



TED HUGHES, NATURE AND CULTURE

EDITED BY NEIL ROBERTS, MARK WORMALD, AND TERRY GIFFORD



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ABBREVIATIONS

All references are to the British first editions of Faber and Faber unless otherwise indicated. So the abbreviation *SGCB* refers to the first 1992 edition of *Shakespeare and the Goddess of Complete Being*. Editions of *Winter Pollen* and of Jonathan Bate's biography vary between editions, but all quotations from these books are from hardback first editions, unless endnoted otherwise. If poems are published in *Collected Poems* they are referenced therein. When referencing the two major Ted Hughes archives, 'Emory' refers to the Stuart Rose Rare Books and Manuscript Collection at the Robert W. Woodruff Library, University of Emory, Atlanta, Georgia, USA and 'BL' refers to the Ted Hughes collections at the British Library, London, UK.

ABBREVIATIONS ACTUALLY USED

<i>CP</i>	<i>Collected Poems</i>
<i>DB</i>	<i>Difficulties of a Bridegroom</i>
<i>G</i>	<i>Gaudete</i>
<i>LTH</i>	<i>Letters of Ted Hughes</i>
<i>MD</i>	<i>Moortown Diary</i>
<i>O</i>	<i>The Oresteia</i>
<i>PM</i>	<i>Poetry in the Making</i>
<i>SGCB</i>	<i>Shakespeare and the Goddess of Complete Being</i>
<i>W</i>	<i>Wodwo</i>
<i>WP</i>	<i>Winter Pollen</i>

INTRODUCTION

'Every new child is nature's chance to correct culture's error', Hughes wrote in his 1976 essay, 'Myth and Education' (*WP* 149). No reader of his poetry can doubt that this allegiance to 'nature' and suspicion of if not hostility to 'culture' (at least the culture that he and almost all his readers inhabit) is a powerful—perhaps the most powerful—motivating energy in his work. It is blatant in the contrast between the 'attent sleek' birds 'Triggered to stirrings beyond sense' and the man 'Carving at a tiny ivory ornament/ For years' of 'Thrushes'; between the impotent words and the shape-shifting hare in 'Crow Goes Hunting'; or the 'bunching beast-cry inside' Mrs Hagen and the 'Barren perspectives/ Cluttered with artefacts' of her home in *Gaudete* (*CP* 82–83; *CP* 236; *G* 32).

'Nature' and 'culture' are, according to Raymond Williams, among 'the two or three most complicated words in the English language'.¹ He gives three broad definitions for each word, but for the purpose of thinking about Hughes's poetry one of these definitions, in each case, is clearly most relevant: culture as 'a general process of intellectual, spiritual and aesthetic development' and nature as 'the inherent force which directs either the world or human beings or both'.²

However, this does not dispose of all the complexity. In particular, it has become increasingly evident that the divide between nature and culture is, in the words of the Finnish ecologist and philosopher Yrjö Haila, 'a conceptual prison'.³ The stronger the evidence that humankind is inescapably a part of the natural world (a position Hughes undoubtedly espoused) the more difficult it is to position 'culture' outside nature.

Conversely, ‘nature’ itself is a concept that is profoundly culturally determined. The two concepts, then, are subsumed into each other, but in a way that leaves them both unstable. It might be a useful oversimplification to say that for the ecologist nature subsumes culture and for the cultural theorist the reverse pertains. But none of us exclusively occupies either of these positions, so that the two terms, if not binary, are unavoidably relational.

The essays in this book originated in the seventh international Ted Hughes conference, ‘Dreams as Deep as England’, held at the University of Sheffield in 2015. The chapters vary greatly in their approach from the contextual to the ethical, intertextual, textual scholarship and close reading. The editors chose the title *Ted Hughes: Nature and Culture* because they were struck by how, for all the range of approach, this relation is, in one way or another, unavoidable for nearly all the contributors.

Terry Gifford argues that despite performing poorly in scientific subjects at school, Hughes overcame the ‘two cultures’ divide to become impressively scientifically informed in the field about which he cared passionately: environmental protection. Drawing Hughes into the ‘environmental humanities’, Gifford invokes recent concepts that encode the inseparability of nature and culture, such as biosemiotics and psychogeography, quoting Wendy Wheeler’s insistence that science should ‘be part of a “poetic” developmental dialogic *relation* with nature’.⁴ Mark Wormald takes up the theme of Hughes’s scientific interests and combines it with textual scholarship, tracing the progress of Hughes’s preoccupation with the mayfly in parallel with his developing entomological knowledge. For Wormald, the outcome is ‘the intricate and intimate relationship between an extraordinary exemplar of the natural world and an equally elaborate human sub-culture’: fly-fishing.

Neil Roberts explores the ethical tensions within Hughes’s habitation of the natural world through the contradictions in his writing about the hunting of animals. Focusing on ‘A Solstice’, a poem about the shooting of a fox, Roberts contrasts Hughes’s felt need to ‘inhabit’ the dynamism of predator and prey with his remarkable late suggestion that animals should be incorporated into human culture as ‘fellow citizens’ (*LTH* 691). The ethics of human–animal encounters also inform Danny O’Connor’s constructive critique of John Berger’s argument in *About Looking*, that the mutually recognising ‘look’ between humans and animals has been irredeemably erased, especially in zoos, leaving us isolated in nature. Focusing on Hughes’s poems about zoo animals

O'Connor writes: 'if we can see something "natural" (though anthropomorphised) in animal life, an animal's look restores our animal status, since a hawk or a jaguar or a fox does not see in us culture, but nature'. Claire Heaney's chapter similarly engages with the animal ethics of J. M. Coetzee, or more precisely of his fictional character Elizabeth Costello, who discusses Hughes's poetry approvingly in her eponymous novel. Heaney argues that Costello desires to 'connect with an external reality, to express something that is "not just an idea"', and that 'both Coetzee and Hughes make visible the possibility of a world that exists independently of our conceptions of it', even while enacting the failure of this ambition.

James Castell's focus on Hughes's use of simile might seem remote from these considerations, but he reminds us that in Hughes's *Poetry in the Making* poems are 'like animals' (*PM* 15) and that a poem such as 'Second Glance at a Jaguar' not only consists almost entirely of similes but also, in doing so, 'responds to something both elusive and vulnerable in both the nature of this particular animal and the nature of poetic language'. The word 'organic' is hard to avoid when thinking about Hughes but, at this particular frontier of nature and culture, we encounter 'openness, elusiveness and rupture rather than the closed perfection' of New Critical organicism epitomised by Cleanth Brooks's *The Well-Wrought Urn*.

'Culture' presents a more specific political edge in Vidyan Ravinthiran's chapter, which perceptively and judiciously examines Hughes's engagement with multiculturalism on the basis of hints in the final line of his early poem 'Strawberry Hill', which begins with a stoat dancing on the lawn of Horace Walpole's gothic fantasy, and ends with the same creature emerging 'in far Asia, in Brixton' (*CP* 63). Ravinthiran traces the way Hughes's radical-reactionary politics questions myths of cultural uniformity concerning 'England', and finds that diversity is generated by 'an atavistic, baseline vitality, which is both a matter of survival essentials and ... artful, creative of cultures'. In a different approach to the notion of 'England', in the last chapter in this section, Janne Stigen Drangsholt returns to broader questions about Hughes and environment, specifically the relations between the culturally based temporal dimension of landscape and the actual dwelling of a body in a place. Drangsholt finds in Hughes's poetry a 'preoccupation with place and identity, humans and non-humans, nature and culture, art and the world,

referring to a landscape that comprises both a mythical or spiritual hinterland *and* an actual scape’.

In the second section the focus shifts towards the cultural pole and particularly to Hughes’s relationships with other writers, from Chaucer to Alice Oswald—though, as the latter name suggests, the problem of nature and culture is rarely out of sight. James Robinson is the first scholar to critically examine Hughes’s ambiguous attitude to Chaucer, who was part of his ‘sacred canon’, whom he claimed to read every day at Cambridge, who was ‘Our Chaucer’ to him and Sylvia Plath, yet is cast as ‘the belated cultural accompaniment to what had been a brutal military suppression and occupation’ through his naturalisation of French metres.⁵ In contrast (and misleadingly) Hughes represents the alliterative non-metropolitan poetry of *Piers Plowman* and *Sir Gawain and the Green Knight* as ‘the poetry of the people’ (WP 366). By the time he wrote ‘Myths, Metres, Rhythms’, the essay in which he made this claim, Hughes had himself become a ‘Court poet’ like Chaucer who, Robinson argues, helped Hughes to negotiate between his ‘poetic self’ and his public role as Laureate. Another frequently mentioned but little explored medieval intertext is the collection of Welsh tales known as the *Mabinogion*. Katherine Robinson convincingly demonstrates its importance for *Crow* and *Cave Birds* in particular. *Crow* is, for Robinson, a figure who ‘never masters language’, who ‘embodies the inchoate part of the psyche, not gifted with bardic eloquence’—in other words the pre-cultural psyche—like Morfran in the story of Taliesin, the hideous ‘sea-raven’ who is deprived of the potion of inspiration.

There follow three chapters on Hughes’s relations with twentieth- and twenty-first-century poets. John Goodby makes a vigorous case for the importance not only of Dylan Thomas (a frequently cited but rarely examined influence), but the whole historically marginalised ‘Apocalyptic’ school of poetry that dominated the period of Hughes’s formation. In Goodby’s account, Thomas exemplified for Hughes the problematic of nature and culture, grasping ‘that he is one with the cosmos, equally driven by the “force” that animates it, but simultaneously understands his paradoxical inability to communicate this insight to the natural world itself, and hence his dissociation from it’. Unlike the case of Dylan Thomas much has been written—including books by Marjorie Uroff, Diane Middlebrook and Heather Clark—about the literary relationship of Hughes and Sylvia Plath. Carrie Smith offers an original approach through a complex intertextual web, focusing on Hughes’s

major, but under-valued, collection *Cave Birds*, by also taking in Plath's poetry, *Hamlet*, Leonard Baskin's drawings, Millais's 'Ophelia' and the gender implications of *ekphrasis*. Starting with the significance of two deleted lines referring to Hamlet looking at Ophelia's dead body, Smith explores the spectral character of the poetry, and 'the force of the surrounding poetic, biographical and cultural context'.

With Laura Blomvall's chapter we turn from the influence of others on Hughes to his influence on others, specifically Alice Oswald. Blomvall examines Oswald's discomfort with the issue of Hughes's influence, concluding that this is not a question of Bloomian 'anxiety'—that Oswald is comfortable with the influence in itself—but rather a resistance to being drawn into a narrow narrative of Anglophone nature poetry. The importance of Hughes for Oswald is, rather, at the level of composition and of poetics. Comparing Oswald's 'Poetry for Beginners' with *Poetry in the Making*, as well as the verse of the two poets, Blomvall elucidates 'a belief that the disappearance of the subject is not only a condition of writing, but also a condition of ethical authorship'. The book concludes, appropriately, with a chapter that originates in the keynote lecture at the conference, in which Seamus Perry talked provocatively but fascinatingly about 'Hughes and Urbanity'. Ranging across the verse and prose, Perry finds examples of a variety of social tones that do not correspond to the popular image of Hughes as the unsocial shaman. This social manner, or urbanity, is necessary, Perry argues, to, in Hughes's own words, negotiate 'between the powers of the inner world and the stubborn conditions of the other world, under which ordinary men and women have to live' (*WP* 151). This is, we might equally say, negotiation or 'management' (another favourite Hughes word on which Perry focuses) between nature and culture.

Neil Roberts

NOTES

1. Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press, 1976): 87, 219.
2. *Ibid.*: 90, 219.
3. Yrjö Haila, 'Beyond the Nature-Culture Dualism', *Biology and Philosophy*, 15 (2000): 158.

4. Wendy Wheeler, *Expecting the Earth: Life, Culture, Biosemiotics* (London: Lawrence and Wishart, 2016): 94. Emphasis in the original.
5. Emory, Mss 644, Box 108, ff. 2.

PART I

Hughes and Environments



CHAPTER 1

Ted Hughes's 'Greening' and the Environmental Humanities

Terry Gifford

At the end of his first year at Mexborough Grammar School, Ted Hughes was placed fifth in his class. His strength in English Composition was recognised, but he was 'weak at Physics'.¹ Was there a structural or subliminal expectation in the Grammar Schools of the time that an eventual specialisation in English must be accompanied by an intrinsic 'weakness in Physics'? In a consideration of the trajectory of Hughes's engagement with science—with the Natural Sciences of the physical world—viewed from the perspective of what is now called 'the Environmental Humanities', these are questions that lead towards the debate about educational and social post-war divisions that is known as 'The Two Cultures', as characterised by C. P. Snow. At the end of that first year, Hughes was also 'mediocre in Maths' and this continued to be his worst subject each year until his fifth year report recorded that his excelling in English Composition was accompanied by an

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almost predictable assessment that his weakest subjects were Maths and Science.² It is perhaps no surprise that Mexborough Grammar School student records examined by Steve Ely note that on 8 June 1944, Hughes was placed in Imposition (Friday detention) for ‘reading in a Maths class’.³ Expected or not, there could not be a clearer indication of Hughes’s attitude towards the more quantitative aspects of the curriculum. With his educationally ambitious family, and encouraged by the example in the same school of his older sister Olwyn’s academic success in moving from Sixth Form to university, Hughes would have been looking forward to a specialism in English within an Arts Sixth Form with the knowledge that he would be dropping the study of Science. Indeed, this separation was formalised by the designations of Arts Sixth and Science Sixth at Mexborough Grammar School.⁴ This educational career was almost determined by Hughes’s first report at secondary school. In no other comparable country, observes Stefan Collini, have ‘both the final stages of school education and all of undergraduate education been more specialised’.⁵

The debate about the separation of science education dates back to around the time of the establishment of English as a discipline. In an 1880 public lecture, the biologist T. H. Huxley ‘denounced the resistance to the claims of scientific education by the defenders of the traditional classical curriculum’.⁶ The reply came from his target, Matthew Arnold, who argued that ‘literature’ should actually include scientific classics like *The Origin of Species* in addition to the Classics that were essential reading for any fully educated person. Arnold’s argument could be thought of as an early form of environmental humanities, in that the discourse of evolution might be viewed in relation to ancient European literary modes such as pastoral. But by the period of Hughes’s education, the discourses of the Sciences had become so specialised, and the Arts subjects so alienated from them, that C. P. Snow’s famous phrase struck a cultural chord. ‘The Two Cultures’, first published in essay form in the *New Statesman* in 1956, was the 1959 Rede Lecture at Cambridge University and was published as *The Two Cultures and the Scientific Revolution*.⁷ The dichotomy it described will have pertained during Hughes’s time studying English at Pembroke College Cambridge, which he left in 1954. Snow’s characterisation of the gulf between ‘literary intellectuals’ and ‘physical scientists’ to the detriment of the latter was effectively only endorsed by F. R. Leavis’s combative reply to Snow in 1962.⁸ Hughes, like his later critic and supporter, Keith Sagar, attended Leavis’s lectures at Cambridge. This is not the place to elaborate

upon the much over-simplified and misrepresented arguments on either side of this debate, but it is significant to note that, although in defending the humanity of literary study, Leavis attacked Snow personally as a novelist—‘as a novelist he doesn’t exist’⁹—he did later clarify that ‘My concern for “English literature” implies no slighting of the sciences’.¹⁰ The most striking legacy of this debate for the later development of the environmental humanities is that the defender of scientific materialism, Snow, was actually also a novelist and that Leavis’s critique of social and scientific materialism in favour of the human values and enrichment of life available in the best literature also recognised the value of the sciences as creative explorations. Even if Snow’s analysis was true for education and for the post-war culture at large, there were individuals who were able to respect both sides of the division and, indeed, both Snow and Leavis were, to a certain degree, among them. In the latter part of his life, Ted Hughes could also be counted among them as a poet who took inspiration partly from his reading of scientific papers and from *New Scientist* and *Scientific American*. Indeed, as Poet Laureate Hughes made a case for including *New Scientist* in his expenses as ‘relevant to my job’ and essential for ‘the business of writing poems’.¹¹

But in the same year as the publication of *Crow*, Hughes made an attack on what he called ‘the scientific style of mind’ that he felt had come to dominate the education system in terms that sound very similar to Snow’s Two Cultures:

Our school syllabus of course is the outcome of three hundred years of rational enlightenment, which had begun by questioning superstitions and ended by prohibiting imagination itself as a reliable mental faculty, branding it more or less criminal in a scientific society, reducing the Bible to a bundle of old woman’s tales, finally murdering God. And what this has ended up in is a completely passive attitude of apathy in face of material facts. The scientific attitude, which is the crystallisation of the rational attitude, has to be passive in face of the facts if it is to record facts accurately [...] It is taught in schools as an ideal. The result is something resembling mental paralysis.¹²

In the later *Winter Pollen* version of this essay, Hughes calls this ‘scientific objectivity’ (*WP* 146) as he makes the case for the subjective inner life of the imagination as a space for making ethical and psychological explorations of ‘material facts’. Obviously drawing upon his own education, in a polemic that argues for the place of myth and storytelling in

education, Hughes suggests that this mode of ‘the scientific attitude’ is not only dangerously incomplete, but untested by a moral imagination. It might appear that Hughes was, at this stage of his work, anti-science, but that would be an over-simplification. ‘I’m uneasy with the labelling Ted’s work “anti-science”, ever’, writes his close university friend Daniel Huws.¹³ What is clear, however, is that Hughes’s education took place within a culture that not only separated out certain forms of knowledge, but made it structurally difficult for a poet to maintain an interest in science. This also worked in reverse. Hughes’s friend Peter Redgrove became a celebrated poet in his final year and failed his degree in Natural Sciences, although he maintained a lifelong interest in science.¹⁴ Hughes’s friendship group also included the medical student Than Minton, so it can be argued that student friendships overcame structural separations.

In fact, Hughes’s work eventually came to be a significant subject for the relatively recent multidisciplinary study of environmental humanities in which a wide range of humanities disciplines are informed by environmental science to produce the focus of new studies such as environmental ethics, environmental history, psychogeography and ecopoetry. Like Ted Hughes, the environmental humanities regard the environmental crisis as a cultural crisis in the sense that culture includes both the arts and the sciences. Ursula Heise, in her Introduction to *The Routledge Companion to the Environmental Humanities* (2017), puts it thus:

The environmental humanities [...] envision ecological crises fundamentally as questions of socioeconomic inequality, cultural difference and divergent histories, values and ethical frameworks. Scientific understanding and technological problem solving, essential though they are, themselves are shaped by such frameworks and stand to gain by situating themselves in this historical and sociocultural landscape.¹⁵

Greg Garrard, in his contribution to this *Companion*, offers, as a definition of the work of environmental humanities, ‘the chiasmus “ecologizing humanity/humanizing ecology”’. Garrard regards these two projects as moving towards the same aim: ‘these distinct projects—which are deliberately framed in dynamic, transitive terms—actually coalesce as we approach the most radical implications of the environmental humanities’.¹⁶ One way of characterising the trajectory of Hughes’s work, this chapter will argue, is to see it reversing Garrard’s chiasmus by shifting

from 'humanizing ecology' to 'ecologizing humanity'. Underlying this trajectory is the story of Hughes's engagement with different constructions of science from empirical science to objectivist science, to ecological science, to what he called the 'hired science' of vested interests, to a holistic sense of science as essential research for his poetry.

In a recent essay in *Ted Hughes in Context*, I outlined what I argued to be the six stages of the 'greening' of the writer. I was at pains to emphasise that 'of course, these stages are not as sharply defined as the sequencing of them here might suggest, often having their gestation in earlier manifestations'.¹⁷ These six stages were described under the headings of 'Walking the fields', 'Capturing rather than shooting animals', 'America and after', '*Your Environment*', 'Hunting and conservation' and '*Your World*'. Running behind and through this succession of changes in Hughes's notions of nature is a shift in his attitudes towards different forms of scientific knowledge and practices that is evident in his published poetry, essays and letters, but also in unpublished material in his archives at Emory University in the USA and at the British Library in London. That brief essay simply outlined the stages in the enlargement of the notions of nature that constituted the greening of the poet. What is attempted here is a contextualisation of those shifts from the perspective of the environmental humanities and the writer's changing conceptions of scientific knowledge, practices and their implications.

In that essay, Hughes's earliest conception of nature, as described in his 1963 memoir 'The Rock', represented the psychogeography of the small boy's mood changes in walking up the fields opposite his front door in Mytholmroyd.¹⁸ The term 'psychogeography' was first proposed by Guy Debord, who was the leading member of the Situationists International in the 1950s and defined it as 'the study of the precise laws and specific effects of the geographical environment, whether consciously organised or not, on the emotions and behaviour of individuals'.¹⁹ The rock in question was Scout Rock which dominated the opposite side of the valley. 'The oppression cast by that rock was a force in the minds of everyone there', wrote Hughes.²⁰ But the climb up the fields onto the moors offered a series of escapes from that oppression as, field by field, 'new sensation' by new sensation, an increasingly 'bird-like' lightening of spirit took place. The holograph draft of the latter part of this memoir in the archive at Emory University contains unpublished comparisons of this experience to 'some intense revelation in a dream' and 'a religious awakening'.²¹ This sense of the intense capacity of mind and mood to

be affected by landscape is the focus of Hughes's earliest poems about living amongst the elemental forces of nature. In *The Hawk in the Rain* (1957), one has only to think of the people in the poem 'Wind' gripping their hearts as they are 'Hearing the stones cry out under the horizons' (CP 37), or the force of ice-age cold in 'October Dawn' that 'Squeezes the fire at the core of the world // Squeezes the fire at the core of the heart' (CP 37). What happens in the material world affects the human heart so that humans can even hear the cry of stones under elemental stress. In these poems, ecological processes might be said to be 'humanised' in Garrard's sense by the poet's exploration of psychogeography. Those scientific materialists who might doubt these revelations as irrational, unmeasurable, or unprovable could be represented by the stereotypical 'egg-head' intellectual (who could well be a scientist) in the poem of that name who 'resists receiving the flash / Of the sun, the bolt of the earth' through 'braggart-browed complacency' with the result that he is merely able to 'Trumpet his own ear dead' (CP 34).²² The sustained metaphor of the fragile vulnerability of a life that is only lived through what the rational mind can comprehend is forensically deconstructed and dismissed.

The early animal poems, on the other hand, deploy the attention of the empirical scientist in their observation of not only particular forms of vitality but also characteristic shortcomings. There is no doubt that Hughes's attentiveness to the natural world was trained by his early interest in shooting, first as his older brother's retriever and then as a schoolboy for whom shooting was listed as one of his interests in his records at Mexborough Grammar School. When, after a long lapse, he took up a gun again for just a day in later life, he said, 'I realised what I had completely lost since I stopped shooting was that automatic seeing everything in the landscape. It was quite a shock.'²³ Neil Roberts discusses Hughes's complex attitudes towards hunting in a later chapter, but in *Poetry in the Making*, Hughes talks about a youthful shift towards trapping animals and uses the metaphor of 'hunting' for animal poems. Of the animals he had been shooting, he said, 'I began to look at them [...] from their own point of view' (PM 17). The animal studies branch of environmental humanities would regard such empathy as a first step towards considering questions of ethics, which is a route that Neil Roberts will take. But this statement can be deceptive; all of Hughes's animal poems have implications for their human readers, some more explicit than others. In 'The Hawk in the Rain', the 'drowning' speaker

finds language to celebrate the hawk's 'diamond point of will', although the poem ends by rather exaggerating the risk to the bird (*CP* 19). The self-deception of that will in the last line of 'Hawk Roosting' is ironically balanced by the earlier evocation of evolution as the true reason why things are 'like this' so that the poem acts as an ironic reflection of human arrogance (*CP* 69). The limitation of a 'bullet and automatic purpose' in 'Thrushes' is clear, although not quite balanced by human limitations of the slow, reflective action of 'carving at a tiny ivory ornament' which is surely preferable. But it is surprising that some critics still miss the ironies of the ending of 'The Jaguar' in which its blinding intensity appears to give it a visionary freedom from its cage, that nevertheless remains its imprisoned reality, whilst at the same time admitting the possibility of visions, if not actual physical freedom.²⁴

Omitted from publication in 'The Rock' was a comment in the holograph notes that anticipated the poem 'Wodwo', a poem of ecological and philosophical enquiry. The high moorland, Hughes wrote, having just compared his experience there as a child to some people's 'religious awakening', was a place 'where the rocks, the birds, the silence, the flowers, wait [...], full of something wonderful, if only one could learn to interpret their sounds or their signs'. This is a yearning for a fully humanised ecological understanding of biosemiotics—not just the meaning of bird sounds, but also the signs in the silence of rocks, or the potentially wonderful messages in flowers. They wait and the poet waits with utmost attention. In her book *Expecting the Earth: Life, Culture, Biosemiotics* (2016), Wendy Wheeler discusses the work of Ted Hughes as an intuitive interpreter of signs in 'The Thought-Fox', for example. 'Most modern scientists', Wheeler writes, 'remain within the Baconian model of conscious mastery in avoidance of error. They remain deeply suspicious, or even contemptuous, of the idea that the scientists might more fruitfully be part of a "poetic" developmental dialogic *relation* with nature.'²⁵ Hughes's poetic language, Wheeler suggests, represents an evolved 'grasp of the semiotic scaffolding' such that he 'is able to unlock the deep evolutionary and semiotic layers of animate and even geological time-consciousness within himself in order to free the associated *semiotic* energies'.²⁶ It is indeed his relation with nature that the Wodwo questions, is disturbed by, seeks to take identity from, in a semiotic dialogics ('Do these weeds / know me and name me to each other / have they seen me before, do I fit in their world?' (*CP* 183). This is, I think, what Wheeler means by 'this Coleridgean and Goethean creative *processual*

knowing in being and attending'.²⁷ The Wodwo's being leads him to go on questioning what is 'very queer but I'll go on looking'.

In America, during the third stage of his greening, Hughes came across many things that were very queer: the real world 'sterilised under cellophane' (*LTH* 105), food '10,000 miles from where it was plucked or made', and bread 'fifty processes' away from 'original wheat' (*LTH* 106). But it was a combination of the discovery of the marine biologist Rachel Carson's writing about sea life and that toxic waste was being dumped into it off Cape Cod that made Hughes aware of both the positive and the negative aspects to the work of science. Earlier, Sylvia Plath's letters from Smith College indicate that she had been anxious about the atomic bomb and the Cold War since 1948.²⁸ It seems likely that the threat created by atomic scientists, which was very much at the forefront of public consciousness during the Cold War of the 1950s and 1960s, had contributed to the strength of feeling around the Two Cultures debate as apparently dispassionate, amoral scientists were viewed critically by scholars in the humanities. In particular, the widespread anxiety about imminent nuclear war in the Western world during the Cuban missile crisis of 1962 should not be underestimated.²⁹ In 1959, whilst living in America, Hughes was aware of Cold War anxiety and had published there the poem 'A Woman Unconscious' which begins, 'Russia and America circle each other' threatening 'A melting of the mould in the mother' (*CP* 62). Although held in check by an abba rhyme scheme, the poem voices the possibility of 'Earth gone in an instant flare' (*CP* 63). If this recalls 'the flash / Of the sun, the bolt of the earth', it represents the unintended consequences of theoretical scientific research that might have been undertaken by the 'egg-head' of that poem. It was in the spring of 1959 that a national debate was launched by Rachel Carson's letter to the *Washington Post* about the effects of DDT use in agriculture, resulting in the spectre of 'the silencing of birds', which preceded *Silent Spring* (1962).³⁰

When Hughes returned from America and later began working on the *Crow* poems the implications of a reductionist objectified science found their way into many of the poems in the sequence. In 1981, Neil Roberts and I noted that "'Crow's Account of the Battle" attacks the surrender of responsibility implicit in scientific determinism'.³¹ Recently, Yvonne Reddick identified in *Crow* wider linkages between the scientific technology of nuclear warfare and environmental destruction by drawing attention to Hughes's preoccupation with nuclear waste and

environmental pollution throughout the sequence.³² Reddick argued that 'the blueprint for destructive technology' by which 'From sudden traps of calculus, / Theorems wrenched men in two' in 'Crow's Account of the Battle' (*CP* 222) is actually the Word of 'A Disaster' which results in 'its excreta poisoning seas' (*CP* 226). 'I cannot recall conversation about the environment at Cambridge', writes Daniel Huws, but when he returned from America, 'Ted was full of it. Rachel Carson had made a big impact and industrialised farming was already a frequent topic.'³³ Huws takes the view that 'Ted, I would say, was always an "environmentalist", latently if not manifestly'.³⁴ The word 'latently' is necessary here because during the 1960s in Britain, the 'countryside' was in the process of turning into the 'environment', just as, later, Hughes's early 'nature poetry' was to metamorphose into the 'ecopoetry' of Reddick's book title.³⁵ Carson's work (which included work on warming oceans) contributed to a growing public alarm that the military and commercial applications of science had been proceeding without public debate or control. What was needed was the evidence of the damage being done and a counter science that would become environmental science in its diverse branches.

The fourth stage of Hughes's greening is signalled by his role in the founding of the explicitly named magazine *Your Environment*, having persuaded his friends David Ross and Daniel Weissbort to edit with him a magazine, the first of its kind in the UK (just a year ahead of *The Ecologist*), that would publicise the counter science. The range of new science that Hughes was engaged with through *Your Environment* is remarkable. This includes, for example, the work of Dr F. J. Simmonds whose paper on 'The Economics of Biological Control' had been published in the *Journal of the Royal Society of Arts*. The revealing irony of that publication informed Hughes's subsequent review of Max Nicholson's book, *The Environmental Revolution*. It was actually in the third issue for *Your Environment* that Hughes reviewed Nicholson's book.³⁶ What is remarkable about this review is that it makes a call for what would now be called 'the environmental humanities', first in criticising scientific over-specialisation and demanding 'a total knowledge' in which scientific disciplines speak to each other, and secondly, by identifying the need for a publicly voiced debate about a vision for conservation that would redirect the attention of 'Politicians, Sociologists, Economists, Theologians, Philosophers and the rest [who currently] pick over the stucco rubble of a collapsed civilisation' (*WP* 133–34). It is at

this fourth stage that Hughes begins his efforts to ‘ecologize humanity’, in Greg Garrard’s terms, through work that is exemplified by two significant collections of poetry: the bioregional merging of human and natural history in *Remains of Elmet* (1979), followed by the elegies for family and ‘familiar’ (Hughes’s word) of several species in *Wolfwatching* (1989).³⁷

From ‘The River Cleaners’ by John Whale in very first issue of *Your Environment* there were regular articles about river pollution.³⁸ The chemist Dr David E. H. Jones, who had been writing a column in *New Scientist* since 1964, contributed two articles to *Your Environment* concerned with river pollution: ‘Hazards of Enzymes and Detergents’³⁹ and ‘Modern Farming and the Soil’.⁴⁰ Hughes was to follow closely the scientific papers on river pollution in particular as he introduced his young son to his own passion for fishing. Hughes himself had harboured a desire to pursue a part-time degree in Zoology at the University of London, although a combination of poverty and a young family made this almost impossible, as Sylvia Plath explained to her mother.⁴¹ So, it would have been no surprise that his encouragement of his young son’s interest in animals and fish would result in Nicholas studying Zoology at Oxford and undertaking an undergraduate research project in 1983. Hughes went along as research assistant for his son’s investigation of the effects of the introduction of Nile Perch into Lake Victoria (*LTH* 465), the resulting paper from which was published in *Nature*.⁴² From this point onwards, Hughes was to follow his son’s research interests at the University of Alaska at Fairbanks as the father of a scientist as well as taking a close interest in research into the pollution of the rivers of North Devon on his doorstep.

In his Emory archive are four folders of scientific papers from the National Rivers Authority with titles like ‘Discharges of Waste Under the EC Titanium Dioxide Directives’.⁴³ Also in this archive is a twenty-five page typed draft of Hughes’s statement to a public enquiry on behalf of the Torridge Action Group. The Torridge Action Group had been formed in 1983 when the South West Water Authority (SWWA) lodged a planning application for a new fine screen sewage plant at Bideford that would remove only 15% of solids going into the river that was so polluted by sewage that the local chemist shop had its own remedy for sick tourists swimming in the river each summer. Hughes was confronting scientists in the pay of the SWWA in his presentation: ‘[...] Dr Barrow, the Authority’s Consultant in Microbiology [states...] that the effect of