MARK ELVIN

CONCEPTS OF NATURE

China and Europe in Comparative Perspective

ROSS-CULTURAL COMPARISONS OVER a long time-scale are notoriously problematic. Not only does each culture change substantially over the course of the period but, even within their own boundaries, both are far from homogeneous. In what follows I will explore conceptions of the natural world in premodern Europe and China by looking, in a non-rigorous way, at examples of nature poetry from the fourth century AD to the start of the earlymodern era. The hope is that these works can help to illuminate not only long-term commonalities and differences between the two traditions, but also some sense of the patterns of change within them. Far apart though Chinese and European literary sensibilities with regard to the natural world were at various times, they could also at moments draw close to each other. It would be a mistake to assume that the mental universes inhabited by educated Chinese and educated Europeans were totally distinct.¹

'Nature poetry'—where the natural world itself is the main focus of interest and not just a background setting, however superbly described²—was written in Western classical antiquity, as well as in China, even though those who have some familiarity with both traditions would probably give the latter pride of place.³ As an example of the former we may take the *Mosella*, a long description in Latin of the Moselle River by Ausonius, who came from Burdigala, today Bordeaux, and rose to become tutor to the future emperor Gratian. It was finished some time not long after AD 37I, and shares several features with the rhapsodies (*fu*) written by Chinese poets on aspects of the natural world, including cityscapes, around broadly the same time.⁴ A few brief extracts follow.⁵ In the first

of these, the poet is coming out of a forest road, and catches his initial glimpse of the river:

Clearer the air hereabouts, and unclouded the rays of the sunshine showing the bright-hued heavens divine, illumined and tranquil. Now, no more are the skies, under cross-linked branches entangled, mutually chained, and unseen, by the green gloom rendered invisible.

The atmosphere, freed from restraints, not begrudging us visions of sunbeams, pours forth roseate gold from the firmament, when we behold them. Prospects where everything calls to my mind fond dreams of my homeland— Bordeaux's culture—its brilliant refinement—lie spread out before me.

¹ This essay is drawn from a much longer introductory Overview in Concepts of Nature: A Chinese-European Cross-Cultural Perspective, edited by Hans Ulrich Vogel and Günter Dux, published this month by Brill. The volume collects contributions to a conference that met at Rheine, Westphalia, in March 2000 to respond to a question posed by Günter Dux in his Historische-genetische Theorie der Kultur (Weilerswist 2000): beneath the almost endless variations between historical cultures, is it possible to detect common, underlying trends in the development of human cognitive capacities? Dux has argued that, at both ends of the Ancient World, Greece and China, economic, social and political changes during the middle part of the first millennium BC both depended upon, and in turn further encouraged, a major increase in the 'cognitive competence' needed for more complex types of human organization and enterprise. Constant political reshapings in both regions led to a loss of faith in the older, purportedly nature-given, character of polities, and prompted a rethinking of political principles with a new depth and generality. These processes led to an accelerated cognitive sharpening, and to a willingness to question accepted ideas which, once this new style of thought turned to nature and the processes of thought themselves, caused a philosophic revolution. The conference was convened to address this issue by exploring an initial test-case: a comparison of the conceptions of 'nature', taken primarily in a philosophical and scientific sense, that are found in ancient Greece and in imperial China.

² As in the description of Hermes's descent to the isle of Calypso in *The Odyssey*.

³ See the wealth of poems cited as examples in Obi Kōichi, *Chūgoku bungaku ni* arawareta shizen to shizenkan, [Nature and the Concept of Nature in Chinese Literature], Tokyo 1963.

⁴ For a selection of partial translations see Mark Elvin, *The Retreat of the Elephants: An Environmental History of China*, New Haven, CT 2004, pp. 60–4 (Zuo Si on Chengdu), p. 330 (Mu Hua on waves), and pp. 335–68 (Xie Lingyun on his estate on the south side of Hangzhou Bay).

⁵ My translations use a stress-based English approximation of the original intricate quantity-based, hexametre. This at times tangles up the syntax, but does convey something of the sonic texture and compressed expressivity of the Latin, for which Clive Brooks's *Reading Latin Poetry Aloud: A Practical Guide to Two Thousand Years of Verse,* Cambridge 2007, gives prosodic details. I have used the text in Hugh White, *Ausonius*, vol. I, Cambridge, MA 1919. Note that in every line there is a mid-line pause or caesura.

Villas' rooves surge from the crests overhanging the plunging escarpments, vines climb the viridian hills, their delight-giving rivulets merging with the inaudibly talking, and gliding, Mosella below them.

In the next passage the poet addresses the river directly, though at one point he shifts for a moment, slightly disconcertingly, to apostrophizing an imagined reader. The theme is the flowing of the waters seen from far away, then closer up, and finally under the surface:

Twofold the routes you allot us: first—downstream—borne by the current, such that the swift-beating oars will set roiling its eddying waters; else up, along the embankment, as, slack'ning no moment, the tow-rope pulls taut the mast-linked harness attached to the barge-dragging boatmen. Many a time you must muse, when observing your river's meanders, your slow course, as ordained by your fate, may be close to too leisured. *You* would not border your shorelines with sedges that slime has engendered, nor yet contaminate strands with impurities, making them cropless. Down to the brink, where the spring-clear water begins, we step dryshod. Go now! Tessellate smooth floors, fitting the Phrygian inlays; under your halls' fretted patterns extend—wide plain-like expanses of marble. Nothing care I for these luxuries given by lands and by riches, awestruck at Nature's creations.—Not mine the trusteeship for grandsons. Happy the penury richly abundant in things to abandon.

Sand grains heavy with damp, shores stretch off flat to the distance. Though feet soles press down hard—smooth, these retain no imprint. Into the glass-clear depths you may peer through the still, level, surfaces, having no secrets concealed in their waters. Serene air, everywhere present, allows us to watch with relaxed contemplation; wind so subdued eyes can pierce through the nothingness, deep under water; vision, once sharpened, sees things there in close-up, and subtlest essentials, op'ning your inmost shrines, and exposing your closest-kept secrets. Liquidly, gently, the shallows run flowing. The dropping of waters sends swift patterns dispersing across the caerulean brilliance. Ripples, in flows imperceptibly passing, shape sand into furrows. Leaning oblique to one side, in the green depths, waterweeds quiver. Plants being shaken about in the water from natural outflows tremble, enduring it; pebbles will glitter, then once more have vanished. Gravels expose, by their different hues, the viridian mosses.⁶

This romanticism is balanced by a realism that is practical but also empathetic. After a detailed catalogue of the local species of fish, which shows his knowledge of their characteristics, including how to cook them, and what they taste like—a list that makes an interesting parallel

⁶ White, Ausonius, vol. 1, pp. 225–7, and 227–9. My translations.

with, and contrast to, the list of fishes in Xie Lingyun's contemporary rhapsody *Living in the Hills*—Ausonius paints a picture of the local angling fraternity:

Where, as it happens, the bank gives a trouble-free path to the water predatory fishermen fossick in every deep hollow for fishes, poorly protected, alas! by their riverine sanctuary bolt-holes. Tugging on moist hemp ropes—out there in the midst of the river one man pulls in the fish shoals fooled by his nets' woven meshes. Sliding, the body of water progresses in calm, where another holds up his seine nets, floating, on corks also serving as markers. Yonder another, inclined on some rocks, waves flowing below him, bending the tip of his pliable rod, so it curves over downwards, casts killing hooks that are hidden beneath the deceptions of dainties. Multitudes, aimlessly swimming, deceived will attack with mouths open, gullets extended, but feel-too late-through their innermost vitals injuries cut by the barbed iron, deeply occulted inside them, then panic.—The signals go upwards, a shuddering trembling, inducing jerking response from the cane rod, setting its quiver-tip7 shaking. Swift, the lad skilfully seizes his prey, knocked free with a sideswipe, whiplash hiss in the handstroke; life's breath-gasping out-follows, sounds like vibrations of air in the void, once a whip's oscillations pressure the draughts to come rushing in, whistling, to fill the displacements. Caught, and still wet, tails thrash up and down on the moistureless rock slabs, daytime's javelins, lethally brilliant, pierce them with anguish. Deep in the river that's theirs, fish keep their strength. In the air, they grow feeble, ling'ringly wasting their life force, breathing our atmosphere, breathless.

... Fish at the onset of death, I have seen for myself, when despairing gather their will-pow'r together, then—vertically—leap for the heavens, turn, in a flash fall headlong, down to the river below them, once more lords of those waters they'd thought to all hope lost forever.⁸

A steady-eyed, practical Roman relish of the realities of war, death and heroism, in the context of landscape. Ausonius was of course nominally a Christian, but one may doubt if his heart was really in the new religion. Traces of cautious, nostalgic affection for the pre-Christian inhabitants of the hills, fields and streams haunt some of his lines, and echoes of the old unabashed classical sensuality:

Here, panoramas and landscapes divert more than solely the humans. Here, I suspect that the countryside satyrs and shining-eyed Naiads

⁷ *Saeta* means 'bristle'. Here it is an extension of a fishing rod designed to help the detection of a bite.

⁸ White, Ausonius, 'Mosella', lines 240–62 and 270–3.

run to assemble and sport on the outermost riverbank margins. Gleeful and impudent lust stirs Pans with their capering goats' hooves, prancing through shallows to startle their sisters submerged and affrighted, setting the waters impulsively rocking with rough blows carelessly smitten.

... Doings not glimpsed by our eyes, and unknown to our cognizance, should be proper to speak of in part, but provided—their secrets remain still hidden, and dread-filled mysteries guarded secure, by the streams they inhabit.⁹

Ausonius was also fascinated by the visual 'falsehoods' sometimes conjured up by everyday phenomena, such as reflections. He goes on:

Next, an illusion to relish without being furtive: the dark hills mirrored in luminous waters, and—seemingly—floods in the river sprouting forth leaves, while new vine-shoots cover the streambed. Lovely the surface appearance of reaches of water once Vesper's summoned the ev'ning-time shadows, and filled the Moselle with green mountains. Whole hills float through the ripples, their vineyards, tendrils a-tremble,

Whole hills float through the ripples, their vineyards, tendrils a-tremble, unreal. Grapes swell, ready for harvest, in swell that's transparent. Joking, the waterman counts the viridian grape-vines below him, sailor afloat on an endless plain, in his timber-built vessel out in its midst, where illusory hills intermix with the river, stream that's confused where it ends, undefined at its margins of shadow.

He next watches the youngsters competing with each other in imitation naval battles, and comments:

Once sun's drenched them with heat from the son of Hyperion, Apollo, boys' simulacra flash back from the glass-clear depths of the eddies, sunlight returning disrupted reflections of bodies inverted. Endlessly, agile manoeuvres ensue, with the right hand, then left hand, shifting their weights, changing first from the one oar, then to the other, —liquid resemblances, counterpart sailors, being tossed up by wave-swash. These young boatmen themselves find delight in their own simulacra, being amazed that such semblants deceitfully rise from the river.

After comparing their state of mind to that of a young girl who has just seen herself for the first time in a bronze mirror and thinks she is seeing someone else, Ausonius ends by remarking that the boys 'take pleasure in the ambiguous shapes of what is both false and also true'.¹⁰

⁹White, Ausonius, 'Mosella', lines 169–74 and 186–8.

¹⁰ White, Ausonius, 'Mosella', lines 189–98, 222–9, and 239.

Time in the mountains

The best Chinese comparison might be with *Living in the Hills* by Xie Lingyun (AD 385–433), but since I have already published a translation of most of this great environmental rhapsody, which interweaves human life with nature, both wild and domesticated, as well as with history and the numinous vision of Buddhism,¹¹ I offer here a selection from various shorter poems by Xie Tiao (AD 464–99). This change of genre makes an appreciable difference by restricting the expansive elaborations in which, mostly for better but sometimes for worse, both Xie Lingyun and Ausonius at times indulged. The first extract is from Xie Tiao's 'Roaming in the Mountains'; the translation uses vowel-rhymes to echo the Chinese full rhymes.¹²

Presiding, by undeserved good luck—where mountains and streams meet together,

I encounter the unstained winter's disdainful remoteness again.

- The escarpments I cross have exposures—some thousands of fathoms in depth,
- the circuitous detours round rivers I follow-wind on, forever.

Now cut into layered strata—are the cliffs, once solidly obdurate; spate passed, waters flow in meanders—once again obedient and moderate, but lost in the distance, the gulfs in the cloudbanks—seem to be bottomless, yet shallow the rapids, whose streams—run bubbling over their rocks.

- I glance off, at an angle, to see—where the stout-stemmed and poison bamboo-stands are dense;
- then look behind me in survey where, deep—the southwoods and laurels extend.

The unkempt cwms are covered over—with indigo grasses and sedges, and the landslipped screes of the rock-walls are girdled with lichens and mosses in belts.

The flying squirrels and black gibbons call—from the serried ranges of peaks; and the ducks and the gulls disport themselves—on sandbanks, mid-course in the streams.¹³

¹¹ Elvin, *Retreat of the Elephants*, pp. 338–67.

¹² The original in this case rhymes every even-numbered line on the same rhyme throughout, which is too difficult to match exactly. Unfortunately, the crystalline syllabic exactitude of the Chinese prosodic structure is impossible to reproduce in English. The caesura, where it exists but is not obvious, is shown by an em-dash. ¹³ 'Roaming in the Mountains' in Obi, *Chūgoku bungaku*, pp. 306–7. A cwm (pronounced 'coom') is a small mountain valley with one end closed. Indigo grass is *Strobilanthes flaccidifolius*. Its leaves and stalks yield indigo dye. Found mostly in hilly country in central and southwest China, as well as in Burma and Assam.

This is an evocation, in the style of a Chinese painting, of the subdued melancholy of winter in the mountainous forest landscape of western China, most probably Sichuan. Giant flying squirrels¹⁴ are said to moan when they call, and the gibbons to have a heart-rending and almost human cry. There is a pervasive sense of different times passing: the slow time of the weathering rocks and the more frequent falls of scree, the seasonal time of the rivers no longer full of run-off water, and the variable personal time created by a return visit. Human presence is alluded to with the lightest of touches in another poem:

The last snow left reflects—the dull blue of the hills, the noonday sun reappears—out of the chilling mists, from under the veiling gloom—a riverside village grows visible, little by little, along the lake—the trees become distinct.¹⁵

Human feelings are attuned, however, to something both in and, in a sense, out of this world:

Heart filled with springtime, and mind unconcerned, relaxing at leisure, cord-tagged bird-shooting arrows in hand, I stroll through the forest's depths. The light of the dawn illumines—the cups of the flowers with red; sweet tunes are piped by a breeze—so soft as to be imperceptible. I find pure, and enlightening, delight—along by the river's edge; at the bounds of the mountains, my search—for deep secrets—can end.¹⁶

The language here is full of hints at Daoist and Buddhist themes: the flowers that formed part of the diet of the hermit in search of longevity or immortality; the music played by the earth, as well as the cosmic 'tuning' of phenomena via the pitches of their immanent *qi*, understood as pneumata or breaths of life; the hunt for the hidden workings of the universe. I have translated *shang*, literally 'delight' or 'delighting', as 'enlightening delight' here because that is how Xie Lingyun, the most important of Xie Tiao's immediate predecessors, understood the function of the 'delight-ing heart' (*shang xin*) when it contemplated the landscape.¹⁷ More than mere pleasure, it was a source of, and the means of the exercise of insight.

¹⁴ The squirrels are more properly called gliding squirrels, and are probably *Petaurista petaurista*, the giant red species.

¹⁵ Obi, *Chūgoku bungaku*, p. 310: 'Attending to official business in the Studio on the Heights'. He is looking down on the scene from his office.

¹⁶ 'Responding to He Yicao's "Roaming outside the city"', in Obi, *Chūgoku bungaku*, p. 310.

¹⁷ See Elvin, Retreat of the Elephants, pp. 332–3.

Explicit reference to numinous powers in the landscape are rare in Xie Tiao, but they do occur. In a poem on 'Jingting Mountain', Xie wrote:

In every direction, for hundreds of miles, spread out the extended hills, together amassed, and the equals in height—of the mists. It is here that hermits, already—have entrusted themselves to oblivion, and where, also, there dwell undisturbed—many potent uncanny existences.¹⁸

The Japanese authority on the Chinese poetry of this age, Obi Kōichi, glosses the last term simply as 'spirits' (*kami*), which is revealing even if the translation given here is closer in a literal sense to the original Chinese.

Detailed and sharply observed nature poetry was thus being written in both great cultural domains at this period, and in a predominantly 'objective' mode, albeit with some rhetorical exaggerations and some slight, but not insignificant, sense of the local and limited supernatural. Is it possible to perceive any deep and pervading differences? Arguably, there is, but they are subtle. In this formative period, Chinese poems, to the extent that they were 'nature poetry' in the strict sense defined earlier, gained their most powerful effect by tacitly transforming the reader, if only momentarily, into an 'immortal' (xian, xianren). In the particular Chinese sense of this term, an 'immortal' was a former human being physically metamorphosed into a deathless entity by means of some combination of enhanced spiritual qualities, asceticism, macrobiotic diet and alchemy, often together with supernatural assistance in this quest. He roamed within the natural world, and was part of it; but often, so to speak, in dimensions of it that were inaccessible to mortals. Hence, characteristically, the sense of detachment and the extremely subdued presence of any 'ego' in most pure-vintage Chinese nature poetry. Another indicative sign is the importance attached to the altitude of an observer's standpoint, and to looking down on the world below as if from far above it. This conferred a sensation of supernatural detachment on the reader, since immortals could move through empty space as easily as on the ground, while their unending lives also allowed them to experience and understand almost unthinkable expanses of time.

In general, what might be called the 'immortal's-eye view' adopted in much of Chinese nature poetry, such as that of Xie Tiao, is implicit,

¹⁸ Obi, *Chūgoku bungaku*, p. 307.

not explicit.¹⁹ It is therefore difficult to prove that the interpretation just suggested really is correct, though it seems to make sense of much that would otherwise be opaque. It is also the case that, later, during the middle and later empire—that is, the Sui (581–618) and Tang (618–907) through the Ming (1368–1644) and Qing (1644–1911) dynasties—most poems in which 'nature' plays an important part are, ultimately, more complex creations focused on the interactions between ordinary human beings and the natural world.²⁰ The original intensity has weakened, and the driving impulse to concentrate on nature in and of itself now functions, more often than not, as just one component among many.

Transformations in the West

These were gradual changes. What is more striking is the relative continuity in China, in comparison to the massive rift with the past that soon opened in Western Europe. Western classical realism had believed in the harmony between the human world and the world of nature. First the Christian religious vision, and then, in the early second millennium AD, other elements, including the linking of imagined, idealized, enclosed-garden landscapes with a varying mixture of celestial and terrestrial paradises, often suffused with eroticism (rather than the honest animal sensuality of the Pans), altered out of recognition the perspective on nature summoned up by Ausonius's *Mosella*. These changes have been memorably described by Derek Pearsall and Elisabeth Salter,²¹ and it will only be necessary to summarize some of these scholars' main findings, while making them concrete with a few illustrations, and adding a few extra observations.

One major problem confronting any explanations for this cultural rift as well as attempts to track its possible consequences for the changes

¹⁹ Apart from some early, and very partial, antecedents like 'Encountering Sorrow' by Qu Yuan (late fourth century BC) in *The Songs of the South*. See David Hawkes, *Ch'u Tz'u: The Songs of the South*, *An Ancient Chinese Anthology*, Oxford 1959, pp. 22–34. ²⁰ See the translated poems from the Yuan (1279–1368), Ming and Qing periods in Elvin, *Retreat of the Elephants*, pp. 200–02. Examples of the earlier, less complex, type (by Cao Zhi, 192–232), and one by an eighth-century successor (Du Fu, 712–70) may be found on pp. xxi–ii.

²¹ See Pearsall and Salter, *Landscapes and Seasons in the Medieval World*, London 1973.

in the Western European understanding of the natural world-is how to relate it to the economic collapse that affected the western half of the Roman Empire in and after the fifth century AD. This had a very marked geographical gradient, running west-to-east from the severe crisis in Britain to the barely noticeable one on the edge of the Aegean world, east of which there was even continuing economic growth for a time until the seventh-century assault by Islam. The factual reality of this downturn in livelihood has been established by archaeological discoveries making it possible to reconstruct such phenomena as the deterioration in the quality of buildings, the decrease in the size of cattle as measured by their skeletons, and the drastic alteration in the scale of production, and the middle- and long-distance exchange of goods for everyday use, such as ceramic containers and roofing tiles. Oblique but useful light has also been shed on other phenomena through these digs. An example is the decline in popular literacy revealed by the virtual disappearance of the once common graffiti inscribed on walls and potsherds.

The immediate cause of acute economic dislocation was probably the destruction of the western sections of the major trading routes that had crisscrossed the Roman Empire prior to about 400 AD and had enabled a few large, specialized production centres—for example, of ceramics—to produce a number of basic goods in huge quantities. The cause of this in turn, it seems reasonable to assume, was the near-collapse of the security essential for commerce, and of the functioning of political structures generally, in the context of the administrative fragmentation mainly caused by the incursions and settlement of tribes from outside the Empire. Technological and economic recovery can be shown in some cases to have taken up to 800 years.²² In China, the period from the fourth to the sixth centuries AD may have seen an analogous political fragmentation and economic collapse in the north, though growth continued in the south; but the disruption did not last for anything like so long.²³

Hateful handiwork

So, what happened? In brief, during the first two-thirds of the Middle Ages, in the eyes of Western Europeans, the world of nature no longer had its old, assumed basically benign, relationship to human beings;

²² Bryan Ward-Perkins, *The Fall of Rome and the End of Civilization*, Oxford 2005, part 2, 'The End of a Civilization'.

²³ Elvin, The Pattern of the Chinese Past, Stanford 1973, chapters 2 and 3.

and its once independent intrinsic reality to some extent faded into an allegorical symbolism. To summarize the first of these aspects, wild and untransformed nature was felt, in varying degrees, to be an environment to which humans had been banished by God as a punishment for the sins of Adam. As Aelfric of Eynsham wrote around the end of the tenth century, 'this world is not our homeland, but our place of exile'.²⁴ Later a more complex approach was found. An example is in Chaucer's 'The Franklin's Tale' from the later fourteenth century.²⁵ The lady Dorigen, sick with anxiety while waiting for her husband's return from overseas, reproaches and interrogates God as she contemplates the ship-destroying rocks below the cliffs of the Breton coast. Her words express a tension between an orthodox but unconvincing optimism and an existential dread:

But, God eternal, who through caring foresight directs the world along an unerring course, and nothing without a purpose brings to be—or so it's said, these gruesome rocks, black and of devilish essence, rather appear to be confused, and hateful handiwork not at all a fair creation for such a perfect Lord, wise and consistent. Why hast Thou wrought Thy work illogically like this? For, by this work, to south, north, west, and east, no man is nourished, neither is bird nor beast. It does no good, but harm, as I would find it. Can you not see, Lord, how it destroys mankind?

Corpses a hundred thousand have these rocks dismembered of human folk, though each one's not remembered. —Humans, so fair a part of Thy creation that it was in Thine image that Thou shaped them. It seemed at that time Thou felt great affection for Thy mankind, so how does it make sense that Thou such means hast made for their destruction? —Means that do nothing good, but endlessly discomfort. I'm well aware that learnèd men will happily attest, their proofs prepared, that all is for the best, but why this is—I cannot comprehend.

The cautious Chaucer then manipulates the plot in an improbable fashion so that, by a *tour de force*, both personal honour and orthodox

²⁴ Pearsall and Salter, Landscapes and Seasons, p. 42.

²⁵ Both in this and other examples quoted here, I have put Chaucer's language into slightly more modern English so as to make it easily intelligible. The original text is in Fred Robinson ed., *The Poetical Works of Chaucer*, London 1933, p. 165.

theodicy are saved; but this does not hide the fact that we are hearing here an ideological register utterly absent in Ausonius and, *a fortiori*, in Xie Tiao.

The psychological counterbalance to this sense of a dark outer world is the mediaeval European vision of the isolated perfection of an enclosed inner world, a paradise-garden, spiritual or sensual. In the case of the latter, though, it has to be said that there is usually a persistent premonition that the forces of evil, decay and death will always in the end insinuate themselves. A suggestive example of this dual vision occurs in Chaucer's 'The Parlement of Foules'.²⁶ The prelude indicates that the poem is the author's dream, and he is warned by a famous figure from classical antiquity that:

... since, here below, this earth was such a trifle, so full of torments, ill luck's rough abrasions, in this world here he should not take delight.

It was also a world destined to perish totally at the end of its cycle:

He told him next that, after a fixed duration, each star would then return to take the place where it was first, the past pass out of mind as would all once done here, by all mankind.

With this sombre background to his visit, the poet then enters, in his dream, a park walled with green stone:

A garden saw I, filled with blossoming boughs beside a river in a grass-green meadow where evermore blew sweetest scents uncounted from flowers of blue and white, and reds and yellows; chill waters welling up were never motionless, brimming with tiny fishes, sparkling there, and swimming, vermilion-finned, their scales of flashing silver.

On every branch I heard birds at their carols, angelic voices joined in consonance; others were busy, helping their young to hatch, while little rabbits to their games were gone. Soon, at some further distance, all around, I spotted

²⁶ The piece, whose main theme is birds choosing their mates, was probably written for St. Valentine's Day. The 'ay' in the last line is older English for 'always'. the timid roedeer bucks, and harts and hinds, squirrels and smaller beasts of harmless kind.

I heard stringed instruments, in such accord, playing sweet sounds that held my soul possessed, that God, of all things maker, and their lord never heard any better—such is my conjecture. The while a gentle wind, that could have been no gentler, breathed through the verdant leaves with sounds of stirring that answered back the songs sung high above by birds.

Throughout that place the air's warmth was so mild that they were never vexed by hot or cold. Likewise there sprouted there each healing herb and spice; no man fell sick there, ever, or grew old. Joy was abundant more than a thousandfold more than one could relate it. Nor was it ever night, but ay bright day—in every person's eyes.²⁷

This is an unreal nature in the sense that everything in this panorama is symbolic, expressing something else. At the deepest level, everything in nature is valued insofar that it is what it is because of its creation by some other power, which is immanent but only indirectly divinable within it. Thus Dante said in the 'Paradiso' that:

The foliage with which throughout is decked the garden of th' Eternal Gardiner, I love to that extent that He has it with His own goodness bless'd.²⁸

One suspects that the restless psychological need to search in the natural world for the general impress of the hand of the Eternal Gardiner was one of the hidden tributaries that flowed into the river of early-modern science in Europe. Although the will to mastery of specific techniques was at times very strong in the mediaeval West, the contrast to the almost mystical Chinese exaltation at the processes of nature itself, coupled with the impossibly exalted wish to attain such fusion with, and such understanding of, their total overall unity as to be able *oneself* to command them, is perhaps worth contemplation.²⁹

²⁷ Chaucer, Poetical Works, pp. 363 and 365.

²⁸ 'Paradiso', 26.64–66, in Dante Alighieri, *La Divina Commedia* (1472), Hermann Oelsner ed., revised edition, London 1933, pp. 318–9.

²⁹ Joseph Needham, Ho Ping-Yü and Lu Gwei-Jen, *Science and Civilisation in China*, volume 5, *Chemistry and Chemical Technology*, 'Part IV, Spagyrical Discovery and Invention: Apparatus, Theories and Gifts', Cambridge 1980, p. 372.

Dark heavens, black earth

This leaves us with the shadow side, nature experienced as a hostile, destructive, or indeed malevolent force. Some Chinese poems puzzled over the justice of Heaven-Nature (Tian), and even of the lesser gods like the sea-deities Tianwu and Hairuo, to a greater extent than did Chinese philosophy, though there were a few interesting exceptions.³⁰ An example of the latter is one of the most difficult of the debates to understand about the character of Heaven, but also one of the most illuminating, namely that begun in the ninth century by Han Yu (768–824), Liu Zongyuan (773-819) and Liu Yuxi (772-842), and continued in Song times by others.³¹ Putting together and reformulating disparate older ideas that went back to Wang Chong's Lunheng (Discourses Weighted in the Balance) and the Huainanzi, Han Yu suggested that human beings were similar to the grubs and maggots produced when plants decayed, and that the damage done by human beings to the primal vitality (yuangi) and to the cosmic forces of vin and vang, through what would now be called 'economic development', made it impossible for Heaven and Earth. and the innumerable entities, to realize their true characters. Human beings thus became in a sense 'the enemies of Heaven and Earth'. By implication, the sufferings seemingly imposed on so many humans by a harsh Heaven were by no means undeserved.

Liu Zongyuan in contrast argued for the amoral character of Heaven:

That mysterious darkness above us is commonly referred to as 'Heaven'. The brown beneath it is commonly referred to as 'Earth'. That inchoate substance that occupies the space between them is commonly called the 'primal vitality'. Cold and hot [in the sense of the seasons] are commonly called *yin* and *yang*. Although these are immense entities, they are no different [in their character] from fruits, boils, and grasses and trees . . . How can they reward meritorious achievements and punish the creation of disasters? Meritorious achievement is what it is in and of itself [that is, its own reward],

³⁰ The 18th-century Yongzheng Emperor tried but failed to construct a philosophically based system of moral meteorology. See Elvin, *Retreat of the Elephants*, pp. 413–36. ³¹ See Hamilton Graham Lamont, 'An Early Ninth Century Debate on Heaven: Liu Tsung-yüan's *T'ien Shuo* and Liu Yü-hsi's *T'ien Lun'* (Part I in *Asia Major*, vol. 18, no. 2, 1973, and part 2 in vol. 19, no. 1, 1974), and Jörg Schumacher, 'Wer diese Menschheit zerstört... Zu Han Yu's Frage im Tian Shuo des Liu Zongyuan' (*Asiatische Studien*, vol. 39, no. 1–2, 1985) for two rather different points of view. I would like to thank Hans Ulrich Vogel for drawing these articles to my attention.

and the creation of disaster what it is in and of itself [a disaster]. To look up expectantly [to Heaven] to be rewarded or punished on account of them is a great absurdity. To cry out and be angry, looking up expectantly [to It] for succour or empathy is a still greater absurdity... How can one assign existing or perishing, succeeding or failing, to [entities of the same kind as] fruits, boils, and grasses and trees?³²

In a loose sense, this is a 'modern' point of view. The ensemble of Heaven, Earth and the sum-total of the other entities, with no part seen as having any ontologically privileged status, is close to 'nature' as present-day science would understand it.

Some poems about the suffering inflicted by nature were written as pleas to society for help, or for other motives. But in general, the question that tormented people—and poets—was whether or not a natural disaster was a morally deserved punishment. The problem was almost never explicitly answered, but the scepticism is time and again evident enough. Here is an interesting negative reply from part of a poem by Zhang Yongquan on the huge storm that smashed through the seawalls south of the mouth of the Yangzi River in 1696, drowning large numbers of the seacoast's inhabitants:

Some of the people used ropes, to tie themselves together, hoping this way to support each other, or give each other help. How were they to know that, together, they'd be swept away and drowned? Some of them sought to escape, boring holes in the rooves of their houses, but their bodies, along with their reed-thatched shacks, were borne off and tossed about.

Some clutched at beams and rafters, and let themselves go where these went, but the wind pounded and battered them, and scattered them east and west. Some clambered to the tops of trees, where they floated for a time, but snakes climbed to the treetops, driven, too, by fear of dying.

Men, scared the snakes would bite their hands, of themselves released their hold.

Men and snakes have gone, together, into the other world . . .

The downpour ceased at dawn, but the storm did not let up. Those people who had not been drowned congratulated each other. Then they saw a sandbank far away, among the rolling waves, where a thousand others called for help that their lives, too, be saved.

³² My translation based in part on Lamont, 'An Early Ninth Century Debate on Heaven', and in part on Schumacher, 'Wer diese Menschheit zerstört...' using the Chinese text from www.confucius2000.com.

The tide came in, then, with a swirl, and half of them went down. With the second swirl the bank submerged, and everyone was drowned . . .

Their faces, two days later on, were still easy to recognize.

Like mounds, or hillocks, the washed-up corpses had stacked themselves in piles.

By the third day, or the fourth, skin and flesh were soggy-rotten. One could smell the stench some thirty miles. It made one want to vomit . . .

Half a month later, beside the seawall, folk dragged along, barely mobile; dark was the Heaven, and black the Earth, hearts with apprehension hopeless. At the hour of midnight their ears were filled—with howls from resentful ghosts.

and at noontide they still continued to hear—the wails from these wandering souls.

'Disastrous Events and Auspicious Omens' in the county records consulted reveal in *three* reigns, under the later Ming, that storm surges mounted up, drowning the livestock and human beings in numbers described as past number.

A hundred years have not yet gone by, but we're once *more* being punished.³³ Alas, why are those who live by the sea—alone guilty of some transgression? Evil and virtuous, agèd and youthful, met their deaths all at once, together. Why should Tianwu and Hairuo, the sea-gods, have acted in fashion so

venomous,

giving orders so harsh that the *yin-yang* balance was-lethally-thereby unsettled?

... The country people have suffered destruction that, sadly, is so overwhelming that those far remote in distant places behold us without comprehending. As of old, *yin* and *yang* coordinate patterns of the kind that, to them,

are inherent.

Catastrophic conjunctions induce folk to blame, in their folly, caerulean Heaven.³⁴

Zhang's main concern was probably to persuade people to give the remains of those who had died a decent, if summary, burial. So we may suspect that he was anxious to combat any popular tendency to suspect that the victims of the storm-surge flooding had deserved it. Against any belief that it might have been justified action on the part of the lesser deities, let alone a morally conscious Heaven, he argued—if I have correctly understood his difficult final lines—that the flood was the more-or-less mechanical result of the interactions of cycles inexorably generated by the Bright Force and the Dark Force.

³³ The term used here is *yang*. The sense of a celestial punishment is often in the background.

³⁴ Zhang Yingchang (comp.), *Qing shiduo* [*The Bell of Poesy of the Qing Dynasty*], Beijing 1960 [1869], pp. 472–3.

This can be approximately paralleled in Europe in a passage from *Le roman de la rose*, written more than four hundred years earlier. Nature, the vicegerent of God, is building up to Her searing final indictment of the disgusting behaviour of humankind:³⁵

I am going back to the Heavens above which faultlessly—as they're obliged to—emit to created beings, recipients, influence of a Celestial nature fitting for each one's distinctive status.³⁶

They compel into conflict opposing winds, force the air to spurt flames, to bellow, and shrill, and splinter it into countless parts by means of thunder and lightning sparks which resound like drumbeats, tambourines, trumpets, so the cloudbanks open, ripped asunder by the pressure of vapours steaming upwards. Rents are thereafter torn in their stomachs by the heat, and the terrible commotions swirling around in rotating motions, while they whip up storms, and hurl lighting flashes, making dust-clouds gust upwards above the land. Even towers and belfries are knocked down flat and numberless ancient trees so battered that they from out of the soil are wrenched, being never firmly enough embedded, for a root to be, ever, of any help to prevent them from being groundwards swept, and their boughs and their branches from being broken, either a few of them, or most.

So people maintain that these are devils with grappling-irons and throwing-engines, equipped with hooks and with clawlike nails don't give two turnips for such tall tales! The devils are here suspected in error, since nothing at all has damaged anything except for the hurricanes and winds who launch, in this way, their attacks on things.³⁷

³⁵ Summed up in Armand Strubel, *Guillaume de Lorris et Jean de Meun: Le roman de la rose,* Paris 1992, pp. 998–9. The human misdeeds Nature cites are the conventional ones, and differ greatly from those put forward by Han Yu.

³⁶ That is, astrological effects.

³⁷ Strubel, Le roman de la Rose, pp. 932–5.

Meteorology is seen, not quite as what we would call a natural phenomenon, but as a process that nonetheless functions regularly in accordance with fixed rules.

The later story of the slow and incomplete journey in modern Europe back to a more realistic sense of Nature is too familiar to need summarizing here.³⁸ (That it was incomplete is shown by the ability of the uncompromising unsymbolic directness of the Zen Buddhist haiku of Edo Japan still to shock when they came to the awareness of the West as late as the twentieth century.³⁹) But for the period before the Western take-off, the question remains as to how far historical intellectual developments that, on the surface, seem different in most respects may, at times, have had an underlying similarity of deep structure and social function. We have seen, for example, that in the pre-Mediaeval era both cultural worlds produced striking, closely observed and deeply informed accounts of the natural world. Similarly, there were discussions about whether God (in Europe) or Heaven-Nature (in China) always acted in some sense justly, or failed to do so; whether natural disasters must necessarily be read as punishments from Heaven. The ranges of answers given were rather different, but maybe what was more significant was the largely shared conceptualization of the problems.

³⁸ See Pearsall and Salter, *Landscapes and Seasons*, chapters 5 and 6.

³⁹ Reginald Blyth, *Haiku*, 4 vols, Tokyo 1949, and *A History of Haiku*, 2 vols, Tokyo 1963.