1 Seeing as Painting

The contention of this Element is that confrontations between sight and landforms, as registered in British, North American and Australian landscape paintings of the late eighteenth and nineteenth centuries, and particularly as influenced by the increasing middle-class enthusiasm for the science of geology, presented an opportunity for speculations upon the means by which nature and human consciousness fit together, with dire implications for who and what was categorized as valuably human or not, as well as for the environment that sustained them. Dominant in these speculations was the increasing competition between theological and scientific explanations of the origins of the planet, in which the histories of the eye and the environment it observes were instrumental in the union or segregation of human and natural history. Of the three components of my title – sensory perception, history and geology – the first refers to the mode in which paintings and their descriptions envision the subject matter of the second and third components and how theories of perception dawned alongside colonial ambitions over many centuries, for it is within the development of technologies of colonialism for exploring and securing previously unconquered, if far from uninhabited, territories that the impact of Molyneux's question on art and culture provides the focus of this Element. It does so in relation to Britain, the United States and Australia, the latter being countries that by the nineteenth century were or had been colonies of the British empire but were also subject to the scientific and cultural influences of other European countries. Molyneux's question serves as a clarifying lens for how philosophy and art might influence each other and together influence the social and political landscape of various places and times, providing novel insight and interconnections to these histories and geographies.

In 1693 the Anglo-Irish philosopher and politician William Molyneux posed to his friend, the philosopher John Locke, the question of whether a blind man newly restored to sight would be able to name the difference between a sphere and a cube without resorting to touch, the only faculty through which he could have prior knowledge of their different solid shapes. It is important to attend carefully to the vividly compressed language Molyneux used to clinch what he called his 'jocose problem' (quoted in Berman 2009, 139):

> *Suppose a Man born blind, and now adult, and taught by his touch to distinguish between a Cube, and a Sphere of the same metal, and nighly of the same bigness, so as to tell, when he felt one and t'other, which is the Cube, which the Sphere. Suppose then the Cube and Sphere placed on a Table, and the Blind Man be made to see. Quaere, Whether by his sight, before he*

> *touch'd them, he could now distinguish, and tell, which is the Globe, which the Cube.* (Molyneux quoted in Locke 1975, 146; his emphasis)

Though Locke did not take this up until the second edition of his *Essay Concerning Human Understanding* (1694), he agreed with Molyneux, as would George Berkeley and many others (Glenney 2013a; for positive answers see Riskin 2002, 25–31), that the newly sighted blind man would be unable to 'tell' – naming is important – a sphere apart from a cube without the aid of touch, for otherwise there must exist an innate, amodal correspondence between the separate ideas of sight and touch that transcends immediate sensory experience of a retinal image presumed flat and so unable to convey the distance, position, mass, shape, texture and magnitude of either object. As an empirical philosopher implacably opposed to innate ideas formed in the Rationalist tradition of René Descartes, Baruch Spinoza and Gottfried Leibniz, Locke could not assent to such a proposition. Rather, he argued that if the newly sighted blind man could not bring his habitual memory of touch to the image on his retina, he would see the sphere only as 'a flat Circle variously shadowed, with several degrees of Light and Brightness . . . *as is evident in Painting'* (1975, 145; emphasis added).[1] Molyneux's question became a battleground between key European philosophers about whether empiricism (the epistemology of science) or idealism (innate ideas, rationalism) best explained the mind's access to ideas about the world. I shall argue that Molyneux's question helped to generate models of transformation or preservation of untouched Nature that informed distinctions between the aesthetic categories of the Beautiful, the Sublime and especially the Picturesque.

The analogy between seeing and painting dates back to Johannes Kepler's publication in 1604 of his discovery that sight takes place on the retina, which, though curved, performed a similar role to the canvas in receiving a two-dimensional image through the action of light 'as if it were some tips of small paintbrushes (*apices penicillorum*)' (quoted in Dumitrescu 2017, 50). Kepler decisively tipped the scales in favour of the Aristotelian theory of intromission (sight as the passive reception of light from the outside world) in its ancient battle with the Platonic theory of extromission (in which the eyes emit particles of light that beam objects into the mind). In this Kepler was following the example of 'the artist-architect-engineers' in their objectification of light through the development of optical instruments such as the camera obscura

[1] Modern philosophers discriminate more precisely than most earlier readers between the different respects in which Locke thought retinal images were unintelligible. See Walter Ott (2020, 280) for the definition most consistently relevant to nineteenth-century commentators on painting: 'Only touch can prompt . . . [Molyneux man] to inflate his two-dimensional image into a visual idea of a three-dimensional shape.'

for the rendering of pictorial perspective (Straker 1976, 7–8). Kepler's use of pictorial language to describe the operations of sight was primarily motivated by his admiration for Albrecht Dürer, who had discovered Renaissance perspective science on a trip to Bologna in 1506 and later codified it (Straker 1976, 12–13). Kepler's concentration on the mechanics of vision had the effect of pushing the soul 'back behind the eye where it resides in severe danger of absolute eviction' (Straker 1976, 21).

Despite claims by the anatomist Galen of Pergamon in the second century BC that sight takes place on the crystalline humour, the belief that the only immediate component of vision is the mental representation of a two-dimensional image belongs to a tradition reaching back to Euclid and Ptolemy in ancient antiquity and was considerably boosted in the twelfth century AD by the Islamic natural philosopher Alhazen, who first argued for a one-to-one match between world and visual experience, which rendered the extromissionist theory untenable (Hatfield 2009, 358–61; Straker 1976, 10). Kepler's analogy between seeing and painting was also prepared by the development of one-point perspective painting in fifteenth-century Italy, which depended on the assumption that the plane section of the picture surface through the cone of sight is an adequate reproduction of the visual image (Panofsky 1991, 28).

These, then, were some of the precedents for what the American psychologist James J. Gibson called

> the classical assumption that two-dimension vision is immediate, primitive or sensory, while three-dimensional vision is secondary derived or perceptual. One must first see a plane form before one can see a solid form. This notion is connected with the argument that the three-dimensional properties of things can have no correlates in a two-dimensional retinal image, and that the three-dimensional properties must therefore be reconstructed by the mind or the brain. (Gibson 1951, 404)

This tradition also raised the question of whether humans are conscious of these flat representations of the three-dimensional world before the mind interprets them as direct experience of that world, a question that could have no meaning until Descartes' strict division in 1641 'between mechanistically conceived physiological processes and sensations in the soul' of which only the latter could be conscious (Hatfield 2009, 372). The consequence of Descartes' division of these two hitherto undifferentiated realms of matter and spirit was to unify Aristotle's separate powers of the mind into a single, rational, conscious entity tantamount to the modern conception of the self (p. 377). This concept was necessary for first-person validation of experience that facilitated disengagement from the world, the better to act on it. Such psychological

understanding of perception propelled, into the nineteenth century and beyond, the classical assumption that painting might be a more immediate representation of vision than experience of actuality itself (p. 384). It is the distance of these assumptions from our own experience of perception (see **Section 10**) that endows the sensory and emotional configurations discussed in this Element with radical alterity.

Three stages of perception may be assumed in this long tradition of perception: first, the non-conscious retinal image; then, from Descartes and Berkeley onwards, two conscious stages, a mental idea of the retinal image of which we are only fleetingly aware, followed by a stage in which the mind acts on tactile memories to turn flat mental representations into seemingly immediate experiences of a fully three-dimensional world (Hatfield 2009, 358, 376). For those in the grip of this tradition, the process of perception is mirrored by the spectator's resolution of a flat painting into an illusion of the outside world and by the art critic's description of it – for Molyneux's question, we remember, entailed naming as well as perceiving.

Quaint as Molyneux's succinct language seems now, it bears out W. K. Wimsatt Jr's verdict that, like other thought experiments characteristic of seventeenth-century empirical science, Molyneux's question was one 'which almost anybody might be expected to understand' and 'many might be expected to emulate', since its diction 'had an average generality and easiness of meaning' (Wimsatt 1948, 10) that gave it wide appeal, especially at a time when scientific experiments were taking over from philosophical ratiocination in finding answers to fundamental questions. The 'multifarious or indeterminate' relations between speculative and experimental philosophy became hard to disentangle in the nineteenth century (Anstey and Vanzo 2019, 2), though some thinkers, such as Ralph Waldo Emerson, would always resist Samuel Taylor Coleridge's successful insistence in 1833 on protecting the term 'philosopher' from contamination by the term 'scientist' (Walls 2003, 62–3).

While Enlightenment philosophers from Locke to Kant endeavoured to clear space for the validation of empirical science within theories of mind, Locke's insistence, following Aristotle, that nothing is in the intellect that was not first in the senses and that complex ideas derive from simple ideas based on sense impressions raised the crucial problem of how to preserve operations of the mind from a purely passive, mechanistic response to sensations (Locke 1975, 158). If the mind is not granted innate powers a priori before external reality floods it a posteriori through the senses, how can it attend to what, in the undifferentiated, chaotic scheme of sensations, answers its needs and inclinations through the passions? This had been the premise on which Leibniz built his rationalist qualification to the Aristotelian and Thomist dictum that 'nothing

is in the intellect which was not first in sense' with the devastating addition (Cassirer 1951, 99) 'nisi ipse intellectus' – except the intellect itself (Leibniz 1981, 111). Not just the content but also the energies of mind needed accounting for (Cassirer 1951, 127), and on this depended the issue of whether the ego and the world belonged to the different strata of spirit and perceived reality (Descartes), on a continuously materialist or continuously spiritual spectrum between them (Locke and Berkeley, respectively), or on a middle course between innate ideas and empirical impressions, which Immanuel Kant took to fit the inner and outer worlds together (Scruton 2001, 30, 53).

The difficulty of aligning the mind with the world explains why Molyneux's question became the 'common centre' of 'all the special problems of eighteenth-century epistemology and psychology' (Cassirer 1951, 108) and 'the key issue in the debate between innate ideas and sensory experience' (Paterson 2006, 7). This is because it asked whether sensory perception is specific to each sensory modality as a unique portal to the world or whether it is amodal and so reliant on innate ideas to establish transfers of knowledge across sense modalities. Since art was both an instance and a metaphor of the various ways mind and world correspond to each other, the appeal of Molyneux's question to artists and critics lay in its dramatic role as an axle on which the weightiest alternative conceptions of the truth might turn. For William Hazlitt, whose writings are the subject of the next three sections, 'the arts of painting and poetry are conversant with the world of thought within us, and with the world of sense without us – with what we know, and see, and feel intimately' (Hazlitt 1930–4, vol. 18, 9). As a framing device, the stark sensory duality of Molyneux's question may itself have inspired the wide variety of emotional responses expressed in the art and thought considered in this Element.

2 Hazlitt on Wilson

The centrality of Molyneux's question emerges in the British Romantic essayist William Hazlitt's response to landscape paintings by Richard Wilson, Aelbert Cuyp and Nicolas Poussin, artists who each called on different regimes of sensory perception and emotional affect from his sophisticated philosophical armoury.[2] In his brilliant but ambivalent review 'Wilson's Landscapes, at the British Institution' in *The Champion* newspaper of 17 July 1814, he awarded laurels to *Apollo* (c18; **Figure 1**) and *Phaeton* (c18), two of Wilson's Italianate landscapes in the manner of Claude Lorraine. Hazlitt reads them as companion

[2] Indeed, other respondents discussed in this Element used different readings of Molyneux's question without rigorous consistency, but, with the possible exception of Denis Diderot (Morgan 1977, 28), none of them consciously approached it as a comprehensive 'cluster concept of disjunctive sub-problems' as a modern philosopher might do (Glenney 2013b, 542).

Figure 1 Richard Wilson, *Apollo and the Seasons* (c18), oil on canvas, 100.1 × 125.7 cm, Fitzwilliam Museum, University of Cambridge, United Kingdom

pieces that capture the transition between a spring morning and an autumnal evening in ancient antiquity:

> In looking at them we breath [sic] the very air which the scene inspires, and feel the genius of the place present to us. In the first, there is all the cool freshness of a misty spring morning: the sky, the water, the dim horizon all convey the same feeling. The fine grey tone, and varying outline of the hills, the graceful form of the retiring lake, broken still more by the hazy shadows of the objects that repose on its bosom; the light trees that expand their branches in the air, and the dark stone figures and mouldering temple, that contrast strongly with the broad clear light of the rising day, give a charm, a truth, a force and harmony to this landscape, which produce the greater pleasure the longer it is dwelt on. – The distribution of light and shade resembles the effect of light on a globe.
>
> The *Phaeton* has the dazzling fervid appearance of an autumnal evening; the golden radiance streams in solid masses from behind the flickering clouds; every object is baked in the sun; – the brown foreground, the thick foliage of the trees, the streams shrunk and stealing along behind the dark high banks, combine to produce that richness, and characteristic propriety of effect, which is to be found only in nature, or in art derived from the study and imitation of nature. The glowing splendour of this landscape reminds us of

> the saying of Wilson, that in painting such subjects, he endeavoured to give the effect of insects dancing in the evening sun. His eye seemed formed to drink in the light. These two pictures, as they have the greatest general effect, are also more carefully finished in the particular details than the other pictures in the collection. This circumstance may be worth the attention of those who are apt to think that strength and slovenliness are the same thing.
>
> (Hazlitt 1814b, vol. 18, 24–5)

These intense, extended descriptions conclude with a dig at the president of the Royal Society, Sir Joshua Reynolds, whose theory of abstraction required general forms in art to be purged of the accidental details and defects of nature. Hazlitt commits to an opposing theory of art in which 'the details and peculiarities of nature are only inconsistent with abstract ideas, and not with general or aggregate effects' (Hazlitt 1930–4, vol. 18, 77).

Although Lessing had claimed in the *Laocoön* (1766) that a picture can only represent static scenes, here in *Apollo* we perceive the trees growing, the stones mouldering and the day rising; and, in *Phaeton*, the evening sun streaming and the stream stealing through a landscape that has been 'baked'. At the same time, objects break down into finer detail as they absorb our attention: 'the retiring lake, *broken still more* by the hazy shadows' (emphasis added). These are of course the artist's as well as the spectator's observations. We notice, therefore, a subtle combination of vocabularies from nature and painting (the 'tone' and 'outline' of the 'hills', the 'graceful form' of the 'lake') whereby our awareness of the painting and the landscape alternates and merges. The description refers sometimes to particular objects in the landscapes – 'dark stone figure' and 'thick foliage' – and sometimes to the material properties of the paint: 'radiance' is only 'solid' when painted. There is certainly no attempt to keep subject, image and description apart (Hazlitt 1814b, vol. 18, 24–5). Rather, their distinctions are suspended to forge an identity between natural processes, artistic technique, sensory perception and subjective feeling that compresses the contrasting moments from a spring morning and autumnal evening from another age into an experience of successive perceptions in an art gallery.

Emulating the poetry of James Thomson's *Seasons*, Hazlitt's syntax re-enacts excursions of the eye over diagonals linking variegated bands of landscape scenery to the bright horizon where it rebounds upon tonal contrast to the foreground (Barrell 1972, 6–34). In the *Apollo* it wanders back to the foreground but rebounds from the dark temple there to the 'clear light of day' at the horizon, a movement prompted by abrupt tonal contrasts. But after the varied pace of movement between the horizon and the foreground in each picture, the eye finally comes to rest on the overall 'effects of insects dancing in the sun' (Hazlitt 1814b, vol. 18, 24–5). The general effect and uniform feeling of each

picture repose on the overall impression of this aggregated mass of shifting detail.

Fusion of detail with space is fundamental to a further quality of Hazlitt's descriptive style, which is deeply implicated in amodal or intermodal schemes of sense perception: the delicately controlled literary synaesthesia that plays about Wilson's scenes, as in 'the cool freshness of a misty morning' (Hazlitt 1814b, vol. 18, 25). Literary synaesthesia allows Hazlitt to establish imaginary parallels between nature, painting, sensation and feeling that determine the sort of detail that is fixed yet 'dancing', single yet 'blended'. It entails an ambiguity registered in the alternative words Hazlitt elsewhere uses to define: '*gusto* or expression: *i.e.* the conveying to the eye the impressions of the soul, *or* the other senses connected with the sense of sight' (Hazlitt 1830–4, vol. 18, 106; his emphases). Apart from the usual sense of zest or relish that 'gusto' still conveys today, these alternative roles for the senses and the soul signal a weighty philosophical conundrum that persists in his definition in the essay 'On *Gusto*': 'In a word, gusto in painting is where the impression made on one sense excites by affinity those of another' (Hazlitt 1816, vol. 4, 78). Thus, in claiming that 'we breath the very air which the scene inspires', the play on breathing and inspiration raises the question of 'how far such language is merely metaphorical, or how far it signifies an actual excitation of the senses' (Chase 1924, 196), known today as the relatively rare physical condition of true synaesthesia. Thus he sometimes concedes that he is writing fancifully to convey 'the force and precision of individual details, transferred, *as it were*, to the page from the canvas' (Hazlitt 1930–4, vol. 11, 166; emphasis added) but at other times would have us believe that our senses really do integrate with each other to penetrate the picture's surface to some indisputable reality in nature past or present on which even the most imaginative history paintings depend for their conviction (Hazlitt 1930–4, vol. 18, 78).

Hazlitt's earliest philosophical writings attest to a polarity between matter and operations of mind that underlie the dynamic interaction between feeling, painting and nature in Wilson's synaesthetic effects: 'it might be said . . . that we have one source of ideas, *viz*. sensation, and another source of ideas, *viz*. ideas', he writes in *Lectures on English Philosophy* (Hazlitt 1812, vol. 2, 149). Hazlitt confusedly takes this dualism from Immanuel Kant, for, hampered by a bad translation (Welleck 1931, 165–71), he failed to grasp that Kant resolved the conflicting strata of the ego and the world with a transcendental deduction in which 'a priori knowledge provides support for, but it also derives its content from, empirical discovery' (Scruton 2001, 30). Kant held that the limitations of personal experience and individual point of view denied consciousness access to a priori, timeless, spaceless knowledge of supersensuous reality that Leibniz

thought available. Hazlitt's failure to understand this limitation led him on an erratic course between Locke's empirical theory that the mind is passive before reality and Bishop Berkeley's theory that only the mind exists. Meanwhile, he could not countenance the lapse into solipsism that David Hume's extreme empiricism entailed, wherein, as Hazlitt put it, 'each separate impression must remain absolutely simple and distinct, unknown to and unconscious of the rest, shut up in the narrow cell of its own individuality' (Hazlitt 1930–4, vol. 20, 25).

Using his imperfect knowledge of Kant as a guide between this Scylla and Charybdis in both his philosophical writings and art criticism, Hazlitt sometimes appears to desert Kant for either Berkeley or Locke. Kant persuades him that there is no significance in the material realm without the action of the perceiving mind: *'the mind alone is formative*, to use the expression of a great German writer . . . There is no object or idea which does not consist of a number of parts arranged in a certain manner, but of this arrangement the parts themselves cannot be sensible' (Hazlitt 1812, vol. 2, 153; his emphasis). The important implication for his art criticism is that form, though potentially in matter, is realized only when the mind reassembles the particles of matter into wholes. Therefore his descriptions of the mind abound with attributions of form, not as something static but with the qualities of a gerund: the mind is 'a superintending faculty, which alone perceives the relations of things, and enables us to comprehend their connexions, forms and masses' (Hazlitt 1930–4, vol. 20, 25); it is a 'surrounding and forming power' (Hazlitt 1812, vol. 2: 151), a 'cementing power' and without it 'All nature, all objects, all parts of objects would be equally "without form and void"' (Hazlitt 1930–4, vol. 2, 152–3). But if form exists only in the mind, then the importance of matter quickly recedes, for are we not the cause of the form that affects us in matter?

In fact, Hazlitt argues vehemently in his philosophy and criticism that the complex qualities perceptible in objects actually inhere in them as raw materials or potential ideas for the 'forms or moulds' of the mind to activate (1812, vol. 2, 166). Art seems particularly suited to the moulds of the mind so has special power to generate ideas of the world it refers to. Hence the importance of technique. Wilson's brushstrokes allow our pleasure to grow with the growing of the trees. It is the continuity of style between *Apollo* and *Phaeton* that turns the morning and the evening of each picture into related moments. In these moments, optical movements and teeming detail are synaesthetically united by a consciousness that the critic re-enacts for the bourgeois body of the growing reading public who attend the new public art galleries (see **Section 4**).

Yet the problem remains: we still do not know how qualities belong both to objects and to our perceptions of them, whether these qualities are mental or material, or how they coincide in perception. His belief in a dialectical

relationship between the details of matter and the shaping power of the mind lacks philosophical rigour due to incompatible allegiances. 'Revoking epistemology, yet tied by habit and tradition to empiricism's demand for at least some criterion of truth, Hazlitt's thought is suspended between the imperative for a proper account of knowledge, and the obvious attraction of a theory of human psychological activity based upon the paradigm of intellectual energy' (Milnes 2000, 5). The dilemma erupts in a crucial sentence linking the descriptions of *Phaeton* and *Apollo* but also cut off from them by a dash: '– The distribution of light and shade resembles the effect of light on a globe' (Hazlitt 1814b, vol. 18, 24). To what does this analogy refer in a painting in which there is nothing globe-like?

One possibility is that Hazlitt is referring to the terrestrial globe that was a common feature of British intellectual life in Georgian interiors. As such it reverses the contraction of scale observed in 'On Going a Journey', where he uses a terrestrial globe to show how lived experience dwarfs abstract understanding: 'What is the true signification of that immense mass of territory and population, known by the name of China to us? An inch of paste-board on a wooden globe, of no more account than a china orange! Things near us are seen of the size of life: things at a distance are diminished to the size of the understanding' (1822a, vol. 8, 187). Throughout this Element we will encounter other contractions and expansions of consciousness. A mismatch between the microworld and the world of knowledge was inherent in William Gilpin's theologically grounded theory of the picturesque where the sketcher excises the details and combines the forms of natural scenes to facilitate their approximation to art works, which are but inferior reflections of nature's overall perfection as God would see it: 'She works on a *vast scale*; and, no doubt, harmoniously, if her scheme could be comprehended. The artist in the mean time is confined to a *span*' (1782, 18; his emphases). Hazlitt's globe analogy, however, works in the opposite way. Rather than transcending the spectator's limited scope, it draws the world into its range. It endows Wilson's Arcadian scenes with a macrocosmic scale and global amplitude that anticipates Ralph Waldo Emerson's claim that 'a work of art' is 'an epitome of the world' (1836, vol. 1, 23). Likewise, in perfecting the Romantic essay form, Hazlitt draws the boundless realm of contemporary empirical knowledge into the aesthetic intensity of personal experience where he seeks to evoke human experience as a whole (Milnes 2019).

An alternative to this macrocosmic explanation is that the analogy, which bears no relation to the painting, illuminates the internal operations of sensory perception by recalling the globe in Molyneux's question. Either the haste of a busy journalist or common knowledge of the cube and sphere experiment may