark, see the man but hear his footsteps, see the bird but hear its call, and so on. Yet surely, vision depends upon light just as much as hearing depends upon sound. Thus if sound is what we hear, then why do we not see light? Why do we so readily assume on the one hand that we see things rather than light, but on the other that we hear sound rather than things? Why are we so convinced that the one thing we do *not* see, as James Gibson once put it, is 'light as such' (Gibson 1979, 55)?

Here is another indication of the same asymmetry. We often compare sight and sound. It is just as usual to compare sight and sound as it is to compare sight and hearing. Indeed many authors use the terms *sound* and *hearing* interchangeably, as though the phenomena to which they refer were really one and the same. But if sight and sound are often compared, light and hearing never are. And if hearing and sound are often regarded as synonyms, vision and light are more likely to be treated as antonyms. This passage from Walter Ong exemplifies the comparison of sight with sound, and the conflation of sound with hearing:

> Sight isolates, sound incorporates. Whereas sight situates the observer outside what he views, at a distance, sound pours into the hearer … Vision comes to a human being from one direction at a time … When I hear, however, I gather sound from every direction at once: I am at the centre of my auditory world, which envelops me, establishing me at a kind of core of sensation and existence… You can immerse yourself in hearing, in sound. There is no way to immerse yourself similarly in sight. (Ong 1972, 82)

Had Ong been as prepared to substitute light for vision as he is to substitute sound for hearing, much of the force of this passage would be eliminated. If sound pours into the hearer, does not light pour into the viewer? When I stood by the sea on that March day, was I not as much bathed in light as enveloped in sound?

The isolation of the observer that Ong attributes to sight appears to have its source in a peculiar topology of the human head whose roots run deep in western traditions of thought. In this topology the ears are imagined as holes that let the sound in, whereas the eyes are screens that let no light through. Inside the head, then, it is noisy but dark. As sound penetrates the innermost sanctum of being, mingling with the soul, it merges with hearing. But light is shut out. It is left to vision to reconstruct, on the inside, a picture of what the world is like on the outside. Such pictures can of course be wrong, and it is for this reason that philosophers through the ages have been so much more concerned with optical than with aural illusions (Rée 1999, 46). But how did this topology come to be established? How did light and sight find themselves on opposite sides of an apparently impermeable barrier, while sound and hearing did not? The answer lies in a key historical transformation in our understanding of what light actually means, and at the cusp of this transformation lay the towering figure of Renée Descartes.

WHAT IS LIGHT?

Philosophers of antiquity placed man at the centre of the cosmos. From his eyes, rays of light shone out to illuminate the world. But with the Copernican revolution, this anthropocentric cosmology was overthrown. At the centre now lay the sun, a source of radiant energy that – filtered through the atmosphere of our peripheral planet and reflected from its surfaces – excites the eyes of its human inhabitants. Thus the *lux* of the ancients, the light that illuminates the world of our perception, was replaced by the *lumen* of modern physics, an impulse that owes nothing to the human presence or to the workings of the eye. Yet as Descartes realized in his *Optics* of 1637, this physical impulse, striking the eye, gets no further than the back of the retina. So where, he wondered, does the essence of vision reside? Does it lie in the focusing of incident light and resulting stimulation of the retinal nerves, or in the operations of the mind upon the 'raw material' of nervous sensations subsequently passed to it? Is vision an achievement of the eyes or of the mind? To begin with, Descartes seemed to endorse the former view. Why else could he have been so impressed by the potential of the telescope to increase the power of sight? Yet his eventual conclusion was that it is the mind (or soul) that sees, and *not* the eye. And it sees by constructing an inner picture, on the basis of intelligence received by way of the eyes, of what the world outside is like (Descartes 1988, 57–68).

So it was that sight, understood as a purely cognitive phenomenon, went 'indoors', while light, understood as

a purely physical one, went 'outdoors'. Sight and light, confounded in ancient optics, came to be separated on either side of a boundary between mind and world. Yet the true meaning of light remains as enigmatic in our time as it was for Descartes almost four centuries ago. Thus the physics of light continues to be known as optics, even though it has nothing to do with the eye and repudiates any connection with mental phenomena. And when physicists tell us that light reaches our eyes from afar, we believe what they say, even though in our everyday experience, luminosity saturates a world that is only revealed to us through vision. Is light, then, a precondition for, or a consequence of, visual perception? Does it shine in the world or in the mind? When we speak of light, do we mean the physical *lumen* or the phenomenal *lux*?

The answer, surely, is neither. Questions of the meaning of light must be wrongly posed if they force us to choose between regarding light as *either* physical *or* mental. The mistake is to imagine that vision proceeds along a one-way chain of connections starting with material objects and ending with their representation as images in the mind. If this were so, then at some point along the chain nervous impulses registered in the brain would have to be 'turned over to the mind', as Vasco Ronchi put it in his *Optics* of 1957 – echoing Descartes' own claim that such impulses 'tickle' the soul (Descartes 1988, 65; Ronchi 1957, 288). While a physiology of vision might tell us what happens on the far side of the turn-over point, and a psychology of vision might tell us what happens on the near side, the turning over itself would remain a mystery.

This mystery, however, is not inherent in the phenomenon of vision itself, but is a by-product of our own categories of thought. In reality nothing is turned over from body to mind. This is because vision is not a one-way process leading from worldly object to mental image, by way of the eyes and the brain, but rather unfolds in circuits of action and perception, without beginning or end, that are set up through the placement of the perceiver from the outset as a being *in* the world. Thus the phenomenon known as 'light' is neither on the outside nor on the inside, neither objective nor subjective, neither physical nor mental. It is rather immanent in the life and consciousness of the perceiver as it unfolds within the field of relations established by way of his or her presence within a certain environment. It is, in other words, a phenomenon of *experience*, of that very involvement in the world that is a necessary condition for the isolation of the perceiver as a subject with a 'mind', and of the environment as a domain of objects to be perceived (Ingold 2000, 257–58).

THE LIGHT OF BEING

This is what the philosopher Maurice Merleau-Ponty was getting at, in his celebrated essay on 'Eye and mind'. That we can see *things*, objects in our environment, is obvious and unremarkable. That we can *see*, however, is astonishing. Yet we cannot see things unless we first can see, and we cannot see unless we are immersed, from the start, in what Merleau-Ponty calls 'the soil of the sensible' – that is, in a ground of being in which self and world are initially commingled (Merleau-Ponty 1964, 160). For sighted persons, this ground is light. Or to put it another way, light simply means 'I can see'. We are, for the most part, so preoccupied with the things that occupy our attention that we tend to forget the foundational experience upon which it rests. But for a blind person to whom sight has been restored – and doubtless for a newborn baby opening its eyes to the world for the first time – the experience must be overwhelming. Quintessentially, light is an experience of being. As William James once put it, 'the first time we see *light* … we *are* it rather than see it' (James 1892, 14). This is what Merleau-Ponty means by the magic – or delirium (1964, 162) – of vision: the sense that at every moment one is opening one's eyes for the first time upon a world-in-formation. And it is the task of the painter, above all, to recover this sense of being, to witness the 'continued birth' of the world, to rekindle in us the astonishment of vision, and to remind us that there are things to be seen only because we first can see. As Paul Klee wrote in his 'Creative credo' of 1920, 'art does not reproduce the visible but makes visible' (Klee 1961, 76). It brings the world to light.

Just what 'bringing to light' entails can be demonstrated by means of a simple experiment. Close your eyes for a while, then open them. So long as your eyes remained closed you may have felt as though you were shut up indoors, in complete darkness. But did it seem to you, when you opened them again, that you were looking out upon the world through the windows of your unlit house, having opened the shutters? Far from it. It was rather as if the very walls and ceiling of your house had vanished, leaving you out in the open. Bringing the world to light is not a matter of seeing out but of *being* out (Ingold 2000, 263). The space we inhabit is not set over against an outside world, but is already outside, open to the horizon. Thus, mingling with all we see, we are simultaneously somewhere and everywhere. Flitting like an agile spirit from one place or topic to another as the focus of our attention shifts, we do not so much see things as see *among* them.

Much the same argument can be adduced in the case of sound. If to see, we must be immersed in light, so also to hear, as Ong noted in the passage cited above, we must be immersed in sound. There is no fundamental difference between sight and hearing in this regard, which is one reason why – in practice – their respective contributions to normal multisensory perception are so hard to tease apart. Nor however, in order to establish the condition of immersion in sound, need we suppose that it enters the body through the earholes. No more with sound than with light does the physical impulse – in this case comprising vibrations in the medium – get inside the head. For sound, too, is a phenomenon of experience, another way of saying 'I can hear'. Ong, along with countless other writers, forces the contrast between hearing and vision by comparing *sound* as 'I can hear' with *sight* as 'I see things', rather than with *light* as 'I can see'. Making our way in the world, we hear among things, as we see among them.

Moreover we feel among them too. In just the same way that the experience of light is ontologically prior to the sight of things, so also *feeling* is prior to *touch*. Of course we are forever touching things in our everyday lives, whenever we make them, or use them, or seek to identify them for what they are. And in more intimate forms of sociality we touch other people, as they touch us. But we could not touch unless we first could feel. Like light and sound, feeling is an experience of being – of a body that is open and alive to the world, or as Merleau-Ponty would say, immersed in the soil of the sensible. Feeling lies in that commingling of the perceiver with the world that provides a necessary foundation for the isolation of things as objects of touch, and of the perceiver as an agent who touches. The action of touch is generally delivered through particular organs, above all the hands, but also the lips, tongue and feet. However, it is the whole body that feels, including even the eyes. Indeed we have only to stand before a warm fire, or alternatively to find ourselves outside on a windy or frosty day, to realize that by opening our eyes we open ourselves to feeling as well as to light. With this observation in mind we can return, after that long detour on the meaning of light, to our original question of visual perception and the weather.

MEDIUM, SUBSTANCE, SURFACE

I have already posited that perceiving the weather is above all an experience of light, and have provided some explanation of what this might mean. But now we face another problem. Much has been written on the perception of the landscape; virtually nothing on the perception of the weather. It is extraordinary that something that has such a massive impact on people's activities, moods and motivations, indeed on the whole tenor of social life, has been so little considered. The problem, however, is this: is weather a part of the landscape or is it not? If it is not, does it swirl around *above* the landscape, or does it actually *encompass* the landscape, as the earth is encompassed by the great sphere of the sky? If the weather is not part of the landscape, is the landscape, then, part of the weather?

To begin to answer these questions, I turned to James Gibson's classic work on *The ecological approach to visual perception*. Here Gibson proposes a tripartite division of the inhabited world, into *medium*, *substances* and *surfaces* (Gibson 1979, 16–32). For human beings the medium is normally air. Of course we need air to breathe. But it also allows us to move about – to do things, make things and touch things. It also transmits radiant energy and mechanical vibration, so that we can see and hear. And it allows us to smell, since the molecules that excite our olfactory receptors are diffused in it. Thus the medium, according to Gibson, affords movement and perception. Substances, on the other hand, are relatively resistant to both. They include all kinds of more or less solid stuff like rock, gravel, sand, mud, wood, concrete and so on. Such materials furnish a necessary physical support for life – we need them to stand on – but it is not generally possible to see or move *through* them.

At the interface between the medium and substances are *surfaces*. They are where radiant energy is reflected or absorbed, where vibrations are passed to the medium, where vaporization or diffusion into the medium occur, and what our bodies come up against in touch. So far as perception is concerned, surfaces are therefore 'where most of the action is' (Gibson 1979, 23). All surfaces have certain properties. These include a certain, relatively persistent layout, a degree of resistance to deformation and disintegration, a characteristically non-homogeneous texture and a particular shape. As illustration, Gibson offers a series of six photographs depicting different kinds of familiar surface (1979, 26–7). One shows the transverse surface of sawn wood, another a field of mown grass, another a woven textile, another the rippled surface of a pond, and another a patch of gravel. In each case, the texture of the surface immediately allows us to recognize what it is a surface *of*.

But there is an odd-one-out in this series. For a sixth photograph is of clouds in the sky. The picture is included alongside the others as an example of just another kind of surface, on a par with wood, gravel, grass and so on. Yet if this were the case, and if surfaces had all the properties that Gibson attributes to them, air travel would be decidedly hazardous! Take a look at the sky on a day such as the one I described at the outset, when I stood by the sea on Aberdeen beach. Shower clouds were building in an otherwise bright blue sky. What kinds of surfaces can you see? Are there really any surfaces at all? Do clouds have surfaces? Indeed Gibson has a particular problem with the sky, which he never manages to resolve. It stems from his peculiarly Cartesian insistence – peculiar, because of his avowed rejection of the Cartesian programme – that while we see by means of light, the one thing we do not see is light itself (Gibson 1979, 54–5). What we see are the *surfaces of things*, by way of their illumination.

You might wonder, then, what we are to make of those phenomena that announce their presence directly, as radiant light. How do we perceive a flaming fire, a candle lamp, the sun, a rainbow, the scintillation of light off water? Gibson's answer, which becomes increasingly strained and unconvincing as his argument proceeds, is that these are all 'manifestations of light, not light as such'. How, then, are we to distinguish 'light as such' from its manifestations? Only by reducing light, in essence, to the *lumen* of modern physics. And this is precisely what Gibson does. 'All we ever see', he insists, 'is the environment or facts about the environment, never photons or waves or radiant energy' (1979, 55). It is at this point that Merleau-Ponty's phenomenology of perception takes over from Gibson's ecological approach. As I have already shown, Merleau-Ponty goes behind the ordinariness of 'I see *things*' (or rather the surfaces of things, what Gibson would call 'facts about the environment') to capture the astonishment of vision, namely the discovery that 'I can *see*'. Another way of saying 'I can see' is light. Seeing *is* the experience of light, *what* you see is *in* the light.

Let me present an imaginary scenario, nevertheless scripted with actual words. So far as I know, Gibson and Merleau-Ponty never met. But let us suppose that they did, on a fine summer's day. There they are, stretched out on the grass, looking up into the sky. 'What do you see?', Gibson asks Merleau-Ponty. To which the latter dreamily replies: 'I am the sky itself as it is drawn together and unified, and as it begins to exist for itself; my consciousness is saturated with this limitless blue' (1962, 214). Gibson is unimpressed. Why, he wonders, will this Frenchman not answer the question? He had asked what his companion can *see*, not what he *is*. And in any case, how can he claim to be the sky when he is stretched out here on the ground? Eventually, Gibson responds, 'To me it seems that I see the sky, not the luminosity as such' (1979, 54). Gibson's problem, however, was that he could never figure out *how* the sky should be distinguished from its luminosity. Since all visual perception, for him, is the perception of surfaces, he could only imagine the sky as a sort of surface, set over against the perceiver. To which Merleau-Ponty could respond that the sky is not a surface at all but the world of light itself, to which we *open ourselves up* in vision. 'As I contemplate the blue of the sky', Merleau-Ponty insists, 'I am not *set over against* it as an acosmic subject …' (1962, 214). To see the sky is to *be* the sky, since the sky *is* luminosity and the visual perception of the sky is an *experience of light*. For sighted persons, light is the experience of inhabiting the world of the visible, and its qualities – of brilliance and shade, tint and colour, and saturation – are variations on this experience.

WEATHER AND LANDSCAPE

We can now return to our earlier problem. What is the difference, and the relation, between perceiving the weather and perceiving the landscape? 'The atmospheric medium', Gibson writes, 'is subject to certain kinds of change that we call weather' (1979, 19). Thus weather is what is going on in the *medium*. The landscape, by contrast, consists in the first place of *surfaces*. So at a first approximation, we could say that the question of the relation between weather and landscape is really one about the relation between medium and surfaces. For Gibson, as we have seen, while the medium affords perception, *what* we perceive are surfaces, together comprising a landscape. That is why he includes a photograph of a cloud-studded sky in his illustrative series demonstrating the varieties of surface texture. But if the surface is defined as an interface between substance and medium, how can the sky possibly be a surface? What substance lies behind it? If, on the other hand, the sky is not a surface, then how can we possibly see it?

Merleau-Ponty, for his part, does not deny that we see things or features of the landscape, and his account of how this happens has many resonances with Gibson's – for example in his insistence that it involves movement, exploration and discovery rather than the construction of mental representations from the raw material of

optical sensation. But vision, according to Merleau-Ponty, goes on against the ground of our immersion in the *medium*. In visual, as indeed in auditory and haptic perception, we open ourselves up to the medium, and this opening is experienced as light, as well as sound and feeling. If, then, landscape is to weather as substance is to medium, could we not conclude that the perceiving the landscape differs from perceiving the weather precisely as the sight of things differs from the experience of light? Thus:

Landscape	**Weather**
Properties of *surfaces*	Properties of *medium*
Seeing, hearing and touching *things*	Experience of *light*, *sound* and *feeling*

Perceiving the landscape, then, is a mode of *observation*, perceiving the weather is a mode of *being*.

Let me return to the scene from which I began. I am standing on the beach, on a cold, blustery and showery day. Looking around, what can I see? Starting with a downward glance and then casting my eyes gradually upwards, I see first my own trousered legs and shod feet, then the stones of the shingle on which I stand, then the surging breakers collapsing on the shore, then waves upon waves, capped with foam, gradually panning out into the level expanse of the ocean, then apparently motionless ships silhouetted on the horizon. Continuing the ascent beyond the horizon line, I see the sky, billowing clouds, seagulls wheeling in the sky, and off to the right, the grassy slopes of a peninsula, with a lighthouse at the tip and buildings along the shore leading to the harbour. But I wondered: was I seeing all these things in the same way? And were they really things at all?

There were some things, to be sure. A particular pebble caught my eye. I stooped to pick it up. Holding the stone in my hands, I examined it, and knocked it against another stone to listen to the sound it made. The stone was indeed an object separate from myself, in a way that my legs and feet were not. For I could walk away and leave the stone behind! But what of the ships in the distance? They were visible only from the vantage point at which I stood. I could not walk around them. For this reason they appeared almost two-dimensional, as recognizable shapes rather than the hulking objects they really were. The same was true of the distant buildings and the lighthouse. Most remarkable were the seabirds. Watching a gull wheeling in the sky is quite different from seeing it perched motionless on one of the great wooden pillars of a breakwater. I observed the latter as a thing at rest which, when it subsequently launched into flight, was observed to move. In the sky, however, I recognized the gulls by their characteristic movements, which would only congeal into objective forms when they came in to land. I perceived the bird, upon landing, not as a thing that ceased its movement, but as a movement that was resolved into a thing.

But the movement of the waves never ceased. Unlike a seabird, which can be all movement at one moment and a motionless thing the next, the waves could not reappear as things. They were movements-in-themselves. And the clouds? They did not exactly move, but nor did they stand still like solid objects. Rather they appeared to drift in nebulous formations that billowed up ahead as fast as they faded away behind. A storm progresses in the same way, continually winding itself up on the advance and unwinding on the retreat. But when the storm cloud is right overhead, you do not see it as a cloud in the sky. Rather the cloud becomes the sky itself and the 'limitless blue' of which Merleau-Ponty spoke so evocatively is replaced by a leaden grey. Moreover the surface of the sea, reflecting the sky, changes colour to match. Thus the sea is ever-changing too, not just in its surface texture, according to the strength and direction of the wind, but also in its brilliance and colour, depending on the luminosity of the sky.

Despite the sheer diversity of phenomena presented to me in my field of vision – feet, stones, birds, ships, waves, sea, clouds, sky – I had no sense of incongruence, disjunction or rupture as I cast my eyes from one to the other. I did not feel immersed in the world at one moment and set over against it at the next. I did however have a powerful sense that behind my recognition of various kinds of objects and surfaces, such as the pebbles of the beach and the waves of the sea, there lay the experience of inhabiting an illuminated world, and that this illumination was in some way *constitutive of my own capacity to see*. The implication is that as the weather changes we do not see different things, but we do see the same things differently. That is why I have gone out of my way, at the risk of some stylistic awkwardness, to avoid referring to the weather as an *object* of perception. Strictly speaking, the weather is not what we have a perception *of*; it is rather what we perceive *in*. For if weather is an experience of light, then to see *in* the light is to see *in* the weather. It is not so much an object as a medium of perception.

Another example lends support to the point. The day was windy. But how was the wind registered in my

perception? I could of course see and hear its effects, above all in the crashing waves, which drowned out all other sounds. I would have had to shout to make myself heard. Though I was well dressed against the elements, I also felt the cold blast on my face, and – albeit without thinking about it – adjusted my posture and balance to counteract the force of the wind on my body. But while I could certainly *feel* the wind, I could not *touch* it, nor did the wind touch me. Indeed the experience of the wind offers a powerful illustration of the distinction I introduced earlier, between touch and feeling. We do not touch the wind, nevertheless things feel different when it is windy compared with when it is calm. For we touch *in* the wind. Wind is an experience of feeling, just as the brilliance or cloudiness of the sky is an experience of light. In our movements of action and perception we respond to the wind, as other creatures do. Soaring in the sky, the seagulls were feeling and responding to the wind. And so was I, in my very action of watching the birds in flight.

SKY AND EARTH

To conclude I would like to return to a question I raised earlier. Why is the literature on visual perception, which has so much to say about landscape, so silent on the weather? Why, in other words, does it concern itself with surfaces to the virtual exclusion of the medium? Of course, as terrestrial creatures, human beings live their lives on the ground, and its surfaces provide a necessary foundation for their activities. Beneath the ground lies the earth; above it the atmosphere. While the former provides support and materials for subsistence, the latter gives us breathing space and affords both mobility and sensory perception. It seems reasonable to characterize the ground, following Gibson (1979, 16), as an interface between the solid substance of the earth and the gaseous medium of air. In the eyes of many philosophers and theorists, however, it is far more than that. For them the surfaces that make up the landscape mark nothing less than the limits of materiality itself. Thus the ground appears as an interface not between substance and medium but between *materiality* and *immateriality*.

The equation of materiality with the solid substance of the earth has its roots in a tendency, deeply sedimented in the canons of western thought, to imagine that the world is presented to human life as a surface to be occupied. Having emerged from an autochthonous point of origin, the family of man is said to have branched out, along its many lines, over the territories of the globe. In this colonial image, life goes on upon the outer surface of a world that has already congealed in its final form, rather than in the midst of a world of perpetual flux. But between the materiality of nature and the agency of its human occupants, between the worlds of things and persons, there remains no conceptual space for those very real phenomena and transformations of the medium that we generally recognize as weather. Where, we might ask, do we place wind and rain, sunshine and clouds, frost and falling snow, thunder and lightning? Is falling snow part of the material world, or does it only become part of that world when it lies on the ground? Is the wind on your face or the wind that blows down trees merely a figment of the imagination? Rain can turn a ploughed field into a sea of mud; frost can kill growing crops. How, then, can we say that a farmer's field is part of the material world while rain and frost are not? And where do we place all the forms of fungal and bacterial life, or fire and smoke, or liquids of all kinds from ink to volcanic lava?

The inability to comprehend these phenomena within the terms of a division between the objective materiality of things and the subjective agency of persons accounts for the virtual absence of weather from philosophical debates on these matters. It is the result of an ontology that, placing surface before medium, imagines life to be played out upon the inanimate surface of a ready-made world. The landscape figures in such an ontology as something like a stage-set. As in the theatre, the boards are real, but the weather can only be *imagined*. I suggest turning this ontology upside down. Let us suppose that living beings make their way *through* a world-in-becoming rather than *across* its pre-formed surface, as inhabitants rather than occupants. The properties of the medium through which they move then become all-important. The inhabited world would be constituted in the first place by the aerial flux of weather rather than by the grounded fixities of landscape. The weather is dynamic, always unfolding, ever changing in its moods, currents, qualities of light and shade, and colours, alternately damp or dry, warm or cold, and so on. In this weather-world the earth, far from providing a solid foundation for existence, appears to float like a fragile and ephemeral raft, woven from the strands of terrestrial life, and suspended in the great sphere of the sky. It is in this sphere – and not on the surface, as Gibson thought (1979, 23) – that 'most of the action is': where the sun shines, the winds blow, the snow falls and storms rage. Sensed as the generative current of a world-in-formation, weather engulfs landscape, as the sight of things is overwhelmed by the experience of light.

Let us finally rejoin Gibson and Merleau-Ponty in their summer reverie. Recall that Gibson, gazing upwards, claimed to see the sky, not luminosity as such. Merleau-Ponty, for his part, claimed to have merged with the sky itself. What, then, *is* the sky, and how does it relate to the earth? Puzzled by the meaning of the term, I turned for guidance to my Chambers dictionary of English. The sky, the dictionary informs us, is 'the apparent canopy over our heads'. This is revealing in two respects. First, the sky is imagined as a *surface*, just like the surface of the earth except of course a covering overhead rather than a platform underfoot. Secondly however, unlike the earth's surface, that of the sky is not real but only *apparent*. In reality there is no surface at all. Conceived as such, the sky is a phantasm. It is where angels tread. Thus the surface of the earth has become an interface between the concrete and the imaginary. What lies below (the earth) belongs to the physical world, whereas what arches above (the sky) is sublimated into thought. With their feet on the ground and their heads in the air, human beings appear to be constitutionally split between the material and the mental.

In the weather-world, however, the sky is not a surface, real or imaginary, but a medium. In the cosmologies of many non-western peoples – commonly but somewhat inaccurately described as animistic – it is through the interiority of this medium, and not across the earth's exterior surface, that life is conducted. Among the inhabitants of the medium are a variety of beings, including the sun and the moon, the winds, thunder, birds, and so on. These beings lay their own trails through the sky, just as terrestrial beings lay their trails through the earth. Nor are earth and sky mutually exclusive domains of habitation. Birds routinely move from one domain to the other, as do powerful humans such as shamans. In short, far from facing each other on either side of an impenetrable division between the real and the immaterial, earth and sky are inextricably linked within one indivisible field. Painters know this. They know that to paint what is conventionally called a 'landscape' is to paint both earth and sky, and that earth and sky blend in the perception of a world in continuous formation. They know, too, that the visual perception of this earth-sky, unlike that of objects in the landscape, is in the first place an experience of light. I believe we can learn from them.

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