Spectres of Science
“admiration for its clear-sighted objectivity and analytical precision is mixed with a fear, inherited partly from Romanticism and partly from Christianity, that experimental science is destructive, reductive, and degrading; that it diminishes nature to a quantifiable and soulless mechanism”

Gregory Tate ‘The Poetry of Victorian Science’ (2018)
The MOUSE’s PETITION,*

Found in the Trap where he had been confin’d all Night.

Parere subjicit, & debellare superbis.
Virgil.

O H! hear a pensive captive’s prayer,  
For liberty that sighs;  
And never let thine heart be shut  
Against the prisoner’s cries.

For here forlorn and sad I sit,  
Within the wiry grate;  
And tremble at th’ approaching morn,  
Which brings impending fate.

If e’er thy breast with freedom glow’d,  
And spurn’d a tyrant’s chain,  
Let not thy strong oppressive force  
A free-born mouse detain.
“But scientific, political, and social changes in the eighteenth century, including shifting constructions of animal-human relations, worked to undermine [this]”

“challenged anthropocentric complacency”.

“animals experience sensation and can therefore suffer pain”


Beware, left in the worm you crush
A brother’s soul you find;
And tremble left thy luckless hand
Dilodge a kindred mind.

James and William Ward, “The Mouse’s Petition”, (1805)
Joseph Wright of Derby, *An Experiment on a Bird in the Air Pump* (1768)
for the Illustration of a Course of Instructions on the Rhythmus and Utterance of the English Language: with an

INTRODUCTORY ESSAY

on the application of Rhythmical Science to the Treatment of Impediments, and the Improvement of our National Oratory; and an

ELEMENTARY ANALYSIS

of the Science and Practice of Elocution, Composition, &c.
Dear Babe, that sleepest cradled by my side,
Whose gentle breathings, heard in this deep calm,
Fill up those interspersed vacancies
And momentary pauses of thought!

Coleridge, “Frost at Midnight” (1798), ll. 44-8
the movement of the lungs offered the grimmest diagnosis not of the body or the mind, but of the soul and its chances of life beyond. Articulating the largest questions about the durability of human life and its relationship with breathing, Coleridge came implicitly to fear that he was ... mere emptiness of air that would presently cease, grow cold, and descend not to the earth but beneath it. In his dark late fantasy, ‘Human Life, On the Denial of Immortality’ (1817), Coleridge fretted about the crude materiality of the body that breathed. ‘If the breath / Be Life itself’, he observed gloomily, ‘and not its task and tent’, then man would indeed be but a ‘vessel purposeless, unmeant’, a ‘drone-hive strange of phantom purposes’!

These beauteous forms,
Through a long absence, have not been to me
As is a landscape to a blind man's eye:
But oft, in lonely rooms, and 'mid the din
Of towns and cities, I have owed to them,
In hours of weariness, sensations sweet,
Felt in the blood, and felt along the heart;

(22-28)

Until, the breath of this corporeal frame,
And even the motion of our human blood
Almost suspended, we are laid asleep
In body, and become a living soul:
While with an eye made quiet by the power
Of harmony, and the deep power of joy,
We see into the life of things.

(44-50)

*Tintern Abbey* (1798)
A whispering shade; while haply there reclines
Some pensive lover of uncultur’d flowers,
Who, from the tumps, with bright green mosses clad,
Plucks the wood sorrel, with its light thin leaves
Heart-shaped, and triply folded; and its root
Creeping like the beaded coral; or who there
Gathers, with the copse’s pride, anemones,
With rays like golden studs on ivory laid

Smith, “Beachy Head” (1807) ll. 358-65

Footnote:
Line 361. “Plucks the wood sorrel” - Oxalis acetosella.

Line 364. “Gathers, the copse’s pride, anémones.”
Anémone nemorosa. It appears to be settled on late and excellent authorities, that this word should not be accented on the second syllable, but on the penultima. I have however ventured the more known accentuation, as more generally used, and suiting better the nature of my verse.
INTRODUCTION.

The True is the Beautiful. Whenever this becomes evident to our senses, its influences are of a soul-elevating character. The beautiful, whether it is perceived in the external forms of matter, associated in the harmonies of light and colour, appreciated in the modulations of sweet sounds, or mingled with those influences which are, as the inner life of creation, appealing to the soul through the vesture which covers all things, is the natural theme of the poet, and the chosen study of the philosopher.

But, it will be asked, where is the relation between the stern labours of science and the ethereal system which constitutes poetry? The furnace of the laboratory, its alkalies and acids, the mechanical appliances of the observatory, its specula and its lenses, do not appear fitted for a place in the painted bowers of the Muses. But, from the labours of the chemist in his cell,—from the multitudinous observations of the astronomer on his tower,—spring truths which the philosopher employs to interpret nature’s mysteries, and which give to the soul of the poet those realities to which he aspires in his high imaginings.

Science solicits from the material world, by the persuasion of inductive search, a development of its elementary principles, and of the laws which these obey. Philosophy strives to apply the discovered facts to the great phenomena of being,—to deduce large generalities from the fragmentary discoveries of severe induction,—and thus to ascend from matter and its properties up to those impulses which stir the whole, floating, as it were, on the confines of sense, and indicating, though dimly, those superior powers which, more nearly related to infinity, mysteriously manifest themselves in the phenomena of mind. Poetry seizes the facts of the one and the theories of the other; unites them by a pleasing thought, which appeals for truth to the most unthinking soul, and leads the reflective intellect to higher and higher exercises; it connects common phenomena with exalted ideas; and, applying its holiest powers, it invests the human mind with the sovereign strength of the True.
"So careful of the **type**?" but no.
   From scarped cliff and quarried stone
   She cries, "A thousand types are gone:
   I care for nothing, all shall go.

   (56, 1-4)

Who trusted God was love indeed
   And love Creation's final law -
   Tho' Nature, red in tooth and claw
   With ravine, shriek'd against his creed -

   (56, 13-16)

Tennyson, "In Memoriam" (1850)
The Mayfly is torn by the swallow, the sparrow spear’d by the shrike, / And the whole little wood where I sit is a world of plunder and prey.

Tennyson, “Maud” (1855)

“we do not see or we forget, that the birds which are idly singing round us live on insects or seeds, and are thus constantly destroying life; or we forget how largely these songsters, or their eggs […] are destroyed by birds and beasts of prey.”

Darwin, The Origin of theSpecies, (1859)
... They say [scientists],
The solid earth whereon we tread
In tracts of fluent heat began,
   And grew to seeming-random forms,
   The seeming prey of cyclic storms,
Till at the last arose the man;
Who throve and branch'd from clime to clime,
   The herald of a higher race,
   And of himself in higher place,
If so he type this work of time.

“In Memoriam” (118: 7 -16)
O Sorrow, cruel fellowship,

What whispers from thy lying lip?

"The stars," she whispers, "blindly run;
A web is woven across the sky;
From out waste places comes a cry,
And murmurs from the dying sun."

Tennyson, “In Memoriam” (sec. 3)
Rossetti: “insists emphatically on self-abasement before God in literally creationists terms, regardless of his severity – so emphatically that the poem reads as an implicit but nonetheless direct rejection of evolutionism”

Page from Darwin's notebooks around July 1837, showing his first sketch of an evolutionary tree, with the words "I think" at the top.

The tree of life image in Darwin's *On the Origin of Species*, 1859.
The affinities of all the beings of the same class have sometimes been represented by a great tree. I believe this simile largely speaks the truth. The green and budding twigs may represent existing species; and those produced during each former year may represent the long succession of extinct species. At each period of growth all the growing twigs have tried to branch out on all sides, and to overtop and kill the surrounding twigs and branches, in the same manner as species and groups of species have tried to overmaster other species in the great battle for life.

[...]

From the first growth of the tree, many a limb and branch has decayed and dropped off; and these lost branches of various sizes may represent those whole orders, families, and genera which have now no living representatives, and which are known to us only from having been found in a fossil state.

[...]

As buds give rise by growth to fresh buds, and these, if vigorous, branch out and overtop on all sides many a feebler branch, so by generation I believe it has been with the great Tree of Life, which fills with its dead and broken branches the crust of the earth, and covers the surface with its ever branching and beautiful ramifications.

— Darwin, 1859.
[...] own scientific awareness engenders what can be regarded as a proto-ecological poetry. Yet in turning to write about the impact of society Hopkins then extends the scope of a social ecology of the imagination by drawing on phenomenological characteristics seemingly available only to poetry, in verse which, in its emphasis on sound, enables us to feel the modifications being wrought, on nonhuman and human nature, by an unsustainable Victorian political economy.

Glory be to God for dappled things—
For skies of couple-colour as a brinded cow:
For rose-moles all in stipple upon trout that swim;
Fresh-firecoal chestnut-falls; finches’ wings;
Landscape plotted and pieced—fold, fallow, and plough;
And all trades, their gear and tackle and trim.

All things counter, original, spare, strange;
Whatever is fickle, freckled (who knows how?)
With swift, slow: sweet, sour: adazzle, dim:
He fathers-forth whose beauty is past change:
Praise Him.

Gerard Manley Hopkins, “Pied Beauty” (1877)
"Without poetry, our science will appear incomplete; and most of what now passes with us for religion and philosophy will be replaced by poetry".

Matthew Arnold, “The Study of Poetry” (1880)
Recommended Further Reading


Goodman, Kevis. ‘Conjectures on Beachy Head: Charlotte Smith’s Geological Poetics and the Ground of the Present’, *ELH*, 81.3 (2014), 983-1006


