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Wordsworth, *The River Duddon* and ultimate particles

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Wordsworth's 1820 collection, *The River Duddon: A Series of Sonnets* is, according to Daniel Robinson, still dismissed by critics 'as a conventionally didactic loco-descriptive poem of Wordsworth's later years' (Robinson 450). Certainly, writing sonnets about rivers harks back to the conventions of the eighteenth century. Wordsworth's composition of a '*Series*' of such sonnets is, however, less usual.¹ The sequence follows the arc of a well-known passage from the concluding book of *The Prelude*, where Wordsworth draws a comparison between the development of his imaginative powers and the course of a river, from source to sea: from 'the very place of birth [...] to light and open day'.² In the sonnet series, likewise, the Duddon rises high in the mountains, enjoys a childhood in remote, natural surroundings, gradually enters the social world until, at the estuary, it will 'mingle with Eternity'. How curious, though, to depict the flow of life, from past to present to future, in sonnets – the form being so knotted, compact and insular. How curious too to write '*A Series of Sonnets*'. A series of units suggests that onward movement is achievable only amidst a succession of stopping-points and interruptions. Continuity is achieved by leaping over gaps.³

This may owe something to Coleridge – not so much his plans for 'The Brook', discussed during his and Wordsworth's time in the Quantocks in the late 1790s, but works of his published just a few years prior to *The River Duddon*. In *Biographia Literaria* (1817), Coleridge made a now famous comparison between the mind's process and the movement of a water-skater against the current of a stream:

The little animal *wins* it was up against the stream, by alternate pulses of active and passive

motion, now resisting the current, and now yielding to it in order to gather strength and a momentary *fulcrum* for a further propulsion (Coleridge, *Biographia* I 124)

Similarly, in his revision and reordering of his periodical *The Friend* (1809-10) for publication in three volumes in 1818, Coleridge introduced what he called ‘Landing-Places’. These light-weight, entertaining pieces, he sets into the sequence of more demanding essays, placing them he says like landings in a stair-case, linking and dividing successive flights of stairs. They provide moments for the reader to pause and reflect before moving on, offering stepping-stones to higher things.⁴

Coleridge’s simile of the water-insect is, clearly, drawn from the natural world and he found a similar quality to be present in nature’s inorganic elements.

The *white rose* of Eddy-foam, where the stream ran into a scooped or scalloped hollow of the Rock in its channel – this shape, an exact white rose, was for ever overpowered by the Stream rushing down in upon it, and still obstinate in resurrection it spread up into the Scollop, by fits and starts, *blossoming* in a moment into a full Flower.⁵

This notebook entry, written in 1803, enacts the miniature drama of the water’s being overpowered and then obstinately reviving – ‘*blossoming*’, underlined and separated from the run of the sentence by the intervening phrase, ‘by fits and starts’, suggests the astonishment of discovering at once the energy and the (moral or symbolic) significance of this unspectacular feature in the landscape. Wordsworth’s *The River Duddon* shares Coleridge’s observation of how water flows ‘by fits and starts’ and how the mind moves in a similar fashion.

How water flows is governed by its material qualities – its viscosity and surface tension, for example. Likewise, its behaviour as a gas is a product of its boiling-point, which differs according

to pressure; how water behaves as a vapour (in, that is, the minute droplets suspended in the atmosphere) varies with temperature. Eighteenth-century and romantic period science was developing a fuller understanding of these phenomena and the relationships involved in them. Meanwhile, philosophers and ‘natural philosophers’ were probing and debating the intrinsic nature of matter: whether it was infinitely divisible or whether ‘ultimate particles’ existed, minute but indivisible. The leading British researcher in the field was John Dalton, born in 1766 in Eaglesfield, near Cockermouth in Cumberland, where Wordsworth was born only four years later. In 1803, in ‘On the Absorption of Gases by Water and other Liquids’, Dalton proposed an atomic theory of matter – that it consisted of ‘ultimate particles’, various in form and weight but permanent, irreducible and non-interchangeable. He developed these ideas more fully in his *A New System of Chemical Philosophy* (1808).⁶

There is no evidence that Wordsworth knew either Dalton or his work directly, but they did have friends in common. The Cambridge geologist, Adam Sedgwick, who contributed to later editions of Wordsworth’s *Guide to the Lakes*, recorded ‘an historic meeting with John Dalton near the summit of Helvellyn’, during the 1820s (Wyatt, *Geologists* 82). Humphry Davy, known to Wordsworth from his Bristol days and still a friend and associate of Coleridge, argued in 1811, publicly, that Dalton’s theory had been pre-empted by William and Bryan Higgins in the 1790s. The dispute over priority rumbled on through the decade, and Wordsworth is unlikely to have been unaware of it. Rather than investigate possible lines of influence, however, this article takes up Marilyn Gaull’s suggestion that Dalton was the ‘most imaginative, visionary, and Wordsworthian of all the scientists’ of the period (Gaull 610). That claim is supported by the ways in which Dalton’s atomic theory is paralleled in both the innovative form of Wordsworth’s *The River Duddon* and its subject-matter. The relation in material things between the ‘ultimate particle’ and the larger whole shadows questions about the differentiation and the interconnection of individual, regional and national identities – questions which Wordsworth’s *Series of Sonnets* seeks to address, as Coleridge’s recent

prose, in the revised version of *The Friend* (1818), *The Statesman's Manual* (1816) and *A Lay Sermon* (1817), had also sought to do. Similarly, the science of water connects with questions about individual identity – its stability and continuity across time: questions raised also by Wordsworth's retrospective poetry. Furthermore, in Dalton's theory connecting forces must overcome both particulate individuality and radical difference. That is to say: if there are (as Dalton maintained) essential differences between the ultimate particles of, say, water, air, and earth, flesh and blood, can these material things still be thought of as parts of the 'one Life'? If they do not unite, what bonds join them together? Is it, in this context, apt or accurate to suggest similarities between chemical affinities and societal bonds?⁷

Dalton's self-repulsive particles

Atomic theories of matter developed out of Newton's corpuscular theory and they sought to defend ideas of substance and impenetrability. Trevor Levere notes that Dalton's thinking was based, self-consciously, on Newtonian ideas.

[Dalton] copied into [...] his own notebooks "that God in the Beginning form'd matter in solid, massy, hard, impenetrable, moveable Particles" [...] Dalton himself wrote that in the gaseous state each atom 'supports its dignity by keeping all the rest ... at a respectful distance' (Levere, *Transforming Matter* 82)

In adopting this position and building his theory upon it, Dalton was occupying, as Alice Jenkins points out, a particular moment in the development of theories of matter. The physical world was understood in 1800, she writes, quite differently from the understanding brought to it in 1840

even as increased access to manufactured goods caused the spaces of nineteenth-century urban life to fill up, changes in physical science's understanding of the relationship of matter

and forces generated a new conception of space filled with forces interacting in complex patterns but emptied of solid material bodies (Jenkins 178)

As Peter Harman points out, this debate was current already in Dalton's day – current and politicised. Joseph Priestley, supporter of the French Revolution and a founding Unitarian:

rejected the assumptions of Newtonian atomism – that impenetrability and solidity were essential properties of matter – and replaced the Newtonian dualism of atoms and forces by using forces to define the essence of matter. (Harman 77)

Differently inflected but equally opposed to the idea of 'solid material bodies', Immanuel Kant's contemporaneous theory of matter proposed that it was 'penetrable throughout' and 'owing its present condition to the balance between the two forces of contraction and expansion' (Daubeny 41, 49). These ideas were first put forward by Kant in his *Physical Monadology* of 1756 (see Kant p. vi).

The political and cultural resonances of Dalton's position are well illustrated by the work of Oxford Professor of Chemistry, from 1822-55, Charles Daubeny, in his *Introduction to the Atomic Theory* (first published in 1831). There Daubeny brings Kant and Priestley together. In Kant's world:

When two kinds of matter shew an affinity one for the other, it is because they are actually penetrable, and when a perfect solution of one substance in another takes place, both are infinitely subdivided, so that each ingredient is uniformly diffused throughout the mass.

Priestley's substitution of forces for substance is, according to Daubeny, comparable in terms of science but its implications run in a different direction.

Since matter, [Priestley] concludes, has in fact no properties but those of attraction and repulsion, it ought to rise in our esteem; as making a nearer approach to the nature of spiritual and immaterial beings, as we are tempted to call those which are opposed to gross matter.

Priestley is caught in a contradiction: ‘attempting to shew that mind is not spiritual’, he is led ‘almost to deny the materiality of body’, as Daubeney puts it. Dalton’s work, on the other hand, possessing ‘the more palpable and substantial footing of experiment’, avoids these difficulties and is able, likewise, to contest the conclusions reached by Kant and other ‘speculative reasoners of Germany’ (Daubeney 41, 48, 50; see also Colman).

Daubeney, then, is being patriotic and somewhat Coleridgean in identifying Dalton with an English *via media*, which charts a course between Germanic idealism and French-inspired materialism. By the time Daubeney was writing, Dalton enjoyed a national and international reputation. The government awarded him a pension in 1833, which they doubled three years later. In the same years, the citizens of Manchester, where Dalton spent almost his entire adult life, commissioned a statue of their renowned scientist. Fifteen years earlier, however, when Wordsworth was writing the sonnets for *The River Duddon*, Dalton’s reputation, though high, was less thoroughly established. A northerner and a Quaker, Dalton encountered the patronising disdain of some among London’s scientific establishment. Humphrey Davy’s brother, John, for instance, described Dalton’s ‘aspect and manner’ as ‘repulsive’, adding ‘there was no gracefulness belonging to him’. Dalton’s, though, was a ‘resolute provincialism, as Jan Golinski puts it – a deliberate removal of himself from London, ‘the most disagreeable place for one of a *contemplative turn* to reside in constantly’ (Golinski 266, 267).

Self-removal from the centre and a reluctance to become other than ‘repulsive’ are choices which correspond to aspects of his atomic theory, in which forces innate to particles hold them at once together and apart. According to Dalton, matter is formed of:

particles, that repel one another with a force decreasing directly as the distance of their centres from each other (Henry 62)

The further they are apart, the less they are driven apart, until they reach a point of equilibrium. The particulate offers, therefore, an understanding of matter which highlights mutuality and respect, separation reducing friction between autonomous and equivalent points. It is amenable to ideas of independence and confederation.

According to his biographer, Dalton’s character, exhibiting disinterestedness, independence, truthfulness and integrity (see Henry 175), exhibited forcefulness as well. When his theories were challenged:

though emphatically self-reliant and tenacious of opinions once embraced, [Dalton] was not insensible to the cogency of these objections

Defending him against accusations of derivativeness, if not actual plagiarism, Dalton’s biographer presents a self-reliant scientist, able to recognise the ‘cogency of [...] objections’ without either succumbing to them or attempting to snuff them out. Science, ideally, progresses via this dialogue of ‘self-reliant’ researchers.

Similarly, according to his biographer once again, it was Dalton’s birthplace that prompted his distinctive line of inquiry.

It is obvious, that his birth and early residence among the lakes and mountains of Cumberland, a region peculiarly exposed to sudden and impressive atmospheric changes, gave the first special impulse to his genius. His first attempts in science were general remarks on the weather

Moreover, these ‘first attempts’ led on to a series:

Thus far, then, we can trace a natural filiation of thought, in unbroken sequence, from—1. The vigilant and persistent observation of meteorological phenomena, and specially of the variations of *the atmosphere* in weight, temperature, and *moisture*; to 2. The theory of the relations of air and vapour and of mixed gases; and finally, to the abstract conception of elastic fluidity, and of self-repulsive molecules or atoms (Henry 59, 63, 66).

The sequence is ‘unbroken’ and yet its stages can be separately identified: ‘1 [...] 2 [...] and finally’. The advancement of learning follows a comparable pattern: one person’s work forming the basis for the next; the cogency of objections being acknowledged by the tenacious. Out of the local too, the global – the universal – emerges: from ‘remarks on the weather’ and ‘persistent observation’, Dalton develops an ‘abstract conception’. Were the Lake District found in a Kantian universe – ‘each ingredient [...] uniformly diffused throughout the mass’ – then it would provide no ‘special impulse’ to men such as Dalton. More surprisingly, perhaps, and paradoxically, were places and people not ‘self-repulsive’, ‘fluidity’ would not be found, either within the nation or within the self. Wordsworth’s localism shares many features with Dalton’s attachment to and study of the Lake District. This is evident in the River Duddon sonnet sequence and the volume in which it first appeared, which also contained Wordsworth’s ‘Topographical Description of the Country of the Lakes’ (later published, in a number of revised and expanded versions, as *The Guide to the Lakes*).⁸

Dalton's understanding of matter, whose origins can be traced back to his early meteorological studies, remains, however, sharply and decisively attached to distinct particulars. Matter could not, according to him, be subsumed into forces, and their relationships; beyond that, kinds of matter were irreducibly different. Humphrey Davy's experimental focus lay in breaking compounds down into constituent elements – he isolated sodium and potassium and he tried unsuccessfully to separate chlorine into the underlying component he believed it to consist of (Levere, *Transforming Matter* 89-91). His predominant aim, therefore, was to find beneath the varieties of matter a fundamental unity and simplicity. Hence, alongside his distaste for Dalton's stubborn loyalty to Manchester and the north, 'Davy's hope that ultimately all elements might be shown to be compounds of hydrogen could not be reconciled with Daltonian chemical atomism' (Golinski 265). Because modern science has identified chemical elements as made up of electrons, protons and neutrons in different quantities, Davy's search for 'compounds of hydrogen' has been vindicated. Elements can be regarded as, in a sense, compounds. Like compounds, they may be broken down, although the methods involved are different. Davy's perspective reflects a theoretical truth and has the potential for great predictive power (as the periodic table demonstrates).⁹ By comparison, Dalton's view of the elements, as each irreducibly individual, appears antiquated and primitively empirical.¹⁰

On the other hand, through the century in which the standard model has been worked out and the Higgs boson discovered, it's also been shown that all the elements larger than hydrogen and helium are formed only in the enormous temperatures and pressures of supernova explosions. The obstinate stability of the individual elements is borne out by their endurance, across time and space, and by awareness of the vast forces required to bring them into being. Nonetheless, modern physics has developed an understanding of matter in which it is more open to metamorphosis than Dalton conceived it to be. Likewise, as Jenkins points out, modern physics has made matter less material – matter is no longer the opposite of force, it is energy condensed. Dalton's perspective has become

difficult to grasp or, when adopted or entertained, difficult not to regard as unscientific.

Yet, as Daubeny's sardonic criticism of Priestley's materialism suggests, both the atomic substantiality of matter in Dalton's theory and the specificity of material things were attractive in their day. They were of real use to fellow-scientists in their experimental work and were valuable to the religious and hence cultural establishment because they sustained the distinction between matter and spirit. When William Lawrence argued in his Hunterian Oration of 1816, that organized matter was self-animating, his former teacher, John Abernethy, replied that Lawrence's claims were not only scientifically inaccurate but 'detrimental to society', reinstating as they did the materialism of the French *philosophes* (Mitchell 89; see Jacyna). Lawrence's materialism led, moreover, to a pervasive loss of distinction. T. C. Morgan, in his *Sketches of The Philosophy of Life* (1818), shares Lawrence's position on matter and spirit, extending it to the relation between mind and body. Perception, he writes, 'is the result of a primitive law of the organization' and, even though philosophers have 'boldly considered' the 'phenomena of thought' to be 'independent' of the body, 'The fact of their connection must, however, be admitted' (Morgan 279). This argument is accompanied by assertions of the interpenetration of all things:

All the various substances, which exist in nature, are possessed of certain powers, by which they exert upon each other a mutual action; and are connected into one whole, in which nothing is strictly and absolutely independent

Among living beings 'Every species is intimately linked with those the nearest resembling it, and abrupt breaks in the series of beings are manifest impossibilities'. Nature, therefore, 'never proceeds *per saltum*' (Morgan 27, 28).

Susan Wolfson has recently drawn attention to the precise and various meanings of 'interaction' in

romantic period literature. She illustrates how carefully the term was handled by quoting from the Anglican writer, Isaac Taylor. ‘The material system’, Taylor states in his devotional text, *Saturday Evening* (1832):

is related in all its parts to the whole [...] an efficient dependency or correspondence links every globe to its system; and also that every system, or cluster or spheres, is, by the same laws, connected with the great community of worlds, among which it moves, or is suspended (quoted Wolfson 2)

Taylor writes in terms of connection and relations – relations obtaining between globes and creating from these individuated objects ‘clusters’ and a ‘great community of worlds’. Morgan, on the other hand, contests the possibility of globes, as Taylor would define them: for Morgan, being ‘connected into one whole’ rules out being ‘strictly and absolutely independent’.

Dalton’s science is habitually careful to distinguish between object and property. Discussing the Aurora Borealis, for example, he writes

My *fluid of magnetic matter* is, like magnetic steel, a substance possessed of the properties of magnetism, or, if these writers please, a substance capable of being acted upon by the magnetic *effluvia*, and not the magnetic *effluvia* themselves (Dalton, *Meteorology* 174-5)

Heat, similarly, which he terms ‘the caloric’, is not related to the motion of particles (as Newton thought and is now accepted); rather, for Dalton, it is ‘an elastic fluid of great subtilty’ which is attached to the material object, enfolding it (Dalton, *New System* I, 2). Like Taylor, Dalton resists an idea of matter as either blending with or moving into or out of alternate forms. Things are substantial and fixed; interconnected rather than intermingled. That accompanies a distinction

between object and property (particle and caloric) which opposes the materialism of a T. C. Morgan or William Lawrence – a materialism which slipped towards both atheism and revolutionary politics. Isaac Taylor wrote polemical books against ‘enthusiasm’ and fanaticism. Holding onto the distinction between object and property assisted in preventing thought from being carried away by its own energies, or by what Gillian Beer has called ‘delusive accords’ (quoted Jenkins 181).

Dalton’s atomic theory of matter, then, aligns with his strong regional identity and a dissenting self-removal from the religious and political mainstream which coexisted with patriotic feeling. His arguments in favour of material substance and, equally, of distinct material substances may or may not have been the result, simply, of his research – its experimental focus, methods and Newtonian underpinnings. Self-consciously or accidentally, his thinking corresponds with an idea of society as interdependent rather than homogeneous, ordered rather than blended or as blended through its ordering. This ordering is not necessarily hierarchical (and Dalton’s Quaker allegiances encouraged egalitarian views). It is Davy’s search for ‘compounds of hydrogen’ which implies, in fact, a more hierarchical world – all things subordinate to hydrogen, their master-spirit – whereas Dalton’s atoms are all equal and all different.

Dalton understood compounds to be bonded combinations of self-subsisting atoms. This is now received and uncontroversial. In his day, he was opposing theories of the compound in which the constituent elements fused and interpenetrated (as Kant, among others, argued). Dalton’s atomic theory grew out of his measuring the proportions in which different elements combined – two parts hydrogen to one part oxygen in water, one part sulphur to two parts oxygen in sulphur dioxide, one part sulphur to three parts oxygen in sulphur trioxide, and so on. These whole number ratios in conjunction with the possibility of their varying between the same elements (SO₂ and SO₃, for instance) led him to think in terms of different units linking up.¹¹ Furthermore, finding evidence which challenged concepts of interpenetration, Dalton highlighted how things were joined: what

force it might be that held together compounds. The means to interdependence remain, in his theory separate from the things being brought together. Thinking with Dalton leads one to think, therefore, less in terms of part and whole – of the Coleridgean ‘one Life’ – and more in Taylor’s preferred terms of globe and cluster, globe and community of worlds.¹²

to sovereign Thames allied

Wordsworth was drawn to sonnets, he said, by ‘that pervading sense of intense Unity’ they gave, resembling ‘an orbicular body—a sphere or a dew-drop’ (*Sonnet Series* 929, quoting Wordsworth’s letter to Dyce from Spring 1833). Michael O’Neill has discussed with great sensitivity Wordsworth’s indebtedness to Andrew Marvell, particularly Marvell’s ‘On a Drop of Dew’, observing that the poem brings ‘the sonnet form to mind’ and citing Wordsworth’s letter to Dyce (O’Neill 762).¹³ Sonnets, written by Wordsworth, are characterised by such ‘intense Unity’, because they employ only rarely the internal sub-divisions of either the Petrarchan or Shakespearean forms.¹⁴ The word, ‘orbicular’, meaning either circular or spheroid, was used in astronomical contexts (of the planets suspended in space) and botanical ones (orbicular or orbiculate leaves are round), but it was also a favourite word of Thomas de Quincey, applied by him to Plato’s philosophy – to the unity, wholeness and comprehensiveness of that system of thought.¹⁵ ‘Orbicular’ suggests, therefore, as does the connection with Marvell’s poem, that Wordsworth is thinking of sonnets as, at once, discrete particulars and unique wholes.

The form, therefore, particularly in Wordsworth’s employment of it, emphasises separation between parts, approaching a kind of atomism. Placed in a series, these sonnets are certain to raise questions about the basis of sequentiality. What links together this chain, the series asks. In the case of ‘The River Duddon’ the answer may seem obviously to be the river itself, providing the common thread and unifying track. If so, it’s an answer which only raises further doubts: is the river an accidental, circumstantial link, the various places it touches being joined by it no more than superficially?

Given that the collection is titled a 'series' (instead of, say, a sequence), is the reader being asked to hesitate before demanding more profound or certain interconnections? The underlying metaphor of 'The River Duddon' joins, as we have seen, the course of the river to the pattern of a life. The uncertain relation Wordsworth creates between the 'intense Unity' of separate moments and the series they form suggests, therefore, doubts about biographical and autobiographical sense-making – how much consistency a life can achieve or, in fact, how much it can bear; what continuity can or should be established between life-events, which may come in series without forming a sequence.

'The River Duddon' progresses from its source, among 'Streams [...] Pure as the morning, fretful, boisterous, keen' which 'Poured down the hills, a choral multitude!' to the serene gliding of its path across the estuary's sands, portrayed in the closing sonnets; by then 'each tumultuous working [is] left behind'. The series, taken as a whole, seems to acquire and then relinquish a self, formed from and yet rising above the 'boisterous' energies of youth. The wholeness attained may be orbicular, uniting and rounding out the life it narrates. Yet the past moments survive, within the autonomous sonnets where they are described. And, Wordsworth says, these enliven and disrupt the 'philosophic mind' of the older man. The 'random cares and truant joys' of a youth spent tracking the course of riotous streams, are lasting and invigorating.

Maturer Fancy owes to their rough noise

Impetuous thoughts that brook not servile reins

(Wordsworth, *Sonnet Series* 71, 74)

These 'ultimate particles' of experience are not lost in the self they help to fashion; they refuse to be assimilated or affiliated. Something 'repulsive' within oneself will not smoothly glide or fully interpenetrate or submit to the authority of either the centre or the received.

A comparable persistence of self can be discerned in the later sonnets, less ‘Impetuous’ in quality but unwilling nonetheless to become ‘servile’. Wordsworth establishes early on that the Duddon rises ‘remote from every taint | Of sordid industry’ (Wordsworth, *Sonnet Series* 57) but, as it nears the sea, in sonnet 31, out of a sequence of 33:

Beneath an ampler sky a region wide
Is opened round him; -- hamlets, towers, and towns,
And blue-topp’d hills, behold him from afar;
In stately mien to sovereign Thames allied,
Spreading his bosom under Kentish downs,
With Commerce freighted or triumphant War.

The pastoral river joins the nation; it becomes both tributary and microcosm, its progress towards commerce repeating the nation’s ascent to global power. With that comes a sense of becoming part of a far greater whole. ‘Not hurled precipitous from steep to steep’, nor ‘by rocky bands | Held’:

but in radiant progress tow’rd the Deep
Where mightiest rivers into powerless sleep
Sink, and forget their nature; -- *now* expands
Majestic Duddon

(sonnet 32, lines 4-7, 9-14; Wordsworth, *Sonnet Series* 74)¹⁶

Dissolved now, no longer ‘Held’ but sinking into oblivion and majesty, the local appears lost in the national, the personal in the eternal.

Similar feelings are expressed in the more well-known final sonnet, ‘Conclusion’, but in between

these two Wordsworth includes something far more rousing and combative. Against the patriotic sentiments of sonnet 31, sonnet 32 announces:

But here no cannon thunders to the gale;
Upon the wave no haughty pendants cast
A crimson splendour

The Duddon remains the keeper of ‘lowly’ and local, ‘unambitious’ life and, in keeping with this, Wordsworth insists here on restricting his comparisons to those between river and individual. As the Duddon now ‘seeks that receptacle vast’ of the ocean, so:

may thy Poet, cloud-born Stream! be free,
The sweets of earth contentedly resigned,
And each tumultuous working left behind
At seemly distance, to advance like Thee,
Prepared, in peace of heart, in calm of mind
And soul, to mingle with Eternity!

(sonnet 32, lines 1-3, 7-8, 9-14, Wordsworth, *Sonnet Series* 74-5)

In ‘Conclusion’ (re-named ‘After-Thought’ in later editions), the stream ‘glides’ and ‘shall for ever glide’ (Wordsworth, *Sonnet Series* 75); individuals and their lives do ‘mingle with Eternity’. Yet Wordsworth evokes here separateness – the individual person’s focus and desire; their being ‘Prepared’ ‘to advance’. A firm and perhaps surprising purposefulness comes from these words, lending a military inflection to the forward movement, a rigour at odds with the idea of mingling. The gliding from 31 to 33 and present within both is decisively interrupted.

Resolution is conveyed by the steady parallelism of the phrases: 'Prepared, in peace of heart, in calm of mind'. Wordsworth's addition of 'And soul', across the line-ending, disrupts that pattern, as it extends the thought. 'Soul' persists. Even as it comes to 'mingle with Eternity', it is not lost. This is not boisterous or impetuous independence; rather it coexists and perhaps coincides with resolution. Rather than providing an image of the childhood self being gradually socialised through adulthood and then dissolved in death back into a natural continuum, the river in Wordsworth shows the individual moved by widening social relations into a fuller realisation of self and prompted by aging to a more self-conscious and deliberate practice of childhood's instinctive behaviours.

The conflicting trajectories in the last three sonnets disturb a smooth flow and create a new, 'unruly' flow of their own, one that is energised by the life of a distinctive, unique point of view. So the ending of the series suggests it is loyal to a confederate and interdependent understanding of the English nation, contesting the centralising claims made for and via the River Thames. The poems' forceful, unruly style resists, in that case, the authority of the received, symbolic meanings of rivers, even while it employs these. And the freshness of this river, Wordsworth is eager to preserve, just as he seeks to keep alive the energies of youth in the adult mind.¹⁷ Peter Larkin regards this endeavour as characteristic of Wordsworth's later poetry and as always belated; the poems bear witness to the generative powers of the past self, now lost.

Wordsworth is left with a fortitude which itself has to become indirect testimony, but a testimony only valid from within the project of an endlessly repeated, but never recreative or rivalling, fidelity of witness (Larkin 410)

Deliberately, Larkin reads the poems separately from their context, 'excerpted from a framework' supplied by tour-sequences or 'The River Duddon' series, 'in the belief that occasional poems reflect more sensitively' the later work's 'sense of role' (Larkin 434).

His brilliant, concluding reading of the final two sonnets in 'The River Duddon' sees Wordsworth glimpsing the past as 'directly aligned with the future into which it essentially vanishes'. The value of the past is confirmed by its serving the future, but the present meanwhile can do no more than bear witness to that fact. The poet escapes 'perspectiveless immersion', Larkin argues, only 'via a self-distancing meditation on eternal form'; or again, 'the present moment' is 'addressable so long as it remains formally reduced within the closure of an emblematic structure' (Larkin 435, 436). Self-distance and formal structure bear witness to the contrasting sublimity of youth, which can be indicated but never retrieved. Witness is an elegy for immersion; fortitude is a work of mourning.

If Wordsworth's sonnets are, however, like dew-drops or Dalton's 'ultimate particles', shape is no longer the opposite of flow. The polarity between 'self-distancing meditation' and 'perspectiveless immersion' does not obtain because neither can occur. Moreover, the retrospection Wordsworth conducts at the end of the series itself repeats early retrospective moments, which take place within the series. The self survives in the vast of the ocean, prepared 'to mingle with Eternity'; similarly, the final sonnet's transcendent glimpse of 'what was, and is, and will abide' continues a perception already attained at successive moments in the series.

The river's smooth and widening descent is interrupted by unexplained shifts; occasions when forward movement appears to be a movement back. In sonnet 14, the stream, is 'impelled to leave, | Utterly to desert, the haunts of men', although these are idyllic, like 'a spot | Of stationary sunshine' in 'deep solitude'. It goes on instead from the settlement, back to 'this wilderness' which it must conquer: 'a passage cleave | Attended but by thy own voice', Wordsworth writes, addressing the stream. Again at sonnet 20, 'The Plain of Donnerdale' with its 'flow'ry plains, | The still repose, the liquid lapse serene' has to be abandoned: 'a rough course remains, | Rough as the past'. Going forward, the stream will, once more 'Dance like a Bacchanal from rock to rock'.¹⁸ It will return to

its earlier state of sonnet 9, as ‘a struggling Rill’ or sonnet 4, where the ‘cradled Nursling of the mountain’

through

Dwarf willows gliding, and by ferny brake.

Starts from a dizzy steep the undaunted Rill

Rob’d instantly in garb of snow-white foam

(Wordsworth, *Sonnet Series* 58, 61, 64, 67-8)

Sonnet 20 reminds the reader of the stream’s earlier energy, though not as something lost and left behind, rather as a potential continually present and always potentially required. Moreover, the serenity which the river and the sonnet series apparently progresses towards was there from the outset: the stream, high in the mountains, ‘through | Dwarf willows gliding [...] Starts from a dizzy steep’. The full-stop after ‘brake’ lends this change a quality of sudden abruptness. In sonnet 14, Wordsworth writes of ‘paths renew’d | By fits and starts’ and the line from sonnet 4 establishes the double sense of the word as a single joint meaning: a startled person makes quick, almost involuntary movements; these are new beginnings and vice versa: a new start is a sudden leap, a discontinuity. Yet renewal is a constant. The mountain stream glides and starts, as does the ‘Brook of loud and stately march’ (sonnet 9) (both loud and stately), and the river passing through the successive landing-places of the Duddon valley. Recurrence, rather than an overarching narrative, is the source of pattern. The overarching narrative is a recognition of what recurs.

History, therefore, does not submit to the pattern which progress seeks to impose and, similarly, in a person’s life, unexpected pressures may intervene.¹⁹ In sonnet 29, Wordsworth reflects on ‘the force | Of chance-temptation’ which may bring ‘divorce’ from ‘that serene companion—a good name’. The river, though, is both less serene and more companionable.

Not so with such as loosely wear the chain
That binds them, pleasant River! to thy side:—
Through the rough copse wheel Thou with hasty stride,
I choose to saunter o'er the grassy plain,
Sure, when the separation has been tried,
That we, who part in love, shall meet again.

(Wordsworth, *Sonnet Series* 73)

Constancy is being differentiated here from consistency; greater flexibility is possible because difference is no threat. And in that moment the contrasting terms of youth and age reappear: the river travels 'with hasty stride' through 'the rough copse'; the speaker chooses to saunter. By choice, he lingers and glides. Self-acceptance is included, then, in the pattern of companionship. Wordsworth meets and greets again the youthful self he walks beside.

Dalton wrote 'We might as well attempt to introduce a new planet into the solar system [...] as to create or destroy one particle of hydrogen' (Dalton, *New System* I 212, quoted Gaull 611). It is intensely put but, nonetheless, a reassuring thought: that permanence is basic; that, by extension, the ultimate particles of oneself remain unchanged within the changing phases of a life.²⁰ Yet, of course, individuals die. *The River Duddon* was published in late April, 1820 and the evidence suggests Wordsworth was adding to the volume until late on (see Wordsworth, *Sonnet Series* 54).²¹ George III died on January 28th, 1820 and Wordsworth composed his sonnet, 'On the Death of His Majesty (George the Third)', soon afterwards. The poem asks what response should follow his death, which brought to an end many years of mental and physical ill-health.

Why should we bend in grief, to sorrow cling,

When thankfulness were best?—Fresh-flowing tears,
Or, where tears flow not, sigh succeeding sigh,
Yield to such after-thought the sole reply
Which justly it can claim.

[Text?]

Curiously perhaps, the not unusual feeling that a death in these circumstances comes as a blessed relief is here rebuked: ‘Fresh-flowing tears’ and ‘sigh succeeding sigh’ are the only proper reply to such an ‘after-thought’. Sorrow expressed again and again – ‘sigh succeeding sigh’ – is the morally justified response, not the more reasonable and reasoned acceptance one might expect. The single whole that was George III has been destroyed; that planet has left the solar system. Grief properly should stay, repeatedly, in the moment of that loss – preserving it through recurrence rather than by reference to any wider perspective; rather than by saying, for example, that in the larger scheme of things, we should thankful death came when it did.

At the same time, of course, the word ‘succeeding’ invokes the line of royal succession. In sonnet 9 of ‘The River Duddon’, the word is used again. The ‘struggling Rill’ has by now ‘grown | Into a Brook’, crossed by simple and then more elaborate bridges (‘plank and arch’) and here by stepping-stones.

Stone match’d with stone
In studied symmetry, with interspace
For the clear waters to pursue their race
Without restraint.—How swiftly have they flown!
Succeeding—still succeeding!

The stones provide a *memento mori* – they test the child’s ‘budding courage’ and show to

‘Declining Manhood [...] the sly | And sure encroachments of infirmity’ (Wordsworth, *Sonnet Series* 61). ‘Still glides the Stream’, Wordsworth writes in the last of the sonnets. The double meaning of ‘still’, paradoxically related to movement, brings forward the ‘after-thought’ of gratitude and acceptance. Echoing this earlier poem, however, the relentlessness of succession, of temporal flow, reasserts itself. The brevity of life’s moments give rise to a feeling of its brevity as a whole and to the sense that the smallest particles of experience deserve to be loyally cherished and their passing mourned.

The river Duddon descends successively, not smoothly, towards the sea – its path a chain of stepping-stones – and this quality Wordsworth connects to how a life’s moments are each ‘a spot | Of stationary sunshine’, one of the ‘spots of time’ which time joins together. In this respect, the Duddon valley is the Lake District in miniature. As he writes in his ‘Topographical Description’, the region’s lakes may be ‘contemplated with that placid and quiet feeling which belongs peculiarly’ to them:

as a body of still water under the influence of no current; reflecting therefore the clouds, the light, and all the imagery of the sky and surrounding hills; expressing also and making visible the changes of the atmosphere, and motions of the lightest breeze

Yet, Wordsworth goes on to say, they are particularly beautiful because ‘the same valley generally furnishes a succession of lakes’ and the lakes themselves, secretly, flow:

from the multitude of brooks and torrents that fall into these lakes, and of internal springs by which they are fed, and which circulate through them like veins, they are truly living lakes

(Wordsworth, *Duddon* 232, 233, 239)

And what is true of the district's physical geography is true also of its inhabitants. The higher reaches of the valleys, Wordsworth compares famously to 'a perfect Republic of Shepherds and Agriculturalists': 'an ideal society or an organised community, whose constitution had been imposed and regulated by the mountains which protected it.' Protected by the mountains, this utopia is not isolated by them:

venerable was the transition, when a curious traveller, descending from the heart of the mountains, had come to some ancient manorial residence in the more open parts of the Vales, which, through the rights attached to its proprietor, connected the almost visionary mountain Republic he had been contemplating with the substantial frame of society as existing in the laws and constitution of a mighty empire.

(Wordsworth, *Duddon*, 271, 272)

Rights 'attached to its proprietor, connected' the tiny republic to the frame of society and the empire which, in turn, its laws and constitution held together. Wordsworth's language of connections and attachments is the same as Isaac Taylor's. His sense of the nation, his grasp of its history and of the individual's life in time, are all, likewise, Daltonian and particulate.

Atoms and Molecules as depicted in Dalton's *A New Theory of Chemical Philosophy* (1808)

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¹ Lee M. Johnson states 'The spiritual pilgrimage of *The River Duddon* is cast as a topographical progress poem' (Johnson 121). See also Wilcox. See Geoffrey Jackson's assessment in 'Appendix II: Wordsworth and the Sonnet', Wordsworth, *Sonnet Series*, 925-31: 'Whereas Milton's sonnets are discrete, self-contained poems, Wordsworth introduced and developed the idea of the interconnected sequence' (930). Jackson suggests Spenser's *Ruines of Rome* as a precedent, a text Wordsworth quotes in his 'Postscript' to 'The River Duddon' (Wordsworth, *Sonnet Series* 76).

² See *Prelude* (1805) Book 13, lines 172-84 and *Prelude* (1850) Book 14, lines 194-205. Francis Jeffrey, in his slashing review of *The Excursion* attacks its 'amplification of the vulgar comparison of human life to a stream' in Book 3 (Jeffrey III, 251).

³ Thomas Love Peacock's 1810 poem, 'The Genius of the Thames' is a useful counter-example. Peacock's poem too follows the path of the river, from headwaters to estuary, and aligns its progress to the shape of a human life. His poetry moves far more smoothly and continuously, however, than Wordsworth's does, and its sentiments are more conventional as well (see Pite).

⁴ Coleridge argues that his complex prose style, with its elaborate syntax and long periods, has a similar purpose. See Coleridge, *Friend* I 21, 114 and II 151, 81n. On this, see Nabholz.

⁵ Coleridge, *Notebooks* I, entry no. 1590. I reproduce the printed text which presents underlinings in italics.

⁶ The paper was read in 1803 and published in *Memoirs of the Literary and Philosophical Society of Manchester*, 2nd series, 6 (1805): 271–28.

⁷ Water's high boiling-point and high surface-tension are the result of the polarisation of its molecules and the 'hydrogen bonds' which attract them to one another. This was not understood by Dalton or his contemporaries. Dalton's atomic theory is opposed, however, to ideas of the elements as smoothly interpenetrating with one another. The substantiality he attributes to matter creates a resistance to blending, seeing forces at work within fluid forms.

⁸ Stephen Gill points out contemporary reviewers bemused response to Wordsworth's celebration of such an obscure river with such an unattractive name. See Gill ..

⁹ Coleridge remarked in 1832: "alchemy is the theoretic end of chemistry: there must be a common law, upon which all can become each and each all" (Levere, *Coleridge* 185). Davy's search for 'compounds of hydrogen' corresponds in some respects with a quest for such 'a common law', an endeavour creating, moreover, continuity between ancient alchemy and modern chemistry. Ernest Rutherford 'split the atom' in Manchester, Dalton's adopted home.

¹⁰ Dalton devised a system of symbols for the different elements which has been superseded. It reflected his conviction of the fundamental differences between them. See Appendix.

¹¹ There's no comparable proportionality in a mixture, in which one element can be combined with another in a range of concentrations. Chemical affinity was observed and Davy recognised the link between affinity and electricity (see Levere *Transforming Matter* 45-8, 89).

¹² Mitchell 86-92 shows that Coleridge's thinking about 'Life' in his essays from 1816-17 challenged both Abernethy and Lawrence, resisting their assumption of a fundamental difference between living and non-living things.

¹³ O'Neill refers also to Wordsworth's transcription, made in 1802, of Marvell's 'An Horatian Ode upon Cromwell's Return from Ireland' (O'Neill 758). Philip Connell links this transcription to the political position and the stylistic qualities of Wordsworth's 'Sonnet Dedicated to Liberty', composed the same year and published in 1807. Connell writes of these sonnets: '[they] work to preserve a commitment to republican freedom within, rather than in opposition to, the terms of Burkean argument, drawing a sense of historical community into richly paradoxical relation to the revolutionary spirit.' (Connell 769). I find similar tensions articulated in 'The River Duddon'.

¹⁴ See Robinson, 'Sonneteer', 293 and Jackson's detailed discussion in Wordsworth, *Sonnet Series*, 927-9.

¹⁵ *OED* definition A 4 quotes de Quincey writing in 1841 of Plato's *Republic* as 'An orbicular system, or total body of philosophy'. Definitions A 1 and 3 give anatomical usages: the ball and socket joint of the hip is orbicular; muscles around the eye or mouth are described with the same word, and so is a tiny bone in inner ear, which resembles a grain of sand. De Quincey lived in Dove Cottage from 1809-19 and near Rydal from 1820-25. He was, therefore, in close proximity to Wordsworth when he wrote the sonnets (though not when he wrote the letter to Dyce).

¹⁶ The sequence contained 33 sonnets in the first edition of 1820 and 34 in editions from 1827. The sonnet, 'Fallen, and diffus'd into a shapeless heap' was added and placed as number 27 in the expanded sequence. 'To the Rev. Dr. W----- (With the Sonnets to the River Duddon, and other Poems in this Collection)' included midway through the 1820 volume, became the opening poem, introducing the sequence. See Wordsworth, *Duddon* 113-17.

¹⁷ Galperin makes a comparable point when he reads 'The River Duddon' as both 'a resumption and [...] a clarification' of Wordsworth's project in *The Excursion*, and as repeatedly attacking 'tradition', 'both the speaker's and its own worst enemy' (Galperin 219, 223).

¹⁸ Adam Potkay admirably discusses the allusion to St Paul in Wordsworth's 'Thro' love, thro' hope, and faith's transcendant dower | We feel that we are greater than we know' (Potkay 180). It is a further recursive moment, setting in reverse Paul's order of faith, hope and love

¹⁹ Wordsworth's *Ecclesiastical Sketches* (1822) have, unavoidably, a larger investment in discerning progress within history, yet the faith they express in a divine plan is frequently stretched and equivocal: 'Papal Abuses' (Part 1, sonnet 36), begins: 'As with the stream our voyage we pursue | The gross materials of this world present | A marvellous study of wild accident'. The dissolution of the monasteries is viewed with 'Imaginative Regrets', and the sonnets, 'General View of the Troubles of the Reformation' and 'Troubles of Charles the First' (Part 2, sonnets 20, 26 and 34) are filled with distress (Wordsworth, *Sonnet Series* 159, 174, 178, 185).

²⁰ Compare W. S. Graham's 'Implements in their Places': 'Somewhere our belonging particles | Believe in us. If we could only find them' (Graham 237)

²¹ Jackson argues that the references to the nation, in sonnets 31 and 32, were added late (Wordsworth, *Sonnet Series* 74), which may suggest they were written in response to the King's death.