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Wonder Revisited

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This chapter begins with some basic definitions of wonder. These will prompt the main question that I want to address: can an experience of wonder be revisited, and not just in memory — can the same phenomenon rekindle an experience of wonder? I will look at four ways this could be possible. Throughout this paper I will draw on Ronald W. Hepburn's work. His seminal essay 'Wonder' of course, but also papers where wonder is an important aspect of, for example, the metaphysical imagination.² Also, my own writing on aesthetics has been influenced by Hepburn's skilful use of examples, although I would not claim to come up with such evocative pictures as his. The sense that to talk of aesthetics is to talk of aesthetic experiences, pertinently chosen and richly described, is an aspect of Hepburn's work that contributes a great deal to the field.

1 Definitions of wonder

What is meant by the term 'wonder'? Do just take a moment to dwell on your own experience. There is much to be gained by simply recalling an experience of your own that seemed to be one of wonder. What prompted it? What did it feel like? What followed on from it?

The Oxford English Reference Dictionary defines wonder thus: '1 an emotion excited by what is unexpected, unfamiliar or inexplicable, esp. surprise mingled with admiration or curiosity etc. 2 a strange or remarkable person, thing, specimen, event, etc. 3 (attrib.) having marvellous or amazing properties, etc. (a wonder drug). 4 a surprising thing (it is a wonder you were not hurt)'. It also gives 'wonder-

¹ Ronald W. Hepburn, 'Wonder' in idem, 'Wonder' and Other Essays: Eight Studies in Aesthetics and Neighbouring Fields (Edinburgh, 1984), 131–54.

² Ronald W. Hepburn, 'Landscape and the Metaphysical Imagination', Environmental Values, 5 (1996), 191–204.

³ Oxford English Reference Dictionary (Oxford, 1996), 1663.

struck – reduced to silence by wonder'. The latter perhaps most clearly links wonder to 'awe' which itself is defined as 'reverential fear or wonder', with 'awe-inspiring' as 'causing awe or wonder, amazing, magnificent'.

From these basic definitions it would seem that surprise, curiosity and the unexpected are part of what is usually meant by 'wonder'. This would suggest that once a phenomenon is no longer a surprise or is familiar it must lose its wonder inducing power. If we look to older formulations and uses, this sense is reinforced. René Descartes points to wonder as a 'surprise of the soul', and in his description of the passions outlines wonder in this way: 'Whenever the first encounter with an object surprises us, and we judge it to be new or very different from what we knew before or even what we had supposed it to be, we are caused to wonder at it and are astonished [étonnés] at it.'4 For Baruch Spinoza the opposite seems to apply; where wonder is a state in which the mind is incapable of making connections and is thus not being mind-like at all.⁵ This would cast wonder as a defective, or at least sub-optimal, mental state.

Hepburn's essay 'Wonder' touches on historical figures and their interpretations, such as Adam Smith seeing wonder as something to be eliminated by extending our understanding.⁶ Also, and this is much more helpful for my thesis, he discusses Immanuel Kant's distinction between *Verwunderung*, a kind of astonishment at some novelty, and *Bewunderung*, 'an astonishment which does not cease when the novelty wears off'.⁷ His dismissal of pure novelty as an unworthy aspect of wonder brings Hepburn to Martin Heidegger's distinction between real wonder and curiosity; the latter jumps from one novelty to another and wants to know in order to be known. Hepburn agrees that real wonder 'does dwell in its objects with rapt attentiveness'.⁸

That essay goes on to look at the conditions for wonder, but for Hepburn's own definition of the state I turn to his 1998 paper 'Nature Humanized: Nature Respected' where he says:

⁴ René Descartes, *Passions of the Soul*, quoted by Philip Fisher, *Wonder, the Rainbow and the Aesthetics of Rare Experiences* (Cambridge, Mass., 1998), 45.

⁵ Cf. Benedictus Spinoza, Ethics, Part III, referred to by Fisher, Wonder, 46.

⁶ Hepburn, 'Wonder', 132.

⁷ Immanuel Kant, *The Critique of Judgement,* trans. James Creed Meredith (Oxford, 1952), 125 (§29).

⁸ Hepburn, 'Wonder', 134.

Although it is elusive to analysis, wonder is an utterly familiar, simple response, seeming surely neither to presuppose nor to generate challengeable theory. In its aesthetic mode, it is related to, but not identical with, surprise, astonishment. It is an appreciative-contemplative delight in its object. It is self-rewarding and self-perpetuating: a glad and serene inner celebrating of the *actuality* of these items, those processes of nature.⁹

Here we see *Bewunderung* and Heidegger's 'dwelling' in an interpretation of wonder that is rich and does not overplay the surprise element.

To bring us up to date I want to give one more characterisation from a 2015 book of popular nature writing (it also proposes an initial answer to my question). This is from Michael McCarthy's *The Moth Snowstorm*. I would say wonder is a sort of astonished cherishing or veneration, if you like, often involving an element of mystery, or at least, of missing knowledge, but not dependent upon it; for true wonder remains when the mystery is no more, or when the missing knowledge is supplied.' For McCarthy it seems the mark of true wonder is that it resists erosion by knowledge. He also introduces to these various characterisations the term 'cherishing' which does seem lacking in those that emphasise surprise, but is implied in so much of Hepburn's treatment of the subject.

2 The perceived problem of revisiting wonder

The problem of revisiting wonder is most starkly posed by Philip Fisher in his book *Wonder, the Rainbow and the Aesthetics of Rare Experiences*. He talks about the paradox of wonder needing to stand out as a fresh experience against a backdrop of the ordinary: the ordinary is required for the standing out to occur. However, by the time we are old enough to have a backdrop of the ordinary in place we are running out of new things to experience.¹¹ This seems a false paradox as there are so many permutations of things, particularly in nature, they can be seen freshly. Moreover, the seemingly ordinary can still strike us with wonder time and again.

⁹ Ronald W. Hepburn, 'Nature Humanized: Nature Respected', *Environmental Values*, 7 (1998), 267–79, 277.

¹⁰ Michael McCarthy, The Moth Snowstorm (London, 2015), 195.

¹¹ Fisher, Wonder, 19-20.

For example, the intricate folds and interlocking patterns revealed on slicing open a red cabbage causes me to stop and wonder at this almost every time. Perhaps if it were a daily chore the impact would dwindle to nothing, but Fisher's claim and the prominence of surprise in those first few definitions above seem to overemphasise this aspect. (Alternatively you might think me over susceptible to wonder.) Would greater botanical knowledge about the growth and formation of cabbages drive out the experience of wonder? In the case of red cabbage, I do not think so, there is no great mystery here. Revealing that overlapping of white meanders outlined in purple red with a sheen of silver/magenta on any leaf surfaces glimpsed in the folds is a fresh sight each time and yet in many ways the same each time. It is what it is but also speaks to the complexity and intricacy of even simple everyday aspects of nature. The very ordinariness of cabbage heightens the wonder at its freshly revealed beauty.

Wonder can undoubtedly drive a desire for knowledge. Socrates believed that wonder is the origin of philosophy.¹² Hepburn combines his own thoughts on knowledge and wonder succinctly when he says: 'Undeniably wonder can stimulate a person to enquiry: it may be intensified when enquiry succeeds and the enigmatic in nature becomes intelligible. But it may thereafter dwindle, as its object becomes assimilated and commonplace knowledge. The question, then, arises must it always be so?'¹³

To answer Hepburn's question of 'must it always be so' I want to turn to different ways that the ordinary or the fully explained can be experienced with a freshness that allows wonder to be experienced again. There are many ways that this can happen (even without perception-enhancing substances – the Aldous Huxley route) and I will look at four in the following successive sections.

3 Through the eyes of a child

The first way to revisit wonder that I will discuss is 'through the eyes of a child'. Introducing a child to something that we have experienced with wonder but has now become commonplace allows for a refreshed experience. Rachel Carson explores this in her, posthumously published, short book *The Sense*

¹² Socrates as portrayed by Plato at Theaetetus, 155d.

¹³ Hepburn, 'Wonder', 132.

of Wonder.¹⁴ Here she takes her nephew into the woods and to the seashore at night and through his experience of wonder her own is rekindled. This would not fall under Hepburn's criticism of 'stupid wonder'¹⁵ – we have not lost our understanding of natural phenomena we just see the wonder of them freshly. Taking our time to allow the child to discover something, we ourselves wake up to the 'it is!', 'it exists!' of the experience. There is something inherently childlike in the experience of wonder. We are taken out of ourselves and absorbed into something greater. For Carson this ability to step back from the facts and dwell in wonder was not only important for education, but also for science itself. For her we temper the hubristic tendencies of science by retaining an 'attitude of piety and humility [to] wonder at the world around us'.¹⁶

The child's wide eyes at the working of a leaf cutter bee allows us to see it outside of our acquired attitudes or preferences, and to take time to observe its deft progress. Children's amazement at a recently extinguished candle being relit without touching the wick with a flame renews our pleasure at the phenomenon even when we know the reason. The world is full again of instances of potential wonder, not from mystery or surprise, but now enhanced by the reasons or explanations that usually point to phenomena beyond the single instance. But for that moment with a child, or with our own childlike openness, the single instance speaks predominantly of itself as we stand in wonder and humility before it.

4 The temporal gap between occurrences

The second way to revisit wonder I will discuss is when we experience something that we perhaps know well but it is not an everyday occurrence. The archetypical form of this kind is the rainbow. We know it well but each occurrence is slightly different and when it is particularly clear or striking the rainbow can be experienced afresh with wonder. As Fisher points out it was an important phenomenon to Descartes as its description in scientific terms could release it from the category of miracle but still use the rainbow's capacity to invoke wonder now informed by science.¹⁷ The surprise element is there

¹⁴ Rachel Carson, *The Sense of Wonder: a Celebration of Nature for Parents and Children* (New York, 1965).

¹⁵ Hepburn, 'Wonder', 134.

¹⁶ Lisa H. Sideris, 'Fact and Fiction, Fear and Wonder: the Legacy of Rachel Carson', Soundings, 91 (2008), 335–69, 338.

¹⁷ Fisher, Wonder, 47.

with the rainbow and its transience helps to make it special. However, there is, I believe, also a recurring wonder at some seasonal events – utterly predictable and yet set apart from the ordinary. I will outline two examples.

Picture the situation: in the depths of winter on a cold morning, seemingly like many previous mornings, you open the curtains and are captured by the wondrous scene of everything transformed by the first snowfall of the season. Whether a light dusting sparkles from all surfaces or a heavier fall has piled up on even small twigs, transforming everyday objects such as dustbins or bicycles into mysterious shapes, the snow creates a dramatic change across the whole landscape and brings about a strange muffled silence. You have experienced this before, in exactly this way, but doesn't it still take your breath away? Another seasonal occurrence of wonder for me is the experience of a wood carpeted with bluebells and the haunting lilac-blue that seems to float above them. Although the scene and the individual bluebells are instances of beauty, that atmospheric floating hue that occurs when the flowers are experienced en masse transforms the experience into wonder again and again.

Seasonal occurrences can be weighted with meaning. The meanings can be stereotypical and registered without full engagement with the phenomenon or they can, even when typical, still bring an enhanced aesthetic engagement. Hepburn discusses the way, for example, a falling leaf can be viewed with increased poignancy if we consider it alongside: 'a summer gone, its symbolising all falling, our own included'.¹8 It is a common thought but in Hepburn's schema of trivial and serious appreciation it retains seriousness because the shared aspects of the leaf and the human are experienced through a deep connection with nature not through a trivial resemblance.

Similarly, McCarthy's treatment of the first snowdrops brings together cultural associations such as Candlemas and the personal experience of joy at the sight of a first clump of snowdrops poking through the leaf litter. Analysing the experience later he says: 'Here was the earth firmly under the lock and key of winter; here was I huddled inside my coat, adjusted to the cold hard season as if it would last forever; and here were they, the first visible sign of something else. They were unexpected but undeniable notice that the warm days would come again, and I realized what it was that made me smile: here

¹⁸ Ronald W. Hepburn, "Trivial and Serious in the Aesthetic Appreciation of Nature' in idem, The Reach of the Aesthetic: Collected Essays on Art and Nature (Aldershot, 2001), 1–15, 3.

against the dead tones of the winter woodland floor was Hope, suddenly and unmistakably manifest in white'.¹⁹

In these seasonal recurrences we have the 'unexpected' not as strange or curiosity provoking, but the occurrence – though it is not rare and could be easily anticipated – strikes us afresh. It invokes a sense of wonder not at the strangeness but at the familiarity of the thing itself seen in this fresh light and perhaps tinged with a kind of gratitude for its loyal return. It can give us, as Hepburn says: 'an odd sense of the gratuitousness of the object and its qualities. Its existence strikes us as a gift undeserved'.²⁰

5 Deepening knowledge

The third way to revisit wonder that I want to explore is that of deepening knowledge. Wonder is well recognised as a prompt for learning in science education.²¹ A phenomenon that initially prompts wonder is intriguing and one response to that intrigue is to want to know more, we want to understand it better. Sometimes with the mystery revealed the phenomenon might be taken into the commonplace and no longer have that impact. Perhaps it was not wonder after all but simply curiosity, it was Verwunderung and not Bewunderung. However, deepening knowledge can also deepen the wonder. As each new aspect is revealed, each intricacy or connection seen or understood with greater clarity, the wonder intensifies. This is certainly Richard Dawkins' position when he counters John Keats' evocative line in the poem Lamia, about unweaving the rainbow, to point out that the opposite is the case. He says: 'The feeling of awed wonder that science can give us is one of the highest experiences of which the human psyche is capable. It is a deep aesthetic passion to rank with the finest that music and poetry can deliver. It is truly one of the things that make life worth living'.22

¹⁹ McCarthy, The Moth Snowstorm, 133.

²⁰ Hepburn, 'Wonder', 135.

²¹ See for example: Yannis Petros Hadzigeorgiou, 'Fostering a Sense of Wonder in the Science Classroom', Research in Science Education, 42 (2012), 985–1005; Philo H. Hove, 'The Face of Wonder', Journal of Curriculum Studies, 28 (1996), 437–62; Per-Olof Wickman, Aesthetic Experience in Science Education (New Jersey, 2006); Mark P. Silverman, 'Two Sides of Wonder: philosophical keys to the motivation of science learning', Synthese, 80 (1989), 43–61.

²² Richard Dawkins, Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder (Harmondsworth, 1999), xii. For a balanced and wide-ranging discussion of this point see Patrick Sherry, 'The Varieties of Wonder', Philosophical Investigations, 36

In my last extended example, I want to explore this experience of wonder increasing as knowledge deepens. When I was a child I loved the Ladybird books about nature, with their densely packed illustrations of, for example, woodland animals in their setting.²³ In one picture there might be all the mammals who might share a woodland space: badger, fox, squirrel, dormouse, and so on. I grew up in the New Forest (Hampshire) so I knew that nature was not quite like that. On a walk one might catch a glimpse – a white flash – of a deer's disappearing rump and on another occasion a fox in the distance or the splash of a water vole taking to the river. The rarity made these encounters special moments where I would hold my breath in astonishment at sharing the space with this other being. One of my favourite pictures though was one where the landscape included a cross section of soil. Unlike my childhood paintings the grass did not go to the bottom of the page, there was a band of brown earth in which there were burrows of rabbits, tree roots, a mole, worms, beetles and ants. The picture revealed something of the mystery of the underground. I could lie on the grass and imagine this teeming realm of activity. I probably thought it might be like the other pictures and there was just a mole here and an ant there and a lot of plain brown soil or rocks in between. Even so, that there was an underneath to the world induced a sense of wonder even though it was unseen. Children come primed to wonder and then something happens, we become accustomed and things seen regularly and named are no longer seen with that same freshness. Adults experience phenomena as coming along with responses of usefulness or not, liking or not liking, associations and well-worn tramlines of thought. However, my encounter with soil wonder returns because of new information. Here we can bring together that expansion of mind that Bewunderung is related to with increasing knowledge that allows a recapturing of the initial wonder and a building on it through deepening appreciation given by additional knowledge. Encountering soil science at a recent 'Regenerative Agriculture'24 event I was introduced to the activity of fungi in the soil. My Ladybird book would have reflected a time when its simplified version of dead brown stuff making up the medium in which the soil creatures moved around was not so far from a scientific picture of soil at that time. Fungi would still have been classified as plants and their

^{(2013), 340-54.}

²³ The artist for many of these early Ladybird books was Charles Tunnicliffe.

²⁴ This is an organisation who organise events for farmers and smallholders for information: Regenerative Agriculture, United Kingdom, https://www.regenerativeagriculture.co.uk/index.php, accessed 26 October 2018. (At time of printing, this site is out of date and crashed.)

role was not understood.²⁵ To give a snapshot of this new picture of the soil food web that created a revisit of the wonder I experienced as a child, I will outline the role of mycorrhizal fungi. I choose this because the details are not widely known and thus it could allow some readers to experience some aspects of that 'Wow!', 'really!' sense that I experienced just hearing about it.

Ninety-five per cent of plants form relationships with fungi to help them acquire nutrients and water from the soil. There are many different types but eighty-five to ninety per cent of plants, including most of those important for agriculture, are assisted by *Arbuscular mycorrhizae*. These multicellular organisms are comprised of masses of filaments called hypha. Hyphal tubes are between two and ten micrometres wide. For purposes of visualisation, a human hair is approximately one hundred micrometres wide. A single teaspoon of soil from around the roots of a rye plant will contain about three miles of mychorrhizal fungi.²⁶ The fineness of the hyphal tubes also means that the fungi can spread out in the soil and transport water and nutrients back to the plant roots, where there is a mutual exchange of water and nutrients for carbohydrates such as glucose, which the fungi need but cannot create for themselves in the way plants can. Moreover, the fungi are the means by which plants transmit warning signals when under attack from pests, allowing neighbouring plants to produce chemicals that will deter the specific insect pest ahead of being attacked. The fungi will also introduce toxins into the soil to prevent plants with which they have no beneficial association from moving into an area and competing with those they do benefit from. They also help, for example, a tree with plenty of light and nutrients to pass those through to other trees in the same network who are in less favourable conditions or have been damaged.²⁷

The more we look into these processes that take place out of normal view – underground, the more we see connections and complex interactions. For me the childhood wonder was revisited because soil could no longer be visualised simply as a medium containing living things, as in my Ladybird book – a brown background against which worms and beetles could stand out – for much of this medium is itself composed of living things. Now, if I lie on the grass and think of the soil below it has to be reimagined as alive through

²⁵ Soil science is moving on at a pace now and it seems strange that it has taken so long for the available scientific advancement to be applied to this realm. Consider that the first Moon landing (and all that was necessary to make that happen) was in 1969 and, for example, the sticky material, Glomalin, that helps to give soil its structure (and is implicated in how the soil can provide food) was not discovered until 1996.

²⁶ Jeff Lowenfels, Teaming with Fungi (Portland, 2017), 36.

²⁷ Ibid., 65.

and through. The soil food web, of which fungi are a part, requires a fluidity of imagination to shift from thinking of components with edges or even networks in a medium to something more like a living fabric of the world. We experience this not only in the sweet pungency of rich soil and the flourishing of healthy plants but also in language. The linguistic relation of soil – *humus* – to both human and humility adds an additional layer of meaning, that of our own return to the fabric of the earth.

6 Self-transcendence

In the three ways to rekindle wonder discussed so far there has been an associated phenomenon mentioned here and there but not fully articulated. This is the accompanying sense of being de-centred: of sharing in something and being aware of its 'is-ness' and thus moving away from a more customary self-absorption.

For a fourth way I want to touch on an aspect of wonder that is most closely related to awe, which itself carries notions of reverential fear or veneration. Hepburn thought deeply about religious experience and the boundaries and overlaps between the aesthetic and the religious. His imagery often suggests a sincerely held spiritual resonance, although he is careful to retain a questioning stance about the ontology of beings as represented in religion. Nevertheless he is critical of the inappropriate or overuse of religious language in aesthetic accounts. See for example, his discussion of the terms 'sacred' or 'reverence'. These terms can be used to suggest deep meaning when none of the work of religious faith or theology is actively standing behind their use. In a sense the power implied has been usurped. Hepburn says his own strategy: 'must be neither to use the language of "sacred" in such a way as to ignore or lose too much of its special force and significance, nor to exploit its full religious force without owning the beliefs that alone make it legitimate'. 28 Indeed, he questions whether we can experience awe as dread mingled with veneration if we have no belief in external beings worthy of veneration.²⁹

To return to my central question about revisiting wonder, I need to look at moments when we experience some spiritual insight or manifestation and ask, 'can it happen again'? Having touched on something beyond understanding

²⁸ Ronald W. Hepburn, 'Restoring the Sacred: Sacred as a Concept of Aesthetics' in idem, *The Reach of the Aesthetic*, 113–29, 124.

²⁹ Hepburn, 'Landscape and the Metaphysical Imagination', 201.

and retained an echo of that experience, can it be experienced again with the same sense of awe or wonder? Whereas my previous examples were purposely commonplace, I want to address this question of revisiting the experience of wonder when it is an experience of something that could be construed as religious or, in Rudolf Otto's term, as the numinous.

On the coast of Dunfanaghy (on the north coast of the Republic of Ireland), I walked a path sprinkled with daisies that wound around the sand dunes towards the sea, my consciousness shifted from enjoying the beauty of this place and vague botanical musings about the daisies that only grew between the sand dunes to suddenly experiencing no separation between what had been me and the place. Its presence was suddenly powerfully there, its nature – its essence – suddenly evident and nothing else, nothing to grasp its essence or do anything other than experience its being. A feeling of expansive softness and gentle power pervaded the landscape and all that was part of it. Then the feeling shifted and 'I' was gradually re-coalescing. Though shaken, thought returned to try to examine the residual feelings and what had been imprinted by that occurrence. Language falls short and I was left with the sense of being touched by something beyond my understanding.

The experience of being de-centred, of the ego dropping away and something else being fully present, is open to religious or spiritual interpretation. Certainly one aim of spiritual practice that appears in most of the world's religions is directed towards such a dropping away of the ego and an opening to something beyond oneself. With practice the experience can come again and again although each time with its own tenor and there is a sense that the residue of one experience opens the way for another. The awe or wonder is returned to, but in this forth way the strength of the de-centring poses the question, who is doing the experiencing, who is the wonder returned to?

7 Conclusion

In conclusion, I believe these four ways: through the eyes of a child; having a temporal gap between occurrences; through deepening knowledge; and by actively seeking to de-centre one's habitual self, give us grounds for accepting the claim that wonder can be revisited. By connecting to our childlike openness to phenomena, we can slow down and experience the roiling sea, a slither of shining moon, a murmuration of starlings or even just a frog, and fall into a silent wonderment at its 'is-ness'. By meeting phenomena we know but have

not met for a while, we can be caught unawares and experience them with a freshness as we share their world with familiarity and renewal. Exploring the detail that is not known to us can become a journey of recurrent wonder, as the workings of nature are revealed and the object becomes environed and connected as part of a larger whole, we wonder at it from a deeper knowledge. Profound experiences, sought out or just received, that leave our egoic self behind are perhaps never the same, but like the other experiences can be invited and perhaps pave the way for more occurrences. As with all four ways, this is a journey without end.

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